Samuel Neaman Institute
for National Policy Research

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The Israeli Institute
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CHARTING A
GRAND
STRATEGY
FOR THE STATE
OF ISRAEL

2017

TECHNION

GRAND STRATEGY FOR ISRAEL:
Reflections and Directions

2017

TABLE OF CONTENTS

ABOUT THE GRAND STRATEGY FORUM

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Seventy years after its establishment and inclusion in the family of independent nations, the State of Israel is still struggling to obtain universal legitimacy. Israel's military victory in the war waged against it 50 years ago eventually led to peace agreements with Egypt and Jordan, but peace has neither been achieved with Lebanon and Syria, nor with the Palestinians. Therefore, Israel has no internationally recognized borders along key sections of its territory. The lingering of the Israeli-Palestinian conflict, along with emerging internal and external threats, both on the state and non-state level, and mostly by radical Islamic entities, are liable to escalate and jeopardize Israel's security. While the prevailing view today is that Israel does not face an immediate existential security threat, such threats could recur, particularly if weapons of mass destruction proliferate into the region.

The current era of globalization is marked by intense transformations and upheavals in the international arena, some of which are of such scope that they are changing the world system and order. These changes are occurring against a cascade of complex and accelerating technological and geo-economic developments. These processes pose both risks for Israel, due to adverse changes in the global balance of power and the creation of new points of friction, as well as opportunities, due to new alignments and new common denominators. Under such dynamic circumstances, Israel obviously is at a juncture where it must rethink its policy directions and make critical choices regarding its global positioning and diplomatic alternatives.

Israel has grown and developed over the last few years in many fields – economics, technology, and security – and has secured its position amongst the ranks of the world's advanced nations. But it has not improved in relative strength – relative to other pertinent countries that have also made progress and grown in strength. The rapid ascent that characterized the State of Israel in its early decades has, therefore, come to a halt, and there is concern that the current stagnation could turn into a relative decline in comparative terms.

Within Israel's society there are some who feel deeply troubled by threats to Israel's democratic values and even to the very future of the State. These risks relate to socio-economic rifts and to gaps developing under certain demographic trends. Continuing manifestations of the erosion of the rule of law, as well as the condition in which Israel is perceived to be in occupation over a large group of people – the West Bank Palestinians – present continuing moral and political dilemmas. In addition, there is a discernible deterioration in the national systems of education and governance; and the apparent weakening of the quality of scientific and technological advantages which underlie the base of Israel's economic and military power, and which, in turn, could

endanger future security and resilience. Thus, alongside Israel's characteristic dynamism and optimism, there are isolated dystopian expressions of uncertainty about Israel's future existence.

It is this recognition that Israel is in the midst of a pivotal chapter in its history – together with profound concern about its strength, character and future – that has led a group of concerned people of experience and accomplishments in diverse sectors of Israeli society – security and foreign affairs, economics, science and technology, education and culture – to reflect on the new directions required by Israel's future national security strategy; indeed, its new Grand Strategy. This endeavor has been pursued with the hope and optimistic outlook that suitable responses to the above challenges exist, and that it is possible to reverse course and take Israel to a new and higher level in its upward climb.

The crafting of a new Grand Strategy for Israel is taking place at a time of frenetic changes inside Israel and in near and distant geopolitical regions alike. That state of affairs is forcing leaders to implement immediate, mostly short-term reactions. The name of this group also reflects its raison d'être – 'The Israel Grand Strategy Forum.' Some Forum members have personal experience of this type of short-term reactivity in all aspects of the State's policies. This event-driven frenzy makes it especially urgent to address the issues intelligently, both in the short-term and the long-term. The Forum has translated this perspective into proposals of ideas and directions both in the short- and the long-term, and had them fused into a coherent, comprehensive, and overarching Grand Strategy.

The concept of Grand Strategy has been ascribed various definitions, uses and applications over the years, and has been the subject of many a debate about its purpose, scope, significance, virtues and defects, methodologies, and implementation. For our purposes, the term 'Grand Strategy' refers to an integrated, broad-ranging, far-sighted, programmatic blueprint and set of principles that will guide the State in how to optimally harness its national resources – political, economic, social, technological, governmental, military and other – towards achieving its key national objectives and priorities. At the basic level, these include safeguarding and promoting Israel's long-term security, prosperity, societal well-being and national values. That is to say that in addition to overcoming the threats and risks that it may be facing, Israel also needs to advance its security and society while protecting and promoting the spirit of its founding values and that of the family of enlightened nations. The absence of such a new Grand Strategy means Israel is vulnerable to being tossed and battered by the waves of global developments, with no compass of its own or sense of direction and purpose; it is liable to encounter a situation in which it is forced into improvised reactions to the strategies of others, including its foes who wish Israel ill.

The project on a Grand Strategy for Israel has been conducted under the auspices of the National Strategy Forum. The Forum was established on Independence Day, 2013, on the initiative of Prof.

Uzi Arad and Prof. Zehev Tadmor. It was first convened that year on July 7, Jabotinsky Day, when two dozen eminent Israelis[1] assembled at the Ben-Gurion House in Tel Aviv. During 2014-2016, the Forum expanded to include more than 180 experts and leaders from the private, public and academic sectors, from varied fields, institutions, and specializations, and with diverse outlooks, participating in numerous meetings within the framework of the Forum's activities. They are listed in the appendix of this document and in the chapters containing summaries of the respective cluster strategy groups. The Forum's authority rests upon the seniority, experience and achievements of its members. Their contributions are based on their knowledge of present conditions, trends and evolving processes from different vantage points, their broad and long-range observations, their experience in jointly understanding the key challenges facing Israel, and their ability to propose the planning and design of desirable policy responses in a variety of spheres.

The Forum held a number of plenary sessions, but, for the most part, operated within smaller frameworks. It has been guided by a steering committee comprised of Forum members, which includes Prof. Uzi Arad (Chairman), Dr. Ruth Arad, Prof. Avi Ben-Bassat, Mr. Barak Ben-Eliezer, Major-General (Res.) Prof. Isaac Ben-Israel, Maj. Gen. (Res.) Avraham Ben Shoshan, Mr. Isaac Devash, Prof. Yadin Dudai, Mr. Gideon Frank, Mr. Ephraim Halevy, Dr. Irit Idan, Maj. Gen. (Res.) David Ivry, Prof. Aviad Kleinberg, Dr. Oded Margalit, Prof. Dov Shwartz, Adv. Dror Strum, Prof. Zehev Tadmor, and Col. (Res.) Itamar Yaar. The then President of Israel, the Prime Minister of Israel and the former Speaker of the Knesset each gave their blessing to the Forum's endeavor and expressed interest in its deliberations and in receiving its findings and recommendations.

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1   Participants in the opening meeting at Ben-Gurion House: Yossi Ackerman, Fmr. President and CEO of Elbit Systems; Prof. Uzi Arad, Fmr. Founder & Head, Institute for Policy and Strategy and Founding Chair, the Herzliya Conference Series, IDC Herzliya, Fmr. National Security Advisor to the PM and Head of the NSC, Fmr. Director of Research, Mossad; Prof. (Maj. Gen. Res.) Isaac Ben-Israel, Head of Yuval Neeman Workshop for Science, Technology and Security, Chairman of the Research and Development Council, and Chairman of the Israel Space Agency, awarded the Israel Defense Prize; Dr. Yael Binyamini, Tel Aviv University and IDC Herzliya, Fmr. Head of Global Risk Management, Private and International Banking Division, Bank Leumi; Prof. Yadin Dudai, Weizmann Institute of Science & New York University, Senior Research Fellow, the Samuel Neaman Institute for National Policy Research, Technion, Fmr. Dean, Faculty of Biology, Weizmann Institute & member of the Committee for Budget & Finance, Finance Ministry, Member of the Israel Academy of Sciences; Dr. Yona Ettinger, Fmr. CEO, Atomic Energy Commission; Dr. Yishai (Jesse) Ferris, VP of Strategy, Israel Democracy Institute; Gideon Frank, Chairman of the Council of the Technion, The Lauder School of Government Diplomacy and Strategy, IDC Herzliya, Fmr. Head of the Atomic Energy Commission; Prof. (Emeritus) Ruth Gabison, Faculty of Law, Hebrew University of Jerusalem; Maj. Gen. (Res.) Shlomo Gazit, Frm. Head, Center for Defense Studies, Frm. President, Ben-Gurion University, Frm. Chairman, the Jewish Agency, Frm. Head of the Military Intelligence Directorate, IDF; Dr. Shavit Matias, Hoover Institute, Stanford University, Lauder School of Government, Diplomacy & Strategy, IDC Herzliya, Fmr. Deputy Attorney General of Israel; Judge (Res.) Meir Shamgar, Fmr. Supreme Court President, Fmr. Supreme Court Judge; Dr. Shimshon Shoshani, Fmr. CEO of the Ministry of Education and the CEO of 'Birthright'; Zalman Shoval, Fmr. Israeli Ambassador to the U.S. ; Adv. Dror Strum, Director of The Israel Center for Economic Planning, Fmr. Antitrust commissioner; Prof. Zehev Tadmor, Chairman, S. Neaman Institute, Technion, Fmr. President of the Technion, Member of the Israel Academy of Sciences, awarded the EMET prize; and Maj. Gen. (Res.) Shlomo Yanai, Vice Chairman, the Rothschild Caesarea Foundation, Chairman, Protalix, Fmr. CEO, Makhteshim Agan, Fmr. CEO, Teva Pharmaceutical Industries, Fmr. Head, Planning Branch, IDF. Prof. (Emeritus) Shlomo Avineri of the Department of Political Science, the Hebrew University of Jerusalem and Prof. Yehezkel Dror, Department of Political Science, Hebrew University, Israel Prize winner, and founding President of the Jewish People Policy Institute, did not participate, but contributed advice.

The Forum set its own agenda, bringing together domestic and foreign issues, crossing and connecting different fields: political, economic, security, international, scientific and technological, legal, social, governmental and ideological. It relied on the expertise of its participants, as well as on cutting-edge knowledge and research in Israel and abroad. To this end, the Forum networked with similar frameworks in the US and Europe. The Forum hosted specialized working groups, which were used at the end of the process to plan the strategic alternatives in practice. Priority was given to start work with the analysis of problems, identifying barriers and developing responses and solutions. Sometimes, the groups applied the 'Solarium' method for developing and clarifying contending alternative strategies. The Forum's work proceeded along the following stages: **(1) Mapping the main risks and challenges** facing Israel; **(2) Analyzing the challenges themselves** in terms of the problems they present, for which significant decisions may be required. This stage included designing policy response options and identifying their essential principles and implications; and **(3) Assessing, prioritizing and fusing the alternative plans into an integrated overarching Grand Strategy.**

Naturally, comprehensive work also requires focusing on **fundamental components.** The preliminary discussions clarified the appropriate division of discussions into those of national security, welfare and progress. These discussions led to the conclusion that it would be beneficial if the work were categorized according to three themed clusters, each critical in and of itself, and when integrated, of greater individual significance: the **Statecraft, Security and International** cluster, the Economic, Social, and Governance cluster, and the **Scientific, Technological,** and **Education** cluster.

The results of the Forum's work are presented in the Executive Summary that follows, and then in detail in this document. Clearly some of the specific problems characterized and some of the solutions proposed were already identified by others, sometimes by the Forum members themselves, in other settings dealing with the same problems. The usefulness, therefore, of this report lies in its all-inclusiveness and in its comprehensive and integrative scope, such that leads to a coherent, integrated long-term strategy. Such a perspective is based on the understanding that solutions at the national level will never be effective, so long as they are directed at one sector or focal point only. Instead, a range of problems in different areas must be taken into account, including their interdependencies and integration of the domains; in our discussion, this means assessing the links among the economy, society, science and technology and education, governance, security, and international relations. Indeed, special emphasis was placed on the integrative components, essential when developing a system-wide and long-term Grand Strategy. Obviously, the proposed strategic directions are not 'carved in stone.' Our intention here is to place on the agenda of the country's leaders, elected officials, government, stakeholders, and general public a finished report, as well as to provide a platform and process for rational strategic deliberations in order to identify challenges and provide solutions as required by the current era of decisions.

The Technion's S. Neaman Institute for National Policy Research supported the Forum and its activities (and its outcomes are presented on the Neaman Institute's website, http://www.neaman.org.il). Other supporters of the Forum include the Israeli Institute for Economic Planning, headed by Yossi Hollander, Israel Stockman and Eli Ben-Dor in Israel, and Josh Weston, Roger Hertog, Mark Abramovitz, Jose Galicot and the late Harvey Krueger in the United States.

This document is based on the deliberations and position papers developed by Forum participants. It does not generally represent the opinion of each of the participants in the Forum, or of the institutions with which they are affiliated or their supporters.

EXECUTIVE SUMMARY

The Fabric of Israel's Grand Strategy

The fabric of the Grand Strategy hereby proposed for Israel encompasses policies that are directed both abroad and at home. It is true that Israel has limited control over events and processes affecting it from the outside, and although it must be prepared and ready to confront them, it is at home where Israel has fuller command of its fate. The emphasis in this work and where the major thrust is required is, therefore, at home. Indeed, at a time when it seems that there is no major external, existential danger facing Israel – one which requires full national mobilization to confront – now is the time to direct resources and energy to enhance the country's internal sources of strength. The strategic objective of the Grand Strategy is to affect a turnaround from a trajectory of relative descent to one of ascent. In other words, it seems that in the near-term for Israel, a strategy for strength begins at home.

Israel faces two major grand challenges, both in the domestic areas. In these areas, there exist clear, relative weaknesses, but at the same time there is much room for improvement, due to hidden resources that have not been tapped due to sluggish development and acute inequalities. The area that requires the greatest shift in momentum is that of human resource development in science, technology and education. The State of Israel must allocate resources and leadership to stop what has been identified as a serious risk of erosion in the country's qualitative advantage in the fields of science and technology, and which can be affected by a quantum improvement of its educational system. This combined effort is imperative if Israel wishes to maintain its qualitative advantages, upon which its economic competitiveness and national security rest.

The second domain that poses a governmental challenge is to substantially update and improve the governance effectiveness of the entire executive branch. In this area, functional weaknesses and a trend of regression have been discerned, which is further exacerbated by current practices. A comprehensive reform of public services is needed because improved and effective governance of the executive system of the country, from top to bottom, is critical to all areas of national policy and action. Obsolete and weak governance practices thwart the economy, security, education, law, etc. Escaping from the slump in this field and energizing the administration to the point where it becomes more professional and effective is crucial for the future of the country. In short, no less than a turnaround is needed, and from a reform management point of view, this constitutes major national grand challenges and should be approached as such.

Israel's relative strength lies in the domains of security and military matters, as well as in technological innovation. But it has to become more efficient in these areas if Israel wants to move forward. The same holds true in some critical economic-social areas, where Israel's performance

lags behind most advanced countries. Weaknesses in productivity, inequality and governance require reforms that are more focused on greater efficiencies than policy reversals. It is efficiency that will contribute more than anything else in the long run to increasing sustainable economic growth, which in turn will bolster Israel's security, economy and society.

Israeli society is plagued by profound socio-economic and political divisions. One such division concerns the Jews and the Arabs of Israel. Another rift exists between ultra-Orthodox Jews and other Jews. Both rifts entail structural, demographic, social and political ramifications, which need to be bridged if the country's long-term political and economic stability is to be preserved. Multiple socio-economic divisions in Israeli society, as well as deep internal controversies, compose acute factors of weakness, since they compromise the country's unity required for its resilience, and even its ability to increase its resources in the pursuit of the overall national interest. Additionally, the Israeli body politic has long been subject to a fierce internal dispute about its policy on the Palestinian issue. In the face of these divisions, some have adopted the approach that accepts them and suggests policies of tribalism, seeking to institutionalize divisions as part of the distribution of national resources. The Forum members are concerned about coming to terms with a sectarian approach, lest it cause the disintegration of the political order. It is believed that it is necessary to fortify the national dimension, strengthening the common ground, and seeking mechanisms to bridge the rifts. For Israel to move forward, it must expand the common ground. No Grand Strategy can be pursued without a solid national and societal consensus.

From the dawn of the State, its leaders were required to split their governing priorities between day-to-day management and those areas in which the tasks of nation-building required concentrated efforts, leadership from the top, the pooling and mobilization of resources, all on a massive scale. So, in the first two decades of statehood, when Israel was still small, weak and isolated, it achieved immense progress by effectively coping with major grand challenges. It rose to create large national systems that spread over long time spans and required both applied and organizational power, such as the establishment of the IDF, the major national water works, the bringing, settling and housing of millions of immigrants, and establishing scientific projects of excellence. It took a decade or two for these goals to be accomplished by the newborn state, with its meager experience and resources. Without a doubt, those decades were Israel and its leaders' finest hour.

Some of the recommendations included in the document below can be implemented immediately, and their usefulness can be proven over a short timetable. Others can be partially implemented, pending initiation by other bodies and sometimes even with participation of Forum members in their various capacities. However, the grand challenges presented herein are in no way measures with immediate, short-term results. On the contrary, most of the recommendations require patience and perseverance with considerable time lags before reaching maturity and the desired results.

They do not depend on the personal or partisan identity of individuals. The directions should be policy directions and principles that should be acceptable to all the captains of the state who are ideologically pragmatic. The original Grand Strategy of Zionism, which now celebrates 120 years since its formation by Herzl and the First Zionist Congress, has succeeded because its most consistent feature was that the actions and policies taken by those in charge were marked by their inspired and creative pragmatism. Israelis have always stood out for their spirit of patriotism and willingness to exercise this spirit to overcome trying times. A well-managed Grand Strategy aimed at propelling the country forward towards the fulfillment of the values and goals of its founders, will find the Israeli people ready and able to realize that goal.

A GLOBAL STRATEGY FOR ISRAEL

Contrary to domestic challenges, regarding which the state can comparatively be the master of its own fate since the majority of the problems and solutions are subject to its own influence, Israel can hardly control the challenges in the foreign affairs arena, which involve threats from the state's active adversaries and enemies. It is commonly estimated that in the coming years, no existential military threats from the outside requiring national concentration and mobilization will present themselves, and, therefore, the next few years constitute a window of opportunity of sorts for Israel to concentrate on domestic resilience-building. However, at the same time, evolving international and foreign developments force Israel to make significant critical decisions regarding actions in the international and regional arenas and its positioning on the changing world map in a manner that best serves its interests.

In a world that is experiencing a shift in the distribution of power from West to East, in an era characterized by accelerated technological change that impacts economic, geopolitical, and military fields alike, Israel must develop a global strategy that will guide its international policies. In other words, Israel's new global approach will clearly be neither primarily regional nor unidirectional (that is, mainly Western Atlantic), as it has been thus far. It must adopt an orientation of global positioning while maintaining the American and Western anchor. Israel, from its geographical location, should add to its policy's existing historical Western vector – the Atlantic orientation, grounded in North America and Europe – another vector directed eastward to the Persian Gulf and further to the emerging Asian powers. Some would call such a shift a Pacific orientation, as it is directed towards the countries in the Far East and the shores of the Pacific and Indian Oceans, but on balance Israel should still rely on its predominantly Atlantic alliance with the United States and seek to enhance it.

Alongside these two vectors, there are two others, northward and southward: Toward Russia because of its involvement in the region, and toward the south, namely, Africa, an emerging continent, and key countries in Latin America, where Israel has interests and options.

Some would call this global strategy a 'tous azimuts,' or 'Rose of the Winds,' but its logic stems from Israel's geographical location, on the one hand, and the diffusion of the world's power centers, which are no longer unipolar or bipolar, but rather multipolar and spread over the entire globe, on the other. The processes on this globe are characterized by an erosion of governmental and organizational institutions, changing traditional concepts of sovereignty, and the arrival of non-governmental powers and entities. On the international scene, ad-hoc coalitions and blocs emerge around partial common denominators, as well as multilateral corporate and non-govern-

mental networks of various types. Israel needs to navigate in these rough waters in such a way that it maintains its anchors with major allies and cooperation with other countries, sometimes managing its policies by hedging.

A strategic task facing Israel is: How can it restore, promote, and strengthen its special relationship with the US, if the latter is moving away from the arena, and how to do so while developing the relationship with China, which may be on a collision course with the world's only superpower? As said, Israel has a profound interest in preserving and promoting its ties with the West, with the US at the center, and even with Europe. In the same breath, Israel should also develop opportunities and relationships with the East, while recognizing that these do not present alternatives to the relationship with the US in terms of diplomacy and security. China allows for diverse economic cooperation that should not be overlooked for fear of American displeasure. There is no problem from the American perspective in fostering Israel's relationship with the rising powers of India, Australia, Singapore, Japan, or South Korea. Vis-à-vis these and other countries, such as Indonesia and Taiwan, Israel could move forward without any pressure from the US. With regard to China, Israel can adopt the parameter bar the US itself employs with that country, but it must understand that China also has interests in countries that are not friendly to Israel, such as Iran, and it cannot be expected that China will serve as a political and security support.

To the same extent, the overall relations between Israel and Russia need to be attended to, among other reasons because of Russia's military and political involvement in the Middle East in proximate areas to Israel. It also should be noted that Russia, too, has interests in countries hostile to Israel, such as Iran. A calibrated policy towards Russia is, therefore, warranted.

Israel's present and future interests are, therefore, global and diverse. Some are only political interests for the purpose of harnessing countries to support Israel in international forums. Regarding other countries, interests could include military-security matters, from which Israel could advance through cooperation, burden sharing, and securing means for itself. In other cases, interests are economic and commercial only, as Israel, an export-oriented state, is interested in developing markets for its products, as well as in investment from the outside in its infrastructure and industry. With newfound energy resources, Israel has even developed a modest international energy policy that should be judiciously leveraged. Besides economic and security interests, Israel also has cultural, scientific, and other interests, and for their advancement it needs to pave the way to centers of knowledge.

The strengthening of Israel is also required because the needs of the economy, society, and security, in the present and future, are such that only robust economic growth can maintain them. Such growth will be possible only if the economy and labor productivity are strengthened and improved, and if the human resources of Israel are increased, giving our security quality advantages and

our economy a competitive edge. In addition, this growth and strengthening is required if Israel sets for itself the goal of upgrading its status among nations.

If Israel is to vigorously develop its economic and scientific capacities, it must pave the way by improving its international standing among the nations. There is a reciprocal link between the necessity of promoting national goals in education, science and technology, as well as stream-lining the economy and improving governance, and Israel's global foreign policy and standing. Diplomatic action and Israel's policy should, therefore, allow Israel to advance its economy, science and technology by maintaining openness and receptivity toward Israel in the world, particularly with regard to key relevant countries.

Israel, as a well-respected state whose international standing is improved by its being seen as seeking peace in word and in practice, will also be able to secure the international openness that will allow the strengthening of its human and economic capital, which, as stated, confers on its national security an essential qualitative edge and on its economy the required competitive advantages.

One defining aspect of Israeli exceptionalism is the special relationship that relates to Israel's connection with and obligation to the Jewish world. That, too, is in a way a global issue, as it relates to the management of Jewish communities spread over the world's continents. It is obviously in Israel's interests to benefit from existing Jewish sympathy and support that it receives from those communities abroad. At the same time, Israel also has an obligation, as declared by its Zionist founding fathers who, while always seeking to encourage aliyah to Israel, also sought to support, connect, and even protect their Jewish brethren worldwide. Moreover, today there is and will continue to be communities of Israeli expatriates in various countries as globalization advances, and the relationship with them should also be reinforced. In these contexts there may be a need in Israel to modify some of its policies, such as the religious definition of a Jew and that of the civilian privileges of expatriates who are citizens of Israel, all with a view toward expanding the size, connectivity and solidarity of the global Jewish community through policies of inclusiveness. Efforts should be made to remove bureaucratic and state-supported barriers against such inclusiveness.

Israeli global interests are also advanced through the entrepreneurship of non-governmental Israeli actors from the worlds of business, culture, civil society, the arts, and more. The resourcefulness and initiative of these private entities constitute the softer elements of Israeli potential power. Yet it is Israel's official and governmental bodies and branches that should manage and advance Israel's global interests through the traditional means of diplomacy and representation, as well as through cooperation in the domains of security, intelligence, trade, agriculture, medicine, and so on, which should also be pursued by Israel's foreign policy apparatus. This apparatus, which involves governmental agencies and branches, must be invigorated, modernized, and tasked with advancing Israel's interests globally. This era of globalization and the nature of the global distribution of interests necessitate effective machinery to manage it in the field. The current trend of the weakening of the Foreign Office must be reversed, with the Ministry modernized and re-organized. The enactment of a Foreign Service Law would be beneficial, but other ministries should also have international reach, based on a whole-government approach whereby relevant Israeli ministries should be an essential platform thanks to which Israel's changing international interests could be successfully advanced.

REGIONAL MANEUVERING STRATEGIES

The changes in the Middle East and the processes that have evolved allow Israel a wider space for it to maneuver, as it seeks to blunt security threats and align itself with relevant partners. The security risks and threats it faces are well defined around Iran's nuclear ambitions, its hostility to Israel, and its subversive activities in the region. There are in close proximity to Israel other pockets of Islamic entities that possess military capabilities that can harm Israeli interests abroad, in the region, but worst of all, inside Israel's territory itself. Other radical Islamic forces are operating in the region and internationally, with Israel and Israelis targeted by them as well.

On the other hand, the Western countries, Russia, and others are often found combating these terrorists and radical Islamic threats, an effort with which Israel is allied. But in the region itself, there are also a number of Arab countries, all of them Sunni, who face the same threats. This political fluidity in the region gives rise to opportunities of convergence, of shared common ground and options. Geostrategists have been considering a strategic convergence between Israel and the Sunni-Arab camp, which fears a rising Iranian Shiite crescent. Others have identified the Mediterranean as an organizing strategic and conceptual framework. However, recently, this vision has been re-etched, in light of significant offshore energy finds in the eastern Mediterranean, together with energy production and supply routes.

It seems, however, that as long as the Israeli-Palestinian conflict has not been fully settled, there will be a ceiling to the degree to which Israel could be included in regional coalitions or institution frameworks. While it is probable that Israel will be able to advance its discreet and even its diplomatic relationships on lower levels – from economic ties to political security – full participation in some of these coalitions with variable geometry, full membership and equal partnership in the regional bodies and organizations will come about only when a comprehensive peace agreement is reached. The heart of Israel's regional partners comprises the ring of countries bordering Israel, two of which we have a peace treaty with – Jordan and Egypt – and a quieter relationship with Saudi Arabia and the Gulf States. But there are other countries in that proximate ring which are of significance to Israel: Syria and Lebanon. Currently, Israel has an interest in the future political order that would arise in Syria, and ultimately in having good relations with its neighbors to the north-east. There are, in fact, multiple reasons Israel should seek a peace accord with Lebanon. All in all, Israel's long-term interest is in having peaceful relations with the entire ring of countries on its borders, and with having all these countries as security buffers in which no hostile military presence can be based.

It stands to reason that in the context of a glass ceiling on the formalization of regional normalization, Israel's maneuverability will be on the level of practical relations only, with no high level official diplomatic representation. At such a level, Israel will have to display impressive skill, agility, and preparedness to effectively promote its interests.

To conclude, Israel should operate simultaneously on several multilateral regional configurations, such that may be congruent with the progress made on the Israeli-Palestinian peace process, and in pursuit of its near and far security interests, and finally those relating to economics, trade, and energy interests. Hence, the Israeli policy in the region also needs to be proactive and dynamic, of a hybrid character, flexible, and agile.

It will have to refine and deepen its relations with the countries in the nearest ring, with the aim of reducing and, indeed, neutralizing any hostile presence close to its borders. A policy of flexible maneuvering will be required of Israel in conducting its relations with other key countries in the region and, especially, with those with whom the common denominators have broadened, mainly in dealing with Iran. This regional policy can be carried out in concert with the United States of America and its allies.

Peace, Conflict Management and Negotiating Strategies

The Israeli body politic has been fundamentally torn between two conflicting approaches to the resolution of the Arab-Israeli dispute, both of which seek to bypass the current deadlock, alter the status quo, and move forward, with support from the new US administration. One approach advocates a solution based on a principle of separation, basically under the formula of two nation states, one Jewish and the other Palestinian, based on modified 1967 borders. The second approach seeks to expand Israeli sovereignty beyond the 1967 borders, retaining a part of the West Bank, and in the remainder allowing either for Palestinian autonomy or statehood of limited sovereignty. Palestinian society is also divided as to which formula to resolve the conflict. Internationally and internally induced efforts to break the impasse and embark on new efforts to move a negotiating process forward can be expected.

It is in Israel's national interest to avoid stagnation and do its upmost to generate a process that will yield progress. The international community often blames the lack of progress on Israel, which is damaging to its international standing and interests. Towards that very purpose, Palestinians often leverage the impasse to improve their position as well as their bargaining capacity in the process. That is why seeking peace in words and in deeds is not only Israel's genuine position, it is also tactically the position to which it should be seen as committed. Bridging the internal political debate is necessary so as to allow for the resumption of negotiations and for sufficient maneuvering space over time. A Grand Strategy cannot exist in the absence of a majority consensus. Hence, in the face

of an internal debate, political debates and mechanisms should be employed to mobilize a consensus-based policy for the process. One way of achieving this is to adopt an agreed political platform among the main Israeli political blocs, which would define a phased, graduated, and multi-stage approach that in any event may very well be the product of negotiations when Palestinians and Israelis are at odds over the contours of the final and complete peace agreement. This graduated approach also allows for time to do its work as implementation on the ground is phased, thereby postponing the burden of some of the tougher measures further down the road.

Another instrument that should be capable of allowing Israel to manage an effective negotiating position is the deliberate structuring of future Israeli governments on a bi-partisan basis – a method that has been used several times in Israel's history for the sake of national unity during times of war but also at other times for the sake of political stability. Indeed, both recent and distant history testifies that, even under dispute, Israeli governments knew how to form such coalitions, which imparted both political space and support for its policies. Such an intricate deed requires overcoming significant political hurdles; but, on the other hand, given the precedents and exigencies of future negotiations, it seems to be a most useful structural political mechanism.

It is judged that the principle of geographical separation based on demographic factors remains the preferred formula to resolve the Arab-Israeli conflict. For almost a century this has been the governing principle, from colonial times through to international community resolutions leading to positions expressed by the respective parties. Departing from that formula and towards a policy of annexation and expansion holds a dual danger. First, it flies in the face of what has been the preferred approach historically and politically, including that accepted internationally and regionally. Second, it is not at all certain that Israeli governments would have the diplomatic and political means to render political legitimacy to such policies and render them sustainable. Rather, it is assessed that such policies may prove themselves to suffer from over-extension, due to insufficient ability to make its results accepted without future opposition, political or otherwise. Only a proactive Israeli strategy that pursues arrangements based on partition will enable it to improve its condition and is congruent with the need to increase Israel's international standing and interests.

The image of Israel being committed to peaceful resolution of the conflict and the reality of progress in the negotiating process are important in and of themselves, no less than their consequences. Promoting the process has two advantages: The direct advantage is moving towards the state of peace for which Israel longs and which is its strategic long-term goal. The indirect advantage is in improving Israel's international standing, and thereby facilitating the advancement of its economic, scientific, technological, and security interests. In addition, it would also allow progress with countries in the region, which could, in effect, underwrite such a policy and expand the process into a regional one.

Regional constellations also open areas to Israel for political maneuvering and new cooperation. It should be borne in mind that the idea of accepting Israel as a de jure Jewish state is not yet commonly accepted in the Arab-Muslim world, and that situation presents limits to the accomplishment of a final peace agreement that has full closure with all grievances addressed. This fact sets a barrier on the feasibility of achieving full regional peace between Israelis and Arabs, as desired by Israel; that is, full reconciliation and good neighborliness, with no residual grievances or claims that might re-open the conflict should changes in the balance of power occur. Perhaps in the long run this element will subside, if only because if there is a constant in history, it is that of change. However, that is not likely to happen in the near to medium future, judging by the mood on the Arab-Muslim street, among both its ideological and secular leaders. All these suggest, therefore, that leapfrogging to a final and comprehensive agreement may be neither feasible nor desirable. Instead, a graduated, phased approach consisting of partial steps all leading in the direction of full resolution of the various outstanding issues is the dominant course to follow.

Assuming an effort by the Trump administration to jumpstart a negotiating process while drawing on both plans and steps already informally discussed and negotiated in the past in addition to novel initiatives and instruments, the following are certain rules that should serve, for example, as the guiding principles of an Israeli pragmatic and flexible approach in the process:

1. **Peace:** The long-term goal of the Jewish State of Israel is the obtainment of a comprehensive, stable, and enduring peace with all outstanding claims being addressed, which would bring legitimacy, recognition, reconciliation, and good neighborliness.

2. **Security is paramount:** The security component in Israel's position is cardinal because of Middle Eastern realities and regional instabilities, violence sometimes directed against Israel, as well as the potentially escalatory nature of the Israeli-Palestinian conflict. Any Israeli move in the process has to enhance Israel's security rather than detract from it. A variety of security-enhancing means could be introduced by the international community.

3. **Partition and separation:** The principle of Jewish nationalism, historical experience, and the cumulative weight of international legitimacy prioritize the partition formula of two states over unification into one state. The partition arrangement is preferable for Israel, since only partition ensures that it will be the nation state of the Jewish people. An annexation strategy is bound to dilute the Jewish identity of Israel.

4. **Legitimacy:** The State of Israel was established and accepted into the family of nations on the basis of Israel's self-definition as a state in which the right to self-determination of the Jewish people is materialized, and as a country that accepts the principles of the UN Charter. Any departure from these international tenets could not only harm Israel's legitimacy, but also contradict its own constitutional and national values as declared and under which it was accepted into the family of nations.

5. **An institutionalized process:** An institutionalized and regulated framework for the process is advantageous. The old practice of spurts of intermittent and ad-hoc negotiations, often bounded by deadlines, should be replaced by an institutionalized, permanent, and continuous process framework. There should be no fixed agendas; in fact, even the list of final status issues could be re-examined and re-shuffled, and agendas would be set at each phase and each session. The guiding principles would be the ripeness and feasibility as regards potential progress.

6. **Current asymmetry between the parties:**

    A. **The formula:** The overriding Israeli interest is in a partition arrangement that will create a two-state situation – Jewish and Palestinian – and will end the conflict and all the claims. For the Palestinians, however, such a formula may not put an end to all claims, e.g., the right of return. Israel's right to exist as a Jewish state is not yet accepted as a possible, final outcome.

    B. **Time urgency:** Among the Palestinians there is a sense that time is maybe on their side, and that there is urgency neither for concessions on substantive positions nor for closure. The opposite holds for Israel.

7. **A phased process:** Due to the absence of agreement on the end-goals and on closure for 'two states for the two peoples,' progress can be generated over time only in the context of a gradual and phased process.

8. **Pragmatism and progress:** Progress should be sought wherever the parties can agree. Partial agreements reached, whether bottom-up or top-down, shall be implemented upon their attainment, while modifying the rule of 'nothing is agreed until everything is agreed.'

9. **Procedural flexibility:** Israel will demonstrate a high degree of procedural flexibility, along with insisting on substantial interests. For this purpose, it can use negotiation-supporting devices (rear channels, special envoys, Track Two diplomacy), as long as they do not disrupt the process. The confidentiality and transparency of the talks are not sacred, and neither should there be hard deadlines.

10. **Initiative:** Israel stands to gain from being the initiator of various diplomatic moves and ideas. Appearing proactive and constructive will give Israel a diplomatic advantage that could be leveraged tactically and laterally. The very fact of Israel taking the initiative and being active in an institutional framework for negotiations, and the very existence of an ongoing settlement process, are as important as the outcome of the process itself.

11. **CBMs and code of conduct:** Code of conduct and confidence-building measures could be employed: e.g., measures of restraint, such as for Israel on the construction of settlements, and for Palestinians on hostile international activities.

12. **The USA:** International participation in the process should not replace direct negotiations, but could be instrumental in addition to them. The United States is likely to remain involved, both in the negotiation process under varying profiles, as well as in the implementation phase. Israel should work with the United States and welcome American involvement in the process and in the implementation of whatever agreements are reached, if it comes to that.

13. **International involvement:** Other international involvement by world powers or international institutions are not a liability and should not be disregarded. Israel should demonstrate open-mindedness to international instruments and participation and exhibit procedural flexibility on the whole. The use of international conferences or forums can and should be benefited from, as such use sometimes allows for the injection of resources and legitimacy into the process, so long as it does not damage the main institutional process.

14. **The regional dimension:** The two major issues in terms of the final status are the issue of the Palestinian right of return and Jerusalem, both of which have regional consequences. New avenues for arrangements may open; for example, international instruments of compensation for refugees, to be applied equally to Palestinian refugees and Jewish refugees, and legal instruments and various sovereignty formulae that allow for land-swap mechanisms. Progress in the arrangements process will constitute a lever to deepen Israel's operations in the region and its integration into it. Regionalization provides new possibilities and opportunities, which should be leveraged together with other countries in the region, in regional contexts – economic, security, etc. – and in the context of normalizing measures and regulating the conflict.

15. **The proximate ring:** Negotiating peace with the Palestinians could be and should be augmented by the completion of a peace process with all countries neighboring Israel. Preserving peace with Egypt and Jordan is critical. Jordan is an integral part of the Palestinian equation and has a standing and interests in Jerusalem and the Palestinians. The stability and security of Jordan is critical to the security of Israel. In the mid to long term, peace with Syria and Lebanon should also be achieved.

16. **Sovereignty:** There is no rigid definition of what state sovereignty practically entails, and the changing international manifestations of sovereignty, coupled with international precedents and examples, offer a rich menu for alternative territorial arrangements, such as enclaves and exclaves, as well as special international regimes. Use should be made of such precedents and arrangements, which could offer newer solutions for geographical/ demographic alternations. Similarly, the special case of Jerusalem also calls for creative application of a variety of sovereignty concepts, as warranted by the complex legal and political character of this issue.

17. **Federated and confederated frameworks:** Options presented under discussion for future confederated or federated frameworks, as regards Jordan, Israel, and Palestinian Territories, could be examined in the context of the degrees of separation versus cooperative and integrative modalities.

18. **Borders and land swaps:** The current fluidity regarding the redrawing of borders in the Middle East gives greater feasibility to the application of land swaps and border changes. Proposals to that effect involving Israel and the adjacent territories have been considered and could be implemented in the service of a more stable, secure Palestinian-Israeli formula, as well as with Egypt, Saudi Arabia, Jordan, Syria and Lebanon.

Calibrating National Security Strategy

From its incipience Israel had to base its security, indeed its very existence, on the possession of demonstrable power and capabilities These provide adequate responses to the range of military challenges currently confronting Israel. To render its military capability more efficient, it must address the following specific challenges:

A. Revise deterrent options: Against conventional threats, deterrence must be better calibrated by reducing costs and improving benefits. The deterrence of conventional threats should not be predicated on deterrence through punishment, but rather on deterrence through denial. For there can be no effective punishment other than disproportionate response, which, however, is often seen as excessive use of force and invites condemnations, which, in turn, make the policy prohibitively costly. Therefore – to the extent that deterrence is the policy pursued – it should be based on decapitation and counter-force targeting, thereby reducing the enemy's ability to inflict damage, and defense means that are aimed at the same objective. Against non-conventional threats, an effective deterrent ought to be maintained on the basis of credible and often disproportionate, retaliatory capacity.

B. The IDF has to maximize the effective purposefulness of its military capabilities in terms of concrete and tangible results, particularly as applied to the enemy's offensive capabilities. Defeating the enemy should be defined as depriving it of the means and will to engage in hostile activity. Israel's military have to stretch to the limit, in terms of bringing about the enemy's defeat, and the responses that military capabilities can offer. All use of force, whether planned and initiated or as a reaction to enemies' initiation, should be undertaken with the purpose of defeating the enemy in tangible terms.

C. A determination should be made regarding areas the IDF now controls, must keep, or, if attacked, has to capture. It should be clear what the defensive and security value is of such territories under changing political, military, and technological circumstances. This is needed for the dual purposes of shaping Israel's security and permanent borders within the framework of the negotiating processes and of determining the possible conduct of future military operations.

D. Israel has to upgrade its defensive cyber security capabilities and further advance its cyber offensive capabilities so as to establish that domain as one in which Israel maintains comparative qualitative superiority.

In terms of force projection, it appears that the significant areas for such use are located close to Israel. Thus, Israel defines Jordan as a zone in which it has serious interests, to the point of justifying intervention in circumstances of danger to the Hashemite regime. The Syrian theater is similar in terms of the possible need for intervention in the case of threats developing from that area. The same holds true for Hezbollah in Lebanon and Syria. Gaza and the Sinai are clearly zones in which Israel would have need to project power. At the same time, for both strategic and non-strategic purposes, Israel should maintain a long-distance operating force projection capacity. Finally, critical sea lanes and economic waters call for an Israeli ability to maintain an effective force projection.

As far as national security command, control and decision-making are concerned, Israel must upgrade its means and improve its performance. There exist current gaps between the level of performance required by law and the existing level in practice. National security decision-making at the top echelons, both at Cabinet and National Security Council levels, ought to be significantly streamlined and improved. Current shortcomings should be corrected without delay, if the country is to be ready for future emergencies and crises.

OUTLINE FOR SCIENTIFIC-TECHNOLOGICAL-EDUCATIONAL STRATEGY

In the second decade of the twenty-first century, science and technology continue to be—more so than ever before—the undisputed central components of human welfare, the economy, and security. They affect the destiny of nations and states, for better and for worse, as reflected by the selection of science and technology as one of three clusters comprising Israel's Grand Strategy, alongside foreign affairs and security, and the economy and society.

By global standards, Israel has achieved extraordinary successes in science and technology, and continues to do so. This is manifested in many fields, such as security, the economy, industry, innovation, and entrepreneurship. However, the national apparatus creating these scientific and technological capabilities is showing signs of stagnation and attrition, both in absolute terms and relative to nations with which Israel competes on the global markets and in its geopolitical arena. One of our major conclusions is that without a resolute national initiative the crisis will worsen—so much so, that Israel will be placed jeopardy.

At this time and before it is too late, a focused and determined national effort by Israel's government and Israeli society is needed to place science and technology – including scientific and technological education – at the top of the national agenda. A national emergency program is a necessity, as the warning bells are already sounding, and action, even if taken immediately, will show its effect only years in the future.

A decisive and fundamental conclusion of our work is that the problem with science-technology education does not lie in any one particular aspect or other that, were it only to be fixed, would result in everything else falling into place. We are witnessing a weakening of the entire system that creates, sustains, and promotes Israel's scientific and technological capabilities, and enabling their derivatives to be manifested in the nation's welfare, economy, and security. The cracks are everywhere. Unless they are fixed in a coordinated and concurrent manner, the entire structure is at risk. What ought to keep our decision makers awake at night is the realization that we are caught in an adverse process that, unless reversed, will accelerate and lead the country into the abyss.

Our work may be summarized in ten insight. In the relevant chapter, we shall offer categories of solutions to remove the obstacles. The challenge, overall, is advancing our human capital, both quantitatively and qualitatively.

1. **Lacunae in science and technology education.** Israel is experiencing a growing deficit of high school graduates at high mathematical and scientific levels (not attained by lowering the bar to create an appearance of excellence) capable of successfully coping with higher education in science and technology. Israel must therefore significantly increase the excellence tracks offered in these subjects. It is critical to create an emergency plan that will attract students to science and technology and encourage outstanding students who, in turn, will pull many in their wake and, in the future, push the frontier of knowledge and its byproducts steadily ahead for the benefit of society, the economy, and security. At the outset, we should note that a healthy, advanced society must also be blessed with students excelling in the humanities and social sciences and must promote cultural richness and openness beyond the natural sciences and technology. This document, however, focuses on science and technology.

2. **Lacunae in professional technological high schools.** In recent decades, the rate of students in professional technological training tracks in Israel has steadily declined and is lower than that of European nations. The low rate of students in these tracks is an obstacle to economic growth because of the need for technicians, practical engineers, and professional workers, as well as the engineers who emerge from this background.

3. **Very large non-participatory population segments.** Young men and women in Israel's geographical and social peripheries and in the ultra-Orthodox and Arab sectors, who represent a growing percentage of the population, are not involved in in scientific-technological endeavors at universities, in R&D, or in industry. Each of these groups needs a unique program adapted to its special needs.

4. **Lack of suitable teachers.** There is a severe deficit in a teaching cadre capable of and committed to consistently heading science and technology studies. It is critical to create programs to encourage and attract candidates leading to a change in teachers' professional status (including appropriate working conditions and salaries).

5. **Weakening of science-technology research relative to the global forefront.** Research and research universities at international levels are a critical component in sustaining and promoting the state's scientific and technological capabilities and preventing provincialism of Israeli science. They set the standard for the rest of the system.

6. **Obstacles in technology transfer between the academe and industry.** The potential for the transfer of technology between the academe and industry is not being maximized due to cultural differences between them and the relative dearth of mission-oriented research at the institutions of higher education.

7. **The weakness of traditional industries and services.** For many years, the traditional industries were the central economic and employment base in the economy, and they continue to be so today as well, with beneficial effects especially in the periphery. But the low rate of productivity creates a real economic and social problem. Restoring this branch to its rightful place is of critical national importance, requiring a nation-wide approach based on innovations and financial tools.

8. **The slowdown in the growth of the high-tech sector, the importance of R&D centers, and a knowledge drain.** In recent years, growth in Israel's high-tech sector has tapered off. Instead, we are seeing a trend of establishing R&D-intensive companies whose economic potential is maximized across Israel's borders. The result is a drain of knowledge and a decrease in the employment share of the high-tech industry.

9. **Boycott of Israel.** Israel's international status and the capabilities of Israel's R&D community are greatly affected by the state's deteriorating geopolitical standing, such as access to and participation in large science and development programs and multinational flagships of future technologies, cooperative ventures, and the training of scientists at outstanding knowledge centers the world over, and resulting in boycotts and sanctions operated by scientists, organizations, and nations. This is a threat that must be taken into consideration when shaping Israel's foreign affairs and security policy, and everything must be done to minimize its possible ramifications.

10. **Lack of synchronicity.** All entities making a contribution towards Israeli science and technology at the national level are in need of appropriate coordination. Such coordination must include all the major settings and systems involved in promoting science and technology in Israel: the schools, the academe (while maintaining academic freedom without which there is no excellence at the frontier of knowledge in basic research), and industry (including the defense industry).

Organizational recommendations to resolve the problems described in our insights:

a. For leadership and management of the interrelated scientific, technological, and educations systems described in Insights 1-4, and to ensure long-term actions with reasonable and vital immunity to short-term political changes, Israel must establish a national emergency project administration to develop and entrench mathematical, scientific, and scientific-technological education. This administration must be autonomous and work in a coordinated fashion with the prime minister, education minister, and the proposed advisory committee on science and technology *(see below)*.

b. For long-term planning, development, and coordination of Israel's grand strategy and its objectives in science and technology, absolutely critical to the nation's progress, economic resilience, and security, it is necessary to establish a science, technology, and science and technology education policy council (STSTEPC), a parallel institution to the National Economic Council and the National Security Council, representing the various bodies engaged in all aspects of science and technology and science and technology training, to work with the prime minister.

OUTLINE FOR AN SOCIO-ECONOMIC STRATEGY

Israel's economy is characterized by light and shadow. Taking a superficial look, everything seems quite benign: no inflationary erosion, the employment rate is relatively high, and the economy sailed through the global crisis that erupted in 2007 with relative success. However, there is a trend of erosion of the fundamental basic components of the economy: the growth rate is falling, exports are very small, productivity has been low for years without any improvement, and non-competition is still the daily bread of many markets. In addition, despite some improvement in recent years, net income disparities and the poverty rate are still high as compared to those in developed countries and may crack the social cohesion, which is one of the assets of the Israeli society. Finally, there are serious problems at the 'Author House' of the decision-making

processes in the field of social economy: problems of governance, meritocracy, representation, and accountability are very onerous on these processes. Looking forward, if there is no change in any of these, they will constitute a weighty source of concern.

Below is a brief description of the main items in each of these contexts, which should be seen as being integrative. The full details of the analysis and recommendations are found in the report.

a. Recommendations for economic growth

› Increasing the GDP per capita and improving the relative position of Israel among the developed countries require a significant acceleration in the GDP per hour worked. This will be achieved by expanding the physical and human capital per worker and improving productivity. The main recommendations for attaining these goals include:

› Massive increase of investment in infrastructure, R&D, and (with an emphasis on technology education).

› Elimination of distortions in the tax system and in the law to encourage capital investments.

› Creation and significant increase of competition in monopolistic and oligopolistic sectors and the removal of barriers to doing business.

› Taking actual steps to resolve the conflict with the Palestinians.[2]

b. Competition, growth, and lowering the cost of living

Competition is the best mechanism for the distribution of business opportunities and therefore its existence is an important prerequisite for growth, entrepreneurship, and the opening of small and medium businesses, creating in turn employment opportunities. In addition, it is an important condition for reducing the cost of living. The main recommendations for achieving these objectives are:

› An authority to open monopolies to competition has to be formed, equipped with powers to take active initiatives.

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2   While there is disagreement about the political success of the Oslo Accords, it certainly contributed to Israel's economic prosperity by lowering the country risk and considerably weakening the Arab boycott. However, these rewards are fragile and can be lost. The lack of some settlement with the Palestinians over time could undermine the legitimacy of trade with Israel, which is extensively based on export to the major trade blocs in the world.

› Introducing competition into import - exclusive import licenses should be withheld (and, where possible, existing exclusive licenses should be withdrawn).

› Orienting the government's policy toward creating competition in all the business sectors in which it operates directly.

Legislation to prevent workers in vital infrastructures from striking, when such strikes are against the introduction of competition into their field of operation.

The Government's Economic and Social Policy

a. Direct involvement: Restoration of public services

The weight of public spending as a percent of GDP in Israel is declining, and in recent years Israel has been ranked in the lower third of the OECD countries. The ranking of civilian expenditure is even lower and is in the penultimate place among these countries. The decrease in the proportion of the GDP spent on civilian purposes is reflected in all public services. These findings point to the great importance of the restoration of public services, by means of the addition of resources, which should be contingent on making them more efficient. Moreover, in the Israeli society, which is divided between religious and non-religious Jews and between Jews and Arabs, and which is an immigrant society where newcomers and veterans coexist, public spending is especially important also for cohesion and reducing disparities. The main recommendations are:

› The rate of increase in public expenditure will increase at a fixed rate, similar to the long-term growth rate of the GDP.

› Since the share of the GDP allocated to public expenditure has reached its lowest point, in particular in the civil area, we must strive toward the median level of expenditure in developed countries.3 At the same time, a budget deficit that does not exceed 3% of the GDP should be maintained, and the average over time should not exceed 2% of the GDP.

The tax system - the government has granted numerous tax exemptions that have no economic or social justification. These exemptions impede efficient allocation of resources and the growth rate. Most exemptions are regressive and therefore intensify inequality. In addition, the share of

3   Therefore, it is recommended that the share of general government spending in the GDP be increased by 1 percentage point during the next two years. The results of the change should then be examined, and, if there are no negative side effects, it should be raised in the following two years by an additional 1 percentage point of the GDP.

indirect taxes in the total taxes is much higher than the OECD average. It should be noted that indirect taxes are regressive and affect people with a low income to a greater extent. The main recommendations are:

› Focus canceling tax exemptions that benefit primarily those who already enjoy a high income.

› Introduce estate tax.

› Refrain from raising statutory taxes as far as possible and avoid frenetic changes in tax rates.

› If the cancellation of tax exemptions will not be sufficient to finance the desired public spending, adjustment of the tax rates will also be required.

b. Reducing economic inequality

Inequality increased steadily from the early 70's until 2003, and is today one of the major problems of the Israeli economy. The Israeli tax policy and the policy for the transfer of payments by the National Insurance moderated the economic inequality, but to a lesser degree than in most developed countries. Regarding the poverty rate, Israel is in second place among the OECD countries, and in the index of inequality, Israel is ranked fifth. Even among families with five or more persons with two breadwinners the poverty rate is very high. Reduction in income inequality is an economic, social, and ethical value, especially in light of its high level in Israel. Reducing inequality not only does not interfere with economic growth, but also enhances it. The main recommendations are:

› Direct measures should be instituted to alleviate poverty among working families.

› Labor grants to low-income workers, mandatory core studies in funded schools, the expanded building of day-care centers and nurseries, and the extension and targeting of vocational training courses to the demands of the economy.

› Labor laws should be enforced by increasing the number of inspectors to the rate accepted in the developed countries.

› Inequalities in education spending per student should be reduced

› The number of foreign workers should be reduced, along with a substantial improvement in the enforcement of all labor laws.

› The old age pension should be increased and the child allowance should be increased for the first three children only.

Governance and the process of determining socio-economic policy

To plan updated economic and social policies that are capable of accelerating growth, reduce inequality, increase competition, and long-term competition requires a government that can function effectively. The low level of governability of the government in Israel has many roots, such as the antiquated structure of government departments, lack of serious research departments and the pronounced centrality of the Ministry of Finance in the decision-making process. An improvement in governance requires a series of reforms in many aspects of the executive branch. The main recommendations are:

a. The budgeting process

› The way to enjoy both fiscal discipline and efficient allocation of the budget is through dividing the process into two phases. In the first phase, all the budget aggregates will be determined: spending, taxes, and the deficit. Since the fiscal discipline is derived from the aggregate budget, it is proposed at this stage that the Prime Minister and the Minister of Finance be granted a prioritized status in the decision-making process. On the other hand, in the second stage, in which the composition of the budget will be decided - it will be done through a collaborative process, with the involvement of the expenditure ministers in determining the total composition and also the budget composition of each office, because most of the knowledge and expertise in the variety of services supplied is located in the ministries that supply these services.

› When discussing the budget proposal, the government members have to be presented with detailed information at a level that is presented to the Knesset in the budget principles book.[4]

b. The structure of the government

The structure of the government and offices leading the public policies is obsolete, frequently changing, and exposed to political pressures. The structure of the governmental system is not based on rational and professional thinking that relies on updated public needs. The political

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4   The low level of transparency in the data presented to the government in the decision-making process on the budget size and its composition is a serious problem. Although the power to decide on the budget proposal to be placed on the Knesset's table is in the hands of the government, its members receive very little data. The unsat is factory data submitted to the ministers on the composition of the budget, and the short time allotted to them for forming their positions and discussing them, undermine the effectiveness of budget allocation.

arrangements, which often change after the elections, are those which determine the distribution of portfolios, the establishment of offices, and sometimes even their internal structure and their span of control. Therefore, the main recommendations are:

› The structure of the government in Israel should be redesigned to include a maximum of 15 ministries.

› Each government office should be required to establish a research unit to help formulate knowledge and understanding of the processes in the areas of the office's responsibilities.

› The powers of the Prime Minister's Office should be strengthened as the headquarters and as a coordinating office between the other ministries

c. The Knesset's function

The Israeli Knesset has two main missions: legislation and supervision over the executive branch.[5] Control of government activity is neglected relative to other parliaments and requires a significant overhaul. The main recommendations are:

› To set a quota for the bills that each Knesset member similar to the amount accepted in Europe, and the weekly quote of private bills should be reduced. To set the limitation of the number of ministers and deputy ministers by law, to allow a sufficient number of MKs to serve in the committees.

› The activity areas of the committees should match the ministries' structure.

› To grant the committees hearing powers and sanctions for non-appearance.

› To add to the committees one working day and activity hours at the expense of plenum sessions.

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5   The Knesset members put on the table in the last 15 years about 20,000 private bills, as compared to a few hundred in European parliaments.

d. The activity of lobbyists in the Knesset

Governments in modern times take into account the implications of their decisions on the welfare of all sectors of society, including the business sector. Stakeholders and external parties are invited to the various committees to voice their opinions, and useful information and external insights can improve policies. However, the main concern of the lobbyists is for the interests of a very small group, often at the expense of all or most of the citizens of Israel. The ability of the wealthy to finance lobbyists is far greater than that of non-profit associations and organizations that represent the interests of the general public. The lobbyists' efforts to slant the legislation so that it benefits businesses and in particular larger companies also affects the public image of the Knesset. Therefore, it is recommended that lobbyists be prevented from appearing in the Knesset Committees.

e. The principles of meritocracy

Senior officials in the public service will be invited to a hearing procedure in the Knesset committee that is relevant to their field of function;

The general directors of government departments will be appointed in accordance with strict professionalism threshold in the field of the office operations;

Civil Service Commission will undergo a reform. The Civil Service Commissioner will be determined by a committee headed by a judge;

Position tenders will be open to external applicants and there will be no appointments by tender of people who actually served in this position.

ON INTEGRATION AS A PRINCIPLE AND IN PRACTICE

A significant key to the success of the Grand Strategy demonstrated herein is realizing the importance of integration both within and between the clusters. For example, integration within the cluster of science, technology, and education is highlighted in the ten insights selected, stressing the need for simultaneous implementation and the establishment of a national council that will guarantee such a coordinated implementation. In the society, economy, and government cluster, the intra-cluster integration emerges out of the understanding that it is impossible to reach the levels of GDP per capita of developed countries without treating the insufferable gap in income

that divides Israeli society into a thin layer of rich over a thick layer of poor, whose personal contribution to the GDP is low and who earn low salaries. It is also impossible to lower the cost of living without making major changes in the structure of the economy and preventing excessive centralization and crony capitalism. All this is impossible without a functioning, effective, and clean-hands government and the concomitant severing of ties between government and capital, as well as the establishment of a cadre of civil servants who see their work as being rewarded in accordance with their designation and not as a stepping stone to the private sector, which they oversaw only the day before. However, it is also impossible to raise the productivity of the large poorest classes without a dramatic improvement in their level of education and especially technical education (the science and technology cluster) –and all of this profoundly affects national strength, including its projection to the outside (the foreign and security cluster).

By the same token, a strategic plan for foreign affairs, defense, and international policy demands, like any other area, an understanding of all the various arenas in which Israel operates and those that act upon it. An increasing number of political, social, economic, and scientific-technological contexts express themselves simultaneously in all corners of the globe and require the simultaneous consideration of a multivariate system. In this context of a global perspective, the relationship between Israel and the Diaspora is particularly sensitive, and especially that with Jewish Community in the United States. Demographic and social developments in Israel, leading to growing control by a Jewish nationalist Orthodoxy, are a source of a rift with American Jewry, most of which is liberal and Reform and distancing itself from Israel and from total identification with it. Israel's international and security status as a whole also depends, in no small part, on its technological-scientific strength, but the infrastructure for this strength has so far been made possible in our research institutions thanks to the generous assistance of world Jewry; and the products of this infrastructure have long-term consequences on the security-political status of Israel, in the region, and the broader world in general, and vice versa.

The following are a few more examples, intended to draw the reader's attention to the inevitability of integration for the understanding of processes and removal of barriers to solve problems of strategic significance:

› **Economy and R&D:** A basic problem emerging from the review of the economic cluster is the problem of productivity (expressed in, among other things, the quantity of capital per worker in the economy). An important source of growth lies in innovation that stems from R&D and projects. We already know now that the number of long-term savings assets in the economy is growing and is expected to grow at a fairly high rate (partly due to a mandatory pension law, etc.). The combination of these factors leads to the recommendation to examine the possibility that the financing of R&D will also be done with the help of long-term savings schemes (pension funds, education funds, etc.), which will invest some assets in encouraging R&D programs needed for the economy. This investment is expected to establish a large funding lever that is untapped today, while making all necessary adjustments. This will create a decentralized source of funding for R&D and industry that does not exist today and is independent of bureaucracy, such as the Investment Center, etc. Moreover, strengthening the sources of funding will enable further development of Israeli start-up companies in Israel, conservation of knowledge assets, and the opening of another channel for the construction of stable and broad industries that will contribute to strengthening the Israeli economy in the future.

› **Boycott of Israel:** The international status and capabilities of the Israeli R&D community are significantly affected by the state's geopolitical status (such as the impact on access to and participation in large programs of science and development and multinational flagships of future technology, cooperation, training of scientists in outstanding knowledge centers world-wide, and the exclusion and ostracism of Israel by scientists, organizations, and countries). This risk should be taken into account in foreign affairs and security policies, and we have to prepare ourselves as far as possible to minimize this risk.
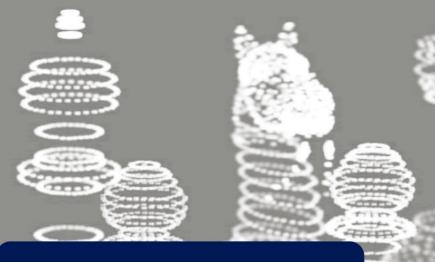
› **Society, education, and economics:** *A*. In the last decade, the ruling axiom employed by the public toward teachers in Israel was: 'If they will give – they will receive;' in other words, teachers' salaries will be raised only 'if they will give,' that is, if there is a dramatic change for the better in the quality of teaching. This strategy is fundamentally wrong: those who want quality transformation must offer more at the level of compensation. In simple terms, you cannot raise quality while offering salaries bordering on misery to the teachers who are entrusted with the future of the country. As a result of this prevailing view, the teachers' status in Israel has deteriorated alarmingly in recent decades. A review of the status and earning level of teachers in countries such as Singapore and Finland and the power multiplier it produces in their domestic economies shows an example of the tight link needed between the quality of education and the economy. *B*. In the Forum's view, a high priority task is the development of a special instruction track with individual contracts for academics/ excellent teachers (teacher researcher), who will be launched as a task force to centers that foster excellence and eradication of disparities, aimed at improving the status of teachers and, thus, improving education and attracting students to study science. *C*. The next generation is the key to strengthening and leveraging the State of Israel. Boosting quality education is, therefore, the ultimate task and the cornerstone of the Grand Strategy. It should become a national project run continuously and without budgetary interruption, with an emphasis on the prioritization of the teaching profession also by economic means. A "root canal treatment" will be performed on both the world of content (curriculum) and the level of teaching quality. Positioning the continuum of education from kindergarten to university under one integrated national vision contributes in many countries to achieving the most significant results, and we have no doubt that it would in Israel, too. *D*. Strengthening all the components of the ecosystem necessary for a healthy and growing economic-technological society. Promoting quality science and technology education from kindergarten to high schools, strengthening basic and applied research, and encouraging academia-industry relations, tax breaks, and grants for the establishment/strengthening of factories with manufacturing infrastructure.

› **Governance, Economy and Society:** The weakest link in Israel's scores on indices of international competitiveness is the element of government institutions. Therefore, a "root canal treatment" in the public sector is required as a derivative of the vision for the areas of (a) the issue of political appointments and meritocracy, (b) the elimination of corruption and a revolution in the war against it, and (c) aggressive enforcement of measures against pollutants of public tenders: tailoring, bribery, and coordination in tenders and government jobs form a very large part of the GDP.

In conclusion, as we noted at the beginning of the document, the reader will find that, although innovation is not lacking in specific areas, a more significant contribution is found in the comprehensive, connective, strategic, and long-term perspective, with the understanding that solutions at the national level will not be effective if they focus on one sector or on focal points, and that the range of problems in different areas has to be taken into account, as well as their interdependencies and the responsiveness among the domains. In the field of our discussion, this means among the economy, society, science, and technology and education, governance, security, and international relations. We hope that the interested reader will benefit both in thought and in fields of action by the principles and insights we sampled in this document.

ABOUT
GRAND
STRATEGY

PART 1

GRAND STRATEGY FOR ISRAEL:
CONCEPTUAL AND METHODOLOGICAL REFLECTIONS

UZI ARAD

About Grand Strategy

The concept of Grand Strategy evolved following World War I, reflecting the notion that all elements of national power need be harnessed to win wars. Such a definition suggests that national strengths fan out beyond military force alone. While tactics, as Clausewitz said, is the art of using the army to win the battle, strategy is the art of using victories in battles to win the war. John Fuller refined the concept, describing Grand Strategy as the synchronization between military and non-military efforts to defeat the enemy. For him, Grand Strategy is the use of all relevant resources for winning the battle. In World War II and its aftermath, the concept was utilized by other thinkers, such as Liddell Hart, who clarified that Grand Strategy connects the use of resources, which are limited, to the attainment of essential national goals. To him, the essence of Grand Strategy is the art of mobilizing national resources, both military and non-military, in the pursuit of essential national objectives.

The growing use of the concept of Grand Strategy, at both the conceptual and practical levels, led to multiple and different definitions and applications, and sometimes to lively debate as to the feasibility or utility of such a concept. Two definitional approaches can be discerned. One approach found serving scholars at Yale University, who defined Grand Strategy as the rational manner in which the state harnesses all its resources and national means for the sake of realizing its interests and national goals. Another approach by scholars at MIT and Harvard defined Grand Strategy as the conceptual architecture that gives logic to statecraft, especially how to navigate in a difficult and dangerous world. For our purposes, both definitions have been employed: the latter, which is the more focused, when applied to the crafting of Israel's principles and directions of action, and the former in the integrated examination of the ingredients of national power.

With time, other definitions have been offered for Grand Strategy, and with the advent of the nuclear age, official pronunciations on the grand strategic level were sometimes described as 'national security strategies.' Indeed, the concept of national security, which came into vogue from the Cold War onwards, encompassed a fuller scope of national interests and objectives, as well as a fuller range of resources for its support. Since then, the applications of the concept have become increasingly varied. Those who use the term Grand Strategy differ in their approaches and methods, as well as emphases. There is a vast literature, both comparative and historical, that demonstrates the theoretical and methodological diversity found amongst those who use the term. That literature also includes skeptics who question the existence or value of grand strategies. Some object to its

presumptuousness or point to the difficulty of obtaining it either in the abstract form or in practice. A certain typology can be found in the literature that notices four distinct applications of the term: as a course of action, as a declared vision, as a paradigm, and as a process.

Grand Strategy as a Course of Action

Grand Strategy, in its most common definition, is a plan which charts the course of action that needs be taken to obtain the desired goal; or it could be a program on how to integrate military, diplomatic, economic, and other means to attain the country's national objectives. The Grand Strategy program suggests which are the most important goals for the long-term, prioritizes them along with national interests, and often identifies the main threats that lie ahead. With this mapping, the responses it outlines constitute a course of action which involves the allocation of appropriate national resources. Indeed, the Grand Strategy directly connects the goals of the state with its resources, activities and actions in the short and medium term, and with its long-term goals. That connection is realized when current policies and specific short-term objectives are drawn in light of a long-term strategy and as steps toward achieving the greater goals defined by the Grand Strategy. Grand Strategy, therefore, consists of both setting the goals and outlining the ways and means for achieving them. Given such an approach, a nation's statecraft is conducted, not in an ad-hoc fashion, but rather on the basis of a structured idea and organizing principles regarding long-term goals and its interests in the international arena, and derives from these the principles the path to achieving the goals and the realization of its interests.

Sometimes it is only natural for the leadership of a country to be the source of the strategy. It may emerge from the planning staff at the captain's side, or sometimes from teams of government officials, the academy, or think tanks, which develop and articulate the plan. Interestingly, when produced by the top echelons of a country, the definition of Grand Strategy often takes a more narrow scope, focusing only on national security and international and foreign policy dimensions. And yet, in some instances, grand strategic documents encompass both the foreign and interior dimensions and identify domestic considerations and domestic reality as essential to making progress and dealing with the external environment. Domestic resilience and cohesion, national and economic robustness, scientific and technological progress, ideological consolidation, political consensus, public opinion, purposefulness, and effective mechanisms are all internal factors that Grand Strategy planners must take into account and mobilize to achieve the desired goals.

While future plans call for foresight, more often than not they are couched in hindsight, rooted as they are in a country's own unique cultural and political heritage. Therefore, just as a country's national goals are particular to it, those goals will also be grounded in that state's history, which in turn will also find expression in Grand Strategy. The Grand Strategy is, therefore, not a purely utilitarian document, but also a cultural one, which serves as a reflection of a state's overall val-

ues and principles. After all, states do not operate in a moral and ideological vacuum. A Grand Strategy both implicitly and explicitly connects a state's complete national resources to its basic values, commitments, and traditions. The latter will be discussed later.

Grand Strategy as a Declared Vision

Sometimes leaders present their constituents and followers with a vision that is a collection of desired objectives set in the long-term, and which, by their attractiveness, inspire the followers to pursue them. The presentation of such a declared vision by a leader often does not involve a detailed outline of how that vision is to be achieved: There is no concrete plan of action. All there is a noble end-goal whereby, because it comes from the leader, it carries authority and bestows inspiration. The signaling of that long-term noble or desirable goal should by itself energize the process, but there is no necessary discussion of means and methods on how this has come about. In contrast to the Grand Strategy as a program, Grand Strategy as a vision omits the elaboration of details and the means and methods of achieving the goal by those involved. This may give the operational elements greater leeway and flexibility to pursue the vision pragmatically, in accordance with the circumstances.

Usually, a vision is presented as a more desired and challenging future than the present, and thus differs from Grand Strategy programs, which are no more than ways to deal with difficult and threatening challenges, but lack a glorious and promising ending. However, the vision ignores the details and facts or even the existence of conflicting interests, obstacles, or different projections, and instead uses a catchy and memorable term to create an enticing image of the future. Strategy as a vision depends on the quality of the vision and its acceptance, as well as on the quality and credibility of the leadership, and the latter's ability to inspire and put in motion the relevant processes. There is no doubt that vision alone is insufficient, and participation of institutions and organizations is critical in order to transform it into a viable Grand Strategy.

Grand Strategy as a Paradigm

There are those who view a specific conceptual approach as a guiding paradigm. A paradigm is an abstract version of the reality and prevailing worldview as seen by decision-makers. For example, the 'realpolitik' school or that of 'neo-liberalism' may constitute major paradigms that guide countries in the international arena. Ascribing to a certain paradigm can be a kind of conceptual framework or binding concept, which allows the interpretation, even if partial, of events encountered by the leaders that they have to address. The tool of analysis allows them to understand the problem and possible courses of action. It is important to remember that conceptual frameworks could never reflect reality perfectly, and, therefore, a Grand Strategy that is no more than such a framework will not be entirely realistic.

There is a tendency among Grand Strategy planners to search for a 'golden formula,' condensed into one word that encapsulates the quintessential essence of the strategy. As is known, the Grand Strategy of the United States since the dawn of the Cold War and the emergence of the Soviet threat was condensed into a single word, 'containment.' Since then, Grand Strategy planners have been looking for the same concise terminology that synthesizes its meaning, such as 'offshore balancing,' 'forward deployment,' and so on. There are, of course, those who come up with an idea who would settle for an exciting title, such as Peres' 'The New Middle East.'

Grand Strategy as a Process or Pattern

Does a country whose leaders present no declared vision, and which has no explicit, concrete plan of Grand Strategy or a golden formula to guide its policy, actually lack a Grand Strategy? After all, it is unlikely that actions taken by a country are chaotic and completely random. Therefore, in the absence of all these types of strategies, there still could be a degree of consistency, even partial, in the country's conduct, and this can be considered a kernel of Grand Strategy, although it is doubtful whether it is sufficiently coherent and explicit. Moreover, it can be argued that the presence of a planned, declared, and defined Grand Strategy is not necessary for a successful policy because there could be strategic activity even without a formal and uniform definition of a Grand Strategy. Moreover, historians have attributed grand strategies to countries and powers at various times in history, based on retroactive observation of their actions and identification of the thinking underlying their actions, even if none were officially declared. In such instances, historians have retrospectively derived the Grand Strategy from patterns of state behavior.

Difficulties in Designing a Grand Strategy

Some countries do not possess a cohesive Grand Strategy, and this may not exact a heavy toll. Other countries have adopted lofty declarations that have shattered when applied in practice. The development of an authentic Grand Strategy is a most difficult planning challenge, requiring significant input from planners, scholars, intellectuals, and heads of state.

The basic problem is that of contending with the unknown, as a structured dimension of uncertainty is inherent in future planning, both in times of relative calm and, all the more so, in periods of turbulence. That dimension, present in any planning, intensifies when the need for formulating a Grand Strategy aimed at the medium and long term is faced. Moreover, the ability to shape the future through strategic action with significant impact strongly depends on the ability to estimate the future and the possible path of its development.

The current era, being one of deep uncertainty as a result of several interacting changes, exacerbates the problem. The different pace of change across the globe makes this era particularly fluid and turbulent, and, therefore, harder to predict. Not only are politically erratic periods hard

to grasp analytically – not to mention in terms of predictability – but it is even harder to do so in a period characterized by such powerful drivers of change. Technology, for example, may cause disruptions and transformations in the social order and affect the stability of regimes, treaties, and alliances. This overall variability has led to considerable changes in the systemic order we have known since the aftermath of World War II. Humility is warranted at a time that is so ripe with uncertainty, but which still offers considerable opportunities.

There is also an objective obstacle to planning a Grand Strategy – which is a very complex task as it is – in terms of the necessary quantity of resources, the quality and intellectual capabilities of those engaged in it, as well as the high institutional level required. To engage in Grand Strategy, high-caliber officials and first-rate institutions that can express a coherent vision of the state's interests, threats, and resources are paramount, but not easy to come by.

The Advantages of Grand Strategy

Despite considerable difficulties, the Grand Strategy harbors varied benefits that reward the effort. First, a coherent Grand Strategy prevents ambiguities and creates order, continuity, and steadiness. Second, a consensus or at least a broad agreement must be built among the branches of government that make decisions and execute the ideas and trends that exist in it, in conjunction with the general public. Grand Strategy can serve as that consensus. Finally, Grand Strategy, with the soul-searching it requires of its planners, defines identity, gaps, and trends and thus anchors itself in what is unique about the country and its people, with its many audiences and constituencies, and their basic values, ethos, common social denominators, and fundamental goals. The intelligent discussion of all these is an instructive process that requires discipline and the use of consistent and methodological tools, and is also capable of bringing the people together and even unifying the public.

At the same time, expectations of the Grand Strategy should not be exaggerated. It has obvious limitations, but its virtues, if achieved, adopted, and fulfilled, lie in providing a strong basis for the state's conduct, identifying common goals, and efficiently harnessing and allocating resources to navigate toward these grand objectives, as well as in the ability to mobilize the nation, including all of its populations, in the pursuit of that goal.

Some believe that Grand Strategy is first and foremost characterized by a long-term perspective. This perspective is immediately implied by the use of the word 'strategy'. After all, it is customary to distinguish between strategic planning and non-strategic planning, while the essential difference between the two lies in the planning range. In other words, 'strategic' and 'tactic' are terms aligned on the timeline, and their position along this timeline is the major difference between them. As a result, short-term conduct, often called 'tactical,' is, by definition, seen as lacking in

vision, as being shortsighted because of its more provincial and trivial character, and, therefore, undeserving of the same glory reserved for far-sighted planning.

However, change in the global arena in our times is dramatic, accelerated, full of fluctuations, and often unexpected. Therefore, ambitious planning for two or three decades ahead will necessarily be found to be incomplete as time goes by. In times of dynamic change such as now, it is obvious that the more one distances oneself from the present, the less one will know. The chances of any reference made to some future long-term forecast being refuted are significantly higher than the chances of it being correct. Therefore, the planner who is outlining his/her strategy on the basis of a specific long-term forecast and who draws a rigid and purposeful strategy assumes the risk that his/her findings will be found irrelevant, unhelpful, or even harmful. On the other hand, the many changes that may occur over short time periods make tactical short-term planning all the more important. Tactical thinking also requires agility and versatility. This means that the modern strategic planner is not free to decide as to a rigid time horizon. He should be able to plan for different time ranges, with the ability to focus at any given moment on one of the planning modes as needed. He also needs to know how to design short-term strategies, based on a number of stages, which can be adapted, based on probabilistic thinking with planning that is adaptable to developments and changing circumstances. It seems, therefore, that the appropriate labeling should be 'dynamic strategic planning' for such a design style.

On Typical Problems and Types of Challenges in Grand Strategy

A Grand Strategy will invariably involve the realization of national grand objectives, which reflect the critical nature of pertinent issues. A related term that has gained a foothold in recent decades is the concept of 'grand challenge.' The term 'challenge' has many meanings: it is sometimes used as a euphemism for 'issues' or 'opportunity.' Here, we are not concerned with these meanings, but rather with the challenging effect, namely nudging and energizing, to overcome complex problems or extensive tasks. Grand challenges, by definition, are difficult: they require significant expansion of existing capabilities and are characterized by a larger scope and complexity than other types of problems. Grand challenges usually have global consequences, and their impact extends beyond the boundaries of nation and region.

Grand challenges need not be confused with what are sometimes called 'wicked problems.' Wicked problems often do not lend themselves to easy description and are characterized by the absence of an end-point or termination. Furthermore, it is possible to know only in hindsight whether these problems have been 'solved.' By contrast, grand challenges are, in principle, solvable. On the other hand, grand challenges and wicked problems have the following characteristics in common: Neither can be understood until a solution has been found, and these solutions will be neither correct nor incorrect, but simply better or worse. Each grand challenge and wicked problem is unique; each

grand challenge and wicked problem can be considered the symptom of another problem; and their solution is dependent upon how the issue is framed, and vice versa. Stakeholders often adopt different worldviews, and consequently formulate different frameworks for understanding the problem; the limitations to which the problem is subject, as well as the required resources, also evolve over time.

Some governments have espoused the term of 'grand challenge' as an operative term in national planning and policymaking. The Canadian government, for example, linked the concept of grand challenge to that of 'integrated innovation,' which is the coordinated application of scientific, technological, social, and business innovation for the purpose of designing solutions to complex challenges.[6] This type of innovation defines which tasks are considered grand challenges and how they can be identified. Grand challenges will be considered those challenges that can be realized by intelligent and holistic leveraging of innovation. Innovation is the engine for overcoming difficulties and attaining objectives. Hence, tasks that do not require innovation will not have to be characterized as grand challenges. Conversely, tasks which require innovation, and which, because of their general importance, justify concentrated effort and harnessing of science and technology innovation, will be considered grand challenges.

The inclusion of innovation as a significant instrument for dealing with grand challenges is evident in the approach adopted by the ILSI Institute, which recognized the need not only for innovation per se, but for widespread innovation as the necessary instrument to realize global grand challenges. This approach emphasizes the importance many perceive in the potential impact from the cross-fertilization of scientific and technological innovation with social and economic innovation. At the heart of integrated innovation lies the coordinated application of scientific, technological, social, and business innovation to develop solutions to complex challenges. In 2008, Canada was able to identify a pre-eminent driver in innovation: namely, that the best minds should be supported in order to research breakthroughs with the potential to bring about significant and lasting changes in the lives of millions of people. Elsewhere, the Canadians describe the system as follows: Grand challenges will be those whereby the removal of a specific critical barrier will pave the way to an important development. Hence, this approach is based on the following principles: scientific excellence, competitive cooperation, and accountability.

Experience in actualizing grand challenges indicates the following advantages: First, it involves very focused and specific targeting, producing intermediate goals and tangible milestones. Second, it attracts and makes use of the best minds, as its very definition as an extremely complex problem signifies that it demands the most expert, gifted, and experienced people. Third, its execution leads to the establishment of stakeholder communities that are involved in the process on a multi-dis-

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6   'The Grand Challenges Approach', January 2011.

ciplinary and collaborative basis. Thus, entire networks of stakeholders, involved in the process, are established. Fourth, by virtue of being a national project and a grand challenge, certain areas of the project are received with much enthusiasm by the general public and even internationally.

Hence, the pooling and concentration of special efforts may lead to the overcoming of hitherto unsolved obstacles or stumbling blocks. Thus, what distinguishes this concept is that it does present a list of grand objectives, but focuses mainly on high-level difficulties, which have yet to be mastered. Typically, these difficulties currently exist around issues that are inherently wicked problems, in the sense that they contain structured difficulties – usually as a result of their being dispersed among many officials and interested parties – and the existence of complex interrelations among the problems' various dimensions. However, it is reasonable to suggest that when it comes to facing issues that are system-wide and which involve different interests, sectors, and authorities, etc., the pooling, integration, and cooperation of all parties is warranted, so that a comprehensive, integrated approach will resolve the problem.

However, the concept of a grand challenge has also its disadvantages. First, there is no guarantee of its success, which is both the difficulty and the challenge. Second, from an organizational perspective, the participatory and integrative approach is burdensome and expensive. Third, sometimes the grand challenges overshadow more modest goals.

The term 'innovation,' when used in the context of wicked problems does not mean scientific and technological innovation but rather 'administrative innovation' or 'governance innovation,'[7] namely, the adoption of new, innovative approaches to managing such problems. Innovative directions are found in the adoption of methods that are based on an organizational-institutional approach, network theory, and an emphasis on pluralistic approaches and negotiations among interested parties. They also allow space for political leaders to lead and make interpretations, as well as for professionals to test and conduct trials, while the overall strategy is collaborative rather than authoritative.

7   Frode Bjorjo, Asbjorn Roiseland, 'Innovations in Governance – The Challenge of Wicked Problems', Enschede, July 2013.

ABOUT GRAND STRATEGY AND A SECURITY CONCEPT FOR ISRAEL

Despite its advantages, the use of the term 'Grand Strategy' remains relatively rare in our region. Only a few essays from the academy and research institutions have applied this term in specific contexts, and except for these applications, the use of this term as an organizing concept is conspicuously absent. This absence reflects a lamentable paucity of thought, reflection, and planning at higher levels in Israel.

Israel has extensive literature on security policy, and a little less on Israeli foreign policy, excepting the peace process efforts, which constitute a field in their own right. However, there is almost no integration of these respective areas that binds together security and military dimensions with international and political ones, and that looks forward as well as backward.

Even within the Foreign Affairs and Security Ministries, including the planning departments, there are no documents that can serve as an actual Grand Strategy for the state and combine security with statecraft and other dimensions related to state power. There are no Israeli government agencies that issue documents equivalent to those produced by the National Security Council of the United States or Britain, called in these countries the 'National Security Strategy.' Israel also has no documents that contain top-down directives, which, by using political authority, articulate and drive a Grand Strategy, or national security strategy.

One of the main reasons for this is that the important issues on the Israeli agenda are subject to ideological disagreement, making it difficult to conduct high-quality strategic thought. Heated political rivalry, combined with ideological rifts, causes politicians to turn their backs on 'cold' strategic thinking and means 'sensitive' issues are ignored by professional political parties. On the one hand, this creates organizational and institutional limitations and pitfalls, which hinder the establishment of planning bodies that are able to produce a Grand Strategy, whether at the top tiers of the defense establishment or (certainly) in the Prime Minister's Office due to opposition by the military establishment. On the other hand, this leads to excessive reliance on work produced by the army, which, although a professional body, reflects the concerns of a single sector, and finally, gives rise to an 'anti-reflective' culture in top-level decision-making, which ignores political and security work

addressing the long-term future. In fact, no organization in Israel imparts professional and academic guidance and instruction for thinking and planning at the grand strategic level.

Additionally, Israel suffers from a unique problem of its own. In the Israeli reality, where the central political issue – the Arab-Israeli conflict and ways to manage it – is one of fierce political controversy, it is difficult to produce a consensus at the grand strategic level. At the same time, strategic thinking that is contingent on political initiative remains hidden so as not to disclose intentions prematurely. Even in the military dimension, intentions sometimes need to be kept secret, if only to preserve the element of surprise. Therefore, in the Israeli reality, a declarative exposure of moves and strategies may prove counter-productive, and therefore confidentiality and secrecy are a necessity. Hence, the Grand Strategy that is designed for public consumption, both at home and abroad, is impossible, except at the most basic level.

It should also be considered that tactical military thinking plays a dominant role in the Israeli discourse. There is also a further difficulty here in that there is a paucity of writing and research in the field of comprehensive strategy, and even more so in terms of Grand Strategy.

Nonetheless, it would be wrong to conclude that Israel is not guided by certain principles, concepts, and planning that cover the full spectrum of political and security actions, and beyond, and which also contain a long-term perspective. In this context, the most common term in the Israeli reality is that of the 'security concept.' This term functions as the highest expression of foreign and security policy.

The essay by Prof. Isaac Ben-Israel, Israel's Security Concept, constitutes a security-oriented treatise on Israel, which is close to meeting the definition of Grand Strategy. In terms of terminology, the title of Ben-Israel's book in English is Israel's Defense Doctrine. Ben-Israel's important contribution is that he acnchors his discussion of Israel's security concept on the premises identified by the security review written by the then Prime Minister, David Ben-Gurion, in 1953. In that document Ben-Gurion considers Israel's position in the regional and world arena; the nature of the short-term and long-term threats it faces; and the military, political, and even technological responses needed as part of Israel's long-term responses to these challenges. It should be emphasized that Grand Strategy is not synonymous with 'foreign policy,' and that foreign policy does not make up one of its constituent parts. While foreign policy involves a variety of activities that take place between the state and foreign players, the Grand Strategy is the theory, the 'Grand Plan' from which the activities and processes of foreign policy are derived.

Ben-Gurion's document is unique. Since then, no similar document has been written by any Israeli Prime Minister or Defense Minister, not even by personnel operating close to and on behalf of the Prime Minister. An example of an attempt to formulate an updated national defense strategy is the

document prepared by the 'Meridor Commission' in 2006. The Committee, which was appointed by Prime Minister Ariel Sharon and Defense Minister Shaul Mofaz, included civilians and officials from the field of national security, who discussed all components of the defense system. The Committee presented an updated defense strategy and emphasized the importance of defense, together with other familiar parts of security strategy; the implications of the era of precision weapons; challenges from peripheral ring countries and non-state actors; and suitable responses. Nevertheless, this is an analysis of the security strategy relative to specific concerns, not a full and comprehensive examination of the national security strategy. The document, which is the product of the Committee, was approved by the then Defense Minister but was never brought to the cabinet for approval. Another document, published in 2015, is The IDF Strategy, prepared by the military under the leadership of the IDF Chief of General Staff Gadi Eisenkot, but it essentially describes the building and use of force and is not a comprehensive national security strategy. Moreover, The IDF Strategy was formulated in the absence of a national security concept as an authorized Grand Strategy.

This does not mean that the defense system is not accustomed to the production of documents that include comprehensive integrations of responsibilities. For example, the intelligence community has a long tradition of producing periodic intelligence estimates, but these are merely documents that examine, research, and evaluate what is happening outside of the state. It is a snapshot assessment of what is happening and what can perhaps be expected to take place. But these documents do not identify desirable outcomes. They present a characterization of the present reality, but not the desired reality, and they in no way provide suggestions on how to achieve such objectives. There is, therefore, no systematic or extensive research conducted on how to reach this desired reality.

'Situation assessments' are even more generalized. Being evaluations as well, they do not constitute a strategy. The difference between these and intelligence assessments lies primarily in the fact that situation assessments not only examine other state or non-state actors, but juxtapose bilaterally what the latter's capabilities and intentions are with those of the another. Situation assessments present a 'two-sided equation,' but usually addresses current activities and how these should be interpreted. They do not develop policies and strategies to attain a desired goal. Strategy is considered merely a plan that offers and illuminates the ways, methods, means, and resources with which the country is working to achieve its goals. The system also develops multi-annual programs for both the military and the political sectors. However, if such programs that usually grow from within the system are presented before top leadership, these often reflect the system's need to respond to problems and threats, as and when they arise. However, they lack the defining characteristic of Grand Strategy, which is to open with statecraft directives and national goals as defined by the state's leaders and continues to explore ways to achieve this.

Moreover, the nature of how these documents are produced means that the strategy concerned focuses purely on the security dimension.

The question that arises from this context is: What is the 'security concept' and how does this differ from the concept of Grand Strategy? Is it a snapshot of the present, or is it a master action plan for achieving targets? The term 'security concept' is more prevalent outside of Israel. One can overhear the term, for example, in the corridors of NATO. But we must remember that, since NATO is a military alliance organization rather than a state, such a term may actually serve its captains well. States, however, are still required to define for themselves, in a qualified manner, what their strategic plans are for achieving their national security objectives.

The term 'doctrine' is close to the notion of 'security concept,' but a 'doctrine,' too, is not a 'strategy.' A doctrine can be a solution when building and exercising power that a country may adopt under certain circumstances and as required. It is especially tailored to the state, and when a state has a military doctrine it has developed and adapted to its special needs, then there is no doubt that this doctrine may be a pillar of the defense strategy of that country. However, a doctrine in itself is inadequate and does not include what is contained in the term 'national security strategy'. Thus, once again, the question arises as to whether Israel has an explicit expression of national strategy. The question is: Who lays out the plan for achieving national objectives in Israel? Who is responsible for the national strategy? The National Security Council Law imposes many tasks on the National Security Council (NSC), but nowhere is it stated that the NSC is required to develop a 'national security strategy' document, as are corresponding departments in Britain or the United States. In the United States, for example, discussions at the Grand Strategy level are held in different configurations. First, there is a public debate, where academic researchers (some of whom also have extensive practical experience), along with journalists and statesmen, debate the desired properties of the Grand Strategy. The number of participants, many of whom have written articles and even books on the subject amounts to many dozens. This activity is even more extensive within the confines of government. Military academies also have panels and think tanks that produce high-level discourse or documents. There are also well-known cases of government-sponsored research which has addressed issues of Grand Strategy and subsequently produced real changes and milestones in the modern history of the United States.

Engagement in Grand Strategy by hegemonic states, such as the United States, as stated above, is a natural tendency, because powers – and particularly global leaders – maintain a presence and wide deployment in the international arena and thus provoke resistance and challenge. Such countries should conduct themselves wisely in prioritizing their points of interests because no country has unlimited, global resources. This does not apply to small countries, of course, which are, therefore, spared the need to define their areas of global reach. To them applies the well-

known saying that 'the strong do what they can and the weak suffer what they must.' Powerful countries enjoy the choice and freedom to pursue their own path. Small countries live within the constraints of their environment and the restrictions imposed on them. The question of selection and prioritization is less pertinent to small countries, which must in any event respond to the threats directed against them. The Grand Strategy of smaller or medium countries, where it does exist, does not, therefore, address the entire international arena, where in any case the state does not play a major role, but instead concentrates on the regional arena and the immediate threats and opportunities within its range. However, as we shall see in this document, Israel's exceptionalism lies not in its size, but in its being a source of power; indeed, some would say it is imperative for Israel, a regional power, to develop a global strategy.

ISRAEL'S GRAND OBJECTIVES: ITS HERITAGE AND VISION, EXCEPTIONALISM AND DESTINY

Although a Grand Strategy is oriented toward the future, future action is influenced and even inspired by the deeds of the past. Grand Strategy is a literal excavation of the past, where a country's very roots are dug up, and its historical processes, as experienced by individual and state alike in moments of both crisis and transformation, are unearthed, all in the name of un-covering a country's fundamental values and emerging fault lines. In all of this, it is important to understand our exceptionialism as a people and as a country, as well as the dynamics at work here. In order to draw conclusions, we must take a fresh look at our resources and resilience, and, in particular, at the resulting implications regarding our ability to make use of these resources in order to achieve future state and national objectives.

In 2017, Israel will observe several anniversaries, representing a number of crucial crossroads in its history:

› One hundred and twenty years ago, the first Zionist Congress convened in Basel. Here, the first Grand Strategy was designed, since it was here that the goal of establishing a Jewish national home in Israel was set, and the first course of action designed to achieve that goal was formulated. This goal remains the grand objective of the state and its people;

› One-hundredth anniversary of the Balfour Declaration issued by the superpower of the day, Great Britain, which recognized the right of the Jewish people to a national home in Israel. By virtue of the fact that Britain ruled this piece of land, these were no idle words, and the Balfour Declaration became the 'keystone' in the granting of international legitimacy to the future state;

› One-hundredth anniversary of the Jewish Legion established by Jabotinsky and Trumpeldor, forming the first organized Jewish military force since the second century B.C.. This defining act signaled the necessity of mobilizing successive generations of fighters in order to ensure the existence of the Jewish state, and the independence and freedom of the national home in Israel to this day;

› Seventieth anniversary of the War of Independence that followed the decision of the United Nations (UN) to divide the land into two states, one Arab and the other Jewish. During the war, the State of Israel was declared, and it defended itself against the Arab invaders. Israel won this war against the invading armies, at great cost, thanks to exceptional leadership and the courage of its fighters.

Fifty years since the Six Day War in 1967, the second defensive war of Israel against Arab armies. Following the victory and takeover by Israel of the territories in Sinai, the West Bank and the Golan Heights, a new situation was created that led to the peace agreement with Egypt after the '73 war. Nevertheless, Israel remains in a state of continuous partial control over territory and populations, which is not acceptable to the international community, and is also subject to heated domestic debate.

These anniversaries taking place in 2017 and the way in which they have been and will continue to be marked will affect the public mood and discourse. Their historical significance will be examined with the passage of time. In times such as these, anniversaries may also inspire a certain forward-looking frame of mind, which, in turn, may also inspire reflections that shape the direction of future national strategy.

As stated above, the Grand Strategy of any political entity is dictated by two different directions: One is the internal (or domestic) development, with its different sectors and problems; the other is the external (or foreign) vector, with its environmental, global, geopolitical, and technological trends, both current and expected, which determine the range of options and constraints on implementing them. Often, there is also a substantial association between the two directions: After all, a global, political, or technological development may also affect the evolution of internal developments and narrative threats. As mentioned above, the Grand Strategy is inextricably connected to the history of Israel. In fact, the people of Israel have two 'histories': an ancient and a modern one. The ancient history can be traced back to the First and Second Temples and the period of exile, which lasted thousands of years; the second history, which is almost contemporary history, formally began with the first Zionist Congress 120 years ago. These two histories are intertwined and have in common: the eternal desire for freedom and independence; moral values in the spirit of the prophets of Israel; the vision to be a light unto the nations; a common

heritage; and the Hebrew language. A primary and frequently recited lesson from the ancient history of the nation of Israel in the Land of Israel, is that the seed of destruction of the people and the state was rooted in discord and internal hatred, leading to the destruction of the Ancient State of Judea, and thus ending the existence of the Jewish people in its homeland.

Another fundamental lesson, also derived from antiquity, which is unique to the Jewish people and was passed along through thousands of years of exile, is the Jewish nation's capacity for self-preservation, thanks to its institutions and spiritual heritage, even in the absence of national territory. From Yavneh and the sage Rabbi Yochanan ben Zakkai through to Jewish institutions, the Jewish people have always been able to find sanctuary in the community, and the Jews have maintained their cohesion as a people in the face of the numerous calamities that have befallen them over centuries and millennia. Indeed, considerable contributions to this community and its national coherence also came about from the cycles of destruction, persecution, and hostility suffered by the Jews in the countries where they lived. Nonetheless, an important lesson – and one which is essential for understanding Jewish 'genetics' – is that it is not the land that creates the nation, but the people who create the state, in the deepest sense of the word, both spiritually and temporally. Indeed, the solidarity that distinguishes the Israeli public has continued to solidify and strengthen over the years of the State's existence and is demonstrated in times of adversity as in times of peace, in the face of individual cases of distress. The generating core of national strength lies in the Jewish people, its cohesion and values, and in its willingness to take risks and make sacrifices for the state and homeland. These are also evident at the economic and social levels and are not reserved for security adversities alone. This is a unifying narrative, the cultivation and preservation of which constitute a guarantee for the future, and it serves as the foundation of any strategic thinking.

The broad objectives of the state are derived against this background, and the Grand Strategy seeks to promote and achieve them. The broad objectives, serving as guiding and desired princi-ples, are also expressed in the founding documents of the State of Israel, first and foremost in the Declaration of Independence, which includes clauses to that effect, both on heritage and a certain vision: the pursuit of freedom, the vitality of democracy and equality, and the adoption of a moral stand vis-à-vis the minorities living among us, all of which are included in this short document.

The spiritual forebears and political leaders of the Jewish national movement included the dimensions of defense and security as an unavoidable necessity in the requirements for the establishment and existence of the State of Israel. In practice, Theodor Herzl was the first grand strategist of the future Jewish state. He outlined the political path, including securing the support of a great power to help establish a national home in Israel. Jabotinsky, Trumpeldor, and Arlozoroff, among others, were those who realized the need for a Jewish-organized military power as a key

ingredient in an effort to establish a state. Ben-Gurion understood this when he took upon himself to lead the Jewish settlement. At first, Ben-Gurion believed that, alongside political and military power, Israel also had spiritual and moral power: 'Spiritual independence does not rule out human solidarity, just as political independence does not contradict international affinity, and financial independence does not require an autarkic economy. Interaction between states, countries, and nations is a fact of life and a historical necessity. Every nation learns from other nations, from the legacy of its previous generations, and from the accomplishments of the human spirit throughout all ages and countries […] out of our national and state existence, since we too are involved in all issues of humanity and are aware of its needs and dilemmas, and because we share equally the same problems and dilemmas, Israel's power and independence are the foundations for its ability and dedication to act and become part of the world. Israel not only seeks to be a beacon, a city on the hill, but a light unto the nations …'

'Israel's war and struggles are not only political, but also ideological, namely, cultural and spiritual,' wrote Ben-Gurion, emphasizing that 'the Jewish people, loyal to itself, will not submit to the moral authority of a foreign, 'global' power, and will not bow its head in matters of society, science, spirit, and culture, and the values of freedom, equality, justice, and peace to those who appointed themselves by the power of their rule and military power or economic strength to the position of superior judges over humanity.'

'The State of Israel will be open for Jewish immigration and the ingathering of the exiles,' reads the Declaration of Independence, alongside a commitment that the state 'will foster the development of the country for the benefit of all its inhabitants; it will be based on freedom, justice, and peace as envisaged by the prophets of Israel; it will ensure complete equality of social and political rights to all its inhabitants irrespective of religion, race, or sex; it will guarantee freedom of religion, conscience, language, education, and culture; it will safeguard the holy places of all religions; and it will be faithful to the principles of the Charter of the United Nations.' In other words, underlying the establishment of Israel is the assumption that Israel will strive to be an advanced democratic country.

These principles of security and national, physical, and spiritual independence for the Jewish people in Israel and the world, together with commitment to universal values of liberty, equality, and peace, alongside cooperation with the peoples of the world, have been repeated as the basic principles in any written document that included a consensual vision of Israel. It is sufficient to note that Israel's fifth Prime Minister, Menachem Begin – who was deeply unpopular with Ben-Gurion – shortly after the Likud Party came into power for the first time since Israel's establishment 29 years earlier, led the enactment of the Foundations of Law Act, which set as a superior source of inspiration for the Israeli legal system the 'principles of freedom, justice, integrity, and peace of the

Israeli heritage.' Not for nothing were these principles tied together. It is important to emphasize that, despite the ideological chasm between them, from Ben-Gurion to Begin there was consensus on the fundamental importance of values in accordance with the heritage of ancient Israel, which coined the fundamental values of freedom, justice, integrity, and peace. This makes it possible to establish the fundamental values of Israel's strategy on these shared values.

Prof. Yehezkel Dror, who contributed to the Forum's discussions through his writings, summarized the basis for the grand principles and objectives as follows: 'The proposed [strategy] is morally based on Zionism and is perceived as striving to establish the Land of Israel as a Jewish and democratic state of the Jewish people, excelling in creativity, quality of life, both morally and materially, education for long-term prosperity of the Jewish people as a whole, and tikkun olam. All these are conditioned on the security of the State of Israel and its legitimacy in the community of nations. Zionism is based on a nation's natural right for self-determination, on the historical and cultural-religious right of the Jewish people to the Promised Land. However, this does not mean that it is mandatory to realize the right to its fullest, because other values have to be taken into account, such as demographics and the rights of others, as well as considerations of realpolitik.'

Israel must protect the existence and sovereignty of the country and the safety of all its citizens and residents, allow peace to be achieved between Israel and its neighbors, serve as a safe haven and protector of the Jewish people, and ensure its survival. Israel will strive to be an equal and active member in the international community. In addition, Israel will aspire to be a superpower in innovation and in the development of knowledge and technology, not only for economic reasons, but also as a mechanism by which to define human excellence, assuming that the only real natural resource that merits cultivation is human capital. This is based on the philosophy of Herzl and Ben-Gurion, who defined intellectual capabilities and human morality as the characteristics inherent to our country and system.

One of the fundamental conclusions to be drawn from what we have examined so far is that security concerns and protection from physical threats is an important part of Israel's Grand Strategy. However, at a deeper level of understanding is the notion that Israel's Grand Strategy must safeguard the preservation and defense of the nation's fundamental values, as laid out in writing and in practice for more than a century: a state that is based on freedom, democracy, and equality, on the one hand, and on strength, human brotherhood, and social solidarity, on the other. And note, these values are not limited to a single area, be it political or defense, but are a common thread through all: economic, social, educational, and scientific fields.

ORGANIZING PRINCIPLES FOR ISRAEL'S GRAND STRATEGY

Above and beyond the natural need for strategy in times of great change and turbulence, many of those who are calling for an updated Grand Strategy for Israel are doing so because they are troubled by the existence of the following gaps:

A. **Vision and reality -** the gap between vision and reality; that is, the situation to which one aspires and its desired values, versus the current reality. This is the gulf between the real and the ideal. This gulf requires a response in the form of the work needed in order to arrive at this ideal. If the reality is favorable to begin with, and the gap between the real and ideal exists only because the vision is ambitious, then one is faced with nothing more than a strategic challenge; in other words, how to move from a situation that is good in the first place to one that is merely improved, as expressed by the goals of the vision. However, sometimes there is dissatisfaction with the present situation and even a sense of distress when the reality is remote from, and perhaps even contrary to, the desired vision. At this point the gap itself may generate depression and possibly discouragement. As the gap widens, the sense of distress deepens, as does the strategic challenge.

B. **Risks and responses -** the gap between the magnitude of the visible threats and the scope of the present response; that is to say, each country has resources and defense capabilities, but when threats to its peace and security emerge, the severity of those threats is measured by the damage they may cause the country versus any gap in existing prevention and protection capabilities to prevent or reduce those threats. Alongside this is the very probability that a threat will take place, even if all state capabilities remain resistant. The severity of a risk is estimated professionally by the anticipated damage combined with the likelihood of its occurrence. Hence, the threat landscape varies both chronologically and from country to country, but will always comprise several risks of variable dimensions.

C. **A trend of decline -** the divide between a favorable past or present reality and a less promising future, as well as the gap between the state's present capabilities, resources, and performance and those of that group of countries to which the state refers or compares itself. For the state's enemies, the comparative gap reflects the balance of power and may decide the outcome of a conflict. For economic competitors, the gap may determine the degree of the country's competitiveness. Where countries are concerned whose world image and standing are favorably perceived by us, the gap might be one of perceptions; that is to say, the degree to which Israel itself is valued by others. Either way, the comparative balance is relevant here and not the absolute condition. Thus, it is clear, for example, that even if the condition of our country is improving, if the progress of an enemy country or economic competitor is greater, then the overall position of our country declines. Since, in most cases, countries are growing and getting stronger, the mere progress of one's own country should not be cause for satisfaction, unless, of course, enemy progress is falling behind. Another gap may develop between the current reality and the past. This is not similar to the gap between the current reality and a utopian vision, as there could be signs of retreat when a current reality is worse than that of the near or distant past.

A gentler version of this bleak assessment of Israel's future can be found among observers and scholars who are well versed in the volatility of history. The decline and fall of great states, mighty civilizations, and even small political entities, due to new, challenging forces, is a common trajectory in history. In any case, Israel's story since the dawn of the Zionist idea contradicts almost any practical logic underlying its ascent from nothing into a strong and prosperous country. Only by virtue of a sustained surge in sacrifice, investment, and resourcefulness, the wisdom of its leadership and political pragmatism, support from Diaspora Jews, and support from a friendly superpower nation, was this achievement made possible. But Israel's growth curve has already leveled out, and despite aspirations towards renewal, there are increasing signs of a stall in its momentum. The question is, therefore, whether Israel has already entered its age of decline. Indeed, there are those who describe the country as being in the twilight zone that precedes a fall. Nobody knows whether this will actually happen, although it is possible that because of international circumstances or because of internal vulnerabilities and difficulties, the Israeli miracle will not burn with the same intensity, leading to deterioration and weakening. The concern is that this trend may spiral, gain momentum and ultimately bring the state to a point of collapse that may lead to real existential danger.

D. **Dystopia -** Israel features a phenomenon that is not widespread among other countries: a lingering fear that the country is on the verge of destruction. What distinguishes the Israeli case is that, perhaps because of its history, doomsday scenarios are often raised under circumstances that are not always external. However, Israel is not perceived as belonging to the group of states described as 'fragile,' whose instability is so great that they are nearing a state of disintegration or failure. Among Israelis, fears of destruction arise from within a number of different frameworks. These include the intensification of internal tensions to the point that state unity will unravel and a civil war break out; or the prevailingscenario according to which, within a decade, continued demographic trends will mean that, in order for the state to maintain itsdemocratic nature, its very character will be altered and, therefore, become inconsistent with its Zionist vision. Such demographic shifts, which involve various rates of reproduction, could lead to an economic and social imbalance, ushering in the capsizing of the state. Another scenario predicts a situation in which the continuation of the Arab-Israeli conflict is conducive to a policy that causes the loss of the Jewish or democratic character of the state, thus bringing an end to the form in which the state was conceived. Finally, a scenario exists that is the very reversal of the Zionist movement: a so-called abandonment scenario, whereby, just as the State was established and grew due to huge waves of immigration, it may collapse if and when abandoned by key populations.

The ubiquity of dystopian expressions in Israeli public discourse, including literature, fiction, poetry, and popular music, and which consider the potential annihilation of the country, is impossible to ignore. It feeds on the long course of Jewish and Israeli history and moments when the threat of extinction was very real, namely in the fourth decade of the last century, during   which the Holocaust took place. The apocalyptic scenario is given special prominence by Prime Minister Netanyahu, who describes the Iranian nuclear threat in terms of an existential threat to Israel. The motif of annihilation and the references to the Holocaust became popular at a time when the Prime Minister of Israel found it necessary to warn against the nuclearization of Iran. So, not only have our persecutors threatened our annihilation, but even from our own ranks this possibility is referred to time and again as something that must be stopped.

Assessing Strengths, Weaknesses, Opportunities, Threats

The methodology adopted by the Forum to organize its thinking in terms of analysis and planning was based on the SWOT method (Strengths/Weaknesses/ Opportunities/Threats). The identification of opportunities/threats (or, alternatively, chances/risks) was carried out using two approaches: One approach considered the global picture, and the other considered the Israeli one. For the global picture, we were helped by the 'wisdom of experts' gathered by the US National

Intelligence Council, who drew various long-term forecasts and potential global futures. This is the 2030 Project of the American intelligence community, which amounted to the presentation of four scenarios for alternative futures, most of which revolve around the geostrategic axis of friction between the US and China. The scenarios extend from a future of an Armageddon battle for supremacy in the global arena to the opposite pole of checks and balances, based on cooperation between these powers. For scenarios that involve Israel, we relied on our own 'wisdom of experts' – the Forum participants – who have mapped the range of the main threats that could affect the very existence of Israel in the form in which it was established. At the same time, the experts analyzed and mapped the weaknesses and strengths of Israel, using the tool of international rankings and comparisons; that is, they examined Israel's status and standing by comparing it to the relevant reference groups.

The global environment, in which the critical challenges on the country's agenda are mapped – challenges that affect the state's security, prosperity, and very existence – is characterized by an era of complexity and rapid transformation, an era of upheaval, as exemplified by the 'Arab Spring,' the rise of Asia, the decline of the US and Europe, and profound technological changes that are changing the global system. In the midst of all this, there remains a continued strategic threat emanating from the nuclearization of Iran and the strengthening of extremist Islamic forces. At the same time, splits and fissures can be observed in Israeli society and mentality that undermine the country's social cohesion and even unity and, therefore, its resilience, mainly in the form of demographic trends that may exacerbate the phenomenon of 'tribalism.'

Israel is not an isolated island, and global changes also affect it. Its place in the global arena also hinges on the way it will manage and contend with these changes, and perhaps seize opportunities to leverage the benefits and opportunities that this global revolution holds in store.

Clearly, the mere profusion of risks and types of challenges often related to different systems of living and government requires the formulation of appropriate policy responses. At the same time, coherence must be ensured so that formulated strategies for different problems do not contradict each other. These considerations only amplify the need for a comprehensive national strategy, namely a Grand Strategy for Israel.

However, strategy at this level is all the more difficult in an era that not only is characterized by global transformations, but in which these very changes, whether in politics, society, economics, demography, military, and politics, are themselves defined by frequent change of pace and direction, meaning uncertainty is prevalent, even in short time frames. Especially among expert individuals who are up to date with current thinking about these processes, there is recognition of the profound uncertainty and certain expectation of surprises; and there is confusion in view

of multiple complicated factors that cannot be reduced or predicted. There is also a recognition of society's difficulty in understanding these processes and an understanding that this deep uncertainty will remain. But the necessities of life require that policies and decisions be made.

Hence, the need to refresh Israel's policy regarding its lingering domestic problems, emerging risks, and global changes requires observation and the shaping of a national policy at the highest and most comprehensive level. This is the level of Grand Strategy.

For this purpose, the participants in the Forum mapped, early on, a list of processes and problems that constitute potential risks to Israel's existential interests. This list, also valid and effective today, is as follows:

›   Weakening and retreat of the global position and regional role of the United States, the superpower with whom our multi-dimensional cooperation has constituted a vital pillar of support for Israel;

›   Increased activity of extremist and violent Islamic organizations and their collaboration with Islamic organizations in the north (Hezbollah) and south (Hamas);

›   Iran's possible nuclearization and the far-reaching implications for the security of Israel and the region;

›   Israel's occupation of territories not recognized as belonging to it, and its control over populations that resist that occupation, and the continuation of the Arab-Israeli conflict which threatens to flare up;

›   Erosion of Israel's qualitative advantages, based on scientific and technological excellence, which have compensated for its quantitative weaknesses and earned competitive advantages for the economy and power for its defense force;

›   The weakening of the educational systems, in particular science education and higher education, especially at a time when their optimization is required to nourish the economy and science;

›   Worsening of economic and social inequality, deepening of internal rifts and gaps, and demographic trends indicating growth in the numbers of non-Zionists, affecting established state values;

› Undermining of the rule of law and weakening of the execution capabilities of government agencies, in a manner that affects governance and the quality of policy implementation.

Alongside the risks, it is also recognized that developing processes and realities around the world also offer Israel opportunities for promoting its existential interests, which should be identified and seized. Moreover, addressing threats effectively presents in itself an opportunity. But, similar to the standard procedure employed, for example, by the British authorities in shaping its national security strategy, priority is here given to the exact identification of risks, as phenomena that must be anticipated, prepared for, and eventually overcome.

ISRAEL'S COMPARATIVE STANDING AMONG THE NATIONS

To identify the current weaknesses and strengths of the country, we used the comparative bar of Israel's current rankings and the country's performance as compared to other reference countries, as well as Israel's situation relative to its past. This is how we identified emerging trends over time. All this was done by rating Israel according to different components of power, both hard and soft alike, in the areas of security, international, socio-economic, educational, scientific, and governance, among others.

The inventory of global comparative indicators and rankings has grown over the years, and although caution should be exercised in using them, due to different methodological limitations, they are useful for assessing the total situation of the state at the present time, especially as their use has gained increasing popularity among various international official institutions and become commonplace among leaders, including those of major powers.

To cast Israel's capabilities into a mold that distinguishes between strengths and weaknesses on the ratings spectrum, it is necessary to distinguish between a country's different levels of leadership. With regard to leading countries, an indication is found in the fact that international frameworks have already been institutionalized among them for some time, , usually based on the size of their economies. We refer here to the framework of the G7-G8 countries, which maintains a regular schedule of summits, as well as that of the more extended group, the G20, which, similarly, has also adopted an agenda and regular summits. Figuratively speaking, countries can be labeled as leaders in a certain area if they belong to the first or even the second decile in a sectorial comparative rating. By the same logic, it is possible to label states whose rating puts them in the third or fourth decile as advanced countries as compared to the rest of the world, but

not necessarily leading nations. It is, therefore, possible to describe countries in these deciles as having medium capacities. Finally, if a country is located in the fifth decile and below, it will be defined as having weak capabilities to the point of being behind in that area relative to the group of developed countries. From this comes about the logic of choosing the area of the leading countries as the desired space for Israel, and stating that, if the country is actually located in this area, this location is a source of power. Therefore, proportionally, the lower the ranking, the more acute its weakness. The higher the ranking, the stronger the source of power, to the point of the country being a leader in that field and vice versa – the lower the ranking, the more severe the weakness component.

According to this perspective, Israel's strengths or relative advantages are evident in several areas: military capacity, the quality of human and research capital, innovation, and social progress. Even so, in all of these areas, a trend of relative retreat can be discerned. In other words, Israel's relative position today has worsened compared to previous years. In terms of the Global Firepower Index,[8] Israel was ranked at number 10 or 11 for several years. However, in 2016 it dropped to 16th place (despite Israel's very high security burden, in terms of per capita defense budget, in which it is ranked globally in 3rd place[9]). The quality of human and research capital was ranked 2nd in the world in 2011[10] and gradually fell to 16th place in 2016. In the field of innovation, Israel was in 5th place last year, but fell to 11th place in 2016 and 10th in 2017.[11] According to another innovation index,[12] Israel fell from 14th place in 2011, to 21st place in 2016. In the social progress ranking,[13] referring to socio-economic parameters, Israel was in 15th place in 2010 but dropped to 18th place last year (while actually improving its ranking in health care).

Thus, Israel's strengths usually position the country in the second decile among developed countries. However, almost without exception, all these power sources show signs of erosion and decline in the last year, and sometimes even earlier.

In the economic sphere, Israel is performing well, showing moderate abilities as compared to other developed countries. The WEF Competitiveness rating[14] ranks it in 24th place in 2016, as for 2010. In terms of the Common Index of GDP per capita (PPP adjusted),[15] its comparative position

8   Global Firepower Ranking 2017 www.globalfirepower.com/countries-listing.asp

9   SIPRI Military Expenditure Database, 1949-2016 www.sipri.org/research/armaments/milex/milex_database

10   From the WEF Competitiveness Index 2016-2017 reports.weforum.org/global-competitiveness-index

11   Bloomberg Index www.bloomberg.com/news/articles/2016-01-19/these-are-the-world-s-most-innovative-economies

12   The INSEAD Cornell University WIPO Global Innovation Index 2016 www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016.pdf

13   UNDP Human Development Data, 1990-2015 http://hdr.undp.org/en/data

14   From the WEF Competitiveness Index http://reports.weforum.org/global-competitiveness-index/

15   The Conference Board Total Economy Database™, May 2017 www.conference-board.org/data/economydatabase/
     index.cfm?id=27762

remains mediocre, and it shuffles between 31st place in 2005 and 33rd place last year; that is, lower than the OECD countries' median. Even according to economic quality and business environment rankings, part of the Legatum Prosperity Index[16], Israel's ranking dropped from 2011 to 2016, from 25th to 32nd place in the economic environment, and from 22nd to 25th place in the businesses environment. A similar phenomenon can be discerned in terms of productivity. In 2015 Israel was in 34th place, where it also stood 10 years earlier, in 2005[17]. This means that despite the growth of the Israeli economy in recent years, its situation in comparative terms has not improved, and its performance remains mediocre.

In the social sphere, Israel stands out in terms of the severity of the inequality that exists in the country. Thus, on the issue of inequality in income distribution and poverty, Israel is located at the bottom of the OECD member countries' ranking. It is the worst performing country among them on the poverty ranking and ranked fifth in the severity of inequality. This situation has not improved in recent years (ranked 36 and 31 respectively in 2014).[18]

In contrast to Israel's leadership in the fields of the quality of human and research capital and innovation, in the field of education, the position of Israel is moderate and worsening over time. The indices of PISA or TIMSS place Israel now in 39th and 40th places respectively, a drop from 36th and 39th[19] places in the previous three years, despite the fact that ultra-Orthodox schools do not participate in these exams. Since in this period and in recent years the education budget was significantly increased, this means a significant deterioration in both the efficiency of education in Israel and its quality. The degree of inequality in educational outcomes in Israel is so great that it is ranked first in this category, a ranking that has severe social and economic significance. In the field of international standing, in terms of soft power and reputation, Israel's performance is poor and has also seen substantial deterioration in recent years. According to the Index of Soft Power,[20] Israel ranked 26th among the 30 strongest countries in this area in 2015. In 2016 Israel was no longer found in this group and dropped to the fourth decile. On a different soft power index,[21] Israel was ranked 40th in 2010, and in 2015 dropped to 44th place. Israel's contribution to world

16   Legatum Prosperity Index 2016 www.prosperity.com/rankings

17   The Conference Board Total Economy Database™, May 2017 www.conference-board.org/data/economyda tabase/index. cfm?id=27762

18   OECD Data on Income and Inequality www.oecd.org/social/inequality.htm#income

19   OECD Programme for International Student Assessment (PISA) 2015 www.oecd.org/pisa/pisa-2015-resultsin-focus.pdf; The TIMSS 2015 International Database https://timssandpirls.bc.edu/timss2015/international-database/index.html

20   The Soft Power 30, Portland Communications 2016 http://softpower30.portland-communications.com/wp-content/ themes/softpower/pdfs/the_soft_power_30.pdf

21   Elcano Global Presence Report 2017 www.globalpresence.realinstitutoelcano.org/en

countries, as measured by the Good Country Index22, was ranked this year in 44th place. Finally, on the index of Israel's global reputation,[23] Israel fell from 33rd place in 2010 to 51st place in 2016. However, the domain in which the comparative ratings of Israel rank the lowest relative to its other capabilities and as compared to other countries, is that of administration and governance. In The Worldwide Governance Indicators Project,[24] Israel was ranked 26th in 2015, which is identical to its level in 2010. However, on the index of the public's confidence in its elected officials,[25] Israel was ranked 38th in 2010 and in 2016 dropped to 51st place. Also, on the bureaucratic efficiency index, as reflected in the United Nations' Ease of Doing Business Index,[26] Israel sank from 26th place in 2010 to the 53rd place in 2016.

As for the question of where Israel stands in terms of the overall trend, that is, whether the country has been ascending or descending in the last few years, it is clear that there is no improvement in almost any field in its comparative situation. On the contrary, in dimensions where Israel performs best, both those that indicate Israel's considerable strengths and those where its capabilities are more modest, a decline is indicated. This state of affairs is, therefore, contrary to the ambitious goal set about a decade ago, or the one that its leaders are now declaring, that Israel will assume world-leading positions. The comparative data and trends indicate an alarming direction of gradual devaluation in Israel's situation as compared to other countries. There is no doubt that Israel has not embarked on the path of strengthening its relative position. In fact, it is a state at risk, as felt by many of the public, because of its inability to fortify itself, comparatively speaking. The reason for this is that, alongside its strengths, Israel suffers from structural weaknesses that are particularly damaging. There are those who, through extrapolation of trends, believe the country has an expiration date. On the other hand, the Forum's approach is by no means a pessimistic one, since underlying the proposed strategic directions is a call to take action, leading to a reversal of these trends and progress toward the desired goals for the state, and even ambitious ones.

Appropriate leadership and policies are capable of addressing the current situation and reversing these setbacks. Israel faces dilemmas of prioritization: the need to find the optimal balance between investing in strengthening and in leveraging its strengths and minimizing and repairing its weaknesses. Thus, disputes between alternative strategies may often be expressed in a debate between strategies aimed at reducing weaknesses and their impact, as opposed to those designed to buttress strengths and leverage them. There is no universal answer to this debate, and quite

22   The Good Country Index https://goodcountry.org/index/results

23   Country Rep Track, Reputation Institute 2016 www.reputationinstitute.com/CMSPages/GetAzureFile.aspx?path=~%5C media%5Cmedia%5Cdocuments%5Ccountry-reptrak-2016.pdf&hash=5a4232c6bfda0af12fca90660d5f8d18a657ac 230d062e34e0bb589c0d3c1538&ext=.pdf

24   The Worldwide Governance Indicators Project http://info.worldbank.org/governance/wgi/index.aspx#home

25   From the WEF Competitiveness Index 2016-2017 http://reports.weforum.org/global-competitiveness-index/

26   Doing Business 2016, The World Bank www.doingbusiness.org/reports/global-reports/doing-business-2016

FRAMEWORK FOR
GLOBAL
REGIONAL
& LOCAL
STRATEGIC OPTIONS

PART 2

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STRATEGY FOR GLOBAL POSITIONING AND HEDGING

A keen appreciation of the new world stage is paramount if a strategic plan for Israel's foreign affairs, defense, and international policy is to be pursued. Unlike in the past, Israel is now dependent on a variety of global processes and contexts. More than ever before, states are no longer isolated islands subject to the influence of neighboring countries. In the modern era, a process of globalization is at work, whereby political, social, economic, and other fields have increasing international reach and whose influence can thereby be felt worldwide, alongside related processes and other trans-formations which impact upon the world order. We, therefore, must cultivate an understanding of the global reality and its processes. Clearly, this reality is highly dynamic, and, indeed, its defining characteristic is the phenomenon of rapid and sometimes accelerated changes; in this context, one must recognize that anyone who seeks to examine these shifting global phenomena and events must also possess a healthy dose of skepticism. Such uncertainties also affect Israel, whose fate is greatly influenced by global events and processes, and are difficult to track and predict. However, even if we only examine the regional space, in other words, using a sub-global perspective, even then, the regional dynamics and situation cause confusion and complexity for the Israeli observer. In Israel today, it seems that there is a disagreement, and some would even say 'strategic confusion,' about this reality. For example, at a convention held at the Institute for National Security in 2016, a picture emerged according to which various players, some of whom are responsible for drawing up a picture of the geopolitical landscape and who design strategy, interpreted the local, regional, and global context of Israel in substantially different ways: Some pointed to ISIS as posing the central threat to Israel, while others, including the Defense Minister, claimed Iran was the greatest strategic threat. The Chief of Staff, on the other hand, pinpointed Hezbollah as Israel's main threat, while many others zeroed in on the Israeli-Palestinian conflict as a source of major problems and difficulties. Naturally, the difference in the identification and prioritization of threats to Israel leads to differences in preparedness and response programs, since preparations against Hezbollah missile attacks do not resemble preparedness vis-à-vis the Palestinian challenge; similarly, a strategic plan aimed at dealing with Iran is not the same as one designed to confront ISIS. In each case, the causes are different, the necessary resources differ, and the matching of resources to said challenges is dissimilar; in other words, the Grand Strategy itself is different.

Many characterize the post-Cold War world, especially since the beginning of the 21st century, as chaotic. Indeed, the world order dating back to the end of the Cold War and its two-sided power struggle is crumbling, as power relations between the major global powers undergo seismic shifts. The United States and Europe, which seemed at the end of the 20th century to be accumulating power and dominance, now find themselves – each as a result of different processes – faced with diminishing international presence and power. In contrast, the Asian powers, led by China

and India, have witnessed a period of intense economic growth, bringing with it an increase in their global influence. China has launched a vigorous, and sometimes challenging, global policy in different world arenas, while Russia, which experienced a regression at the end of the Cold War, has changed course in recent years and begun to challenge the existing order in Eastern Europe and even in the Middle East. These geostrategic changes have also generated areas of friction and potential flare-ups, from the South China Sea region, to the former Soviet sphere of influence and Ukraine, in particular.

The different developments in each of the arenas are interrelated. The proliferation of conflicts in the world, chaos in the Middle East, maritime tensions in Asia, China's economic slowdown alongside its rise as a superpower, the economic crisis in Brazil, lack of democracy in countries with emerging economies, Russian-American hostility, the rise of nationalism, Europe's internal problems, and other geopolitical processes are interconnected and render the present and foreseeable future particularly complex.

The backdrop to such geostrategic changes is our era of technological development, which challenges the world order and influences both economic processes and conflicts and the way these are conducted. One consequence of these changes is that the world's major powers, particularly old and new powers, have outgrown the laws established by Western powers over a hundred years ago. Chaos, it seems, exists worldwide. However, even chaos can be defined and characterized.

First, the sources of instability and geopolitical risks can be identified in four major centers: Russia, China, the Middle East, and cyberspace. Moreover, we can say in general that the currently diagnosed changes reflect a situation in which the law-based and multi-lateral global system is under increasing pressure. Thus, authoritarian governments use their membership in multilateral institutions, such as the Human Rights Council of the United Nations, to erode the norms and standards pertaining to human rights and to protect themselves from criticism regarding their anti-democratic conduct in these areas.

The Western democratic world, as it emerged after World War II, is now subject to a confrontation with forces seeking to erode it. This presents to established democracies a series of existential questions about the manner in which they conduct themselves both domestically and internationally. Another megatrend is the diffusion of power, i.e. a process that ends with a world without hegemonic power, replaced by power that is concentrated in networks, relationships, alliances, and coalitions in a multipolar world.

In this context, of particular concern is another megatrend, the weakening of the transatlantic partnership, which has reached its lowest levels since the end of World War II. For example, European

countries do not consider the developments in Syria or Russia in the same way as the US, which makes concerted and effective action on these two fronts difficult. More generally, it appears that it is more difficult today to enforce and preserve international cooperation. However, as we shall see, middle power countries, such as Australia, Japan, South Korea, and Singapore, specifically view the establishment, strengthening, and maintenance of regional partnership networks as the leading, principal solution to this 21st-century reality. The regional perspective arguably stands at the heart of these and many other countries' national security strategies and reflects a belief that relationships and partnerships are the foundation for stability and security in the face of change.

Moreover, one can identify today two changing trends in the centers of power. Together with power shifting away from Western countries, power is also moving away from states and governments toward non-state entities as a result, inter alia, of the information revolution and the development of technology. It is unlikely that over the coming decades the first trend will result in the end of US dominance in the global balance of power, and it is not entirely clear whether it will undermine or destroy the Western world order shaped since World War II. China, for example, has profited and enjoys considerable benefits from the existing global order, and, therefore, its motivation to destroy it completely remains low.

The second trend, however, undermines the ability of countries to face global challenges, such as economic stability, terrorism, and climate issues – challenges that a single country, even a superpower, cannot resolve alone. In the sphere of transnational connections, which lie outside the control of governments, concepts such as multipolarity, bipolarity, or hegemony have no value. Many of the challenges have no military solution, and collaborative networks are essential in order to address them. In a world characterized by growing complexity, networks are becoming increasingly important. Powers that can accommodate these non-state networks, especially democratic powers such as the United States, will have an advantage over countries which ostracize non-state players, perceiving them as competitors and subversive.

In the Middle East, beyond the local and circumstantial changes that constantly characterize the region, two sweeping historical phenomena have been discerned. First is the disintegration of the political order that emerged in the aftermath of the First World War, and with it the disintegration of states and regimes established at that time, which are no longer under central control but run instead by militia groups and others. Such is the situation in Libya, Yemen, Syria, and Iraq. The second phenomenon is the extremist Islamic trend, which began with the revolution in Iran nearly 40 years ago, and today is expressed in, among other things, a violent Sunni-Shiite conflict. This conflict has manifested itself in recent years in more diverse ways and has become a dominant component of some of the violence, as well as of the friction between the varieties of Islam (even within the Sunni camp itself) and even within undivided societies and countries.

Alongside the geopolitical perspective, profound changes can also be seen in combat doctrines and practice, with the rise of hybrid warfare a central component here. This form of warfare exploits the use of technology, ranging from cyber attacks on infrastructure to the use of social networks and digital media, in order to conduct psychological warfare, spread disinformation, spark intimidation, shape public opinion and consciousness, and more. In the case of Israel, a large part of the attack being waged against it in the international arena is conducted through propaganda. Many see Russia as the master of this hybrid warfare, but the Kremlin is by no means the only player in this field.

Cyberspace may even eclipse all other domains of war, as the former is not restricted or governed by borders and armies. The potential strategic threats in cyberspace are enormous and include: disruption or even destruction of infrastructure, theft of classified strategic information, hacking of essential systems, theft of technologie, interfering in the election process of democratic countries and more (the geostrategic effects in this area can be inferred from the case in which the widespread theft of technology from American companies caused China and the United States to make a formal agreement, in which they undertook not to provide government assistance to any theft aimed at improving the situation of companies in either of the two countries).

However, the threat becomes even more serious when we take into account all non-state actors with political agendas, which use technology that cannot be monitored and supervised. Instead of promoting the centralization of power (political, military, economic, cultural, and other), new technologies damage it. World politics is no longer the interest of governments only. It would be accurate to say that control has become difficult for all players, and that in many countries politicians seem to be sidelined, while non-state players are moving to the forefront of global processes. Yet at the same time it appears that modern technologies sometimes render leaders more powerful than they had been before, with the interesting phenomenon that personalities seem to matter in the age of globalization possibly more than they did in previous eras.

Another trend that can be identified is the ascent of the global middle class, with a reduction in poverty and an increase in literacy and the quality and availability of advanced health services. This middle class is now, and will continue to be, the biggest and most significant actor driving change at the state level and in the international arena. So, for example, this growing class is the subject of global economic expansion, is driving the emergence of developing countries, and is the great beneficiary of the possibilities inherent in new media. Another implication of the ascension of this class is the growing concentration of power and entrepreneurship in the public sphere. On the other hand, fluctuations in the size of the middle class, which is gradually shrinking as capital concentrates itself amongst the upper class, runs the risk of eventual social upheaval. Another trend is the significant increase in the demand for food, water, and energy, as the result

of, among other things, global population growth and the consumption patterns of the growing middle class, together with climate change.

The Range of Long-Term Scenarios

Given these trends, several possible mega-scenarios can be forecasted for the coming decades, as recently conducted by the National Intelligence Council of the United States (National Intelligence Council - NIC). The NIC has set up four possible 'worlds' in 2030:

A. **Stalled Engines:** This is the worst possible scenario, where the chance of inter-state conflict will increase, while the United States separates itself and withdraws inward, and globalization comes to a halt.

B. **Fusion:** This scenario, according to which China and the United States cooperate in a wide range of areas and lead growing collaborations worldwide, is the most favorable outcome.

C. **Genie-out-of-the-Bottle:** This scenario depicts a world where inequality on the world stage reaches its peak, with some countries collapsing while others emerge and 'profit.' Inequality widens within countries as well, leading to increased social tensions. In this scenario, the United States, although not completely withdrawn into itself, is no longer the 'global policeman.'

D. **Non-State World:** According to this scenario, non-state players stand at the forefront of addressing global challenges and are armed with advanced technology.

The NIC also identified several 'black swans' that would have, if materialized, significant and reality-altering effects:

A. **A deadly global epidemic**

B. **Drastic and accelerated climate change**

C. **The collapse of the EU and/or euro**

D. **The rise of a democratic China or, alternatively, the collapse of China**

E. **A moderate Iran that will promote stability in the Middle East**

F. Nuclear war and/or the use of weapons of mass destruction and/or gigantic cyber attack

G. A geomagnetic solar storm

H. Collapse or total withdrawal of the United States from the international arena, especially in a situation where no power can replace it for the next 30 years

Nonetheless, the NIC states that the United States will remain the most powerful country in the world in 2030, but that in this world, there will be no single leading power, such as the role the United States has played thus far. Among other things, this future is rooted not so much in the decline of the United States, but rather in the rise of new powers – state and non-state – who also seek their place on the world stage. The unipolar world is over, and while this does not mean that the United States will cease to be a superpower, it is certainly likely that the world will become more complex.

For Israel, alongside aforementioned processes in the global, regional, and conflict arenas, the Israeli-Palestinian conflict is an area that also requires foremost consideration. The continued situation in which the State of Israel has not reached an understanding with its neighboring countries on agreed and recognized borders, while finding itself dominating millions of residents who reject its rule, is reflected in Israel's global standing and also internally, in its social fabric, national identity, economy, politics, and more; and in the long term, on the character of the state and destiny of the Zionist vision. Even on this complex issue, it is possible to identify trends, primarily in the deadlock in the political process, but also in the transformation of the conflict, mainly by Palestinians, into a cause célèbre on the world stage. UN Security Council Resolution 2334 last December regarding the illegality of settlements is one such example.

On the other hand, the Israeli public is split and deeply divided in its approach towards the conflict. This controversy is one of the most profound experienced by the nation, and in the political arena it assumes an intense expression. It is clear that in the absence of a substantial amount of national consensus and in light of the controversy involved, it would be very difficult for any government to implement a policy in this area. Therefore, the stalemate in the peace process is the result of the situation not only between Israelis and Arabs but also among Israelis themselves, who have disparate political views. At the same time, it is appropriate to consider that regional dynamics also provide Israel with a key to exploiting opportunities and to creating a strategic environment – both regionally and globally – to promote its interests. In other words, the progress in the arena of the Israeli-Palestinian conflict, even if it is phased and gradual, can advance Israel's position disproportionately to the non-centrality of the Israeli-Palestinian conflict in the

eyes of the world's nations. All this is over and above the inherent benefits that taking action in this area would bring to Israeli domestic interests.

The term 'chaos' is very common in analytical discourse, perhaps because of the confusion generated by the current situation and its processes, or perhaps because of the popularity of chaos theory itself. Either way, we do not recommend adhering to this term because, in practice, processes are not completely random: On the contrary, it is always possible to identify trends and characteristics. These do not reduce the degree of instability, turbulence, and inherent risks, but neither does understanding the reality diminish the need to design a strategy. This unstable, tumultuous and dangerous reality confronts Israeli statecraft with a series of cardinal strategic questions: How should Israel navigate its activities and operations, with partners and opponents alike, both on the regional and global arena, taking into account the characteristics of new realities and the changing balance of power? How will Israel's economic and security needs be addressed under these circumstances? How and to what extent should Israel change its policy in light of the existing situation and adapt its policies to new situations? As detailed below, all countries, large and small, are currently operating under the reality described above and as part of the four possible scenarios mentioned earlier. Israel should consider not only this reality but also act in accordance with the maneuverings of different countries, led by the superpowers and other countries which lie close to it strategically.

A striking fact is that although many variations exist between every country across the globe, and even though each state has its own distinct territory, population, history, unique interests, and differentiating characteristics, there are common denominators for all. This stems from the fact that we are all players on the global scene and subject to (global) processes, extending from the effects of climate change, through to technology changes and fluctuations in the distribution of the balance of power on the continents. In addition, we also learned that although key phenomena are universal, these manifest themselves differently in each country. For example, it was found that there is not a single country where significant demographic processes are not taking place, in one shape or another. Often, the processes are radically different from state to state. However, we learned that the unique demographic processes in each country have significant implications on the required national security strategy.

Each country, in shaping its future, can begin with an introspective examination of its own unique needs and circumstances, which will, of course, prove to be key factors. Only gradually does it become possible to look at the ever-widening circles of contexts, from the regional to the global. This is how the vast majority of Israeli observations on the state of the country and its conduct begin, before concluding with the most central question: the long and open conflict between ourselves and our

neighbors. However, in our view, in part due to the rising proportion of global elements that guide considerations and influence factors, it has been preferable to start from afar and at a distance, meaning from the global aspect, before moving forward to focus on the immediate and nearby.

Thus, this document is divided into three main arenas in which Israel operates – the global arena, the regional arena, and the arena of the Israeli-Palestinian conflict – and examines the options for action open to it and those that are most rewarding. After identifying the key players and main trends in every arena, the document marks the desired policies for Israel, with which it can achieve its objectives optimally while harnessing the resources at its disposal. This approach, it is hoped, aims to transcend a provincial and ethnocentric perspective, and by taking a broad and wide-ranging viewpoint, correctly identify interrelated and interactive elements in the international system – and on which even the Arab-Israeli conflict is to a considerable extent dependent, since the Israeli-Palestinian conflict, despite the most modest toll of victims incurred during the century of its existence, has captured global political attention. Relative to other conflicts whose destructiveness and deadliness are far greater, but which for various reasons are often considered local and do not arouse international attention, the Arab-Israeli conflict cannot bemoan a lack of attention from the nations of the world.

A major central conclusion arising from our discussion is that Israel must adopt a proactive strategy of involved and proactive maneuvering in world affairs, which will utilize all available options in an era of change and uncertainty. The negotiations compiled in this document show that in the final analysis, action and engagement are preferred to 'sitting on the fence,' adhering to the status quo, 'buying time,' entrenchment and fortification. The comparative perspective adopted here also shows that even major powers, such as China, the US, and Russia, as well as smaller countries such as Singapore and medium-size nations, like Japan, adopt similar strategies and seek to position themselves as forces active in their region. Furthermore, identifying the strategies of different countries is essential for formulating the Israeli policy toward them. That is to say, Israel has to act in light of the global, regional, and local reality while keeping an eye on other players operating in these arenas and their respective maneuvers.

THE GLOBAL ARENA

The global arena is the largest framework within which the State of Israel operates, as well as that with the greatest impact upon Israel. This arena is first and foremost the 'playground' of the world's superpowers and leading players, which also have the strongest influence on it. Israel must draft a strategy in the face of these forces; to set itself in a position that will allow it to harness the international forces in order to promote its security and prosperity. Moreover, despite being a relatively small country by conventional power indices, Israel still has a place in this 'playground' by virtue of its specific military capabilities and as a leading technological-scientific power in the world. Therefore, Israel can position itself in the global arena in a way that will serve its interests, while breaking through the limitations imposed by its modest dimensions in other fields.

Central to this issue is whether Israel needs and is able to change its Atlantic strategy, which has guided Israel in the international arena since its inception – that is to say, an alliance with the Western powers, led by the United States as a leading anchor. The alternative, given the possibility of devaluation in the status of these countries, is that Israel should diversify its network of connections and partnerships in the direction of the emerging powers. At this time, we must ask specifically whether Israel's flourishing relations with key countries in Asia, with China at the center, and also with India, Japan, Korea, and Australia, and in parallel also with Russia, may become a new center of gravity, through which relationships and partnerships can be developed to compensate for the weakening of ties with Europe and the United States.

United States

The United States is still the world's only superpower, behaving as a leader and operating thanks to its overall strength in order to shape the situation on five continents. The United States is a status quo power, and its superpower status manifests itself differently in each arena. Thus, in Latin America, the United States gave up the Monroe Doctrine, whereas in the Middle East there are signs that it wants to relinquish its role as a superpower. Some even claim that this alarming phenomenon in the United States is not necessarily a result of weak policy, but rather the lack of a coherent strategy to project US power globally. According to this scenario, although the United States will continue to be the leading global power and a superpower, a world would be created that is best characterized by the definition of 'non-polarity' and not characterized as a unipolar, bipolar, or multipolar world.

Moreover, public opinion in the United States is divided on key foreign policy issues. This will make it difficult for President Trump to conduct himself in this arena. For example, polls show that while two-thirds of Republicans support sending ground troops to Syria and Iraq, 64% of Democrats

oppose it. The new administration, therefore, must contend with a divided public opinion when shaping foreign policy challenges.

The power of the United States is also declining in terms of global GDP, due to the rise of competitors. For example, in the early 21st century the United States' share of global GDP was 23%. The rise of competitors, especially China, as part of the overall transition of power to the East, has led to a forecast by the International Monetary Fund that the share of the United States in 2018 will be only 17.7% of the global GNP. 'Moving eastward' means a decrease not only in the power of the United States, but also in the power of its allies and partners, and, therefore, also of its global networks. In any case, it is clear that in a complex world, where power moves not only from west to east, but also from governments to networks and non-state players, the United States cannot act alone, and it will become dependent on other forces more than ever before.

Despite all this, the fact that events have global implications may make it harder for the US to minimize its presence on the global stage. For example, the immigration crisis in Europe and the proliferation of terrorist activities on both sides of the Atlantic may force the United States into taking more assertive and direct action in Europe and the Middle East. The civil war in Syria is another burden that makes it difficult for the United States to pull out from the region. Indeed, additional US troops and material have been deployed to Syria, and some elements of the Trump administration are keen to use the conflict as a platform from which to clash with Iran. Others, such as Secretary of State James Mattis and other US military leaders oppose this idea and argue that the main objective of the US presence in Syria is defeating the Islamic State. Conservative circles are also keen to monitor directly and closely the application of the nuclear deal with Iran, strategize the withdrawal of China in Asia, change US conduct in Latin America, stand firm against Russia, and show proactive leadership.

Mapping conflicts according to the magnitude of their impact on the interests of the United States, the conflict in Syria is ranked first, and eight out of the 11 conflicts classified as 'hotspots' originate in the Middle East. Conflicts in Libya, instability in Egypt, and political violence in Turkey are ranked high and seem more urgent today than ever before. In Europe, too, especially because of the influx of refugees and migrants from Syria and Africa – which is destabilizing countries and the entire European Union – Americans recognize a potential danger to their interests, which may require intervention. In general, whereas in previous years, including 2015, the Americans have attributed little importance to foreign policy issues, now it seems that this trend is changing.

While the United States may be currently working, and may work in the future, to reduce its direct or indirect presence in the Middle East, this is probably the opposite when it comes to the Asia-Pacific arena. Much has been said about American attention shifting to the East, especially in

the wake of the rise of China. Beyond the general trend on which the debate is often focused, one should note the characteristics of American policy in this arena. The Americans see the benefits of their vigorous policy in the Pacific arena in, among others things: strengthening their alliances and networks with Australia, Japan, South Korea, and the Philippines, along with the long-term preservation of the alliance with Thailand; promoting and strengthening trade ties and deepening economic integration; deepening the partnership with Malaysia, Indonesia, Vietnam, and India, as well as strengthening non-formal relations with Taiwan; establishing a more stable and viable relationship with China, characterized by expanding areas of pragmatic cooperation in the face of international challenges and constructive management of differences between the countries; and reinforcing regional institutions, thereby strengthening the law-based order. All of these, along with many other actions, are laying the groundwork for long-term American involvement in Asia.

Finally, even though the world is becoming more complex, and many more players than before are taking part in shaping the global reality, we must not underestimate the importance of the United States and not overplay its apathy or apparent reluctance to participate in world affairs. In such a complex world, the challenge is sometimes to act, and the United States is often the driving, organizing, managing, and leading force, uniquely able to direct the networks of international partnerships and organizations of which it is a leading member. Even on issues such as the proliferation of nuclear weapons and global trade, where the dominance of the United States has experienced a certain decline, it still has a major, even normative, role to play today and in the foreseeable future. Over-all, Americans seek to strengthen and expand these trends, while deepening and expanding their relationships in Asia, and to establish relations with new partners (e.g., Malaysia and Singapore).

Vis-à-vis China, the largest competitor of the United States on the world stage, the Americans outline policies according to which the rise of China as a peaceful, stable, prosperous, and responsible player in the global arena should be welcomed. The United States seeks to expand its practical cooperation with China on international issues within the framework of constructive relationships, in parallel to resolving disputes in a transparent manner. In addition, the United States supports China's becoming a partner with the capabilities to address regional and global challenges, and already views it as a partner in strengthening the system of international norms and laws. Specifically, an accurate understanding and calculated response toward the rise of China are the major challenges faced by the United States in the 21st century. The Americans identify several trends among the Chinese, including aggressive responses to what might be seen, from a Chinese perspective, as bases of hostile or competing forces in its perceived sphere of influence; expressions regarding territories that from the Chinese viewpoint must be controlled or influenced by the Chinese; and attempts to harness the global social and economic system to China's advantage.

Between pre-emptive containment and pre-emptive appeasement, and in light of the above, some claim that the United States should establish the identity and interests that it has in common with China; to link their respective elites, and for generations to come, to establish stable relations between them. Others maintain that the United States should adopt a realistic engagement policy toward China. This policy should integrate efforts to cooperate where possible, together with an attempt to prevent, where possible, China from gaining capabilities that may jeopardize the national security of the United States and the latter's security interests; and preparedness against the consequences of China's displaying excessive assertiveness (the development Americans foresee as most likely when examining the direction of China's development in the coming decades).

As far as the United States is concerned, its relations with China are not intended to help the latter grow, so that it will eventually overshadow the United States, even if peacefully. Instead, the goal of the US policy is to encourage China to be more cooperative, while maintaining US superiority in geopolitical terms. Either way, the rise of China will require the United States to take actions to strengthen itself and boost its 'immunization' against the problematic implications of China's increasing power. Among these actions, the US will also have to consolidate and enhance its international status, including its military status and involvement in various regional theaters.

The United States aims to promote regional prosperity, but under its own terms. According to the American view, such a system would be one of the key factors of stability and should be promoted through multilateral institutions and frameworks, such as the G20.

Donald Trump's election to the presidency represents, in itself, a certain mood in the American electorate, which, until recently, had only been vaguely identified. It is difficult to predict how Trump will conduct himself over time. However, from what can be gauged by expressions of policy on American strategy research papers, these do not point to withdrawal, reduced responsibility for global affairs, or apathy; instead, they outline the range in which the US will act in the coming years in light of global developments and in accordance with the world vision of its leader. The US strategy outlines the boundaries of the United States' conduct between containment and restraint, between limited involvement and leadership, and between collaboration with its competitors (primarily China) and open competition with them. American retrenchment, too, does not mean disengagement, and certainly not of the kind witnessed in the 19th century or in the 1920s. While it may be the opposite of a maximalist strategy, the US can still adhere to a policy of retrenchment as part of a strategy of global American presence and involvement. In this context, the United States is dealing with a series of strategic dilemmas, such as the size of the defense budget versus other American needs and the ability to collect taxes for these purposes; the degree of intervention in other countries' affairs and how to conduct this; and the way international institutions and networks of contacts and collaborations should be forged in the face of new supranational challenges. As Joseph Nye stated: 'The

American century' is not over yet, if analyzed in terms of American military and economic dominance as well as soft power, which have transformed the United States into a major force in the existence and management of the world order and global balance of power. Nevertheless, without entering a discussion on the post-American era, it can be said that the continuation of the 'American century' will probably not resemble what it was in the 20th century.

There is no telling whether the United States will maintain its supreme power status over the course of the 21st century, but if that status changes to its detriment, there is no other country able to take its place. Moreover, there is no state or superpower that has all the advantages, assets, and resources of the United States, certainly not in Israel's view. Therefore, Israel is required to maintain its relations with the United States as a major Israeli asset over time and irrespective of any developments, including those that diminish US status. The United States is considered Israel's main ally and the keystone of its national security, especially since the Six Day War. The spectrum of Israel's relations with the United States makes it an indispensable anchor, incomparable and unparalleled among its foreign relations. Entwined in this context are the generous military aid funded annually (a $38 billion package of military aid for Israel over the next 10 years was signed in 2016); the provision of the world's most advanced weapons in the most extensive scope; the maintenance of Israel's qualitative edge in the area of existing and active weapons in the Middle East; scientific and technological cooperation between the two countries in the design and development of weapons; and cooperation in the field of intelligence, which is mostly kept under the radar. The scientific collaboration between the research communities of Israel and the United States is also a key and essential factor in ensuring high standards in Israeli research. It is important to remember that despite Israel's pioneering role in these areas, Israel has no replacement for the leading science, research, and technology of the United States.

In addition, the American Jewish community is the largest in the world outside Israel. In domestic American affairs, this community has considerable weight and significance in shaping the foreign and security policies of the United States in a way that serves Israeli interests, as well as a very high level of identification with Israel. However, it should be noted that among the younger generation of Americans, including Jews, there is a substantial erosion of solidarity with Israel and its policies, especially concerning the 'Occupied Territories.' Resistance to the settlements is intensifying, and two-thirds of Americans see the Israeli-Palestinian conflict through the prism of human rights. This trend seems to be growing in the younger generation. Seen through this lens, Israel seems at times a colonial state, which operates outside the norms of the protection of human rights and as an imperialist and racist state. Israel does not have a deep understanding of the American political system and of the societal changes the United States has undergon and continues to undergo. In this context should be noted the decline in the political influence of American Jews and the fact that the Jewish voice and Jewish money are not playing the role they

used to in the past. President Trump will not necessarily be grateful to the Jewish vote. Moreover, AIPAC was badly hit in connection with the Iran nuclear negotiations, when it tried to promote the policies of Israel and failed, at a time when Israel needs American assistance more than ever.

The need for Israel's reliance on the United States continues to be wide-ranging and deep, but the identity of their shared goals has also been affected because Israel has signaled its readiness to turn to alternate sources of support and investment. Such statements, perceived by the Americans as illegitimate or as undermining their interests and their ties with Israel, have a price tag. If the US is important to Israel as a significant anchor in the 21st century, we must examine what can be done to enhance Israel's value to the United States.

Summary of Insights

America's role in the global arena will change as a result of the rise of other forces and because of the retreat of American leadership and the inward convergence of the West as a whole. This does not mean that the United States has lost interest in the Middle East, but it seems that its willingness to act in the area directly – a feature of the Bush administration – has diminished. If, indeed, a trend of inward convergence and withdrawal from active involvement in the world can be identified, then this is of real concern – an isolationist United States especially so. However, simplistic arguments about the alleged retreat of the US should be rejected. Instead, the situation should be analyzed in terms of world leadership 're-calibration,' in an attempt to understand the changing way the US is seeking to uphold and implement its global involvement.

In any case, even if the power of the United States and its global position has declined in recent years, there is still no significant and stronger power to take its place, and it does not seem that such a power will emerge in the near or foreseeable future.

Recommendations

The support of the United States, of the President of the United States, of Congress, and of both political parties should be fostered and maintained in Israel. The areas of defense and intelligence cooperation should be intensified, and the value of Israel's contribution in these areas should be cultivated.

The essential relationship between American Jewry and Israel should be maintained. Exceptional efforts must be made not to distance most American Jews from Israel and Judaism. This essential need also requires that the issue of 'Who is a Jew' be addressed.

US policy on matters that do not concern Israel should be supported to ensure continued US backing of Israel in the institutions of the international community. In addition, Israel's relations with other actors in the international arena should be coordinated with the United States.

Special attention should be paid to maintaining the different channels of contact between the science and technology communities in Israel and the United States. The boycott movement against Israel (BDS) is no longer limited to American campuses and is beginning to interfere with the advancement of other areas. Preserving the relationships with influential elites in the United States (e.g., students, academics, and the press) requires a significant change in the Middle East policy of Israel, such that they become as compatible as possible with the American perception and interests, as accepted by these groups.

The demographic changes in the United States should be followed and extra effort should be invested in cultivating the relationships and contacts with the Hispanic and Asian communities – emerging forces, both demographically and politically – whilst simultaneously maintaining contact with Israel's traditional allies in both political parties.

It would be appropriate to strive for agreements and understandings with the American government on interests that are vital to Israel and on which it will not yield. On the other hand, a flexible policy that would make it easier for the US administration to consider Israel's vital interests regarding the Palestinian issue and the Iranian nuclear issue should be presented, as well as a policy concerning joint efforts in strengthening and protecting Jordan against the threats of jihad, particularly ISIS.

The strategic dialogue with the United States aimed at reaching an understanding on the Iranian nuclear issue and continued dealings with Iran after the agreement was signed should be expanded.

Israel must avoid, as far as possible, taking a stand against the US in the international arena on issues that do not relate directly to Israel.

Israel must avoid being perceived as affiliated with one of the major political parties in the United States on issues that are currently in dispute and to avoid being perceived as dishonoring the administration in its conflict with Congress. Israel must avoid risking security relations with the United States in favor of a third country, such as China.

Israel must avoid taking any step in the West Bank that might be interpreted in the eyes of minorities in the United States (Hispanics, African-Americans) as being similar to discrimination against America's black population, even if it this is not actually the case.

Israel must avoid involving American Jewry in Israeli politics. Administrative measures in the West Bank, which may be interpreted as unnecessary discrimination between Palestinians and Jews (such as the initiative to introduce segregation on buses) and that are negatively perceived by large parts of the Jewish community, especially the younger generation, must be avoided.

Relations with the United States (and in the long-term also with China) are of critical significance. Even when it is clearly important for Israel to develop its economic and trade relationships with China as well as with other countries, due to the primacy of its interest in America, Israel should not transgress American strategic considerations or trade practices.

In view of the importance of the special relationship with the United States, it is essential to nurture it, even if Israel does not have to accept the American view on every subject. Special attention should be paid to fostering personal relationships with President Trump, and carefully avoiding inappropriate style of speech, disruptive leaks, and moves that could irk him. However, the most important thing is not rhetoric, but rather the actual statecraft and policy of Israel, which must lend great weight to the needs, positions, and opinions of the United States.

Europe

Europe, as a unified body, is the world's largest economy. In military terms, Europe does, indeed, spend less than the United States on defense but has more recruited military personnel. The big question is to what extent, if at all, will Europe succeed in acting as one body and in maintaining sufficient political and socio-cultural cohesion on international issues. Today, it seems that the challenges facing the EU domestically severely restrict this capacity. The Brexit referendum in the United Kingdom to withdraw from the EU was, of course, a historical milestone in the history of the 'European Project,' as well as in the UK. At this point, we do not know how pervasive the disintegrative process will prove. The tussle between integrative and disintegrative trends in unified Europe may rise and fall as a function of the challenges that the continent has experienced in recent years: waves of immigration from Africa and the Middle East, extremist Islamic unrest and sporadic violence, economic crises in various countries, and conflicts in the east along its borders with Russia and its spheres of influence. At the same time, the integrative process also includes technological cooperation in which the continent is still making progress. As for Turkey, a veteran member of the Atlantic alliance and former candidate for the European Union, it is doubtful whether it will be accepted into the EU under the circumstances of recent domestic developments, such as the encroachment on democracy and the strengthening of Islam.

Disputes in Europe are nothing new. However, the upcoming period may witness a new level in struggle and debate regarding Europe's identity. Some argue that the European experiment will be challenged in the next few years as never before. In recent years, European Union countries

have formulated different, and sometimes conflicting, foreign policies. Thus, the UK is fostering economic relations with China, France is strengthening its military cooperation with Russia, and Germany is seeking a common language with Turkey. In the background of all this, Europe is facing a crisis of escalating growth, in part due to the great immigration waves and because many countries, including France, Greece, Italy, Portugal, and Spain, are failing to comply with the Maastricht Treaty regarding the budget deficit. Yet more recently there have also been tentative signs for hope and, possibly, further European integration. Marine Le Pen, leader of France's Front National, concluded that European elections in 2017 would blow a wind of change over the continent. Yet the recent election of French president Emmanuel Macron, who is enthusiastic about the rejuvenation of the European project, has dampened the voice of Euroskeptics such as Le Pen. So, too, have a poor electoral performance by Dutch populists in March, and the difficulties faced by 'hard Brexiteer' Theresa May in the UK's own general election in May.

The massive waves of immigration from Syria and Africa threaten Europe's social, economic, cultural, and political fabric, as well as its identity, and represent a huge challenge for the EU and the various countries belonging to it. The terrorist attacks that have struck European cities and centers in recent months have also given rise to difficult security questions, in the legal, political, identity, and social spheres. Thus, for example, the arrival of refugees triggers debates between nationalists and supporters of globalization; between those seeking the strengthening of state institutions and those who trust international institutions such as the United Nations; and between the defenders of the Judeo-Christian identity of Europe and those who advocate multiculturalism. Even the political map of Europe may change considerably as a result of this situation, with Angela Merkel possibly paying a political price for her policy of absorbing immigrants or, alternatively, with the rise of right-wing nationalist parties (in Poland and Austria, for example, there is a considerable increase in the power of extreme right-wing parties. These are not only anti-liberal, but also oppose the EU). European politics as we know it will most likely undergo substantial change.

The refugee crisis in Europe also raises questions about the relationship between the EU countries themselves (such as the issue of open borders, which constitutes a key element in the economy of the whole Union), and relations between the EU and other countries. In general, it seems that, while in the past economic issues were the main source of concern in Europe, in the future social and political issues, alongside economic problems, will also have their place.

In addition, the jihadist threat is already fueling Islamophobic sentiment in Europe, and it seems that this will continue in the foreseeable future. It also seems likely to increase the expression of nationalism in various European countries and lead to a push for stricter monitoring of borders,

which in turn will serve to undermine the principle of EU freedom of movement. Closing the borders will create a bottleneck of migrants in the Balkans, a region of burgeoning ethnic tensions. Alongside all this, Russia is the biggest challenge for the European Union, which remains at the same time open to China. As detailed in the discussion on Russia, it appears that Russian foreign policy and the deep discord with the West will not allow a resolution of the crisis in Ukraine in the near future. Russia may try to leverage the crises in Syria and Ukraine to reach compromises with Europe and the United States about a slowdown in the entry of Western forces into the Soviet sphere of influence. Overall, rapprochement between Russia and the West does not seem likely in the near future. In the meantime, please note that the war in Syria became an international conflict some time ago, and as such, it is a prominent challenge from the international community's point of view, along with being a major focus of risk in our region.

In the absence of proper de-confliction mechanisms, the Cold War in Europe could degenerate into a more acute conflict. Against this background, many have called for the establishment of new institutions that reflect the current situation in Europe and regulate present tensions, especially between Russia and NATO countries. The governments of some NATO countries, particularly in Eastern Europe, are demanding an increased military presence in their countries, while there are elements in NATO and the West which claim that steps of this kind may increase the risk of confrontation with Russia and are, thus, reluctant to recommend them and carry them out. Many experts even question the very ability of NATO to provide adequate protection to the Baltic countries.

The erosion of Europe's ability to play a major role in maintaining global stability is reflected in its difficulty in standing up to Russia; a combination of limited resources and hesitant policy has led to the expansion of this trend. The Munich Security Conference Report of 2015 identified a huge gap in European rhetoric when it comes to security and defense issues, policy and assertiveness.

Europe is the continent closest to Israel both geographically and commercially, but as mentioned, it is not a monolithic bloc. Each country has its own foreign policy, although in recent years a trend has been discerned among the EU Member States to formulate a joint policy on the Middle East. Since the economic agreement between the European Community and Israel in 1975 (the EC-Israel Cooperation Agreement), EU-Israel relations have evolved considerably, and Europe has become Israel's main trade partner at the global level, although recently this trend has suffered a decline. Since 1998, when it was awarded full membership in the research and development programs of the European Union in science and technology, Israel has attained a unique position. Israel is the only non-European country to enjoy such a status, granting its science and technology community the right to participate in joint ventures and win grants worth hundreds of millions of dollars. Recently, Israel has successfully been accepted as the only non-European member of the European Institute for Nuclear Research in Geneva (CERN). This is an impressive and unique

achievement for the science community in Israel and for Israeli diplomacy, and an example of what Israel can achieve under difficult political conditions, when talent, determination, and creativity are combined through smart and coordinated operations. Collaborations between Israel and European countries in the areas of security and intelligence are also beneficial to both parties, and in general, Israel and the EU have a broad and stable common denominator of values, which is based on a common cultural heritage and the belief in democracy, the rule of law, and the market economy. This large common denominator with Europe creates a platform on which even closer relationships can be built.

However, between Israel and the EU there are also disagreements, disputes, and tensions, both historic and new. These constitute an obstacle to exploiting the full potential of economic, scientific, and political partnership between the parties. First, the patterns of bilateral relations between Israel and the countries within the EU (such as France or Germany), as well as of bilateral relations with countries outside it (primarily the United States), at times overshadow the EU as a major partner of Israel. Second, there exist elements in the Muslim community in Europe that are hostile toward Israel, fueled by the Israeli-Palestinian conflict and the disagreement between Europe and Israel regarding the approach that should be taken to resolve it, both leading causes behind difference of opinion between Israel and the EU. Europe has many reservations regarding Israeli policy in the West Bank, and in recent years it has also sought to exclude from trade agreements and reduced customs tariffs industrial and agricultural products from these regions, and to designate them in a special way. This issue has caused sharp and vociferous friction between Israel and the EU. The same is true of the cooperation between Israel and the EU in research programs on science and technology, from which the EU sought to exclude the West Bank. During the debate on this issue, senior Israeli officials raised the possibility of replacing Europe with China, but it soon became clear that China would not be able to offer even a fraction of what Europe can provide. One way or another, Israel was forced to accept the European move.

Politically, the EU has traditionally wished to remain neutral in the Israeli-Palestinian conflict. However, the lack of agreement between the EU countries themselves on questions related to the conflict (beyond the agreement on the 'Two States' formula), resulted in the EU's becoming an entity that is unable to play the role of a significant mediator. In addition, the EU's attitude to Israel hardened following the fighting in Gaza in the summer of 2014 and its humanitarian repercussions. Moreover, the European Parliament does not understand Israel's policy regarding negotiation strategies and its commitment to the two-state solution. Furthermore, the formula of the State of Israel's being a Jewish state – a component on which the Israeli side is based – is not understood as such in Europe.

Europe aims to move away from military activity and involvement in the Middle East, wishing to leave this role to the United States. Europe is not ready to replace the United States as a stabilizing force in the region for the following reasons: its limited ability to fulfill such a role, the lack of a common strategy, economic problems in the EU, Israel's problematic image because of the persistence of the Israeli-Palestinian conflict, and uncertainty about Israel's intentions and goals on the Palestinian issue.

On the Israeli side, the prevailing view is that the EU ignores reality and the security needs of Israel, and is not prepared to stand firm against Islamic extremism. There are even those who speak of a deep psychological, economic, and ideological crisis in European institutions, which vote almost automatically against Israel. According to these arguments, Europe is generally unable to understand the Israeli situation.

For Israel, of all European countries, Germany – the strongest of the EU nations – has a central place, carrying the terrible memory of the Holocaust. The unique relationship between Germany and Israel found expression in critical economic assistance delivered by Germany to Israel in its early years (the Reparations Agreement), and recently in providing significant strategic weapons: six submarines that reportedly are able to carry nuclear weapons. Many streams of opinion can be found in Germany in the 21st century, and many Germans still harbor anti-Semitic feelings to this day, but as long as Angela Merkel heads the German government, the special relationship between Berlin and Jerusalem is sure to continue. There is no guarantee that this will be the case with the end of her term.

Israel's relationship with Diaspora Jewry, including the Jews of Europe, is growing weaker on both sides and at various levels. The Jewish world is moving away from Israel, both because of Israel's policy toward the Palestinians, which is disapproved of by some, and because Diaspora communities feel that Israel rejects closer ties,because their religious and secular practices are not acceptable to or approved by Israel. Israel, for its part, does not encourage immigration of Jews from around the world equally, and employs preference and bias, absorbing Jews according to their degree of Jewishness. The exceptions are the Jews of Eastern Europe. The result is that, on the one hand, Israel is calling for world Jewry to immigrate to Israel, but in practice, the Interior Ministry applies a very strict policy for granting entry permits to Israel. This signifies refining the definition of 'who is a Jew,' a policy that may lead, in turn, to reducing the number of Jews in the world. In times of trouble, such as after the Holocaust, rabbis acted differently from how the State of Israel conducts itself today. The continuation of Israel's current policy in this area will result in fewer Jews in the world, which may be at its lowest point ever.

Summary of Insights

Germany is a leading actor in Europe. Many recognize in the policies and expressions of the German leadership a combination of desire and ability to lead Europe and be an independent and influential global player. At the same time, Israel's multifaceted relationship with the countries of West and Central Europe in general, even with those that are not members of the EU, such as Norway and Switzerland, will require special attention.

Israel has an interest in maintaining a connection to the Jews of Europe, as expressed, for example, during the terrorist attack on the Jewish supermarket Hyper Cacher in Paris in January 2015. In cold hindsight, it seems that most French Jews will not respond to the Prime Minister's suggestion that they consider immigration to Israel. One of the reasons for this is that Israel does not recognize the rabbinical degrees of the religious leaders of France's Jews. The problem of Jewish identity and its definition is a topic that strikes Israel on multiple fronts – in the United States, Europe, Russia, and former Soviet Union – and the government of Israel will have to make courageous decisions on this issue.

In this context, one should not ignore the existence of growing Muslim communities across the continent and their integration into the government systems of most countries, including as officials and on parliamentary and ministerial levels. The sensitivity of these communities to the status of Islam in each country, as well as to developments in the Middle East and the Palestinian issue, will increase in the coming years.

✪ Recommendations

Israel must conduct a cautious policy vis-à-vis the EU in order to preserve the many achievements in its relations with Europe and with its key countries.

Israel must communicate that it is a rational and democratic country, and it should clarify its strategy and objectives. Europe can help, if Israel refrains from policies that are leading it toward isolation. If Israel fails to do this, it may lose Europe. In this context, a step-by-step policy can be adopted.

Israel must take into account the great sensitivity of Europe to the Palestinian issue, given the existence of Muslim populations there and because of the possibilities of riots in Europe against the background of extreme events. The nature of such a development will affect the policies of governments on domestic issues and possibly also on foreign policy. To manage such a situation, a change in Israeli advocacy will not suffice. It will require changes and adjustments in Israeli policies in the West Bank and the Palestinian arena as a whole.

Israel and the EU should acknowledge the gaps in their approaches to the peace process in the Middle East and adopt a pragmatic approach. They must avoid making the difference in their respective approaches into the defining characteristic of their relationship. This process of de-escalation should be based on common values and bilateral measures. For this purpose, it is also necessary to make political and operational decisions to promote that process. In Israel, a more in-depth understanding of the policy structuring process in the EU with regard to the peace process should be developed, and Israel should refrain from confrontational discourse. Israel must also act constructively toward the Palestinians. It should be clarified that the Jewish roots of the country do not prejudice against the country's non-Jewish citizens. Israel also has to make room for informal players.

If possible, it is advisable to start the process of dialogue and networking with the moderate, religious, and civil Muslim communities in major European countries. Israel must withhold its support of extreme right movements and avoid being identified with Islamophobic streams, which are negatively perceived by the European elites, especially in the press and universities. However, it is advisable to cooperate with European countries at war with Islamic terrorism in all its forms and to strengthen relations with those European countries that seek to stop waves of Muslim immigration to the continent.

Israel needs to deepen its relations with the countries involved in the implementation of the nuclear agreement with Iran to ensure its compliance, as well with those countries that fear the era of a nuclear Iran.

Special attention should be paid to leading European countries, such as Britain and France, and especially to Germany, which has played a unique role in the history of the Jewish people, for better or worse, and plays a preeminent role in Europe. Israel has to interact with major forces in the German political system to prepare for the post-Merkel period.

At the same time, another five to seven countries in Europe must be identified whose political support can be secured through cooperation in areas such as defense, agriculture, and medicine. While these may be the smaller states, their vote in the EU institutions is equal to the vote of the largest and most powerful countries in Europe.

The vulnerable situation of the Jewish communities in Europe requires special monitoring and sensitivity to their needs. If the need arises to take care of them in extreme conditions, we should be prepared in advance not only to absorb them economically, but also to settle in advance their personal status as Jews.

Our dealings with Europe should not be primarily based on repeated references to the historical past, which was characterized by Europe's hatred of Jews. Europe's younger generations are not receptive to such arguments.

We must be careful regarding confrontation with Islam in Europe. We must leave this to the Europeans, and they are the only ones who should formulate a policy on the Muslim reality in Europe.

We should not preach to the Europeans. This would only provoke counter-arguments that would drag us into endless, fruitless arguing.

We should neither enter into the complexities of intra-European conflict nor identify with any party in this or any other conflict.

Russia

In many ways, Russia seems to be in a process of decline. Its ability to project its power has decreased drastically, its economy depends almost exclusively on energy, and the index of its purchasing power is about a third of that of the United States. According to forecasts, its population will decrease from 145 million people today to 121 million by the middle of the century, and only a few steps have been taken to promote modernization processes. Its soft power is also very limited because Russian nationalism and anti-liberalism are exhaustible sources of this type of power.

Still, as a nuclear superpower, Russia has the ability to project power anywhere in the world, and as such, is a source of uncertainty in the global arena. It seems that this is how it will remain in the foreseeable future as well. Russian President Putin has expressed the desire that his country maintain the territorial integrity and dignity of the Russian nation, alongside moves – sometimes military and far-reaching – to establish and consolidate a new type of union consisting of the former Soviet Union states and led by Russia: All this indicates that Russia is seeking to challenge and undermine the world order. Putin has stated more than once that a union of this kind is a necessary consequence of history. He is looking to advance Russian interests by adopting an active and assertive policy, using military force alongside hybrid warfare, which combines energy sources, transportation and trade routes, research, immigration policy, labor laws, investment, and other various and sundry tools at Russia's disposal. The election of Putin's favorite candidate, Trump, for President, may help Russia, ostensibly, in playing the role of an equal among equals.

Defense issues are dominant in determining the Russian agenda and place a heavy burden on policy planning and on coordinating mechanisms in Russia. While Russia has strategic planning, the implementation of programs is not necessarily clear-cut. This situation leads to disorder, knee-jerk reactions to foreign policy issues, and uncertainty. In addition, Russia suffers to some degree from a lack of coordination among the various bodies and entities responsible for policy formulation and execution. The allocation of responsibilities is unclear and the boundaries be-tween the different areas are blurred. The implementation of programs is largely dependent on the intervention of the highest officials. To this, one must add an economy that has not yet been fully modernized, together with the economic sanctions imposed by the West, as factors that impact the performance of Russian foreign policy (the negative growth rate of GDP in Russia in 2015 was 3.8%). Russia is also experiencing considerable difficulties in adapting skills and resources to desired goals, which is the core of any Grand Strategy.

There is a debate among researchers, policy makers, and professionals on whether Russia has any Grand Strategy at all. The debate is largely between those who identify a Grand Strategy that not only includes harnessing resources to achieve long-term goals but also has the ability to generate and distribute power, and those, such as Michael McFaul, Andrew Monaghan, and

Ruslan Pukhov, who argue that despite Putin's efforts, Russia has no Grand Strategy at all. In contrast, Henry Kissinger, John Mearsheimer, and others have argued that Putin has an identifiable Grand Strategy that should be reckoned with.

Even with no clear conclusion to this debate, some contours can still be identified in Russia's conduct as well as several discernible grand objectives. To a great extent, the main geopolitical threat from Russia is Putin's reliance on external military operations – such as in Ukraine and Syria – to retain his domestic support. It can be assumed that Russia will build up its military presence around the world, such as in Central Asia (where it may encounter similar attempts by America), especially as NATO forces have largely withdrawn from Afghanistan. It also seems that Russia will expand its operations in Syria, where, in addition to fighting ISIS, it will seek to force the United States to reach a compromise that would delay the entry of Western forces into what was once an area of Soviet influence. In addition, Russia sees its Syrian involvement as a way of breaking its isolation from the international community (especially in the West) following its operations in Ukraine.

François Hollande, the former French president, argued after the terrorist attacks in Paris that Russia can play an important role in defeating ISIS and bringing the civil war in Syria to an end. However, it seems that the West will not be ready to make significant concessions on the Ukraine front in exchange for Russia's actions against the Islamic State in Syria. The policy on this matter is to isolate the respective arenas and consider and analyze each of them separately.

Russian policy is conservative and consistent with past behavior. It focuses on nurturing Russian nationalism through politico-economic autarky ('samodostatochnost'), for the sake of which it directs its attention and resources to China. These two forces are interested in weakening the influence of the West. Russia's economic prosperity depends (including in its own eyes), first and foremost, on natural resources, especially energy.

Russia is working to protect itself against any form of threat and attack, where, from the Russian perspective the most threatening factor is the United States. Meanwhile, Russia's aim is that the countries bordering it will not be identified with the United States and US policies and will constitute a buffer zone between the West and Russia. Russia faces several challenges at home and abroad, including its unstable economy (Putin has even warned Russians they are about to enter a period of austerity) and discussions within the highest Kremlin circles around questions such as the Ukraine crisis, the fighting in Syria, Russia's energy policy, and authority concerning economic, military, and security issues.

Russia has always viewed the Middle East as a region where it must play a role. Indeed, since the expulsion of Soviet military experts from Egypt in 1972, and especially since the defeat of Syria in the Yom Kippur War in 1973, Russia has experienced a series of setbacks, including the collapse of Saddam Hussein's regime in Iraq and the elimination of the Qaddafi regime in Libya. Nevertheless, Russia did take advantage of the outbreak of the 'Arab Spring' in 2011 to begin its strategic comeback in the region: It has become a major player in the ongoing Syrian crisis, providing Assad's army with advanced weapons, and through Assad, Hezbollah. The long-time alliance between Russia and Iran has become increasingly important in view of the fact that Iran and Russia are the two main supporters of Assad and his struggle for survival. Russia also played a significant role in the negotiation of the five permanent powers and Germany for finding a solution to the nuclear crisis with Iran. In the Palestinian arena, Russia has supported Hamas, while preserving its relations with the Palestinian Authority, and at certain stages was involved in mediating between the two Palestinian rivals. It seems that Russia's presence in the Middle East is not a passing interest, and that it will continue in some form or another for the foreseeable future. Russia is consolidating its presence in Syria, which may well spread throughout the region. Among the major interests of Russia in its relations with Israel are technological cooperation and influence on world Jewry. Russia does not wish to undermine US-Israel relations or replace the US in this role. It resumed its diplomatic relations with Israel in the early nineties of the last century, and since then it has maintained good relations with Israel. Russia has 'contained' actions attributed to Israel on Lebanese and Syrian territories, in which advanced weapons shipments to Hezbollah were destroyed, and there is reason to believe that it also took into account Israel's strict requirements not to provide certain types of advanced Russian weapons to its enemies, especially in the field of air defense. At the same time, Israel was very careful not to criticize Russia publicly for its assistance to Iran and Hezbollah, and throughout the negotiations around the Iranian nuclear issue, not one word was spoken by Israel about Russia's policy, which, no less than for the American administration, has harmed the foundations of Israel's policy toward the regime of the Ayatollahs in Tehran.

Shaping Israel's policy toward Syria – on both the broad regional plane and the narrow prism of the evolving situation in the Golan Heights – intensifies the dilemmas faced by Israel in this sensitive area when it comes to Russia. For instance, Russia's long arm was very evident and significant in the two incidents that took place in the Golan Heights at the end of January 2015. In the first incident, an attack that killed, among others, a senior Iranian general from the Revolutionary Guards and Jihad Mughniyeh, one of Hezbollah's senior commanders, was attributed to Israel, and in the second incident, two Israeli soldiers were killed in an incident at Mount Dov. Russia torpedoed an American effort to bring to the UN Security Council a condemnation of Hezbollah's actions. It was more than a presage of the possibility that Russia will respond bluntly to Israeli

claims of freedom of action along the ceasefire line that was drawn and agreed upon between Israel and Syria on the Golan Heights in 1974.

Moreover, Russia is currently more than ever a significant ally of Iran, as well as of Assad's Syria and Hezbollah, both at the top strategic level and in the international arena. It is known that the involvement of Russian experts at various command levels in Syria has increased in recent years. The depth of intelligence cooperation between Russia and its partners was revealed a few months ago with the exposure of a Russian intelligence collection facility near the demarcation line in the Golan Heights, which operated regularly and passed military information about Israel in real time, even to Tehran. Because the civil war in Syria has intensified and brought in external forces, such as ground forces of Iran's Revolutionary Guard, regular units of Hezbollah warriors, combat units of ISIS, and members of global jihad and Al-Qaeda, Israel must shape a strategy that takes into consideration the Russian presence. The margin for error has now narrowed, as a small tactical move could spark a chain reaction in which Russia could also take part.

In the distant past, the Jewish and Israeli effort to open the gates of the Soviet Union so that Jews could immigrate to Israel played a special role in the overall picture of rescuing distressed Jews in the Diaspora. Today, the gates of Russia are open, but a few months ago the Russian authorities took a step that was feared by the Jewish community, affecting the hundreds of thousands of Jews who remain in Russia. Russian authorities instructed 'Nativ' representatives in Moscow to report any immigration appeals they receive. This new directive raises dormant demons from the not-so-distant past. Today, Russia does not prohibit dual citizenship, but neither is it sympathetic towards citizens who equip themselves with a second citizenship, including Israeli citizenship. On the Israeli side, the treatment of immigrants from Russia is far from friendly and efficient, and rather than welcoming candidates, Israel's representatives make the process difficult for those interested in immigration. The contrast between Israel's official policy, which encourages immigration according to the principles of the Law of Return, and the real obstacles placed in the path of Russian immigrants, requires that fundamental solutions be implemented.

The developing reality requires that all variables be considered and that an Israeli strategy toward Russia be shaped, not leaving the future solely to tactical measures. The latter could lead to clashes, or even war, in the absence of an overriding, comprehensive strategy.

Summary of Insights

Russia is of great importance, because of its military and technological presence in Syria, its central position in the energy market, its considerable influence in the global power structure, and its relations with non-Western countries. In view of the impasse and deadlock in the relations between Russia and the West on Ukraine, the question examined today is how the decline in oil

prices and sanctions will influence Russia's desire and ability to escalate the conflict in the energy market, by using the oil and gas card in an attempt to dictate European maneuvers. At the same time, Moscow could become an economic partner to countries such as Iran, and this collaboration would lead in practice to the cancellation of sanctions imposed on it.

The tools available to the West against Russia are limited. Although Europe is seeking ways to diversify its energy sources and rely as little as possible on Russian oil and gas, any movement by Europe toward alternative energy sources will be gradual in any case, due to the enormous resources that have to be invested in alternative infrastructure.

European NATO states are expected to increase their defense budget in the coming year – in 2016 defense spending went up by 0.02%, the first increase in 7 years – and in April 2017 a US-led NATO battalion was deployed in Poland, with three additional NATO battalions set to be activated in Poland and the Baltic states at a future date. However, it is clear that the use of military force against Russia – a country with a huge nuclear arsenal – is unlikely.

✪ Recommendations

Israel must invest in maintaining proper relations with Russia at a high level. It has to establish a serious dialogue with Moscow and discuss the problems involved in Russian's increasing involvement in Syria, and the issue of Iranian presence in that area.

At the same time, major investment in shaping an Israeli strategy toward Russia is needed, assuming that Russia's involvement in the Middle East will grow, expand, and deepen. This matter should not be left to the tactical level, and Israel must shape a proper strategy because it will likely encounter Russia at every turn. Russian activities in Syria must be monitored and considered when a decision is made to carry out an Israeli military operation in Syria, so as not to harm Russian civilians.

The common interests of Israel and Russia must be mapped out, and Israel's value in the eyes of the Russians should be boosted in the long-term. Secret diplomacy, based on strong mutual interests, might be able to persuade Russia to limit or cancel some arms deals with Iran, which could drive a wedge between Moscow and Tehran in Israel's favor. The interests of Russia and Israel in the Middle East are not in conflict, even if they are not identical. It is important now, more than ever, to find a common language between the two countries based on broad cooperation and the deep bonds that already exist between them.

Israel must work toward holding a serious dialogue about Russia with US administration officials in an attempt to learn US intentions regarding Russian activity in Syria and to design a common policy with the US on this issue. The expansion of Israeli cooperation with Russia, with its incor-

poration in an unprecedentedly significant role in the political process, will serve as a convenient and appropriate basis for improved relations and contribute to positive changes for Israel in the regional balance of power. Since the preservation of good relations with Russia will mean Israel pays a price in its relations with the United States and in the conflict with the Palestinians, it is desirable that such a move will be made in coordination with the United States.

Relations with the Jewish community in Russia should be maintained, and the status of Russian immigrants to Israel should be settled, with special concern for their personal status as Jews. Any change in questions of conversion and 'Who is a Jew?' will require careful political preparations in Israel. We should not meddle in intra-political issues where Russia is involved, especially not the civil war in Ukraine. Russia should not be supplied with military or other assistance in this war, so as not to create unnecessary friction between Israel and the European Union, and especially with the countries of Eastern Europe. However, we should not join the militant anti-Russian line led by some European countries.

We should not complain publicly about Russian involvement in Middle Eastern affairs. Russia is very sensitive about its honor in general and its standing in the Middle East, in particular. Therefore, it is important to raise controversial issues in meetings that are not intended for publication.

We should not supply arms to Russia despite the temptation to do so. Russia is arming Israel's biggest enemies, and the supply of weapons for its own needs, if required, must be done in exchange for its concrete commitments to help Israel in its struggle to significantly reduce 'tiebreaker' weapons in the Middle East.

China

China is still a poor country in terms of GDP per capita (about one-quarter of that of the United States), but because of its size, the total gross domestic product (from which the expenditure on security, intervention capabilities in world affairs, and the capability to become a strategic player in the global market are derived), is equal to that of the United States. Looking to the future, even moderate predictions expect that China will overtake Europe and the United States in terms of GDP. China is the only major country in the world with a global economic strategy.

China is expanding its operations and strategic ambitions and is presenting claims, territorial and other, to the regional and global community, in addition to the actual expansion of its geopolitical influence, which it is achieving, in part, through initiatives such as the Asian Infrastructure Investment Bank, aid programs in Africa, and plans to create an international infrastructure linking it with Europe (the One Belt, One Road initiative). China also has the largest army, the highest growth rate, and the greatest number of Internet users in the world. Its area is equal to that of

the United States, while its population is four times the size, and it has more than 250 nuclear warheads as well as cyber and space capabilities.

China has become a country that sets norms and rules in the global scene and which establishes international institutions. These are not designed to work within the framework of existing institutions or to comply with existing laws and norms, but to run in parallel to and in competition with them. Evidence of this can be seen in the international institutions where China is a major player, including: BRICS CRA and ASIAN + 3 CMIM, operating in parallel to the International Monetary Fund; the Asian Infrastructure Investment Bank and BRICS Bank, operating in parallel to the World Bank; and BRICS SUMMIT, operating in parallel to the G8/G7.

China's power also has limitations, certainly in relation to the United States. Its economy is undiversified and unstable, and China still has vast undeveloped areas. Furthermore, there is an imbalance among the different parts of the country. China will take decades to catch up with the average per capita income of the United States, if it ever does. In the field of technology, too, China suffers from a lack of diversification and sophistication in comparison with the United States, being dependent on the import of technologies and lacking scientific and technological innovation. China's population is also aging rapidly, and by 2030 the supported elderly population will be larger than the child population. It is still unclear how China will respond to these and other challenges. On almost every measure of strength, it does not seem China will be able to overtake the United States, or even rival it, in the near future.

Despite claims that China does not have an official and organized Grand Strategy, the reality is that it does not have to invent one, since it has already a strategy based on the principle of 'peaceful rise/development.' According to this strategy, China's super-goals are improving its prosperity and increasing its power. China's actions today point to a trending ascent using the politics of force, threat, and intimidation. However, China will also try to avoid war, in the understanding that undermining global security may make it difficult for China to connect to the modern world and to achieve its required growth. China faces a strategic problem: It finds it difficult to convince its neighbors and competitors, especially the United States, that its rise is peaceful. Moreover, tension exists between China's desire for growing involvement and influence on the world stage and its rejection of a large part of the guiding principles of the international community, particularly on human rights. Finally, China has no broad consensus on how to implement its strategy or on how to conduct its foreign policy.

China's foreign policy reflects an identity conflict between a harmonious world and its national interests. It is not entirely clear whether China sees regional and global stability as a means to achieving its goals, or as an end in itself. Either way, a combative approach is inconsistent with

China's interests, and, therefore, it seems unlikely that it will take the more militant path. A peaceful approach, warm or cold, poses opportunities not only for China but also for other countries in their interactions with China.

China now recognizes five major trends according to which it outlines its domestic and foreign policy:

1. **Movement toward multipolarity**

2. **Globalization**

3. **Peace and development**

4. **Reforms and changes in the global system**

5. **Growing prosperity of the Asia-Pacific region**

China sees in these trends many opportunities for itself as well as opportunities that serve its goals. China's core interests, as formulated by it, include:

› National sovereignty and preserving the rule of the Chinese Communist Party

› National security

› Territorial integrity (especially concerning Taiwan, Tibet, and Xinjiang)

› National unity

› Resistance to hegemony and a guarantee of its status and influence in the international arena and, in particular, in relation to the United States, but also in relation to Russia, Japan, and Europe. China seeks a multipolar world, with greater regional autonomy

› Preservation of regional and global conditions that are good for the development of China, while avoiding being portrayed as a threatening force

› A political system based on the constitution and social stability

› A stable base that ensures viable economic and social development

From all of the above, three super-goals can be derived for the Chinese leadership:

1. **Diversifying the economy**

2. **Political stability**

3. **Developing a multi-polar world order**

In general, one can see China's national strategy as part of its aspiration for 'Rejuvenation,' recently announced by the General Secretary of the Communist Party Xi Jinping. To achieve this goal, China has formulated an active and creative foreign policy that is assertive and not always compromising. The very formulation of strategic goals indicates a change in the Chinese policy and its reliance on these goals.

The South China Sea has become an arena of inter-power competition. China's desire for hegemony in the Pacific arena makes it a significant threat in the eyes of its neighbors, especially Vietnam, the Philippines, Japan, India, South Korea, Australia, and Taiwan (where, in the last election, the DPP party, which advocates independence from China, won).

The United States has several major points of controversy in its relations with China, but also common interests. On the one hand, China wants to challenge the Western world order, shaped and implemented mainly since the Cold War, primarily by the United States. In the eyes of the Americans, China follows an assertive and sometimes aggressive path of reshaping the Asian region and even the world order, and by doing so, it is becoming a dangerous element that undermines stability. China's repeated attempts to forcibly impose its requirements in the waters close to its border are only one explicit expression of this policy. In addition, China is challenging the allies of the United States in the Pacific, claiming that the political order and the prevailing state of mind there are outmoded and obsolete expressions from the Cold War.

On the other hand, the economies of China and the United States are a common interest because both are invested in and intimately connected to one another. This makes a fully open confrontation between them an unlikely scenario. In addition, the United States sees economic cooperation with China, even if secretive, as a legitimate and beneficial strategic path. Against this background, it seems that China's desire for hegemony will be expressed within the framework of prudent conduct toward the United States. China will seek to reach agreements with the United States, whereby each of the two countries will respect the fundamental interests of the

other, following the words of China's leader, who defined these relationships as a 'new kind of relationship between the superpowers.'

China's relations with Russia also constitute an important element in its policy. In 2015, China agreed with Russia to connect the Eurasian Economic Union with the new 'Silk Road' initiative. In that year, the two countries also signed a huge transaction in the gas sector. However, there are also restrictions on the rapprochement between China and Russia. China has no interest in either a formal alliance with Russia or in the creation of an anti-American or anti-Western bloc. Instead, China seeks to create a model of cooperation with Russia to advance the interests of each in a stable and peaceful manner.

China's policy is characterized by classic national aspects together with imperialist ones. China accords increasing importance to psychological warfare and the use of soft power and employs such alongside the use of military force and sometimes instead of it. Therefore, although it is not always possible to identify forceful Chinese action, this does not necessarily indicate either peaceful or less aggressive Chinese conduct. China makes no secret of its ambitions to challenge and even replace the world order formed by the United States after World War II, while at the same time it stands for peace and development, which are part of its strategy and which it wishes to promote through cooperation with the world. China's foreign policy is based on multiple governance – global partnership, evolution, and cooperation with other countries – because of its heavy dependence on what is happening in the world arena. Alongside globalization that would allow it access to the world for development purposes, China sees great importance in reforms from within, and, therefore, along with the actions it takes to increase its power in the international arena, it works toward the gradual building of its domestic institutions.

A continuing increase in the strength of China will, assuredly, lead it to demand international recognition of its power, status, and influence as a legitimate force. It can be assumed that China will continue to act assertively to accumulate military power in order to create spheres of influence, to demand and even take over territories it has claims over, and to attempt to rewrite international norms and laws, all in the aim of stating its position more clearly.

One of the prominent trends in China today, which will continue to exist in the near future, is the slowdown in the Chinese economy and the imbalance that characterizes this economy. Some argue that the period in which developing countries' economies, by advancing and evolving quickly, caught up with Western economies, is over. Instead, they point to a notable trend in the rise of giant American firms, with a joint market value of over two hundred billion dollars.

Israel's relations with Asia and the Pacific in general, and, in particular, with key countries there, such as Japan, Australia, and India, are veritably booming. This flourishing of ties is reflected particularly in non-political areas, such as in academia, technology, research, trade, and the economy in its broadest sense. China plays a central role in this context, especially for Israel, being the world's second largest economy and the third largest export destination. Indeed, economic and trade ties are a key part of the fabric of relations between Israel and China. In many ways, the Chinese economy and the Israeli economy are complementary, which creates a common interest between the two countries.

China's position on the Middle East stems largely from its need for the energy that comes from the region. Some even claim that China's geopolitical strength is largely dependent on its access to the oil resources of the Middle East. China wishes to demonstrate its presence on the Mediterranean coast and is primarily interested in Syria. Therefore, it is building systems of land transportation – railways and roads – that will allow access to the coast region. For the Chinese, Israel is one of the three or four most prominent countries in the Middle East. China has formulated a proactive, dynamic, and comprehensive policy toward what the Chinese call 'Western Asia' (the Middle East in Israel's terms) in numerous areas, including security, energy, and economics. There are also those who see China as replacing the United States as the dominant power in the region.

Israel could help China in some top priority areas, including the provision of food and education for the entire population. In the 1980s and 1990s, Israel conducted a covert and extensive policy of assistance to China, consisting of upgrading its weapons, in a series of profitable projects. Israeli hoped that its aid would mean China would limit the arming of Israel's enemies failed; on the contrary, China has significantly assisted Iran's nuclear program despite Israeli and American pressure to refrain from doing so, by providing Iran with technologies in the nuclear field, as well as with uranium, and giving Iran international sponsorship that prevents the latter's punishment in the organizations where China is a member. China helps Iran on a massive scale, not only in defense but also in the economic sphere, and has long-term investments in the Iranian oil industry.

China is also deeply invested in Syria, and the Trans-Asian railway line, under construction, is intended to reach its terminus on the Syrian coast of the Mediterranean. At the same time, China is increasing its presence in the Egyptian economy. During the short reign of the Muslim Brotherhood in Cairo, President Morsi chose to make his first state visit to China. China has consistently supported the Palestinian position in the conflict with Israel and made it clear on more than one occasion that this position will not change in the foreseeable future.

Although Israel -China relations in the political arena are not as warm as in non-political arenas, there have been positive developments here of late: political dialogue is ongoing between the two

countries, mutual relationships exist, and high-ranking officials are visiting each other. During the 2014 Israel-Gaza conflict (Operation Protective Edge), for example, the official statements from Beijing were relatively balanced. In general, it seems that both sides are willing to tighten their relations. In this context, the Chinese are aware of the meaning of the comparison often made between Israel's position on the Palestinian issue and the Chinese attitude toward the issue of Tibet and Xinjiang, which it sees as belonging to China. Such an uncomfortable comparison, along with the threat of terrorism, has led to some moderation in Chinese attitudes toward the Israeli-Palestinian conflict.

In recent years, Israel has taken steps in areas alongside diplomatic and economic ones to deepen and expand its relations with China. Thus, organizations concerned with enhancing the relationship between Israel and China are in the process of being established. There is also cooperation in agriculture, technology, tourism, and more. In addition, 2015 was a record year for business between China and Israel, as well as for business cooperation between the two countries. It seems that the tension between Israel and the United States has positive implications for relations between Israel and China, which views the United States, as noted, as a major competitor and a threat. China is thousands of miles away from Israel, and direct intervention in security and military matters along Israeli borders is not to be expected. At the same time, four issues that affect China-Israel relations are worthy of mention. First, China appreciates, to the point of admiration, the scientific and professional achievements of Israel, and is eager to enjoy these and ready to pay for them in hard currency. The second aspect is that, despite the strategic confrontation between China and the United States in Asia, China is careful about – and some would even say recoils from – expanding the competition into one of overt confrontation. Hence, it seems that the strength of the alliance between the United States and Israel may deter China from confrontation with Israel on regional issues in the Middle East. The third aspect is China's being forced to address a growing internal threat, as expressed in the danger of radical Islam penetrating its Muslim minority which, according to foreign estimates, constitutes nearly 50 million people. This aspect is important both because China's difficulties on this front have recently led to increasing failures and because it so happens that Israel has the necessary and required expertise and skills in this arena. Israel's ability to assist China on this front will enable it to demand in return a more balanced approach toward Middle Eastern issues, in which Israel invests greatly. The fourth and final aspect is the great eagerness shown by China in recent years to enter Israeli markets and acquire key economic assets and its success in obtaining tenders for building Israel's strategic economic infrastructure, such as ports and railways. The fact that leading companies in China are wholly owned by the government demands special attention and careful consideration of the implications.

On the economic level, the Chinese market is not especially welcoming to Israel, and there is no equal relationship between the penetration ratio of China into the Israeli industrial space and

the penetration of the Israeli industry into the Chinese space. China imposes serious restrictions on foreigners entering its economy, and its policy does not support full economic freedom in the style of the current world economy. A distinction must be made between Israelis doing business with China and those doing business in China. The latter conduct their business and invest profits in China, while the Israeli economy does not enjoy the fruits of their economic success and their economic ties there. Moreover, it should be noted that the increasing economic involvement of China in Israel also has negative aspects. For example, just recently the Chinese company Bright Food, which purchased a 77% controlling interest in Israel's largest food company 'Tnuva', abruptly cancelled a plan to raise NIS 5.4 billion through an offer of shares. It should be recalled in this context that after the sale of an Israeli company to a foreign entity, the interests that dictate its policy are the interests of its foreign owners – not of the Israeli company. In the Chinese case, this is even more complicated, as Chinese companies are, as mentioned, essentially government-owned companies.

Some see great potential for profit from Israeli-Chinese relations, and, therefore, perceive the development of relations with China as a national mission. However, although the potential threat posed by China to Israel is not direct, we cannot overlook it. As noted, China is challenging the world order shaped by the United States, from which Israel has benefited since its inception. The competition with China may cause the United States to spend many resources and weaken it in other areas, and thus, affect its ability or willingness to stand by Israel's side as it has done so far. China also sells weapons to countries hostile to Israel, including Iran (however, it is likely that China will not agree to Iran becoming a competing nuclear power). Finally, a new international arena in which China will have considerable import will result in undermining the traditional structure of the nation-state, and will also undermine the model on which Israeli strategy is based and the global and regional order under which Israel operates. Moreover, in the distant future, a situation in which China, as part of its ambitions as an imperial non-democratic power, ceases to see Israel as a country whose sovereignty must be respected at all costs, cannot be ruled out.

Summary of Insights

China occupies the most central place in the global agenda among the BRIC countries. According to estimates, China has already unthroned the United States as the world's leading economic power, or is on its way to doing so. Its central position in economics, politics, and security, particularly in Asia, is not under question. Nevertheless, it is still unclear what global role China will demand for itself.

The World Economic Forum identifies a new type of power politics being practiced in the BRIC countries, one of its characteristics being that it ignores Europe and the United States. It contends that if there is something that unites the policies of these countries, it is their opposition to the

West and the claim that international institutions and global power structures do not reflect their relative strength in the global arena. In addition, it seems that China is developing a foreign policy that reflects more than just economic and national interests, and that it is willing to use many levers, including military leverage, to implement its policies.

Recommendations

It is recommended that the channels of communication with China be kept open, and that Israel should inform China with reliable and current information on Israel's Middle East policy.

It is recommended that the expansion of trade and exploitation of economic potential in working with the Chinese economy be encouraged, by considering the areas in which the Israeli economy has benefited and where activity is not nationally sensitive or vulnerable in terms of US-Israeli relations.

It is recommended that the expansion and deepening of ties with Chinese research institutions on subjects related to the Middle East be encouraged.

It is recommended that Israel continue to demand that China prevent Iran's military nuclearization. In the long term, we must try to create a network of mutual interests with China in order to weaken its ties with Iran.

Care must be taken to act respectfully vis-à-vis China's national honor, but to insist on closed meetings on the subject of China's consideration of Israeli interests.

It is recommended that the strategic significance of acquisitions by the Chinese government in Israel through its national companies be carefully examined.

Israel must make every effort not to damage the world order designed and led by the United States. Specifically, it should refrain from hedging its bets on China, even if it seems that the United States is weakening or withdrawing from the Middle East. The intensity of Israel's relationship with China cannot be compared with the special relationship with the United States, with which Israel shares common values and a strong Jewish community that serves as a bridge between the two countries. Therefore, Israel should strive for a situation in which its relations with China are at a level and scale similar to those it has with European countries, such as France, Germany, and Britain, and, in any case, not at the expense of its relations with the United States. Arms sales by Israel to China should be avoided.

Israel should not bind itself to Chinese projects, including transportation projects. There are other countries with which we can promote similar projects that are not problematic for Israel, such

as India, Japan, and South Korea. Singapore and other countries may also be considered, when their interest in cooperation is based on the Chinese threat to their region and the need to study maritime defense, in which Israel has experience and leverage.

The habit of making individual decisions related to China, while ignoring the complexity of the wider, broader issue, must be abandoned. China is a rising power, and it may be necessary to involve it to a greater degree in the predicament of Israel in the region and the dilemmas facing it. Perhaps thus, Israel will, in time, be able to mobilize China on its side more clearly and decisively.

Israel must take steps to improve its relations with China, while adopting a bold but cautious policy considering regional and global changes, both in the Middle East and in Asia. Acting toward tighter cooperation in 'neutral' areas, such as culture, science, academia, and agriculture, is the favored route for promoting Israel-China relations.

Israel must strengthen its ties with China's intellectual elites, from which the future leadership of China will emerge.

Israel should avoid criticizing the communist regime in China on human rights issues.

In some circles in China, there is great appreciation of Judaism, as an ancient culture that supposedly resembles the Confucian culture. These cultural parallels should be fostered, and the friendly attitude of the Chinese population to Jewish refugees during the Holocaust should also be emphasized. However, the ideological similarity must be limited to values of this kind. The CCP values are not the values of Israel.

China should not be assisted militarily in its fight against Muslim separatists in the Xinjiang province, even if there is a temptation to do so. First, the Chinese are skilled at 'suctioning' military technologies without giving anything in return, and second, Israeli involvement, even indirect, in suppressing Muslims may lead to an unnecessary wave of anger in Islamic countries. The Turkish public, for example, is very sensitive when it comes to the suppression of the Uighurs in China, and there is no need to undermine our already shaky position in Turkey or our relations with Azerbaijan and Central Asian countries.

India

India is experiencing rapid growth, if only because of its high population growth rate. Prime Minister Modi has infused India's global policy with additional vigor, and it is possible to identify guidelines in its conduct and policies. India's surroundings are characterized by the presence of both nuclear (Pakistan, China, North Korea) and superpower (China, Russia, the United States)

forces, making it necessary for India, also a key nuclear player, to formulate policies and practices, first and foremost, in view of these forces. India diversifies its foreign policy toward the nuclear powers and countries and manages a policy of 'strategic hedging' in its pursuit of power and influence in its cramped surroundings.

India's nuclear doctrine emphasizes the importance of nuclear deterrence, and its military doctrine emphasizes in general proactivity, offensiveness, and deterrence, based both on prevention and punishment. The Indian Army seeks to leverage advanced technological capabilities to shorten the duration of fighting in a nuclear environment. India also places great emphasis on cyber defense and warfare.

India views itself as a democratic, secular, and pluralistic society and aims to protect and preserve these values. As such, it sees itself as a country whose emergence and gathering strength on the global stage is not threatening, as opposed to China. Moreover, India views the 21st century as an era in which knowledge will be a major component of power for countries, and, thus, something to be cultivated. India's policy prioritizes economic growth, along with the rejuvenation of its foreign policy. Although it fosters cooperation with the United States, India does not seek an alliance with it and insists on maintaining its independence with regard to its foreign policy.

Alongside the positive developments in the global arena, such as the multiplying contacts enabled by technology and rapprochement among different communities and countries, India identifies several key threats, which it seeks to address. Among these threats are terrorism (in particular jihadist terrorism, primarily from Pakistan), failed or failing states, one-party ideologies (such as that of China), and the spread of organized crime. Looking to the future, India considers its position in the emerging world order as a 'tiebreaker': In a world where the central power is the United States, and the second strongest is China, the path chosen by India and the side with which it connects will tilt the balance in its favor, and indeed in favor of one of the world orders and the values represented by that order.

India's choice is clear: the democratic, liberal, and pluralistic United States over dictatorial and aggressive China, which uses repressive means. As a result, India presents a series of common interests with the United States and many other bilateral paths, such as labor, technological development, and the exchange of cultures and populations, enabling the creation of a deep and strong relationship between the two countries. This connection is perceived as a contributor to the United States as much as a contributor to India and its interests. In the eyes of the Indians, the partnership with the United States is not a question of restraining or containing China, but one of protecting democratic, pluralistic, and secular India from the challenge posed by dictatorial forces and radical jihadist terrorism.

India is a major trade partner of Israel, and the potential relationship between the two countries is extremely significant. The election of Narendra Modi as Prime Minister in 2014 by the young population, professionals, and lower middle class indicates that India is turning away from a path that is critical of Israel. Modi himself has a positive bias toward Israel, and the appointment of Sushma Swaraj, the former Chairman of the Indo-Israel Friendship Group in the Indian parliament, to the role of Secretary of State, indicates a real step in this direction. Some claim that the 2014 elections in India signified a profound and real turning point in India-Israel relations. Indeed, bilateral relations have greatly improved recently, and there are even signs of a change in India's position (although cautious and tentative) on the Israeli-Palestinian crisis.

In general, Indo-Israeli relations are good, and common interests dictate that this situation will also continue in the future. For Israel, this is a promising opportunity, both economically and politically. This situation requires that the two countries continue to strengthen and deepen the relationship between them, for example, in the field of counter-terrorism. India is probably also the main export destination of the Israeli defense industry, and it is estimated that about a quarter of Israel's defense exports are intended for India. At the same time, the scientific and technological ties between the two countries are becoming closer, and the volume of non-military bilateral trade reached $4.6 billion in 2014.

Alongside warming ties with the Government of India, Israel has to deepen its ties with elements influential in shaping Indian public opinion, without interfering in internal Indian debates and without appearing to exclusively support the ruling party. Particular care should be taken not to openly support anti-Muslim rhetoric, so as not to arouse anti-Israeli reactions. It is recommended that the cooperation with India in economic and technical areas be increased, and that Israel meet Indian expectations in these areas and facilitate the entry of affluent Indians, as well as experts, journalists, and opinion-makers, into Israel. Since most Indians know nothing about Israel or the Jews, we must increase the Israeli and Jewish presence in India and provide access to information and learning materials about Israel and Judaism.

Japan

Japan finds itself very much at a crossroads. Its constitution, and, in particular, its Article 9, denouncing war as a means to settle disputes and opposing the possession of military forces, is currently undergoing re-examination. Evidence of such a re-examination can be found in the two main objectives of Japan, as stated by Prime Minister Shinzo Abe: strong economic growth and the launch of a new National Security Strategy, entitled 'proactive pacifism.' To advance these goals, the Abe administration conducted a number of structural reforms and launched a number of initiatives in the field of national security, including: the establishment of the National Security Council; the formulation of a national security strategy; the passing of the State Secrets Protection

Law; formulation of the National Defense Program Guidelines; new legislation that broadens the scope of Japan's military actions; the establishment of a cyber security unit; and the drafting of guidelines for arms exports.

Japan's Grand Strategy, as formulated by the Japanese National Security Council, can be characterized as proactive and engaged. Japan seeks to act dynamically in each arena, against any country and on each of the issues identified by it as important to its security, territorial integrity, and prosperity. Moreover, Japan sees itself, above all, as a democratic country that aspires to establish a stable regional and world order and to preserve peace. A repeated principle in the Grand Strategy documents of Japan is the formulation of the policy of Proactive Contribution to Peace. Japan considers its strategic environment as one that is profoundly changing in a direction that may endanger its security and values, and wishes to be, in the face of this changing world, a significant and engaged force on the global stage.

Japan's national interests, as formulated, are:

› Preservation of sovereignty and independence, protection of territorial integrity, securing the peace and the life of its citizens, and continued survival, while upholding the values of democracy, freedom, and security.

› Increasing prosperity of Japan and its people, thereby consolidating peace and security.

› Maintaining global order based on law and universal values such as freedom, democracy, respect for fundamental human rights, and the rule of law.

Accordingly, the strategic objectives identified by Japan are:

› To strengthen the deterrence factor, which is essential for preserving peace and security, as well as for the survival of Japan, and in parallel to eradicate the threats that Japan has failed to deter.

› To improve the security environment of the Indo-Pacific region and prevent or reduce the threats to Japan by strengthening the alliance with the United States, deepening the trust and cooperation with Japan's partners outside the Indo-Pacific region, and promoting practical cooperation in the area of security.

› To improve the global security environment and build a peace-seeking international community that is prosperous and stable, by strengthening the world order based on values and law, and by taking a leading role in conflict resolution by diplomatic means and personal contribution.

Japan identifies a number of threats and challenges in its region and in the global arena. First, the global order and the center of gravity of world power are changing rapidly at the hands of powerful players, such as India and China. Especially striking is the transition from the Atlantic to the Pacific arena, although Japan still recognizes the United States as the main and strongest power in the world. These radical changes are taking place alongside significant changes in technology and in the status of nation states, which are currently challenged by non-state elements and by very large-scale population movement across national borders. Other threats in Japanese eyes are the proliferation of weapons of mass destruction and the rise of international terrorism. Japan also recognizes among the challenges it faces dangers to personal safety and hazards stemming from the global economy. Alongside these global threats, Japan identifies several prominent threats in the Asia-Pacific arena, including: increasing tensions because of changes in the world order; the military buildup of North Korea; and the growing power of China and its operations in a variety of arenas.

Against this turbulent environment, Japan has formulated a number of principles:

Strengthening and improving its capabilities and functions. Japan aims to: enhance its diplomacy to create a stable international environment; build a comprehensive defense plan; boost efforts to protect its territorial integrity; ensure maritime security; improve its cyber security; strengthen its actions against international terrorism; upgrade its intelligence capabilities; upgrade its technological equipment and cooperation in this field; ensure stable use of outer space and promote its use for defense purposes; and fortify its technological capabilities.

Reinforcing the alliance with the United States. This alliance is the cornerstone of Japan's security, while for the United States, it serves as the backbone of its partnership networks with other countries in the region, including South Korea, Australia, Thailand, and the Philippines. In this sense, the alliance with Japan serves the United States as the basis of its strategy for the Asia-Pacific arena. Japan and the United States share many strategic interests, as well as values. Japan has to increase and emphasize its importance to the United States, and in so doing strengthen its security cooperation in a wide range of areas. In addition, Japan has to ensure the stable presence of American forces in the Asia-Pacific region.

Enhancing diplomacy and defense cooperation with Japan's partners for peace and stability in the international arena. Japan has to initiate and establish relationships of trust with its existing partners and create and promote relationships with new partners, within and outside the region (such as South Korea, Australia, ASEAN countries, and India). Notably, Japan recognizes Australia as an important partner that shares its values. Japan seeks to maintain stable relations with China, the emerging regional and global power, to promote peace and stability in the region. Meanwhile, Japan aims to establish mutual relationships with China, based on common interests in political, economic, security, and cultural areas. In this context, Japan is pushing for full transparency on China's defense and military policy and is working to establish a framework to prevent surprises and the development of unexpected situations.

Promoting cooperation with Russia in all areas, including security and energy, and the promotion of bilateral relations in general, to ensure Japan's security.

Initiating the development of a multilayered and functional system for regional cooperation, based on existing structures, such as ASIAN + 3 CM, EAS, ASEAN, ARF, ADMM-Plus, trilateral frameworks, such as Japan-US-South Korea, Japan-China-South Korea, Japan-US-Australia, and Japan-India-United States.

Promoting and strengthening the relationships with key countries outside the region, including Britain, France, Germany, Poland, and Italy, with which Japan shares common values. The idea is that Japan, together with these countries, will be a driving force for promoting peace and stability in the global arena. In addition, Japan will strengthen its ties with the EU and NATO and with the Organization for Security and Cooperation in Europe.

Developing relationships with emerging countries, including Brazil, Mexico, Turkey, Argentina, and South Africa, and searching for political and economic initiatives in Africa as well.

Japan sees the Middle East as a hub of instability that could affect Japan and its security, and, therefore, it seeks to promote initiatives and activities in this arena as well. In doing so, it will work to establish diverse relationships with countries in the region, to include economic, security, political, and cultural cooperation. Japan is interested in playing an active role in finding a solution to the Middle East conflict and in cooperating with other countries for the sake of stability in the region.

Contributing to international efforts to achieve peace and stability in the world. Japan will play a leading and central role in strengthening diplomacy at the United Nations; it will work to strengthen the rule of law; it will become a leading global force acting for disarmament and the non-prolif-

eration of weapons of mass destruction; and it will promote global cooperation for peace and international cooperation against terrorism.

Promoting and strengthening cooperation based on universal values to address a variety of global challenges, including the global economic system, eradication of hunger and poverty, promotion of climate management, reduction of pollution and transition to green energy; all in order to provide a remedy and a timely response to environmental and natural disasters, as well as assistance in the areas of food and drugs.

Israel's relations with Japan are rather extensive in the economic and cultural fields, but slightly less developed in the political sphere. When Israel carries out its advocacy work in Japan, it must consider the pacifist tendencies prevalent among the Japanese public and take care not to be perceived as militaristic or aggressive – even if, as mentioned, in recent years, a change has occurred in Japanese policy and Abe's government also wishes to strengthen Japan from a security standpoint. There may be room for discreet Israeli-Japanese cooperation in this area, but such cooperation must take into account the possible consequences on Israel-China relations. In general, the developments in Japan's operations in the global arena should be closely monitored, as, especially of late, these have been dynamic and changing.

Australia

Australia should have been a pivotal country on Israel's list, as it is allied with Israel's western allies, such as the United States, Britain, and other Commonwealth countries, it is active international organizations, and it even boasts a vibrant and prosperous Jewish community. Yet, it appears that no special efforts have been directed by Israel's leaders to advance that relationship, and a strange paucity of high-level visits by top Israeli leaders had been observed. That should be corrected if the full potential for developing relations with Australia is to be achieved.

Australia views the Indo-Pacific arena as a rapidly developing region, whose economic and strategic importance is becoming particularly central. The security architecture of the area was shaped for many years by two forces:

› A system of alliances, partnerships, agreements, and arrangements, with the United States at the center; and

› A series of institutions, the leader of which is the Association of Southeast Asian Nations (ASEAN).

In recent years, in light of the region's threatened stability, Australia foresees increased spending by the countries in the region in security and defense, as well as on efforts to introduce reforms and modernize their armies. Australia recognizes China as the most threatening force in the region and as a source of instability, militarization, and challenge to the existing order.

Australia's strategic challenges, as seen by its leaders, can be characterized as follows: First, Australia has to recognize that its Western allies are no longer the dominant forces in the Western-Pacific economy, and that the center of global power is changing substantially and is expected to continue to do so for the foreseeable future. Second is the massive military buildup of China, mainly of missiles, submarines, satellites, cyber, and intelligence – areas in which it already has, or will have in the future, an advantage over Western forces. Third, the Chinese strategy has become more assertive and global. Fourth, the United States has become a less assertive and more hesitant force, especially in the Pacific arena, at a time when the latter is presenting more challenges for the United States and the West in general.

Against this background, Japan and India, as well as smaller countries, such as South Korea, are gaining prominence from the Australian strategic viewpoint. Australia recognizes broad common interests with Japan and India and seeks to leverage these partnerships as a major part of its Grand Strategy, especially in the area of security, first and foremost against China. Specifically, it is possible to characterize the tenets of the Australian strategy as follows:

› The significant strengthening of Australian self-defense capabilities, commensurate with increasing defense expenditure to 2% of GDP by 2022.

› Tightening and strengthening the collaboration with partners such as the United States and Singapore in the naval arena.

› The need to allocate space for training and bases for its partners, such as the United States, who are located at a great physical distance from Australia and the Indo-Pacific region.

› Initiating and encouraging the establishment of an American-Australian professional think tank for strategic planning, in light of the profound changes in the Indo-Pacific region.

› Full and better utilization of its intelligence capabilities and geostrategic advantages, its high-quality human resources, and technological capabilities to become an intelligence hub for the Pacific region.

› Strengthening and development of facilities in Australia that support US space capabilities and strengthen the command resilience and operational capabilities in the Indo-Pacific region.

Another outline that is consistent with the principles set out above and which is gaining traction in Australia relates to the strengthening of the country's ties with India and Japan, even to the point of creating an 'anti-China front' (in the words of Peter Varghese, then Secretary of Foreign Affairs and International Trade, in June 2015). This concerns the establishment and fostering of a regional security framework that will serve as a central force in the Pacific arena. From Australia's point of view, the three countries share a desire and need for a peaceful area, the existence of a stable regional order, and abstention from the 'Pax Sinica.' In addition, the three countries share common values of democracy, freedom, and the rule of law. All three fear China's military buildup, the fact that it ignores international law and international norms, and its unilateral and aggressive attempts to violate the status quo in the region. In addition to this triumvirate, Australia also sees the United States – itself a democratic superpower also interested in curbing China's power – as continuing to play a central and important role in the region.

Australia's relationship with India, and especially with Japan, has recently strengthened, and along with common values, overlapping interests, and a historical past relatively clean of negative sentiments, a relationship of trust and rapport between the leaders of these countries prevails. Australia is warming to India, and the two countries are becoming closer. In 2009, the relationship was 'upgraded' to a strategic partnership, and movement in this direction accelerated after the election of Narendra Modi as Prime Minister of India in 2014. Thus, from the Australian perspective, the time is ripe for shaping the initiative to establish a trilateral partnership, focused on diplomacy and military defense operations, and Australia considers itself to be in a good position to move the initiative forward. Among the expected fruits of the initiative, Australians identify its support of a US presence in the Indo-Pacific, as well as its commitment to international law, global norms, and the existing regional order. An important possible path for beginning to promote the initiative, beyond talks and the tightening relations between these three countries, is to return to the Quadrilateral Security Dialogue among India, the United States, Australia, and Japan.

Indonesia

Indonesia is the most populous Muslim country in the world and the world's fourth most populous country, and as such, has an important role in both the Asian and global Muslim arena, especially in light of its fundamental aspiration to promote its international status. Indonesia is contemplating fulfilling a significant role in conflict resolution in the Middle East, including the Israeli-Palestinian conflict, as a key to promoting its global position. Only recently, Indonesia

hosted, at its own initiative, a summit of the Organization of Islamic Cooperation (OIC), which touched upon this conflict.

Relations with Indonesia hold great potential for Israel. First, although Indonesia sympathizes with the Palestinian side in the conflict, it stands by the decision of the summit of the Organization of Islamic Cooperation (of which the Palestinian Authority and Iran are also members), which states that an international process aimed at political settlement should be pursued, with the participation of Muslim countries, to turn the principle of a two-state solution into reality. Moreover, Indonesia has some degree of influence on Iran, as well as a moderating influence on the Muslim world as a whole. In addition, Indonesia is fighting terrorism and has had some impressive achievements in this area.

Second, relations with Indonesia have an economic potential for Israel, especially when it comes to the defense trade. For example, Indonesia approached the IAI of Israel, asking to purchase early warning aircraft, and recently approval was given to additional Israeli defense industries to offer specific military systems to Indonesia. Indonesia is investing heavily in modernizing and developing its army. Israeli security delegations are already visiting Indonesia, and Israel's Ministry of Economy is investing heavily in developing trade relations between the two countries. Indonesia has also a large banking system that is eager for Israeli technologies.

While Indonesia continues to refuse the establishment of diplomatic relations with Israel and conditions any such discussion on the establishment of a Palestinian state, it will be difficult for it to play a significant role in resolving the Israeli-Palestinian conflict – a goal it has set for itself. Indonesia is now beginning to understand this, and, indeed, a change of attitude in this regard can be observed. For example, Indonesia recently considered removing Israel from the list of countries whose citizens require a visa to enter its territory (the initiative failed, in the end, due to public and media pressure).

Either way, Israel has an interest in promoting relations with Indonesia, which holds a moderate policy on the Israeli-Palestinian conflict and supports the two-state solution, and in addition has the potential to serve as a bridge to Iran and to the moderate Muslim world. Indonesia's growing involvement in the Middle East and its policy of broadening this involvement and making it as meaningful as possible, constitute an opportunity for Israel, which has at least to consider it seriously.

Other Continents

Israel's strategic interests are global, and a number of countries where it has vital interests and important assets are also worth mentioning. Thus, for example, just as we must look for key European countries, both large and small, the same applies to South America, where we can find

players and establish relations (technical, medical, financial, or other) which, within the next few decades, could turn into real assets for Israel. Israel was informed in 2014 that it had been granted observer status within the Pacific Alliance – a trade association of six important countries in South and Central America, which constitute a significant market. In parallel to this, several key states and a number of regional systems deserve particular attention, such as Brazil, Colombia, Argentina, and Mexico. In some of these countries there are also flourishing Jewish communities.

The African continent has recently re-emerged on the Israeli operative horizon, against the background of the establishment of a Knesset lobby for nurturing Israeli relations with the continent and visits by the Prime Minister to East and West Africa. Israel has diplomatic relations with 40 countries in Africa, and Israeli embassies operate in about 10 of them. Israel has been involved in the affairs of the continent, and in the past has sent medical supplies and personnel, agricultural specialists, and consultants in the areas of defense and the military. Africa-Israel relations today are focused on the areas of economics, the military, and diplomacy. From Israel's point of view, the African countries can be leveraged as a body that votes unanimously in international frameworks in general and in the United Nations in particular, thus preventing decisions that would damage Israel or its interests.

Africa continues to offer a variety of opportunities, along with many risks, and these are in line with the positive developments that have taken place on the continent, alongside some alarming trends. For example, many African countries have registered impressive growth, and significant economic reforms can be seen, as the middle class continues to grow and the services provided expand and improve.

In economic terms, Africa is considered a rising power and growing market with great potential. However, the volume of trade between Israel and Africa is relatively low (less than a billion dollars annually) and is concentrated mainly in trade with South Africa. Against this background, efforts are being made by the Ministry of Foreign Affairs and other Israeli officials to open new channels of communication for development initiatives, particularly in the fields of agriculture and medicine. These initiatives are promoted sometimes in collaboration with other, non-African, countries.

Israel has relations in Africa in the areas of security and the military, but these seem to be relatively limited, and the number of military transactions is not as great as it could be. However, the threat of terror on the continent is bringing many African countries closer to Israel, which has developed means and expertise in countering this violent phenomenon.

Alongside all this, Africa has known many conflicts and political instability. The infrastructure on the continent is still not sufficiently developed to support an advanced modern lifestyle. Africa's

population is expected to double, thus creating pressure and burdening existing infrastructure; it is unclear whether it will be able to support such a growth rate. Poverty, social polarization, and climatic difficulties are just some of the problems faced by African countries, in addition to jihadist terrorist groups such as ISIS, Al-Shabaab, Al-Qaeda, and Boko Haram, which operate with relative ease across the continent.

Some countries in Africa are expected to become emerging powers in the future, and therefore, Israel has to initiate non-stop science, technology, medical, and agricultural assistance, and launch exchanges of experts and delegations. In the past Israel has succeeded in establishing relations with specific African countries, over and above the connection with the Organization of African Countries, and it can be assumed that the situation is likely to remain similar in the future. The key countries in Africa with which Israel has good relations are Kenya, Ethiopia, Nigeria, Uganda, and Rwanda. Israel must improve its treatment of African foreigners living in Israel, without giving up its right to maintain strict borders.

ISRAEL IN THE ERA OF GLOBALIZATION

Before discussing the regional arena and negotiating strategies with the Palestinians, we need to understand the global arena in broader terms, in order to illuminate another important aspect of Israel's Grand Strategy in the 21st century. Beyond conventional diplomacy, there is one scene that has become increasingly central in the last 20 years: the global arena. Globalization processes in recent decades have dramatically increased the importance of international institutions, global corporations, and worldwide networks of civil society. Regulatory and other decisions made by international institutions influence the domestic politics of countries, including Israel, and even the conduct of specific government agencies. Issues that were previously regulated at the state level are increasingly determined at the international level. For example, countries are exposed in almost all domains to regulation at the international level. The impact of this is also evident in all ministries and state agencies, up to Cabinet level, as well as in all other authorities, the academy, and science, and to a great extent in every area of political life. These trends are expected to strengthen in the coming years due to the rapid technological developments in communications and the Internet.

The global arena affects not only the nature and character of the state, but also its national resilience and security, and this trend is also gaining momentum: Issues of security and political importance are placed on the agenda and decided in unexpected arenas, and countries become dependent on each other in the international arena (on issues such as economic dependence,

health, cross-border crime, and terrorism). In addition, the strength of non-state elements is rising in the global arena. There are now more than 300 international organizations that bring together countries on specific issues, within whose frameworks are decided matters of great importance. These include agencies, networks, working groups in different areas, and more than 150 dispute settlement mechanisms. There is currently a considerable amount of information that affects states, which is generated and transmitted by non-state entities.

Among the greatest challenges to humanity identified at the Munich Security Conference in 2016 were global challenges, which no individual country can address or solve alone, and which instead require a global network of non-state players. Such is the case, for example, for humanitarian issues such as immigration. 2015 was a record year for coerced migration, when more than 60 million people were forced to leave their homes (in 2011 the number stood at 5.42 million). More than one million immigrants reached European shores in 2015 alone. The humanitarian crisis in Europe soon became a political crisis that is now threatening, inter alia, Europe's unity and ability to withstand other difficulties, such as the Russia challenge.

A different kind of concern is health security. Failures in this area pose a threat to the international economy and international stability. The outbreak of the Ebola epidemic in 2014 was an example of this. Many countries lack the mechanisms and technology to withstand health threats, and neither is the international system adequately prepared for it.

Climate challenges are also part of those problems posed by globalization. About 70% of the countries in the world define climate issues as among their national security problems. For some countries, such as those that are at or below sea level, climate changes pose an existential threat. Even a slight increase in the water level in the oceans signals their destruction. Droughts also form a significant strategic threat.

Finally, the entry of AI (Artificial Intelligence) into warfare constitutes a security challenge with moral aspects, which the international community has already begun to address in recent years. Today, in an age when great power is amassed and held by non-state players and networks that often operate outside the control of governments, the victor is not always the country with the largest army, but rather the party – state or non-state – that succeeds in projecting the most attractive 'image.' Thus, soft power is becoming increasingly important in the overall power mix. Such power is created, frequently, at the non-state level, while state agencies have only limited control over content information and its distribution. Not only has the quantity of information proliferated, but the cost of transferring that information has become negligible: information has essentially become public property.

Israel should find its place in the current global system. To strengthen its position in this arena, it must invest more in journalists, bloggers, writers, academics, and opinion-makers, and, in particular, in students. All these function, or may function in the future, as central figures in international networks, both formal and informal. Israel must be a player in the global arena, whether voluntarily or not, because economic, scientific, and political-security issues bind together in this arena. The problems that Israel faces today and will face to a greater extent in the future have global aspects: the interdependence of agencies, institutions, and processes raises the need for responses of a similar nature. Clearly, a large part of today's problems cannot be solved without cooperation and interdependence among countries and different factors.

Israel can and should play a major role, along with other countries, in tackling challenges in health care, humanitarian aid, and climate problems (primarily in the area of drought and lack of water resources). Israel has the experience and the means to truly shine on the world stage in these areas and be seen on the 'right side' of history, at both the government and non-governmental level.

Israel is not exposed to all the global mechanisms described above. Moreover, Israel's political establishment, as well as that of other countries, is not built for such a global system. No wonder, therefore, that the structure of the conventional system does not accommodate the global arena. In other words, although all ministries should work with the global arena, or at least acknowledge it, the governance structure and personnel in Israel are not prepared or equipped for this. This poses a great challenge indeed!

In addition to changing the structure of government offices and public services – a multidimensional challenge in itself – hundreds of state officials and others need to be involved today in the global arena in one way or another, and any person representing the state in this theater should command the finest professional skills on issues discussed at different international forums: outstanding professionalism and talents of persuasion; appreciation of the broad global arena; understanding of the working policy of the various countries; familiarity with the political-diplomatic interests of those countries; understanding of the meaning of the various issues; and the ability to identify problems and opportunities.

Countries must carry out structural reforms and sufficient preparation in order to remain effective players on the global stage, to safeguard the interests of the state, to maintain the ability to influence various issues, and to develop new initiatives to advance these interests. For Israel, in addition to all this, opportunities to lead new initiatives in its areas of strength should be promoted, such as in cyber.

It is clear that in the global arena, unprecedented transformations are underway in areas such as demography, economy, energy, climate, politics, technology, and so on. Also changing is the fabric of international systems, organizations and agencies, and even functional networks and finally supranational corporations. It is imperative that the national system which operates and promotes Israel's interests in all these areas is staffed with exceptionally skilled and talented candidates. The weakening of the Israeli Foreign Ministry in recent years, which seriously compromises Israel's ability to promote its interests, must be reversed.

REVISITING ISRAEL'S SECURITY CONCEPT

The security context in which Israel operates has changed and grown increasingly complex in recent years – a trend that is expected to continue. The shape of conflicts today and emerging technologies assume different forms that blur traditional boundaries and engage civilians more intensely. The weakening of the state framework and the proliferating phenomenon of religious and fundamentalist terrorist and guerilla organizations, such as the Islamic State, Hamas, and Hezbollah, which control territories and have advanced weapons and strategic technology capabilities, diversified cyber threats, and Iran's established status as a nuclear threshold state, as well as the fear of the proliferation of unconventional weapons, pose new challenges to Israel, which must employ a variety of responses and great flexibility in their deployment. The challenge can no longer be expressed in terms of the number of enemy states and their definition as fixed and separate arenas, nor of distinct challenges and responses to unconventional weapons and conventional threats, with a separate struggle with terrorism and guerrilla organizations. The current era and foreseeable future are characterized by greater inherent instability, a high potential for strategic backpedaling, and dramatic changes in the nature of forces operating in the region. The tactical-strategic situation is influenced by the existence of the following: technological means that are available to almost everyone, multiple forces that are difficult to identify, deter, and overcome, threats from a variety of ranges and dimensions against Israel and other key nations outside our region, and the massive involvement, military and other, of a host of external players, including world powers that are struggling to promote and protect their various interests.

To address these challenges, a comprehensive understanding of this reality and relevant policies are required, as well as flexibility, multi-arena responses in a wide range of areas, a concept of operation, and effective decision-making at the political and security level, as well as organizational flexibility and multi-organizational activities at all levels. At the same time, operational coordination and political, security, and strategic cooperation with regional and global powers and players is required and would be greatly beneficial.

The Israeli security concept and policy has changed steadily, slowly, and gradually over the years. The basis of the concept has remained the same, and any revisions have generally been the result of dramatic changes, particularly in the aftermath of wars when insights and lessons have been gleaned, and often long after the changes have actually taken place in practice. This is the result not only of the military establishment's conservatism, a lack of initiative, and absence of thorough review by the political leadership, but also of the fact that public institutions are involved, and the costs of any change in such a large system – based largely on the reserve force and on immense, expensive operation systems – are considerable by any standard. Because of their cost, the operational life of weapons systems is very long, and the conventional method in this field is to upgrade rather than replace. The available weapons systems have a dramatic impact upon strategy and upon the concept of operations, although it is the reverse situation that is desired: The right way would be for changes in challenges to lead to advances in solutions, which would then mobilize toward the appropriate resources and technological developments. In addition, traditional and all-too-rigid definitions of 'routine,' 'emergency,' and 'war' situations have lost their relevance at the national level, when 'in-between' situations are now common. The dramatic transformations in the regional and domestic environment require that Israel's security concept and policy be updated.

The nature of our enemies and the shape of conflict and war are changing as we speak. The likelihood that the main scenario guiding Israel's security systems – that is, which countries and organizations will try to infiltrate and seize Israeli territory – will occur is now minimal. An entire mosaic of other scenarios and challenges now occupies that primary position. Against these, the relevance of the traditional conception of Israel's security, the main tenets of which were deterrence, early warning, decisive outcome, and defense, is questioned. How can an entity that can strike from a distance and that does not bow to conventional moral or legal norms be deterred? Or a non-state entity, whose assets are marginal and unidentifiable, and whose methods may change rapidly and inconsistently? An antagonist with no clear hierarchy, which is embedded in no-man's land and amongst civilians? Sometimes, such elements are driven by religious fanaticism that celebrates martyrdom and the death of civilians caused by acts of terror. What does it mean to overpower non-state entities? How to deal with the unrestricted use of unconventional weapons, such as chemical and radioactive substances, and, of course, with the issue of Iran's acquiring nuclear capabilities? The massive use of rockets and missiles of different ranges and quality creates a reality that neutralizes some of Israel's significant advantages in airspace, and poses a serious challenge in terms of defending the population and civilian infrastructure and maintaining the steady operation of all civilian sectors both in times of emergency and calm. It also requires a different approach in terms of intelligence and offensive measures. Cyber has become an agent and weapon that can potentially be used to seriously damage a technologically advanced country like Israel. It may be employed even during (relative) peacetime, against civilian

and security infrastructure alike, and is aimed at causing harm to and delaying all counter-efforts by the other side. Cyber may also be used against Israel in an undercover manner by a third party in order to promote its interests.

In general, the share of the civilian population in the context of conflicts with the enemy has changed dramatically in recent decades. The civilian population on the enemy side serves various entities as a human shield, which limits our responses, and the Israeli civilian population has become the main target of enemy attacks. This requires a different level of preparedness at the level of the division of responsibilities between civilian and security organizations regarding the response to external threats and state management in emergency situations.

The changing reality also produces new and different opportunities. Many enemies pose a threat not only to Israel, but in various areas and dimensions including neighboring countries and international players. Actors who were once considered potential enemies are also threatened by our enemies, and can become tactical, operational, and even strategic partners. Even with our enemies, it is possible to identify overlapping interests and collaborate intelligently, within coalition frameworks or even bilaterally.

Responses to challenges must be focused and diverse, and this requires sophisticated capabilities and quality personnel and professional skills in the fields of intelligence collection, analysis and assessment, development of concepts and doctrines, technology development, priority-based planning, risk-management capabilities and sophisticated decision-making, and the buildup of first-rate performance capabilities.

Desired Security Components for Israel

› Secure borders and civilian and defense fronts, maintaining the capabilities to respond quickly and effectively to threats and to accomplish tasks between and during wars

› Maintaining maximum security in any territory controlled by the state

› Stability and strategic depth, by controlling territory, combined with political and security arrangements and cooperation with our neighbors and other regional and global players

› The ability to influence the design of the regional environment, while maintaining a comprehensive strategic advantage: diplomatic, intelligence, security, economic, scientific, and technological

› Resolute and credible strategic and operational deterrence, in terms of both ability and willingness to use force

› Reducing periods of conflict to a minimum, since they adversely affect the civilian arena and routine, the continued functioning of the state economy, and social institutions

› Global strategic support, mainly American, but not total dependence

› Prevention of the existence and proliferation of unconventional weapons in the region

› Securing international legitimacy for our security needs and activities and establishing a good relationship with a large number of global players

› National, social, cultural, and economic resilience, as a basis for the construction of power and internal legitimacy

› Cost-effective budgeting and realizable security needs, which will allow for prosperity in the civilian arena and the creation of additional resources, while maintaining high public confidence in the defense system

The following are the principles of the recommended concept and policy:

<u>**Initiative and Environmental Design.**</u> The ability of Israel to shape the regional political and security environment is limited. Yet, Israel is a regional superpower in economic, political, and security terms, and as such has the responsibility and capabilities to impact the regional environment both positively and negatively. Impact could best be accomplished by weakening negative and strengthening positive trends and forces. Israel must try to locate such positive trends examine the utilization of its security, political, and economic capabilities, and be prepared to take risks, including security risks, in those cases which may benefit Israel. Israel's duty is to initiate and assume a position of influence, in both political and security terms; it should be more than reactive, defending against and preventing damage. A proactive stance would aid Israel in influencing the landscape of the region and its various developments, as well as in maintaining the country's strategic interests.

Arrangements. Striving for peace and maintaining cooperation in security areas is another important cornerstone of the security concept. This applies not only to countries with which there are peace agreements and to the Palestinians, but also to other countries in the region, as well as to countries that have interests and/or a presence in the region, on the basis of common interests, fixed or evolving. Cooperation is necessary at different levels of intelligence and operations, covert and overt, for opposing common threats and also for creating infrastructure. This position is based on the desire for stability and to weaken extremist elements, especially Iran and its allies and organizations such as ISIS, PIJ, and the global jihad, while attempting to remove as many elements as possible that are in conflict with us. A potent image of security, social, and economic power and of ability to impact the region is an effective tool for achieving arrangements and cooperation – and Israel has a great deal to offer in the fields of technology, intelligence, remote operations, cyber, innovation, and impact on several third parties. There is no doubt that even in terms of the economics of security, collaboration is a more efficient response, allowing the achievement of security objectives that cannot be achieved independently because of limited resources.

Deterrence. It is necessary to distinguish between the deterrence of states and the deterrence of non-state entities. There are also significant differences between conventional deterrence and deterrence against the use of unconventional weapons. Recently, the issue of deterrence against the use of cyber capabilities has also gained prominence. This is a developing issue that combines the need to deter states with that of deterring private and organizational hackers. Each challenge and sector, and very often each player, must be matched with a particular form of deterrence, while simultaneously considering interaction with other actors. Each type of deterrence has different components, but as a rule, we must display our capabilities and the intent and determination to operate these continuously over long stretches of time. Our era is also witnessing the strengthening of non-weapon components in deterrence. To achieve deterrence, we must achieve and demonstrate advanced command-and-control capabilities, precise intelligence targeting capabilities, real-time coordination and reaction, and effective and responsible decision-making capabilities. Contrary to conventional wisdom, although deterrence is usually achieved by the stronger party, the weaker entity can also try to develop specific capabilities with which to discourage action taken against it, despite the damage this could cause the weaker entity. Potential damage includes damage and losses to its own population and army, as well as the risk that using its superior capabilities could incur a price that the weaker entity, and even international community, consider too high and disproportionate. Sometimes, the role of deterrence with regard to non-state entities is to prevent the stronger party from applying the full force its power. Deterrence is not punishment, although sometimes early punishment achieves a deterrent effect at the same time as achieving the punitive goals. Successful deterrence also has a negative effect by pushing the weak side to stop investing in capabilities in which the stronger party has an advantage, and to develop new capabilities against which the stronger party has, albeit temporarily, no effective deterrent response.

Israel cannot achieve absolute deterrence. Its deterrence capability is a cumulative phenomenon, which stems from the fact there is no definitive end to the conflict, as some of our enemies have still not accepted the existence of the State of Israel. A key objective whenever Israel goes to war is defined as 'restoring deterrence' until the next round of hostilities. This issue assumes that it is possible to deter non-state organizations, and success can be measured according to the amount of time that elapses between wars. This approach is problematic because pauses between successive rounds of hostility depend primarily on the overall interests of the opponent, of which Israel's deterrence capability is only one element. This holds true for Hezbollah and Hamas, as well as for Egypt, which started the War of Attrition and the Yom Kippur War when Israel thought that Egypt's clear defeat in the Six Day War would deter it from launching another conflict.

Israel must build capabilities and an image of deterrence against Iran in conventional and non-conventional fields alike, both visible and low-profile, and in civil, security, and political domains. It has to build and maintain deterrence capabilities against countries that might think that Israel is losing its ability to operate against armies with infantry troops, UAVs, and missiles, and prevent them from making limited gains. It must build deterrence against organizations such as Hezbollah and make Hezbollah understand that Israel is willing to pay a heavy price, in civilian lives and infrastructure, and conduct a limited cross-border campaign, if it means dealing a fatal blow to that organization and even to the entire Lebanese state, of which Hezbollah is an organic part and toward whose residents it has a responsibility. Israel must maintain capabilities that will persuade Hamas and other Palestinian entities that the possibility of, at least temporarily, re-occupying the Gaza Strip or any other area taken over by Palestinian forces, is a real option. Israel must preserve its deterrence capability in the face of terror and cyber elements, including by hunting down terrorists anywhere in the world and at any time. In the reality that is the Middle East, Israel must maintain a dialogue with world powers such that will make plain to them that it is determined to protect Israeli interests and deter others from harming or restricting those interests or preventing Israel from protecting them, even if this means conducting offensive operations in enemy territory. However, it should be recalled that beyond offensive capabilities, deterrence is also built of strong defensive capabilities that make the chance of and efficacy of an attack against the state and its civilians unworkable, relative to the damage incurred by the attack.

Important components in the context of defensive deterrence capabilities are cohesion and civil and economic resilience. It should also be remembered that strategic and operational deterrence, both in terms of practice and of image, require regular upkeep in light of the gradual wear and tear experienced by any deterrence component.

The Required Achievement. In recent decades, Israel's security concept was almost exclusively defensive and engaged in dealing with threats and the conservation of the status quo. The roles of the defense system in the service of other state interests have hardly been considered from an offensive and proactive perspective, meaning not only as a response to threats, but also to meet challenges in promoting the country and its interests and achieving political goals in the region and in many cases beyond the borders of the Middle East.

We must define, in a structured and systematic manner, the achievements required of the various security agencies against the different entities that constitute a threat to the state, its citizens, and its interests, as well as the achievements required against all types of threats and security challenges. At the same time, alternatives to achieving these objectives must be presented, through risk management and setting priorities, while simultaneously providing resources and control systems in order to realize the objectives. It should be borne in mind that there will be attempts made to delegitimize solutions proffered by security officials, which are aimed at paralyzing and limiting their freedom of action as well as that of the state's decision-makers, in order to block certain activity and reduce the effectiveness of the response.

This fight will be waged against each suggested solution separately. The likely backlash must, therefore, be considered when designing a solution, as such backlash may lead to the disqualification of effective responses that would not receive sufficient legitimacy, rendering the response inoperable. The security agencies have to address threats that include and originate from: neighboring enemy states and countries in Israel's proximate and outer rings; distant countries that are facilitating terrorism; guerrilla and paramilitary organizations; and individuals who pose a threat to the state and its citizens, infrastructure, and security interests. Also, an appropriate response must be formulated against coalitions that include more than one element, such as that of Iran, Syria, Hezbollah, and other organizations, which often operate under the auspices of other countries, such as Iran. Iran, for its part, may acquire a zone of influence which extends from Iran to the west through Iraq and Syria and all the way to Lebanon and the Mediterranean.

Security elements have to develop a security response, at various levels, to threats of different kinds. A response is needed against: military invasion, invasion by terrorist organizations, terrorism in all its manifestations, trajectory weapons such as rockets, mortars, and missiles, and cyber-attacks on the country's infrastructure, security agencies and civilian, economic, and social entities. At the same time, the country must prepare itself to provide a response to military nuclear threats and other unconventional measures. Security forces are also committed to maintaining control over the territories that are not under the sovereignty of the state, and where the IDF, therefore, represents the sovereignty of Israel and is responsible for many areas. Additional security responsibilities include: preventing the penetration of unauthorized citizens – even if their intentions are not

hostile but for immigration or smuggling purposes only; securing freedoms of navigation and of the air in Israeli airspace; securing international airspace; and providing security to economic and infrastructure interests in Israel's economically important waters, such as oil and gas production and transportation facilities.

Regarding threats from enemy states, the achievements required include: preventing territorial gains by the enemy at the end of a battle; disrupting enemy morale; restoring deterrence while reducing the enemy's capabilities and minimizing the damage to Israel; dealing a substantial blow to the enemy's capabilities and assets; achieving a long 'intermission' until the next round of hostilities; creating conditions that will allow the translation of military gains into political gains; the ability to take over large areas outside those controlled by the state and to operate deep within enemy territory; as well as second-strike capabilities. Clearly, some of these capabilities are also required in response to needs arising from other challenges and threats.

In the case of threats from organizations, measures must include the following: an answer to local or localized penetration and the takeover of a defined area, community, state or civilian facilities, or civilians; preventing the arming of organizations and cross-border disruption and destruction of organizations' capabilities through pre-emptive, immediate and follow-up operations; intercepting means of attack by air, at sea, and on land before they hit and destroy launching facilities; arrest or targeting of people or leaders and terrorist and guerilla infrastructures, overt or covert, across the border or in distant countries; damaging recruitment and financial sources; and the ability to document and present incriminating information that would harm such organizations and their sponsors. Similarly, the required response to all other challenges, including cyber, must also be defined.

Control over territory. A sovereign state should control its territory completely. The question of territorial control is relevant anywhere in the world where there is a conflict. This is the case in Syria, Afghanistan or Iraq, in Sinai, Singapore, Ukraine and Georgia, Morocco, or Gibraltar. In the Israeli context, this applies to the Golan Heights, the Jordan Valley, South Lebanon, and Gaza and the West Bank. The issue is security, but it has an equally wide spectrum of civil and other aspects, which will not be discussed here.

Security control of occupied territory as vital territory, and the creation and enforcement of conditions to prevent the operation and establishment of a significantly threatening hostile force in the territory, requires security arrangements that would allow different levels of action by intelligence and security agencies, from within the area or remotely, in a permanent or random manner, without symmetry vis-à-vis political and territorial arrangements and accords. The issue is particularly

relevant to the security dimension of each arrangement reached concerning parts of the West Bank, but also to the future of the Gaza Strip, the Golan Heights, and southern Lebanon. As part of the peace agreements between Israel and Egypt and between Israel and Jordan, security arrangements were established to ensure that in the areas evacuated by Israel in Sinai and the Arava, and in the areas all along the border with Jordan in the West Bank and in the Beit She'an Valley and the Jordan Valley, no activities would be carried out that threaten Israel's security and sovereignty. Territorial control allows the control of freedom of action on the ground and in the air, intelligence and cyber operations, the use of infrastructure, the use of technological means, and the execution of deterrence operations, training, and more. By controlling the area, it is possible to protect the state against existing or potential future threats, and the territory can be used for the purpose of launching attacks across the line of hostile forces. One of the main advantages of controlling territory is that it prevents a hostile force from holding and exerting control in the area and using it to launch attacks against us, and it places the foreign population at a distance from our population and infrastructure. This is often referred to as creating a cross-border security zone. Sometimes, it is possible to maintain security control over an area in order to ensure local government, but the government has to be friendly and under our protection. On the other hand, there is a downside and a price to pay when a territory inhabited by a foreign population is controlled, as such control renders the population hostile, which becomes a heavy ethical and professional burden, causing the loss of the international legitimacy of the occupying force in other areas as well. It follows that we would benefit by controlling a minimum area inhabited by foreign residents. In the case of terrorist attacks, territorial control does not guarantee the prevention of penetration from it or through it into our territory, although it places enemy populations at a distance, makes an attack more difficult and more expensive to carry out, and to some extent delays an attack from beyond the controlled area. Control of the ground also prevents a significant conventional military offensive, and to some extent even short-range missiles or rockets, and greatly facilitates protection from aerial attack.

From a security perspective, military withdrawal from territories can be considered when there is an alternative governing force that can be trusted and cooperated with, in return for suitable concessions. Even then, it is important to preserve our capabilities, continue deterrence and maintain the threat of regaining control of the area and exacting a significantly high price, if necessary, which requires relevant preparations and advance provisioning of resources. Gains in exchange for relinquishing control can be political, and related to various issues, including strengthening our international legitimacy to control a different area, as well as other political activities. Also in this case, there is a need to receive direct security guarantees via an agreement to retain facilities and partial presence on the ground and through setting rules for the operation of our forces on the ground in special cases, as well as through an agreement about the rules for gathering and using intelligence, establishing rules about cooperation with the new governing force, building

control tools to prevent the arming and organizing of hostile forces in the area, and more. Security exchanges can also come from a third party through security aid of various types or by replacing our forces with international forces in different formats. Withdrawal from territory can be included in an unofficial arrangement, but a unilateral withdrawal without an agreement with the opposite side, or at least with third parties, means giving up the area and security assets without any compensation. Part of any arrangement regarding leaving territory should be the definition of the carrots and sticks to be used vis-à-vis the other side in the case of hostile activity and harm to Israel's security, and our freedom of action should be preserved as far as possible in this case. Most important of all is to remember that ultimately Israel has an interest in strengthening the force that will receive (from Israel) the control and responsibility over the area, as such control will prevent chaos that will harm our security.

If necessary, the possibility of giving away only partial control over the area, with the entry of foreign troops acceptable to Israel alongside our own forces, can be examined, in order to obtain partial international legitimacy while not waiving all the benefits of having a presence on the ground, including pressure and positive impact on the effectiveness of foreign forces. Such a move is a partial or intermediate step that would not mean paying the full price of relinquishing total control of the area, but also does not produce complete compensation, and holds in store new problems and potential friction with the foreign partner or force.

It should be borne in mind that withdrawal from territory under our control has mental, domestic, local, regional and national consequences, which must be considered. There are also, of course, serious political implications that would allow or prevent such a move, irrespective of security considerations alone. Some would argue that ceding control of a populated area with hostile inhabitants, through a security or political arrangement, is fraught with risk; however, the prospects for improving the security situation and being released from a heavy burden outweigh such risks, although others will claim that such a move may harm security and deterrence. From a security perspective, withdrawal is clearly only possible only under the right conditions.

Defense. The protection of the state, its residents and citizens everywhere, its infrastructure, and interests, including land, air, maritime and cyber space, are the basic tasks of the security forces, together with the help of other organizations and efforts, including diplomatic, economic, and social. The defense tier also includes offensive action, as and when needed, to reach that goal. The centrality of the defense tier is reflected even in the name chosen for the army, 'Israel Defense Forces,' and in most countries the ministry in charge of security is called the Department of Defense. The defense component was marginalized over the years when the Israeli security doctrine emphasized the offensive component and the transfer of conflict to the enemy's territory during and between wars. This was due to the fact that, until the Six Day War, there was

not enough territorial depth to face regular, strong, and hostile armies, in the absence of peace arrangements and agreements with our neighbors. Defense as a concept lost its centrality also because citizens were rarely involved in conflict.

However, defense has again become a central component in the current era of confrontation for several reasons. First, civilians on both sides have become the main victims of attacks, whether intentionally by organizations and even armies, or as a result of population growth and the expansion of densely inhabited areas, and the fact that irregular fighters who operate in their midst use civilians as human shields. In Israel, the civilian population has become the primary target of enemy organizations, who have scant regard for ethical and legal norms. In addition to casualty numbers, the daily life of citizens is severely compromised in any conflict, even between respective rounds of warfare. This phenomenon puts intense pressure on decision-makers to strengthen the defense component, mainly in aid of civilians and civilian infrastructure, but also for the sake of combat soldiers. Defense has renewed its centrality also due the fact that remotely operated weapon systems and even technological systems, such as cyber, allow an organization to attack an enemy – and in our case, Israel – without movement of forces and penetration into the territory, and sometimes even under a low profile. As a result of this, investments have been made, and must continue to be made, in resources for protecting buildings, infrastructure, and spaces, while at the same time large investments must be directed toward active defense against missiles, UAVs, rockets, and even mortars of various ranges. The same applies to defense against underground and tunnel threats. Because no protection can completely prevent damage to the civilian front, investments have to be made in its physical reinforcement, improving the components of social, logistical, and mental resilience. The more robust and effective the layers of protection, the greater the flexibility decision-makers have in hatching military and political decisions.

Israel has insisted on protecting itself in the past and should continue to do so in the future, while exploiting the modern advantages of cooperation with colleagues and allies and even with other elements with which there are overlapping security interests.

Decisive Victory. The concept of achieving a decisive victory is becoming increasingly complex. If in the past it was possible to identify such a situation as one in which the enemy's option and will to fight were disabled and its capabilities significantly damaged, today it is very difficult to do so. A victory over organizations and individuals, often motivated by extremism, and the death of enemy fighters, may not necessarily lead to their defeat. Today, the existence of decisive capabilities is tailored to the norms of proportionality, even if it is clear that the nature of developing and changing threats renders it difficult to measure a clear victory. In many cases, the victory is in the eye of the beholder, especially where fighting against non-state entities is concerned, as their objective is to cause us heavy losses at a high price, all while blending into the civilian

population. In the evolving nature of warfare, victory can often only be understood in hindsight, since the enemy's separate logic leads to a situation where, even if a clear victory was achieved, individuals and small groups will continue to operate from other regions against the interests of their adversary. In this situation, the very concept of winning takes on a whole new dimension.

Still, security systems have to maintain capabilities to achieve national security objectives and, if necessary, victory according to its various manifestations and limits, by employing means of remote fire within a very short time period and the erosion of enemy capabilities through limited or extensive warfare maneuvers. Today, winning must combine psychological, economic, civic, and political elements, as well as aspects that affect the range of international legitimacy. To achieve a decisive victory, we must take into account the ability and readiness to hold a territory or to prolong a siege for a long or limited time.

Strategic cooperation. Israel is committed to a strategic partnership with the world's sole superpower for the foreseeable future, the United States. The United States is a strategic asset to Israel, which obviously enjoys US security and political support. This requires care and also consideration of American needs in diplomatic and others areas, even at the expense of giving up tactical gains and going against ideological and religious wishes. The strategic interest should, indeed, outweigh all other interests. However, we should aspire to forge strategic relationships with other major international and regional players, especially in an era in which other powers, such as Russia, China, and Europe, are exerting their influence in all areas, including through the presence of forces directly in the region where Israel operates. By this is meant a partnership, not absolute dependence, as strategic partners give more to those who can act by themselves rather than being entirely dependent.

Pre-emptive strikes. Only cases of active conflict and cases that represent a serious change in the status quo justify pre-emptive strikes. This includes disrupting unconventional capabilities in various ways and targeting activities and infrastructure that constitute a real strategic threat and substantial violation of future freedom of action. Any pre-emptive action is conditioned on the assessment of the situation regarding the gains and political and security costs to bear on the home front and the state, as well as its impact on deterrence. In extreme cases, pre-emptive strikes must be carried out in order to prevent the opening of a broader confrontation.

Remote attacks. Maintaining capabilities to attack remotely anywhere in the Middle East. The threats made against Israel originate from different geographic areas, both near and far. It is necessary to prepare a flexible response – whether this involves an attack from afar, aerial or maritime strikes, or the use of Special Forces – also as part of a policy of deterrence. In addition, holding territory and controlling it for a limited time should be considered when there is no other

effective way to achieve the objectives. In this case, the ends justify the means. The length of stay should be determined in advance and be accompanied by a declaration of non-interest in holding the area beyond the time required to erase the threat.

International norms and laws. Compliance with international law and norms, supporting the interests of allies and other partners, and cooperating with regional and international powers. Beyond the moral considerations, internal and international legitimacy demands this compliance. The internal and external price of ignoring this or making mistakes through inappropriate action may be very costly, tying the hands of decision-makers in the future, damaging the status of the state and all strata of society, incurring heavy political, economic, and security costs for repairing the damage, and achieving the very opposite goals from those intended. Any deviation leads to increased motivation and legitimacy of the other party, and harms Israel's cooperation with its friends. Effective legal tools are also required.

Qualitative edge. Maintaining the qualitative, human, technological, and quantitative advantages of the intelligence and security apparatuses requires a close and high-quality relationship, open and covert, with partners and allies, particularly the United States, but also others. At the same time, investment is needed in manpower, research and development budgets, and also in Israel's educational, scientific, technological, economic, and industrial fields.

Command and control mechanisms. An advanced system of situational assessments, decision-making, and control at the state level is needed to enable decision-makers to effectively obtain necessary information, including varied strategic and operational intelligence. It would also facilitate the advanced analysis of information, possible implications, risks versus benefits, alternatives, and possible courses of action – both strategic and operational. This capability is crucial in order to enable a productive, high-quality process of decision-making, management, and operation of the state and national security in various conditions, including in extreme situations. It can also enhance Israel's deterrent image. All this should be based on a dialogue between the political and security systems, clarifying the requirements for the security system and the achievements expected in return for the resources allocated.

Cognitive warfare. Cognitive and psychological warfare is both a defensive and offensive tool, which combines security and civilian elements and also uses physical terror for this purpose. In the digital age, any person may easily influence the knowledge and consciousness of many, and by anonymous means. The potential harm of such threats is immense, but in reality there is also an opportunity to influence and deliver messages to an equally large audience.

Combining efforts. Advanced integration is needed between all divisions and efforts in the spirit of hybrid warfare – combining political efforts, economic struggle, combat maneuvers, information warfare, intelligence warfare, media and legal warfare, and homeland security. This should be done within well-defined organizational processes at assessment, decision-making, and operational levels. In addition, economic warfare is required, both defensive and offensive, given the centrality of financial systems, sources and systems of energy supply, the food and water supply chain, the vulnerability of industrial production, international transport and trade systems, and the potential of environmental damage. These issues intensify as a component that affects security policy and security interests and cooperation at the regional and international levels.

Building strength and focus. The composition of power and allocation of resources for security must be greater than the norm in Western countries. In international terms, the IDF is a huge army relative to the size of Israel's population, but the range of threats and the resulting state of high alert, which is expected to continue, do not allow a significant reduction in the fighting force. However, it is clear that the allotment of resources within the security system must be flexible and allow the changes required in the internal mix among types of capabilities and systems. Fewer units are required for conventional mechanized warfare, and more emphasis should be given to finding solutions and responses to trajectory weapons, remote attack capabilities, dedicated and Special Forces, and the strengthening of cyber warfare capabilities and targeting intelligence capabilities. In view of these demands, it will be impossible to significantly change the duration of compulsory military service. Since (military) security should serve overall national security, it would also be inappropriate to excessively reduce budgets in civilian spheres for the sake of the military. It makes sense to link the defense budget to the volume of GDP so that its increase is linked to GDP growth, even though it is clear that additional funding would enable an improvement in security responses.

Additional activities: It is necessary to concentrate on activities that directly enhance security, professionalism, and success – and to transfer to other entities activities that are not core elements of security. Activities with a civilian orientation divert attention, distort professional security priorities, subjugate resources, require the maintenance of a larger and more expensive organization than is necessary, and divert quality personnel from core functions. Security organizations do not specialize in the civilian environment and in activities of a civilian nature and should focus only on those areas that have no civilian alternative. By the same token, even within the army, civilians, rather than trained soldiers and officers, should provide non-security-related professional support.

In parallel, it is desirable that the premises of the security concept and security policy be re-examined every decade. Even if the end-result does not stray far from that of the original evaluation, its re-validation is important, in that it will offer an opportunity to re-think and re-examine basic

premises and analysis of the current reality, as well as possible goals and achievements. It is recommended that a range of people be involved, including new personnel and others from various cultures, organizations, processes, and areas of thinking and action, in order to try to set the bar even higher than the norm and allow Israel to achieve more than meets the eye.

REGIONAL STRATEGIES: MANEUVERING, PARTNERSHIPS AND NEGOTIATIONS

Israel's regional strategy is part of its global strategy. The Middle East frequently emerges as a source of global instability, making it an integral part of global, and not only Israeli, strategic thinking. Regional conflicts have 'leaked' into Europe and even to the United States, forcing the latter, as discussed above, to tackle questions of immigration, terrorism, and more. This trend, it seems, will not end anytime soon. In addition, sources for terrorism's growth can be seen in the Middle East and North Africa, due to the weakness of the region's administrations. These sources include international terrorist networks, which pose a challenge to the entire world. New technologies, accessible today to non-state organizations, are turning terrorism into one of the biggest hazards of our time and of the foreseeable future. The war in Syria has become a focus of discussion in the context of the underlying growth, radicalization, and global distribution of Islamic terrorism.

In the picture of regional terrorism, the 'Islamic State' (ISIS) organization occupies a prominent place because of its influence on the region and the international arena. ISIS is a well-funded organization and has varied and advanced capabilities, such that the UN Security Council has defined it as an unprecedented threat to international peace and security. Its influence can be seen in countries and failed states, from Algeria to the Caucasus and Afghanistan. ISIS has relationships with other global terrorist organizations, and its control of the digital media and social networks significantly increases its destructive power. The organization enjoys limited support among extremists in Western countries, and some have even joined its ranks. The West's understanding of ISIS is wanting and deficient to a great extent, thereby limiting its capacity to defeat it. The West's reaction against ISIS is limited to air attacks, which is unlikely to destroy it, but at the same time it seems that there is no country that desires an all-out war against ISIS. Irrespective of the outcome of the Syrian civil war, the campaign against ISIS, in which about 60 countries are taking part under the leadership of the United States, is still in progress. The declared goal of the US is to damage the organization and defeat it. Even if the coalition against ISIS has managed to restrict its territorial dispersion, the battle has not yet been decided.

The Middle East is apparently a particularly chaotic corner in an unstable world, but on second glance there have also been significant periods of stability in the Middle East. Between 1948-2010, the governments in Jordan, Egypt, Lebanon, and Syria remained basically unchanged: They had control of the territory and a monopoly on the military power for most of this time; leadership was rational and deterrent; the 'Islamic genie' was kept in the bottle; the United States maintained its deterrent power in the region; Israel maintained its strategic advantage with the United States' help; even terrorism was, essentially, controllable and largely subject to leadership. This is not the case today. Israel operates in an environment where current certainties can collapse within a very short timeframe. Even the environment beyond its direct contact zones is subject to deep and persistent changes. Iran's moving closer to nuclear capacity requires a change in the approach of other regional players, including Israel. The stability of the Gulf states is very much under question. In North Africa, Libya is no longer a country, Algeria has unstable military rule, and the future of Morocco appears ominous. It seems that the era of relative stability in the Middle East has passed.

The regional arena includes: the 'inner ring' of Egypt, Jordan, Syria, Lebanon, and the PA; the 'middle ring,' which includes Saudi Arabia, the Gulf states, Iran and Turkey; and the 'peripheral ring' of Central Asia, Central Africa, India, Pakistan, and Indonesia. Several key processes can be identified in this arena. Iran's aspirations for regional hegemony could lead to creeping nuclearization of the forces competing with it, the spread of Sunni radicalism, the disintegration of the state system in the Arab world, and the withdrawal of the United States from active involvement in the region, but also to Israel's progress toward energy independence. The regional level around Israel is organized along religious lines (along with ethnic, tribal, and sectarian identities). Whether the region's secular administrations will be able to maintain their power remains an open question. However, the title 'Muslim' is misleading and is, in fact, polarized. Thus, the divisions between the Sunni and Shiite movements are greater than the parallels between the old 'Muslim Brotherhood' and the new jihad movements (such as ISIS); between movements with national and territorial affiliation (such as Hamas) and 'global' movements (e.g., Al-Qaeda); and between status quo-seeking conservative establishments (i.e., Saudi Wahhabis) and establishments seeking to destroy the existing system. The ancient conflict between Sunnis and Shiites is one of the most important forces of division in the Middle East today. Thus, Saudi Arabia and the Sunni Gulf states see Shiite Iran as their largest and most threatening enemy. The confrontation between Saudi Arabia and Iran will be not just about religious beliefs and religious authority, but also the many oil resources in the Arabian Peninsula and the tremendous value of small countries such as Kuwait. Indeed, curbing its ties with Iran is one of the 13 demands that Saudi Arabia, the United Arab Emirates, Bahrain and Egypt issued to Qatar in June following their boycott of the oil-rich Gulf state.

The weakness of the idea of Arab nationalism has led the Muslim nation states established at the end of the colonial era in the Middle East, such as Iraq, Syria, Lebanon, Yemen, Sudan, and

Libya, to various stages of destabilization or even disintegration. Other countries may follow suit. The disintegration of nation states has created the conditions for the rise of other powers, such as the jihadist Sunni movements, Shiite movements, and separatist ethnic groups such as the Kurds and the Druze, as well as groups with local or tribal identities.

Indeed, the beginning of 2017 finds the Middle East ripe with intra-state and inter-state conflicts at a high level of intensity, with a growing number of crumbling countries and with non-state players governing territories both on and near Israeli borders. The Hashemite Kingdom of Jordan is threatened by changes in Iraq and Syria and by the influx of refugees flooding it (a threat that holds in store serious danger for Israel). In other countries, such as Yemen, Libya, Lebanon, and Sudan, the disintegration has already occurred, and it is doubtful whether it is possible to continue to see them as countries (that is, entities that have a stable central government, which have a monopoly on tax collection and the use of violence). Israel may be required to deal with a significant intensification of the chaos surrounding it.

It seems that in the coming year, too, non-state organizations in the Middle East will continue to be a major factor in attempts to destabilize existing regimes. Organizations affiliated with the global jihad, whether they belong to the 'Islamic State' camp or are associated with Al-Qaeda and its partners, are expected to continue acting to change the existing regional order as determined by the Sykes-Picot agreement, in order to realize their vision of establishing an Islamic caliphate in the Arab region. The success or failure of the campaign against the 'Islamic State,' announced in the second half of 2014 by a coalition that includes more than 60 Western and Arab countries, will decisively affect the character of the Middle East well into the future.

Another characteristic of the region is the existence of four nation states with a coherent identity and a sufficient level of governance: Israel, Egypt, Turkey, and Iran. The fact that three out of the four countries have different shades of totalitarianism is ironic, and in all three strong Islamic trends can be seen. These three countries maintain a sort of stability, but they are not stable at all in terms of their political and sociological processes: Currently Egypt is ruled by a military dictatorship that conducted a counter-revolution against the Islamic insurrection; Turkey is marked by Islamic totalitarianism that executed a counter-revolution against the army; and Iran is still governed by organized Islamist powers. All four, including Israel, face significant challenges, but all have sufficient national solidarity and tools that allow them, at this stage at least, to deal with these challenges in their own way. Israel and Egypt are currently status-quo players, seeking to preserve the existing system, while Iran and Turkey seek to reorganize the regional system in their favor. Iran is noteworthy mainly for its operation of a network of secret proxies, who play a major role in Iraq, Syria, Lebanon, and Yemen, with tentacles spreading into East Africa and Central Asia. The four nation states have no disputes over territorial interests, and it seems that

the main reason for rivalry among them is the struggle for regional hegemony or the desire to prevent the hegemony of the other. Over the years, these countries have both collaborated together and been in conflict with one another, and, therefore, the current state of affairs does not reflect an irreversible strategic reality.

In the south of the regional system is an additional set of actors – the monarchies – consisting of Jordan, Saudi Arabia, and the Gulf principalities. These monarchies have thus far survived the turmoil of the 'Arab Spring,' but the resilience of some to aftershocks is unclear. In Jordan, the reigning family is of Saudi origin, while most of the population is Palestinian. It is flooded with refugees from Syria and Iraq, and the Islamic Movement is gathering strength. Saudi Arabia has a large foreign community and a defiant Shiite minority, the state framework is looser, and the survival of the House of Saud is a concern. Moreover, recently it seems that the hostility between Saudi Arabia and Iran, two major forces in the Middle East, is becoming visible and more acute. Saudi Arabia is currently facing 'the perfect storm,' which includes a drop in oil prices, open war in Yemen, terrorist threats emanating from different directions, and, as mentioned, a confrontation with Iran.

The monarchies (excluding Qatar) are also status-quo players. A chaotic reality exists in the region occupied by the four nation states and southern monarchies. The forces called 'organizations' operating in the middle of this do not necessarily have a clear structure and an orderly decision-making process. Their identities and loyalties vary between localism and global jihad, and are frequently changing. Some of the activists in jihadist organizations do not share the same ethnicity as the populations in which they operate. There is no certainty that the current players will continue to dictate the dynamics of the future, but it is likely that the liability of state frameworks, the power of weapons versus the weakness of public opinion and the masses, and instability will continue to characterize the Sunni part of that region.

More successful in consolidating a political and organizational structure are separatist ethnic and religious groups, such as the Kurds (and, to a lesser extent, the Druze and others) and the Shiites and their allies (such as the Alawites). The Shiite part of the region has well-defined policy objectives, a rational strategy, a hierarchical structure, and a guiding Iranian hand. The challenges facing the Shiites are considerable, especially in places where they are a minority. Iran provides them with strategic support, industrial capabilities, and know-how. The Shiite system ultimately aspires to achieve territorial continuity. Thus, al-Qusayr, which links the Shiite region in Lebanon with the Alawite region in Syria, has become a center of gravity in the present Syrian civil war. The future dynamics of the Shiite system in the region lie in the tension between its qualitative advantages and the possibility that Iran, as it gains outposts and allies, will arrive at a point where it is 'overstretched,' in terms of expensive obligations and the consolidation of opponents who fear its growing power.

Moves by the superpowers also affect regional dynamics. The United States has enjoyed hegemony in the Middle East over the past 15 years, beginning with the first Gulf War, and to a large extent since the mid-1970s. These were the Pax Americana years. But by the end of the Bush administration, and especially during the Obama administration, the wars in Afghanistan and Iraq reduced American willingness to bear further costs and risks in situations where the political and economic gains are not clear. The United States is currently seeking ways to protect its interests in the Middle East at a lower price than before.

From an Israeli perspective, the American policy with respect to the nuclear issue exemplifies how the United States is now ready to bear what until recently it had defined as intolerable. Moreover, the United States, as always, finds it difficult to understand the processes in the Middle East (the 'Arab Spring,' for example), and as a result, has difficulty formulating a policy (against Bashar al-Assad, for example) and making its policy a reality, especially when its willingness to take political and economic risks has decreased dramatically.

It is not clear whether the United States still sees the world through a prism of a unified allied front that must be fortified against and weaken an axis of rivals. The Obama administration seemed to believe that Iran was a relatively stable power (a reasonable assumption), with which one could 'close a deal' in the common interest of regional stability.

There's no telling what US policy under President Trump will be in the long run, but it is clear that the US is undergoing a geostrategic revolution. It has successfully completed the course of reaching energy independence, and its economic interests in the Middle East are diminishing. The cultural ties between the US and countries in the region are also weakening. In addition, American demographics are changing, as is its worldview. Israel must prepare itself for the reality of declining American interest in it.

The US administration under Obama recognized the limitations of the United States as a single player and did not see itself as conducting a distinct and unilateral policy in the Middle East, and, therefore, worked to establish a broad coalition against Iran, which, from the American perspective, permitted an agreement to be reached. The most important issue for the administration was to preserve the consensus it was able to consolidate, according to which Iran must not be allowed to obtain nuclear weapons capability. In its opinion, all achievements in this area were reached thanks to cooperation between coalition members (for example, the willingness of Japan and other countries to reduce the amount of cheap Iranian oil they purchase). Such an achievement bears a price. The US leveraged its economic ability to establish the consensus, and the sanctions regime has placed a heavy toll on Iran. Washington understood Israel's anxieties, but assumed that time was running in favor of the coalition. Moreover, the United States maintained that, even

if the negotiations with Iran failed, how this failure would be perceived was also very important: would the United States be seen as the problem, or would Iran? If the United States were seen as the reason for the failure, it would be unable to maintain the coalition against Iran. It should be noted that in the United States there were also voices that warned against the establishment of new norms if no agreement were reached and called for an examination of additional means to pressure Iran.

Israel is portrayed as an island of relative stability, of democratic governance, and of economic, scientific, and technological strength. Although there is widespread criticism of its policy in the West Bank and objections are raised regarding its compliance with the principles of civil and human rights, still the difference between Israeli society and its neighboring societies is prominent. The Middle East has no other country with Western democratic values, while, on the other hand, most of the other countries are characterized by a political pendulum that swings between aggressive regimes that hinge on the army and the secret services, and extreme nationalist Islamic groups. ISIS horrors alongside the jihadist terrorism that preceded it, and even past wars in the region, such as the Iran-Iraq War, all highlight the vast differences between the nature and character of the Israeli state and Israeli society, including its values, and those of its surrounding arena. Israel is perceived as a country whose citizens manage their daily lives calmly, in a state which sometimes borders on complacency. Every few weeks, however, the quiet is disturbed, whether in the form of local HDA (Hostile Destructive Activity) or an outbreak of violence emanating from the Gaza Strip or on its northern borders. Within hours or a few days Israel acts to 'contain' the events – allegedly successfully – to allow its citizens to 'return to normal life.' Indeed, the two major Israeli objectives in recent years have been containment and returning to normal life. 'Quiet in exchange for quiet' has become a target constituent of Israel, and the strategy of containment and 'quiet in exchange for quiet' have become Israel's main strategy. However, such tactics, even if successful until now, may be insufficient in the event of conflagration in the Gaza region or in Lebanon, not to mention the fact that such a tactic is necessarily narrow and reactive.

When leaders and informed circles in Israel are required to outline a possible vision beyond the immediate context, some of them go wandering toward the 'regional option' or 'Arab initiative' or the 'unilateral move' in the Palestinian sphere. Each of these headings has its own interpretation when it comes to translating theory into practice. Taking calculated risks can turn the 'Arab spring' obstacle into an opportunity for Israel. The redefinition of the regional map of interests is opening up possibilities that were closed in the past. Israel can diagnose where the Arab world is seeking to synchronize itself with the western-democratic world and where threatened regimes are seeking new allies. To do so, it must abandon its prevailing mentality of thwarting all possible threats and instead adopt a philosophy of informed, calculated risk-taking that could reap real benefits in the long-term. It is time to abandon the notion that the world in general, and the forces operating in

our area in particular, desire our destruction, and to work together with the forces that see us as allies against the forces that consider the elimination of Israel their strategic objective.

Another regional arena open to Israel is the Mediterranean. Although forces such as Turkey may present a challenge to establishing a strong Mediterranean partnership, flexible frameworks and institutions that bring Israel, Egypt, Cyprus, and Greece under one roof can constitute a path to promoting stability in the region and act as an anchor for Israel. Along with countries, such as Portugal, Spain, France, Italy, and Malta in Europe, and Tunisia, Algeria, Morocco, and Mauritania in Africa, it is possible to think of a stable framework of cooperation, ripe with opportunities for Israel in the region. For Israel, Greece, Cyprus, Egypt, and Jordan are the key countries in a structure of this kind, and these are the countries with which we have to promote moves in this direction. In this context, we should note the warming and upgrading of relations with Greece since 2010. The cooperation between Israel and Greece today is primarily in the field of security, but there are many other avenues that exist and should be developed, such as culture, academia, trade, and tourism. With all the appeal of regional organizations made up of countries that share the same seas or oceans – geopoliticians often organize their thoughts around seas and oceans (e.g., the Atlantic, Pacific, Baltic, etc.) – we should also remember that the Mediterranean countries, even those on its eastern basin, are heterogeneous. They suffer from tensions among themselves and even conflicts that are typical of neighboring countries, and their stability is not rock solid. Thus, even if multilateral frameworks are established, based on a Mediterranean connection, these are likely to be more of an ad hoc type of framework, of flexible and certainly not rigid composition, capable of sustaining the natural shocks that may afflict some of them.

As for the 'new periphery' or the new 'circles of power' in the area, it is clear that Israel's emerging relations with countries close to Turkey, Iran, and Egypt cannot be considered formal alliances, even if they yield benefits for both parties. In addition, all potential candidates continue to conduct normal relations with Turkey, Iran, and Egypt. These new peripheral relationships are not a 'zero-sum game' against Muslim neighbors, and Israeli strategic policymakers must understand this. The 'new periphery' offers Israel and its partners considerable rewards, especially in the economic sphere (natural gas, oil, arms sales), rather than in the military one. Such a flexible approach may offer Israel strategic benefits that are based on contact with both the region's core and its periphery. Hence, it is possible to understand today's concept of 'core-periphery' as mosaic-like in its dynamics, not fully defined, and having both friends and enemies in the broader Middle East region.

Insights

Three agreements signed by Israel with three players stand out as exceptionally resistant in the sea of radical instability in the Middle East, despite the dramatic changes that have taken place with each of these players. Thus, the peace treaty with **Egypt** has survived two revolutions thus far – the 'Arab spring' and the overthrow of Mubarak, and the overthrow of the 'Muslim Brother-hood' regime; the peace treaty with **Jordan** has survived the passing of King Hussein and the crowning of young King Abdullah, who faces a variety of threats from domestic extremists, with infiltration and subversion attempts from the outside and the civil war in Syria at its northern border, which occasionally spills over into Jordan; and the **Palestinian Authority**, which moved from the leadership of an authoritarian and charismatic leader (Arafat) to President (Abbas), and which is immersed neck-deep in an internal struggle that damages it both physically (the West Bank against the Gaza Strip) and politically (the PLO against Hamas). The PA survives despite its humiliation, clipped wings, and condemnation and denunciation of its leader every day by Israel's heads of state. So, too, does the agreement signed with Israel.

These three pillars, demonstrating viability under extreme conditions of regional turbulence, are the cornerstones that Israel must preserve, both to stabilize the region and to benefit from their assistance in the future. The current regional fault line is not 'all Arabs' against Israel. Many countries in the region are willing to cooperate with Israel against Iran and against the forces of radical Islam. Of the Arab-Israeli conflict, only the Palestinian dimension has largely remained.

As the terrorist movements in the region increase their strength and extend the geographical ar-eas in which they operate, the possibility increases that security incidents will occur that involve Israel. If these forces intensify their presence along the Syrian-Israeli separation line in the Golan Heights, such incidents, which thus far have been sporadic, could develop into a continuous state of war. Israel will be required to establish practical policies, centered on preserving the separation line approved in 1974 by the Security Council as binding. Israel has a keen interest in preserving the latter's international legal status, and thus, has a vested interest that its border will be domi-nated by a regular, and not a terrorist, force. Iran and Hezbollah demonstrate a growing presence along the border between Syria and Israel. This reality, which made headlines with the killing of an Iranian general during a tour of the Golan Heights, requires Israel to formulate a real policy against this disturbing presence on the other side of its border.

The instability of the regional system makes Iran Israel's main strategic challenge. The nuclear deal signed between Iran and the great powers in 2015 may legitimize its rise and its becoming a signifi-cant military and political factor, even if it does change its foreign policy. The agreement could also enable Iran to take further steps to destabilize the region, including in Yemen and Syria. American

and Arab weakness has created the conditions for deep penetration of Iran into the regions in which Israel has vital interests (such as the Syrian Golan, Lebanon, the Gaza Strip, the Red Sea, etc.).

It seems that the covert policy of destroying Russian and Iranian arms shipments to Hezbollah is coming to an end. The elimination of the Iranian general was interpreted, at least by the leader of Hezbollah, as the end of Israel's 'low profile' policy, when he explained that the killing of two 'Givati Brigade' soldiers was swift revenge for the death of Hezbollah fighters, and that the organization would respond to future Israeli attacks 'whenever, however and wherever.'

Israeli military power should be adapted to reality in the post Sykes-Picot Agreement era. The IDF has already conducted operations that are long-term, but localized and limited in their resources and goals. Perhaps, next to traditional capabilities, the IDF will be required to project power, and perhaps for the first time even conduct an extensive, albeit largely undeclared, campaign against a strong nation state that does not border Israel.

The capabilities of Israel's non-state enemies are also expanding. Hezbollah, for example, is acquiring state capabilities with an effective and experienced military and extends far beyond the area of Lebanon. In its new form, Hezbollah poses a real threat to Israel, and tactically it is a far more serious threat than Iran. The latter will probably try, at least in the near future, to demonstrate a semblance of moderation and of maintaining its agreements with the West. The challenges posed by Hezbollah have to be dealt with using military and political tools. Weakening of the organization will affect Iran, which seeks to support the Syrian government, but cannot realize its support without Hezbollah.

In a scenario where Russia has a physical presence in Syria as a supporter of the Assad-Iran-Hezbollah axis, Israel's capabilities to conduct extensive military operations there are limited, but it must take advantage of its ability to negotiate with non-hostile parties like the Russians to reach a tolerable status quo from the Israeli perspective.

The creation of a scenario in which Iran will become a nuclear threshold state, whether abiding by the P5+1 settlement or not, would force Israel to monitor Iranian actions, while steering its policies according to developments. As long as Iran has not reached military nuclear capabilities, Israel's policy has been built on efforts to thwart threats and prevent them from emerging, as well as in the preparation of deterrence and containment in the event Iran ever were to acquire such capabilities. It would appear that the main battle against the Iranian nuclear program is not in the hands of Israel; however, Israel must continue to formulate policies of deterrence and containment in case Iran does acquire nuclear weapons.

The regional approach seems to many Israelis a fairly promising political move because the moderate Arab countries in the Middle East, and notably Saudi Arabia, now share a common enemy in the form of radical Islamic terrorism. According to this assumption, the regional order has changed in terms of the moderates: The immediate enemy (radical Islam) requires them to move towards Israel and cooperate with it (and possibly establish an overt relationship with it). This assumption leads to the conclusion that the treatment of the Palestinian issue can be postponed to a later date (to this is added the fact that Hamas is also identified as part of radical Islam), and it is possible to promote alliances with the moderate states, without being required to take care of the 'hot potato,' that is concessions in Judea and Samaria. Even without considering the internal cost of the status quo, it is very unlikely that potential allies of Israel share a willingness to 'skip' the agreement with the Palestinians on the way to new regional alliances. On the contrary, it seems that without an Israeli-Palestinian arrangement, this alliance system will not be realized, and in any case not beyond covert cooperation in a limited array of common interests.

Prof. Yehezkel Dror argued:

› 'Israel's continued fundamental security, perhaps even existential, problem, stems from a deep conflict between the State of Israel and the Jewish people on the one hand and the Muslim-Arab world on the other, even when the intensity between the components varies with time. For the conflict has ideological, religious, and historical aspects that undermine the very right of the existence of a Jewish state in Palestine, above and beyond the disputed territory. A dynamic characteristic of the conflict is the variable mix of the countries signing peace agreements with Israel: many countries, including most non-Arab Muslim [countries], as well as a variable number of Arab States that maintain diverse relations with Israel, or at least are not taking an active part against it; also countries and non-state organizations which behave aggressively towards Israel while denying its right to exist – that is, 'anti-Israel fanaticism.'

› 'The Palestinian issue cannot be understood separately from the whole Arab-Israeli conflict. This is a kind of paradox: There is almost no chance of defusing the overall conflict, without establishing a Palestinian state next to the 1967 lines, with a foothold in Greater Jerusalem. However, the establishment of a Palestinian state, even if it is accompanied by maximum security measures, will not in itself be enough to ensure the overall conflict is defused and that a substantive reduction in its dangers is effected.

› 'Relations with the Palestinians themselves do not directly endanger Israel's hstrategic security. It is possible to contain and subdue any intifada or acts of terrorism, and to prevent the formation of 'one state' that will wipe out Israel as a Jewish and democratic state. However, violent clashes with the Palestinians may ignite further anti-Israel fanaticism, including the serious consequences inherent in this. No agreement with the Palestinians is stable in the absence of real progress in defusing the conflict as a whole and reducing the extremism in the Middle East. On the contrary, the establishment of a Palestinian state in the absence of change in the surrounding areas could lead to serious developments, such as the destabilization of the Kingdom of Jordan.

› 'However, the above needs to be emphasized: **without the establishment of a Palestinian state, it would be almost impossible to defuse the conflict as a whole,** and its grave dangers. Even Israel's foreign relations, including those with the United States, and its general global standing, will suffer in the absence of real progress in reaching an agreement with the Palestinians.'

The more likely scenario is that Israel is expected to bring the conflict with the Palestinians to a close. According to this assumption, the 'gift' to Israel, in the form of the establishment of normal relations with 57 Arab and Muslim countries, will be given only after signing an agreement with the Palestinians, a kind of 'dowry' for the agreement reached and not as an 'advance' before the real negotiations begin between the parties. This scenario was often discussed under the heading the 'Arab Peace Initiative,' presented in its first version at the beginning of the millennium, and was ratified at a meeting of the Arab League in 2014. Upon ratification, the League announced that the initiative would not be on the agenda indefinitely.

From the perspective of Saudi Arabia, the initiative aims to strengthen stability in the region and to introduce Israel – a regional power that could play a key role – into the regional alliance system to ensure that stability. The Saudis have learned that when the regional arena is in a state of conflagration, this has a direct impact on its internal situation. Indeed, a sense of isolation and the state of instability in the Saudi royal family is pushing Saudi Arabia toward taking more assertive moves in the region, which will probably be expanded. The Arab Peace Initiative with Israel is, therefore, of secondary importance. The goals of Saudi Arabia are, first and foremost, to preserve the strategic alliance with the United States, moderate the disputes in the Arab world, maintain the political and religious reputation of the royal family (among other things, to show that it is working more than any other party on behalf of the Palestinians), and strengthen the position of Saudi Arabia as a force that can mediate between the Arab world and the West. The ultimate goal is to position Saudi Arabia as the leader of the Sunni camp in its struggle against Shiite Iran and its satellites. The Saudis have made it clear that they have no intention of inter-

vening directly in the negotiations between Israel and the Palestinians, and that they want only to provide the framework for such negotiations.

Nevertheless, the Arab Peace Initiative reflects the willingness of the Arab League states to see Israel as a fait accompli and their refusal to harness their interests to the Palestinian national struggle. This is the first time these countries have declared that there is no point in using military force as a solution to the Israeli-Palestinian conflict. It is also important to note that the proposal is not a 'closed' one; on the contrary, the initiative is open to debate, change, and amendments. For example, it is possible to demand that the issue of the Golan Heights be frozen, in light of the civil war in Syria and as long as no new borders between Syria and Iraq are determined. The real significance of this type of freeze would be continued Israeli sovereignty over the Golan Heights and the neutralization of this difficulty in the initiative.

Another assumption concerning Israel's relations with the surrounding area are the implications of the Israeli-Palestinian conflict on the relations between Israel and Saudi Arabia, the Gulf countries, Jordan, and Egypt. Following Operation Protective Edge, an initiative was made to promote a long series of moves to strengthen the status of Israel in Jerusalem, both in areas populated mostly by Arabs and on the Temple Mount. The assumption was that after Protective Edge, the Palestinians would have no practical capabilities to challenge such a move. This assumption quickly proved false. Riots that broke out on the Temple Mount provoked the Muslim world from Asia to London and Paris. Calm was achieved only after the arrival of the US Secretary of State in Amman, where he summoned Prime Minister Netanyahu and King Abdullah to a meeting, in which Netanyahu promised to maintain the status quo on the Temple Mount and to act to defuse tensions in all of Jerusalem. Even from their inferior position, the Palestinians managed to rally the entire Muslim world behind them, including the moderate states headed by Jordan.

In this context, the Gaza Strip should be considered, as it has been steeped in poverty and despair since the end of Operation Protective Edge. As time goes by, and as long as there is no change in daily life in the Gaza Strip, the possibility of an outbreak caused by despair is increasing, which Israel would not be allowed to put down by military force alone. Even if Egypt stood aside, and perhaps even expressed support for further action by the IDF, Israel might fail this time to recruit (albeit tacit) international support. Israel has an interest in preventing chaos in the West Bank and the Gaza Strip. Regional experience shows that such chaos breeds waves of terror and requires a comprehensive response involving heavy human and economic costs. Israel must not only prevent the collapse of the Palestinian Authority, but also initiate significant relief for Gazans in their worsening plight.

It can be assumed that energy and water will continue to be key factors in shaping regional dynamics in the Middle East, which will remain divided between, among others issues, the 'haves' and 'have nots.' Oil will continue to be a major resource for at least 10-20 years. Many of the economies in the region depend, directly or indirectly, on gas and oil (in 2011, the relative share of the Middle East in producing oil and gas in the world was 2.32% and 4.15% respectively). Regional instability (especially in Saudi Arabia) will apparently affect oil and gas production, which, in turn, will deepen and broaden instability in the region. The struggle for energy independence may lead to further fragmentation of the region and to the crumbling of the stabilizing and organizing countries and organizations.

Israel must be aware of the possibility that the changes in the Middle East and the world will open new possibilities for collaboration with some of its neighbors, especially those who prefer the status quo over radical changes and those who fear a nuclear Iran. Contacts have already been made with different countries in the region, including Saudi Arabia, and recently meetings that had been secret came out into the open, while the two parties talk about common interests, such as the Iran issue and global terrorism. Generally, there is broad recognition of interests between the 'Sunni coalition' that includes Jordan, Egypt, Saudi Arabia and the Gulf States, and Israel. Economic ties, too, are expanding with these countries, sometimes under the surface and sometimes above board. However, the trade volume and cooperation with these countries is relatively limited, and their political and economic potential is far from being exhausted. The development of these kinds of collaborations passes necessarily through an agreement with the Palestinians.

To stabilize the Middle East, containment is not sufficient, and the political, social, and economic challenges of the region must be addressed. The need to fight ISIS is the lowest common denominator of any agreement among the countries of the region (although ISIS is a symptom, rather than the source of the problems). The main friction axes that must be moderated to stabilize the region are: the Saudi Arabia-Iran axis and the Israeli-Palestinian axis. It will be difficult to reach a consensus on the legitimacy of existing borders and devise a strategy that combines regional and international powers.

✪ Recommendations

Israel must act in every possible way to help the existing regimes in Egypt, Jordan, and the Palestinian Authority. It must avoid moves such as stopping the transfer of funds from Israel to the Palestinians. Any weakening of the Palestinian Authority brings it closer to its demise, and such a development is worse than any anti-Israeli move by Abbas.

The continued reign of the Hashemite royal family in Jordan should be viewed as a supreme Israeli interest, and ties must be strengthened with it. In the extreme case of an action taken by a foreign party against the regime in Amman, Israel has to seriously consider the use of Israeli forces and air strikes to save the regime. An independent Jordan is of supreme strategic interest to Israel, but there is no guarantee that Washington and London are equally sensitive to the implications of a change in the Hashemite Kingdom in its current form.

Egypt and Jordan are interested in expanding the circle of Arab countries that have peace treaties with Israel, in order to reduce the internal and external pressure from opponents of their own respective agreements with Israel. Therefore, Israel's response to the Arab Peace Initiative, or even a comment or actual consideration of the initiative, will contribute to strengthening the regimes in Egypt and Jordan.

It must be assumed that Israel's ability to engage in low signature activity is coming to an end. Against this background, the civil war in Syria must be prioritized, including considering support of the continued Assad regime in exchange for the withdrawal of Iranian and Hezbollah forces from the country. Alternatively, Israel should consider agreeing to the positioning of pro-Iranian forces in the Golan, in return for maintaining peace along the separation line. Such a precedent can be used as a harbinger of local understanding between Iran and Israel. In any case, it must be made clear to the Iranians who are in Syria, far from their homeland, without any aerial coverage, that if the situation deteriorates into a confrontation, Israel will not enter into a war of attrition, but will act without restraint to erase Iranian power there. Syria is the 'Achilles heel' of Iran and should be treated accordingly.

Israel should seriously consider the opening of a reliable channel of communication between Jerusalem and Tehran. At the same time, it must prepare in earnest for the danger of rapid deterioration along the demarcation line in the Golan Heights and for a swift and decisive move against the 'Al-Quds Force' in Syria.

Israel must prepare for a war against Hezbollah in Syria, Lebanon, or in both countries together. The battle against Hezbollah is significant in terms of the scope of the organization and the threat that it poses to Israel, and Israel must prepare accordingly. In addition, the IDF should recognize the limits of force against non-state jihadist threats.

Israel and Russia have a number of conflicting interests, but a dialogue can be maintained about a way to stabilize Syria that would not jeopardize Russian or Israeli interests. In this context, Israel must examine the possibility of reaching a state of equilibrium, even a temporary and fragile one

and even with local groups such as Jabhat Al-Nusra in the southern Syrian Golan Heights. It is possible to reach at least a state of mutual disregard with these groups.

Israel must take action vis-à-vis Saudi Arabia to determine the practicality of the Arab Peace Initiative (it is needless to emphasize that any such move on the part of Israel should be communicated to the White House in real time). To a considerable extent, the current conditions are optimal for clarification: as oil prices have dropped, the oil states feel more vulnerable and their fear of maintaining contacts with Israel is decreasing. Egypt, Jordan, and Saudi Arabia see eye-to-eye on strategic risks, first and foremost a nuclear Iran.

Israel must see to what extent it can advance relations with the moderate Arab countries based on the assumption that such a move would serve as an alternative to engaging on the Palestinian issue, or that the progress of a settlement with the Palestinians would be a necessary preliminary step toward realizing the vision of order and an all-Arab and all-Islamic settlement. In seeking this kind of clarification, attention should be paid to the possibility that, in light of regional developments, the Arab Peace Initiative does not represent all Arab countries or other countries and Muslim entities (Iran, Pakistan, Hamas, etc.), especially as Syria, Lebanon, Libya, Yemen, and Hamas do not control their territories fully or even partially, and, therefore, cannot be part of a potential regional agreement, which may become bilateral.

Because the price required from Israel as part of the Arab Peace Initiative is substantial, while the commitments made by the Arab world are 'on paper' only, an Israeli response to the initiative (even if characterized by demands for amendments and significant changes) would return the ball to the Arab court, and first and foremost to the Saudis. This would set the process in motion, break the image of an 'entrenched' Israel that is not taking any initiative, and improve Israel's image, all without committing at this stage to making any concessions.

Israel must recognize the Arab Peace Initiative as a regional and international platform for multilateral dialogue with the Arab world and as a basis for dialogue with those countries that are members of the Arab League, provided this will accompany actual progress in negotiations on a political settlement with the Palestinians. Recognition of the initiative, as a single and separate step, means nothing. Its integration in the negotiation for an Israeli-Palestinian agreement is a good and a realistic way to ensure Israel's national interests, led by delineating its borders as the democratic and safest state of the Jewish people.

An Israeli response that includes acceptance in principle of the Arab Peace Initiative as a platform for negotiations, alongside the presentation of Israel's fundamental demands, is the preferred situation. Israel must clarify unequivocally that it does not see itself solely responsible for the

Palestinian refugee problem, but is willing to be a partner in finding a solution. Regarding the requirement to withdraw from the Golan Heights, it is clearly unreasonable and impossible in the current reality. The fact that today there is no central government in Syria and no stabilization of the situation in the northern arena allows Israel to leave this issue pending.

Entrepreneurial, economic, and business activities should be encouraged in the Arab region, and in promising markets, even when things are conducted in private, let alone when business activities and cooperation take place with the blessing of local authorities, such as in the case of cooperation in the field of resources (gas, water, etc.).

The tacit fabric of dialogue, coordination, and cooperation that exists with governments in the region should be preserved and enhanced. Even if these collaborations are circumstantial and often temporary, they are of great benefit, and as long as there is no full normalization following an arrangement, Israel should cultivate this mainstay as one of mutually beneficial cooperation. It should not rely on the consolidation of blocs or of ambitious regional multilateral framework. Israel's capacity to maneuver in the region has limits, which it must recognize. Therefore, Israel should not delude itself into believing in an undue ambition to integrate into regional frameworks beyond those that are possible under realistic circumstances.

Israel must act to stop players wishing to alter the regional system by force and prevent the formation of threats – including through partnerships with as many players as possible, even if temporary, fragile, and covert. In addition to continued cooperation with Egypt and Jordan, the advantages of identical current interests between Israel and Saudi Arabia should be exploited. Israel should also consider supporting ethnic groups such as the Kurds and the Druze.

Israel must act to reduce its dependence on energy from other sources in the region and promote energy independence, especially in the oil sector.

Israel must empower stable regimes in the region and strengthen their capabilities and effectiveness. The Middle Eastern countries must be responsible for ensuring 'one government, one law, one army.' Israel must encourage the development of responsible and stable regimes that function effectively and enjoy local legitimacy. State responsibility is a key element for maintaining sovereignty, as is the creation of a coalition of states with exclusive authority for local issues, particularly in the areas of internal security and external military capabilities. Each country should have one military force, subject to its government, and efficient and robust internal security forces that are capable of enforcing law and order and disarming armed militias, armed militants, and terrorist groups. Armies of the countries should be strengthened, while emphasizing defensive

capabilities, ensuring sovereignty and protected and efficient border arrangements, and preventing smuggling and infiltration of terrorists, radical elements, and criminals.

Economic security also requires environmental stability. The countries should change their decentralized approach to security and transform this into a unified one. Security is comprised of more than physical survival (food, shelter, and other basic needs). The basic security concept should be expanded to include consideration of the population's standard of living, including education, employment, justice, freedom of expression, and political choice. National approaches to security issues should become internationalized and regionalized.

Israel must encourage trade and cooperation with countries in and outside the region, and to work in such a way that is beneficial to both ourselves and our partners in international organizations, such as the World Trade Organization and the United Nations. At the local level, it should be encouraging a focus on strengthening education and the development of human capital. These measures will lead to higher productivity, greater innovation, and sustainable growth and development. Israel should encourage the countries of the region to diversify their own local products, as well as their foreign trade and investment. Social security can be enhanced by solidarity systems that reinforce identity and create a sense of community belonging.

Israel should concentrate on the major regional threats and address them. The greatest danger is the Iranian threat. Even without the use of nuclear weapons against Israel, a nuclear Iran would make the region more dangerous by providing an umbrella for terrorist organizations and by Iran's becoming a leading regional power. It should be noted that the declared policy of the United States, which is quite logical, is that Iran will not have nuclear weapons. The agreement reached with Iran in 2015 postponed the possible timing of such an occurrence, but it is clear to all that Iran's ambitions to develop nuclear weapons could develop and place the United States, other countries in the region, and Israel under threat and in a dilemma. According to statements made by senior Israeli officials, there is a possibility that in the absence of any other way to prevent Iran from obtaining a nuclear weapon, it will be necessary to attack Iran's nuclear facilities.

Israel's strategy for overall containment of Iran should cover four bases: harnessing the new US administration to take a harder line against Iran and its presence in the region; cooperation with regional players; the projection of direct power toward Iran; and kinetic prevention of concrete threats against vital Israeli interests. Iran's growing infiltration into Arab areas where Israel has key interests, as well as the nuclear threat, requires Israel to build up its strength to project power and be in a position where it can engage in a protracted conflict.

In the post-'Muslim Brotherhood' era, Egypt is a key player that has common interests with Israel. Egypt can be incorporated in the development of a new security order in the region. Israel must strengthen its ties with Egypt, Greece, and Cyprus to help maintain its freedom of the seas and maritime trade, and protect the gas found in the Mediterranean.

Israel aims to become a supplier of gas to Turkey, but to what extent this will be feasible is unknown, and, therefore, Israel should not give up the growing cooperation with Cyprus and possibly also with Greece. Israel should try to find new partners in the eastern Mediterranean alongside Turkey. Greece and Cyprus court Israel and strengthen the Western presence in this region. Italy, too, has excellent relations with Israel, which could be further developed.

Tightening the ties between Israel and the Gulf states has the potential of softening the Palestinian position. It also could help finance joint Israeli-Palestinian projects and allow the Gulf states to offer themselves as hosts of diplomatic negotiations, thus offering legitimacy to other Arab countries that seek to 'jump on the peace bandwagon.' Establishing public relations with the Gulf States might cultivate a more favorable Israeli public opinion concerning making concessions in the peace process.

As Israel's strategic environment becomes more hostile, there is a growing need to extend the IDF's capabilities and update its war scenarios. Military force should be adapted to the new reality. Perhaps alongside traditional skills, the IDF will have to project power and for the first time also conduct an extensive battle against a strong nation state that does not border Israel. Israel has no choice but to increase its defenses, so that they are able to cope with regional challenges. It should reinforce troops on its borders and provide more funding for anti-missile defense development. Israel must invest in building a stronger military force to be able to handle a variety of scenarios, including an all-out war on a large scale.

Israel, as a player with low capabilities in 'political engineering' of third parties and of limited resources, should focus on defensive strategies. It cannot become involved in and waste its resources on adventures in the Arab world beyond its borders, but should cooperate only with available forces that can prevent shocks and stop Iran from being drawn to over-reach, and use military force sparingly and only to prevent concrete and selected threats in areas where it has vital interests.

The original Core-Periphery Doctrine of the 1950s, 60s, and 70s is not the right model to emulate. Specifically, in light of the relative weakness of the 'new periphery' and the relative openness of the 'new core,' Israeli policymakers must take advantage of new and old ties that are in Israel's best interests and bridge conflicts through creative diplomacy. A zero-sum 'peripheral strategy' is dangerous.

Alongside a determined effort to expand its relations with both the 'new periphery' and the Islamic core, Israel must address the Palestinian issue in a much more realistic manner than in the past; otherwise, its entire Grand Strategy will be jeopardized.

Israel has to reassure Egypt about the innocent nature of its relations with Ethiopia and other African countries on the Nile. It has to leverage its approach to the southern periphery, especially by recruiting American or other interventions, in order to enhance its relations with Egypt by providing good (and discreet) services in the field of securing water sources.

Climate crises may strengthen the ties between Israel and Egypt and hold in store opportunities for Israel in areas such as water and modern agriculture, energy, and investments in advanced industry. Israel must act with an eye to the region, and practically, it must extend any reasonable assistance to the Egyptian authorities to help stabilize their country and try to lead it to a better future.

Israel should adhere to the principle of non-interference in the face of developments in the region. If and when the downfall of the monarchy in Jordan seems imminent or President Al-Sisi's regime in Egypt falls, or if a direct military threat close to the border with Syria occurs, Israel must act, either by moving forces or, in extreme cases, also by using them. Israel should avoid a preference for the diplomatic-strategic approach of 'don't do' over the 'do' approach. The fluidity of the region and its dynamic developments, as well as Israel's interests, require maneuverability and openness to quick responses and a willingness to act, especially in situations that present opportunities alongside risks.

THE ARAB-ISRAELI DISPUTE: FROM CONFLICT MANAGEMENT TO MANAGING NEGOTIATIONS

Introduction
The primary objective of Israel's Grand Strategy is assuring Israel's future existence as a Jewish democratic state which lives in peace and security. Some of the programs presented today regarding the Israeli-Palestinian conflict do not take us along the path leading to the desired strategy, including those that promote the preservation of the status quo or even strive to achieve annexation – programs that will ultimately lead to the creation of a binational state. Even the policy of 'conflict management' is nothing but a policy aimed at creating a certain reality that is not necessarily the existence of a Jewish and democratic state with a Jewish majority and strong international legitimacy. These programs may incur an unbearable cost. A binational state would be a devastating apartheid state both internally and externally, built on the betrayal of the basic

principles of our existence, which would tear itself apart and eventually collapse. Such a state would be more similar to Syria than to Belgium.

The two-state solution (including various options of a federation with Jordan) **is the only solution which we should aspire to as a vision.** Support for a demilitarized Palestinian state is not a vision. It could serve under different conditions as a possible and reasonable means to our vision, which is a strong, prosperous, and enlightened Jewish state. The import of this document is not to give recommendations to the Palestinians on how to plan their actions, but to help Israel act in its own interests and to create a reality that serves its interests and vision.

There is real urgency for Israeli action regarding the Israeli-Palestinian conflict. Events, both worldwide and in Israeli society, create a reality that calls for Israel to wake up from what appears to be a state of denial. The reason the world does not enforce boycott and isolation is the 'umbrella' of the Holocaust, which is gradually being eroded; eventually, the world will declare us boycotted and ostracized from the family of nations. Boycotting products from the West Bank (in the first stage), and the growing boycott movement in the United States (BDS), are forerunners in this direction. Trends of alienation from Israel among American Jewry have to be dealt with. When the Jewish majority in the United States understands that its Judaism is the cause of their children harassment in prestigious US campuses by adversary groups of students and faculty, resentment towards Israel may grow.

Israel is facing a serious problem not only with the Palestinians, but in one of two scenarios below, and perhaps even both:

› The first problem is the internal conflict within us, which has yet to be thoroughly defined, having been represented until now by slogans and vague concepts. This dispute, in which some even see the seeds of an actual civil war, is a cardinal and central obstacle that is tearing Israeli society apart from within. There is a need to invest utmost effort and understanding into the roots of the conflict in a profound way beyond looking only at its symptoms; it is a matter of the greatest urgency that we remove this stumbling block and find common ground upon which Israeli society can agree. On this basis, we must establish a robust socio-political structure, which will provide Israeli society with the support it needs in its conduct toward this conflict, as it stands against the Palestinians and the world at large.

› The second problem is with the free world in which we live and on which we depend. Here the conflict is clearer: Our conduct is viewed as colonial and wrongful by leaders and opinion makers on whom we depend in the long term.

Both conflicts have crucial economic and social consequences, which, together with military and terrorist threats, harm the security of Israel and turn the Israeli-Palestinian conflict into an obstacle and a threat to the very existence and vitality of the country.

Both conflicts have crucial economic and social consequences, which, together with military and terrorist threats, harm the security of Israel and turn the Israeli-Palestinian conflict into an obstacle and a threat to the very existence and vitality of the country.

Thus, peace is a vital necessity. Once the Zionist movement had actualized its historical destiny – the establishment of a Jewish state in Israel – both in the practical sense and at the level of international legitimacy, it had achieved its purpose. But even before the establishment of the Jewish state, as well as after, it was obvious that the movement had not achieved the most desired goal of all: to live in peace and quiet, and with good neighborly relations. Israel has also failed to achieve international legitimacy – bestowed to the vast majority of nations – and thus has been deprived of the possibility of developing safely and prosperity in accordance with both those Jewish and universal values for which it stands. The profound reason for this is also the primary reason: to date, Israel has not won Arab recognition of its right to exist, and, therefore, has been unable to reach a situation in which no hostile measures are taken against it, including acts of war. These measures, presumably, will be terminated if and when peace and sustainable reconciliation is achieved with all parties.

The Arab non-acceptance of the right of Israel to exist as established, namely as a Jewish state, is based on different motives and takes its shape according to changing circumstances. However, it still remains a crucial factor in Israeli-Arab relations and in Israel's relations with the Muslim world. Even if there are historical moments where the hope or some impression emerges that this non-acceptance is declining and even disappearing, in practice it turns out that its roots are deep and robust, and there is no sign that it will vanish in the near future. Still, it is reasonable to think that in the distant future changes will occur, and it is certainly possible that things may develop favorably.

The uppermost Israeli interest from the time of the State's establishment was, as mentioned, to achieve peace. This is not only a moral statement: Although the pursuit of peace is a desirable principle in the Jewish tradition, achieving it by all means, direct and indirect, is a significant realpolitik interest. The fact that steps toward peace are not within reach should not distance, push aside, or numb our strong national interest in peace, and it must not prevent us from ex-

pressing this desire in its fullest political and moral form. The world is constantly operating at great geo-economic intensity. Israel must act vigorously within this framework, be aware of the risks and the opportunities this presents, and promote a settlement with the Palestinians in a way that will also contribute to its economic and military strength.

Israel has a diplomatic interest in giving proclaimed and continuous expression to its aspirations to achieve peace. At the same time, it must see things clearly and act soberly and without illusions. The desire for peace should not blind us to the obstacles on the way, especially the reality according to which Israel's adversaries and enemies cling to opposite aspirations; that is, they hope for Israel's disappearance and may also act to extinguish the State in violent ways.

The current global era has witnessed accelerated transformations, and our region, too, has experienced significant changes, a number of which are surprising. Some of these developments do not concern the Arab-Israeli conflict at all, and some are tangential to it. The processes and turmoil in the Middle East by no means bring tidings of calm, stability, and prosperity. On the contrary, the phenomena of brutality and the use of illegal weapons and weapons of mass destruction in the Middle East are on the rise, in comparison with the past.

The recent era has witnessed supreme diplomatic efforts to settle the Arab-Israeli conflict in its various manifestations, particularly the conflict with the Palestinians. It seems that no other conflict has received such concentrated, public, and diplomatic attention, and some call it 'the most over-negotiated conflict in history.' These efforts have yielded partial progress in practice and in principle, but the attempts to reach a comprehensive, inclusive, and final settlement have time and again come to no avail. The reasons for the repeated failures are found on various levels and with assorted parties. Clearly, there is more at stake here than issues of disputes and differences between bargaining positions.

The root of the inability to reach a final agreement, which provides closure in the sense that the parties declare they have no outstanding claims, lies on the Palestinian side, where there is no willingness to recognize Israel as the national home of the Jewish people, in which it exercises its right to self-determination. Even if it were possible to reach an agreement on all elements of the conflict outside this issue, the conflict would still endure, as would the pretext to continue resistance to Israel by various measures, according to circumstances that justify and permit it. Therefore, the top Israeli interest as part of a final settlement with the Palestinians is to ensure closure of the issue of Israel's existence as a Jewish state. As long as this is not satisfied, Israel will not be able to see any agreement as final, even if the agreement benefits Israel in terms of other negotiation components.

When David Ben-Gurion established the foundations of the national security strategy of Israel, he did not anticipate reaching final peace agreements any time soon. He believed that Israel would face occasional rounds of war, in which the Arab countries would try to achieve what they did not manage to in 1948. The Grand Strategy shaped by Ben-Gurion was based on this assumption, although it is clear that he saw achieving full peace as a long-term goal. Moreover, Israel has needed to ask itself time and again, 'Must the sword devour forever?' and these days must add, 'Will boycotting Israel never cease?' The sad answer is affirmative in the near- and perhaps medium-term. But in the long-term – who knows? Israel hopes and declares that in the long-term, its vision of peace, reconciliation, and security will be achieved.

The Israeli ethos requires this vision for utilitarian reasons and because, clearly, should peace prevail, it would be to everyone's benefit. But the commandment to embrace realism co-exists with the commandment of hope. And in calculating its actions, Israel is required to conduct itself with practicality, pragmatism, and realism. It must do so in a manner that does not contradict the desire for the long-term goal, but at the same time it must ensure that its security and well-being will not be compromised at any stage.

As mentioned above, efforts have been made in the last era, sometimes heroic and with the involvement of the superpowers, to reach a comprehensive and final settlement between Israel and the Palestinians; and the conventional wisdom is that in the present circumstances such an agreement cannot be reached. However, it is possible that under some exceptional constellation of circumstances and with the emergence of surprising leadership, such an opportunity may arise, and, therefore, it cannot be argued that such a chance is non-existent.

There is a view, which is spreading and prevails in different areas and for various reasons, that the basic negotiating formula in place since the Security Council Resolution 242 – which states that the Land of Israel should be partitioned into two states for two peoples – has lost its vitality. Whether as a result of analytical observations or out of material interest, those who hold this opinion are now discussing the default option of 'one state for two peoples,' i.e., a binational state. Since Israel is already an established state, the interpretation is that a second, Palestinian, state will not be established, and the one state will not be Jewish, but mixed. Different proposals and positions revolving around this potential development exist, with the Israeli side talking about Palestinian autonomies and annexations, and the Palestinian side considering Israel as a state that, by virtue of being democratic, will give equal status to its constituent nationalities and, therefore, will not be Jewish.

Perhaps for the time being this is the prevailing dispute; namely, is there still hope for the old formula, which won sweeping international legitimacy, regarding two independent and sovereign

states, or will the one-state alternative prevail? In the face of this obstacle, and given the stalled negotiations and diplomatic processes to resolve the conflict, other formulae emerge and surface, including those that integrate the Jordanian state and explore federative and confederative ideas. Such formulae arise at times from the Palestinian side and sometimes from Israeli officials, with slightly different characteristics.

It is our understanding that the basic partition formula, which is in principle a territorial partition based on demographics, still remains the formula that has the deepest historical roots and the highest international legitimacy, and is likely still the most practical and desirable formula in comparison to its alternatives. All this is said from the perspective of the Israeli government and its majority. However, it should be noted that, on the other hand, there is a significant trend among the Israeli public whose aspiration is not for partition or separation, as described below. From the Palestinian perspective, we must consider that the trend that was dominant in the past, which emphasized the desire to annihilate Israel as an independent Jewish state, will resurface, and that the one-state vision, with a Palestinian majority, may be the vision they prefer. Even against this background, there is concern that the Palestinians will find it difficult to part with their refusal to recognize Israel's right to exist as a Jewish state and will commit to this refusal for as long as possible.

There are those who believe that the advent of the Trump administration will shake the foundations of this matter and impact the power dynamics at play, but it is unlikely that the Trump administration will engage in any significant manner in these issues for the foreseeable future.

The History of the Israeli-Palestinian Peace Process: Positions and Possibilities

Prof. Shlomo Avineri encapsulated the fundamental difference between the Israeli perception of ways to settle the conflict and the Palestinian perception, expressed by Abbas and other Palestinian leaders – a chasm that negates a confluence of attitudes that would allow a final settlement:

› The basic Palestinian concept, which is often not reflected in talks with Israelis – and certainly not with those who make the pilgrimage to Ramallah – is quite different, and they do not hide it: For Palestinians, it is not a question of a conflict between two national movements, but a conflict between one national movement, the Palestinian one, and an imperialist colonial entity, that of Israel. According to them, the end of Israel would be like the end of any colonial movement: Israel would be eradicated. For this reason, according to the Palestinian perception, Israel as a whole, not just the West Bank, is similar to Algeria – an Arab country from which the foreign colonialists were expelled. This is the reason why Israel does not appear on the maps of Palestinian textbooks; why they cling to the demand not to give up the right of return of Palestinians to Israeli territory; and why there is the official Palestinian insistence, from Abbas to Saeb Erekat, not to recognize Israel by any means as the state of the Jewish nation. In terms of the Palestinian position, Israel is an illegitimate entity, which is doomed to disappear from the world.

› If the prevailing opinion among the Palestinian public is that Israel is not a legitimate state based on the right of self-determination, but rather an imperialist entity, there is no room to end the conflict by compromise. Most Israelis believe that the conflict is essentially territorial, and, therefore, a territorial settlement – a return to the 1967 borders, the evacuation of settlements, and compromise on the issue of Jerusalem – is the key to resolving the conflict. The Palestinians' conduct in the Camp David negotiations during Arafat's leadership, and later in the talks between Mahmoud Abbas (Abu Mazen) and Prime Minister Ehud Olmert, has proven that something deeper is at play. Even Abbas's statement that his movement is unable to give up the right of return because it is an 'individual right' given to each Palestinian refugee or his descendants, proves that, even if the territorial aspect is controlled, the conflict will continue to bleed. This is also the reason why Abbas refuses to follow the in the footsteps of Egyptian President Anwar Sadat and address the Knesset: From a Palestinian point of view, this would constitute recognition of Israel's legitimacy and sovereignty.

In the past 15 years, the Israelis and the Palestinians have conducted themselves on the issue of the conflict according to a paradigm that has failed repeatedly. This paradigm contains several aspects:

› We want to reach partition; i.e., separation from the Palestinians should be the outcome of negotiations.

› Negotiation is the appropriate tool. It is a means from which each party has deviated (the Palestinians turned to the intifada and Israel to disengagement from Gaza), but to which they have returned.

› We discuss all issues – including core issues – in the form of 'all or nothing.' Therefore, the result has been 'nothing.'

› The United States is heavily involved in the negotiating process with the Palestinians. Although the Oslo process began without significant American participation, the United States has subsequently played an important role in all negotiations. The last round of negotiations with the Palestinians was the first time Israel conducted a debate on the core issues directly with the United States.

The above process clarifies a series of issues:

› The gaps on core issues are real. Even seemingly simple issues (land swaps, for instance) are difficult to resolve.

› The existing leaders, on both sides, are unable to reach an agreement. The reason for this is that the respective leaders are unable to bridge the gulf between them: Abbas is unable to make the concessions necessary to lead his people in the required direction to reach an agreement; Netanyahu is unable to cross a certain line because of ideological or political considerations, or both. Unlike other negotiations, such as those with Jordan, in the current negotiations with the Palestinians there is no dialogue between the leaders, where communication between the leaders is a critical component in reaching agreements and their realization.

› There is internal resistance in each of the parties to an arrangement, and there are gaps between the existing consensus in Israel and the consensus that exists among the Palestinians. There is also a growing movement on the Palestinian side that supports the reality of one binational state.

›   Over the years of negotiations, the Palestinian side added a requirement, which did not exist in the first place, of freezing the Jewish settlements. According to the Palestinians, Israel continues to build settlements in the West Bank and creates incontrovertible facts on the ground.

›   There is a split between the two entities on the Palestinian side – Judea and Samaria, controlled by the Palestinian Authority, and the Gaza Strip, controlled by Hamas – and it is impossible to reach an agreement with Mahmoud Abbas that he will be able to back up and apply in the Gaza Strip.

›   Hamas is now in a position of weakness for the first time in years. Its practical ability to prevent the initiatives of Abbas is diminished, but it nevertheless has a voice that cannot be ignored.

›   The US approach to promoting an Israeli-Palestinian arrangement varies from one administration to the next. The Obama administration proved the weakest in this area, and played an actual part in the failure of the recent negotiations. Moreover, on the core issues, the United States is closer to the Palestinian position.

›   In Europe, a change has occurred to Israel's detriment: there is less tolerance for a continuation of the conflict and growing pressure for the establishment of a Palestinian state. Today, there are an increasing number of European initiatives to take steps against Israel (especially over the Green Line).

›   In the regional arena, each country has its own interests, its own most important issues, and its own areas of concern. None of the countries in the region is a great supporter of Abu Mazen, but they have a Pan-Arab interest and will not come out against him. Their agreed solution is the Arab Peace Initiative, but ultimately, they will accept any solution accepted by the Palestinians and not impose on them an unwanted solution.

›   Other players, such as Iran, would love to thwart an Israeli-Palestinian agreement, but if there should be a Palestinian consensus around it, Iran will probably not be able to fulfill that mission.

Prime Minister Netanyahu may understand the importance of the need to move toward a settlement with the Palestinians, as well as the price of continued conflict and 'foot dragging' (which is impossible because of the arena's dynamics). It is also possible that the issue is high on his agenda. However, it is quite clear that there are several elements in such an arrangement that

makes it very burdensome for the Israeli decision-maker. Against this backdrop, Netanyahu has set conditions, but there is only a tenuous chance these would be accepted before reaching an agreement. These conditions are: First, a Palestinian interlocutor who will 'give everything,' but Abbas has not proved himself as such. Second is an American security net that includes guarantees, understandings, and more. In the past, there was an understanding with the United States about what it was willing to give Israel for a settlement with the Palestinians.

At the same time, the Prime Minister must take into account political considerations and pressures from within, a real and heavy burden on his shoulders throughout the negotiations. Before Netanyahu takes any decisive step, such as the publication of the parameters for an agreement, he would like to make sure that he can meet these challenges. However, because it seems that, given the present composition of his government, he will not be successful, it is reasonable to assume that he will find it difficult to return to the negotiating table.

There is a dispute in Israel between the school of thought that maintains that a solution to the conflict must be sought, and that which claims conflict must be managed until something happens that will allow an agreement to be reached. Here are some options that reflect these two possibilities or lie somewhere in the middle:

› A return to the negotiating table and an attempt to reach an agreement. There are very few people, including those who have participated in negotiations with the Palestinians in the past, who believe it can be achieved.

› A variant of this possibility: settling for achieving a framework document prescribing only the principles. If there is a return to negotiations, it is possible that this would be the way the parties would try to follow. Such a move would give impetus to the negotiations, whereby obtaining agreements would not be impossible in principle. Such a move could also open the door to a settlement as part of a gradual and phased settlement process.

› Partial arrangements according to the formula: 'What was agreed, will be implemented.' This makes sense, especially because Abu Mazen is not able to negotiate and to formulate an agreement regarding the Gaza Strip. The problem is that there is no Palestinian leader today who is ready to take this option because the Palestinians claim that Israel will adhere forever to the intermediate stage, and more importantly, that Israel will then have a pretext to claim that this is only a border dispute. The Palestinians do not want to get into such a situation (and this fierce opposition has increased over the years). It seems that the only situation in which any Palestinian

leadership would agree to consider an interim arrangement is one in which agreements would be reached in advance, at least in principle, about the end game, international guarantees, and the freeze of construction in settlements. For Israel, these are unacceptable conditions.

In Israel, there are those who say that, since there is no Palestinian partner for negotiations, unilateral steps must be taken. The logic behind this statement is that the other side should not have veto power over issues that affect our lives. On one side of the political spectrum is the 'Bennett Plan,' according to which Israel would annex Area C and create increased dependence of Areas A and B on Jordan and Egypt. Arabs living in Area C (about 100,000) would receive Israeli citizenship, so that Israel would not rule over another people. This arrangement is very problematic for Jordan and Egypt.

Another unilateral option, at the other end of the political spectrum, is to design a two-state reality. According to this option, there are several ways to achieve this goal:

› Freezing of construction outside the settlement blocs: avoiding construction in areas that are supposed to be the territory of the Palestinian state.

› Evacuation-compensation: it is difficult to determine who will receive compensation and where the line dividing those who are entitled to it and those who do not qualify will be drawn.

› Giving more powers in the security field to the Palestinians in Area C, in addition to those already given to them by Israel.

› Unilateral evacuation of Israeli settlements in the West Bank.

The option of unilateral steps acquired a bad reputation following Israel's unilateral withdrawal from the Gaza Strip. Therefore, it seems that such a solution is not possible today, even if the IDF would continue to operate in the territories from which Israel withdraws, unlike the situation in the Gaza Strip.

Another option is that of the regional approach. According to this strategy, Israel would make use of the Arab Peace Initiative to impose a settlement on the Palestinians. In this context, it should be remembered that advancing a settlement on the Palestinian issue is Israel's key entry ticket into the Arab world, and its positive response to the Arab Peace Initiative can serve this goal.

Another regional approach is that proffered by Prof. Ben-Arieh. According to his approach, Israel would cede territory (transfer of sovereignty) in the south, the Palestinians would cede the territory that Israel wants to annex in a future agreement, and Jordan, too, would be involved in the exchange of territories. At face value, it appears to be a good idea, but its feasibility seems low: No Arab leader would give up land without a final agreement.

According to another approach, if none of the above options are possible, international coercion leading to the settlement of the conflict should be encouraged. This option has very little support in Israel. No international intervention, including American, would benefit Israel, or take into consideration all its interests. There are players in the international arena who desire the option of coercion, but these are not the players that Israel wants involved.

The Palestinian strategies regarding the conflict include several options:

› Negotiation. The current Palestinian paradigm presents new preconditions for the resumption of negotiations: a total freeze on settlements; the release of prisoners; and displaying a map with borders: 'Borders first' is the most important thing to the Palestinians today. No Israeli government has accepted this principle, since it concerns a tangible concession, and Israel wants to know in advance what it will receive in return.

› Armed struggle. This strategy has failed: The Second Intifada damaged the Palestinians deeply, and yet there are those who believe that it pushed Israel out of Gaza. In any case, the armed struggle option now appears in the eyes of the Palestinian leadership as doing more harm than good.

› Salam Fayyad, the former PA Prime Minister, offered at the time to build the foundations and institutions of a Palestinian state, a process that is no less important than the negotiation process. Since then, Fayyad has been pushed aside, together with his plan, and it seems that this option is no longer on the table.

› Popular struggle, seemingly unarmed, in the form of the First Intifada, and coupled with new elements, such as multiple outposts, strikes or marches to IDF checkpoints. There are Palestinians who believe that this is the most effective way forward but fear that it will spiral out of control.

› The chosen option is Plan A, which includes a 'political intifada' and the internationalization of the conflict in two dimensions: the advancement of international recognition of the Palestinian state by international institutions; the direction of legal warfare against Israel. In fact, this means the imposition of a settlement on Israel by the international community in the spirit of Palestinian demands, although thus far the Palestinian leadership has not taken any steps to indicate an all-out move in this direction, and settles for a 'step-by-step' approach.

Opinion surveys among the Palestinians indicate that there is a fixed majority, ranging from 50% to 60%, in support of two states. At the same time, about a third of Palestinians support a binational state (this trend will probably increase, and many young people back it). It is not clear what it means to support the two-state idea: whether it is an idea that brings a comprehensive solution to the conflict or just a stepping-stone to a new state, from which the struggle will continue. A key issue in this context is the Palestinian refusal to recognize Israel as a Jewish state. The Palestinians' explanation of this refusal is that it would infringe upon the rights of Israel's Arab minority and that such recognition would mean the elimination of the Palestinian refugee problem. This is also why the Palestinians refuse to use the term 'two states for two peoples,' which means recognition of the right of the Jewish people to their own state. It seems, therefore, that although the Palestinian public still has a majority favoring the two-state solution, this solution is perceived as leading to a reality that will allow a change in the situation over time rather than a complete and final settlement of the conflict.

To all this, one must add the split between Gaza and the West Bank – which is a huge burden on the Palestinian Authority and makes it difficult for the PA to realize any idea of renewing the negotiations with Israel – and the question of President Mahmoud Abbas' heritage and succession. It is not clear what will happen if Abbas disappears from the stage. He is the last Palestinian leader who enjoys considerable Palestinian consensus. The next generation of Palestinian leadership is emerging from below, and a difficult and serious struggle for succession seems likely, which might even be violent.

Proposed Strategies by Israeli Political Leaders

In Israel, there is a lively political and public – and sometimes frantic – debate on the issue of the necessary strategies for solving the Israeli-Palestinian conflict. Four programs offered by the Leader of the Opposition Isaac Herzog, Head of the 'Yesh Atid' Party Yair Lapid, former Defense Minister Moshe Ya'alon, and Minister of Education Naftali Bennett represent the dominant strategies currently emerging in the public and political debate in Israel.

The essence of Herzog's plan is the concept of separation steps toward the establishment of two states: Israel and Palestine. This program seeks to create a reality that would allow two nation states to coexist side by side. The precepts of Herzog's plan are:

› Avoiding steps that will neutralize the vision of the two states geographically and politically.

› Security activity against Hamas and the completion of the separation fence around the settlement blocs in the West Bank.

› Completion of construction of the wall in the Jerusalem area that will leave the Palestinian villages outside the city.

› The IDF will continue to control all West Bank territories to prevent terrorism.

› Convening a regional security conference with moderate Arab countries.

Yair Lapid's plan can be summarized by the principle of separation and regional initiative. It also seeks to promote the reality of 'two states for two peoples,' but emphasizes the importance of the regional angle. Its main points are:

› Promoting the idea of a regional agreement to lead to strategic change in the situation of the State of Israel.

› Recruitment of Saudi Arabia, Egypt, Jordan, and the Gulf states to support the idea.

› The United States will serve as primary sponsor for any settlement, but Russia and the EU will also play an important role as mediators who have connections in the region and can assist further in the implementation of the arrangement and its assimilation.

› Convening a regional conference as an opening salvo for a comprehensive regional settlement. The framework for the discussion at the conference will be the Saudi-Arab Initiative of 2002, reaffirmed at the Riyadh Convention in 2007.

› The regional conference will have to launch two parallel tracks, which will be sponsored by the US: the direct Israeli-Palestinian track and the multilateral Arab-Israeli track.

› There will be no compromise regarding security arrangements, which will be operated by graduated criteria.

The plan of Moshe ('Bogie') Ya'alon features conflict management and bottom-up economic development and outlines the following principles:

› Israel will hold as much land as possible and contain as few Palestinians as possible.

› Feasible and viable modus vivendi, while maintaining freedom of action in the West Bank.

› Setting modest goals, using a bottom-up approach.

› Allowing the Palestinians to have some autonomy (like their existing political autonomy).

› Promoting governance, stability, security coordination, and other areas of cooperation with the Palestinians.

Naftali Bennett's plan for conflict management and annexation includes the following steps:

› Applying Israeli sovereignty unilaterally in Area C in Judea and Samaria.

› Granting full citizenship of Arabs living in the annexed areas.

› Giving full autonomy with transportation contiguity in the territories controlled by the Palestinian Authority.

› Preventing all Palestinian refugees from Arab countries from entering the West Bank.

› Extending full Israeli security umbrella over all of Judea and Samaria.

› Making the separation between the Gaza Strip and Judea and Samaria permanent.

› Encouraging massive financial investment in the West Bank to facilitate co-existence between the Israelis and Arabs living there.

Insights and Proposed Principles, and Guidelines for an Israeli Strategy

The internal conflict within the State of Israel created by the Israeli-Palestinian conflict requires, first and foremost, a complete understanding of its nature. Only on the basis of a definition and full understanding of the conflict and its various aspects will we be able to increase the chances of a broader internal consensus and define our common strategic goals. Such an understanding will enable the construction of a conditional process in our progress toward a 'super target,' which will be agreed upon among us and with our friends in the free world.

The biggest controversy revolves around the question of whether a comprehensive, inclusive, and definitive arrangement by one concentrated effort can be reached. Some argue that it can. These people maintain that the contours of a final settlement are known in advance and that we are 'within reach' of it, and, therefore, a concentrated effort can end with a final Israeli-Palestinian peace agreement. On the other hand, some say that achieving a final settlement is unrealistic due to gaps, especially at critical points, that seem unbridgeable. According to this claim, the most Israel can give falls short of the minimum that the Palestinians can and are willing to accept. According to this argument, a final and sealed peace agreement is not possible under the current circumstances, which have already been in place for a decade. It would appear that support for this assessment of the situation has increased in the last two or three years.

A second argument that has emerged in Israel is whether the formula of division into two states is still a workable formula. Until two or three years ago, many on both sides believed that this was the winning formula. However, since then, the number of skeptics has increased, in part due to the feeling that the respective parties have reached an impasse. As a result, an examination of alternative formulae has begun.

The third dispute addresses the very nature of these alternative formulae. On the Israeli side, there is a camp that believes that Israel should be the only country with security predominance throughout the area, from the Mediterranean to Jordan, while the Palestinian entities to be established should be demilitarized, autonomous, of state-like status, but, in fact, sub-state entities. According to this view, Israel would unilaterally annex mainly unpopulated areas, while the Palestinian autonomies would continue to be concentrated around areas populated by Palestinians. An opposing school of thought in Israel maintains that Israel has no interest in an 'over-the-fence' presence and that the security wall, approaching the 1967 border lines, should be the border of the sovereign State of Israel. According to this view, maximal sovereignty will be granted to Palestinian entities, and Israel will unilaterally evacuate its presence in the West Bank, except for the settlement blocs.

The fourth dispute concerns the Arab Peace Initiative. In view of the impasse in bilateral nego-tiations, various approaches have been cultivated, calling for shifting the center of gravity to the

inter-Arab space, in other words, looking for different ways to involve leading Arab countries, such as Saudi Arabia, the Gulf states, Egypt, Morocco, and others. In this context, there are two principal currents of thought:

› That which considers Israeli activity around the inter-Arab option to be a downgrade of the Israeli-Palestinian component and its substitution by the organizing element of Arab-Israeli security and economic cooperation based on the new regional circumstances.

› That which denies the downgrade of the Israeli-Palestinian component and advocates tying it to the regional context and turning the negotiation process into a multilateral one, with the assistance of inter-Arab elements in order to overcome obstacles in the Israeli-Palestinian component.

The current reality is that all agree that the Palestinian leadership on the one hand and the Israeli leadership on the other cannot reach a full peace agreement under the current circumstances because this would entail mutual recognition by two nation states of the other's right to exist. But does that mean that Israel should be discouraged and give up on the desire to fulfill the Zionist vision of a Jewish and democratic state that is secure and enjoys regional legitimacy? The answer is, as mentioned, no. First, because it is still possible that eventually this goal can be realized. Second, because on the way to achieving it, Israel can and must make progress in the process itself, which should be called a 'negotiating process' rather than a peace process. This is because peace will be achieved in full at some later period, while any arrangements reached during this process can be components of peace in and of themselves and eventually create a situation that approaches relations of calm and peace, while each arrangement will have its own essential context and connection to the process as a whole.

Thus, the term 'negotiating process' fits an approach that reality allows, and even requires, Israel to adopt. This process should be such that, with each of its chapters and twists and in every situation and opportunity to develop, it would make progress in regulating our relations with our neighbors, with patient progress toward the desired goal of a sustainable, full, and comprehensive peace settlement. For both historical and practice purposes, the process should be one of a series of agreements and partial arrangements, some temporary and some permanent, which will defuse the charged and tense Israeli-Palestinian relationship and bring things to a point where disputes are resolved, partnerships are consolidated, and the political climate between the respective parties is cleared.

In this context, Israel must carry out proactive initiatives and formulate a policy to generate a situation in which it does not control the Palestinian population and does not stand in the way of the Palestinians realizing their national aspirations. The establishment of a framework of this kind is in itself an initiative and a proactive step in the desired direction for Israel.

In past programs for a comprehensive settlement, there have been partial or phased programs, including the Oslo outline and the 'Roadmap.' These programs were extended across all elements of the conflict but emphasized milestone coordinates on the road to a final settlement. It turns out that in the absence of an agreement upon the ultimate destination, it is difficult to draw up a graduated program whose end stage is agreeable to both sides, but which does not eliminate the viability of a step-by-step, phased, and incremental process. On the contrary, there is great benefit in a structure that is flexible in its procedures and deadlines, which is open-ended and allows continuous negotiation and implementation of agreements that are made during the process.

In the current reality of a quasi-stalemate in the negotiations, there are those who turn to the term 'conflict management' as an antithesis of 'conflict settlement.' The term 'conflict management' is not suitable, as it implies that the conflict is constant and that nothing can be done about it other than to 'manage it;' however, this is not the case. The conflict is indeed an existing phenomenon, but we certainly can and should do anything possible to defuse it, with this process important in and of itself. 'Conflict management' also refers to the management of the struggle and the combat involved in managing any conflict. Alongside this necessity, which may be unavoidable, we must dedicate a pathway for political action at all levels, aimed not just at 'managing' the present situation, but also at changing the situation, in a gradual way, as stated, if a final settlement is not achievable today.

The continuation of the status quo between Israel and the Palestinians (the absence of an agreement, political stagnation, the continued control over the Palestinian population in the West Bank, and the state of hot or cold war between Israel and the Hamas administration in the Gaza Strip) has its advantages and disadvantages. If one ignores the religious-ideological dimension, the main advantage is security (although there are perhaps also some economic advantages to controlling the Palestinian economy). The main objection voiced in Israel against a settlement with the Palestinians is that without complete Israeli security control in the field, two dangerous scenarios could occur: an increase in local terrorist activity and the massive entry of weapons, and perhaps even of personnel, into the regions passed over to Palestinian control. The example referred to is that of Hamas taking over the Gaza Strip, and the creation of a terrorist mini-state there, in addition to dashed hopes that calm would follow in Gaza following the disengagement.

The main drawback of the current situation – even if for the sake of argument one ignores the high moral and social price entailed in the denial of the rights of approximately four million Palestin-

ians – is the fear of the increasing isolation of Israel both regionally and in the bloc of democratic states, where the voices calling for sanctions against Israel and reducing support of it are growing. In the West, this applies not only to Europe, but also to the main ally of Israel, the United States, where the attitude toward Israel among young people ranges from indifference to criticism, even in the Jewish community. This isolation, the strengthening of which is indicated by multiplying signals, could bear a heavy political, economic, and cultural price. The price of ignoring regional options is more difficult to assess, but it seems that it is not insignificant. To this, one must add the assumption that the lack of political initiative strengthens the radical forces on the other side, that is to say, the forces that claim that the only way to achieve the national goals of the Palestinian nation is through violence because Israel 'does not understand any language other than force.'

The present situation, heading in the direction of 'conflict management' or 'creeping annexation,' is leading to a binational state. Such a reality would mean the end of Zionism and Israel's very existence as we know it, transforming the country into an apartheid, and, ultimately, pariah state. This, therefore, poses an existential and acute threat. Israel cannot continue forever with the occupation of another nation, restraining millions of people in an ongoing blockade and withholding basic rights from millions. It cannot do so on moral grounds. It cannot do so because of the damage to generations of young men and women who serve the occupation – an occupation that undermines their basic values and creates a violent and aggressive society. It cannot do so because of the economic damage it exacts from Israeli society. It cannot do so without losing international legitimacy and destroying the entire Zionist idea.

Israel's legitimacy as an independent state was not born of a divine promise and Messianic vision or of any historical right or deep inner conviction; its legitimacy was bestowed upon it by the international community. This was granted by the decision of the United Nations General Assembly to establish two states – Jewish and Arab – in the Land of Israel within the partition borders, by General Assembly Resolution 181 in 1948, and later by the recognition of the State of Israel by most countries in the world. If this legitimacy is eroded or disappears, Israel will become a pariah state like North Korea. Therefore, it is impossible to continue with the occupation.

Israeli students and lecturers in prestigious campuses across the US, and especially in England, already feel ostracized and unsafe. Even Israel's scientific activity is beginning to suffer from the academic boycott. It should be noted that Israeli science cannot exist without being an integral part of global science. Israel's Grand Strategy emphasizes the need to give impetus to the development of science and technology, to strengthen and streamline its economy, and to actively integrate into various arenas around the world, including in our region. Progress in regulating the Israeli-Palestinian conflict not only reaps direct economic benefits for Israel, as has been seen in the past, but will also have a positive impact on the status and acceptance of Israel in the world

and particularly in those countries vital for Israel's promotion as a state and the advancement of Israel's economy and science.

As mentioned, more and more Palestinians are beginning to think it might be better to renounce the idea of two states, and even in Israel the idea is losing its appeal. It is in Israel's interest to retain this option, as long as it is not too late and as long as most of the world believes in it and is ready to support it. One such way is for Israel, together with the Palestinian Authority, to present an initiative to the United Nations, that is to say, a proposal for the recognition of a Palestinian state that Israel would be the first to recognize. Such a political initiative, to be carried out carefully and gradually, is a calculated risk that might yield benefits.

Israel is affected by the political deadlock. The Israeli government of Benjamin Netanyahu is seen as one that objects to the negotiating process, and whose sole purpose is to gain time until the acceleration of settlements in the West Bank makes any political arrangement unfeasible (it is already impossible to maintain any territorial contiguity in Judea and Samaria without evacuating settlements). There is no point in arguing that the Palestinians are partly responsible for the current situation. In a state of mutual recalcitrance, the blame should be apportioned to the stronger party, namely Israel. A political initiative will relieve Israel of a lot of pressure. However, it is important to clarify that this step should be taken not only for image purposes (like most of the 'political' steps taken by Prime Minister Benjamin Netanyahu), but also in recognition of the urgent need to properly address the demographic problem and the continued situation in which the Palestinian masses are denied their civil rights. Without such a response, Israel will eventually no longer belong to the family of enlightened countries.

Past endeavors contain precedents that can point to many unique benefits. Despite the negative way in which the Oslo agreements are presented today, these agreements were not a 'disaster.' On the contrary, they were a success in three important ways: First, they brought about the very establishment of the Palestinian Authority, which is the only formal framework accepted by all for the existing arrangements in the area; second, they dissolved the embargo on Israel, opened the world to Israel in general and to Israeli exports in particular, allowing the high-tech boom and for Israel's economy to thrive; and third, they opened a window for further negotiations. If Israel had adopted the Arab Peace Initiative of more than a decade ago, the situation today might be very different.

Therefore, Israel should prepare a few guiding principles, which will guide it in its approach to the negotiation process as follows.

› It is essential to develop a structured and formal framework that will allow continuous and sophisticated negotiations and dialogue with the other side. The establishment of such a framework is not inconsequential, and it would be very useful to have an open framework, similar to those in economics and munitions, which have been held for decades and operate according to fixed rules and developed agendas that allow constant progress. Such a framework can also include bypass channels, but its main importance lies in its ongoing existence. This task requires a sophisticated political architecture. Frameworks that collapse and break down cause processes to be aborted.

› It is very desirable that the framework for dialogue be accompanied by a common code of behavior for both sides. Along with all the rules that are typically included in such codes, it is especially important to reinforce the conditionality of non-aggression. The non-aggression principle – a concept that was once rooted in the Arab-Israeli dialogue – should ensure mutual avoidance of aggressive steps, as well as of economic warfare and even propaganda warfare. Achieving consensus on these rules is not simple, but there is a sufficient number of historical precedents and anchors that can be revitalized.

› Israel will be able to accept maximal procedural flexibility, as the process can benefit from such elasticity. For example, international involvement should not be ruled out, since international factors could contribute to the process, and given the consensus among the regional parties, this advantage should be exploited. The same applies to timetables and discussions. There is no need to set a deadline, although target dates could be set.

› Under the current circumstances, there are advantages to involving key regional parties in the process. Weaving the Arab Peace Initiative into the process may result in Arab involvement, even if it is all-regional. Jordan and Egypt have a say in the Palestinian issue, and giving such a status to Saudi Arabia, Morocco, and other Arab countries is appropriate and should be considered.

› The changes in the region pose a wide and broad range of new possibilities and opportunities for Israel, which exceed initiatives such as the Arab Peace Initiative. The latter's proposals have been on the shelf for a long time and may not necessarily be relevant today. For example, outlines for land swaps, as achieved recently between Egypt and Saudi Arabia, have become relevant in light of the political transformation of the Middle East.

› The regional situation proves that the future of the Middle East does not necessarily depend on the existence of nation states, and that the new non-state entities may increasingly characterize the region. In other words, the future Middle East will probably be composed not only of nation states but also of political entities and sovereignties of different types. For the Israeli-Palestinian conflict, too, one can think of a solution of this nature, such as the possibility that the Gaza Strip would be a kind of non-state sovereignty or entity, independent of the West Bank.

› The rule that 'nothing is agreed until everything is agreed' will cease to exist, so that it would be possible to implement partial agreements before a comprehensive agreement is reached.

› The agendas of the issues to be discussed, as set in previous rounds of talks, will not necessarily be fixed. It is possible to shuffle the deck in terms of splitting the various issues, and one could even think about the timing of the talks in a different order than in the past.

› The guiding principle for both parties is to exhaust the available possibilities and address the areas where the chance of reaching applicable agreements is greater, giving them priority over issues that are perceived as more complicated.

Israel should insist on three basic principles:

› **Security:** Throughout Israel's conduct in negotiations, and with all its willingness to compromise and reach an agreement, one practical consideration is of greater importance than all other considerations, and this is security. The accepted rule in talks on arms control, whereby nothing will ever be done that deteriorates or degrades the security situation – i.e., each step should improve security – should also apply here.

› **Political considerations:** Any move that Israel takes should not only promote the issue discussed, but also improve Israel's status, condition, and its international image.

›   **The legal dimension:** Israel will prioritize meeting the requirements of international law, while preserving human rights and international laws, including those relating to its citizens and residents of the territories under its control.

Meanwhile, Israel should consider ending the demand that Palestinians recognize Israel as a Jewish state as a precondition. First, such a requirement has the potential to thwart any initiative for negotiations and entry into negotiations. Second, there is no need to accept legitimacy from the Palestinians or any single external factor: Neither Egypt nor Jordan was required to do so in their peace agreements with Israel, not to mention the fact that Resolution 181 of the UN General Assembly, which, as stated, constitutes the formal international legitimacy of the State of Israel, defines it anyway as a Jewish state.

Thus, the definition of the process is not the setting of interim targets, but rather the setting of the principles whose gradual attainment will allow progress in stages. This setting of the principles and their order of appearance must give confidence to all parties that Israel's desire to achieve the goal of two states is genuine and stable. Based on the hierarchy of principles, it will be necessary to develop a process with different options of interim targets, which will probably evolve over time. This process should be conditional, and because it would not be either fully or partially agreed upon with the Palestinians, it should be independent of their initiative or consent in its initial stages. The condition is that we are kept safe, both immediately and in the long-term; if deterioration occurs here after a certain point in the process, Israel must withdraw without hesitation to an earlier stage of the hierarchy of principles and wait for the moment when it can move forward again. Israel must act persistently but without illusions. A bold leadership can skip a few steps, and hopefully that leap will lead to a positive momentum on the other side and allow faster progression to the ultimate destination. But if this hope does not materialize, Israel must return to the previous step, and so on. If such processes are agreed upon with the parties in Israel and with our partners in the international community, Israel can maintain its internal and external legitimacy because its conduct will then appear – and be – genuine and honest. Israel's consistent behavior in the process, which is fundamentally fair, may also bring about with time – because of its inherent 'carrots and sticks' approach – its gradual acceptance by the Palestinians.

The conduct of the kind described above is very difficult politically and emotionally, because it is not based on immediate solutions and on measures, the effectiveness of which is guaranteed. Moreover, this policy requires consistency over time under conditions that can be very difficult in certain periods. However, it is clear to us that there is no better remedy

In the absence of an organized process, Israel can take unilateral steps as it may see fit and which are consistent with the international reality. However, in a regulated negotiating process, Israel's

moves, like those of the Palestinians, will be founded on the basis of coordination, agreements, and reciprocity. It is clear that there will not be symmetry of identical steps, but neither the Palestinians nor Israel would be acting unilaterally.

In the last two to three years, the parties have blamed each other for unbridled and unacceptable behavior: Israel is accused of continuing construction in the settlements, and itself accuses the Palestinian Authority of continued incitement and damage against it in the international arena. It stands to reason that the renewal of the negotiating process will be accompanied by the adoption of reciprocal restraints, and it will be only natural if Israel then stops building outside the security fence, while the Palestinians halt incitement against Israel domestically and abroad. There is room to make use of tools known as 'confidence-building measures' in the true sense of this term; that is, identical steps that are taken simultaneously by both sides, vis-à-vis each other, and whose primary benefit is in reducing suspicion and increasing mutual trust. Concessions that are not symmetrical and identical and whose contribution is on a different plane – for example, economic concessions – will not be defined as confidence-building measures, so as not to diminish this tool's unique contribution.

If a frame of reference is required as to the nature of the ultimate settlement, or its components, there is already a base of formulae and statements accepted by the two sides. These formulae are mentioned in the resolutions of the United Nations and can be recapped briefly: UN Security Council Resolutions 242 and 338, the peace agreements with Egypt and Jordan, the Wye River Memorandum, the Clinton Parameters, the Roadmap, the Annapolis Declaration, the Arab Peace Initiative, and the working document of US Secretary of State John Kerry. In addition to all these are the Israeli-American memoranda of understanding. Key principles linking all these formulae are as follows: an agreement that the final border settlement between Israel and the Palestinians will be based on the 1949 lines, with land swaps; demilitarization of the areas evacuated by Israel; and consideration of the demographic reality of the settlement blocs, and so on. It is possible to compose terms of reference for the outline, based on the attempt made by Secretary Kerry, and add to these elements procedural processes.

It is important to emphasize that Israel can decide and implement decisions regarding the conflict with the Palestinians only for itself and in light of its own interests. It cannot and is not at all desirable that it depend on the consent or willingness of the other side. It is clear that if the two sides share a common vision of peace, our initial differences will not be as great as some portray them. In any case, given Israel's goal to exist in security as a democratic state that is prosperous, just, strong, with a firm legitimacy in the international arena, and which has a Jewish majority, it must take positive steps and act in a way that promotes the only solution that can guarantee

all these – the solution of 'two states for two peoples,' as described above. Israel should refrain from any actions or measures that distance it from this reality or place obstacles in the way of its establishment.

A TEMPLATE OF EIGHTEEN RECOMMENDED PRINCIPLES AND GUIDELINES

1. **The desire for peace:** The long-term goal of Israel is the existence of a comprehensive, stable, and lasting peace that would bring reconciliation, acceptance, and good neighborly relations.

2. **The necessity of security:** The security component in Israel's conduct is cardinal because of the violent Middle Eastern reality and the continuing conflict. Any Israeli move must preserve and enhance Israel's security and contribute to reducing threats, while including all the necessary measures to protect Israel's security over time.

3. **Asymmetry between the parties:**

   A. **Regarding the essence of the conflict:** For Israel, a partition arrangement that will create a two-state situation – Jewish and Palestinian – will end the conflict and all claims. For the Palestinians, such an arrangement will not put an end to their claims, primarily the right of return. Even Israel's right to exist as a Jewish state is denied by the Palestinians.

   B. **Regarding urgency:** Among the Palestinians there is a sense that time is on their side, and hence, there is no vital need and no space for concessions on notable, significant positions. The opposite is true for Israel.

4. **The dominant partition formula:** The principle of Jewish nationalism, historical experience, and deteriorating international legitimacy prioritize the partition formula of two states over unification into one state. The partition arrangement is preferable for Israel, since only partition ensures that it will be the nation state of the Jewish people. An annexation strategy would dilute the Jewish identity of Israel.

5. **The ideological-constitutional anchor:** The State of Israel was established and accepted among nations on the basis of Israel's self-definition as a state where the Jewish people's right to self-determination is materialized, as a country whose values are those of equality for all its citizens, and which accepts the principles of the UN Charter. Violation of any of these tenets would thus constitute a deviation from the fundamental principles of Israel and would harm its fabric and inner strength, as well as its international legitimacy.

6. **Phased Process:** Currently, there is no meeting point of mutual and symmetrical recognition similar to the formula of 'two states for two peoples.' In the absence of a consensus on end-goals, progress can be made over time only as part of a gradual and phased process.

7. **Israeli initiative:** An Israeli-declared operational initiative will give Israel a diplomatic and promotional edge, which it is essential to achieve and maintain. The initiative should allow further leverage.

8. **The importance of the process itself:** The very fact of Israel taking the initiative and being active in an institutional framework for negotiations, and the very existence of an ongoing settlement process, are just as important politically as an outline for the arrangement and its specific components.

9. **Steady progress:** The process of continuous and aggregated arrangements will evolve according to what is possible, while creating a dynamic of continuous progress. The process itself is only slightly less important than the eventual outcome.

10. **Rules of conduct:** Terms of reference should be set that protect Israeli interests, as well as rules of conduct that will constitute confidence-building measures, such as mutual restraint: on Israel's part, restraint in settlement construction, and on the Palestinian side, restraint in hostile actions, including international propaganda, and in legal and economic arenas.

11. **The international dimension:** The superpowers have the status and ability to assist the negotiating process. The United States will remain a major partner of this process, and the new administration is expected to reassess the situation. Israel can take advantage of this time interval to promote the negotiating process on its own initiative. For this purpose, it can use international frameworks and resources.

12. **Negotiations as a regional lever:** Progress in the negotiating process will constitute a lever to deepen Israel's operations in the region and its integration in it. Regionalization provides new possibilities and opportunities, which should be leveraged. Israel will exhaust these opportunities together with other countries in the region, both in regional contexts – economic, security, etc. – and in the context of normalizing measures and regulating the conflict.

13. **Room for regional maneuvering:** The two major challenges to the conclusive settlement are the issue of the Palestinian right of return and the status of Jerusalem. For both, formulae have been previously drafted and rejected by the parties. In the current reality, new avenues for possible arrangements are opening. For example: international instruments of compensation for refugees, to be applied equally to Palestinian refugees and Jewish refugees; and legal instruments and various sovereignty formulae that have international precedents will allow the issue of Jerusalem to be seen as a solution, rather than a problem.

14. **Jordan is an integral part of the equation and has a say and interests in this context.** The stability and security of Jordan are very important to Israel.

15. **Confederative frameworks:** Limited confederative ideas in the Palestinian-Israeli-Jordanian context may be useful in the future.

16. **Borders and land swaps:** The land swap instrument is relevant in the context of future boundaries and is capable of creating regional bilateral or multilateral options, against the background of the formation processes of borders, entities, and new territorial arrangements in the region.

17. **An institutionalized and regulated framework for the arrangements process:** The old method of spurts of intermittent and ad hoc negotiations should be replaced by a permanent, open, and continuous process framework.

18. **Process flexibility: Flexibility refers to several components:**

› **Procedural flexibility:** Israel will demonstrate a high degree of procedural flexibility, along with insisting on substantial interests. For this purpose, it can use negotiation-supporting devices (rear channels, special envoys, Track II diplomacy), as long as these do not disrupt the overall process. The confidentiality and transparency of the talks are not sacred. Maneuvers between them will be determined by examining progress.

› **Flexibility of the framework:** A continuous framework without a hard deadline.

› **Operational flexibility:** Partial agreements reached, whether bottom-up or top-down, shall be implemented upon their attainment, while waiving the rule of 'nothing is agreed until everything is agreed.'

› **Flexible Agenda:** Non-adherence to the inventories of the permanent issues, but dividing them into components, adding to them, and 'shuffling the cards' regarding the order of handling and implementation. The guiding principle will be the maturity and feasibility of progress, and the test will be the actual outcomes.

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SCIENCE
TECHNOLOGY
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PART 3

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BACKGROUND AND OBJECTIVES

In the second decade of the twenty-first century, science and technology continue to be—perhaps more than ever before—the undisputed central components of human welfare, the economy, and security. They affect the destiny of nations and states, for better and for worse, as reflected by the selection of science and technology as one of three clusters of issues or pillars comprising Israel's Grand Strategy, alongside statecraft and security, and the economy and society.

By global standards, Israel has achieved extraordinary successes in science and technology, and continues to do so. This is manifested in many fields, such as security, the economy, industry, innovation, and startups. However, the national apparatus creating these scientific and technological capabilities is showing signs of attrition and stagnation, both in absolute terms and relative to states with which Israel competes on the global markets and in its geopolitical arena. One of our major conclusions is that without a resolute national initiative the crisis will worsen—so much so, that Israel will be placed jeopardy.

At this time and before it is too late, a focused and determined national effort by Israel's government and Israeli society is needed to place science and technology – including scientific and technological education – at the top of the national agenda. A national emergency program is a necessity, as the warning bells are already sounding, and action, even if taken immediately, will show its effect only years in the future.

This document presents ten insights regarding existing and anticipated obstacles in the fields comprising the scientific and technological structure of the State of Israel, consisting in part of science and science-technology education in the schools, basic and applied research and graduate training at universities and colleges, industrial and defense R&D, and the interrelations among these systems. To ensure the long-term development of the scientific and technological structure and its economic, social, and security ramifications, it is necessary to remove these obstacles. However, it is insufficient to identify the problem and raise the alarm. We therefore offer a series of solutions and action items, some of which exist and some of which are new, to remove these obstacles, and to encourage Israel's growth and resilience.

The insights and solutions presented herein were formulated over the course of a year in which dozens of meetings and debates were held with the participation – in various panels – of some forty leading scientists, industrialists, economists, and educators, both veteran and young. The key message of our work is the whole gamut of our insights rather than one particular idea or another (some of which are almost certainly well known to the system). It is necessary to coordinate the implementation of the range of insights and examine their interdependence, as well as their dependence on the economy/society and statecraft/security related clusters of issues.

How did science and technology become so central to Israel's economy and security?

The modern economies of advanced nations are no longer based primarily on natural resources, cheap labor, or geographic expanses, but rather on human scientific-technological knowledge. Like the modern economy, national security is to a great extent dependent on scientific and technological capabilities. In fact, the modern economy, security, and science and technology are the three factors most critical for ensuring the future of any developed nation, and especially that of Israel.

This state of affairs is hardly coincidence or the consequence of a passing fad. It is the manifestation of a new era in the history of humankind, the outcome of profound historical processes of hundreds of years that matured in the middle of the twentieth century, with World War II proving to be a watershed. These processes are deeply rooted in the essence of science and technology, representing the inevitable result of the melding of two tremendous human revolutions: the scientific revolution and the industrial revolution. This melding was the catalyst for a revolution greater than its parts – the scientific technological revolution in which we find ourselves today. This revolution also generates scientific and technological breakthroughs in knowledge-intensive industries; it is the factor making globalization possible; and it is the decisive factor in economic success and military power.

HISTORICAL PERSPECTIVES

The scientific revolution began some 400 years ago at the end of the European Renaissance. It provided the method, insights, and tools with which humankind decodes the secrets of nature, including those of life itself, giving human beings tremendous power and, via technologies, opening up new worlds time and time again. The very need for technology (that is, the use of external resources to act on the world and change it) preceded the scientific approach, and has been a feature of human life since the dawn of man, enabling humanity to carve out their own unique evolutionary niche.

However, the modern industrial-technological revolution started only a little more than two hundred years ago in Great Britain, with the newly-invented steam engine serving as its symbol. It started the process of relieving humans from hard labor and dependence on power sources from nature, and made it possible for people to produce more than they need, increasing per capita product. The industrial-technological revolution spread out in time and space wave after wave: by means of trains, the steel industry, agricultural machinery, the internal combustion engine, electricity, oil, the chemical industry, the plastics industry, the electronics industry, and so on. We need only mention that in these few hundred years the daily per capita energy consumption went from some 2,000 Kcal, just a little more than the energy needed to survive, to 200,000 Kcal in developed nations – one hundred times more than what is needed for survival. This demonstrates the capabilities of human intelligence and their role in improving human welfare through science and technology.

For a long time, these two major revolutions – the scientific and the industrial-technological – evolved in separate tracks, having little contact. It was only in the early twentieth century that mutual relations between science and technology grew, inaugurating a new era of mutual and ever-increasing acceleration.

World War II was an important turning point, perhaps a watershed, in this process of integration. In that war, science was systematically harnessed to the war effort to develop military technologies, thereby making a decisive contribution to the Allies' victory. Obvious examples are the atom bomb, radar, and synthetic rubber. The tremendous success of using science to attain military achievements convinced decision-makers that science has the potential for great power and that combining it with technology can bear remarkable military and economic fruits. Finally, in the second half of the twentieth century, the two revolutions merged and set off the newest revolution – the scientific-technological one.

Towards the end of World War II, US President Franklin Roosevelt, who during the war became aware of the tremendous power of science and its role in the victory, realized its long-term significance and ordered the preparation of a broad program to harness science, to "create a fuller and more fruitful employment and a fuller and more fruitful life." The program was called "Science: The Endless Frontier," and it initiated a profound change in the US administration's attitude to science (and subsequently a similar change in most advanced nations). It stopped being "the hobby of scientists," and became a national necessity instead. Growing sums of money were now being invested in basic and applied science, leading to a long chain of new technologies that became central factors in the unprecedented and constant economic growth still taking place to this day.

It is therefore not surprising that all nations, both those at the forefront of technological advances and those striving to be at the cutting edge (including Iran, Turkey, Saudi Arabia, and other nations in the region) are investing vast sums to advance their scientific and technological capabilities and their economic and security byproducts. In this new era, the economy and even fate of nations and states depend on their ability to adapt to new processes and reap their benefits. In this era, the gap between technologically-scientific advanced and backwards nations will only grow. Lagging nations will find it increasingly difficult, perhaps even impossible, to board the racing train of progress. Of course, the scientific technological era affects the individual and society in many other ways, such as an incredible leap in access to knowledge, frequent interactions with computerized systems on a daily basis, and effects on interpersonal relations and the consumption of culture.

However, because of the narrow focus of this document, we shall not deal with this aspect of the new era.
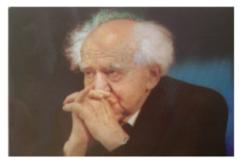

Photo with permission Keren Kayemet Archives

David Ben-Gurion, Israel's first prime minister, recognized the critical importance of science and technology in building a state and a nation. In 1949, at the seventh session of the first Knesset, presenting the basic principles of the first government, Ben-Gurion enumerated three factors as critical for overcoming the huge obstacle to state building: the help of the Jewish people in the diaspora, the spirit of creative pioneering beating in the heart of Jewish youth in Israel and abroad, and:

> *"The third item that will bring about this wonder is the power of science and technical knowhow which we shall attach to our work. What is perhaps the greatest revolution in the human life on earth is taking place in our own generation: the revolution of man controlling the most powerful and secret forces in nature hidden in the atom, and conquering space and all the secrets of the universe. We cannot equal many nations in force, wealth, numbers, or materials. But we are not inferior to any people in our intellectual and moral abilities.*

This is the great, and only, inheritance given to us by Jewish history, soaked as it is in suffering, sorrow, and heroism. Any act we undertake, in material and in spirit, to strengthen our security and expand our economy, to educate our children and integrate our immigrants, will be based on the conclusions, principles, and superiority of pure and applied science and the most sophisticated technical knowledge so that we do not fall short of the most developed nations in the world in terms of the quality of our product and labor. This is how we view our mission and we shall try to realize it honestly and to the best of our ability".

These words were true then and are still true now. Time and again, Ben-Gurion proved in practice that he meant every word, setting aside large budgets at the time to scientific research, both civilian and military. He closely associated himself with the leading scientists of his day, actively seeking out their opinions and advice. These scientific leaders – or rather scientific strategist - not only conceived the strategy of the Israeli science, but also had a profound influence on the Israeli society as a whole and the State of Israel's orientation to the West in general, the West representing the scientific frontier of the developed world. Ben-Gurion understood that, without being a part of Western science, Israel would never survive. And, it was completely congruent with his vision of the future of the nascent state. The vision of the scientific strategists of that time also served as the foundation for the Israeli middle class, the backbone of the nation as a whole.[27]

A Historic Window of Opportunity

Ben-Gurion was preceded by the men and women who envisioned and built the state and their vision and accomplishments. In his book Altneuland (The Old New Land), Theodor Herzl wrote that our endeavor would succeed only because it was always at the technological forefront of the modern era. The vision and its first fulfilment took place in several different spheres of activity that strengthened one another. Israel was unique by establishing institutions of higher education and research long before the state was founded, at a time when the small Jewish community in Mandatory Palestine was still struggling for its very existence. Thanks to the initiative of the World Jewish Congress, two universities – the Technion in Haifa (1924) and the Hebrew University in Jerusalem (1925) – opened almost a quarter century before Israel declared independence. Albert Einstein was deeply involved in the processes that led to the establishment of both these institutions. The Ziv Institute (later the Weizmann Institute) in Rehovot, dedicated to the development of applied science, was founded about a decade later, at a time when original agricultural research was already well under way. All of these served as magnets for scientists and students from

27   Moshe Lisak and Uri Cohen, "The Scientific Strategists in the Era of Statehood: Mutual Relations between the Academic Community and Political Power Centers" (Hebrew), Studies in the Rebirth of Israel: Compendium of Zionist, Settlement, and State of Israel Issues, Vol. 20, 2010, pp. 1-27.

the community developing in Israel as well as the Jewish diaspora, and as a solid foundation for education and knowledge that would allow innovations in science, medicine, technology, defense, and economics in future generations. At the same time, doctors and engineers, mainly from Europe, arrived and laid the foundations for medical practice and research focused on regional problems and engineering initiatives in the economic and public sectors.

The importance of science and technology was also obvious to the Hebrew defense force since its inception. As early as 1946, the Haganah founded a scientific research department with three branches located at the Hebrew University, the Technion, and the Ziv Institute. The operation of this department was reinvigorated and enhanced by Ben-Gurion under the leadership of scientists and engineers, both from the academe and from the British army. When the state was established,

it became the Science Corps, serving as the foundation for developing critical defense capabilities and research and development efforts at Rafael Advanced Defense Systems, the Israel Atomic Energy Commission, Maf'at—Administration for the Development of Weapons and Technological Infrastructure, Israel Aircraft Industries, Israel Military Industries, and other advanced industries of defense importance. These and other institutions established unique scientific centers of excellence, amassed knowledge, developed capabilities, and trained generations of scientists, researchers, and engineers whose contribution to Israel's defense capacity – and economy – is inestimable.

Years later, in the 1990s, Israel had the opportunity to board the 'racing train' of the modern global economy and become a leading high-tech power, thereby ensuring its defense capacity and economic wellbeing. At the same time, a rare historic coincidence in the rapidly accelerating scientific-technological revolution, which had created Silicon Valley and its mirror images elsewhere in the world, occurred in which three factors converged to open a window of opportunity for Israel and enable it to break through to the heart of the high-tech world:

The first, and most decisive, factor was the fact that defense technologies, the products of long-term investments in nurturing excellence, and the training outstanding engineers and scientists by the Research Universities, reached a point at which they were ready to leap to the forefront of global technology. This was the beginning of an accelerated process of transmitting scientific-technological knowledge to the information sector-in-the-making—intensive startup industries. Knowledge of scientific-technological-security capabilities had been developed through vast investments by the State of Israel for half a century. These investments may have begun because Israel had no choice, as powers around the world refused to sell cutting-edge technologies to the state, but this lack of choice also fast-tracked the critical involvement of the academe in Israel's security effort.

The second factor was the far-reaching geopolitical changes in superpower relations as well as changes within the Soviet Union, leading to Glasnost and Perestroika under Mikhail Gorbachev, the USSR opening its doors, and the mass immigration from the Commonwealth of Independent States. Within five years, the number of engineers and scientists in Israel doubled, making the country one of the richest in the world in terms of technological-scientific human resources relative to the size of its population.

The third factor was the beginning of the peace process with the Palestinian Authority in the 1990s, which weakened and in some cases ended the Arab boycott and opened the world markets to Israel.

All of these, together with wise government policy that encouraged R&D and laid the basis for the venture capital industry, generated an enormous flood of investments, making Israel into the startup nation. Under these circumstances, advanced Israeli industries soon gained worldwide respect. It is important to remember that Israeli achievements in the defense field, seen around the world as a combination of determination, talent, and technological skills, helped promote the products of other high-tech industries. The entrepreneurial nature of Israelis, their willingness to take risks and try new things, and their ability to improvise thanks to knowledge and stubbornness, are also an inseparable part of the Israeli success story.

Israel's research universities, on par with the best institutions of higher education in the world, have trained and continue to train the cream of Israeli youth to become engineers and scientists, thus providing a critical contribution to that success. Without them, the state would have remained a poor agrarian nation. Instead, high-tech industries are the engine driving Israel's industry and economy. The decisive importance of science and technology to the people's wellbeing and to maintaining and promoting security is not in dispute. In these fields, Israel has proven achievements that garner global admiration. But these achievements are now threatened by certain factors and processes in society and the state. In this document, we shall expand on the obstacles facing future success and threatening to reverse Israel's status as high-tech leader.

Finally, if the decisive importance of science and technology is not in dispute, the critical importance of science and technology education is certainly incontestable.

Technology and Industry

It is difficult to overstate the importance of knowledge-intensive industries to the Israeli economy and to Israel's status and image in the world, which bring the finest technological companies in the world to the country to establish their R&D centers and manufacturing plants. Knowledge-intensive industries account for about 50 percent of all industrial exports, but it is important to remember that they employ only about 8 percent of the workforce and contribute only about 12 percent to the

GDP. The rest of the GDP comes from the range of traditional industries and services, employing 92 percent of the workforce. But the productivity of the traditional industries and services is low, also resulting in low wages. This is a key factor in the socio-economic gaps within Israeli society. Without a dramatic improvement in the productivity of these sectors, it will be impossible to reach the per capita GDP of advanced nations, raise the standard of living of most of the population, close socioeconomic gaps, and attain social justice. Only efficient industries and services can lead to salaries that support employees with dignity. Productivity can be enhanced only though a better workforce that relies on advanced technologies, R&D, and modern management practices. Therefore, the need for a skilled technological-scientific workforce at the level of graduates of colleges, universities and two-year post-secondary educational institutions, as well as graduates of practical engineering and technician schools, goes far beyond what the knowledge-intensive industries require. Moreover, the process of improving and training workers has tremendous potential to include within the workforce large population segments currently not working, such as ultra-Orthodox men, Arab women, and parts of the urban and geographical peripheries.

Science-technology-based industries are a prerequisite for maintaining and advancing a firm, long-lasting foundation for economic prosperity and security. These include information and communications industries (ICT), a field in which Israel already has a relative advantage. As well as, future twenty-first century knowledge industries in life sciences, molecular biology, computational biology and informatics, nanotechnology, brain and cognitive sciences, robotics and brain-inspired technologies, individually tailored/personalized medicine, and the ascendance in the national and defense related importance of cyberspace and the potential of Big Data and deep learning, where Israel has a relative advantage, because it pioneered the development of computer sciences and is still a leader in the field. When these industries come together and are integrated with ICT, they enhance one another, and operate together and in tandem with upgraded, more efficient traditional industries and services. All of these are critical to Israel's resilience and future, to prevent stagnation and backwardness, and to promote the population's welfare, social equality, and national security. It therefore follows that strengthening all things scientific and technological in Israel is a national must.

The most basic and critical conclusions we drew in the early stages of our work is that the problem is not rooted in any single obstacle that, if only it were overcome, would allow everything else to fall into place. We are looking at a systemic weakening of everything that produces, sustains, and promotes Israel's scientific and technological capabilities and makes their byproducts possible in Israel's wellbeing, economy, and security. There are cracks in the whole system that, unless they are addressed in a coordinated fashion and all at once, threaten the stability of the entire structure. What should keep our decision makers awake at night is the recognition that this is a destructive process which, unless it is reversed, will accelerate and lead to catastrophic consequences.

Our work may be summarized in ten insights we shall expand on below. We shall also suggest a series of solutions and action items needed to remove the obstacles we have identified.

1. **Lacunae in science and technology education.** Israel is experiencing a massive growing deficit of high school graduates at sufficient high mathematical and scientific levels[28] capable of successfully coping with higher education in science and technology. In addition, Israel must significantly increase 'excellence tracks' offered in these subjects. It is critical to create an emergency plan that will attract students to science and technology and encourage excellence. At the outset, we want to stress that an educated healthy and advanced society must also be blessed with students excelling in the humanities, social sciences and the arts, to promote cultural richness and openness and give a deeper meaning to life and culture, beyond the natural sciences and technology, This document, however, focuses on science and technology.

2. **Lacunae in professional technological education.** In recent decades, the number of students in professional technological training tracks in Israel has steadily declined and is lower than that of European nations. The low enrollment of students in these tracks is an obstacle to economic growth because of the need for technicians, practical engineers, and professional workers, as well as the engineers who emerge from this background.

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28   Not to be attained by a lowering of the bar to create a semblance of achievements

3. **Very large non-participatory population segments.** Youth in Israel's geographical and social peripheries and in the ultra-Orthodox and Arab sectors, which represent a growing percentage of the population, are not involved in scientific-technological endeavors at universities, in R&D, or in industry. Each of these groups needs a unique program adapted to its special needs.

4. **Lack of suitable teachers.** There is a severe deficit in a teaching cadre in the school system capable of and committed to consistently leading science and technology studies. It is critical to create programs to encourage and attract candidates, and lead change in teachers' professional status (including appropriate working conditions and salaries).

5. **Weakening of science-technology research relative to the global forefront.** Research and research universities at international levels are a critical component in sustaining and promoting the state's scientific and technological capabilities and preventing the provincialism of Israeli science. They set the standard for the rest of the system. Yet we are witnessing threats and early signs of decline in the Israeli scientific infrastructure.

6. **Obstacles in moving technology between the academe and industry.** The potential for the transfer of technology between the academe and industry is not being maximized due to cultural differences between them and the relative lack of mission-oriented research at the institutions of higher education.

7. **The weakness of traditional industries and services.** For many years, the traditional industries were the central economic and employment base in the economy, and they continue to be so today as well, with beneficial effects especially for the periphery. But the low productivity creates a real economic and social problem. Promoting this branch to its rightful place is of critical national importance, requiring a nation-wide approach based on innovative and financial tools.

8. **The slowdown in the growth of the high-tech sector,** the significance of R&D centers, and a knowledge drain. In recent years, growth in Israel's high-tech sector has tapered off. Instead, we are seeing a trend of establishing R&D-intensive centers, whose economic potential is maximized across Israel's borders. The result is a drain of knowledge and a decrease in the employment share of the high-tech industry.

9. **Boycott of Israel.** Israel's international position and the capabilities of Israel's R&D community are greatly affected by the state's deteriorating geopolitical standing, such as access to and participation in large science and development programs and multinational research flagships of future technologies, cooperative ventures, and the training of scientists at outstanding knowledge centers the world over, and resulting in boycotts and sanctions operated by scientists, organizations, and nations. This is a threat that must be taken into consideration when shaping Israel's foreign affairs and defense policy, and everything must be done to minimize its possible ramifications.

10. **Lack of synchronicity.** All entities contributing towards Israeli science and technology at the national level in the society are in need of appropriate coordination. Such coordination must include all the major settings and systems involved in promoting science and technology in Israel: the schools, the academe (while maintaining academic freedom without which there is no excellence at the frontier of knowledge in basic research), and industry (including the defense industry).

AN IN-DEPTH ANALYSIS OF THE INSIGHTS

Insight 1: Lacunae in science and technology education

Israel is suffering a growing deficit of high school graduates at sufficiently high mathematical and scientific levels capable of successfully coping with higher education in science and technology. In addition, Israel must significantly increase the excellence tracks offered in these subjects. It is critical to create an emergency plan that will attract students to study science and technology and encourage excellence. In turn, these students will pull many in their wake and, in the future, push the frontier of knowledge and its byproducts steadily ahead for the benefit of Israeli society, economy, and security.

According to a 2015 report presented by the Chief Scientist's Bureau at the Ministry of Economy, two-thirds of Israeli companies in 2012 stated that they lacked employees with the relevant qualifications and skills. According to the report, some 4,700 engineering and computer sciences students complete their studies annually, whereas the market demand is for 7,000 employees a year in those fields. Without intervention, the gap will only grow over time. Due to the deficit in skilled workers, an inter-ministerial committee headed by the director general of the Ministry of Economy[29] was established, which warned of this gap, noting that at present the school system

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29 "Report of Steering Committee to Formulate Policy Tools for Confronting the Lack of Skilled Manpower in Knowledge Intensive Industries" (Hebrew). Ministry of Economy, August 3, 2014, Michal Tzuk, chair.

produces only 6,600 high school graduates with matriculation in 5 math units with scores higher than 85 percent and many of them eventually opt for other careers (in law or economics). Thus, at present, there is no potential for increasing the number of university and college graduates to fill the gap. The report suggested a series of actions to change the situation. We shall refer to some of these proposals below.

The Central Bureau of Statistics, too, reported that between 2013 and 2015 there was a significant increase in the number of open positions for professionals in engineering, science, and information technologies. In addition to the lack of engineers and scientists, there is also a significant lack of practical engineers and technicians *(see Insight 3)*.

As noted, the number of university and college graduates in the relevant subjects is 4,700 a year. According to the CBS *(Table 1.2)*, there was a 20-30 percent drop in mathematics and science between 2006 and 2012, but an increase in computer sciences (4 percent), computer engineering (74 percent), and electrical engineering (12 percent). The increase in computer engineering can be attributed to the colleges starting to teach the discipline. The obstacle to increasing the number of graduates in these subjects lies in the number of high school graduates eligible for matriculation certification in 5-unit math and science tracks at an adequate level without lowering the bar for the sake of improving the statistical numbers. In other words, the bottleneck is to be found in the school system.

The existing potential for maximizing the full capabilities available to this end is determined by the size of the 18-year-old cohort. In 2014, this age group consisted of 125,673 youths, of which 80.5 percent were attending the twelfth grade. Of these, 72.1 percent sat for the matriculation examinations, and the rate of certificate eligibility was 52.7 percent of the cohort. In other words, only about one-half of the cohort completed matriculation certificate eligibility[30] *(segmentation by sectors appears in Insight 3)*.

Of those eligible for the matriculation certificate in that cohort, the percentage of those sitting for the expanded math curriculum examination continued the downward trend:

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30   Ministry of Education, data on 2014 matriculation certificate eligibilit. http://edu.gov.il/owlHeb/Tichon/BechinotVbagruy ot/BechinotAbagrut/Documents/%D7%96(%D7%9B%D7%90%D7%95%D7%AA%20%D7%9C%D7%91%D7%92%D7%A8%D7% 95%D7%A)A%20-%20%D7%AA%D7%A9%D7%A2%D7%93.pdf

Table 1.1: Percentage of students taking the math matriculation examination of those eligible for matriculation certificates (in percentages)

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
5 units	19.2	18.7	17.2	17.3	17.7
4 units	31.7	28.6	28.0	24.2	24.0
Expanded (4+5 units)	50.9	47.3	45.2	41.5	41.8

Source: Central Bureau of Statistics, press release 023/2016[31]

Among those eligible for matriculation certificates, there was also a downward trend in students choosing to combine the expanded math examination with an expanded examination in a science or technology subject (i.e. physics, chemistry, biology, computer science, electronics, and electronic systems). In 2009-2010, 17.1 percent of students elected to be examined in 5 units of math and at least one other expanded science or technology subject; in 2013-2014, that number stood at only 15.8 percent.[32]

Those eligible for matriculation certificates with examinations at an expanded level of math, and in particular those examined in 5 units of math as well as another expanded science/technology subject, represent the future potential for students of science and technology at institutions of higher education. And indeed, there has been a decline in most science and technology subjects also among Bachelor degree graduates, as demonstrated by the table below:

Table 1.2: Number of BA graduates (universities and colleges) in sciences and math, 2006-2011

Field	2006	2012	Change in %
Math	454	378	-19%
Physics	388	316	-21%
Chemistry	261	191	-28%
Biology	959	752	-21%
Computer sciences	696	726	4%
Computer engineering	122	209	73%
Mechanical engineering	402	387	-7%
Electrical engineering	705	792	12%
Total	3987	3751	-6%

Source: Central Bureau of Statistics, Chart 8.49, 2014.

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31 Central Bureau of Statistics, press release 023/2016: Matriculation certification eligibility and science and technology students in Israel, 2009-2010 to 2014-2015. www.cbs.gov.il/reader/newhodaot/hodaa_template.html?hodaa=201606023

32 Ibid.

Generally speaking, even though all sectors (other than the ultra-Orthodox) in recent years showed an increase in matriculation certificate eligibility, both in the cohort and among those sitting for the examination *(see table in Insight 3 below)*, the rate of high school students sitting for the expanded math and science examinations is on a downward trend.

The data above point to two conclusions: One, that it is necessary to increase the percentage of matriculation examinations in math and science/technology subjects as much as possible *(see below)*, and, two, that it is necessary to find ways to include the large reserve of young men and women who do not sit for the matriculation examinations to begin with (**especially** in the ultra-Orthodox, Arab, and peripheral sectors). Within the general population, we can expect only a fraction to have the innate ability for math and science at a level sufficient for the appropriate skills and possible excellence in the future, but in the specified population segments it would seem that this fraction is not being expressed in any circles of learning, training, or employment, resulting in significant damage to individuals, the community, and the state.

Insight 1: Possible Solutions and Action Items

Systemic Solutions:

› **Educational continuum:** Constructing learning and teaching systems that will form a multi-staged continuum of scientific-technological-conceptual education from kindergarten through the twelfth grade, professional schools, and technological training tracks in the army. In kindergarten, the emphasis may be experiential; elementary and middle schools would focus on introducing the various branches of science and technology and their effect on human life; and in high school, the emphasis would stress the acquisition of quantitative tools and the ability to handle research and technological tasks.

›   **Family involvement:** Constructing a broad national public awareness campaign (e.g. via social media and buying airtime on radio and television) that could reach parents and other family members and, through it, provide a continuous flow of information about the importance of science and technology for their children. This would include messages from scientists, industry leaders, politicians, doctors, successful teachers, community leaders, artists, athletes, and other celebrities, all focused on technological and scientific successes, with emphasis on the importance of science and technology for the citizens' personal future and the future of the state. Commendable activity of this nature is already taking place, to some extent, in science and technology museums in Israel, and this also contributes to the educational continuum, the inculcating of a multidisciplinary perspective, and greater familiarity with the global world. Such activity must be expanded.

›   **Providing grants to all matriculating high school students taking 5-unit exams in math, English, and an expanded technology/science subject:** For example, one year of free tuition at a college or university if they enroll in science or engineering faculties, or a financial award.

›   **Training counselors:** It is necessary to ensure that all school counselors undergo training in which experienced math and science teachers explain the importance of their subjects, and scientists and industry leaders explain the potential of scientific and technological studies, so that they take these factors into account when counseling children choosing their course of study.

›   **A range of subjects:** It behooves the system to carefully examine the entire first to twelfth grade curriculum and reduce the number of electives. Instead of offering a 'smorgasbord' of options, it is necessary to return to a fixed core program with two or three tracks (such as humanities, sciences, arts) at two levels – regular and expanded.

›   **Adopting schools:** Universities should adopt academic/technological schools, assist them in teaching theory and science, and provide them with unmediated exposure to the frontiers of science and technology.

›   **Learning research skills:** Teaching students how to research a defined topic while giving them the tools required to succeed in the project, and incorporating small-team learning and practice.

Content-related Solutions

› **Multidisciplinary approach:** Presenting different multidisciplinary study materials, while stressing the overall picture and the synergy produced.

› **Familiarity with a global world:** Using the internet and social media as online learning tools. Aside from the accessibility of materials, it is possible to nurture supervised long-distance mentorship relationships with experts. In other words, using a platform like that of a web-based university, beginning at the early stages of the educational process.

› **Incorporation of "human sciences":** It is important to assimilate the notion that the humanities and social sciences—that is, "the human sciences," as well as humankind's multihued cultural and spiritual achievements, attained over many generations all over the world—are a critical tool for understanding the world and engaging in complex thought about it. Furthermore, these subjects enrich human capital, providing tools for critical analysis and showing the way in which individuals and institutions should act in a state. It is difficult to measure human capital, but economists have concluded that it is a key factor in the economic success of any state. It is commonly assumed that a developed civilization is built and progresses due in large part to technological achievements, but the problems of the individual and society are, at the end of the day, what generates the motivation to look for solutions. How scientific achievements are translated into improving reality is a question that must be addressed not only to scientists and technologists but also – perhaps especially – to scholars of the human sciences. Here, too, as in the case of science and technology, it is necessary to encourage pursuit of excellence among both the general student population and the outstanding few. It should be remembered that a society which possesses a command of science and technology, while this element is absent from the education and personality of individuals, can be compared to a barren tree. For students oriented towards the human and social sciences, it is necessary to construct a program that would provide familiarity with science and technology, in a manner not geared toward scientists. For students oriented towards the sciences, it is necessary to construct a program that would provide them with familiarity with the human and social sciences.

Outstanding Student Programs

› Encouraging and nurturing excellence from kindergarten onwards, with exposure to the academe and industry from an early age.

› Involving outstanding students as subject leaders in schools, alongside their teachers, to teach other children, especially younger ones.

Military/National Service

› Establishing service tracks in technology, including technological industries.

› Providing soldiers possessing a technological profession with the opportunity to forge relations with the academe and industry, and helping them maintain that contact, while encouraging them to continue studying while still in service to the extent their position allows it. Expanding the deferred draft option for science students (policy dictated by the IDF).

› Establishing national service tracks in the sciences designated for Arabs, the ultra-Orthodox, and women.

› Providing professional help in placement to servicemen and women before their discharge and encouraging academic achievements as part of a benefits package / discharge grant.

BA Programs in the Academe

› Reducing tuition by half for students of engineering and science at universities and colleges.

› Ensuring a higher level of suitability of the students accepted to science and engineering faculties and engineering-technological colleges, based on an integrated science and technology program. In colleges, acquisition of the capabilities required in industry should be emphasized, while in the research universities, mathematical and scientific capabilities should be emphasized.

Insight 2: Lacunae in professional technology education

In recent decades, the number of students in professional technological training tracks at the secondary school level in Israel has steadily declined, and it is lower than that of European nations. The low enrollment rate of students in these tracks is an obstacle to economic growth because of

the need for technicians, practical engineers, and professional workers, as well as the engineers who emerge from this background.

Professional technological training includes three tracks: an engineering track (computerization and control systems, computer systems, electronic systems, system planning and programming, biotechnological systems, integrative technology, aviation systems, mechatronics and naval machinery), a technological track, and an employment track.
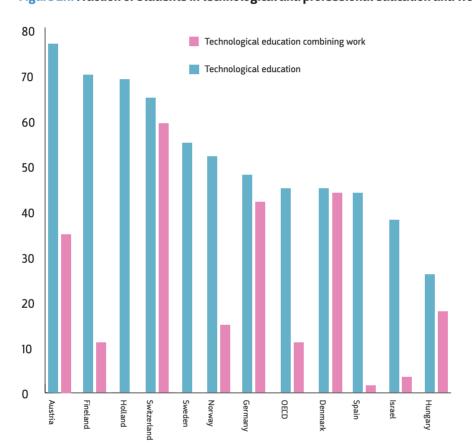
Figure 2.1. **Fraction of students in technological and professional education and work experience**

Source: Education at a Glance 2013 – OECD Indicators, 2011 data, www.oecd.org/edu/eag2013%20(eng)--FINAL%2020%20 June%202013.pdf, processed by the Samuel Neaman Institute for National Policy Research

The current attitude toward technological education at professional schools in Israel, as sometimes reflected in the media and public statements, is deleterious to the great importance of this kind of schooling, at both the national and individual levels. Moreover, the content of the technological professions has changed greatly; it is enough to compare a contemporary car mechanic's garage with one from twenty years ago, or a communications technician from the 1990s with today's experts.

A tremendously instructive example of this commonplace and erroneous perception of technological education at professional schools is an exchange that took place at a government meeting in

October 2014, devoted to the start of the new school year. At this meeting, the outgoing chair of the Higher Education Council's Planning and Budget Committee noted that 50 percent of young people would not reach the academe. The idea of opening professional schools instead of institutions of higher education caused an uproar: "You want to open professional schools for welders and tinsmiths and perpetuate social gaps?" said one of the minister irately. "…Would you send your son to become a tinsmith?… This is a scandal, and I will not let it happen."

In fact, in the past, over the course of many decades, professional schooling was an integral, legitimate part of the Israeli school system. An important reason for its deterioration lies in the sense that it helped set ethnic discrimination in stone, a phenomenon whose shorthand was "tracking," i.e. steering children from Israel's Mizrachi geographical and urban periphery toward professional tracks, unlike Ashkenazi children from the country's center who were steered toward academic subjects in high school. Another reason was the relatively high cost of professional schooling. The first explanation, as is exemplified by the government debate mentioned, is still prevalent, although its sting has been somewhat blunted. In any case, promoting secondary professional schooling so that it succeeds must take into account this animosity and offer solutions that will deal with the problem honestly and powerfully.

It is worth examining the data in the following table:

Table 2.1. **Percentage of 12th grade students taking academic/technological tracks**

	Technological track	Academic Science track	Technological Engineering track	Girls in academic science track	Girls in technological track
Hebrew language schools	33	12	11	53	31
Arabic language schools	46	21	18	64	54

Source: Central Bureau of Statistics, The Character of Israeli Society No. 6, 2013.[33]

It is worth noting that, since the educational reform was instituted, the relative weight of students in the academic science track and engineering tracks has been higher in the Arabic-language schools than in the Hebrew-language schools. The rates of matriculation certificate eligibility and those meeting university requirements were higher among girls than boys overall, in both

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[33] The next and last report was issued in 2014 but reports data only for the large cities.

the academic science and technological-engineering tracks, in Hebrew-language schools, and especially in Arabic-language schools. It behooves the state to learn from the Arabic-language schools' rising numbers of students in the academic science and technological-engineering tracks in general, and the participation of girls in these tracks in particular. These data, in addition to being indicative of the general potential of technological education, are also instructive of the potential existing in the different sectors and genders, as described below in Insight 3.

Insight 2: Possible Solutions and Action Item

It is necessary to position the professional technological high school as a legitimate, prestigious option parallel to the academic high school, with options for excellent professional training tracks for outstanding students, so that a highly qualified cadre of professional technological high school graduates emerges.

To make this happen, it is necessary to take the following mutually complementary steps:

› Creating the possibility of lateral mobility, unlike the public perception that this track is the default for those incapable of succeeding in the academic track.

› Allowing the option for advanced study at school (to the level of technicians and practical engineers) for students who studied in the professional technological track and/or ensuring access to academic engineering studies at the university without asking for extra requirements beyond a technological matriculation certificate with reasonably high grades.

› Improving the image of professional technological studies using various means, including those mentioned above regarding improving the image of science and technology studies in general. Adapting schools' infrastructure in order to allow exposure to and training with advanced technological methods and tools.

› Locating select schools near industrial parks to make it possible to mentor students and hire outstanding graduates.

› Setting up a network of regional technological centers all over Israel to allow students to study and train on new and advanced equipment. (Such centers have already been set up in Haifa and Beersheba, but it seems that the momentum to establish further such centers has stopped.)

› Universities adopting both academic and technological high schools.

› In some tracks, incorporating work placement in industries (a day a week, with pay).

› Incorporating advanced methods and tools into the schools themselves.

› Starting elitist professional schools such as the now defunct Bosmat High School, established in the 1920s alongside the Technion, which operated symbiotically with it for decades. Among its graduates were several of the most important office-holders in both the civilian system and the security establishment.

› Formulating a system of prestigious professional certifications and licenses for graduates in addition to or instead of the matriculation certificate.

› Starting a professional technological study track to include grade 13, designed for students of draft age not drafted into the army (see Insight 3 below regarding non-involved population segments).

› At the systemic, organizational level, making all studies in the professional technological track the responsibility of the Education Ministry (past decisions in this spirit have never been implemented).

Insight 3: Very large non-participating population segments

A crucial segment of the population, including inhabitants of the geographical and urban pe-ripheries, the ultra-Orthodox, minorities, and some women, does not participate in the life of the academe, in R&D, or in industry. This worrisome reality is growing worse, and will have an increas-ingly deleterious effect on Israeli institutions of higher education, R&D, and industrial endeavors, and therefore also on Israel's scientific and technological capabilities and the resilience of the state. This situation also harms individual welfare and the economic future of these non-involved populations and it will exacerbate the social gaps within Israeli society. Any attempt to draw on this untapped potential can reverse the trend and make all the difference.

To appreciate this insight properly, it is important to understand the demographic situation and the demographic forecasts for these sectors. The following data are based on the CBS's 2009 report. According to the CBS's average estimate, in 2059 the population will reach 15.6 million, of which 50 percent will be Jewish and others (excluding the ultra-Orthodox), 27 percent ultra-Or-thodox, and 23 percent Arab *(see Table 3.1)*. In other words, the population as a whole will double; the Jewish population (excluding the ultra-Orthodox) will increase by only 50 percent, while the ultra-Orthodox population will grow by 460 percent and the Arab population will grow by 134 percent. The implications of this demographic forecast for the future of science and technology

are abundantly clear. Also clear is the critical national need for a change of direction with respect to science and technology, both in education and in the practical involvement of the 'non-involved' segments of the population.

Table 3.1. Demographic forecast based on the CBS's average estimate

Year	Jews and others (excluding ultra-Orthodox and Arabs)	Ultra-Orthodox	Arabs	Total population	Ultra-Orthodox of Jews	Ultra-Orthodox of total population	Jews (excluding ultra-Orthodox) of total population	Arabs of total population
	Millions				*Percentages*			
2009	5.27	0.75	1.54	7.56	12.5	9.92	69.71	20.37
2019	5.84	1.10	1.90	8.84	15.9	12.44	66.06	21.49
2034	6.56	1.89	2.53	10.98	22.4	17.21	59.74	23.04
2059	7.85	4.15	3.60	15.60	34.6	26.60	50.32	23.08

Source: Central Bureau of Statistics, long-term Israeli population forecast, 2009-2059[34]

Even now, there are insufficient graduates for Israel's industrial needs. This shortage will become more acute by 2059, unless current schooling trends change, so long as half the population remains non-participatory.

Two conclusions are inescapable: The first stresses the critical nature of a solution to Insight 1, as suggested in the solution categories above; the second points to the tremendous reserves of untapped potential among women, the ultra-Orthodox, and Arabs.

The following graph (based on Education Ministry data) may be indicative of the potential and its realization in the different sectors:

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34   Long-term Israeli population forecast, 2009-2059, Central Bureau of Statistics, 2012, www.cbs.gov.il/publications/tec27.pdf
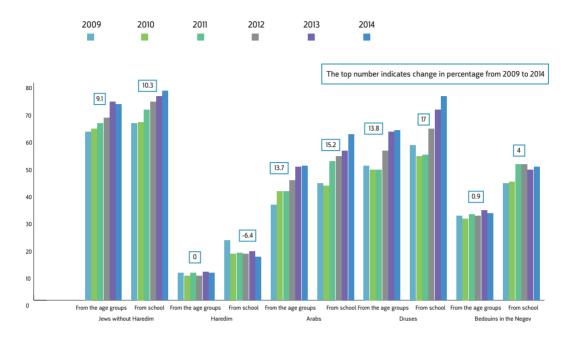
Figure 3.1. Matriculation certificate eligibility by sector (%) this needs to be fixed up

The upper number indicates change in percentages from 2009 to 2014

Source: education ministry, 2014 data on matriculation certificate eligibility[35]

As the data show, the greatest increase in matriculation certificate eligibility – both per age group and per student group – occurred in the Druze sector, followed by the Arab sector, the Jewish sector, and the Bedouin sector, though in the ultra-Orthodox sector there was a decrease in matriculation certificate eligibility. These data demonstrate the existing potential and its current rate of realization in the different sectors.

Insight 3: Possible Solutions and Action Items

We shall discuss the solution combinations in two ways, one general and applicable to all non-participatory populations, and the other specific to the populations of the periphery, the ultra-Orthodox, and the Arabs. Because there are vast and essential differences between these sectors, each one needs its own unique solution combination, in addition to the general solution combination. The geographical and urban peripheries attend state schools; therefore, the solutions proposed in Insight 1 apply here too. However, the solutions proposed for the general population are far from sufficient for the peripheries, and other solutions are needed, as will be described below.

It is important to remember that, within the ultra-Orthodox sector, there is a deep ideological opposition to the study of science, which is seen by the community and its leaders as pointless and as

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35   Education Ministry, 2014 data on matriculation certificate eligibility, http://edu.gov.il/owlHeb/Tichon/BechinotVbagruyot/BechinotAbagrut/Documents/%D7%96(%D7%9B%D7%90%D7%95%D7%AA%20%D7%9C%D7%91%D7%92%D7%A8%D7%95%D7%A)A%20-%20%D7%AA%D7%A9%D7%A2%D7%93.pdf

forbidden secular knowledge. By contrast, in the Arab sector there is a desire – even a thirst – for science and technology studies, but social barriers and discrimination prevent their full integration. These two sectors are growing to such large dimensions that the State of Israel cannot afford to concede their involvement in scientific and technological pursuits. Within 40 years, the ultra-Orthodox sector will grow by 460 percent and reach 4.15 million, while the Arab sector will grow by 134 percent and reach 3.6 million. Together, they will equal the number of the non-ultra-Orthodox Jewish population. Writing off this reserve means writing off half of the Israeli population's contribution to science and technology, and therefore also to Israel's economic and social resilience.

General Solutions for All Non-Participatory Groups

The financing model.[36] One of the most significant obstacles facing young people who want to study in an advanced technological field is the long and demanding course of study during which they must pay relatively high tuition fees while not being able to support themselves or their families. The financing model proposed seeks to provide a solution to this obstacle. In principle, it would be inappropriate to finance students 100 percent. It is necessary to put together a package that would also include self-financing or at least a long-term loan. The financing plan would consist of four parts:

› Self-financing.

› Government subsidies.

› A government sponsored loan mechanism.

› Financial aid from philanthropic institutions or from the adoptive place of employment.
The financial aid package would be constructed in such a way that it would be most significant at the initial stages of studies, covering full financing and a handsome living stipend, but the financing would be gradually reduced as the student comes closer to completing his or her training, at which point the possibility exists of finding part-time work as a student. The aid would be awarded differentially, with significant preference given to scientific-technological subjects. The financial aid would be contingent on meeting a certain minimum level of achievements.

Distance learning. The particular characteristics of these population segments call for creative solutions when it comes to establishing general academic studies tracks. The great success of the Open University among the ultra-Orthodox population, for example, should serve as a signpost. One must consider developing science and technology curricula through advanced technologi-

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36 This recommendation is based on Hodi Zak and Gershon Parush, The Incorporation of Ultra-Orthodox in Techno logical Industries: A Model for Incorporation Ultra-Orthodox in High-Tech (Version 2) (Hebrew), the Samuel Neaman Institute for National Policy Research, The Technion, June 2013.

cal means of all types of distance learning, which would allow learning to happen based on the students' available time.

Connecting universities with future places of employment. The transition from the academe to the "real world" is always fraught with difficulties, and this is especially true in the technological and scientific fields. Incorporating a preparatory program with work in high-tech companies and industries during the course of study has the potential to ensure the proper preparation of the candidates for working in the field, through close mentorships, work placement programs before graduation, and work preparation workshops.

Scientific-Technological Employment

Massive government support. In addition to the very welcome activity currently carried out by the Economy Ministry (led by the director of employment and the deputy director general), it is of critical importance that the government adopt an overall policy on the issue to be based on the "immigration model,"[37] similar to the cross-ministry policies adopted by Israel's governments during the absorption of waves of Russian immigration in the 1990s.

Encouraging non-government civilian institutions (NGOs), such as Kama-Tech and the Ultra-Orthodox High-Tech Forum, which are based on cooperation between ultra-Orthodox/Arab entrepreneurs and established, capital-rich high-tech personnel. Although this touches on private initiative, the relevant government ministries (especially the Investment Center of the Economy Ministry) are duty bound to incentivize such initiatives in the most meaningful way possible. It is important to remember that money raising sources and venture capital funds are virtually non-existent in the ultra-Orthodox and Arab sectors.

The Manufacturers Association of Israel. This association – especially the Electronics and Software Industries Association within it – can play a decisive role in incorporating these non-participatory segments into scientific/technological employment in Israel. Clear declarations of intent on the topic have been made more than once (e.g. the one aimed at the ultra-Orthodox, "Unless we manage to enlist the ultra-Orthodox to high-tech, we're lost,"[38] and these intentions have also been presented as objectives at the association's annual conference[39]), but both this association and the main Manufacturers Association of Israel have failed to assume national leadership in this area.

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37 Reuven Gal, "Strategic Plan for Incorporating the Ultra-Orthodox Population in the Israeli Economy: The Immigration Model" (Hebrew), Samuel Neaman Institute for National Policy Research, The Technion, October 2011.

38 Elisha Yanai, Chair, Electronics and Software Industries Association, at 2012 Internet Conference, www.frum.org.il/#!-1.cn7a

39 The chairman's presentation at the annual gathering of the Electronics and Software Industries Association, January 2, 2014, http://www.iaesi.org.il/_Uploads/dbsAttachedFiles/mazeget.pdf

Subsidies of childcare centers. This is of critical importance in encouraging the employment of women – some of whom need to support their families, some of whom are married, and some of whom take care of several preschool-aged children. Subsidizing daycare centers would serve as a significant incentive in women's decisions to study and work. We should mention that, in the context of the general program which the government adopted in the 2013-2014 budget, the government decided to change the criteria for subsidizing daycare centers, so that the employment criteria applied to the mother also applied to her partner, and the subsidy level was set in accordance with the parent employed at the lower number of hours of the two, based on the gradual outline specified in the decision. Recently, the government cancelled the linkage between the father's employment and eligibility for daycare subsidies for children up to the age of 3, a precondition that harmed mainly ultra-Orthodox families in which the mother works and the father studies in a seminary. The government must maintain this policy.

Closing Gender Gaps

It is necessary to increase girls' awareness of and confidence in their aptitude for the study of science and technology by creating a supportive familial, social, and classroom climate from the early grades of elementary school. This also requires parallel work with teachers, possibly with the support of female scientists and engineers in senior positions appearing at schools, as well as public service announcements in the media. It should be noted that, in the Arab sector, the rate of girls in the academic science and technological engineering tracks in high school is higher than that of boys, as is their eligibility for matriculation certificates and success in meeting university entrance requirements *(Graph 2.2)*. These achievements are worthy of investigation and emulation in the other sectors.

At institutions of higher education, for example, when young female scientists embark on post-doctoral programs, it is necessary to increase support systems making it easier for the family to move for the duration of the post-doctoral fellowship. (It is, however, also necessary to consider the fact that such support is appropriate also for young men with families; each case needs to be examined individually.) Such an approach, competitively based, is already in use at the Weizmann Institute and is open to a "varsity" of outstanding female PhD graduates who want to leave for post-doc programs abroad with their families.

The security establishment can also play a role here by increasing the number of women in the IDF's technological settings.

The periphery. For the sake of brevity, we shall use southern Israel as an example, but the situation is essentially the same in the north as well.

The total population of the Negev and Arava (including Bedouins) is approximately 770,000, out of which 150,000 are children in the kindergarten-to-high-school age range. But the proportion of these children who complete high school with 5-unit examinations in math and an expanded science subject is significantly lower than the national average (which is in and of itself not very high).

Based on the experience of a team dedicated to improving math and science studies in the Negev, graduates with high-quality matriculation certificates (5 units in both math and physics) have many options in the academe and the job market, as well as an "entrance ticket" to elite IDF units, allowing them social mobility, on the one hand, and providing for a crucial strategic needs of the state, on the other.

Pilot proposal for Negev towns in general (alternately, at first for towns in the eastern Negev), as an example of the solutions category listed.

Significant advancement of education must be carried out by outstanding teachers, and therefore the main thrust of efforts must be aimed in this direction, as in the case of the 2007 "The Best for Education" campaign. As a pilot, we suggest starting with the eastern Negev, where 20,000 children attend elementary and high schools. Adding the towns of the western Negev (adjacent to the Gaza Strip) would approximately double the number of children involved. To this, it is necessary to add programs tailored for Bedouin children.

The stated goal would be to recruit 250 outstanding math and science teachers (especially physics, but also chemistry and computer sciences) within 5 years (50 per year for 5 years) in the middle and high schools. It would also be necessary to formulate a similar program for elementary school children with a different target group of teachers (outstanding graduates of teachers' colleges). A unique and thorough process for selection and training of teachers, such as that of the Hotam program, which recruits young people with cum laude undergraduate degrees to teach in schools, would help with branding and selection in the profession.

Signing candidates to individual contracts at double current teacher salaries. Past experience demonstrates that salaries are a significant incentive in recruiting highly qualified people to teaching, especially in these subjects, similar to the recent agreement with doctors in Israel's geographical periphery, which brought about real change. It is also necessary to consider a relocation grant to those who decide to move there, similar to what was included in the last agreement with doctors.

Encouraging teachers to continue academic research as part (20-30 percent) of their jobs.

Writing a work plan with measurable goals. A teacher would write a 5-year work plan, with measurable goals and clear stages, to be examined quarterly by a steering committee that would include the school administration, local government representatives, and the Education Ministry.

Innovative pedagogy. Placing emphasis on skills suitable to the twenty-first century, such as learning how to do research, etc.

Instituting science and technology centers and further establishing and branding existing science centers and units for science-loving youths as a leading factor in the field of science, both in the formal and informal education settings.

Enlisting industry and academic institutions from the region as part of creating a picture of the future for the students and making it possible for them to stay there and become leaders in their own right.

The Ultra-Orthodox Population

It is critical to promote and implement the government's in-principle decision to establish a state-ultra-Orthodox school system alongside the state and the state-religious systems. This system would be subordinate to the Education Ministry and would provide instruction in secular as well as religious subjects, thus saving thousands of parents and their communities unnecessary expenses. Moreover, the establishment of such a school system would not only enforce the core curriculum for ultra-Orthodox students, but would also bypass preoccupation with this complex issue. It would leave the choice in the hands of the parents regarding whether and how to realize their children's right to an education. The sticking point would be political and would require the agreement of the ultra-Orthodox parties (which have occasionally hinted at their openness to such an option).

Until the establishment of such a system, it is necessary to deal with the subject of core studies on two levels concurrently:

On the one hand, to continue to realize the Education Ministry's policy of making financial support for ultra-Orthodox schools conditional on their incorporation of the core curriculum; this process must be accompanied by an expansion of supervisory mechanisms to ensure that the relevant regulation is implemented, and fulfilling the High Court of Justice's demand of the Education Ministry "to obligate the education minister to determine a basic plan specifying the number of hours that the mandatory subjects will be taught in the unofficial but recognized schools."

On the other hand, it is necessary to adopt the recommendations of the AMAM (Hebrew acronym for English, math, computers/science) report[40] formulated at the Samuel Neaman Institute for National Policy Research. The report proposes enabling ultra-Orthodox boys aged 8-13 access to informal enrichment studies in external schools to be operated by local entrepreneurs under Education Ministry supervision and employing ultra-Orthodox teachers. The course would be taught at community centers or other public settings, and in the afternoons in schools. The classes would be financed privately (by the children's parents or philanthropists) and would be subsidized by the government. It is worth mentioning that such a program is already up and running: in the 2014-2015 school year, several entrepreneurs operated this program, financed by the Special Projects Fund of the National Insurance Institute. To date, reports speak of great willingness and much demand to open more classrooms all over the country. Qualitatively, too, the program is very successful: some of the students in these setting have sat for the MEITZAV exams in science alongside regular schoolchildren. The program also requires that ultra-Orthodox teachers be trained in AMAM subjects, an issue the Education Ministry is already addressing.

When it comes to involving the academe, it is necessary to make a significant overall change in the ultra-Orthodox academic programs of the Planning and Budgeting Committee / Council for Higher Education as soon as possible. Several changes must be made:

A change in the financing of ultra-Orthodox academic programs. Emphasis should be placed on financing research universities, long-term financing, and facilitating a suitable religious environment. **Changing the definitions of those eligible for financing.** Existing definitions prevent entire segments of the ultra-Orthodox population from entering the academic world. They also isolate ultra-Orthodox students from other groups, with long-term social and economic implications.

Attentive cooperation with community representative and leaders of the ultra-Orthodox public in all steps of promoting the ultra-Orthodox academic programs.

Constant observation to make it possible to identify trends in the integration process and formulate an operational response to events affecting it.

Setting up a national academic preparatory program for the ultra-Orthodox population. Existing academic preparatory programs at the universities and colleges are not suitable for ultra-Orthodox candidates and cannot bridge the vast gap between the ultra-Orthodox world and higher education. It is necessary to consider the establishment of a national institution to serve as an overall academic preparatory program for the ultra-Orthodox, stressing preparation

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40   M. Shahaf and Y. Morgenstern, "Report on AMAM Studies" (Hebrew), March 2012, the Samuel Neaman Institute for National Policy Research, The Technion.

in science and technology. Studies at this program would be subsidized with a voucher system (differential vouchers by subject), which would turn into grants upon the successful completion of the preparatory program. This would create a double, mutually reinforcing incentive – to enter the preparatory program in the first place and to succeed in one of the prioritized subjects. This national program would have branches in the ultra-Orthodox enclaves throughout Israel (such that a Jerusalem resident, who is a candidate for the Technion, for example, would not have to move to Haifa before it is clear that s/he has been accepted there). Moreover, all of the academic institutions in the country would be open to graduates of this preparatory academy. The government body assigned to open the preparatory academy, supervise its syllabi, and finance the institution and its students would be the Planning and Budgeting Committee / Council for Higher Education.

A public awareness campaign to change attitudes. At present, the ultra-Orthodox population in general is still not interested in higher education, and the ultra-Orthodox academic programs have failed to make inroads.[41] Without nurturing unrealistic expectations – of a massive rush of ultra-Orthodox yeshiva students to the university campuses – there is still room to make an effort aimed at changing stances among relevant groups within the ultra-Orthodox public, not to the notion of studying at institutions of higher education, but to the choice of studying science and technology as a means of achieving a high level of secure income. The decision of the Council of Torah Sages on graduate studies for ultra-Orthodox women[42] is indicative of the fact that the ground in the ultra-Orthodox public is ripe for changes of this sort.

The ultra-Orthodox excellence program. At present, there are several excellence programs in existence that have proven themselves to be greatly effective in developing both their participants and the state's research reserve. However, ultra-Orthodox society does not participate in these excellence programs. This means that the system training outstanding researchers in Israel accepts young men and women from many different population segments, but not from among the ultra-Orthodox. The processes of change trickling through ultra-Orthodox society in general in the recent decade and the increase in ultra-Orthodox students in particular are an opportunity to meet the need in developing and promoting excellence within ultra-Orthodox society. The Samuel Neaman Institute for National Policy Research is currently engaged in preparatory efforts for an "ultra-Orthodox excellence program," which would include the identification of those with high potential, enrichment programs adapted to young children, individual supervision in courses of study (which would include the three "envelopes": the academic, the economic, and the spiritu-

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41   Iliya Zatkovtzky, Reuven Gal, Between Tomorrow and Today: The Ultra-Orthodox Academic System at a Crossroads (Hebrew), Samuel Neaman Institute for National Policy Research, June 2015.

42   Israel Cohen, "Members of Council approve Master's degree at Beit Yaakov" (Hebrew), Kikar Hashabbat, june 7, 2015. The decision applies only to MA studies in education and only to an "equivalency degree" (i.e. a degree awarded by the Beit Yaakov institutions, though it grants eligibility for an academic's salary equivalent to those holding a parallel academic degree).

al), the establishment of an advanced research fund (which would award research scholarships to ultra-Orthodox researchers already at their initial research stages), and the creation of an academic-ultra-Orthodox community that would provide cyclicality and stability to the program. Program participants would become the spearhead of R&D in Israel and would be a model source and role model for young ultra-Orthodox men and women with potential.

Arab and Minority Populations
Unlike the ultra-Orthodox community, the Arab and Druze communities have no ideological opposition to the study of science and technology. On the contrary, these populations evince great desire to participate in scientific and technological pursuits. Science and technology are also an excellent platform for fostering coexistence between Israel's Jewish majority and its minorities. And, in addition to allowing the realization of personal ambitions, the interest of these communities in science is congruent with a shared economic and social goal: to ensure that there is a sufficient number of high school graduates with expanded matriculation exams in science and math to meet the needs of the market. The impressive achievements of the Druze town of Beit Jan, where a private science-intensive high school was established, prove that potential exists; it suggests the possibility of creating excellence programs aimed at minorities, similar to what has been suggested above for the ultra-Orthodox, as well as the possibility of forging adoptive and mentoring relationships with nearby industrial plants.

A prerequisite to the integration of young Arab men and women in science and technology studies, from elementary school through the university, is the full integration of Arab society into Israel's majority society and eliminating discrimination from the workplace. It is necessary to eradicate discrimination in all public and private systems, including the defense establishment—as much as possible. Only an all-embracing national policy can generate within the Arab population a sense of national belonging. The broad government program recently unveiled – if it is implemented without any obstacles or preconditions – is an important step in the right direction. It is important to encourage the assimilation of Arab academics into non-defense related high-tech companies, while also providing security clearance for defense work for those who served in the IDF.

When it comes to the expanded study of math and science, everything above related to state schools in the Jewish sector applies to education in the Arabs schools too: promoting the expansion of science studies and tracks of excellence, and employing outstanding teachers who are well compensated, as well as adopting some of the recommendations made for the ultra-Orthodox sector.

At the end of the day, a national policy supporting the Arab sector will close the gap between the achievements of the graduates of Arabic-language schools and those of Hebrew-language schools, and balance their proportional representation in all places of employment, including the academe.

Insight 4: Lack of suitable teachers

A key factor responsible for the current situation is the severe lack of teachers capable of and committed to conducting math, science, and technology studies—within the non-participatory population segments as well—over the long haul. It is critical to create programs to encourage and attract candidates who can strengthen the standing of teachers in Israel (including appropriate working conditions and salaries) and nurture an educated and committed leadership which will spearhead a dramatic improvement in the teaching of math, science, and technology.

Insight 4: Possible Solution Category

A necessary condition for generating scientific leadership by teachers is the improvement of their professional status and popular image by:

› Gradually raising the minimal admission requirements for teachers' colleges (such as the Hotam Program mentioned above).

› Creating, training and continuing educations programs for teachers in which they learn research methods, both for new and veteran teachers.

› Incorporating graduates of science and engineering programs into the teaching corps (e.g. high-tech personnel and "reservist" pensioners), such as the Technion's Mabatim program, which could be spread to all universities.

› Changing manpower in the classroom: research requires additional manpower, including instructors, lab technicians, and more.

› Establishing a cadre of educated, up-to-date teaching leadership and a prestigious status of "research teachers" who, one day a week and during sabbaticals, would engage in research in one of Israel's research institutions, as part of their position and job description.

› Providing principals with administrative flexibility in choosing their science teachers and defining teaching positions.

Teachers' working methods

› Emphasizing accessibility and technological literacy: as mediators and instructors of research skills and "the formulation of information and personal opinion," a high command of technology is necessary.

> › Emphasizing mentoring skills, as opposed to knowledge imparter skills (e.g. setting a personal example, warmth, independent thinking, and individual attention).

> › Developing teamwork among science, math, and technology teachers so that the teaching staff is empowered through cooperation among its members, both professionally and in terms of a sense of belonging, status, and objective. Such an approach is common, for example, in schools in Finland.

Teacher remuneration

> › Doubling the salaries of math, science, and technology teacher. In individual contracts – as an option for all teachers (including teachers undergoing career retraining from the high-tech sector), such as the one existing for teachers working in the periphery.

> › Creating programs for individual development and professional advancement as an option for teachers.

Other programs

> › Leading students: excelling students who have gained familiarity with research and innovative learning can lead younger or peer teams.

> › Institutions of higher education and the industry helping schools: keeping teachers up-to-date, enrichment, lectures, hands-on experience, and running labs on behalf of the schools.

Table 4.1. **The added demand for teachers in select subject from 2012 to 2019**

Subject	No. of teachers in 2012	No. of teachers in 2019	Increased demand from 2012 to 2019	Increased demand in %
Math	4,739	6,484	1,745	37%
English	4,087	5,313	1,226	30%
Physics	725	1,036	311	43%
Biology	1,153	1,717	564	49%
Chemistry	542	771	229	42%

Source: Samuel Neaman processing of data from the Central Bureau of Statistics,

www.cbs.gov.il/reader/?MIval=cw_usr_view_SHTML&ID=662
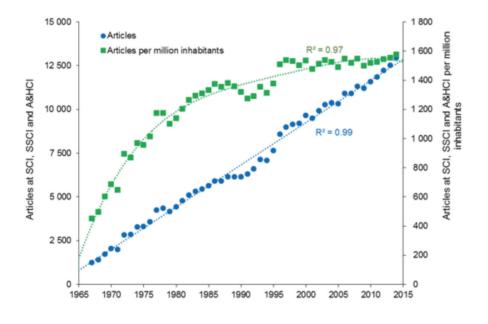
A Systemic Organizational Recommendation

To institute and manage the educational scientific-technological array detailed in Insights 1 to 4, and to ensure long-term activity with reasonable immunity to short-term political changes, which is critical, it is necessary to establish an administration for a national emergency project for developing and establishing autonomous math, science, and science-technological education which will operate in coordination with the prime minister, education minister, and the proposed advisory council on science and technology *(see below)*.

Insight 5: Lagging of science-technology research behind the global forefront

Israeli science and technology research has become weak relative to the cutting-edge research being conducted abroad. Such research and research universities at international levels are critical for sustaining and promoting the state's scientific and technological capabilities and preventing Israeli science's descent into provincialism. They set the standard for the rest of the system.

The graphs below clearly show the stagnation over the last decade and a half in the relative output of scientific publications in Israel, which was, in the past, the very highest in the world but is now being overtaken by several other nations. Israel's close neighbors, such as Turkey and Iran, are now publishing more than Israel per year, although their relative output (per capita publications) is still significantly lower than Israel's.

Figure 5.1. Number of publications and number of publications per million people in Israel, 1967-2014[43]

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43   Source: UNESCO book about Israel (in preparation) and Thomson-Reuters' databases.
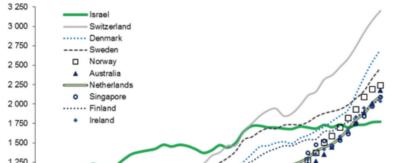
Figure 5.2. Publications per million people in leading nations by global ranking, 1970-2014[44]
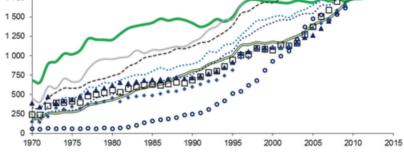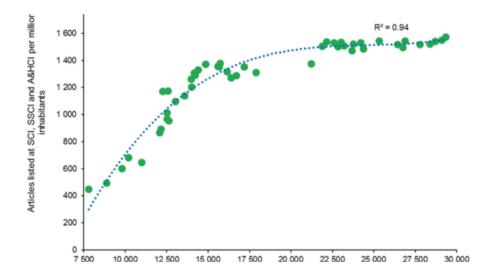

Figure 5.3. Publications per capita compared to GDP, 1970-2014[45]

Publications per capita is a good index for reflecting the status of science in a country. In Israel, this index has been locked in place since the 1990s and fallen compared to its previous global ranking. This is due to a lack of funding resources and the stagnation of the number of faculty in universities.[46]

At the same time, Israeli science can still claim great achievements and, in general, is still greatly respected around the world. Israeli scientists have won Nobel Prizes as well as many other pres-

44   Ibid.

45   Ibid.

46   Ibid.

tigious awards. Israel is still highly ranked in quantitative sciences indexes, such as productivity, measured by the relative number of scientific publications; the quality of the science is measured by the number of citations the publications receive.[47]

As the following graph demonstrates, in most areas of science Israel is still ranked above the average of twenty-seven EU nations in terms of quality. But its global rank in productivity (per capita publications) and quality (number of citations per publication) is on a downward curve.

Table 5.1. Normalized average of citations in scientific fields, Israel and selected nations, 2007-2011[48]

Sub-field of science	Israel	Denmark	Finland	Switzerland	USA	EU-27
Materials Science	1.59	2.03	1.01	1.77	1.74	1.11
Space Science	1.53	1.61	1.04	1.77	1.38	1.17
Plant & Animal Science	1.46	1.55	1.22	1.65	1.33	1.22
Physics	1.42	1.49	1.52	1.89	1.56	1.20
Geosciences	1.32	1.64	1.66	1.77	1.48	1.16
Molecular Biology & Genetics	1.30	1.55	1.64	1.57	1.36	1.10
Agricultural Sciences	1.30	1.53	1.63	1.35	1.36	1.23
Chemistry	1.29	1.41	1.06	1.55	1.59	1.16
Microbiology	1.25	1.34	0.94	1.41	1.49	1.13
Biology & Biochemistry	1.24	1.37	1.16	1.60	1.42	1.08
Pharmacology & Toxicology	1.15	1.22	1.33	1.38	1.35	1.17
Clinical Medicine	1.13	1.67	1.51	1.57	1.42	1.10
Economics & Business	1.11	0.93	0.89	1.25	1.37	0.92
Neuroscience & Behavior	1.06	1.14	1.14	1.26	1.31	1.06
Immunology	1.06	0.97	1.01	1.40	1.30	1.00
Engineering	1.01	1.49	1.13	1.39	1.17	1.04

Almost all of Israel's basic science is conducted at research universities. The graph below shows that, of Israel's seven research universities, only three are ranked among the top 100 research universities by the Shanghai Index. Israel's universities* consist of some 5,000 senior faculty members, of whom some 750 work in some branch of science or technology. These scientists not only produce all of Israel's scientific output, but have also trained and continue to train tens of thousands of engineers and scientists – the backbone of Israeli industry, traditional and knowledge-intensive, civilian and military. A small percentage of university graduates opt for

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47 Report to the Knesset on the state of science in Israel, Israel Academy of Sciences and Humanities, 2013.

48 UNESCO.
* In 2017 Shanghai Index only Technion was ranked among the top 100 universities.

an academic career and continue to graduate and pursue doctoral studies, followed by critical post-doctoral fellowships. These are usually offered at the frontier of global science in the West, especially the United States.

YERUHAM: A CASE STUDY

Yeruham has about 120 students in each cohort. Thanks to significant investments by the local government and several individuals who have made this their life's mission (Michael Biton, head of the Yeruham local council; Dr. Rachel Knoll, a physics teacher and a science center director; Prof. Dov Schwartz, former deputy director of the atomic reactor in Dimona and the chief scientist of the Israel Atomic Energy Commission), the last 15 years have seen a dramatic increase in students taking the expanded matriculation exam in physics from 0 to 15 percent and in chemistry from 0 to 8 percent. In math, the rates are still low, and at present the main thrust of effort is aimed in that direction.

In the informal educational setting, there has been a revolution in robotics. Yeruham created a municipal K-12 (kindergarten-to-twelfth-grade) program, and established top teams which participate prominently in competitions in Israel and abroad. Today, one third of Yeruham's children are learning robotics. We have concluded that the study of robotics can be a modern way (through the children's own research projects) of attracting children to the field of science. The actions required begin with commitment and investment on the part of the local government, by recruiting outstanding teachers and signing individual contracts with them. They include maintaining an active science center as a leader of a citywide science program in both the formal and informal educational systems.

This is complemented by cooperation with local industries, especially the Negev Nuclear Research Center and Perrigo (formerly, the Agis Pharmaceutical plant) through mentorship programs.

Teaching research methods to train students with the skills required in the twenty-first century; opening a municipal research center dedicated to science; having more advanced children teaching other children; and supporting attractive programs in which students engage in experiential, active learning, such as robotics.
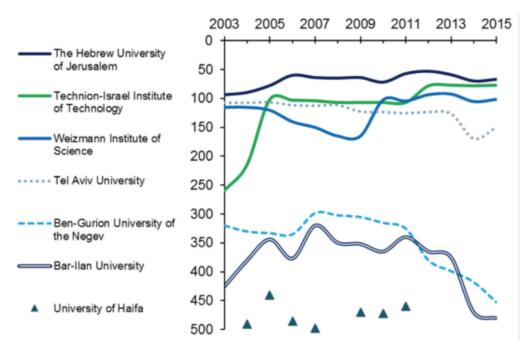
Figure 5.4. Israeli university rankings based on the Shanghai Index, 2003-2015

Source: UNESCO book about Israel (in preparation) and the Shanghai Index

However, the quality of science is not only dependent on the quality of the scientists, but also on the availability of equipment and research grants. State funding of universities in Israel is far from enough to cover the universities' scientific and physical infrastructures. The growing gap between needs and funding, a fact of life in Israel since its inception, is reduced by Jewish philanthropy from abroad, especially the United States. Moreover, it should be noted that almost all the research universities' physical infrastructures – buildings, classrooms, labs – were built thanks to donations. In 2007, for example, universities in Israel raised about $370 million to this end.[49] The total of philanthropic donation to Israeli science since the state's establishment is in the many billions of dollars. Without this money, Israel would have mediocre universities, unknown in the world of science, and Israel's best students would be studying for their undergraduate degrees at leading institutions abroad.

But because of the accelerating pace of assimilation of American Jewry and the younger generation's growing alienation from Israel, these donations are expected to decline and eventually disappear altogether. The state must therefore already begin planning alternate ways to fund scientific research for the mid and long terms. Concurrently, the financing system for research universities must become more efficient by increasing competition between the universities for research resources and making sure that majority of the resources are awarded to the best researchers.

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49   E. Fleisch and Theodore Sasson, The New Philanthropy: American Jewish Giving to Israeli Organizations, 2012, Brandeis University

The cost of scientific equipment in every branch of science is rising steeply. The greater sophistication of modern equipment the increasingly smaller physical dimensions of scientific progress – from macro to micro, to nano, to molecular, to atomic–results in a leap in costs.[50] The need for multidisciplinary research carried out by large teams in expensive labs is another reason for the rising costs of scientific infrastructures. The current trend in scientific research is towards a multidisciplinary approach, with emphasis on the convergence of different disciplines in transdisciplinary settings. This process requires universities to reorganize the way they manage research, because multidisciplinary research requires the forging of new teams and new infrastructures. Furthermore, the current meta-trend in scientific research is towards life and materials sciences (nanotechnology) in synergy with IT/computerization and communications, opening up entirely unprecedented horizons for science and technology, all of which requires huge investments. Many claim that in the twenty-first century life sciences will spearhead scientific progress, replacing ICT research. That being said, progress in life sciences is inseparably tied to ICT capabilities and it is precisely the synergy between them, which will make progress possible. Israel has a relative advantage in ICT and in flexible interdisciplinary capabilities, and this could represent the key to the future success of Israeli science.

Nonetheless, it is critical to note that elite technological industries based on ICT and computer sciences, in which Israel excels by global standards, are based on massive investments of many years in the defense establishment and the qualitative advantage of the manpower trained for them at the universities. This is also true, though to a lesser extent, of the country's advanced agriculture system. The question is this: will Israel succeed in formulating a comprehensive national program, with the appropriate investment of resources, to become a leader in the new fields of the twenty-first century that will not emerge from the defense establishment?

Insight 5: Possible Solution and Action Items
The critical need to ensure the autonomy of research universities

A crucial condition for high-quality scientific research is autonomy. It is the only way to prevent political interference and ensure academic freedom for scientists and academic faculty members. In its absence, universities and scientific research will slip into mediocrity and eventually wither. In Israel, academic freedom is enshrined in the 1958 Law of the Higher Education Council. Paragraph 15 of that law states that "An accredited institution is free to run its academic and administrative issues as it sees fit within its allocated budget". The paragraph further specifies what it means by "academic and administrative issues": "including deciding its research and teaching programs, appointing the institution's authorities, appointing teachers and promoting them, determining teaching and study methods, and every other scientific, educational, or housekeeping activity."

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50   An extreme example is the cost of the accelerator complex at CERN, whose object is to research the smallest particles in the universe, to whose end the advanced nations of the world united to finance.

Formulating this law was not simple and lasted several years due to the profound differences of opinion between the State's leadership who assumed the position that universities ought to be tools for fulfilling state policy,[51] and the opposition – the General Zionists and the Progressives – who realized that a lack of autonomy means a lack of academic freedom, and without academic freedom there is no scientific research worthy of the name. The latter finally had the upper hand, and the legislation reflected their spirit by ensuring institutional autonomy. The Higher Education Council has a majority of scientists with high standing in the scientific community.

Providing the universities with managerial, academic, financial, and administrative autonomy and the establishment of the Budgeting and Planning Committee of the institutions of higher education (founded on the British model) was a daring move that, in hindsight, has been proven wise, both by Israel's scientific achievements and by the proper management culture that the institutions' broad authority generated. Still, autonomy does not mean the absence of oversight; the system is supervised externally by the State Comptroller, the Budgeting and Planning Committee, which tracks and reports on proper management of funds, and the Payroll Supervisor at the Treasury, who sets salary levels.

Over the years, the system of higher education grew from a small number of research universities to more than 60 universities and colleges. It has, therefore, became necessary to reevaluate their structure and function in order to ensure their suitability to the system's current size and variety. This was done by an academic committee headed by Prof. Hagit Messer-Yaron, appointed by then-Education Minister Shai Piron. A key goal of that committee was to ensure the system's continued autonomy However, the subsequent Minister of Education rejected the committee's recommendations.

Increasing competition between universities while concurrently encouraging cooperation
Given the facts of life in Israel, the resources the state can allocate to universities are limited; therefore, the only way to further quality in research as well as broad accessibility to students is by competitive rather than awarding uniformly resources for scientific research. According to the Budgeting and Planning Committee's model, university budgeting takes place is two parallel tracks: one is based on the number of students, with each discipline weighted differently, and the other is based on the research achievements, measured by the number of PhD candidates, the number of scientific publications, the number of time these publications are cited, and more. These are quantitative indices with indirect reference to research quality via the last criterion mentioned, but there is no element of peer review, still the best method for assessing research quality. We therefore propose that the Budgeting and Planning Committee gradually transfer another significant portion of its budget allocations to competitive science research funding

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51   One proposal was that the council should be headed by the Prime Minister, Education Minister, and the Chief of General Staff.

organizations. This would ensure that the best scientists and best research groups receive the most funding. It is safe to assume that, with time, such a move would create two categories of research universities, so that those getting the bigger slice of the research resource pie would remain with or join the leading research universities in the world. Others would continue to operate as competent research universities, each one carving out its own niche, though not necessarily at the very frontier of scientific research.

Adding senior faculty members

The number of faculty at Israeli universities has decreased over the last decade (called, in the academe, "the lost decade"). The numbers returned to 1990s levels only recently, while the number of students grew from 70,000 in 1990 to 125,000 in 2012. This process has resulted in a student-to-faculty ratio so dire that the quality of training has been impaired and scientific productivity significantly diminished. It is critical to increase the number of faculty members by a large factor.
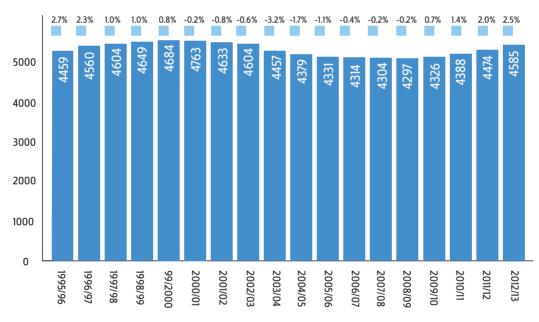
Figure 5.5. Number of faculty at Israeli universities, 1995-2013 (in FTE)

Source: UNESCO book about Israel (in preparation), the Samuel Neaman Institute for National Policy Research, and the Central Bureau of Statistics

A third tier of tertiary institutions of education

Israel maintains many dozens of colleges and post-high school settings providing instruction in a vast array of subjects, many of which are technological in part (such as Hadassah College and nursing schools). These, too, are institutions that can serve as a gateway to the Israeli labor market for non-participatory population segments, such as the ultra-Orthodox, Arabs, and the periphery (see above). This process can be significantly advanced by adjustments that would allow these institutions to award ancillary academic degrees.

Expanding the competitive research foundations

Based on paragraph 2 above, should the recommendation be adopted and implemented, the competitive foundations would greatly grow. Nonetheless, to create the right conditions for becoming competitive with the leading universities in the world, with high-cost changes in scientific research, it is necessary to increase them even more. This requires additional government budgets. But, as noted above, the long-term yield of such investment in prioritizing science and technology is exponentially greater than any investment.

Soldiers in select technological units studying for advanced academic degrees

The IDF's elite technological units have a high and unique concentration of extraordinary scientific and technological talents. Soldiers interested in studying science at university usually begin their studies for graduate degrees after six years of service. It behooves Israel to enable them to pursue advanced degrees while they are still in uniform.

Return to matching donations from abroad to offset the drop in philanthropic giving

According to leaders figures in the academe, philanthropic giving from (primarily) US Jewry to Israeli universities, which financed the physical and research infrastructures of every research university in Israel, thereby allowing Israel to build research universities of international renown, can be expected to decrease within the next few decades, perhaps even sooner (see below). To extend the period in which such a decline can be expected, we suggest renewing the government donation matching program as an interim solution.

Reducing tuition for the study of science and technology

We propose reducing tuition for the study of science and technology at the universities and colleges by half, with the government paying the rest. Israel can send its young men and women no clearer message about the importance it ascribes to science and technology.

Promoting multidisciplinary and transdisciplinary scientific research

It is necessary to promote multidisciplinary and transdisciplinary scientific research given the fact that future breakthroughs in science and technology can be expected to be increasingly found in connections among the different disciplines of science and engineering (so-called convergent technologies). This can be effected in several ways, including specific state investment in the necessary inter-institutional infrastructures (through the National Research Infrastructures, a research infrastructure forum consisting of the Budgeting and Planning Committee, the Israel Academy of Sciences and Humanities, the Chief Scientist, and Maf'at—Administration for the Development of Weapons and Technological Infrastructure), and the establishment of a designated national fund for competitive research, both startup research and long-term research.

Long-term economic support

Israel should pass legislation that would allocate a certain percentage of state income, such as that from the natural gas royalties, to long-term infrastructures at research universities, which have, to date, relied almost exclusively on Jewish philanthropy from abroad.

Insight 6: Obstacles in technology transfer between the academe and industry

The untapped potential of technology transfer between the academe and industry. The potential for the transfer of technology between the academe and industry is not being maximized, mostly because of cultural differences between them and the relative dearth of mission-oriented research at the institutions of higher education. The national nanotechnology project initiated by the National Research Infrastructures in which all the universities participated is a model to be emulated in mission-oriented research.

Training researchers and engineers

The academe's contribution to industry and the economy in general is manifested in two ways, first and foremost, by training engineers and scientists, manager, economists and jurists, doctors and psychologists, and all other professionals in the exact sciences, social sciences, and humanities, allowing for the existence of a modern economy, including classical and high-tech industries and services in every discipline. This is the primary function of universities and colleges. These many generations of academic graduates, representing the human resource of excellence, innovation, and the enterprising spirit, are the foundation on which Israel's industry rests. The decreasing number of high school students studying math and science (see Insight 1 above) is a direct threat to the economy's future needs.

Research contribution

The second way that academe contributes to Israel's economy is by applying scientific research to industry, known as technology transfer, as well as individual and institutional consultations through designated labs and institutes. But greater potential for the academe's contribution to industry already exists. This is especially true for the field of ICT in which Israeli industry excels. The scope of research knowledge developed at the universities and whose rights of use were transferred to industry has played a fairly insignificant role in the development of Israeli industry.

The universities relate to the knowledge generated in them as a privately owned asset. This, though formally and legally true, is a narrow view of national interests, because the knowledge was developed in large part as the result of public financing. Therefore, the academe's attitude to technology transfer must stem from a sense of responsibility and the obligation to give back to society at least some of the state's (i.e. the public's) investment in it. On the other hand, industry

must also adopt a more liberal attitude to relevant research in institutions of higher education and finance its part in promoting basic and applied research.

We expect developments in the business environment of technological industries to increase the dependence of industry on applied research, both in terms of innovation and in terms of quality. The primary reason is the accelerating technological development that shortens the time between basic research in research labs and its application in practice; as well as trends towards trans-disciplinary research, in which science and engineering converge over a defined, concrete topic, The Industry Ministry's initiative through its Chief Scientist's Office, leading to the creation of the Magnet, Megaton, Nofar, and Kamin programs, is an example of promoting fruitful cooperation between the academe and industry.

Insight 6: Possible Solutions and Action Items

Articulating the needs of the economy for (at least) the next decade in terms of the training of tomorrow's engineers and scientists required, in conjunction between the academe and industry, and providing a response in the training contents and the number of graduates needed.

The institutions of higher education must adopt an approach that sees applied scientific research as a contribution to Israel's resilience. Industry, for its part, must recognize the potential contribution of the academe to its development and allow generous financing sources for engaging in research.

Creating platforms such as mission-specific research institutes (see below) to facilitate encounters and engage in joint research between university researchers and industry researchers and engineers. Such platforms must enable an unmediated dialog that can generate an appropriate setting for undertaking cooperative ventures.

Even though the nature of the university is to focus on basic research—as it should be—the university must also find ways to encourage its researchers and faculty members to engage in applied research as well. It behooves the mechanisms of professional promotion of researchers in the academe and directed budgeting for such research to reflect such a policy. It is necessary to establish government sources of funding (the Budgeting and Planning Committee, the Industry Ministry, the Science Ministry) to support applied research with designated budgets. All of this must take place without any reduction in the scope or quality of basic research, which represents the source of the Israeli academe's excellence.

Reinforcing and directing university-based technology-transfer companies to facilitate contact between the academe and industry. Furthermore, it is necessary to allow commercialized activity
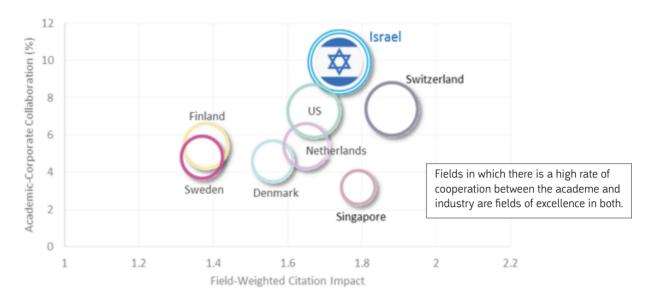
in parallel tracks when technology-transfer companies fail to do so. Measuring the success of technology-transfer companies must be based on the number of contracts signed with industry rather than the scope of income. Where possible, we recommend using attorneys with expertise in mediation to guide the sides.

Augmenting the government ministries' cooperative programs, such as Magnet and Megaton. Establishing mission-specific R&D buffer institutes between academia and industry. Applied R&D institutes exist in all advanced nations as a tool for steering technology and innovation to industry. R&D centers develop technological building blocks that can reach the prototype level. Therefore, R&D institutes are no substitute for the academe, but do provide a solution both for advanced industries requiring more in-depth knowledge and for traditional industries that have as yet no R&D capabilities. These centers rely on skilled manpower in unique fields of expertise, such as the Plastics Institute, the Metals Institute, and so on. Once established, their continued need much be reexamined every 5-10 years. The National Council for Civilian Research and Development, which has discussed the establishment of such centers, has recommended making them into university or college subsidiaries to strengthen the triad of the academe, R&D centers, and industry. Making such centers subordinate to the academic colleges of engineering is a particularly good idea for the following reasons:

› The infrastructure, knowledge, and existing ties to industry serve as a natural platform for applied R&D centers.

› Most lecturers hold PhDs and have experience with and understanding of research processes, expertise in particular areas, and often also significant industrial experience.

› Research at the colleges will help them fulfill their mission as academic institutions in important niches of activity.

› Establishing applied R&D centers at the colleges, with government encouragement and support, will help them attract and retain highly qualified academic faculty members who can engage in applied research together with companies and various projects.
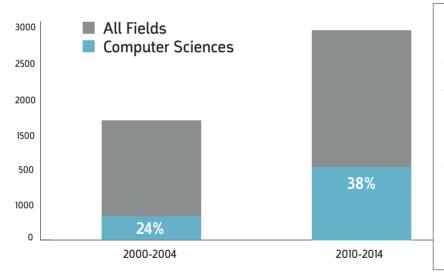
The academic usefulness of academe-industry cooperation is expressed in part by the high impact of papers written jointly by academics and industry researchers, as demonstrated in the graphs below.

Figure 6.1. **Rate of joint academe-industry publications of all publications in computer sciences relative to the normalized average of citations, Israel and selected nations, 2010-2014**

Source: Processing of SciVal (by Elsevier) data by Samuel Neaman Institute for National Policy Research

Figure 6.2. **Rate of joint academe-industry publications of all publications in computer sciences category, compared to the rate in all 26 categories, Israel, 2000-2004 compared with 2010-2014**

In the index measuring cooperative publications with industry, Israel is ranked first in computer sciences (almost four times the average world rate), as well as first in Israel in all fields. Currently, almost 40 percent of Israeli publications written together with industry are in the computer science field and are therefore the chief reason for Israel's high ranking (fourth) in this index in the world for all 26 fields. Publications on computer science play a large and growing role in all Israeli joint academe-industry papers. Fields in which there is a lot of such cooperation are fields of excellence in both.

Source: Processing of SciVal (by Elsevier) data by Samuel Neaman Institute for National Policy Research

Insight 7: The weakness of traditional industries and services

For many years, the traditional industries have been the central economic and employment base of the Israeli economy. This continues to be the case today, with beneficial effects especially for the country's geographical periphery. The perceived decline of traditional industries has created

social and economic problems. Restoring this branch to its rightful place is of critical national importance, requiring a nation-wide approach based on innovation and financial tools.

For a long time, traditional industries were the central economic and employment base of the market, some as export industries and some as industries for local consumption. Some of the export industries learned to compete with global markets and improved; other declined because of their inability to compete on the global arena. For example, in 1990, traditional industry exports represented 40 percent of all industrial exports. However, by 2008, as knowledge intensive industries grew, on the one hand, and local traditional industries were not redirected to export markets and/or were not upgraded, on the other, this market share dropped to less than 25 percent. The relative decline of these industries is a result of the difficult competition with export markets (but also with the local market) compared to manufacturers in nations where manufacturing costs are very low and compared to industries that invested in innovation and modern processes.

Local industries remained protected for a long time, but because they were not exporting, they failed to grow and their profitability declined. The general deterioration of traditional industries has caused widespread unemployment and/or wage depreciation in those companies which did manage to survive. This phenomenon has harmed many populations, creating social and economic problems. The majority of these industries are concentrated in Israel's geographical periphery and provide employment to tens of thousands of workers with a range of skills levels who cannot be integrated into technology intensive industrial fields, especially when the latter make no effort to keep their manufacturing in Israel.

Traditional industries in Israel face several difficulties:

› Low ability to compete internationally. The local market is usually protected from international competition and is therefore less prepared for the global environment.

› Low profit margin, as a result of which it is impossible to create differentiation and size-advantage.

› Old management systems that have not been fully updated to the competitive, innovative era at the rate currently needed.

› The need for high basic investments to retain classical industries unlike other industries.

› Problem of working capital and credit availability because of flaws in the way capital is raised in Israel.

The goal should be to improve productivity and global competitive abilities. The companies that broke through to the global environment succeeded by selecting unique niches, understanding international markets, innovating products that afforded them differentiation, innovating processes, and knowing how to adapt their product to changing markets and manage workers involving decentralization, training, and business integration. The responsibility for promoting traditional industries lies with the industrialists and the state. The state must provide financing, education, and investments as an orderly program worked out together with the traditional industries themselves. The state must provide support in the form of credit guarantees and support with regard to international risks. The senior staff in traditional industries must make changes and adapt to the new world. It is particularly important to encourage companies' second management generation willing to make changes. In addition, as part of grants provided to knowledge intensive industries, the government must encourage the realization of the business potential by building production lines for the traditional industries still in existence.

Insight 7: Possible Solutions and Action Items

Developing a systemic view

Israel's traditional industries will not be restored by the individual treatment of one branch or another, but only by formulating a national program that will provide financial incentives, back risky processes, and create tools for assimilating innovation and cooperation between innovation centers at universities and knowledge intensive industry, on the one hand, and the traditional industries, on the other. It behooves the state to leverage the significant growing presence of multinational companies in Israel to expand their areas of activity to include manufacturing and maintenance of the developed products. This may be attained by instituting an appropriate policy of incentives for these companies.

Innovation

Technological innovation: The decline of the traditional industries began when competition with manufacturers abroad focused only on manufacturing costs. Introducing technological innovation at the product level will make it possible to attain advantages in terms of the product's performance, the development of new products, and penetration of new markets.

Process innovation: Western nations that, years ago, experienced a decline of their traditional industries have recently undertaken a national initiative of modernizing their production lines. The approach adopted in the United States – advanced manufacturing – is aimed at restoring some of the traditional industries that moved to Mexico and the Far East. Advanced manufacturing

processes (such as 3-D printing technologies) will reduce the effect on cost gaps in manufacturing manpower. Similar initiatives are taking place in the EU and Japan.

Training professional manpower

Israel began to neglect its professional, employment-oriented education two decades ago. The arrival of skilled workers from the former Soviet Union filled the ranks and allowed production lines to continue to operate with skilled labor. Renewing growth of the traditional industries requires training thousands of new workers. The state must set a goal of returning to a 50 percent rate of high school students enrolled in professional/employment tracks *(see Insight 3).*

Financial aid

Traditional industrial plants (most of which are located in Israel's periphery) need state help in several areas:

› Financing and facilitating investment in renewing equipment.

› Insurance protection in exports (many of the target markets are high risk).

› Benefits for training professional manpower.

› Programs encouraging innovation in cooperation with technological industries, research institutes (see Insight 6), and the academe.

Establishing mission-driven R&D centers

The R&D institutes recommended in Insight 6 above are the customary tool used in European nations to assimilate innovation in traditional industries, both at the level of the product and at the level of the process. This process should be realized at a scope and speed that will have a significant impact on these industries.

The following chart demonstrates the negligible rates of investment in R&D for Israel's traditional industries.
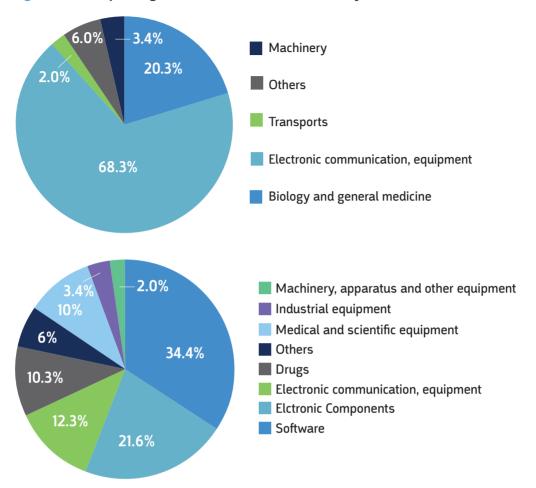
Figure 7.1. R&D spending in the business sector in Israel, by field, 2010

- Machinery
- Others
- Transports
- Electronic communication, equipment
- Biology and general medicine

- Machinery, apparatus and other equipment
- Industrial equipment
- Medical and scientific equipment
- Others
- Drugs
- Electronic communication, equipment
- Elctronic Components
- Software

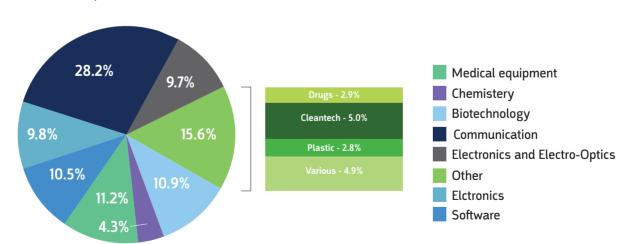Source: Processing of 2013 Chief Scientist's reports by Samuel Neaman Institute for National Policy Research

Figure 7.2. Breakdown of Economy Ministry's Chief Scientist's grants by technological classification, Israel 2012

| Drugs - 2.9% |
| Cleantech - 5.0% |
| Plastic - 2.8% |
| Various - 4.9% |

- Medical equipment
- Chemistery
- Biotechnology
- Communication
- Electronics and Electro-Optics
- Other
- Elctronics
- Software

Insight 8. **The slowdown in the growth of the high-tech sector, the significance of R&D centers, and a knowledge drain**

In recent years, growth in Israel's high-tech sector has tapered off. We are seeing a trend of R&D-intensive companies being established and then sold at early stages to multinational companies, so that manufacturing takes place abroad, their economic potential being maximized elsewhere.

The result is a drain of knowledge out of Israel, a decrease in employment in high-tech industry, wealth accumulation by the few, and a reduction in potential income for the state coffers.

The high-tech industry is considered the engine driving the economy because it contributes about 50 percent to industrial exports and provides Israel with the image of being at the frontier of science and technology (the so-called startup nation). But the high-tech industry contributes only about 12 percent to the GDP and employs only about 8 percent of the workforce, and in recent years its rate of growth has slowed.

Furthermore, the Israeli narrative currently describes the Israeli national hero as an outstanding startup entrepreneur who succeeds in building a tech company and sell it off for a bundle. In the book Startup Nation, by Dan Senor and Saul Singer succeeded in exposing global awareness to Israel's uniqueness in developing breakthrough technologies and products in a way that the significance of the national hero was magnified, becoming a type of brand name. But there is a downside to this. A nation cannot base a stable, balanced economy on national startup figures. In recent years, this has become clearer to decision makers. The state must have a stable industry that employs all sectors of the economy having strong, long-term, and sustainable foundations. All developed nations have come to this conclusion, and are now trying to bring back manufacturing from the Far East.

In the last 20 years, Israel has not seen the establishment of new, large (over $1 billion), global companies doing research, development, manufacturing, and marketing that would provide employment of hundreds to thousands of people in the company and in various ancillary service positions. This problem requires national discussion and policy-making to create a reasonable balance between quick business exits and the building of large, productive companies that can stand on their own, using a full range of the economy, and ensuring an industrial life cycle.

Does the ratio of large industry to quick exits requires a change? This question is sometimes debated. Usually, the development of a company from the initial idea to business success consists of several processes. It starts with an idea with a potential for an industrial product, technological feasibility, business feasibility, expansion of market penetration beyond the early adopters, and

finally its establishment as a large company. The effort required is immense, while the risk of failure is very real. Often, startup developers are tempted by quick, large, no-risk profit by selling to a multinational outfit, knowing that the path of growing a large enterprise requires far greater effort, determination, and management skills.

On the one hand, those who favor quick exits claim, perhaps justifiably, that there is no way to intervene and set a policy on when to sell a company, because most developers who sell companies continue to develop other companies, thus becoming serial startup entrepreneurs, and it might be self-defeating to force them to build up a full company, an endeavor in which they may not excel. Furthermore, the claim goes, selling to large global companies allows access to markets and increases the chances of global commercialization, and the large companies buying the startups continue growing the company they own in Israel and thus generate employment and the establishment of R&D centers here. And, recent arguments even say "Let's build a global innovation center and serve as 'a light unto the nations' focused on spearheading global innovation." In this case, the question is: how can the state provide good jobs for the masses of workers trying to make a living?

On the other hand, those favoring growing full-fledged business enterprises say that advanced developers and entrepreneurs are few, representing a fraction of a percentage of the population, whose leveraging is a critical national need, and that the quick exit model as a dominant phenomenon is not stable over the long haul. This model leads to a brain drain to global companies; it is critical to focus on the development of a competitive industry that can employ all sorts of population types, most of which is unemployable in this model. The proponents of the full company model view the need to leverage some of the fantastic success of the small, innovative startups into building broad, stable, innovative, strong businesses as a matter of great importance for the economy. From their perspective, innovation is a national advantage not if it stands on its own as startups, but only if it helps raise the currently deplorable productivity. The main argument is that several families of global businesses will create a more stable model over the long term.

To date, foreign international companies have started about 250 R&D centers and industrial manufacturing facilities in Israel, providing employment to about 23,700 R&D personnel, i.e. about 50% of the total number of jobs in R&D companies.[52] Some 73% of the foreign R&D centers in Israel employ fewer than 100 workers, and 6% employ more than 500 (in particular the large development centers such as Intel, Applied Materials, HP, Motorola, IBM, Marvell, and so on). Some 27% of the foreign R&D centers in Israel belong to the IT and software sector. Communications, semiconductors, and life sciences represent 50% of these centers' activity in Israel.

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52   Processing of Central Bureau of Statistics by Samuel Neaman Institute for National Policy Research

The biggest problem with the broad scope of activity of the multinationals is that there is too little leveraging of the knowledge created in Israel for the employment benefit for all sectors of the economy (the loss of the knowledge multiplier). In addition to the problematic nature of such activity, there are also, of course, some prominent advantages. For example, the move made by highly qualified personnel from foreign multinationals led to the founding of a considerable number of new, small, high-tech companies that within just a few years grew into companies employing 20 people or more. This phenomenon is highly significant in the context of knowledge transfer to the local high-tech scene and the growth of the economy (Applied Economics, 2014). But the potential loss to the Israeli economy caused by foreign exploitation of local technology, knowledge, and intellectual property is significant. The data show that almost all outcomes of the R&D taking place in these companies trickle abroad. The fact is that today 60 percent of patent applications by Israeli inventors to the United States Patent and Trademark Office are owned by foreign companies, mostly owned by R&D centers of the large multinationals. The graph below shows a similar situation for patent applications submitted to the Israel Patent Office.

Figure 8.1. **Patent applications to the Israeli Patent Office by request source, 1990-2013**

Source: D. Katz, E. Leck, et al, 2013. Product of R&D in Israel, comparative analysis of PCT and unique inventions applications

Furthermore, the almost exclusive source of financing for new initiatives is venture capital funds, which by their nature are required to sell their investment within a given period of time (usually 5 years). These funds, most of which are international, identify continuing investments from foreign companies and investors. Thus, the knowledge the created in Israel and the entrepreneurship emerging here move abroad without the state benefitting in any significant way. As long as the sources of financing are based on venture capital, this phenomenon will persist.

Insight 8: Possible Solutions and Action Items

Israel must build a foundation to enable and encourage the establishment of full-fledged high-tech companies that do their R&D here and produce significant parts of the manufacturing added value in Israel.

Making it easier for companies at the beginning of their journey to raise investment from the public. This can be done by lowering companies' entrance bar to issue IPOs. It may even be possible to establish a special stock exchange for the startup industry.

Providing benefits and incentives to large Israeli companies to make subsequent investments in startups.

Encouraging investments by institutional bodies in growing large companies, as is done in many other countries. This would allow some of the successful developers to get financing and time to complete the process of building large companies.

Investing in the country's periphery by establishing advance technological industries based on growing startups in tandem with upgrading existing classical industries.

Stipulating (or incentivizing) tax benefits, grants, and subsidies to the foreign R&D centers for building manufacturing bases in Israel for the products developed here (such as Applied Materials) or, alternately, building manufacturing capabilities for other products in Israel (such as Intel).

Insight 9: Boycott of Israel

The international status of Israel's R&D community is greatly affected by the state's deteriorating geopolitical standing (e.g. possible effect on access to and participation in large science and development programs and multinational flagships of future technologies, mission-driven cooperative ventures, boycotts and sanctions operated by scientists, organizations, and nations). This threat must be taken into consideration when shaping Israel's international and security policy, and everything must be done to minimize its possible ramifications.

At the time of this writing, the danger of the informal boycott is greater than that of a formal one, and its effect is far greater than the public appreciates. In general, Israel's research universities are still hosting scientists from abroad and first-rate international scientific conferences, and Israeli researchers are still frequently invited on an individual basis to professional events. But under the surface it is already possible to feel a lack of excitement about participating in conferences and lectures in Israel, and disregard, even rejections, of requests coming from Israeli institutions for scientific assessments and letters of recommendation – a critical activity for maintaining the level of research here. Sometimes, a rejection comes with a fabricated excuse; sometimes the real reason is stated outright. The following letter, received from one of the world's top scientists who

had, until very recently, helped Israeli scientists and was invited to deliver a prestigious lecture in Israel, is an example:

> *"Dear….*
>
> *I am giving serious consideration to your request that I deliver the…lecture. While I have great respect and admiration for my Israeli…colleagues, I also have strong reservations about Israel's recent behavior in the Middle East…"*

The question of whether it is appropriate of a scientist to inject political consideration into his scientific work is not germane to this discussions. The same goes for the question of whether or not this scientist has correctly read the political reality in Israel. For our purpose, the outcome is what matters, not its moral or practical justification. And by denying the process, there is a cumulative long-term danger.

For the foreseeable future, there is no substitute for cooperation with the academe and R&D institutions in the United States and the European scientific powerhouses, such as Germany, the United Kingdom, France and Switzerland. While it is certainly worthwhile to encourage scientific and technological cooperation with China, India, and other nations that may reach the forefront of science in the future, such cooperation cannot replace integration with the frontier of global science in the West where the danger of impact from a scientific and academic boycott is particularly acute.

Insight 9: Possible Solutions and Action Items

The most essential, long-term solution is geopolitical. This topic was discussed extensively in the Statecraft and defense policies cluster of this document. But, it is clear that the claim that the problem is only one of PR is without any merit whatsoever.

It is necessary to ensure that the considerations of the connection of Israel's academe and industry with global knowledge centers and their ramifications are taken into appropriate account by national decision making echelons making geopolitical decisions (see the science, technology, and science and technology education policy council below).

Moreover, it is appropriate to make use of a strategic plan to be directed by the academe and industry to stress Israel's capabilities and contributions to global human knowledge while using concrete examples (in medicine and everyday technology). Such a plan could have an effect, albeit limited, on public opinion.

There are actions that should be taken for their own sake, regardless of the boycott threat, including encouraging cooperation with developing nations and helping them promote higher education and R&D, as well as augmenting the integration of the Arab sector in the academe and R&D in Israel (see above), and these may also contribute, again to a limited extent, to public support. But this is not an in-depth solution.

Insight 10: Lack of Synchronicity

There is a lack of synchronicity among the major factors making contributions to science and technology in Israel – the schools, the universities, industry (including the defense industry) – as well as insufficient coordination with the bodies making decisions and operating at the national level in the corporate and geopolitical sectors. At present, each such body is managed by a separate government system intent only on the optimal realization of potential as dictated by its own objectives.

Insight 10: Possible Solutions and Action Items
The solutions relate to coordination and synchronization among three major interfaces and these were discussed at length above. These interfaces are mentioned below only as a reminder:

Cooperation between the academe and the school system, including strengthening attraction to and quality of high school graduates, creating a systemic school-to-academe educational sequence, formulating new and advanced curricula, and raising the level of teachers and instruction.

Cooperation between the academe and industry, including reducing the cultural gaps between the academe and industry, finding sources of financing for bridging the two, and establishing applied research institutes.

Cooperation between the school system and industry, including strengthening attraction to and quality of high school graduates, coming up with a long-term systemic solution, the level of teachers, improving professional high school education, and increasing the human reserve for technological education.

Systemic Organizational Recommendation

To ensure long-term planning, consultation, and coordination of a grand strategy and its goals for science and technology in Israel – absolutely vital to Israel's progress, economic resilience, and security – it is necessary to establish a science, technology, and science and technology education policy council (STSTEPC) to operate alongside the Prime Minister's Office and serve as a parallel body to the National Economic Council and the National Security Council, representing the various bodies engaged in all aspects of science and technology and science and technology training.

ECONOMY SOCIETY & GOVERNANCE

PART 4

TEAM MEMBERS

Several panels held in-depth discussions on a range of issues relating to the socio-economic cluster. Some panels included all panel members, while others were conducted by limited teams. The members participating in the discussions included:

Yarom Ariav: Chairman of Lavie Capital; former Director General of the Finance Ministry.

Prof. Avi Ben-Bassat (Co-Chairman): Faculty member of the Hebrew University of Jerusalem and the College of Management Academic Studies in Rishon LeZion; former Director General of the Ministry of Finance; former member of the Bank of Israel's senior management team.

Ilan Cohen: Business entrepreneur; chairman of the board of several companies; former Director General of the Prime Minister's Office.

Prof. Momi Dahan: Faculty member of the School of Public Policy at the Hebrew University of Jerusalem; member of the Israel Democracy Institute.

Raanan Dinur: Chairman of the Executive Board of the Ruppin Academic Center; former Director General of the Prime Minister's Office, the Industry and Trade Ministry and the Jerusalem Municipality.

Isaac Dvash: Social entrepreneur and businessman; former director of investment funds and investment banks in New York, London and Tokyo.

Dr. Chen Friedberg: Faculty member of the Department of Political Science, University of Ariel; member of the Israel Democracy Institute.

Dr. Moshe Hazan: Faculty member at the School of Economics, Tel Aviv University; member of the Shoresh Institute for Social-Economic Research.

Prof. Reuven Hazan: Head of the Department of Political Science at the Hebrew University in Jerusalem; member of the editorial board of international journals in political science.

Prof. David Levi-Faur: Head of the Federmann School of Public Policy, the Hebrew University of Jerusalem.

Dr. Sami Miari: Faculty member of the Department of Labor Studies, Tel Aviv University; member of the Israel Democracy Institute.

Prof. Shlomo Mizrachi: Faculty member of the Department of Public Policy and Administration, Ben-Gurion University.

Mahran Prosenfer (Ret. Gen.): Investment fund manager; former financial advisor to the Chief of Staff.

Dr. Tali Regev: Faculty member of the Department of Economics, the Interdisciplinary Center of Herzliya.

Prof. Avi Simhon: Faculty member of the Department of Agricultural Economics, Hebrew University in Rehovot.

Prof. Michel Strawczynski: School of Public Policy and the Dept. of Economics, Hebrew University, and the Van Leer Institute.

Dror Strum (Co-Chairman): Director of the Israel Institute of Economic Planning; former Director General of the Israeli Antitrust Authority.

Prof. Eran Vigoda-Gadot: Head of the Center for Public Management and Policy at the University of Haifa; former Head of the School of Political Science at the University of Haifa.

Research assistants: Nathan Hemmendinger and Itamar Yakir.

AN OUTLINE FOR AN ECONOMIC-SOCIAL STRATEGY

Executive Summary

Israel's economy is characterized by both light and shadows. The inflation rate is very low and the country's foreign currency assets relative to its GDP are very high. The economy sailed through the global crisis that erupted in 2007 with relative success. However, whereas the GDP per capita growth rate at the beginning of the crisis was very high compared to that of other OECD countries, Israel's position has deteriorated every year since, moving from fourth place in 2007 to twenty-third place in 2014. This change is consistent with our position regarding the long-term GDP per capita. Even more alarming is Israel's economy's relatively low productivity, which has resulted in Israel's ranking for GDP per worker remaining at the same low level as it was at the beginning of this millennium. Significant improvements in productivity, resulting in higher GDP growth, are vital for improving the economic welfare of Israeli residents.

In addition, economic inequality in Israel ranks among the highest in the world. Although in recent years there has been some improvement in incomes inequality , Israel remains in fifth place relative to other developed countries. Israel's poverty rate ranking is even worse, and improving it is the second goal of our economic program, following increasing the rate of GDP.

The third target of our economic policy is reducing the cost of living by increasing competition in many economic sectors.

The issues of low productivity, income inequality and lack of adequate competition are not isolated from one another. Together, they represent a simmering source of long-term problems, even in the social sphere.

The following chapters present the outstanding problems of Israel's economic-social cluster and our main recommendations for addressing them. The complete recommendations appear in each chapter separately.

a.   Recommendations for Economic Growth

Increasing the GDP per capita and improving the relative position of Israel among the developed countries require a significant acceleration in the rate of growth of the GDP per hour worked. This entails enhancing the physical and human capital of workers and improving productivity. The main recommendations for attaining these goals include:

› Increased investment in education for all sectors of the population, with an emphasis on technology education;

› Investments in infrastructure and R & D;

› Incentives to enter the labor market for groups with lower labor market participation rates;

› Elimination of distortions in the tax system and in the Encouragement of Capital Investments Law;

› Creation of competition in monopolistic and oligopolistic sectors using a variety of means;

› Removal of barriers to doing business;

› Resolving the conflict with the Palestinians, which would greatly contribute to economic growth;

While there is disagreement about the political success of the 1993 Oslo Accords, they undoubtedly contributed to Israel's economic prosperity by reducing Israel's country risk and considerably weakening the Arab boycott. However, these gains are fragile and can be lost. With Israel's economy based extensively on exports to the world's major trade blocks, the lack of some settlement with the Palestinians could eventually undermine the legitimacy of trading with Israel, resulting in considerable harm to the country.

b. Competition, Growth and Lowering the Cost of Living

Competition is the best mechanism for distributing business opportunities. Therefore, competition is an essential prerequisite for growth, entrepreneurship and the opening of small and medium businesses, all of which create employment opportunities. In addition, competition is a critical element in reducing the cost of living. The main recommendations for achieving these objectives are:

› Create an authority equipped with the power to take active initiatives to open monopolies to competition, particularly by strengthening the powers of the Antitrust Commissioner;

› Take government action to create competition in all business sectors in which it operates directly;

› Draft legislation encouraging competition, including preventing workers in vital infrastructure industries from striking to protest the introduction of competition into their industries;

› Reduce tariffs to enable imports to compete with domestic products;

› Withhold exclusive import licenses and, where possible, revoke existing such licenses;

› Privatize government-owned business enterprises producing business products, but only in conjunction with ensuring competition in the affected industries;

› Reduce government involvement in competitive commercial industries;

› Regulate and supervise areas involving negative externalities, such as environmental pollution or market failures.

c. Direct Involvement: Supplying Public Services

The ideal level of government provision of public and social goods is, to a large extent, an ideological issue. The OECD countries differ in their individual approaches, and there is a wide range of government spending on public services as a percentage of GDP among them, from 30% to 60%. Such spending must be supported by taxation, which can have a negative impact on GDP growth. However, Strawczynski (2015) examined the effect of a variety of statutory taxes on growth in Israel and found that only the corporate tax, which amounts to about 10% of all taxes, has a negative and significant relationship to GDP growth.

General government spending as a percentage of GDP in Israel has been declining, and in recent years, Israel has ranked in the lower third of the OECD countries in this area. Israel is also ranked last among OECD countries for civilian expenditure as a percentage of GDP. The decrease in the proportion of GDP spent on civilian purposes in Israel is reflected in the deterioration of all its public services.

These findings underscore the importance of rehabilitating Israel's public services by increasing the resources invested in them, contingent on their becoming more efficient. Moreover, in Israel's multi-ethnic and immigrant society, where religious and non-religious Jews, Arabs and Jews, and new immigrants and veteran citizens need to coexist, public spending plays a particularly important role in promoting cohesion and reducing disparities. The main recommendations for achieving these objectives are:

› The rate of increase in expenditures on public services should grow at a fixed rate corresponding to the long-term GDP growth rate;

› Because Israel's share of GDP allocated to civil spending is now the lowest among OECD countries, it should strive to reach the median level among developed countries. To achieve this, the government should increase the level of public spending by one percent of GDP during the next two years. After two years, the results of this change should be examined. If there have been no negative consequences, the government's level of public spending should be raised by an additional one percent of GDP over the following two years;

› The government's budget deficit should not exceed three percent of GDP and the average budget deficit over time should not exceed two percent of GDP.

d. The Tax System

Israel's tax system suffers from two significant defects. First, the government has granted numerous tax exemptions lacking any economic or social justification. These exemptions impede the efficient allocation of resources, thereby adversely affecting the growth rate. Most exemptions are regressive and therefore intensify inequality. The second flaw in Israel's tax policy is that the proportion of indirect taxes within the total basket of taxes is much higher than the OECD average. It should be emphasized that indirect taxes are regressive and have a much more painful impact on low-income populations. The main recommendations for improving the tax system are:

› Cancel tax exemptions that serve no economic or social purpose and benefit primarily those already enjoying high incomes;

› Avoid raising statutory taxes as much as possible. However, if cancelling tax exemptions results in insufficient funds to finance the desired level of public spending, tax rates should be adjusted;

› An estate tax should be introduced.

e.   Reducing Economic Inequality.

Income inequality is one of Israel's primary problems. Gross income inequality increased steadily from the early 1970s through 2003, and has somewhat declined since then due to an increase in employment rates. Israeli tax policies and its system for transfer payments by the National Insurance Institute have helped mitigate the effects of income inequality, but to a lesser extent than in most developed countries. The improvement in income distribution in the market since 2004 has not been translated into improvements in the distribution of disposable income, because the government reduced the progressive nature of income tax during this same period. Moreover, Israel's position among developed nations remains problematic even today. Israel's poverty rate is ranked second among the OECD countries and Israel ranks fifth in the OECD index of inequality. It is important to emphasize that the poverty rate remains very high even among families of five or more members with two breadwinners, because the increase in employment occurred primarily in low-income occupations.

Reducing income inequality is an economic, social, and moral imperative, especially considering its high level in Israel. Reducing income inequality does not interfere with economic growth; rather, it enhances it. The main recommendations for achieving income inequality reduction are:

›   Implement measures to increase labor force participation, such as increasing grants to low-income workers, mandating a core curriculum in state-funded schools, expanding the building of day care centers and nursery schools and extending and adjusting vocational training courses to meet the demands of the economy;

›   Reduce the number of foreign workers in the country;

›   Enforce labor laws by increasing the number of inspectors to match the rate acceptable in developed countries;

›   Reduce spending disparities per student in the educational sector;

›   Implement direct measures to alleviate poverty among working families;

›   Increase old age pensions and child allowances for the first three children;

An effectively functioning government is the primary prerequisite for planning and implementing the policies needed to accelerate growth, increase competition, lower the cost of living and reduce inequality, all while maintaining stability. Israel's low level of governability has many roots, including the antiquated structure of government departments, insufficient research departments in government ministries according to currently acceptable levels and the pronounced centrality of the Ministry of Finance in the decision-making process. An improvement in governability requires a series of reforms in many areas of the executive branch.

a. The Budgeting Process

The government's budget decision-making process must be divided into two phases in order to ensure both fiscal discipline and an efficient allocation of the budget.

› The first phase will determine all budget aggregates: spending, taxes and the deficit. The Prime Minister and the Minister of Finance should have priority in this first phase of the decision-making process, as fiscal discipline is a function of the aggregate budget;

› In the second phase, following the determination of budgetary aggregates, the composition of the budget will be decided in a cooperative process. This cooperative process will increase the involvement of all those responsible for ministry expenditures, including ministers, in determining both the total budget composition and the budget allocation for each office. Ministers' contributions to the decision-making process are important, as most of the knowledge and expertise regarding the different services supplied are found in the ministries responsible for these services.

Another serious problem is the low level of transparency or detail in the data presented to the government during the decision-making process on the budget's size and composition. Although the power to decide on the budget proposal to be presented to the Knesset lies with the government, its members receive very little information. The insufficiency and unsatisfactory level of the relevant data submitted to the ministers, and the short time allotted to them for formulating and discussing their positions undermine the effectiveness of budget allocations. The main recommendations for improvement are:

›   During discussions of the proposed budget, government members should be provided with budget principles books containing detailed information at the same level as that later presented to the Knesset;

›   The existing rules and powers for the budget implementation phase should remain intact. However, the number of budget sections requiring approval for transfer from one budget area to another should be significantly reduced.

b.   The Structure of the Government

The structure of the government and the offices responsible for public policies are obsolete, change frequently and are highly vulnerable to political pressures. As a result, Israel has been governed through a governmental structure that is largely a function of both the relationships within changing coalitions and of political ambitions and interests completely unrelated or even antithetical to the needs of the nation or to a professional decision-making process. The governing structure is not based on rational and professional considerations that reflect updated public needs. Instead, complicated political arrangements, which often change after elections, determine the distribution of portfolios, the establishment of ministries and sometimes even their internal structure and extent of power. Therefore, the main recommendations for improving this governing structure are:

›   Legislation should mandate that the government should have no more than 15 ministries;

›   Each government ministry should be required to establish a research unit to help acquire and develop expertise in its areas of responsibilities;

›   The powers of the Prime Minister's Office as the government's headquarters and as the coordinating office with other ministries should be strengthened;

› The enactment of an Israeli Civil Service Law should be considered. Such a law would define the fundamental structure of public administration, its key institutional members, the mechanisms for management of the structure and the limits on changes to the structure permissible for future Israeli governments.

c.   The Knesset's Function

The Israeli Knesset has two major areas of responsibility: legislation and supervision over the executive branch. Perhaps surprisingly, in the area of legislation, it operates as a relatively strong entity. Its committees are entitled to correct and even change bills and their chairpersons enjoy significant powers. However, in recent decades, there has been a very significant increase in the number of private bills submitted to the Knesset compared to other legislatures around the world, with Knesset members submitting about 20,000 private bills in the last 15 years, compared to a few hundred submitted to European parliaments during that same period. This development has had an adverse impact on the Knesset's second regulatory responsibility of supervising the activities of the government. The main recommendations for addressing problems associated with the Knesset's functioning are:

› Set a quota for the number of private bills each Knesset member can submit, bringing the number closer to that of Europe, and reduce the weekly quota of bills that can be submitted;

› Require Knesset members to draft detailed, expert explanations of their bills, including their costs and effects, and to assess their bills' quality and/or efficacy prior to submitting them;

› Promote the Basic Law on Legislation;

› Limit the permissible number of ministers by law, thus also enabling a sufficient number of Knesset members to serve in committees;

› Reduce the number of committee members to nine;

› Ensure that the committees' areas of activity correspond to their related ministries' structures;

› Empower the committees to hold hearings and to impose sanctions for non-appearance of witnesses called;

> ›   Add one working day and additional hours to the committees' sessions, deducting that time from the plenum sessions;

> ›   Increase the professional staffs of the committees and of the Knesset's Research and information Center.

d.   The Activity of Lobbyists in the Knesset

Lobbyists are a worldwide phenomenon and they have a strong influence on government decisions and on many laws. Modern governments must take into account the implications of their decisions on the welfare of all sectors of society, including the business sector. Stakeholders and external parties are invited to the various committees to voice their opinions and the useful information and independent insights these outside parties provide can improve policies. However, lobbyists are primarily concerned with the interests of a very small group, often at the expense of all or most of the citizens of Israel. The bulk of the lobbyists' activities involve representing the narrow interests of the wealthy and of business corporations, whose ability to finance lobbyists is far greater than that of non-profit associations and organizations representing the interests of the general public. Moreover, there is concern that because lobbyists are frequently rewarded on the basis of how successfully they maximize their clients' profits, the general public can suffer even greater harm. The public image of the Knesset is also damaged by lobbyists' efforts to manipulate legislation to benefit businesses, particularly larger companies. The low level of transparency regarding lobbying activities prevailing in the Knesset creates opportunities for political and public corruption and adds to Israelis' growing lack of confidence and trust in their elected officials. The main recommendations regarding lobbying activities are:

> ›   All lobbyists must submit quarterly reports to the Knesset Chairman and Secretary, describing the actions in which he or she participated during that quarter. A separate report must be submitted for each registered client of the lobbyist. The quarterly report must should include:

>> •   Information about the lobbyist's clients and other parties funding the lobbyist;

>> •   The objectives of each of the lobbyist's clients;

>> •   The payment the lobbyist received from his or her clients or others for each goal the lobbyist promoted;

>> •   The client's and the lobbyist's contributions to any political body.

CHAPTER 1: SOCIO-ECONOMIC POLICY PERCEPTION

AVI BEN-BASSAT AND DROR STRUM

Israel's economy is characterized by both lights and shadows. The inflation rate is very low and the country's foreign currency assets relative to its GDP are very high. The economy sailed through the global crisis that erupted in 2007 with relative success. However, whereas the GDP per capita growth rate at the beginning of the crisis was very high compared to that of other OECD countries, Israel's position has deteriorated every year since, moving from fourth place in 2007 to twenty-third place in 2014. This change is consistent with our position regarding the long-term GDP per capita *(Figure A-2, Bank of Israel Report, 2014)*. Even more alarming is the Israeli economy's relatively low productivity, which has resulted in Israel's ranking for GDP per employee remaining at the same low level as it was at the beginning of this millennium. Significant improvements in productivity, resulting in higher GDP growth, are vital for improving the economic welfare of Israeli residents.

In addition, economic inequality in Israel ranks among the highest in the world. Although in recent years there has been some improvement in incomes inequality, Israel remains in fifth place relative to other developed countries. Israel's poverty rate ranking is even worse, and improving it is the second goal of our economic program, following increasing the rate of GDP. An additional problem is the high cost of living, resulting from the lack of competition in key sectors.

The issues of low productivity, income inequality and lack of adequate competition are not isolated from one another. Together, they represent a simmering source of problems, even in the social sphere.

This chapter introduces and summarizes the strategic program as a whole. It discusses the program's macroeconomic objectives, the steps that will be taken to achieve them and our principal recommendations. An extended analysis of Israel's complex socio-economic problems and detailed recommendations for addressing them are presented in the following chapters. For the readers' convenience, this opening chapter provides references to the chapters referred to in each of its sections.

a.   Policy Objectives and the Means to Attain Them

The goal of any civilized society is to enable as much of the population as possible to achieve a certain level of prosperity. The rationale for this goal is both economic and moral: economic, because individual prosperity increases the wealth and welfare of the society as a whole; and moral, because greater prosperity allows more resources to be devoted to protecting vulnerable populations from poverty by providing them with aid on the broad level and, more particularly,

by expanding education and improving the earning capacity of the poor. Achieving the primary goals of the strategic plan presented here would help break the deadlock in attaining two main objectives for the Israeli economy: increases in productivity and the GDP growth rate; and a reduction in economic inequality. It is also important to acknowledge that monopolies or oligopolies operate or even dominate in a number of sectors of the economy, which greatly raises the cost of living. An increase in competition and the resulting reduction in the cost of living represent the elements of the third objective of lowering the cost of living sought by the economic policy proposed here. In addition, preserving the price stability that has been achieved with great effort over the last three decades is critical. All these are the main targets of the economic and social policies this work advocates.

Our vision is that of a society in which per capita growth will be greatly increased and prosperity will be enjoyed by all ranks of the population, not only the privileged few; a society in which there is genuine equality of opportunity, with minimal barriers to occupations and entrepreneurship; and a society in which the distribution of the national pie is more equitable. The realization of this vision requires solving the fundamental problems plaguing the economic structure. Committed leadership, courage and determination are also needed, together with a comprehensive plan to attain the objectives outlined below.

a.1.   Sustainable Economic Growth
The GDP per capita in Israel is below the median of OECD countries, with Israel now in 20th place. Improving Israel's relative position requires a significant acceleration in the growth of GDP per hour worked, where Israel is currently ranked 25th among the developed countries (Figure 1). Acceleration of the GDP growth per worker depends on three key factors, all of which now reflect weaknesses in the Israeli economy: investment in physical capital per worker; the value of human capital per worker; and productivity. Increased productivity calls for advanced technology and actual improvements in production efficiency.
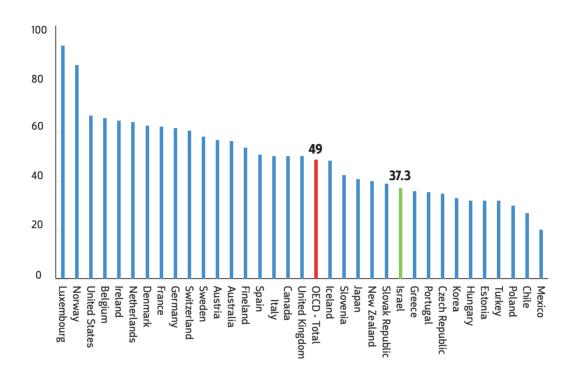
Figure 1: **GDP per Hour Worked, 2014 (Current Dollar in PPP Terms)**

Source: OECD

Physical capital per worker in Israel is far below the median of the developed countries *(Figure 2)* and the trend in this area does not bode well. Only 19% of Israel's GDP in Israel between 2000 and 2010 was allocated to investments in production assets, compared to 22% in the OECD over the same period. Without expanding the percentage of resources directed toward investments, we will not succeed in improving the economy's ranking in terms of GDP per employee. The disparity between Israel and other OECD countries in the total capital per worker is a result not only of the lack of investments by Israel's business sector, but also of the paucity of government investment in infrastructure.
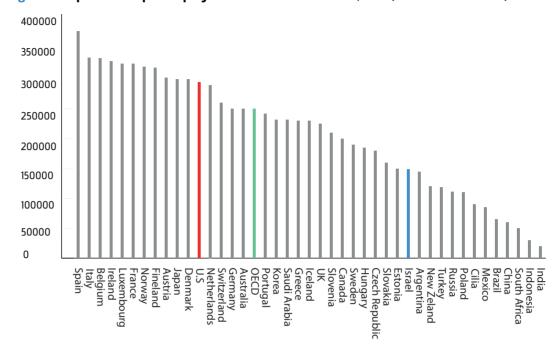
Figure 2: **Capital Stock per Employee in the Business Sector, 2011 (PPP in 2005 Prices)**

Source: Penn World Table

Human capital per worker in Israel lags behind that of other developed countries. Expenditure per student is below the median, as are student achievement levels on international tests, which reflect Israel's poor quality of education. The proportion of individuals with technological education within the total working age population is the lowest among the OECD countries (Figure 3). **Technology in Israel,** as reflected by investments in research and development, ranks second among the OECD countries (Figure 4). The strength of the technology sector somewhat compensates for Israel's lack of investment in physical and human capital. However, it appears that investment in research and development is concentrated in a limited number of specific industrial sectors and much of Israel's traditional industry does not benefit from it. This problem is exacerbated by the fact that a large proportion of traditional industries are located in development towns in Israel's periphery, thus perpetuating the lack of progress in these areas.

An equally serious problem is Israel's relatively reduced representation in scientific publications and the decrease in the number of students eligible for bachelor degrees in science and mathematics. For further details, see the sience and thecnology chapter in the strategic plan.

The participation rate in the labor force has risen, but it is it is it is still significantly lower among Jewish Ultra-Orthodox men and Arab women. In addition, the upward trend in life expectancy will greatly reduce the proportion of the population participating in the labor force, thereby also reducing production potential.

Figure 3: **Percentage of Adults* (25-64) with Professional-Technological Education in 2012**

Source: OECD, Education at a Glance, 2014
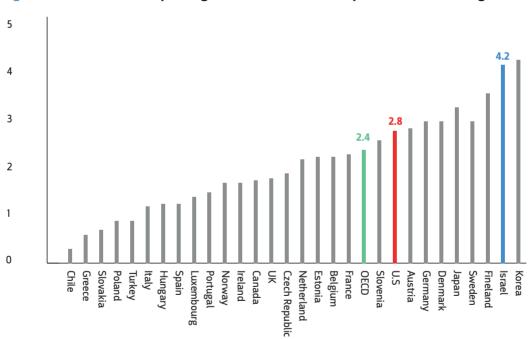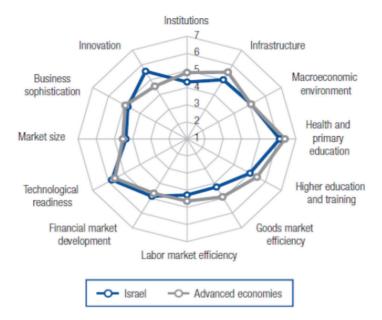
* High-school or non-academic tertiary education

Figure 4: **Gross Domestic Spending on Research and Development, GDP Percentages, 2012**

Source: OECD and Central Bureau of Statistics

There are no data on manufacturing efficiency, which is a key factor in increasing productivity, but it is doubtful that Israel is one of the countries with high production efficiency.

In summary, Figure 5 shows the strengths and weaknesses of the Israeli economy relative to other developed economies.

Figure 5: **Components of the Competitive Index: Israel and Developed Countries, 2013**

Source: World Economic Forum

The government must act to solve all the aforementioned basic problems and increase the pace of growth, employing a variety of methods simultaneously. Our recommendations for improving growth and productivity rates are:

› Increase investment in education for all sectors of the population, with an emphasis on technology education;

› Encourage investments in infrastructure and R&D;

› Provide incentives for entering the labor market to groups with lower participation rates in the labor force;

› Eliminate distortions in the tax system and the Encouragement of Capital Investments Law ;

> › Create competition in monopolistic and oligopolistic sectors, using a variety of means, particularly the introduction of new players;

> › Remove barriers to doing business.

For an extensive discussion of these measures, see Chapter Two.

a.2. About Peace and Economy

Resolving the conflict with the Palestinians is another fundamental step which would significantly contribute to economic growth. While there is disagreement about the political success of the Oslo Accords signed in 1993, they undoubtedly contributed to Israel's economic prosperity. However, these gains are fragile and can be lost. With Israel's economy based extensively on exports to the world's major trade blocks, the lack of some settlement with the Palestinians could eventually undermine the legitimacy of trading with Israel, resulting in considerable harm to the economy.

The main purpose of the economic agreements with the Palestinians was to give the Palestinian Authority (PA) the freedom to manage the lives of its population within the limitations imposed by the absence of defined borders between Israel and the PA areas. Although the economic agreement was designed to last for a five-year period only, it has survived until today, with the exception of a number of amendments made in the year 2000. The first notable achievement resulting from peace with Israel's neighbors has been the great increase in trade with Jordan and Egypt, which signed peace treaties with Israel following the Oslo Accords. Although the volume of trade with these countries is limited, due to the differences between the nature of the specialization in their economies and in Israel's, the importance of trade should not be underestimated, as it is part of the foundation supporting our relations with these countries.

An even greater impact of the Oslo Accords can be seen in Israel's trade with countries in Asia, which had yielded to the Arab boycott until the Oslo Accords. Since the signing of the Oslo agreement with the Palestinians, this ban has effectively been dissolved, which has allowed Israel to import goods from cheaper sources. For example, since the loosening of the embargo on sales to Israel, vehicle imports from Japan have increased significantly at the expense of higher-priced imports from Europe. The proportion of imports from Asia, especially from China, quickly surged after the Oslo Accords were signed. Until 1993, Israel did not import any goods from China, but since then, imports have risen sharply, with imports from China constituting nearly 10% of Israel's total imports in recent years. Slightly more moderate developments also ensued with other Asian countries. In total, the proportion of imports from Asia increased from 10% to 22% of total imports between 1992 and 2011. While trade with these countries was also influenced by Israel's

economic policy, especially its reduction in tariffs and removal of administrative restrictions on imports from countries with which Israel had no trade agreements, most of the increase in trade occurred after 1993. Israeli exports to Asia also increased significantly, with their proportion of total exports rising at a rate similar to that of the increase in imports from this continent.

The greatest contribution of the Oslo Accords to Israel's economy was reflected in the lowering of Israel's country risk. Country risk is estimated on the basis of a country's ability to repay its debts. Not only economic performance, but also a country's security situation affects it country risk rating, since a state under constant military conflict is far more likely to become caught in a financial crisis. The higher the country risk, the higher the interest rates on loans. Foreign investments in manufacturing enterprises are affected even more by economic risks, especially by security risks. Indeed, for many years preceding 1992, investments in Israel by foreign residents amounted to about only $100 to $200 million annually. After the Oslo Accords, foreign investments began to grow rapidly, reaching $1.4 billion in 1995 and $8 billion in 2000. Since then, such investments have remained at a very high level, averaging $6 billion a year, with sharp fluctuations attributed to changes in the global economy and the security situation in Israel.

A calm security situation has a significant effect not only on foreign investment, but on numerous other economic activities. The First Intifada of 2002–2005 had particularly devastating consequences. The loss of lives, injuries, fears and immense uncertainty undermined the personal security and lifestyle of Israelis. However, the Intifada also had an economic price, critically affecting the GDP, which actually decreased for two years (for more information, see Eckstein and Tsiddon, 2004). Not only did the GDP decrease in those years, but local investments in new ventures and the expansion of existing enterprises were also severely depressed, thereby reducing the potential for future economic growth. In addition, studies show that the number of attacks and security incidents within Israel's borders had a real and negative impact on incoming tourism to the country and on stock market values (Eldor, Hauser and Melnick, 2005).

The absence of a definitive peace agreement or at least an operative arrangement between Israel and the Palestinians results in a lack of stability. Tensions smolder beneath the surface and there has been a renewal of attacks in recent months. At first these attacks were initiated by individuals acting on their own, but as these incidents have continued, signs indicate that these later attacks are the result of organized sabotage activities. If Israel does not act soon to ensure peace, terror activities may intensify, taking a heavy toll in lives and undermining the country's economic achievements. If there is a renewed Intifada, past experience shows that there will be high economic costs for the country. Israel can expect a severe reduction in GDP and serious declines in its standard of living and in its already acutely dysfunctional public services. A study conducted on the effect on public attitudes of the number of fatalities caused by terror from

1988 to 2003 shows that as the number of casualties increased, so did the willingness of Israeli citizens to make concessions and establish a Palestinian state. Under these circumstances, it would be far preferable to reach the desired goal of peace without paying such a painful price (Gould and Klor, 2010).

The lack of a peace agreement or arrangement with the Palestinians based on two states for two nations also threatens the main fruits of the Oslo Accords: the country's risk reduction and the weakening of the Arab boycott. The voices calling to boycott Israel, especially its economy, are increasingly growing. Until now, these voices have not had a significant effect, but the experience of other countries shows that once such initiatives emerge, they gain momentum. It is preferable for Israel to initiate the resumption of negotiations for a peace agreement with the real intent of reaching an accord before it is forced to do so. The world will not accept empty declarations and stalled operations. In contrast, putting an end to the conflict would enable Israel to advance its relations with important Arab countries and the Muslim world as well as open additional markets for the Israeli economy.

At the internal economic level, a resolution of the conflict with the Palestinians would help end the conflict with the entire Arab world, and thus facilitate the gradual reduction of defense expenditures, as occurred after entering into the agreements with Egypt and Jordan. This would free up more resources for improving the welfare of the population. Of course, such an increase in resources does not obviate a comprehensive move toward streamlining and reducing the defense budget even today.

a.3.   Competition, Growth and Lowering the Cost of Living
Competition is a tool, not an end in itself. However, in the Israeli economy, overloaded as it is with monopolies, the lack of competition in many sectors affects the foundations of the economy, its business dynamics and its ability to develop sources of investment and employment. Competition is the best mechanism for the distribution of business opportunities and therefore its existence is a fundamental, important prerequisite for growth, entrepreneurship and the opening of small and medium businesses, which, in turn, create employment opportunities.

The immediate effects of the lack of competition are high prices and a high cost of living. Indeed, the price of many products and services in Israel is much higher than in other developed countries. Inefficiency is partly to blame, but a quite significant factor in Israel's high prices is the lack of competition in many industries, especially those providing essential infrastructure services, such as the power and the communications industries and the ports services. In 2013, Israel was ranked 95th on the internal competition index of the World Economic Forum. Lack of

competition in key industries also affects the efficiency of resource allocation in the economy and therefore the rate of growth.

The effect of creating or increasing competition on the cost of living in Israel can be clearly discerned in examples from the country's recent and distant past:

> › In 1993, the mobile device service market, in which Bezeq had enjoyed a monopoly, was reformed to open it to competition with another operator, resulting in a 35% price decrease in usage fees in real terms. The beneficial effect of competition was not limited to tariffs, but also led to an expansion in the number of users, with the number of mobile devices in use increasing over tenfold within three and a half years. In addition, investments in this area have increased significantly, adding net economic activity to the economy and to the GDP (Gronau, R., 2001);

> › In 1997, an additional reform in the field of international calls, which broke the existing monopoly and introduced two additional international calling services, Barak and Kavey Zahav, resulted in a reduction in the price of calls of about 70%. Here, too, the price reductions led to a net increase of 15% to 20% in usage or call minutes.

> › More recent reforms in the mobile phone market have resulted in reductions in the price of mobile device services, as can be seen in Figure 6.

The increase in the mobility of subscribers has further increased competition in the cellular telephone market.
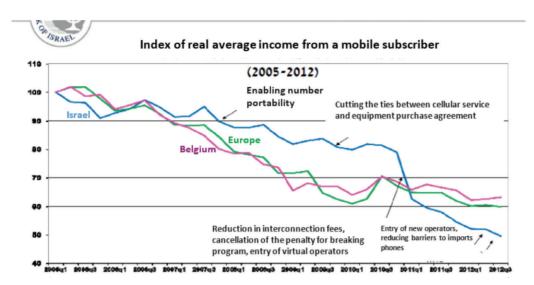
Figure 6: Effect of Subscribers' Mobility on the Revenues of Cellular Telephone Operators

Index of real average income from a mobile subscriber

(2005-2012)

Enabling number portability

Cutting the ties between cellular service and equipment purchase agreement

Israel

Europe

Belgium

Reduction in interconnection fees, cancellation of the penalty for breaking program, entry of virtual operators

Entry of new operators, reducing barriers to imports phones

Source: Bank of Israel Processing and Global Wireless Matrix

One significant result of competition is that from the moment a supplier in the market lowers its price, other suppliers are forced to lower their prices as well. Accordingly, discrimination in business inputs severely affects competition. One example of how this phenomenon operates can be found in capital inputs. The lack of competition in access to financing sources in Israel for small businesses places them at a significant competitive disadvantage in two complementary aspects. First, small businesses' difficulties in raising capital perpetuate the high level of concentration that characterizes the Israeli economy that is clearly dominated by large corporations. Second, at the dynamic level, small businesses' restricted access to capital conveys the message that private enterprise and the underlying motivation for opening small businesses are dangerous and threaten the important economic forces driving growth and entrepreneurship. The data indicate that the cost of capital for small businesses in Israel is, on average, substantially higher than that for large businesses, which are deemed less risky because of the lack of opportunities to compete with them.

The existence of monopolies and oligopolies creates a circle of people who enjoy particularly high incomes from their enterprises which are immune to competition. These beneficiaries include the controlling shareholders, senior executives and associates. Their high incomes deriving from monopolistic practices serve to exacerbate inequality in society. In addition, non-competitive industries that are protected directly or indirectly by the government create an environment that discourages initiative and competition. On the social level, government protection of monopolies projects an unhealthy message of a society in which capital is attained as a result of connections and nepotism and not through work and initiative.

An economy based on the relationships between owners of capital in various sectors is an ineffi-cient one where there are constant distortions in resource allocation, particularly in the allocation of credit in the economy.

Lack of competition is a profound, fundamental problem in the Israeli economy, rooted in the fact that there are powerful elements shielding the structural cores of the monopolies and oligopolies. These include not only private businessmen, but also strong labor unions, in particular in the infrastructure monopolies: electricity, water, air and sea ports, land, telecommunications, cement, etc. In addition, monopolies and oligopolies enjoy the protection of government control that shields them from competition, imposing obstacles and barriers that prevent the entry of competitors into certain market sectors. Even the capital market is not yet competitive in the services it provides to SMEs and households.

Increased competition will contribute to the efficient allocation of resources, thereby removing barriers to growth and equal opportunities and considerably reducing the cost of living. In order to increase competition in Israel, all sectors, including government, economic, academic and media must be mobilized to make the entire economic environment pro-entrepreneurial, especially in monopolistic industries. Moreover, because of the inferior starting point of the Israeli economy in terms of competition, the steps taken by the Israel Antitrust Authority in its current format, which focus almost entirely on preventing further deterioration in the competitive nature of various sectors of the economy, are not sufficient. The change must be generated by proactive measures to dismantle the dozens of monopolies and oligopolies that already exist in the economy, whose scope of influence exceeds one-third of Israel's GDP, and open them to competition.

Clear evidence of how the economy will benefit from large-scale increases in competition can be seen in a process that began in the early 1990s as a result of the decision made in the 1980s to increase imports to Israel. By increasing permissible imports, the state exposed entire industries, including metal products, footwear, clothing and furniture, to wider competition from foreign imports. During this process of increasing imports, prices in the sectors opened to imports declined by approximately 20% in relation to the Consumer Price Index for those sectors, accompanied by comparable declines in the prices of local products competing with imported products (Gabay and Rob, 2001).
In some market sectors in Israel, there are exorbitant protective import tariffs that impede the possibility of allowing products from abroad to compete with local products. Reducing these tariffs is essential, especially in industries in which it is difficult to increase the number of competitors in the local market.

Exclusive import licenses also block the possibility of competition through imports, and therefore, maximum efforts must be made to eliminate them.

✪ Main Recommendations for Increasing Competition in the Business Sectors

An authority to open monopolies to competition should be formed. This authority, based on the powers of the Antitrust Commissioner, needs to be equipped with proactive powers to formulate a five-year plan to open monopolistic markets to competition and prioritize these markets by clear criteria, such as their level of influence on the cost of living and growth. These goals can be achieved by strengthening the powers of the Israel Antitrust Authority, which already has a professional knowledge center.

The government should also take action aimed at its other ministries and agencies to create competition in all those business sectors where the market structure is not competitive. This effort must become a national project because creating and increasing competition is necessary and vital for both privately-owned enterprises, such as banks, insurance providers and food producers, and for government-owned enterprises, which are essentially controlled by their workers, such as the ports and the power industry. Currently, the primary components of production, land, capital and workers are also characterized by lack of competition. Competition is a powerful engine and is indispensable for expanding and increasing the GDP and lowering the cost of living.

At the same time, we must formulate competition-enabling legislation that will prevent workers in vital enterprises and infrastructure industries from striking to protest the introduction of competition into their monopolistic industries. Experience shows that the power of the strong trade unions in preventing competition is even greater than the power of businessmen, and the current Antitrust Law has no authority to address this problem. Of course, any action in this area requires careful limits, and restricting the freedom to strike will apply only in those cases when the strike is intended to prevent the opening of a monopoly to competition and not in cases when the strike has a legitimate reason, such as deteriorating employment conditions.

In addition, national priority should be given to a reform in the banking capital market to eliminate the difficulties faced by small businesses seeking financing.

Tariffs must be reduced to allow imports to compete with domestic products, with an emphasis on those sectors characterized by monopoly control or lack of competition for some reason, such as oligopolies or cartels.

Exclusive import licenses should no longer be issued, and, where possible, existing exclusive licenses, particularly in branches where there is no competition, should be withdrawn.

The government should not own companies producing conventional business products. Government-owned business enterprises should be privatized, but this step must be taken only together with the creation of competition in the industry; otherwise monopolistic profits will be transferred to individuals at the expense of the general public. Opening the market to competition must be a prerequisite for any privatization, which was not the case in past privatization efforts.

Government involvement in commercial industries should be downsized along with the bureaucracy that places barriers to trade and entry in these sectors, provided that these sectors operate under competitive conditions. These government-imposed barriers exist in numerous fields of activity, such as business licensing, planning and construction, government tenders, purchases via the Internet, and more.

In areas of activity with negative externalities, such as environmental pollution, government regulation and supervision are needed to protect the public interest. In regions where there are market failures, such as Israel's development towns, an effective incentive system must be introduced to prevent the creation of distortions in the allocation of production components, which eventually affect economic growth and social welfare. For example, preferences now given to industry in the development regions distorts the nature of industry in these areas, attracting mostly traditional industries that are capital intensive and provide little employment.

For a detailed analysis of these issues and recommendations, see the chapter on competition that will be published separately.

b.   The Government's Economic Policy and its Contribution to Economic Objectives

Success in achieving the main objectives of the economy is largely dependent on the government's policy. The government can act to achieve these goals mainly through intermediate objectives: fiscal discipline, setting priorities in the state budget, effective allocation of taxpayer money, increasing productivity and reducing market failures.

Two levels of government involvement are needed to advance these objectives:

› Indirect involvement in the activity of the business sector, by making market structures competitive, regulating business activity and monitoring compliance (see Section a. 3);

› Direct involvement, by providing public and social goods.

In Israel, both these levels of involvement suffer from problems that need to be addressed.

b.1. Direct Involvement: Supply of Public Services

The answer to the question of what the optimal level of government provision of public and social goods by the government should be is to a large extent determined by ideology. The OECD countries differ in their individual approaches, and there is wide range of government spending as a percentage of the GDP among them, from 30% to 60%. The quintessential capitalist position supports a low proportion of GDP devoted to public spending, while the outlook of the welfare state, largely developed after the Second World War, advocates higher public spending. The question of the impact of public spending and its corresponding tax rates on the growth rate still cannot be answered definitively, as no categorical conclusion has emerged from studies conducted around the world. Strawczynski (2015) examined the effect of a variety of statutory taxes on growth in Israel and found that only the corporate tax, which amounts to about 10% of all taxes, has a significant and negative relationship with GDP growth.

In Israel, the proportion of the GDP expended on public spending is declining, and in recent years, Israel has been ranked in the lower third of the OECD countries in this area. The country's ranking regarding civilian expenditure as a proportion of GDP is even lower, with Israel ranked next to last among these countries (see data in Chapter Two, dealing with the economic activity of the government); only South Korea is ranked lower than Israel. The decrease in the proportion of the GDP spent on civilian purposes is reflected in all public services. In education, Israel's ranking fell to 26th place among the OECD states. Israel suffers from severely overcrowded classrooms, an area in which it is ranked 27th among OECD countries, and from declining achievement levels of its students on international tests. Healthcare services have also deteriorated: the standard expenditure per person in Israel is ranked in 19th place in the OECD community. In their study of the extent of the welfare system's benefits, Dahan and Hazan (2012) found that regarding child allowances, the maximum number of days for which the unemployed are eligible for unemployment benefits, and income support, Israel's benefits are lower than those granted by a large majority of the OECD member states. However, Israel's old age pension benefits are close to the median level among these countries.

These findings point to the importance of rehabilitating public services by increasing the resources invested in them, which should be made contingent on their becoming more efficient. Moreover, in Israel's multi-ethnic and immigrant society, where religious and non-religious Jews, Arabs and Jews, and new immigrants and native citizens need to coexist, public spending plays a particularly important role in promoting cohesion and reducing disparities.

✪ Main Recommendations on Expenditure Policy

All public expenditures should be subject to the following changes:

› The rate of increase in public expenditures should be set at a fixed rate corresponding
to the long-term growth rate of the GDP. This will halt the decline in the proportion
of government spending as part of the GDP and provide certainty to the economy,
thus stabilizing it. Structural changes in the long-term GDP growth rate will require
corresponding adjustments in the rate changes in public expenditures;

› Because Israel's share of GDP allocated to public spending, particularly domestic
spending, is the lowest it has ever been, the government should strive to reach
the median level of expenditure among developed countries. To achieve this, the
government should increase the level of public spending by one percent of GDP during
the next two years. After two years, the results of the change should be examined. If
there have been no negative consequences, the government's level of public spending
should be raised by an additional one percent of GDP over the following two years;

› Preference should be given to increasing the rate of civilian spending rather than
defense spending;

› The government's budget deficit should not exceed three percent of GDP and the
average budget deficit over time should not exceed two percent of GDP;

› Increasing the share of GDP allocated to public expenditure will require increases in the
average tax rate (see details below).

The tax system suffers from two significant defects. First, the government has granted numerous
tax exemptions lacking any economic or social justification. These exemptions impede efficient
allocation of resources, thus affecting the growth rate. Most exemptions are regressive and
therefore exacerbate inequality.

The second flaw in the tax policy is that the share of indirect taxes, such as VAT, in the total taxes
is much higher than the OECD average. It should be noted that indirect taxes are regressive and
have a much more painful impact on lower-income populations.

✪ Main Recommendations on Tax Policy

› Cancel tax exemptions that serve no economic or social purpose and benefit primarily those already enjoying high incomes. Notable examples in the business sectors are tax exemptions for strategy and export companies. Employees and households have also been granted unnecessary exemptions, such as those on deposits in study funds and the VAT exemption on fruits and vegetables and on goods in Eilat;

› Maximum efforts should be made to avoid raising statutory taxes. However, if cancelling tax exemptions would not be enough to finance the increase in public expenditure, statutory taxes should be adjusted.

Most tax exemptions apply to income and therefore their cancellation will also rectify the current imbalance between income taxes and indirect taxes. For the recommended order for canceling exemptions, see Chapter Two.

The complete set of changes in the tax system, as outlined in Chapter Two, will increase the share of direct taxes in the amount of total taxes collected, contribute to enhanced economic efficiency, improve the fairness of the tax system and reduce inequality in income distribution.

For a detailed analysis of the budget, its financing and its implications, and for further details on the recommendations, see Chapter Two.

b.2.   Reducing Economic Inequality
Income inequality is one of Israel's primary and most serious problems. Income inequality increased steadily from the early 1970s until 2009 and has declined to some extent since then. Israeli tax policies and transfer payments by the National Insurance Institute help mitigate the effects of economic inequality, but to a lesser extent than in most developed countries. The improvement in income distribution in the market since 2004 has not been translated into an improvement in the distribution of disposable income, because the government has reduced the progressive nature of income tax during this same period. Moreover, Israel's position among developed nations remains problematic even today. Israel's poverty rate is ranked second among the OECD countries, and Israel is ranked fifth in the index of inequality.

Reducing income inequality is an economic, social, and moral imperative that must be tackled, especially in light of its high level in Israel. Reducing inequality does not interfere with economic growth; rather, it enhances it. There are two reasons for this effect. First, reduced inequality translates into greater political and social stability, which strengthens the motivation of businesses

to expand and invest in production assets. Second, reducing inequality means increasing the investment in education for all of Israel's population. As noted, investment in physical capital and human capital are the two key variables in the growth process of any economy. Despite this, the expenditure per pupil in Israel is currently directly proportional to the pupil's socio-economic cluster, with lower expenditures for pupils from poorer socio-economic clusters. Reducing inequality in education is a key element in reducing income differentials in future generations of workers.

✪ Main Recommendations for Reducing Economic Inequality

› Implement measures to increase labor force participation, such as increasing grants to low-income workers, mandating a core curriculum in state-funded schools, expanding the building of day care centers and nursery schools and extending and adjusting vocational training courses to meet the demands of the economy;

› Reduce the number of foreign workers in the country;

› Enforce labor laws by increasing the number of inspectors to the rate acceptable in developed countries;

› Reduce spending disparities per student in the educational sector;

› Implement direct measures to alleviate poverty among working families;

› Increase old age pensions and child allowances for the first three children;

› Increase competition in monopolistic and oligopolistic industries to lower the cost of living.

It should be noted that within the framework of its Economic Plan for 2015–2016, the government decided to extend the grant given to a working parent in a single-parent family. This amendment is expected to provide an incentive for the parent in a single-parent family to increase his or her scope of work, leading to an increase in household income resulting from both the increase in revenues and the increased grant. In addition, the government raised the child allowances for the second up to fourth child in the family. The team focusing on welfare policy recommended that it would be preferable to apply the increase to the first three children only (see Chapter Three).

For a more detailed analysis and measures to reduce inequality, see Chapters Two and Three.

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CHAPTER 2: THE GOVERNMENT'S SOCIO-ECONOMIC POLICY

AVI BEN-BASSAT

a. Introduction

The government's economic activity is focused on two levels. The first is the supply of services to the public. The second is the regulation of business activity and the creation of conditions that will contribute to prosperity.

This document examines the government's fiscal policy and its impact on overall economic objectives: economic growth, adequate public utilities and a reduction in income inequality. Also discussed are tax policies and the efficiency of incentives, which the government uses to address market failures.

There is no doubt that the government is committed to delivering public goods, such as security, which citizens consume as a group. However, from the beginning of the 20th century, governments began providing products, such as education, which are consumed on the individual level and where the benefit to individuals is affected by the scope of consumption of these products by others. Social welfare improves because of the economic benefit inherent in providing such services and because these services contribute to the realization of social and moral goals. For example, the provision of education by the government will produce a higher level of human capital than if education is acquired in the free market by each individual according to his or her resources. Thus, government-provided education helps drive growth and increase per capita GDP. Public investment in education also contributes to the expansion of equal opportunities and the reduction in economic inequality. Moreover, the broader the education the public at large receives, the more the culture, human relations and social cohesion in the country will be improved.

The production of goods and services by the government raises the specter of inefficiency. The extent and quality of the goods and services traded on a free and competitive market match the requirements of the consumers in the country. However, the government has no objective criteria for determining the level of goods or services it provides. As a result, caution should be exercised in deciding how these services should be delivered as well as their scope. Efficiency is also an important goal when the government is indirectly involved. Incentives, taxes and fines should focus on achieving goals while minimizing the distortions in the allocation of production means to industries, companies and individuals. Otherwise, social growth and welfare will suffer. For example, the preference given to industry in development zones under the Encouragement

of Capital Investment Law distorts the nature of industry in these areas, attracting in particular traditional industries, which are capital intensive and provide few employment opportunities.

b.   The Recommended Scope of Government Spending

The scope of services provided by governments throughout the world has greatly expanded during the 20th century.[53] Notwithstanding this trend of expansion, there is a fairly large variance among countries in government spending as a proportion of the GDP, resulting mainly from the different outlooks held by individual countries, but also from the controversy about a government's efficiency in the production of products and the side effect of taxation on the growth rate.

It is difficult to measure the efficiency of a government, as the products or services it provides are not traded in the market. However, even accepting the argument that a government is less efficient than the market, it must be remembered that it produces social goods, such as education and health, in order to overcome market failures in these areas. Namely, there is a concern that the consumption of education and healthcare will be less than optimal for the society as a whole in the absence of government intervention. It is difficult to assess to what extent neutralizing market failures offsets the lower efficiency of the public sector.[54]

The second argument pertaining to government spending maintains that the higher the tax rate, the smaller the motivation for investing in fixed assets, resulting in reductions in the economy's growth rate. While many studies have been conducted on the relationship between the proportion of the GDP allocated to government expenses and the resulting tax burden and growth rate, the results of these studies are not conclusive about the significance or the direction of the relationship. Similarly, Zeira and others (2009), presenting figures representing the proportion of the GDP allocated to government expenditure, the average tax rate, and the growth rate of developed countries from 1970 to 2007, concluded that:

> **There is a large variance in public spending, ranging from 58% of GDP in Sweden to 32% of GDP in Japan. However, the variance in growth rates is not so great. The figure shows that the relationship between public spending and growth rate is not strong at all and it seems that there is no real correlation between the variables.**

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53   For a summary of the development in the scope of government expenditure in developed countries, see: Zeira, J., et al. The Desired Size of the Government - Between Economics and Politics. The Israeli Democracy Institute, Caesarea Conference, 2009.

54   The public sector is not necessarily always less efficient, and there are well-known cases, such as the privatization of nursing services in schools in Israel, in which the privatization of public services significantly affected their quality and effectiveness. See: State Comptroller's Report, 2009, p.343.

The relationship between the average tax rate and the growth rate is similar. Strawczynski (2015) examined the effect of a range of statutory taxes on growth in Israel and found that only the corporate tax has a significant and negative relationship with GDP growth.

These findings indicate that the main differences among the countries regarding the scope of services provided by the government do not derive from the advantages and disadvantages of the different approaches, but from the individual country's position about the government's role and responsibility.

Given the above, public expenditure in Israel will be examined according to two comparative criteria: international and historical. Until 1967, the proportion of the GDP expended by the government was relatively very low, 35%. The Six Day War, and to a greater extent, the Yom Kippur War, caused a substantial expansion of government spending, which rose to an average of 75% of the GDP between 1973 and 1985, a most exceptional rate in comparison to any OECD country. The expansion of public expenditure left scant resources for the business sector, thus slowing down its development. The Stabilization Plan of 1985 served as a turning point in the economy in many areas, especially the government's budget. The huge government deficit was eliminated immediately and a gradual process of reducing public expenditure in proportion to the GDP was initiated, while the average tax rate was also reduced.

So long as the proportion of the GDP allocated to public expenditure was higher than the average in the OECD, there was a relatively broad agreement to continue reducing taxes. In 2003, then Finance Minister Benjamin Netanyahu developed a plan for a gradual decrease in direct tax rates and public spending, to serve as an engine of growth for the business sector and because he perceived the public services as "too fat." Since then, Israel's rank on the scale of GDP per capita has risen from 23rd to 20th place, mainly because of the recession in the countries affected by the economic crisis that hit the world in 2007. However, the price of this policy in terms of the scope and quality of public services was high. The proportion of the GDP allocated to public expenditure reached 41.3% in 2013 while the average rate in OECD countries then was 45.2% of the GDP *(Figure 1)*. That is, most of the developed countries allocate a larger portion of the national pie to public services[55].

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55   The data presented here accord with the OECD definitions. It should be noted that while these definitions differ slightly from the accepted definitions in Israel, they are preferable to use for the sake of comparison The Brodet Commission (2007) addressed the overall problems related to the efficiency of the security system. The Ben-Bassat Committee (2006), which examined duty service in the IDF, pointed to hidden unemployment in compulsory military service.
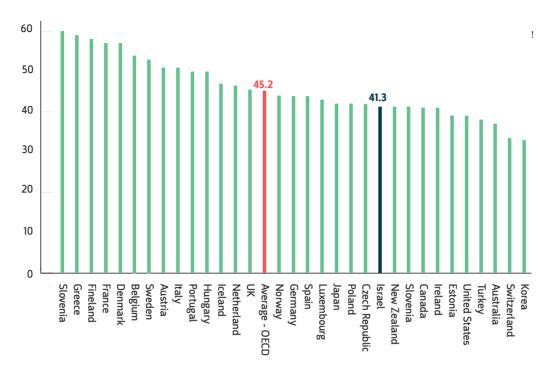
Figure 1: **Government Expenditure, GDP Percentages, OECD Countries, 2013**

Source: OECD

Note: For South Korea, Mexico, New Zealand and Iceland – last available datum.

One element of the budgetary policy for the years 2015 to 2016 - the restriction in the growth in the rate of government expenditure to 2.66% per annum- has been maintained. Although the anticipated rate of growth for these years was not higher than the budgetary restriction, the economy's actual long-term growth rate was 3.5% on average. Therefore, if the restriction on the expenditure growth is not changed, the proportion of the GDP allocated to public expenditure is expected to continue to decline in coming years as well.

b.1.   Defense Expenditures

Israel's geopolitical location has dictated very large defense spending since the country's inception. The peace treaties with Egypt and Jordan and the Oslo Accords permitted a reduction in the amount of defense spending as a proportion of the GDP, but it is still considerably higher, six percent of GDP, than the average of 1.5% allocated for defense by other OECD states. In fact, Israel's defense expenditures are higher those that recorded in the budget book, because the defense establishment also benefits from in-kind sources that are not budgeted, such as duty service and land. Zeira and Wolfson (2015) estimated the non-budgeted expenditures on security at 4.3% of the GDP.

After the Second Lebanon War, a public commission led by David Brodet was established to review the defense budget. The committee issued three major recommendations: creating a multi-

year outline for the security budget; substantially enlarging the resources allotted to security; and forcing the security system to contribute its share through a streamlining program. These recommendations should be examined for a number of reasons.

First, all countries, including Israel, have adopted an annual budgeting system for government expenditures because it is very difficult to estimate tax revenues in the medium and long term due to high levels of economic uncertainty. Canada tried to move to a multi-year budget, but cancelled the program following its failure. Israel adopted a two-year budget for 2011–2012, but this attempt failed as well, and the last government returned to an annual budgeting system. Nevertheless, a multi-year budget for the security system remains. This model is even more problematic than a two-year period for the entire budget, because it places the burden of security budget adjustments as a result of unexpected events solely on the civilian budget.

The Defense Ministry claims that the system cannot operate without long-term planning. This is indeed a worthy argument, but one must distinguish between planning and budgeting. Effective planning needs to be long-term and involve all government offices, but budgeting must be annual because of the uncertainty about income and events that have budgetary implications. Long-term planning should be the benchmark that budgeting strives to meet. However, because of income uncertainty, sometimes budgets will exceed the benchmarks set and sometimes they will fall below. Multi-year budgeting should be utilized only for infrastructure projects. Such projects are found in all ministries, and, indeed, the Ministry of Finance allows for long-term commitments for these projects. Therefore, there is no real reason to prescribe a format for the defense budget that differs from that of other government sectors.

Second, according to a Ministry of Finance report, the security system has not conducted the restructuring plan recommended by the Brodet Commission.[56] Moreover, although it had been promised a multi-year budget, the Defense Ministry deviated from it by approximately two billion shekels in both 2011 and 2012 (Bank of Israel Report 2011, Table 8.F and Bank of Israel Report, 2012, *(Table 3.F)*. Third, another committee was recently established to examine the defense budget, led by the Director General of the Prime Minister's Office Harel Locker. Hopefully, this committee will consider the changes in the nature and extent of threats facing Israel. While some threats have increased, on the other hand, in recent years, most of the states presenting a threat to Israel, such as Iran, Egypt, Syria and Lebanon, have been facing severe economic crises that do not allow them to realize their threats. Moreover, Israel's security expenditures from 1998 to 2014 were 78% larger than the total spending of its bordering countries. Adding Iran's defense budget to that of the

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56   The Brodet Commission (2007) addressed the overall problems related to the efficiency of the security system. The Ben-Bassat Committee (2006), which examined duty service in the IDF, pointed to hidden unemployment in compulsory military service.

bordering countries, we find that during the aforementioned period, the Israeli defense budget was only seven percent smaller than the total defense budgets of all the confrontation countries *(Figure 2)*. It should be noted that, according to foreign reports, Israel developed nuclear weapons for protection long before the aforementioned period. In addition, during the last decade, Israel has been reported to have made preparations to destroy the Iranian nuclear reactors.[57] Against the background of the economic situation in the confrontation states, there is concern that an Israeli initiative to expand the defense budget would accelerate into a renewed arms race that would not change the balance of power, but would affect the economic welfare of all the countries in the region, including Israel.

Notwithstanding the foregoing, in early 2016, an agreement was reached between the Ministry of Defense and the Ministry of Finance to expand the defense budget by three billion shekels per year and not change it for five years.

Figure 2: Defense Expenditure, Israel and the Confrontation States, 1998–2014, 2010 Prices in $Billions

Source: Sipri

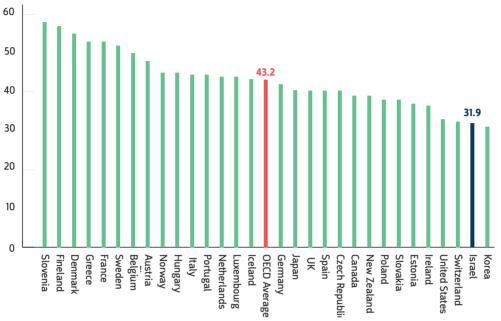Note: Syria's security expenditure after 2010 is based only on estimates.

b.2.   Civil Expenditures

The proportion of total public expenditures as a part of GDP in Israel is smaller than the median of the OECD countries, while the proportion of security expenditures is the highest among these countries. The combined effect of these two parameters is a very low level of expenditure for civil purposes. In fact, only South Korea allocates a lower percentage of resources to civil services than Israel *(Figure*

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57   An examination of the military potential required of a state in our region requires attention to all the threats each state faces. For example, Iran's potential enemies are many and larger than those of Israel.

3). The gap between Israel and the OECD median is huge, amounting to 11% of GDP. The price of this policy severely affects all of the public services, especially education, healthcare and welfare.

Figure 3: **Government Expenditure Excluding Defense and Interest, GDP Percentages, OECD, 2013**
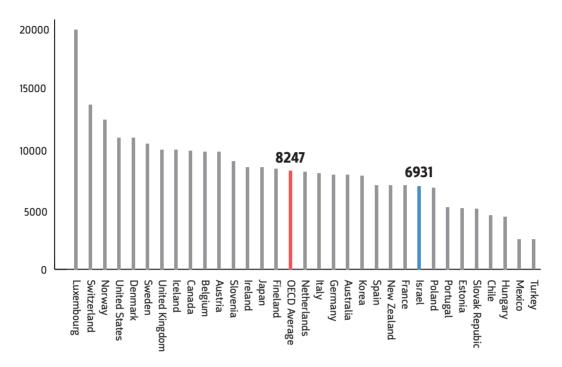

Source: OECD

Note: The graph reflects the last available data for Denmark, Iceland, Finland, France, Germany, Greece, Ireland, Japan, South Korea, Norway, Poland, Slovakia, Slovenia, Spain, Switzerland, Canada, and New Zealand.
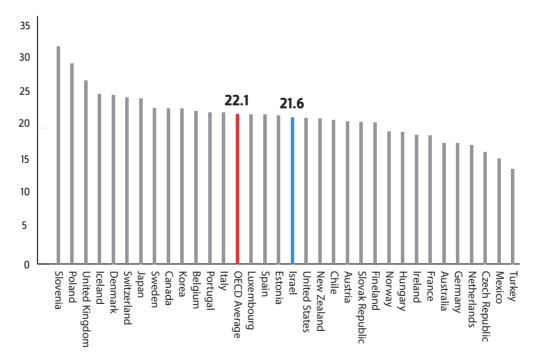
b.3.   Expenditures on Education

Israel spends a larger part of its GDP on the educational system as a whole than most developed countries. Nevertheless, the expenditure per student is relatively low, because the percentage of children in the Israeli population is larger (Dahan and Hazan, 2012). Since the beginning of the millennium through 2009, there were fluctuations in expenditures per pupil in primary education, after which they fell before rising again. Nonetheless, Israel's rank among the 33 OECD countries in 2012 improved by one point only, moving from 25th to 24th place *(Figure 4a)*. When calculating the expenditure per student as a percentage of GDP per capita, Israel's ranking improved to a greater extent, moving from 25th to 17th place *(Figure 4b)*. This improvement in ranking also reflects the sharp slowdown in the growth rate of GDP per capita in most developed countries as a result of the global economic crisis compared to Israel. In recent years, Israel has also experienced a slowdown in growth, so that its improved ranking due to relative changes in growth rates may be temporary.

Figure 4a: Annual Expenditure per Student by Educational Institutions for all Services in Primary Education, in equivalent USD converted using PPP, 2012
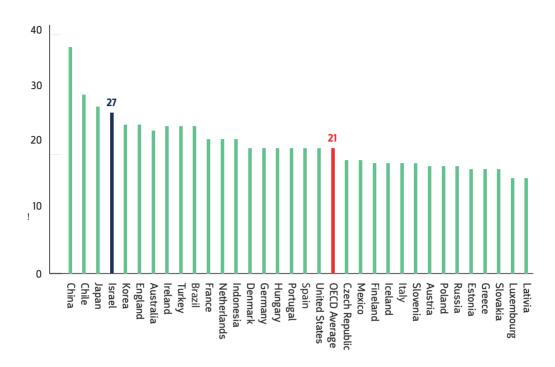
Source: OECD, Education at a Glance, 2012

Figure 4b: Annual Expenditure per Student in Primary Education as Rate of the GDP per Cpita, 2012
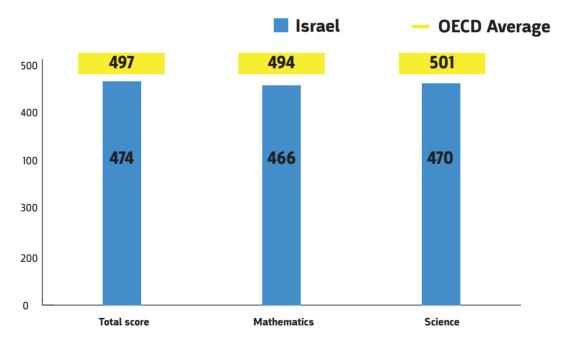

Source: OECD, Education at a Glance, 2012

Figure 5: **Average Number of Students in a Classroom in Primary Education, OECD Countries, 2012**

Source: OECD

Figure 6: **Achievements of Israel and the Average of the OECD Countries in the Pisa Tests, 2012**

Source: The National Authority for Measurement and Evaluation in Education

One consequence of the low level of expenditure per pupil in primary schools is the congestion of classrooms in Israel in comparison with other countries *(Figure 5)*. However, more troubling are the achievements of Israeli students in comparative tests, such as the PISA tests. The scores of Israeli students, excluding ultra-Orthodox schools, are lower than the OECD average in the overall score and in all subjects: reading comprehension, science and mathematics *(Figure 6)*.

Added to the burdens imposed by the low education budget is the unsatisfactory efficiency of the system. This is due in particular to the struggles with the teachers' unions, which are far more concerned with benefits for the teachers than with the interest of their students. One example of the system's low efficiency is the ratio between actual teaching hours and paid non-teaching position hours, which is designed to improve the remuneration of teachers by assigning them administrative tasks, some of which are unnecessary or overfunded. Even the reforms adopted in recent years, Ofek Chadash and Oz LeTmura, are characterized by a low ratio of hours actually devoted to students, on both the personal and collective levels, compared to the number of hours for which teachers receive financial recompense. In contrast, the Dovrat reform, which tried to address the deficiencies of the educational system, was shelved under pressure from the teachers' unions. The educational system's budgeting also suffers from significant inequality between affluent local authorities and low economic status local authorities. The main differences among the local authorities in expenditure per pupil result from supplementary funding, especially for high school students, provided from the resources of the local authority, (Ben-Bassat and Dahan, 2009). Financing for education from independent sources in the three lowest socio-economic level, where most of the Arab local authorities are concentrated, is very low, between 150 and 760 shekels per student annually. Starting with the fourth cluster, the local authorities' expenditures on education rise to 1840 shekels per student annually, and continue upward to a peak of 4,180 shekels per student annually in the eighth cluster. Direct parental participation in funding results in even more pronounced gaps in educational spending. This participation is especially evident beginning with the fifth cluster and peaks in the tenth cluster. The work of Justman et al. (2014) reinforce these findings: "Participation by the local authorities tips the scales in favor of the more established authorities, and creates significant gaps in favor of the strong populations in the total expenditure per pupil."
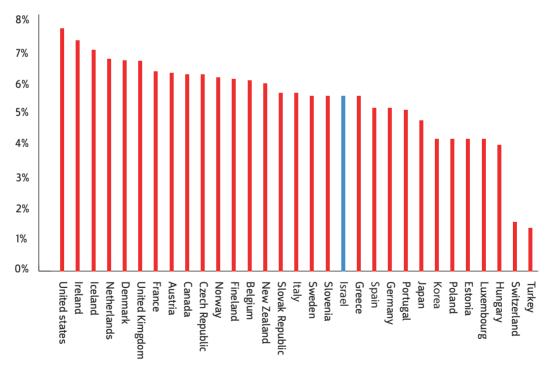
Finally, but not least, school administration also suffers from inefficiency, because the powers granted to school principals to recruit and motivate good teachers is very limited (Dovrat Commission Report, 2005).

The problems of the educational system affect the technological and cultural levels of Israeli society as well as the skills of young recruits to the army. Enhancement of human capital through education is also the most important key to increasing economic growth and reducing inequality in the next generation of workers.

b.4.   Healthcare Expenditures

The healthcare needs of a population are determined by its composition according to age, since the need for health services is far greater among the elderly. Because the proportion of young people in Israel is high relative to the developed countries, the overall spending needed for healthcare is lower. Thus, a comparative analysis of actual spending on healthcare is based on a spending per standard capita, which is calculated on the basis of normative expenditure by age, determined by the Ministry of Health using the capitation method. When calculating the expenditure per standard capita in the developed countries on the basis of Israel's capitation method, it seems that Israel's healthcare services are in a somewhat better situation than its educational system. However, healthcare services in Israel have also deteriorated, and in 2010, the expenditure per standard capita in Israel was ranked 19th among the OECD countries, or below the median *(Figure 7)*.

Figure 7: **Health Expenditure per Standard Capita, the OECD Countries, GDP per Capita Percentage, 2010**

Source: Adapted from OECD data and the CBS

b.5. Welfare Policy[58]

Welfare costs in Israel are much lower than the average in the other OECD countries. Dahan and Hazan (2012) examined the extent of the benefits of the welfare system through the support indices of needy population groups. They found that with regard to child allowances, the maximum number of days an unemployed individual is eligible for unemployment benefits, and income support allowances, Israel's benefits are lower than those granted by the large majority of OECD member countries, while Israel's old age pension is close to the median of these countries.

The economic policy and the welfare system also have an impact on inequality in income distribution. Inequality in economic income, which is determined in the market, increased steadily from the early 1970s through 2009, since when it has declined to a certain extent. Israel's tax policies and transfer payments policies mitigate economic inequality, but to a lesser extent than in most developed countries. Disposable income, meaning economic income minus taxes and plus transferred payments, has also trended upward since the early 1970s, although they have remained fairly flat in recent years. In effect, the improvement in the distribution of income generated in the market was offset by a policy that reduced the progressivity of income tax. As a result, inequality in disposable income has not improved and has remained stable since 2004, with some fluctuations *(Figure 8)*. Moreover, Israel's position remains problematic even today. A report published by the OECD in early 2016 found that Israel's poverty rate is the highest among the OECD countries and that Israel is ranked third on the index of economic inequality.
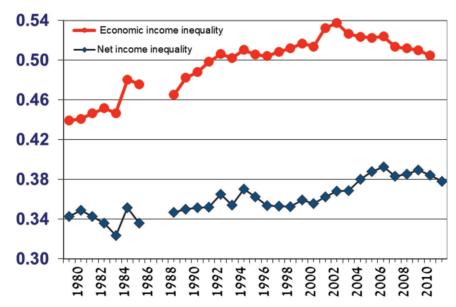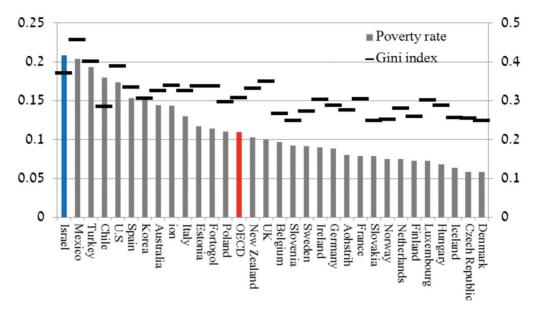
Figure 8: Gini Index for Income Inequality, 1975–2013

Source: The Central Bureau of Statistics

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58 Because of the severity of the problems in the welfare area, a special chapter has been devoted to this issue in the strategic plan.

Figure 9: **Inequality Index (right axis) and Poverty Rate (left axis) for Disposable Income Following Taxes and Transfers for OECD Countries; Most Recent Available Data**

Source: OECD

Table 1: **Distribution of Gross and Net Income by Deciles, 2011**

Decile	Gross income Shekels	Net income Proportion of Total Revenues	Shekels	Proportion of Total Revenues
1	977	1.0	974	1.3
2	1,964	2.1	1,901	2.5
3	3,053	3.2	2,950	3.9
4	4,167	4.4	4,021	5.4
5	5,285	5.6	5,046	6.7
6	6,593	7.0	6,095	8.1
7	8,273	8.7	7,402	9.9
8	10,813	11.4	9,144	12.2
9	15,586	16.5	12,145	16.2
10	37,961	40.1	25,475	33.9
Top percentile	120,271	12.7	77,451	10.3

Source: State Revenue Administration Report 2011–2012.

An examination of the total gross income minus income tax *(Table 1)* illustrates the gaps in income. The poorest 10% of the population receive one percent of the gross income, while the top decile reaps 40% of the total revenues and the top percentile, the wealthiest one percent of the population, collects almost 13% of the national pie. As a result, the income of an individual in the

top percentile is 130 times greater than that of an individual in the lowest decile. While the tax system is basically progressive and corrects some of the country's income inequality, the gaps remain huge. The net tax income from an individual in the top decile is 34 times larger than that from an individual in the lowest decile, and the net tax income from an individual in the top percentile is 103 times larger than that of an individual from the lowest decile.

Reducing economic inequality is an economic, social and moral imperative that must be undertaken. Equality does not interfere with economic growth; rather, it enhances growth, for two reasons. First, reduced inequality translates into greater political and social stability, which strengthens the motivation to invest in production assets. Second, reducing inequality means increasing the investment in education of all of Israel's population and thereby accelerating the rate of economic growth (see Ben- Bassat and Dahan, 2004; and Strawczynski, 2015).

c.   The Tax System

Government expenditures are financed by taxes and income from property, such as sales of government land. Reducing the proportion of GDP allocated to government expenditure in Israel was accompanied by a reduction in the tax burden. In fact, the tax reduction policy formulated in 2003 led to a decrease in public spending. The trend of reducing the two main parameters of fiscal policy, expenditure and taxation, came to a halt following public outcry in 2011. The social protests of that year signaled to Israel's leaders that the public was overburdened by the low level of public services to the point of outrage. Israel's tax rate of 29.5% is among the lowest in the OECD countries, with an overwhelming majority of the developed countries imposing a much higher tax burden *(Figure 10)*.

The main problems of Israel's tax system are inherent in its basic composition, with two distinctive features affecting its fairness and its contribution to reducing income inequality. First, the share of indirect taxes is significantly higher than the norm for OECD countries. Second, the system is heavily loaded with tax exemptions that serve no socio-economic purpose.

c.1.   The Weight of Indirect Taxes

Taxes are divided into two categories: indirect taxes, such as VAT and purchase taxes; and direct taxes, such as income tax and corporate tax. Indirect taxes are collected as a percentage of the value of purchased products, and therefore are regressive in relation to the individual's income. The lower an individual's income, the greater the proportion of it is spent on consumption and therefore the proportion of indirect taxes paid out of a low income is relatively high. Income tax, however, is progressive, in that the higher the individual's income, the higher the tax rate. Since 2003, income tax and corporate tax rates have been lowered, while the indirect tax rates have risen.

As a result, the proportion of indirect taxes to total taxation in Israel has reached 50%, while the average weight in the OECD countries is only 39% *(Figure 11)*. Thus, the policy adopted by Israel minimizes the progressivity of the tax system. Strawczynski (2015) has demonstrated that the overall progressivity of the tax system has decreased from 2001 to 2012.

Figure 10: **Tax Burden, OECD Countries, GDP Percent, 2013**

Source: OECD

Figure 11: Proportion of Indirect taxes of Total Taxes, OECD, 2013

Source: OECD data processing

c.2. Tax Exemptions[59]

Tax relief exists in the tax laws of many countries because of the need to adapt the tax system to the natural differences between taxpayers. Tax relief helps to increase the tax system's degree of fairness by increasing horizontal justice. For example, a disabled person receives tax relief, in contrast to a healthy person who earns the same pay, because the disabled person's actual standard of living at a given income level is lower, due to the likelihood that the expenses incurred due to his or her disability, including those involving mobility, particularly to the workplace, are greater. Tax relief also serves to help achieve national objectives, such as tax relief for investments in development areas to encourage enterprises that otherwise would not establish themselves in these areas, to invest and create jobs for local residents. However, setting the limits and criteria for granting tax relief is quite difficult, and determining the size of the benefit is even more challenging.

The use of tax exemptions as an incentive to achieve national and social goals has its drawbacks. First, it is difficult to estimate the cost of the tax benefit. Interested parties may deliberately underestimate the cost of tax relief as part of their efforts to obtain those concessions. In addition, direct public funding to achieve national goals is far more thoroughly scrutinized than are tax exemptions or relief. Because the cost of the tax relief does not require the approval of the Knesset, as does the state budget, decision makers may be tempted to approve a tax exemption more easily than they would a direct budgetary expenditure.

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59   For further details, see Ben-Bassat et al., 2000.

The main problem with tax exemptions stems from pressure groups that seek to obtain tax benefits for activities that have no national, social, or economic objectives. Typically, the results achieved by pressure groups do not reflect the genuine needs and relationships in a democratic society. Moreover, the success of one pressure group creates an incentive for other pressure groups to seek tax relief as well. The multiplicity of such successes unravels the fabric of the tax system, reduces the tax base and consequently requires higher tax rates. The beneficiaries of exemptions pay a lower effective tax, while others are forced to pay higher taxes. Moreover, usually individuals at high income levels enjoy more tax exemptions, further intensifying the inequality in income distribution.

According to the data of the State Revenue Administration, the scope of tax benefits in 2014 reached 47 billion shekels. Some of these benefits were designed to achieve social or economic purposes, but others do not and, instead, benefit strong pressure groups. Some of the exemptions are justified, but often the extent of the benefit is excessive. Figure 12 presents the distribution of the tax exemptions in Israel in 2014. These exemptions, which should either be cancelled or changed, will now be reviewed.

c.3.   Exemptions under the Encouragement of Capital Investments Law

 The Encouragement of Capital Investments Law has a number of goals: the promotion of settlement and employment in the development areas; the encouragement of exports; and, since 2006, the support of strategic companies. Strategic companies are defined as companies in Development Area A with incomes exceeding 13 billion shekels or companies in the rest of the country with incomes exceeding 20 billion shekels.[60] The incentives for eligible firms include grants and reduced corporate taxes. This section discusses only the tax benefits for export and strategic companies, which totaled 7.2 billion shekels in 2014.

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60   The criterion of a strategic company was replaced in 2011 by the criterion of "special preferred enterprise." To the new definition were added conditions that were not required previously. However, the principle of discrimination and the inherent distortions remained intact.
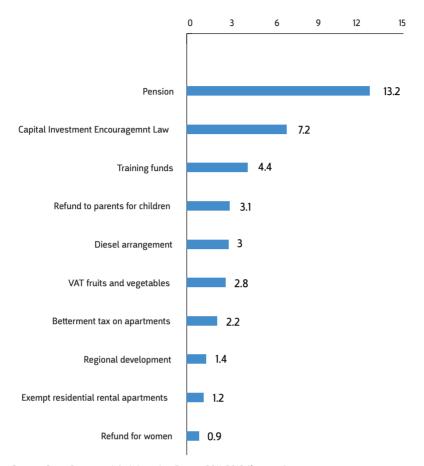
Figure 12: Ten Tax Benefits with the Highest Cost in Billions of Shekels, 2014

Benefit	Value
Pension	13.2
Capital Investment Encouragemnt Law	7.2
Training funds	4.4
Refund to parents for children	3.1
Diesel arrangement	3
VAT fruits and vegetables	2.8
Betterment tax on apartments	2.2
Regional development	1.4
Exempt residential rental apartments	1.2
Refund for women	0.9

Source: State Revenue Administration Report 2011-2012 (forecast).

The export tax benefits were designed to improve Israel's foreign currency balance of payments. However, the production of exported goods has no advantage over the production of import substitutes for the domestic market. Import substitutes improve the foreign currency balance just as do exports. Proponents favoring exemptions for exports also argue that exports are necessary in order to compete in international markets, with success in exports also serving as a measure of innovation and efficiency. But the manufacturer of the import replacement also has to compete with companies from all over the world that market their products in Israel and also faces the same challenges of innovation and efficiency.

The preference for strategic companies did not produce any results, although it cost the economy huge sums of money. Before the special benefits were granted, four companies, Teva, Check Point, Intel, and ICL, met the size criterion and since then, not even one new company has been established that meets the criterion. In fact, the benefits serve in essence as a rent given to the existing strategic companies, since they had previously been able to operate in Israel even without the above-mentioned exemptions.

Worst of all, however, is the discrimination against SMEs compared to strategic companies, since the former companies have to pay a much higher corporate tax. Even companies that produce import substitutes are discriminated against in comparison to export companies. As a result, the ability of the companies discriminated against to compete with companies that pay a reduced corporate tax is impaired in numerous areas, including hiring personnel, obtaining credit, and more. In essence, the discrimination distorts the distribution of production means in the economy among companies. It is possible that some of the companies discriminated against are more efficient companies, but the discrimination undermines their ability to compete for production means and therefore impedes their ability to grow, thus damaging the economy's growth rate.

c.3.1. Exemption for Study Funds

Study funds were originally intended to encourage employees to invest in training and improvement of human capital. Until 1980, it was possible to withdraw the money accumulated in these funds after three years for the purpose of continued education in the country or abroad. After 1980, however, the study funds became double-purpose funds. In addition to the original goals and conditions, it was decided that employees would be entitled to withdraw money from their funds after six years for any purpose. Thus, the relationship between the original aim of improving human capital and the actual use of the funds by employees gradually disappeared. A tax exemption is granted to the employee on the employer's contributions at a level of 7.5% of the employee's salary, with a maximum limit of twice the average wage.

If the tax benefit had encompassed all the workers in the economy, it could then be considered an overall tax reduction. However, the study funds arrangement covers only 37% of employees, or about 1.3 million workers. This means that the tax benefit is not uniform and is available mainly in workplaces organized by the Histadrut. Moreover, according to estimates by the State Revenue Administration, the rate of benefit increases with the employee's income. Considering that the benefit rate for each shekel deposited increases along with income increases, then it can be concluded that most of the benefit reaches a very small group. The Public Commission for Tax Reform (Ben-Bassat et al., 2000) found that 56% of the benefit reaches the top two deciles of those entitled to it. In 2014, the benefit amounted to 4.4 billion shekels. According to the current table of those entitled to the benefit, more than half of the benefit reaches half a million workers who are in the top two deciles, while 2.2 million workers are ineligible for the benefit. Such serious discrimination in the labor market is both unfair and counterproductive to the rational allocation of employees among different companies.

c.3.2.   Pension Exemptions

The Israeli government, like many governments around the world, encourages pension savings, based on the fear that, as a result of a failure to plan for the long term, workers will not save a sufficient amount for old age and may require support from the public. Savings for pensions are subsidized through two mechanisms. First, bonds specifically designated for pension funds and bearing preferred interest rates are issued. The Ministry of Finance estimated that this benefit amounted to three billion shekels in 2015. Second, there are tax exemptions on employee and employer contributions, to pension funds, with ceiling limitations, *(for details, see Abramson and Israel, 2015, Table 1).* The Ministry of Finance estimated that this tax benefit amounted to 13.9 billion shekels in 2015. Government intervention in pension savings raises many problems:

› Since 2007, pension savings have been compulsory. Thus, the questions arise as to whether the government should continue to use tax incentives to encourage savers to "do their duty," and if so, whether the incentive rate is appropriate;

› Savings for pension funds through subsidies of earmarked bonds is relative to the value of the saver's deposits. However, the tax benefit is regressive, as the higher the fund member's income, the greater the rate of the tax benefit. Abramson and Israel (2015) demonstrated that the total benefits to the saver over the course of his or her lifetime, assuming 35 years of work, amounts to 1.5 million shekels in the top decile, compared with only 90,000 shekels for savers in the bottom decile;

› The tax benefits are granted up to a maximum of four times the average salary in the economy. Why should the government subsidize such a high standard of living in retirement?

› Subsidies through dedicated bonds reduces the volume of the tradable market for the bonds and is counterproductive;

› The pension support system is very cumbersome and difficult to understand.

For all these reasons, a reform of the system of incentives for pension savings is warranted.

c.3.3. VAT Exemptions

The two exemptions from value added tax (VAT) are fruits and vegetables and goods purchased in Eilat. Both these exemptions have no economic or social justification. The fruits and vegetables exemption discriminates among products and therefore distorts the consumption basket of households and the composition of production in the economy. Its contribution to reducing inequality is negligible, since it is granted to all households without an income test. The VAT exemption in Eilat is designed to compensate the city's residents for their distance from the center of the country. The main beneficiaries of it, however, are domestic and foreign tourists. In this area, too, there is no justification for favoring Eilat over other tourism destinations in Israel.

c.4. The Estate Tax[61]

Inheritance taxes or estate taxes were instituted already in antiquity and are common today in most developed countries, although there are considerable differences in their prevailing tax rates *(Table 2)*. Two main arguments are raised in favor of imposing an estate or inheritance tax in Israel. First, the inheritance increases the income and economic well-being of the heir and therefore, like any other income, should be taxed. Because the heir is a separate taxpayer from the endower, there is no basis for the claim of double taxation. The second reason for such a tax is to reduce the transmission of inequality from generation to generation and thereby increase equal opportunities in society. The transfer of intergenerational wealth is one of the main mechanisms through which the transfer of inequality from generation to generation is reinforced. Studies have indicated that the share of capital accumulated by households from inheritance ranges from 40% (Davis and Schorrocks, 2000) to 63% (Scholz and Gale, 1994) and even up to 80% (Summers and Kotlikoff, 1980).[62]

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61   For further reading see Ben-Bassat et al., 2000; Tal Wolfson, 2012.

62   The gaps result from the different calculation methods.

Table 1: **Rate of Marginal Estate Tax in Percent, 2014**

State	Marginal tax rate	State	Marginal tax rate
Belgium *	3-80	Italy ***	4-8
Bulgaria *	0.4-6.6	Japan *	10-55
Denmark *	0-51.7	Luxemburg **	0-48
Finland **	0-35	The Netherlands*	10-40
France *	5-45	Poland****	0-20
Germany *	7-50	Portugal*****	10-10.8
Ireland *	0-33	South Africa *	0-20
South Korea*	10-50	Spain****	7.6-81.6
Turkey*	1-10	England	40
USA	18-40	Philippines*	0-20

Source: World Wide Estate and Inheritance Tax Guide, 2014, E&Y

*	Depends on the scope of the inheritance and/or kinship
**	Depends on the scope of inheritance and citizenship
***	Depends on kinship only
****	Progressive taxing – one of the considerations to determine the tax rate is the economic condition of the bequeathed.
*****	Depends on the type of asset, real estate (higher), and other assets

Israel did instate an estate tax in 1949. The tax was imposed on all the deceased's bequeathed assets, including assets transferred to another person without charge during the five years preceding his or her death. The deceased's debts and expenses were deducted from the value of the assets. Most of the population in Israel was exempt from the estate tax because of the deductions permitted by the law, so that by 1979, about 85% of bequests were exempt from tax. In 1979, the amounts of deductions were increased considerably, and the share of exempted estates rose by 98%. The revenues from the estate tax in the 1970s amounted to approximately 0.4% of the GDP, about four billion shekels annually in 2014 values. In 1981, the estate tax was abolished for several reasons, but the primary one was the acceleration of the annual inflation rate to 101%. The galloping inflation eroded the tax base, making the estate tax virtually negligible. However, in light of the decline in inflation in recent years to less than 3% annually, the main reason for cancelling Israel's estate tax is no longer valid.

Other arguments raised in favor of repealing estate taxes are not unique to Israel and can be made in every developed country that imposes inheritance and estate taxes. The central issues are that such taxes entail high administrative costs and that the state should prevent the liquidation or weakening of family-owned industrial enterprises when the head of the family dies. Another prevalent argument is that because it is easy to avoid the estate tax, its collection rates

are low. Data of the Federal Tax Authority in the United States indicate that the scope of estate tax evasion is not extraordinary compared to other taxes and is also considerably lower than the difference between the potential taxes expected from corporate tax and the amount actually collected (Slemrod, 2007). Also, the claim that an individual can avoid paying inheritance tax by inheriting during the endower's life has not been substantiated (McGarry and Joulfaian, 2004).

d.   Demographic Implications on the State Budget in the Future[63]

According to demographic projections of the Central Bureau of Statistics, a significant change in the composition of the population is anticipated. In 2009, the ultra-Orthodox population's share of the population was 10% and that of the Arabs was 20%. The percentage of these two groups in the population, especially of the ultra-Orthodox, is expected to increase gradually. In 2059, the proportion of the ultra-Orthodox in the population should reach 27% and that of Arabs 23% *(Table 3).* The ways in which these two groups differ from the rest of the population have macroeconomic implications:

› The labor force participation rate of Ultra-Orthodox men and Arab women is significantly lower than that of the corresponding groups in the population;

› The educational levels and GDP per worker in these groups are lower than the average;

› The birth rate in these two groups is higher than the average;

› The poverty rate among these populations is higher than the average.

Another development with macroeconomic consequences is the increased life expectancy of the general population, which will significantly raise the dependency ratio in the economy. It is anticipated that the percentage of retired residents aged 65 and over within the general population will increase from 18.2% in 2009 to 33.2% in 2049 *(Figure 13).*

If the behavioral characteristics associated with the demographic groups described above remain unchanged, the following results are expected:

› An increase in public spending on healthcare, education, and welfare;

› A decline in the employment rate of the population;

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63   For further reading on this subject see Asaf Geva, 2013.
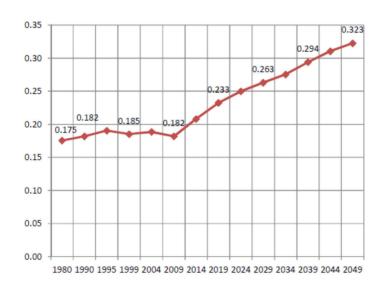
› A decline in the percentage of those eligible for matriculation exams;

› A decline in GDP per hour worked relative to that expected in the OECD.

Table 3: Long-Term Population Forecast by Sectors (percent)

Year	Jews and other non-Ultra-Orthodox	Ultra-Orthodox	Arabs
2009	70	10	20
2019	66	12	22
2029	62	15	23
2039	58	19	23
2049	54	23	23
2059	50	27	23

Source: CSB

Figure 13: Ratio between the Retired Population (65+) and the Working Age Population (20–64)

Source: The committee examining the financial stability of National Insurance

e. **Recommendations**

e.1. **State Budget Expenditures**

1. **Change the fiscal rule for public expenditure so that increases in public expenditures will increase at a fixed rate corresponding to the long-term GDP growth rate.** This will halt the decrease in the share of GDP allocated to public expenditure and provide certainty for the economy, thus serving as a stabilizer of economic activity.

2. **Because Israel's share of GDP allocated to public spending, particularly domestic spending, is the lowest it has ever been, it should strive to reach the median level of public expenditure among developed countries.** To achieve this, the government should increase the level of public spending by one percent of GDP during the next two years. After two years, the results of the change should be examined. If there have been no negative consequences, the government's level of public spending should be raised by an addition one percent of GDP over the following two years.

3. **The government should give preference to increasing the rate of civilian spending in education, health, infrastructure and social welfare rather than defense spending.**

4. **The government must reduce inequality in education expenditures per student while taking into account the education revenues received from the local authorities.**

5. **The government's budget deficit should not exceed three percent of GDP and the average budget deficit over time should not exceed two percent of GDP.**

6. **The government should introduce multi-year planning of the state budget at the cluster level in order to provide long-term guidelines.** However, the actual budget of all ministries must be determined on an annual basis to allow for adjustments to uncertainty in revenues.

7. **The government must streamline the production of services and planning policies in all areas in order to maximize all tax revenues collected from the public.**

e.2.   The Tax System

The growth rate of the GDP should increase tax revenues by the same rate, so that expanding spending at the same rate as that of GDP growth should not increase the deficit over time. However, the increase in the share of the GDP allocated to public expenditure requires an increase in the average tax rate. Therefore, it is recommended:

1.   **Avoid raising statutory tax rates, both direct and indirect, as much as possible and focus on eliminating tax exemptions.** However, existing tax rates must be adjusted, if necessary, to meet the desired level of public expenditure.

2.   **Tax exemptions lacking any economic or social objective should be cancelled in the following order: tax exemptions for strategic companies; tax exemptions for export companies; tax exemptions for study funds; and VAT exemptions.**

3.   **Because the measures to encourage pension savings are regressive and very cumbersome, it is recommended that:**

   C.   **The tax exemption on deposits should be abolished and replaced by a fixed rate benefit for shekel deposits.**

   D.   **Designated bonds for pension funds should no longer be issued and should be replaced by a fixed rate benefit for shekel deposits.**

   E.   **The benefits from retirement savings should be limited to twice the average wage.**

4.   **An estate tax should be enacted, as recommended by the Commission for Tax Reform (Ben-Bassat Committee, 2000), with the parameters adjusted to reflect the state of the current economy.**

All the recommended changes in the tax system will increase the share of direct taxes, contribute to economic efficiency, improve the fairness of the tax system, and reduce inequality in income distribution.

e.6.   Adjusting Economic Policy to Demographic Changes

1.   **The retirement age should be linked to life expectancy, with adjustments made every two or three years.**

2. **Investment in education should be increased, with an emphasis on technology education.**

3. **A core curriculum should be required in the state-supported ultra-Orthodox educational system.**

4. **Ultra-Orthodox men and Arab women should be encouraged to enter the labor force.**

It should be noted that the recommendations in Chapter Three of the Socio-Economic Program addressing inequality, such as increasing work grants, reducing the number of foreign workers, and enforcing labor laws, will also contribute to preparing the country for anticipated changes in the demographic composition.

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a. Introduction

**a.1. The Renewed Expansion of Inequality in Developed Countries and the Motivation
to Narrow the Gaps**

For the past one hundred years, modern states have made major efforts to reduce inequality.
Indeed, in the second half of the 20th century, many countries managed to achieve significant
advances in reducing both inequality and the scope of poverty. However, in recent years, there is
a growing consensus among researchers and relevant institutions that inequality again poses a
leading risk to societies in developed countries (OECD, 2015).

Income inequality is worsening even in relatively egalitarian countries. Governments throughout
the developed world are finding it necessary to invest considerable effort to planning welfare
policies and allocating resources usefully in order to achieve and maintain reductions in income
inequality. Together with local conditions that affect the distribution of income in each country,
several global and structural factors also have an impact on income inequality in many developed
countries. Prominent among these factors are:

> › The growing trend of labor migration, which has increased the supply of and competition
>   among non-skilled workers in developed markets, leading to a decline in their salaries;

> › The continued relocation of manufacturing industries to East Asia and South America,
>   which weakens the position of middle and low-level workers in terms of their
>   technological capabilities;

> ›   A dramatic increase in the return on human capital in science and technology
>   industries and vocations, which has led to a pronounced rise in the incomes of
>   individuals working in these industries and occupations;

> › A significant increase in life expectancy, which compounds the challenges faced by the
>   pension, healthcare and welfare systems.

Policies designed to reduce poverty and address the harm caused by high poverty levels and
inequality reflect several levels of motivation and justification, including:

Moral motivation: The acknowledgement of responsibility and concern for those in need or who suffer from a low standard of living.

Social motivation: The aspiration to reduce and eliminate the negative phenomena arising from poverty and inequality, such as inter-class alienation, violence, crime and more.

Economic motivation: The understanding that a wider diffusion of income and assets can lead increased growth potential. For example, according to the logic of the marginal propensity to consume, increases in income should result in increased consumption, leading to greater growth. A number of recent research articles have claimed that a higher level of equality corresponds to faster growth (Zeira, 2006). In addition, diversification of assets among a greater number of citizens may increase the stability of the economy, at least partially, by spreading the risks inherent in it.

Insurance motivation: The recognition that protecting citizens from economic scenarios involving risk and unexpected life circumstances by providing them with safety nets strengthen citizens' confidence in others and in society as a whole. Such policies also encourage individuals' willing-ness to take risks that can provide economic value, such as opening new businesses, changing jobs and investing time in academic and professional training to increase their earning potential.

Strategic Motivation: The awareness that all the above factors demonstrate that reducing in-equality is a key tool for creating social cohesion and civil resilience.

These justifications and motivations for reducing income inequality are multiple, varied and involve different fields. Therefore, a number of policy instruments which enjoy widespread agreement regarding their justification and effectiveness should be examined for their capacity to achieve several goals simultaneously.

a.2. Poverty and Inequality in Israel

Israel's poverty rate is still very high by international standards. Despite positive changes in this area in recent years, Israel remains at the top of the indices of poverty and inequality among developed countries *(Figure 1)*.
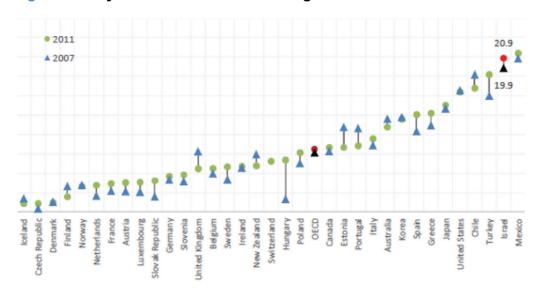
Figure 1: Poverty Rate, OECD Countries (Percentage of Poor Individuals)

Poverty has an impact on many issues and is deeply related to many of the economic and social challenges Israel faces in the second decade of the 21st century.

Given the country's many divisions, Israeli society is especially sensitive to the effects of poverty and inequality; at the very least, it is highly vulnerable to the persistence and expansion of these phenomena. Social divisions not only intensify the long-term impact of economic inequality, but are intensified and amplified by it as well. An additional serious repercussion of income inequality in Israel is the weakening of social cohesion, which is essential not only for bringing about the social changes needed to reduce income inequality but also for coping with unexpected, externally-generated crises.

Changes in the workforce participation rate and the unemployment rate in the past decade have indeed halted the increase in the poverty rate.[64] The labor force participation rate in Israel is similar to the OECD average and the low level of unemployment approaches the natural rate of unemployment. Despite these positive indices, the poverty rate in Israel is significantly higher than that in other OECD countries. Israel must work to reduce poverty even more through improvements in productivity and implementation of a variety of short-term and long-term policy instruments. While preserving growth and generating long-term incentives, these instruments should provide "fish" in addition to "fishing rods; or direct aid as well as training and other opportunities. In designing these tools, the following issues should be considered: the decline in tax progressivity in

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64   The positive change in the last year is questionable because of an unexplained gap between the Manpower Survey data and the Household Expenditure Survey. To date, the CBS has been unable to explain the dramatic rise in wages and employment of the lowest deciles in the expenditure survey, which is not supported by the Labor Force Survey. The CBS has appointed an inquiry team to study this matter.

Israel (Strawczynski, 2015); common structural phenomena characterizing the economies of many developed countries; and the variety of proposals and solutions found in the research, theoretical and empirical literature.[65]

Many government programs implemented in recent years, such as transportation infrastructure development, have been deemed valuable for increasing equal opportunities and reducing poverty. However, only a relatively small number of needed programs have been specifically and systematically designed to provide direct, thorough and comprehensive solutions to the problem of poverty, despite the magnitude and implications of poverty in Israel.

The following discussion considers some of the measures that should be included in the country's next budget in order to further decrease poverty levels. These measures should also be taken into account in the design of Israel's long-term social policies.

It is imperative that the Israeli government set its own targets for achieving a continued and gradual reduction in poverty rates so that they approach the OECD average. This effort must be reflected in Israel's long-term and system-wide strategic planning.

a.3.   The Scope of Poverty

In recent years, the poverty rate in Israel has declined and the Gini index for inequality has improved. Nevertheless, international comparisons indicate that Israel's situation in both contexts is still rather poor.

As of 2013, 18.6% of the families and over one fifth of the individuals in Israel lived under the poverty line. In addition, about 23% of elderly people and 31% of children can be characterized as poor *(see Figure 2)*.

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65   See, for example, Anthony B. Atkinson. (2015). Inequality-What Can Be Done? Cambridge: Harvard University Press.
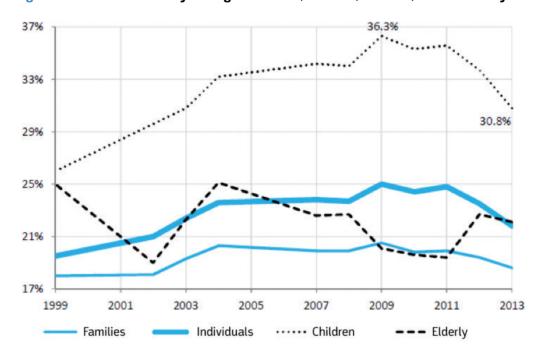
Figure 2: Incidence of Poverty among Individuals, Families, Children, and the Elderly

Source: National Insurance Institute, Poverty and Social Gaps Report, 2013, Table 5

The Gini index of financial income inequality fell from 0.537 in 2001, the peak year during the last 25 years, to 0.479 in 2013, and the Gini index of disposable income inequality fell from 0.392 in the peak year of 2006 to 0.363 in 2013 *(see Figure 3 below)*.[66] According to the most recently released data by the OECD for 2011, Israel was ranked 29th out of the 34 OECD countries on the Gini index according to disposable income and 17th according to economic income.[67]

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66   Beginning in 2012, the sample on which the calculation of the incidence of poverty is based was changed. Previously, it had been based on a combined sample of the Labor Force Survey and the Expenditure Survey. Since 2012, the calculation of the incidence of poverty has been based on the Expenditure Survey only. As a result, there have been discontinued changes in the rate of poverty of certain groups and in the total rate in 2013, as mentioned above.

67   This refers to Israel's position according to its data for 2013, compared to the data of the other countries for 2011, which are the most recent figures regarding the OECD countries.
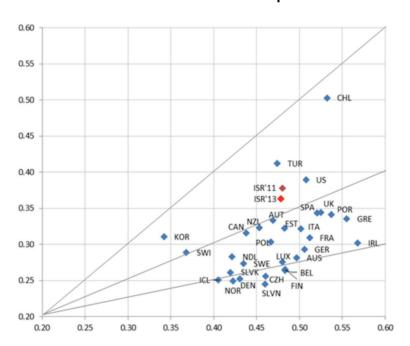
Figure 3: **Gini Index of Inequality, 2011: The Magnitude of Reduction in the Transition from Gini Gross Income to Gini Disposable Income**

Source: OECD, for the Gini Index of Israel for 2013: National Insurance Institute

The improvement in the Gini index and the decline in poverty levels can be attributed largely to changes in the labor market, led by an increase in the rate of workforce participation and the continuing decline in the unemployment rate *(see Figure 5).*

Additionally, more general factors account for Israel's decline in poverty levels, including Israel's economic recovery after the beginning of the decade following the Second Intifada and the global trade crisis as well as its fairly high level of growth compared to other developed countries in recent years. During the decade from 2004 to 2013, the GDP per capita in Israel grew at an average annual rate of 2.4%, while many developed countries experienced lower growth rates in this period.

Figure 4: **Gini Indices of Economic Income and Net Income (Annual Figures and Four-Year Means)**

Source: Adapted by the Kohelet Forum on Economics from data of the National Insurance Institute, 2015
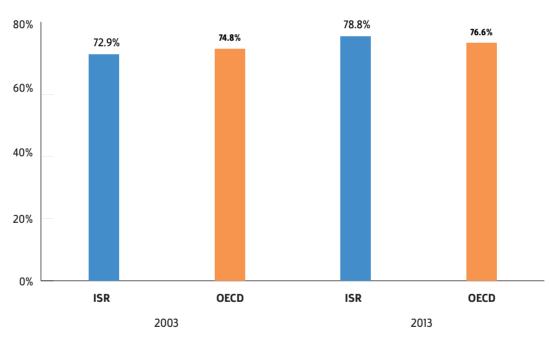
Figure 5: **Participation Rate, Ages 25–64 (%)**

Source: OECD.stat

a.4.   The Policy of Reducing Poverty in Recent Years

In recent years, two main committees in Israel recommended policy measures directly relevant to the field of poverty. In addition, a number of research teams made specific recommendations in this area.[68]

68   See, for example, a recommendation for raising child allowances for the first three children in Dahan et al. (2007). Why are there more poor people in Israel? Israel Democracy Institute.

In 2011, the Trachtenberg Committee for Social and Economic Change studied and addressed the situation of Israel's middle class. Some of its recommendations also applied, either theoretically or practically, to the poor population as well.

The 2014 Alalouf Commission, or the Commission to Fight Poverty, devoted all its resources and recommendations to the situation of people living in poverty.

Both the Trachtenberg and the Alalouf Committees created a distinction between tools with immediate or near-term impact, and tools which would show results only in a few years if not decades. The short-term tools include benefit transfers, which have immediate effect, and employments measures, with short and medium-term impact. The primary and most significant long-term tools identified were in the field of education.

While some of the Trachtenberg Committee's published recommendations were implemented and began improving the population's the standard of living, such as the expansion of government financing for pre-primary education, other recommendations it made were not accepted or have not yet been implemented. In contrast to the partial implementation of the Trachtenberg recommendations, to date, the main recommendations of the Alalouf Committee, covering a wide range of issues, have remained on paper. It should be noted that several issues appeared in the recommendations of both committees, mainly because some of Trachtenberg Committee's recommendations had not implemented in full or at all by the time the Alalouf Commission operated. Most of the recommendations raised below belong to this group of recommendations that were discussed by both committees, as well as in other forums.

b. The Main Contexts of Poverty in Israel

b.1. How the Number of Providers and Household Size Effect the Probability of Being Poor

There is considerable ideological and academic debate about how to characterize the reasons and causes for the emergence of poverty, such as whether to emphasize the weight of government policy or the choices made by individuals. A no less profound controversy exists about the policy tools that should be adopted to reduce poverty. However, almost no one disputes that high levels of inequality and poverty are troublesome and objectionable in many ways, and invariably have extremely negative consequences in many areas of society. Moreover, there appears to be a consensus that poverty is more prevalent in some situations than in others, although the nature of these conditions varies from country to country and from one society to another. In addition, the reason these situations, or the totality of social, economic, cultural, and governmental circumstances, etc., occur can be subject to debate.

The characterization of the causes contributing to the expansion of poverty in Israel, or at least of the factors that correlate with a high level of poverty, has been examined in many contexts by researchers in academia, research institutes and policy teams inside and outside the government. Nevertheless, it is worthwhile to review their main points and findings.

In general, it has been shown that the poverty rate increases with the rise in the number of persons in the household, at least when the number of persons is higher than five, or with a reduction in the number of wage earners in the household *(see Figures 6 and 7)*. The effect on poverty of different combinations of the number of earners and the number of persons in a household can be clearly identified.

Figure 6: Poverty Rate in Israel by Number of Persons in the Household and by Ethnicity

Source: Adapted from the Family Expenses Survey, 2013

* For the distribution of households by size see the Appendix to this chapter.
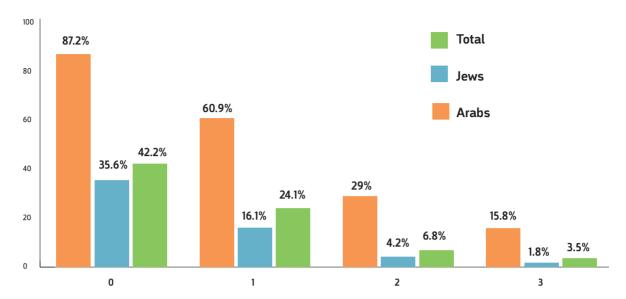
Figure 7: Poverty Rate In Israel by the Number of Earners in the Household and Ethnicity*

Source: Adapted from the Family Expenses Survey, 2013

* The National Insurance Institute data refer to the poverty rate among households with two earners and more, and the figure presented by the Institution for such households is between 3.5% and 6.8% (see Figure 11 below).
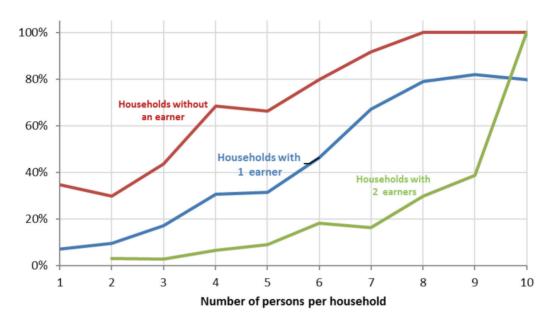
In addition to the influence of household size and the number of wage earners on the probability of an individual falling below the poverty line, the religious and national affiliation of the household also play an important role. As shown in Figure 8, two earners heading a household significantly reduce the likelihood of poverty. A Jewish household headed by two providers is able to support three additional persons or dependents and is characterized, on average, by a poverty rate of less than 10%, even without taking into account the fact that in some households belonging to this group, one of the two breadwinners is employed only part-time. Even in the case of households with a total of seven people, including five dependents, the poverty rate is 16.3%, a figure lower than the poverty rate among the total households in Israel, in which live an average of 3.33 people or 3.87 when omitting households with one person only.[69] These figures accurately describe the situation of the Jewish population, but the corresponding figures for the Arab population are far different.

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69   CBS Statistic Yearbook 2014, Table 5.1.
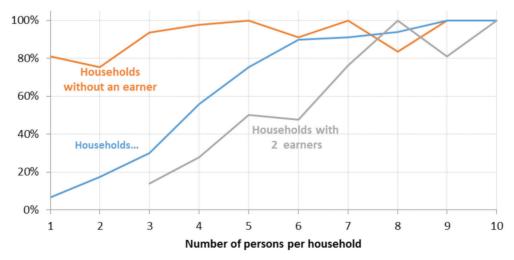
Figure 8: Poverty Rate by Number of Persons and Number of Earners per Household, Jews and Others

Source: Adapted from the Family Expenses Survey, 2013

Indeed, in the Arab society, too, an increased number of wage earners is a positive factor, reducing the likelihood of poverty, similar to the trend prevailing in the Jewish society. However, among Arab households with two earners, the poverty rate already crosses the 20% threshold at the level of two dependents, or four persons in a household. This may indicate that when there are two wage earners in such households, they are employed in occupations or industries that pay less compared to their counterparts in the Jewish sector.
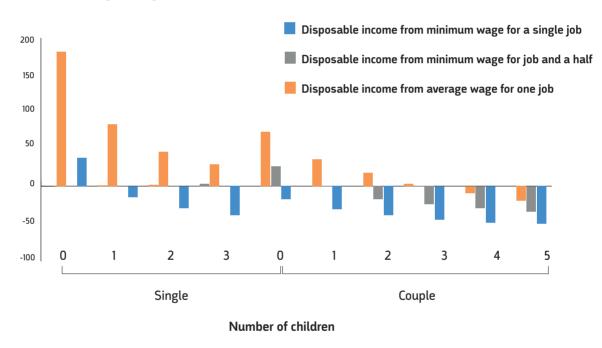
Figure 9: Poverty Rate According to the Number of Persons and the Number of Earners

Source: Adapted from the Family Expenses Survey, 2013

For many families, a large number of children inevitably results in the family falling below the poverty line. This is because in a significant portion of these families, even with two wage earners, the wage earners participate in the labor market in part-time jobs and in low-wage industries. Therefore, the ability of the government to lift these individuals out of poverty through income grants is limited. Figure 10 shows that a family with five children where the wage earner is working for a minimum wage in one job, as is the case in most families, falls more than 50% below the poverty line. This illustrates the difficulty of lifting a family out of poverty by providing work grants. The situation is not significantly improved in families with four children, which also fall 50% below the poverty line.

Figure 10: **Distance* of Total Family Income Derived from Work and Universal Pensions from the Poverty Line by Income Profile, 2013**

Source: National Insurance Institute, Poverty and Social Gaps Report 2013, Table 3

* "Distance" here means the gap, in percentage, in terms of the relevant poverty line for the household size. For example: the furthest column on the right reflects an income higher by 39% than the relevant poverty line for an individual without children.

b.2.   Poverty Rate among Households Headed by Two or More Wage Earners

Since the beginning of the last decade, the poverty rate has increased among families with two earners or more by 3.4%, with most of the increase taking place between 2007 and 2013. In the past year, the poverty rate of families with two wage earners continued to grow, albeit at a slower rate than in previous years (see Figure 11). Although there is no database tracking the income of these households over time, some observers consider these trends a clear indication of the deterioration in the economic situation of households in the lower levels of the income scale. They

argue that, in contrast to the past, the participation of two members of the household in the labor market is no longer a guarantee, or is now a less strong guarantee, that the family will be able to break out of the cycle of poverty. In contrast, others have stressed a counter-interpretation that this process actually indicates a positive change in the situation of the poor population, claiming that many households that previously had only one wage earner have now added a second person to the labor market. However, this second wage earner generally earns a low wage and these families often have a higher number of dependents than the average household with two wage earners, who usually have more seniority and earn more in the labor market. As a result, these families' newly increased rate of participation in the labor market has resulted in a total rise in the poverty rate among this group. A similar interpretation can also be found in the most recent Poverty Report issued by the National Insurance Institute.

Both interpretations acknowledge that the income of many households in Israel is painfully low, so that while increasing the employment rate among these households and in the overall economy does lead to a significant reduction in poverty levels, it is not sufficient to raise them out of poverty. In addition, some measures are needed to increase income levels in the short and long term: in the short term, through policies for increasing the supply of working hours for households; and in the medium and long term, by improving labor productivity. All agree that changes must be made both in structural elements of the economy and in certain qualities of the workers themselves.

Finally, it should be noted that despite the increase in the poverty rate among this group of households with two or more wage earners compared to families with a smaller number of wage earners, the poverty rate in this former group is still very low. In this respect, it can be concluded that **having two working wage earners in a household is indeed a key to markedly reducing the probability of falling below the poverty line, but it does not provide an absolute guarantee of exiting from poverty.**
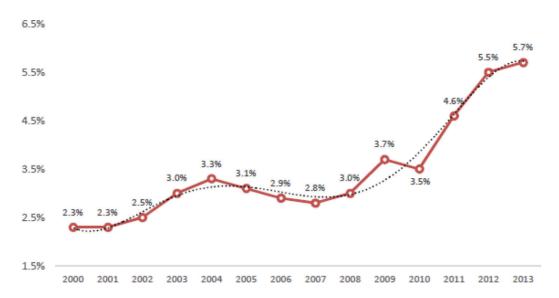
Figure 11: The Incidence of Poverty in Families with Two or More Wage Earners *

Source: National Insurance Institute, Poverty Reports, various years

*   Until 2005, the figures are for "two earners" and from 2006 onwards, for "two earners and more." Nevertheless, over the years, the rate of families with three earners and more is quite low.

**   The years 2012–13 are part of a new series.

c.   Recommended Measures

In light of the foregoing, the team recommends implementing the following measures, which are part of a wider range of policies, some of which were already discussed at the Trachtenberg and Alalouf Committees and some of which should be tested and presented to decision makers in the near future. The recommendations offered below refer to those areas that the team deemed of special significance.

The team's choice of these measures is based on one or several of the following attributes; there is a broad, if not unanimous, agreement among the team members that the policy step has good chances for success and its benefit-cost ratio is high; the step can be implemented or at least initiated within a short time; the impact of implementing the measure on poverty reduction is immediate or may be felt within one budget year or slightly more; the measure has been tested in the recent past or was even presented as a policy objective in various forums; or the step is in the initial or partial stages of application, thus justifying its accelerated implementation and completion.

The following is a summary of the main measures the team recommends, followed by a break-down of the cost and expected consequences of each measure.

*   *   *

c.1.   The Main Measures Recommended

Many agree that the key to lifting people out of poverty and to encouraging social mobility over time lies in increasing the investment in education. The concrete recommendations in this area appear in the chapter on the budget. Therefore, this chapter will mention the recommendations that are designed to cope specifically with poverty, beginning with short-range measures.

1.   **Increasing the Work Grant Funds**

The amount of the work grant should be increased and the structure of the grant allocation should be changed. Different eligibility criteria should be employed in order to strengthen the incentives to enter the labor market and increase the disposable income of low wage earners. These reforms should take into account the changes in the minimum wage, so that the new monthly minimum wage of 4600 shekels should again be a central factor for defining the range of income qualifying the individual for a work grant.

The annual cost will range between one and two billion shekels, depending upon the rate of eligible people that exercise their rightsChange in Child Allowances.

The child allowance for the first three children should be raised across the board from 140 to 220 shekels. For additional children, the fourth and above, the allowance will remain at the current level of 140 shekels. The change should take effect as part of the 2016 budget and will apply only to children born after January 1, 2016.

2.   **The annual cost of this change in the first three years, 2016, 2017, and 2018, will be 273, 409, and 546 million shekels, respectively.**

3.   **Core Curriculum**

The core curriculum for all schools in all the educational streams in Israel should be expanded in the forthcoming school year. This measure was begun during the tenure of the outgoing government, but like other moves, it was frozen during the transition between governments.

4.   **Day Care Centers, Nursery Schools and After-School Activities**

The construction of new buildings and the formulation of comprehensive regulations for the after-school centers should be accelerated. This measure will improve the education and care of children and will enable larger sections of the adult population to enter the labor market or increase their working hours.

5. Professional Training Courses

Professional training in relevant areas of domestic demand should be expanded and focused on occupations the economy needs. Vocational training not only helps integrate non-skilled workers seeking to enter the labor market relatively late, such as ultra-Orthodox men, but also addresses the needs of skilled workers who have lost their jobs in obsolete industries.

6. Reducing the Number of Foreign Workers[70]

The number of foreign workers should be reduced, or at least their numbers should not increase. This measure will have a positive impact on employment rates and wage levels among disadvantaged, low-education groups of workers. In addition, for some sectors, reliance on foreign workers at exceptionally low labor costs weakens incentives to improve efficiency, make technological progress, or to increase the productivity and earning potential of workers in the industry.

7. Streamlining and Strengthening the Enforcement of Labor Laws

Labor laws should be strictly and effectively enforced. This measure serves several purposes: controlling the number of foreign workers and curbing the unnecessary expansion of their employment; preventing abuse and erosion of working conditions; and ensuring that minimum wages are paid according to the law. This goal is particularly important in view of the existence of an excess supply of workers with little education which increases the temptation to breach the laws, especially by paying workers less than the minimum wage required by the law.

8. Preventing the Reduction in VAT on Basic Commodities

No form of differential VAT should be applied and, there should be no reduction in VAT on basic goods. Because of budget constraints in the coming years, dictated by the need to meet reasonable deficit objectives, changes in VAT revenues would come at the expense of other measures deemed more effective in dealing with poverty.

The funding of some of the measures recommended, such as day-care centers and vocational training courses, is divided between several action plans and budget items, a number of which have already begun being implemented. For this reason, it is difficult to assess the precise cost of all the recommended measures or the cost required for their completion.[71]

It should be emphasized that accelerating and completing these steps is essential. The results of implementing some of these recommendations, at least with respect to child care and professional training courses are expected to be seen in the near future.

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70 It is team member Tali Regev's opinion that reducing the number of foreign workers is not relevant to the problem of poverty and that this recommendation should not be including among the recommendations regarding welfare.

71 Nevertheless, see Eran Yashiv and Nitsa Kassir. 2013. The Labor Market of Israeli Arabs. Tel Aviv University. Their work relates only to the Arab sector. Nonetheless, based on the data presented in their work, it can be assessed that the costs of the supplementary measures entail an additional one billion shekels.

We recommend establishing a corresponding research team to examine the results of the changes, similar to the inter-ministerial team established to examine the effectiveness of the work grant programs.

The recommendations for reducing the number of foreign workers and for increased enforcement of labor laws have been discussed frequently in recent years in many publications and discussions. These recommendations should be integrated into the current budget and should be part of more extensive measures for change that the new government will execute.

c.2.   Justification for the Recommendations, the Impact on Poverty and the Budgetary Cost
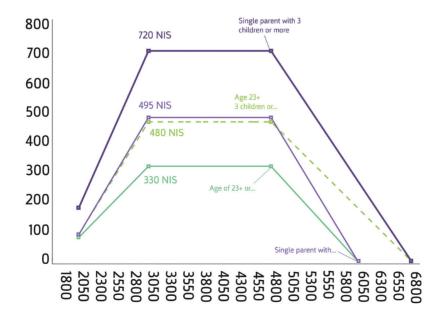
1.   Work Grants

Since 2007, Israel has implemented a work grant program, initially termed a negative income tax. The success of this policy has led to increased employment rates and an increase in the disposable income of households in the lower income deciles. The success of the policy is also evident in the increase in the rate of those participating in this grant program. In the more distant future, perhaps in a decade, it would be appropriate to reconsider the eligibility criteria for labor grants, given that demographic trends will have changed by that time.

Table 1: Structure of the Work Grants: Data of the Existing Trapezoid and the Suggested Trapezoid

	Eligibility Status	Jump to the Beginning of Climbing	Increase Angle Angle	Grant Vertices Verticles	Decrease Angle	Height at Decline Completion
Existing Situation	Age 55+ or 23+ with 1 or 2 children	80	16.10%	330	23.00%	20
	Age 23+ with 3+ children	120	23.50%	480	23.50%	20
	Single parent with 1 or 2 children	120	24.15%	495	34.50%	30
	Single parent with 3+ children	180	35.25%	720	35.25%	30
Suggested Situation	Age 55+ or 23+ with 1 or 2 children	180	27.25%	650	30.00%	140
	Age 23+ with 3+ children	190	31.75%	730	32.75%	140
	Single parent with 1 or 2 children	220	37.00%	850	37.25%	140
	Single parent with 3+ children	250	39.50%	920	39.00%	140

Figure 12: Structure of Work Grants: Existing Trapezoid
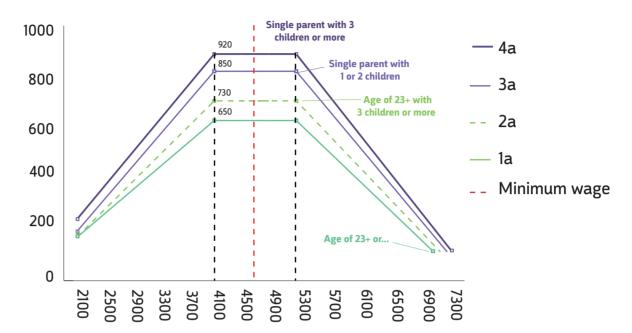
Figure 13: Structure of Work Grants: Suggested Trapezoid

Increasing the grant trapezoid for each entitlement group and assuming a gradual increase in participation in the program could lead to an additional 7,500 households rising out of poverty compared to the numbers that can do so under the current grant terms. In time, tens of thousands more households could rise above the poverty line.
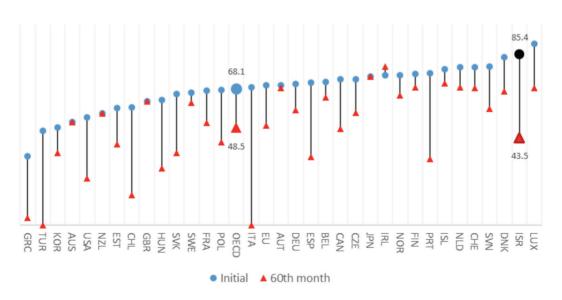
Figure 14: Net Income Substitution Rate During Employment: Unemployment Transition

Source: OECD, Going for Growth, 2015

2.   Child Allowances

We recommend raising the child allowances paid for the first three children, without changing the benefits for children born before May 2003. According to various calculations, the cost of adding 80 shekels to the allowance for each of the first three children is between 1.3 to 1.5 billion shekels, depending on the timing of the change and dates of birth to be included in the change.

The expected decline in poverty, with each of the first three children receiving the addition, is 1.4%. In 2012 terms, this represents a decline from 19.36% to 17.95% of households under the poverty line.

It should be noted that according to the estimate presented in the draft for the state budget this year, an expenditure of 5.3 billion shekels for child allowances for 2.74 million children is expected in 2015. That means an average effective monthly allowance of 163.5 shekels per child. The proposed change by us is 220 shekels per child for all of the first three children in all families and 140 shekels for all additional children in families. This proposal will result in an overall children allowance budget of 6.8 billion shekelsin 2015.
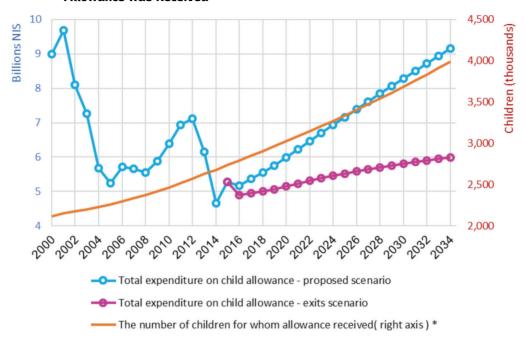
Figure 15: Child Allowances: Present Program and Proposed Program

The number of the child in the family

Source: National Insurance Institute Website; the team's proposal
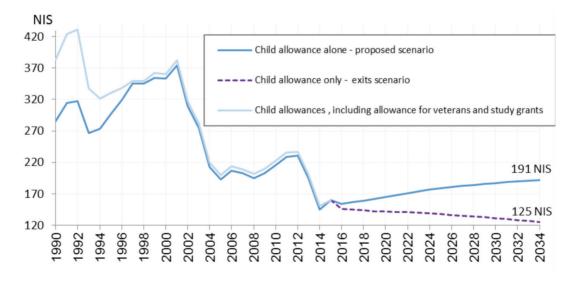
The team's proposal is based on the economic principle of the economies of scale inherent in raising children. Because the cost of raising fourth and fifth children is relatively lower than that of raising the first children, it is reasonable to suggest that the state will adjust its support accordingly, depending on the child's placement in the family.

Source: National Insurance Institute, Quarterly Statistics 2014, IV, Tables 6.1, 6.3.1; Finance Ministry: Budget draft 2015; CBS: Israel's population forecast by the year 2034; estimate

* Calculation assumptions: For children born until 05/31/13, the amount of the allowance is calculated according to the tables prevailing today. For those born after 06/01/13, the allowance increases from 139 to 220 shekels, if they are in positions 1–3, and remain at 139 shekels for the fourth child onwards.

Figure 17: **Mean Effective Allowance (Total Expenditure on Child Allowances Divided by the Number of Children up to the Age of 18) in 2013 prices***

Source: Social Security, Quarterly Statistics 2014, IV, Tables 6.1, 6.3.1; Finance Ministry: Budget draft 2015; CBS: Israel's population forecast by the year 2034; estimate

3. Core Curriculum

The continued investment in the human capital of the entire population is a fundamental condition for maintaining and increasing employment rates, developing industries with added value, increasing productivity and increasing the disposable income of individuals and households. It is immensely important to teach core subjects to populations that are not learning them today, precisely because the share of these populations in the general population is increasing.

Therefore, it is imperative that the government take action to strengthen and complete the process of introducing the core curriculum into all schools and educational streams in Israel. The call to introduce a core curriculum in all the education streams has been heard frequently in different incarnations and in many discussion frameworks in recent years. A practical plan was initiated during the days of the last government, but the change of government has placed a question mark over its completion.

Finally, it should be noted that of all the measures mentioned herein, this step is the one that will require the highest degree of consistent implementation to generate a gradual and continuous change in the ultra-Orthodox community. However, its fruits are likely to be seen only in a few years. Because the anticipated results are long-term ones and because introducing a universal core curriculum represents a complex change in political terms, all the parties concerned must be mobilized to support this move, especially elected representatives and professional officials. It is important to persuade the ultra-Orthodox leadership, now part of the new government, that this step is of paramount importance for the population they represent and that it is necessary to act in concert in order to create the conditions for integrating the ultra-Orthodox public into the technology sectors that are now at the forefront of economic growth.

Figure 18: **Rate of Ultra-Orthodox Students in the Educational System (In Relation to the Total Number of Students, including Those in the Arab Educational System)**

2000 — Ultra-orthodox: 13.4%

2012 — Ultra-orthodox: 18%
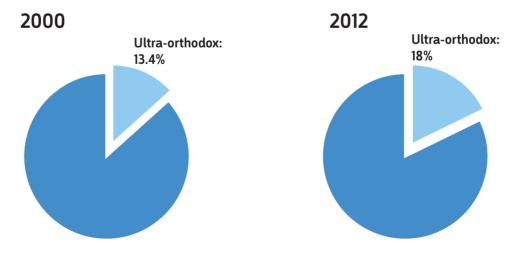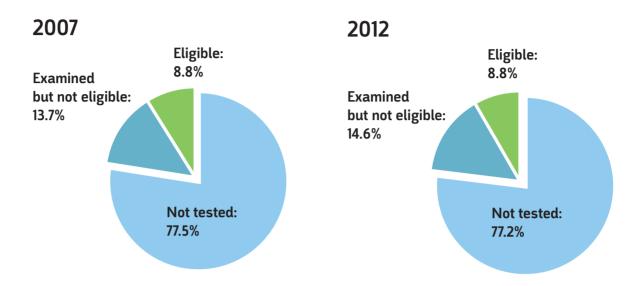
Figure 19: Rate of Ultra-Orthodox Students Eligible for Matriculation Certificates
(out of the Total of Ultra-Orthodox Students)

2007

Eligible:
8.8%

Examined
but not eligible:
13.7%

Not tested:
77.5%

2012

Eligible:
8.8%

Examined
but not eligible:
14.6%

Not tested:
77.2%

Source: Taub Center, 2013

4. Day Care Centers, Nursery Schools and After-School Activities

Expanding and consolidating the options available to families for early childhood education and extending the hours pre-school and school-age children can stay in educational settings in the afternoon serve two important functions. First, these steps raise the quality of educational and enrichment programs provided to children at an early age. Second, these measures also make it easier for parents to join the workforce or increase their working hours, thereby increasing their disposable income.

To accomplish these changes, several steps need to be taken, some of which are already in various stages of implementation following the approval of the Trachtenberg Committee's recommendations. However, completing the construction of the new infrastructure needed and creating a comprehensive program in this area, including supervision and training of staff in the different settings, is advancing at a slower pace than planned (see the proposed budget, 2015). It should be noted that the expected benefits to wage earners and potential wage earners, making them more available for work, should be felt within a short time after the full implementation of these measures. In addition, reinforcing and cultivating this educational area of education has profound long-term implications for the development of the next generation.

Finally, it should be emphasized that the option to advance this educational area as rapidly as possible is important precisely because outstanding planning has already been done in this field.

Thus, the main tasks remaining are funding and implementation, in contrast to other less mature policy areas, which require continued preparatory work.

5.   Professional Training Courses

In recent years, emphasis has been placed on providing incentives for the Ultra-Orthodox and Arab populations to enter the labor market. Increasing productivity by strengthening the human capital of these populations and of the older populations in the labor market has also been an important objective.

However, it seems that insufficient attention has been given to helping potential workers re-enter the labor market, primarily workers who have been made redundant in declining economic sectors. In recent years, developed countries have increased the budgets devoted to implementing the policy of the Active Labor Market, aimed at increasing the employability of unemployed workers in new branches of the economy and strengthening the adaptability of the economy to the changes occurring in technology and in the patterns of global demand. These countries have allocated between 1% to 1.5% of GDP to this endeavor, a much higher rate than that acceptable in Israel for this purpose *(see Figure 20).*

One of the key elements of the Active Labor Market policy is the creation of vocational training centers which provide workers with the tools for moving between different types of professional careers during their working lives.
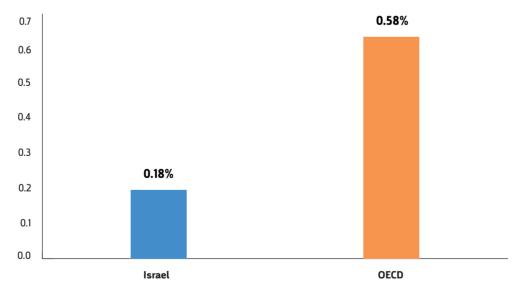
Figure 20: **Expenditure on the Active Labor Market Policy as a Percentage of GDP, 2011**

Source: OECD.stat

6. Reducing the Number of Foreign Workers

While the number of foreign workers in Israel was a topic of intense discussions until a few years ago (Eckstein et al., 2010), the debate on this issue has since declined significantly. However, the rate of foreign workers in the economy is still very high, and in 2014 stood at 11.4% of the workforce in the business sector. Although in recent years there has been a slight decrease in the rate of foreign workers and a significant decrease in their numbers compared with the peak year of 1999, their absolute numbers have continued to grow. The decline in their rate of workforce participation with a corresponding increase in their numbers can be attributed to the increase in workforce participation of Israeli workers. In fact, the absolute number of foreign workers in Israel in the past two years mirrors the peak level of the past three decades.[72]

The important question of the impact of foreign workers on poverty and inequality in Israel persists because of the continuing high number of foreign workers, approximately 275 thousand on average during the past 15 years, and because of additional labor migration to Israel with the arrival of tens of thousands of migrant workers from Eritrea and Sudan in recent years. Despite the policy measures taken during the past two years in response to this labor migration, many of these migrants have begun to work in various economic sectors, primarily the basic services sectors, such as food services and hotels.

The high proportion of foreign workers in Israel has dramatic implications. First, there are intense political disagreements over how to shape and implement Israel's immigration policy. Second, there is great tension, with frequent skirmishes, between foreign or migrant workers and residents of cities and neighborhoods where these workers are living in very high numbers. In addition, regardless of the legality of these workers' presence in Israel, they have a direct and significant impact on the employment situation and the wage level of many Israelis. These foreign workers enter sectors characterized by low-education workers, thus lowering the average wage in these sectors as well as pushing Israeli workers out of these sectors and reducing their employment opportunities.

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72   Nevertheless, it should be noted that a significant portion of the foreign workers who arrived in Israel over the past three decades are employed in the nursing or care-giving fields and the pressure to import and employ them has increased in light of the aging of the Israeli population during this period.
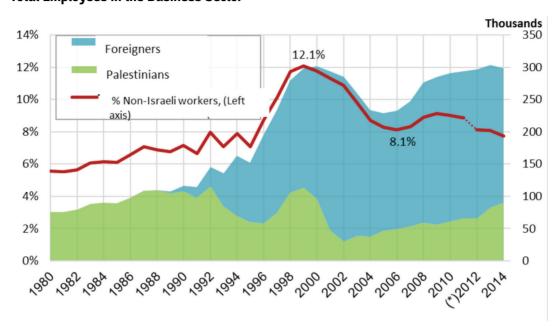
Figure 21: **Number of Foreign and Palestinian Workers and their Proportion of the Total Employees in the Business Sector ***

Source: Bank of Israel Report, 2014 Table 5-N-3

* Data are concatenated for all the years in which methodology changes occurred (1995, 2001, and 2009), excluding 2012. In 2012, many changes were made to the Labor Force Survey, presented as a break in the series in the transition from 2011 to 2012. Nonetheless, the changes were hardly relevant to foreign workers and this is why their number, unlike their percentage, is quite reliable in the transition between the years.
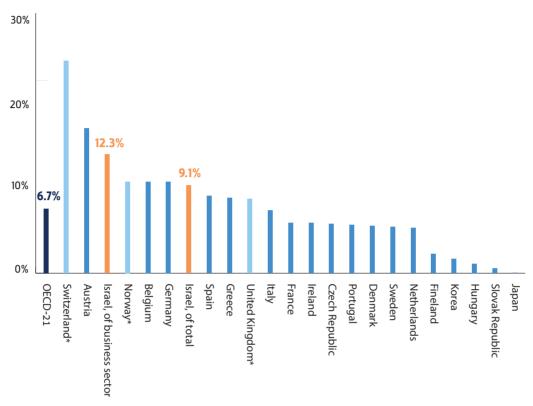
Figure 22: **Percentage of Foreign Workers in the Labor Market, 2008 or a Later Available Year ***

Sources: OECD; for Israel; Bank of Israel

* The figures for Britain, Switzerland, Norway and Israel refer to the rate of foreign workers out of the total employees; on the other hand, the figures for the rest of the countries refer to the rate out of the total labor force.

Given these figures, it can be concluded that reducing the extent of poverty depends in part on limiting the number of foreign employees and ensuring that they are approved for employment, that they work only in the sector to which they were assigned and that they return to their home countries in the event of non-renewal of permits. A central objective of the business sector in terms of employment and support policy must be minimizing the participation of foreign workers in the Israeli market.

7. **Streamlining and Strengthening the Enforcement of Labor Laws and Investment in a Proactive Employment Policy**

Thorough, strict enforcement of labor laws is valuable for numerous reasons. First, it helps limit the volume of foreign workers and control their actual numbers. Proper enforcement prevents abuse by forcing employers to understand the real legal cost of employing these workers, which may reduce the incentive for employing them. It also helps ensure that the foreign employees work only in their assigned sectors and stay only for the time originally permitted.

Second, strict labor law enforcement consistently prevents exploitation, including the withholding of wages and deprivation of rights, and ensures that workers receive the remuneration required by law, whether it be the minimum wage as set by the legislature or the wages reached through agreements by their representative organizations. Another advantage is that the relevant actors will realize the real price of the means of production and the value of labor in terms of the economy and long-term planning.

Currently, Israel suffers from several weaknesses in its labor law enforcement efforts. The number of inspectors responsible for implementing and enforcing labor laws is quite small by international standards *(see Figure 23)*. In addition, the scope of expenditure on improving the labor market, at least with respect to strengthening training programs, etc., is quite low compared to the average of developed countries *(see Figure 20)*.
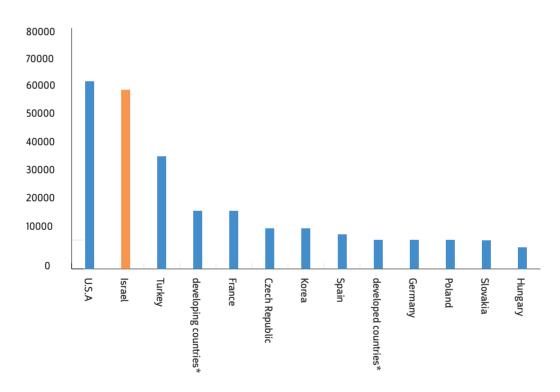
Figure 23: Number of Employees per Inspector *

Source: OECD: Israel: A divided society; Results of a review of labor market and social policy* Benchmark level for these groups according to the International Labor Organization

8.   Preventing a Reduction in VAT on Basic Commodities

As discussed above, no form of differential VAT should be applied and there should be no reduction in VAT on basic goods. The use of this tool is not expected to have a significant impact, if any, and it can be assumed that much of the benefit would be enjoyed by the deciles for which

it was not originally designed. In addition, this step is expected to involve a marked decline in tax revenues and additional costs for operating the supervisory and enforcement mechanism.

However, if the government decides to reduce or eliminate, the VAT on some products, any such reduction should apply only to specific supervised products so that the government will be better able to ensure that the VAT reductions result in prices reductions for consumers rather than as a source of enrichment for firms that maintain the pre-VAT reduction price levels, especially in monopolistic sectors of the economy

Budgetary Resources

The implementation of these recommendations should not involve the expansion of the deficit in the medium term. Therefore, the main funding sources should be a lateral reduction in tax exemptions, first and foremost on benefits on pension savings and training funds, the abolition of the VAT exemption in Eilat and the introduction of an estate tax as proposed by the Ben-Bassat Committee. In addition, the relevant parameters, such as the transfer threshold regarding tax application, its rate, and the like, should be updated.

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Since this paper was completed, the government decided to adopt some of the recommendations proposed herein. Hopefully the remaining recommendations will be adopted during the next few years.

In the case of child allowances, the government decided to cancel the cut in child allowances made by the previous government, a step that is consistent with our recommendations. Nevertheless, the government decided to redirect some of the money to long-term savings for the children, which will be released only when they reach age 18. Although this measure has a positive aspect, in terms of creating savings for families with limited liquidity, something that is desirable in itself, there are two reservations about this move. First, these families need resources today and delaying the transfer of funds is not consistent with the original purpose of returning child allowances to needy families. Additionally, if the goal of this move is to encourage saving habits, a single measure unaccompanied by a comprehensive framework and more diversified policy measures will not be effective. Such a plan should include, for example, the introduction of education on managing finances. In our opinion, there are no shortcuts to achieving this important goal.

Another decision made by the government was to give impoverished families a discount on public transportation and water, without introducing new categories within the VAT framework. This method of providing a benefit is consistent with the recommendation to avoid creating new categories within the VAT framework. However, it is recommended to channel the funds to a more significant enlargement of the working income grant, something that remains to be accomplished in the future. Hopefully, this step will be taken starting with the 2017 budget, in light of the need to reduce the poverty of working individuals, which, as shown above, has increased in recent years. Even the National Insurance Institute Poverty Report of 2014 that was published recently acknowledged this problem.

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CHAPTER 4: GOVERNANCE: SHAPING SOCIO-ECONOMIC POLICY

AVI BEN-BASSAT, RAANAN DINUR AND MAHRAN PROSENFER

a.   The Process of Determining Socio-Economic Policy

A government that can function effectively is essential for planning and implementing the policies needed to accelerate growth, reduce inequality, increase competition, reduce the cost of living and maintain stability. The Israeli government frequently postpones making critical decisions for a variety of reasons, but even when it finally reaches decisions, the government system makes it difficult to convert them into action. The low level of governability has many roots, such as the antiquated structure of government departments, insufficient research departments in government ministries according to currently acceptable levels, and the pronounced centrality of the Ministry of Finance in the decision-making process. An improvement in governance requires a series of reforms in many areas of the executive branch.

a.1.   Centralization and Budgeting of the Socio-Economic Policy Process: Main Findings[73]

The state budget is the primary articulation of government policies in all its areas of responsibility: security, economy, and social services. Planning, budgeting and implementing policies should correspond to the public's demands in every field, the resources available to the policy-makers and national priorities. At the same time, the implications of public expenditure and its financing for the activities of all economic units, including businesses, non-profit institutions and households, must be taken into consideration.

The attitude of each government minister toward a policy and its budgetary cost is influenced both by his or her ideology and position in the government. Many researchers divide the ministers into two main groups. The first group consists of ministers who must take into account the general interest, such as the Prime Minister and the Minister of Finance. The second group comprises ministers who are concerned with the narrower interests of specific groups as well as the general interest. In the second group are usually ministers in charge of offices that provide public services, or ministers responsible for expenditure, otherwise known as "expenditure ministers" In making decisions, these ministers may also weigh the political capital they could reap from an increase in their offices' funding. A bigger budget gives them the means to gain political capital by assisting specific constituency groups able to reward the ministers for their policies in future elections. Moreover, because these ministers are not directly responsible for tax collection, they can be

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73   This chapter is largely based on Avi Ben-Bassat and Momi Dahan (2006), The Balance of Power in the Budgetary Process, Chapters I and IX.

lax in assessing the cost damage resulting from their policies or actions and tend to ignore that certain programs benefit only a few interested parties, while the funding of the programs falls on the shoulders of all taxpayers. As a result, these ministers tend to approve excessive expenses beyond what is prudent from the perspective of the general population.

Globally, different countries exhibit a wide array of decision-making processes. In some countries, the process is very centralized, with the main authority in the hands of the Prime Minister or President and the Finance Minister. Other countries employ a cooperative model, where the Prime Minister or President and Finance Minister have ultimate power regarding budget aggregates or total expenditure, taxation and deficit, while the other ministers are full partners in formulating the composition of the budget. There are also countries characterized by a decentralized process, where all the government members are equal partners in formulating the budget as a whole.

Both theoretical hypotheses and empirical findings clearly indicate that a centralized process increases the budget discipline in all dimensions, resulting in reduced public expenditure, a smaller deficit and a lower government debt. However, the empirical studies do not answer the question of the extent to which the centralized process affects the choice of government priorities so that they correspond to the wishes of the public and benefit the production efficiency of public services. The expenditure ministers specialize in specific areas, such as health, education and welfare, and therefore they and their staffs have more extensive and substantial information on the issues that they supervise than do the Ministry of Finance or the Prime Minister's Office. These ministers are better aware of the public's demand for specific services and products and are much more proficient in supplying them. Ignoring the information advantage of the expenditure offices by limiting their weight in decision making may distort the allocation of resources, resulting in ineffectual spending, and can impede the government's speed in responding to crises in the areas under the responsibility of the expenditure ministers.

In Israel, the process of determining and budgeting social and economic policies is highly central-ized at every stage, compared to other OECD countries (Figure 1). This is evident in the analysis of the decision-making process in Israel, especially regarding the status of each institution in the budgetary process. Israel has chosen to grant the Prime Minister and the Minister of Finance strategic power over the expenditure ministers at the stage of preparing the budget and summa-rizing the government's position. The Prime Minister and Minister of Finance have also been given seniority over the expenditure ministers when determining the composition of the budget when they operate according to the cooperative model. Many of these centralized decisions contribute significantly to maintaining budgetary discipline, but they also exact a cost. Excluding offices with a concentration of knowledge and expertise in many areas could result in a lack of responsiveness to the public's priorities and could damage the efficiency of public services.

Israel began moving towards a centralized decision-making process after the 1985 stabilization program following a severe budget crisis during the "lost decade" of 1974–1985. During this period, public spending reached 74% of the GDP and the budget deficit amounted to 14% of the GDP, with devastating consequences on the rate of inflation and growth. To remedy the ailments of the "lost decade," the government radically changed its economic approach and fiscal policy. The share of GDP expended by the government has fallen gradually since then and currently amounts to only 39%, one of the lowest rates among the OECD members. The deficit in the public sector budget as a whole fell sharply to an average of about 4% of the GDP. These impressive results could not have been achieved if the two main parties had not recognized the necessity of managing the budget responsibly. Given the positive developments in fiscal discipline and stability over time, whether such a high level of concentration is still required in planning and implementing the state budget should be reconsidered.

Figure 1: CentralizationIndex in the Budgetary Process in Israel and in the OECD Countries

Source: Ben-Bassat and Dahan (2006)

In Israel, social and economic policies and their attached budgeting proposals are formulated by the Ministry of Finance. Once the discussions in the Ministry of Finance are completed, it is customary to present the budget proposal to the Prime Minister for approval and support. According to the law, the proposed budget, once agreed upon by the Prime Minister and the Finance Minister, is presented to the government for approval. Thus, the Prime Minister and the Minister of Finance have the strategic power to determine the budget agenda. This process suffers from many failings, including the following key points:

› In practice, the expenditure ministries are not involved in planning the policy or the budget, not even of their own offices. While in theory they are supposed to submit their proposals to the Ministry of Finance, their actual responsiveness is rather low as a result of the lack of effectiveness of their participation. Their exclusion is reflected in the evaluation of the relevant starting point which represents the effect of changes on the previous year budget due to population growth,legislation, government decisions, etc';

› Despite playing a central role in preparing the budget proposal and in implementing the Budget Law, the Budget Department of the Finance Ministry employs only about 50 professionals, unlike other countries where the budget departments employ far more professionals. Even the budget departments of relatively small countries, such as the Netherlands and Belgium, have over 100 employees. Given the low number of professionals in Israel's Budget Department, the exclusion of the expenditures ministries' professional staffs, which are far larger and more specialized, impairs the quality of planning;

› Each ministry receives it's budget proposal for reading two to three weeks before the discussion in the government, and they receive the overall budget proposal and planned reforms only one week before the start of government deliberations. This timeframe severely limits their ability to examine the proposed budget for their office as part of the total budget or to adequately prepare for a discussion at an appropriate level;

› The proposed policy booklet and corresponding budget proposal presented to the government contains a meager amount of quantitative data, both in comparison to what is customary in the developed world and to the budget book that is submitted to the Knesset (see the section on transparency below). As a result, the government's ability to discuss issues in depth is virtually nil, despite the fact that setting a budgetary policy in a parliamentary regime is a key tool of the executive branch. In effect, in Israel, the budget is approved by a government that is essentially blind;

› The government has only one or two days to discuss the budget, in contrast to the Knesset, which has two months for discussion.

a.2. Recommendations for a Cooperative Process of Determining Priorities and Budget Composition

In order to achieve both fiscal discipline and efficient allocation of the budget, the decision-making process in the government should be divided into two phases. The first phase should determine all the budget aggregates of spending, taxes and the deficit, which are the basic components of fiscal discipline. At this stage, the Prime Minister and the Minister of Finance should be granted prioritized status in the decision-making process, as is now the practice. Therefore, in the first phase, **the current centralized procedure for setting the aggregated budget should continue.**

In the second stage, after the budgetary aggregates are determined, the composition of the budget should be decided through a cooperative process, which will increase and enhance the involvement of the expenditure ministers in determining the budget composition of each office as well as the total composition of the budget. Dividing the budget process into two phases, including the change in the relative power of the various ministries in the second stage, will help achieve fiscal discipline and set priorities that maximize social welfare and contribute to the efficient provision of public services. The deliberations on the composition of the budget should start with a discussion of the government's objectives and the economic program needed for their realization.

Implementing this dual-phased budgeting process will require organizational changes in government offices. Since the 1980s, as the Ministry of Finance's role has strengthened, the status of the expenditure offices has waned. Consequently, their prestige has deteriorated, impairing their ability to recruit the best human resources. In addition, the decline in government stability during the last decade has reduced the attractiveness of these offices. To refine the process of budget allocation between offices and different programs, these designated offices should be made more attractive through incentives and other measures. This process will take place gradually, together with the expansion of their authority and their agreement to provide their services within the budgets set for them under the approved budget.

a.3.   Recommendations on Budget Hearing Schedule

A series of discussions on the budget should be held in the government to begin April 1st and end on the eve of Rosh Hashana.

a. **The material for each budget discussion will be given to the participants at least two weeks in advance.**

b. **At the first government discussion, the Minister of Finance and ministers of selected expenditure offices shall present to the government input-output analyses of their offices for the past year.**

c. **Following this discussion, there will be a meeting of the Ministers' Committee on Economics,** where the Minister of Finance Minister will present proposals for priorities at the level of clusters for the coming year, all of which will have limited fiscal targets.

d. **At the second government discussion, there will be a vote on the Minister of Finance Minister's draft with regard to priorities at the level of cluster details,** such as education, health, welfare, and security.

e. **At the third government discussion, the National Economic Council will present the government with a macro-economic assessment and growth forecast.**

f. **At the fourth government discussion, the Finance Minister will submit a draft budget drawn up by government agencies to the government.** Following a full government hearing, the government will hold a vote on the Finance Minister's proposal.

g. **The state budget will be submitted to the Knesset no later than the end of October.**

h. **Failure to approval the state budget by late December will result in the immediate dissolution of the Knesset and new elections.** The deferments and delays prevalent today only aggravate economic and social instability.

a.4. Recommendations for Constructing the State Budget *

a. **In every ministry responsible for expenditure, a budget unit tasked with building a budget proposal should be established funded from the ministry in question.**

b. **The status of The National Economic Council, including its role, its chairman's tenure and its powers should be defined by legislation in order to reinforce its independence and functioning.**

c. **The Ministry of Finance must cooperate with the other ministries in preparing the transition pages presenting the changes in the various budget items dictated by natural growth, legislation, binding agreements, government decisions, and budget summaries in advance of the next fiscal year.** A summary of the transition pages of each budget item will be signed by the director of the budget section of the relevant ministry and by the Deputy Budget Director of the finance ministry.

d. **If the parties in the Ministry of Finance and other ministries cannot agree on the summary of the transition pages,** the dispute will be brought before the directors of the budget departments in the two ministries. If they fail to reach an agreement, the dispute will be taken to the director generals of the two offices for a decision. In the absence of an agreement between them, The Minister of Finance will determine the amount involved in the transition pages after consultation with the minister responsible for the budget item. Any disputes regarding income items or expenditure items which the Minister of Finance is responsible for implementing will be decided by the Director General of the Ministry of Finance and the head of the National Economic Council.

e. **The Ministry of Finance and the relevant ministry will submit proposals for additions and reductions in each of the offices responsible for expenditure,** subject to the expenditure ceiling set. A mechanism for bilateral negotiating will be established between the ministry's budget unit and the Ministry of Finance at all administrative levels. Issues which cannot be resolved between the Director General or the directors of the budget of the Ministry of Finance and the expenditure ministry will become the subject of bilateral negotiations between the Minister of Finance and the relevant minister.

* The recommendations above are based on Ben-Bassat and Dahan (2006). During the term of the Olmert government, a proposal was prepared by a team led by the Raanan Dinur, Director General of the Prime Minister's Office, for a cooperative budgeting process based on these recommendations, but it was not implemented. The last government set up a Governance Committee, headed by Harel Locker, Director General of the Prime Minister's Office, which discussed, among other issues, the budgeting process. The committee recommended a partially cooperative process and offered to start its provisional implementation in expenditure ministries. Only the Ministry of Agriculture agreed to participate in the experiment, probably because the proposal did not allow for sufficient cooperation

b. The Arrangements Law[74]

The Arrangements Law was first enacted in 1985 as part of the economic stabilization program which was instituted to address one of the worst financial crises in Israeli history. Meeting this challenge necessitated exceptional economic measures in all areas of economic activity, such as deep cuts in the government budget, changes in taxation and a wage and price freeze. Because of the comprehensiveness of the steps called for, the Budget Law and the economic measures requiring legislative changes had to be included in one package known as the Arrangements Law, which incorporates government bills and legislative amendments that are needed for the government to fulfill its economic policy.

Although the economic state of emergency has since passed, the Arrangements Law has become a customary part of the Israeli budgeting process. Every year, the government presents the Arrangements Law together with the Budget Law for the purpose of approving dozens of laws, sometimes even more than one hundred, as well as legislative amendments in various fields.

It is important to note that the Knesset members must vote on the Arrangements Law and the budget as one unit. Since non-approval of the budget would lead to the fall of the government, Knesset members, most particularly those belonging to the ruling coalition, must support the entire package included in the Arrangements Law, even if some or most of the contents are not acceptable to them.

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74   Based on Ben-Bassat, Dahan: The Balance of Power in the Budgetary Process, Chapter II, the Israel Democracy Institute, 2006.

The goals of the Arrangements Law include streamlining the public sector, implementing structural reforms in the economy and achieving the budget targets. In effect, the Arrangements Law includes two types of legislative changes: policy measures that have a direct impact on the budget; and policy measures that have an indirect or weak connection to the budget. These measures may have adverse effects on the budget, but achieving the budget targets is not necessarily the main objective of their execution.

b.1. Benefits of the Arrangements Law

1. Weakens Opponents of Reforms

The steps included in the Arrangements Law usually involve reducing the high assets held by a few in favor of increasing the welfare of the many, even if to a small degree. Naturally, the potential losers from the changes exert heavy pressure to preserve the situation or, at least, to obtain adequate compensation for their consent to a change. In contrast, the small benefit that may be secured for the many is not sufficient to create a counterweight to the pressures exerted on the government and the Knesset by the potential losers.

2. Synchronizes the Budget Law with the Economic Plan

The Arrangements Act allows the government to maintain a consistent and coordinated fiscal policy. The limit on the legislative time helps the government determine the effective date of the rules' commencement at the beginning of the budget year. However, only some sections of the Arrangements Law apply to synchronizing the budget bill and the government's economic program.

3. Counters Political Instability

The division of the political system into medium-sized and small parties undermines political stability, and the many times the public has been forced to participate in early elections have grown tremendously, to a point that is unusual compared to other developed countries. The Arrangements Law constitutes an attempt to reduce the damage caused by political instability in governance.

4. Discourages Private Bills

The method of direct elections in primaries in the political parties has pushed politicians to prove their effectiveness as parliamentarians to their constituents in order to increase their chances of re-election. One effect of this has been a substantial increase in the number of private bills submitted by Knesset members. The volume of private bills in Israel in the last fifteen years is many times greater than the norm in other countries, which damages the functioning of the Knesset on many levels (see Hazan and Friedberg, 2009, and section g.2 below). Although only a tiny percentage of the thousands of private bills submitted pass the hurdles to become laws,

even these may interfere with the budget work. The chance of these bills being passed increases as the lack of political stability increases.

To address this problem, the government has used the Arrangements Law to cancel or postpone the effective date of the private laws that have passed.

b. 2.   The Disadvantages of the Arrangements Law

1. **Although the Arrangements Law has a number of advantages, it also suffers from significant disadvantages. It fundamentally undermines the democratic process, because it does not allow for separate votes on the Arrangements Law and the state budget.** This is a striking defect, given that many of the proposals included in the Arrangements Law are structural reforms that have no budgetary implications whatsoever. Also undemocratic is the effect of voting on the Arrangements Law together with the budget as a single package, which prevents Knesset members from approving only the laws they support and forces them to support laws they oppose. Even Israel's Supreme Court stressed the damage to the democratic process caused by the Arrangements Law as part of a judgment on appeals filed against the Arrangements Law (2004).

2. **The Arrangements Law also frustrates the effective functioning of the legislature.** The time allocated to discussing the state budget and the Arrangements Law in the government and the Knesset is two months. During this short period, it is impossible to conduct a thorough discussion of both the state budget and dozens of laws, some of which are highly complex. Thus, the Arrangements Law's mechanism affects legislative efficiency and may result in the premature approval of laws that are not fully developed.

b. 3.   The Disadvantages of the Arrangements Law

Two ailments suffered by the Israeli legislature are the tremendous volume of private bills and the excessive use of the Arrangements Law by the government. Both impede the functioning of the Knesset and the efficiency of the fiscal and structural policies of the government. A reduction in the scope of both these factors would contribute to an improvement in the legislative process and to a greater ability to accomplish the government's economic and social policies.

In section g of this chapter, we propose limiting the scope of private bills. This restriction would also reduce the need for the Arrangements Law. The Arrangements Law is indeed important during times of economic crisis when sometimes dramatic changes are required in the budget, some of which entail legislative action. Lack of time in the midst of a crisis leaves no choice but to tie the budget and the laws affecting its scope into a single package. However, laws that have

no budgetary implications do not involve the level of urgency justifying their inclusion in the same legislative package as laws that do have budgetary implications. Moreover, limiting the Arrangements Law while simultaneously restricting private legislation would help maintain the appropriate balance of power between the Knesset and the government and improve the effectiveness of the legislature. In view of the government's criticism of the exaggerated number of private bills submitted by Knesset members and the Knesset members' criticism of the excessive scope of the Arrangements Law, there is a high probability of reducing both phenomena by linking the two changes together. Therefore, it is recommended that:

› The Arrangements Law should be utilized only during an economic crisis. An economic crisis is defined as an expected fall in GDP per capita in the upcoming budget;

› Even in times of crisis, the Arrangements Law should not include proposals that have no direct budgetary implications;

› The recommendations to limit private legislation listed in section g of this chapter should be adopted.

c.   Analysis and the Decision-Making Process in the Ministry of Finance[75]

There is no one method by which the Budget Department at the Finance Ministry conducts policy analysis. Some policy issues are analyzed mainly by Budget Division employees in informal consultations with external parties. On other issues, policy analysis is performed jointly by the Budget Department and the relevant government offices, either informally or through inter-ministerial committees.

In addition, the Ministry of Finance sometimes delegates policy analysis and recommendations to a public committee, such as the Committee to Examine the Fiscal System Regarding Oil and Gas Resources in Israel, known as the Sheshinsky Committee, or the Committee for Social and Economic Change, the Trachtenberg Commission. These committees include senior representatives of the Budget Department. In some cases, such as cost-benefit analyses of transportation projects, the analysis is outsourced and conducted by a private party.

It appears that the Finance Ministry decides whether to conduct a policy analysis internally, with an inter-ministerial or public committee, or through outsourcing according to the maturity of the policy issues and the level of political feasibility. Conversations with Budget Division personnel

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75   This section was written based on Momi Dahan, Policy Analysis at the Finance Ministry, in Ben-Bassat and Dahan (2014), Reforms, Politics and Corruption, Israel Democracy Institute.

indicate that the use of a public committee is reserved for political issues that were not sufficiently analyzed or researched or for policies with low political feasibility. Sometimes, public committees are used to circumvent opposition from the relevant designated ministryor to resolve professional disputes with a particular ministry.

Dahan analyzed the quality of a policy by comparing the actual analysis with a policy analysis performed according to the bounded rationality model, which includes: articulating the undesired phenomena substantially affecting public welfare that emerge from the gap between the real and the ideal, or in unfulfilled opportunities to improve the welfare of the public or promote important values; a clear problem definition backed by the best scientific, theoretical and empirical information or research available; a close connection between the definition of the problem and the proposed alternatives, with theoretical or empirical support for the connection between the alternatives and alleviation of the problem; an examination of a limited number of alternatives while analyzing the estimated impact of each alternative on key variables, such as major benefits, including reducing unwanted effects, the budgetary cost, political feasibility and more; the decision rule according to which the recommendation for alternatives are accepted; and an accompanying monitoring and evaluation program after the fact.

› An examination of the three models of action practiced in Israel, compared to decision making using the bounded rationality model, shows that the main weaknesses of policy analysis are more prominent in the internal work of the Budget Department and to a lesser degree in the work of inter-ministerial committees. It is important to highlight the following problems:

› Alternative solutions for a problem are not always presented, and sometimes the alternatives are presented to the Minister of Finance, but not to the entire government;

› There is no tradition of evaluating the anticipated effects of policy measures on a range of benefits and costs, financial and other. Sometimes, only the direct impact on the problem at hand is examined and not the broader goals, such as growth, inequality, and stability. In fact, a professional infrastructure responsible for performing the conventional techniques of estimated impact assessment has not been developed;

› There is no uniform methodology by which the Ministry of Finance and inter-ministerial committees analyze policy issues.

c. 1. Recommendations for Economic Analysis and Policy Planning in all Offices

› A uniform methodology for analyzing economic issues should be developed;

› Alternative solutions, including the range of costs and benefits of any proposal for solving the specific problem under discussion and for the more general objectives of economic policy, such as growth, economic inequality and stability, should be presented.

d. Transparency of the Budget Process: Main Findings[76]

The budget proposal submitted to the government contains insufficient data for making decisions that are critical for the national economy. The Knesset, in contrast, receives far more detailed data about the budget. The meager data submitted to the ministers on the composition of the budget and the short time allotted to them for discussing and forming their positions undermine the effectiveness of budget allocation, because most of the knowledge and expertise are located in the ministries providing the public services.

The Ministry of Finance judges that its ability to maintain budgetary discipline is enhanced by its controlling and limiting the distribution of data. However, studies indicate that the lower the transparency, the greater the budget deficit and debt. Moreover, lack of transparency is a breeding ground for corruption. The lack of transparency in the proposed budget submitted to the government is characterized by the following:

› The government does not receive a full review of tax consequences;

› A review of how the budget was implemented is not published prior the government discussion on the next budget;

› The budget book contains only four tables on the state budget showing the budget approved in the previous year and the proposed budget for the coming year;

› No information is provided on the components of the starting point for planning the ministries' budgets for the following year. These components include the impact of government decisions and legislation during the year, demographic changes and budget summaries;

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76   This section is based largely on Ben-Bassat and Dahan (2006), Chapters IV and IX.

› A considerable part of the new programs involving budgetary costs, is not accompanied by quantitative estimates of the costs of the programs;

› There are no tables in which important information is concentrated and presented clearly. This information includes: all the starting point components, the proposals for reductions and additions and the proposed budget;

› There is no breakdown of the budget by economic classification, such as salaries, purchases, etc.;

› There is no full transparency in the Ministry of Finance. As a result, the knowledge and expertise of all the ministerial departments are not utilized and the interactions among the various elements vital for building the budget are not examined;

› There is no information on the fiscal risks and their potential consequences in the event they are realized;

› There is no distinction between existing and new budgetary programs;

› The amount of hidden reserves is very large *(See section 7 for details)*.

d. 1.   Recommendations for Improving Transparency

    a. **The National Economic Council,** with its new statutory status, should prepare the binding macroeconomic forecast for the budget planners. The Research-Department of the Bank of Israel will perform this function until the Council is granted a statutory status.

    b. **The powers of the National Economic Council should include:** preparing the national budget book and submitting it to the government and the Knesset; setting the economic registration rules of budgetary activities in advance; and submitting a second opinion on the budget proposals made by the Ministry of Finance.

    c. **Any proposal initiated by the Ministry of Finance and submitted to the government must be accompanied by the presentation of the expected cost or budgetary savings.**

d.   **When the budget documents are presented, existing plans must be distin-guished from new programs.**

e.   **Prior to the government's third discussion of the budget, The Ministry of Finance must submit to the government the file of tables,** which is regularly provided in the budget principles book, in the same format and at the same level of detail as submitted to the Knesset. The tables should be changed so that their columns include:; the original budget of the previous year; the budget executed in the previous year; the changes to the budget of the previous year; estimates of the cost of implementation of the current year's budget; the changes included in the budget's starting point; and the proposed budget for the following year. For details of the required list of tables, see Ben-Bassat and Dahan (2006: 181).

f.   **The explanatory notes that accompany the tables in the blue booklets submit-ted to the Knesset should be presented in a uniform format by all the govern-ment ministries.** The explanatory notes should include an analysis of the results achieved in the ministry's fields of activity compared to the goals set in previous years. Further, ample space should be devoted to explaining the goals of the new expenditures.

g.   **The Ministry of Finance should present to the government and the public on a quarterly basis all the summaries received during the current year from the Budget Department staff and the expenditure ministries regarding office expenses, known as "peremptory budget summaries."**

h.   **There should be no hidden reserves in the budget.**

i. **Transparency is also the first factor needed for including the public in set-ting the priorities of the budget and monitoring its implementation.** An initial step in this direction was taken in the previous government by Minister Michael Eitan, who provided the public access to the budget details on the government's website. This initiative has been extended in the last two years by Knesset member Stav Shafir and a team of volunteers. However, these steps are not a substitute for a direct initiative by the Ministry of Finance to provide access to the budget data, its amendments and implementation, in a form that would enable users to analyze the information. e. The Budget Implementation Stage: Main Findings[77]

Control over the execution of the Budget Law is critical for maintaining fiscal discipline. In this area, too, the Budget Division at the Finance Ministry has been granted considerable powers that make it easier to achieve the set target. Apparently, from the moment the Budget Law is enact-ed, the expenditure ministries must begin to take action to implement the elements relevant to them. However, ministers may spend more funds than were allotted to their ministries in order to enhance their personal political status. Without rules to minimize the chances of excessive spending, there is a moral hazard that the ministers will exceed the budget. The main danger in the current situation, where there is absolute freedom in the implementation phase, is that a minister can initiate unplanned and unbudgeted initiatives of relatively low viability using funds budgeted for other vital purposes. When, towards the end of the year, the ministry runs out of funding, the government has no choice but to fund vital expenditures of the ministry, such as wage payments to ministry employees, payments to those entitled by law, and so on. Thus, the budget framework may be breached

It is customary to achieve effective control over budget execution by placing restrictions on its implementation, the removal of which would require the Budget Division's approval. The main restrictions that the Budget Department has the authority to impose at the stage of budget ex-ecution are: delaying the transfer of appropriations to a budgeted or supported entity that does not comply with the provisions of the law; reducing the freedom to transfer appropriations from one line item to another and from one year to another; and reducing the government's ability to borrow and the scope of the reserves. Israel deviates in two of the conditions listed above: the ability to transfer budgets from one regulation to another and the extent of the hidden reserves. Despite the importance of some restrictions, they can impair the efficiency of resource allocation. Raising the number of restrictions inhibits the possibility of adapting the budget to changing

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77   This section is based on Ben-Bassat and Dahan (2006) Chapters I and IX.

conditions and of allocating resources effectively. The optimal scope of restrictions must be a function of the two goals of budgetary discipline and efficient allocation of resources.

The state budget has four levels of detail. The highest level is a section, which usually represents the overall budget of a government office. The Budget Summary booklet presents the national budget at the two-digit level. The next level is called the action area, where the budget is divided into the third level of programs which are divided into the fourth level of regulations. The state budget is presented to the Knesset for approval at the detail level of section, action area and program.

Budget transfers in the first three levels, from section to section, between action areas and between programs, require the approval of the Knesset Finance Committee. By law, an appeal to the Finance Committee is made solely by the Budget Department of the Ministry of Finance, meaning that the Ministry of Finance's consent is required for budget transfers on all three levels.

The lowest level of detail, regulations, is controlled by the Ministry of Finance. Budget transfers between regulations require the consent of the Ministry of Finance but not the approval of the Knesset Finance Committee. Typically, the Finance Committee does not even know about budgetary transfers at the regulations level.

The effectiveness of limiting the transfer of funds between regulations increases as the number of regulations in the budget grows. With over 7,000 regulations, not including those of the Ministry of Defense, Israel has one of the highest number of regulations among developed countries, most of which have only several hundred regulations. The number of sections, combined with the requirement to obtain the approval of the Ministry of Finance to transfer funds between regulations, enhances the Budget Department's ability to control the execution of the budget and improves fiscal discipline. However, it greatly reduces the ministries' ability to respond flexibly to changing conditions. For example, the budget of the Education Ministry has been split into approximately 800 regulations, and each transfer between regulations requires the submission of an explanatory application and the approval of the Ministry of Finance. It should be noted that with the exception of Australia and Iceland, all developed countries have restrictions on the ability

to transfer funds between regulations. However, the number of regulations in ministries in other countries is relatively small, so that ministries in other countries enjoy enough latitude to transfer funds from one purpose to another when unexpected events occur.

The second exceptional feature in Israel is the scope of the budget reserve for unexpected events. The formal rate of the reserve in the budget is very low, 1.6%, similar to that in 80% of the developed countries. However, Israel also has a considerable hidden reserve, since the state budget also includes reserves at the regulation level. Reserves at the regulation level do not appear in the budget approved by the Knesset, which is detailed only to the program level. Hidden reserves strengthen the power of the Minister of Finance, reduce budget transparency and may lead to preferences that do not correspond with the national welfare.

In summary, even in the budget implementation phase, Israel operates under the centralized model.

e. 1.   Recommendations for Budget Implementation *

a.   **Budget transfers between sections, between areas of action and between programs should require the approval of the Ministry of Finance,** as is the current situation, as well as the approval of the Knesset's Finance Committee. Budget transfers between regulations should be made by the relevant ministry, with reporting made only to the ministry budgeting unit. In exceptional cases, the ministry's budgeting unit may stipulate that the exchange be executed only upon approval by the Minister of Finance.

b.   **The budget, at the detail level of regulations, will be made available to the public on the website of the specific ministry.** The record of budget execution at the detail level of regulations will be made available to the public on the website of the specific ministry. Its full detailed level will remain at the current norm for the purposes of information and control.

c. **The program level in the budget is the lowest level requiring Ministry of Finance approval for transferring funds between budget items.** It is recommended that the number of programs be reduced gradually over five years and should not exceed 500 after completion of the five-year reform. This will provide the ministries significant freedom of action to change the composition of their b**udgets within the assigned budget framework.**

* The Governance Committee, chaired by Harel Locker, also recommended reducing the number of regulations. This process was supposed to start already in the budget of 2013–2014, but it is unclear whether this actually went forward. The target for the year 2016 is 2500 regulations and the target for 2017 is 1500 regulations.

STRUCTURE OF THE GOVERNMENT AND THE MINISTRIES

YAROM ARIAV, ILAN COHEN AND ERAN VIGODA-GADOT

a. Introduction: Structure of the Government in Israel and its Problems

The structure of the government and offices leading public policy in Israel is obsolete, subject to frequent changes and exposed to political or partisan pressures, particularly during coalition negotiations. As a result, Israel has operated for many years through a government structure that largely reflects relations within the changing coalitions and political ambitions and interests that have no relationship whatsoever to national and professional needs. The structure of the governmental system is not based on rational and professional thinking about changing public needs. Instead, the political arrangements, which often change after elections, determine the distribution of portfolios, the establishment of offices and sometimes even their internal structure and span of control.

NGOs have adopted and continue to adopt modern management structures that conform to advanced management methods. These methods include matrix management, management under constraints and management by objectives, relying on extensive data bases, big data and more (Drucker 2007). Despite changes in recent decades that were strongly influenced by the New Public Management philosophy about the public sector (Vigoda-Gadot, 2007; Vigoda-Gadot & Kisner, 2015), the issue of governmental structure has rarely been examined. The lack of fresh managerial thinking in the area of governmental structure is both noticeable and detrimental given the complexity of the problems involved in providing advanced public services and the critical importance of articulating an integrated government policy in a dynamic and rapidly changing society. The rise in the power of independent and semi-independent regulatory agencies in the public system has increased the

need to correct this anomaly in government management and emphasizes the urgent need for a significant change in the structure of Israel's governmental system. This change must modernize and improve the structure of the government so that it can adjust to the needs of modern Israeli society and facilitate the attainment of national goals by any government now or in the future. This section discusses the principles for determining the optimal structure for the governmental system in Israel. First, the foundations of the current structure of government and public administration in Israel will be examined. In addition, comparing Israel's situation to that of other countries around the world will help illuminate the existing defects in Israel's present structure of government and may help Israel uncover methods for overcoming several problems arising from the government's current structure. The goal is to identify the tools needed for reducing and simplifying the government structure to the minimum needed for better utilization of national resources and for improving planning and policy implementation in various areas. The encouragement and enhancement of inter-ministerial and inter-unit cooperation and the formulation of tools for more coordinated work between various offices and units to upgrade their influence on governability and their capacity to execute government decisions will also be discussed.

The section also addresses to some extent the relationship between core government agencies and support agencies, including municipalities, corporations, implementation agencies, government companies, etc. However, the existing and required internal structural changes of the various agencies will not be discussed. Suffice it to say that some degree of flexibility should be maintained in these structures to enable these agencies to respond to changing needs in Israel and abroad. This section will summarize the current situation in the area of government structure, the reasons for it and the potential for its improvement in the future. Key recommendations will be proffered that are realistic and feasible in any future political setting, but that also take into account the limitations of the Israeli model in the political, social, economic and intellectual spheres.

b. Historical and Ideological Foundations of the Existing Structure[78]

The basic structure of the government in Israel today was greatly influenced by the structure of the national institutions during the pre-state era. In January of 1948, just a few months before the establishment of the state, the Situation Committee presented recommendations on the most advantageous government structure and proposed establishing 12 government offices (Kfir and Reuveni, 1998: 42):

1. **Prime Minister's Office, including the Department of Statistics;**

2. **Ministry of Finance;**

3. **Ministry of Foreign Affairs, including an advocacy and intelligence department, in cooperation with the World Zionist Organization;**

4. **Ministry of Commerce, Industry and Agriculture;**

5. **Ministry of the Interior, including the police force, prison administration and the district directors;**

6. **Ministry of Education and Culture, including the broadcasting service;**

7. **Ministry of Labor;**

8. **Ministry of Health and Social Welfare;**

9. **Ministry of Public Works, Transport and Urban Planning;**

10. **Ministry of Justice;**

11. **Ministry of Planning and Development;**

12. **Ministry of Defense.**

Later, the proposed number of ministries was expanded to 13 and special status was given to the Communication and Transport Ministry, as separate from the Public Works Ministry. Furthermore,

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78   This section is based on Cohen and Mizrachi (2015). Introduction to Public Administration. Open University. Forth coming.

the Situation Committee's program included proposals for four other entities: the Government Comptroller's office, to be supervised by the legislature; the Statistical Office at the Prime Minister's Office; the Government Printing Office at the Finance Ministry; and an Administration Committee, later known as, the Civil Service Commission, which would operate as an independent entity. However, David Ben-Gurion and the provisional government decided on a larger number of ministries and the first government, formed in May 1948, included 16–17government ministries (Gal-Nur, 2007: 33). The Ministry of Social Services was split into Health and Welfare, public works and technical services were added to the Ministry of Public Works and the Ministry of Education and Culture was not established. Five new offices were established: the Ministry of Religious Affairs; the Ministry of War Victims; the Ministry of Police; the Ministry of Minorities; and the Ministry of Immigration. The establishment of these additional ministries, which resulted mainly from a combination of political and personal considerations, sowed the seeds for the decisions of future governments to manage the country through a large number of unnecessary government offices. These decisions made in 1948 still have an unhealthy impact on the structure of the civil services to this day. In addition, in 1948, the Prime Minister did not give enough consideration to governmental or civil administration primarily because of the security situation and the importance of military matters at the time (Kfir and Reuveni, 1998: 43–45).

The first governments, which were controlled by the Labor Party, or Mapai, continued to try to consolidate their political power through the distribution of portfolios to various coalition parties, regardless of need. Indeed, with the establishment of the state, Israel had to cope with a large number of tasks simultaneously that had not been resolved by the national institutions that had existed in the country since the Ottoman period and, more importantly, since the British Mandate (Burstein, 1934). However, there was still no real logic in expanding the number of government ministries beyond the limit originally set. Nonetheless, the process of expanding the government was accepted, primarily because the country faced many hardships during that period and the upheaval of the war marginalized some of the domestic considerations at the expense of more existential and urgent concerns (Kfir and Reuveni, 1998:19).

Over the years, the government structure has expanded and today includes hundreds of organizations and units. This structure of public administration and government and the interactions among its components greatly affect the government's performance capability and the role it plays in society. From the first years of the establishment of the state through the 1970s, government structure was characterized by over-centralization. Only in the late 1970s did a gradual process of limited decentralization begin. Indeed, in recent years, questions have been raised regarding excessive decentralization and the role of the state as a regulator of government bodies that tend to deviate from their basic goals and serve market objectives at the expense of public goals.

To understand the fundamental problems inherent in the current structure of government in Israel, a distinction should be made among different types of government organizations (Gal-Nur, 2007): government organizations, or the civil service, which include government departments and related agencies, statutory authorities and government companies; non-governmental public administration organizations, which include the Office of the President, the State Comptroller, the Director of the Knesset and the Bank of Israel; and local authority organizations, including departments, municipal corporations and municipal companies. This paper does not examine the second area of non-governmental public administration organizations, but focuses mainly on the first type, government organizations and discusses the third type, local authority organizations, only to a small extent, mainly in the context of their connections with government organizations and the civil service.

Gal-Nur (2007: 33) suggests that the main roles of the governmental organizations or the civil service are:

› Participating in shaping public policy and assuming responsibility for its implementation. For example, preparing a proposal to regulate trade relations with a neighboring state for submission to the Minister of Finance, and, upon approval, implementing it;

› Providing services to individuals, groups and organizations, such as providing educational services to all children in the country;

› Regulating the activities of other entities in order to protect the public interest and ensure civil rights.

Cohen and Mizrachi (2015) suggested the following structure:

› Government offices

› Support units

› Statutory authorities or public corporations

› Government companies

› Local authorities

› NGO Public Administration

This broad structural breakdown, without examining the details of each group's internal structure or problems, forms the basis for the discussion here identifying problems and examining recommendations for solutions.[79]

c. Structures of Governments in Developed Countries

The structures of the governments of Western democracies, to which Israel does or aspires to belong, are not identical. Each state has its own infrastructure for historical, cultural, ideological and practical reasons. A comparative broad overview of various government structures can be found in the global research literature (e.g., Raadschelders & Vigoda-Gadot, 2015) and in Israel (e.g., The Knesset Research Center: The Structure of Governments–Comparative Review, 2007).

Despite the differences among developed countries, certain characteristics are shared by all of them:

1. **Government departments are reduced to the necessary minimum.**

2. **There are a limited number of ministers, often including two types of ministers, senior and junior, with the cabinet usually consisting of senior ministers only, thus facilitating the decision-making process.**

3. **There exists a clear intra-office division of labor when there is more than one minister in a particular office.**

4. **Efforts are made to separate professional considerations about the establishment and dissolving of offices and units from political pressures whenever possible, even in parliamentary democracies with a coalition structure as well as in governments with a constitutional presidential or semi-presidential system.**

5. **There are significant units or functions for inter-governmental coordination and collaborative discussions about government objectives.**

6. **Functions are incorporated within a single structure to improve internal decision-making processes.**

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79   A brief description of each group of organizations that makes up the government and the public administration, its basic structure, and its underlying legal foundation is provided in Appendix 1.

7.   **The structure is organized to suit the project-based activities and to promote national objectives and projects with greater ease.**

Each country obviously has changing processes and structures, but the basic structure remains stable over time, with adjustments made according to the time, place and culture. All countries have divisions into core offices and professional offices, but also have central bodies enjoying real powers that coordinate the operation of the offices under their auspices, thus making governance more efficient.

d.   Leading Problems of the Structure of Israel's Government and Administration

Considering the knowledge and experience of other Western democracies and the unique history and social structure of Israel, as well as geopolitical and other needs, the following identifies the main problems requiring attention in future reforms.

d.1.   Traditional and Conservative Functional Structure

The structure of Israel's government is based on the division of portfolios according to the system of political spoils and on obsolete thinking, according to which the core issues of policy and public service are addressed on the basis of a division between professional functions and areas of control. The foundations of the structure were described in the section explaining the formation of the first governments and in fact, the principles have not changed to this day. While the current structure is still functional, it is not integrative. There is a division and definition of zones of powers among ministries, but there is no emphasis on the need to work together in order to promote important national goals. In fact, Israel's government structure continually creates unnecessary bureaucracy and often serves as a stumbling block to advancing national goals. In a world where complex tasks require the collaboration of several governmental bodies and other parties in almost every project, particularly complex national projects, Israel's antiquated government structure limits the its capacity to control, execute and fund activities over time.

d.2.   Excess Political Influence

The strength of the parties in the process of coalition negotiations as well as in the continued existence of any government is a major determinant of the number of ministries and ministers, without regard to long-term national needs. As a result, there are frequent changes in the number of ministries from one government to the next. The rationale for these changes stems primarily from the practice of building coalitions by linking the number of Knesset members a coalition party has to the number of ministries it receives, thus creating a situation where the number of ministries is determined by the political parties' capacity to influence the creation and the stability of the coalition. The coalition parties' demands to place their senior members in key positions

of decision-making and to create autonomous areas of work and control of financial and other influential resources disassociates the issue of government structure from any objective logic of national interest. These practices can persist only where no clear rules apply and in the absence of a law defining the government structure that will appropriately serve the national needs.

d.3. Frequent Changes

Israel's current governmental system is not producing a sufficiently stable political system and governments and coalitions often fall before the prescribed election date of every four years. Therefore, changes in the governmental structure and the distribution of portfolios are frequent, due to the fact that once every two or three years, political negotiations reopen to form new political coalitions. Each time this process takes place the existing structure is stressed and unnecessarily exposed to shockwaves. Beyond the financial costs involved in opening and closing offices and in changing the location and composition of the professional units, this excessive reshuffling does not serve the basic management objectives of stable and long-term planning. Rapid changes are not beneficial to the structure and division of powers, they do not encourage stability in planning, as can be found in many other democracies, and they weaken the power of the professional ranks. The government structure is an influential factor in the relationship between the public and the government and affects the legitimacy that the public grants to the government. Frequent changes resulting not from practical social needs but from the distribution of political power reduce public confidence in Israel's government and weaken its legitimacy.

d.4. Lack of Long-Term Perspective and Interim Goals

Israel does not have a tradition of creating long-term national plans for important public policy areas; rather, it has a history of reacting to and finding solutions for crises. There may have been some justification for this approach in the early years of the state, as the new government consolidated power and concentrated on securing the borders of the country as it faced severe existential, military threats. Many of these pressures no longer exist or have been reduced, freeing the governing structure to engage in long-term planning, adopt orderly and feasible work plans in government ministries and establish planning agencies at the national and local levels. While such processes have begun in recent years, progress has been insufficient, resulting more from pressures from outside events and bodies and less from organized government deliberations. Currently, any connection between the issue of government structure and government objectives and performance is woefully inadequate in Israel. No methodical or comprehensive work has been conducted on the issues of the most suitable government structure for Israel in the era of technology and knowledge, how citizens can participate in decision-making and the required cooperation of the public sector with the business, private and civil sectors of society.

d.5.   Multiple Players and the Lack of Coordination and Cooperation Among Them

Another problem related to the government structure is that the government does not take into account the proliferation of organizations working on behalf of the public in areas where the government also operates. The government structure does not reflect the growing importance of the third sector, which is inadequately represented in public decision-making processes. In the economic realm, the business sector operates by applying political pressure, lobbying and exerting influence on political players, instead of being granted an organized platform for making a contribution to the decision-making process among the professional ranks. What is required above all is one or more organizational bodies with a broad mandate empowered to convene all the relevant players to collaborate on discussions leading to decision making on issues of national significance. Currently, even ministries with strong powers to work across-the-board with other parties and agencies, such as the Ministry of Justice and the Ministry of Finance, view their work from a narrow rather than a comprehensive perspective.

d.6.   Vague Connections Between Core Governmental Agencies and Support Agencies

The relations of government offices with their sub-agencies, such as municipalities, corporations, implementation agencies, government companies, etc., are all managed differently, according to tradition and even intuition. The Interior Ministry is responsible for contacts with the local authorities, but this connection operates primarily on the financial and budgetary level. Local authorities enjoy a great deal of independence in their activities but there is no body to coordinate relationships, needs and cooperation on the regional and nationwide level. In other areas affecting local authorities, such as tax tariffs, the management of transportation projects and more, the central government does not grant the local governments any flexibility nor allow them to plan and execute properly. A particularly glaring example is municipalities' lack of authority to plan metropolitan transportation. The management of government companies and support units is too dispersed and does not encourage cooperation that could benefit all parties involved, such as cooperation among hospitals in the same geographical area or between adjacent local authorities.

d.7.   Recommendations to Reform the Government's Structure

In light of the preceding analysis, a number of principles can be gleaned for reforms leading to the correction of the structure of government and public administration in Israel and adjusting them to meet the needs and national goals of the 21st century. These principles can form the basis of a comprehensive and detailed plan anchored in law which will increase the government's stability and efficiency and serve the professional and ethical objectives of strengthening the confidence of all Israeli citizens and sectors in the government.

›   Establish and Encourage a Rational Structure of Government Based on a Stable, Professional Bureaucratic System

There is an urgent need to construct a plan for a smaller, more streamlined government structure based on the key needs of modern public service in a developed democracy, taking into account Israel's special geopolitical position and its unique problems. It is crucial to immunize the reformed government structure against the political spoils system and the traditional structure of Israel's government, characterized by coalitions and sectorial splits leading to instability and limited long-term vision. This reformed structure should be anchored in law through the Basic Law or the Civil Service Law, which will strengthen its capacity to serve as a counterweight to the political instability and fragility of the government in recent decades.

› Discontinue the Improper Practice of Creating and Discontinuing Ministries
   in the Absence of any Professional Rationale

The process of creating new ministries and closing existing ones, which occurs with the formation of almost every new government in Israeli, harms the stability and continuity of public policy that needs to be determined in an orderly manner, causes a tremendous waste of resources, and communicates to the public the government's lack of consistency and seriousness about long-term policies and programs.

› Redesign the Government Structure According to Professional
   rather than Traditional Considerations

The law should limit the number of ministries to a maximum of fifteen. They will be organized into two main groups and supervised by the Prime Minister's Office, which will act as a coordinating body with decision-making authority over controversies. The first group of ministries will include a number of core ministries with clearly defined powers: Security, Internal Security, Foreign Affairs, Finance, Education, Health, Justice, Interior, and Social Welfare and Housing. There should also be a limited number of vital offices operating in a cooperative and integrative manner: Economy and Development, including commerce, industry, labor, agriculture and tourism; Science, Technology, Communication and Culture, including religion; Transportation; Environmental Protection; and Infrastructure, including energy, water and communications.

In addition to these 14 ministries, the Prime Minister's Office will operate as a managing office, coordinating among the other ministries and coping with the problem of the numerous entities involved in setting and implementing policy (as described in Section 5.5). The restructuring of government ministries will also require consideration of the internal structure of each ministry and its support units. The need and rationale for the continued existence of the current units will be reexamined and their position in the relevant ministry or support unit will be reevaluated. For example, Israel's forests are currently the responsibility of the Ministry of Agriculture and may need to be moved to the

Ministry of the Environment, and the subject of cyber technology is currently under the jurisdiction of the Prime Minister's Office and may have to be placed in the Defense Ministry.

› Establish Research Units

Each government ministry, and in some cases, support units and implementing agencies as well, should be required to establish a research unit to compile focused knowledge in the areas of the office's responsibilities, based on empirical data and comparative research from around the world. The ministry's or other bodies' decision making should be based on staff work and on the research of these units, the position of which should be significant and strong.

› Address the Problem of Multiple Entities Involved in Implementing National Goals and Create a Mechanism for Setting Defined Functions and Resolving Disputes

This problem of multiple entities with overlapping and sometimes conflicting authorities can be addressed by strengthening the powers of the Prime Minister's Office as the government's headquarters and emphasizing its role as a coordinating office among the other ministries. As part of its statutory duties, The Prime Minister's Office will be responsible for inter-ministerial coordination. The responsibility for coordination will rest with the Director General of the Prime Minister's Office or his or her representatives, or, alternatively, a minister can be assigned to the Prime Minister's Office to deal with inter-ministerial coordination. The purpose is to provide ongoing coordination in order to implement the government's tasks effectively. The forum of the director generals of the government ministries may be given statutory authority.

In addition, coordination models should be established that are anchored in procedures and in legislation in some cases:

1. **The Budget Division at the Ministry of Finance will coordinate the formation of the annual budget, the transfer of committed and non-committed surpluses, and other related functions with each government ministry.**

2. **Regulators responsible for specific markets will hold roundtable discussions, anchored in law and in special procedures, for the purpose of coordinating their activities.** For example, there should be a roundtable to coordinate the work of the regulators responsible for capital markets, including the Supervisor of Banks, the Supervisor of Capital and Insurance Markets, the Securities Authority and the Anti-trust Authority, and a roundtable to coordinate the regulators in the field of the gas industry, including the Gas Authority, the Electricity Authority, the Antitrust Authority and the Budget Division, and more.

3. **A professional entity will be responsible for coordination and guidance of complex areas in the government's structural matrix, such as environmental activities, the National Emergency Authority, cyber security, etc., in tandem with the Prime Minister's Office.**

4. **Formal decision-making mechanisms should be established for granting authority to resolve differences of opinion among regulators, with a right of appeal to the government plenum.**

5. **Special attention should be given to projects of national priority.** Projects that are within the purview of several offices in terms of professional need will, as a rule, be located in the Prime Minister's Office, unless otherwise explicitly decided by decided by the government. The enactment of a special law, the National Projects Law, to anchor the authority and responsibility for the rapid and efficient advancement of these projects should be considered. Such a law should encourage cooperation among the ministries and give real priority and implementation tools to the central offices concerned. Such national projects include home-front preparedness, significant infrastructure projects, housing solutions, etc.

In addition, the Prime Minister's Office will transfer to other ministries functions and units that have been added to it over the years without any professional justification, such as the cyber headquarters, the alternative fuels project, the Anti-Drug Authority and the Women's Affairs Advisor. Instead, the Prime Minister's Office will focus on promoting projects of national importance. Cooperation will also be encouraged by promoting the establishment of implementing agencies based on the British model and according to the needs defined in advance by the Prime Minister's Office. These agencies will work according to project-based goals, should be subject to the coordinating entities of the Prime Minister's Office and will deal with national projects and targets of special importance.

›   The Government Structure Should be Subject to National, Strategic, Comprehensive and Long-Term Objectives

The main targets that could serve as a common denominator in any government coalition include:

1. **Sustaining and strengthening national security in the broad sense: political, military, social, economic, etc.;**

2. **Economic stability, including price stability, financial stability and growth;**

3. **Reduction in social gaps and increase in social cohesion;**

4. **Responsibility for providing public services in general;**

5. **Reasonable regulation of secondary players in the economy;**

6. **Improvement in the availability, quality and equality of the Israeli bureaucracy, with special emphasis on reducing harmful bureaucracy or red tape and simplifying the operation of the government in order to improve coordination, budgeting and efficiency.**

› The Enactment of a Civil Service Law in Israel Should be Considered

A Civil Service Law will clearly define the overall structure of public administration, the key institutional players, the mechanisms for managing them and limits on the change allowed in the structure of future Israeli governments. The rationale for the law is based on the argument that the capacity of the government to promote national projects in a serious and efficient manner, in essence, to govern, requires a basic definition of the governance structure, functionaries and the connection between organization and goals. Without these elements, the organizational culture and the political culture will not be revitalized or adapt to the national needs of the 21st century.

Today, the legal framework for the functioning of the civil service in Israel is focused on only two aspects: appointments and discipline. An examination of the wording of the Appointments section of the current Civil Service Law reveals an inherent contradiction between the official language of the law and the many exemptions found in the extensions to the law, to the point that it is not clear what legislative intent governs the issues discussed. The current law also lacks any reference to other fundamental issues, such as the optimal structure of the government and its satellite organizations. A new Civil Service Law will be based on two key elements: setting the framework of the government; and establishing the details for governance within the basic framework.

The purpose of this law is to lay a stable legal foundation for the Israeli civil service and for the structure of the state's executive branch in a manner that encourages the efficiency of public services for the benefit of the government, the Knesset and the public. The law will provide the legal framework that will ensure organizational stability, modernity, renewal, resource management efficiency and fairness in employment and management. It will also define the powers, responsibilities and functions of ministries and related agencies of the government and provide for cooperation among them. In addition, the law will define the rights and obligations of functionaries and employees in the public service, thereby creating better leadership qualities in public servants.

KNESSET ACTIVITY: PERFORMANCE FAILURES AND RECOMMENDED SOLUTIONS[80]

REUVEN HAZAN AND CHEN FRIEDBERG

a. Introduction

The Israeli Knesset has two major areas of responsibility: legislation and supervision of the executive branch. Perhaps surprisingly, in the area of legislation, it operates as a relatively strong entity. Its committees are entitled to correct and even change bills and their chairpersons enjoy significant powers. In addition, the volume of private legislation, unmatched in the democratic world, indicates, among other things, the Knesset's relative strength as a legislative body. However, while by the end of the 1980s, most of the legislation, 88%, was initiated by the government, since the 12th Knesset, 1988–1992, the rate of private legislation has increased to up to 50% of all legislation, a figure that impaired the Knesset's second area of responsibility, supervision. In its supervisory capacity, the Knesset is revealed as a rather weak body, a watchdog without teeth and controlled by very short reins.

This document will briefly review the Knesset's key performance failures in the areas of legislation and supervision and offer practical solutions, for at least some of the failures. It is essential to improve the work of the Knesset in its core areas of operation. Applying the various recommendations presented in this document will help the Knesset function and will even contribute to creating a healthier balance between the two branches of the government: the Knesset and the government. Not only will this benefit each of them, but, more importantly, it will benefit the general public and Israeli democracy.

b. Private legislation: Major Failings

› All Knesset members have the right to submit private bills. However, in recent decades, especially since the beginning of the millennium, there has been a significant increase in the number of private bills submitted to the Knesset compared to other legislatures in the developed world. During the past 15 years, about 20,000 private bills have been submitted, with 3,000 submitted during the last Knesset that served only 20 months *(See Figure 1)*, indicating a significant problem in this area;

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80   This section is based on the previous work of the authors, and primarily on The Knesset's Supervision of the Government–Update Status and Proposal for Reform, the Israel Democracy Institute, 2009.

› Most of the private bills submitted are of the "declaration of law" type, meaning that they are designed to attract public and media attention rather than accomplish a public purpose;

› While only 5% of the private bills tabled in the Knesset in the last 15 years eventually became laws, the absolute number of laws originating from private bills amounts to about 1,000, an amount significantly greater than that in other developed countries the world.
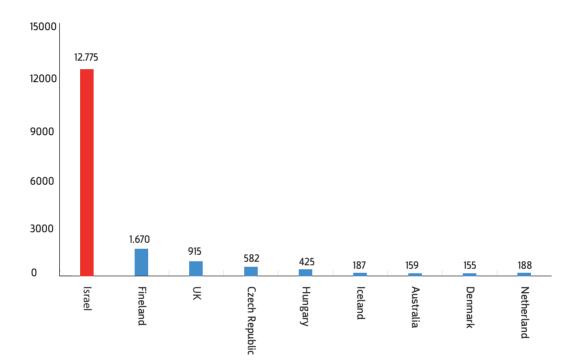
Figure 1: **Number of Bills Tabled in Legislatures 2000–2010**

Source: Hazan and Friedberg (2009)

› Placing thousands of private bills on the Knesset table, and the resulting approval of hundreds of them, a ratio similar to that of government laws approved, has numerous drawbacks:

› The value of private bills is compromised, as is the status of the entire legislative process, with bills being filed casually, or dealing with issues unsuitable for legislation;

› Professional human resources in the Knesset and the government are wasted;

› Knesset committees are flooded with private bills, increasing the burden on these committees;

› The Ministerial Committee on Legislation is unable to hold substantive discussions on so many bills because of the short time allotted for deliberations;

› It becomes difficult for the government to engage in an organized government legislative process according to clear priorities reflecting its policy and budget constraints;

› Private laws that are not compatible with the budgetary policy according to the Arrangements Law are frozen or not implemented.

c.   Recommendations

1. **A quota should be set for the bills that each Knesset member can place on the Knesset table, so that their number in Israel will be closer to that of the other countries listed in Figure 1.**

2. **The quota of private bills presented each week for preliminary discussion should be reduced.**

3. **The committees' chairpersons should be required to monitor the implementation of laws regularly.** For example, a weekly discussion can be devoted to a specific issue, to which the ministry officials responsible for implementing the law will also be invited for the purpose of reporting.

4. **On one hearing day every week, preference should be given to the discussion of government bills in the committees.**

5. **Knesset members should be required to provide detailed, expert explanations of a bill, including a breakdown of its costs, the funds to finance it and its effects on various issues, such as personnel required, social and environmental impact, etc.** Furthermore, the directive requiring that the budgetary implications of private bills should be noted in the wording of the law or in the explanatory text should be enforced.

6. **The Knesset presidium should be forced to examine the contents of explanatory notes before approving the placement of a bill on the Knesset table and to reject proposals that do not meet the established criteria.**

7. **Approval of the Basic Law on Legislation should be promoted.** Today, Israel is one of the few democracies that does not have basic legislation or certainly not a constitution to regulate its legislature's powers.

d.   Control of the Executive Branch by Knesset Committees: Major Failures

Supervision of the executive authority by the legislative authority is an essential pillar of any democratic regime. This duty obliges the elected representatives, Israel's Knesset members, to safeguard the interests of the public and to expose government actions, condemning them if necessary. But the size of the Knesset and its structure make it difficult for elected officials to execute proper inspection for several reasons:

›   **The Knesset is small, governments are large and there are too many members in the Knesset's permanent committees.** The Knesset is one of the smallest parliaments in the world. Countries similar to Israel in terms of their population, and even smaller ones, have a greater number of legislators: Denmark with 179, Hungary with 199 and Greece with 300. On the other hand, the coalition governments in Israel are quite large, sometimes reaching 30–40 members. Consequently, only two-thirds of the members of the Knesset, and sometimes even fewer, are available to serve on committees, whereas the total number of possible appointments in them, including sub-committees and special committees, is almost triple that amount. Hence, the number of committees on which Knesset members may serve in parallel is rather unusual: three on average. Moreover, when over half of the coalition members are members of the government, either ministers or deputy ministers, some coalition members may also serve on four, five and even six committees to maintain the coalition majority in each committee.

As shown in Figure 2, in many countries with a Parliamentary regime, members of Parliament serve on one or two committees at most. In some countries, the law or the regulations prohibit legislators from serving on more than one permanent committee, with the understanding that quality parliamentary work requires focus and expertise, and therefore, it would be better for legislators to concentrate on their work in one committee and invest most of their time and energy in that committee. When a Knesset member belongs to several committees at the same time, he or she is absent from many discussions, which are held at the same time in the mornings of the Knesset's three days of work, because, according to practice, the committees cannot be convened when the plenum is sitting. As a result, committee members do not have the required time or ability to study subjects in depth, to be thoroughly prepared for meetings, or to develop expertise in the fields of the committees' operations;
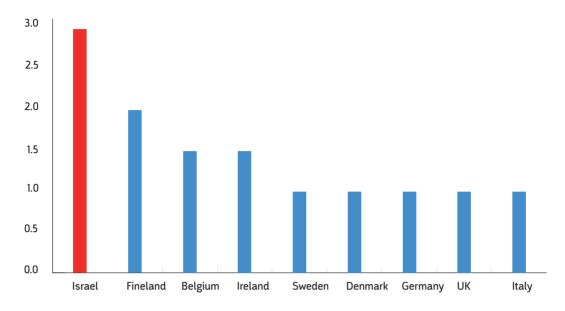
Figure 2: Number of Permanent Committees on Which Each Legislator Serves (on average)

Source: Hazan and Friedberg (2009)

› **The lack of overlap between the committees' and the ministries areas of activity.**
The permanent Knesset committees are linked to areas of activity rather than to ministries. As a result, a committee's fields of activity do not completely correspond to the scope of activity of a particular government ministry. This structure substantially affects the ability of the committees to monitor the government, because committee members are not necessarily able to focus on and thoroughly examine in depth a ministry dealing with the issues for which the committee is responsible;

› **Lack of professional support.** Adequate professional staff available to committees is an important condition for increasing the Knesset's supervisory powers of the government. Without independent professional support, committee members with small professional staffs, find it difficult to monitor the executive branch, with its knowledge and experience, accessibility to information, and, no less important, resources. There was a significant but not sufficient improvement in this area about 13 years ago, when the committees were linked to legal advisors and the Research and Information Center of the Knesset was established, which provides objective professional services to Knesset members and committees;

› **Lack of authority of the permanent Knesset committees to force witnesses to appear before them and present documents.** Knesset regulations authorize the Knesset and its committees to demand that ministers and civil servants appear before them to provide information. According to the regulations, ministers are also required to submit a semi-annual report to Knesset committees. However, the committees, with the exception of the State Control Committee, cannot force anyone to appear in committee nor can they exercise pressure on ministers to deliver reliable and complete information, since the committees lack the power to impose and enforce sanctions for non-appearance or for providing incomplete or even false information. The law and regulations do not grant them the authority to investigate the functionaries appearing before them, such as ministers, government representatives or public officers, and certainly not non-public officer holders, the nature of whose appearance is not defined by evidence or a statement. All these factors undermine the supervisory work of the committees of the executive branch;

› **Inadequate monitoring.** The committees do not regularly monitor the implementation of laws that pass through them or the conclusions reached after handling the proposals transferred to them by the Knesset plenum. Poor monitoring undermines the entire supervisory chain, from raising issues and laws in the Knesset plenum to their handling by the committees, and virtually obviates the committees' supervisory function.

e.   Recommendations

1.   **In 2013, the government size was restricted by the Government Basic Law to 23 members: the Prime Minister, 18 ministers and four deputy ministers. This limitation should be reinforced by a two-thirds majority of the Knesset members.** Otherwise, it will be cancelled at the first opportunity, as in 1999, when it was canceled by the then elected Prime Minister, Ehud Barak because of coalition pressures. This limit, if it remains, will increase the pool of Knesset members who are available for parliamentary work.

2.   **The structure of the committees and their activity areas should be changed so that they correspond to government ministries.** In addition, the maximum number of government offices should be set by law so that it does not change frequently.

3. **The committees should be empowered to hold hearings and each permanent committee should be divided into permanent sub-committees which will correspond to the main departments of the government ministry for which the committee is responsible.** In addition, a permanent sub-committee should be established to review the audit reports of the relevant ministry.

4. **The number of committee members should be reduced to nine or less, with the exception of the House Committee, where the representation of all factions is important.**

5. **The committees should be given additional hours of operation at the expense of plenary session hours, as well as another official workday.**

6. **A statutory audit program should be created for each committee that includes: review of a personal report presented by the relevant minister to the committee every six months; the establishment of a sub-committee to monitor the implementation of committee decisions; and the creation of a mechanism to involve the committee in monitoring the implementation of the ministry's budget.**

7. **Committees should be authorized to impose sanctions on public servants and citizens called to appear at a hearing, or who were asked to provide information and documents, and failed not do so or provided inadequate information.**

8. **The committees' professional staffs should be enlarged by recruiting additional professional staff and substantially increasing their budgets.** This will help supplement two reforms already carried out of linking legal advisors to the committees and the establishment of the Research and Information Center, which have met with some success in the area of counseling, information and research.

9. **The position of the Research and Information Center of the Knesset should be enhanced and its use optimized.** Its existence and independence should be anchored in law to prevent any arbitrary change in its status by any officials. Its budget and staff should be increased and its long-term research capabilities broadened.

10. **The issue of lobbyists in the Knesset is a weighty one, with profound negative repercussions on decision making in the political system.** The presence of lobbyists in the Knesset in general, and particularly in the committee chambers should be limited. Additionally, lobbyists should be required to submit their background material to the Research and Information Center of the Knesset and they should be forbidden to submit data directly to the committees.

f.   Summary

The Knesset is exceptional among parliamentary democracies in terms of its role as a legislature. The number of private bills submitted to the Knesset in the 15 years is immense, with no match in the democratic world. Knesset members propose an excessive amount of private bills, and not for the purpose for which private bills were designed, as this action is very accessible and lacks any concrete barriers to its use. In its role as a supervisor, the Knesset does not work effectively. The committees, the most important supervisory mechanism, are ineffective, in part because of the small number of Knesset members who are available for parliamentary work and because of structural flaws in the legislature as a whole and in the committees in particular. Parenthetically, it can be added that the Knesset's supervisory mechanisms of queries and proposals to the agenda have long encountered many functional problems. The Knesset clearly performs weakly in approving the state budget and tracking its performance and many Knesset members come to their positions without proper training, without accumulated experience as Knesset members and without proficiency in proceedings related to parliamentary work.

Despite the gloomy picture that emerges from examining how the Knesset fulfills its legislative and supervisory functions, we are confident that its functioning could be greatly improved in its main areas of work, both for its own benefit and for the benefit of the government, the public and Israeli democracy.

REGULATING THE ACTIVITIES OF LOBBYISTS IN THE KNESSET

AVI BEN-BASSAT

a. Introduction

Lobbying is a worldwide phenomenon and strongly influences government decisions and many laws. Modern governments take into account the implications of their decisions on the welfare of all sectors of society, including the business sector. To minimize the unwanted effects of public activity, many governments conduct open discussions as an integral part of their decision-making process. Stakeholders and external parties are invited to the various committees to voice their opinions and the useful information and independent insights these outside parties provide may contribute to improving a policy. However, lobbyists are primarily concerned with the interests of a very small group, often at the expense of all, or the majority, of the citizens of Israel. Most of the lobbyists' activities involve representing the narrow interests of wealthy people and business corporations. The ability of the wealthy to fund lobbyists is far greater than that of associations and non-profit organizations representing the interests of the general public. Moreover, there is concern that because lobbyists are frequently rewarded on the basis of their success in maximizing their clients' profits, the general public could suffer even greater harm.

According to a report by the Research and Information Center of the Knesset (2006), of the 42 lobbyists with permanent entry permits to the Knesset, only three belong to social organizations. The other 39 lobbyists are employed by private consulting and public relations companies. Studies on the activity of lobbyists in the EU show that most lobbyists represent corporations or trade associations.[81]

The attempt of lobbyists to alter legislation so that it will benefit businesses and mostly large companies affects the Knesset's public image. The poor transparency prevailing in the Knesset regarding lobbying activity creates opportunities for political and public corruption and contributes to the growing distrust of the Israeli public in its elected representatives.

The increase in lobbying activity and the increasing sensitivity of governments and public institutions to their public image has led many governments, including the British government as well as the European Parliament, to regulate the activities of lobbyists by law. More significant changes were

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81   In 2000, there were approximately 2,600 stakeholders who had permanent offices in Brussels. European trade federations accounted for about one third of these, commercial consultants accounted for one fifth, companies, European non-profit organizations, such as environmental, health or human rights organizations and national associations of businesses and employees accounted for 10% each, representatives of regional and international organizations accounted for 5% each and research institutes or think tanks accounted for one percent.

made in the United States and Canada as a result of major corruption scandals involving large lobbying agencies, such as the Jack Abramoff case in the United States. The notable measures adopted by both countries included: the definitions of who is a lobbyist and the activities that must be reported were refined; the frequency and scope of reporting by lobbyists were increased, with an emphasis on their financial resources that could also be a source of corruption; online databases were created, which are transparent to the public and easy to access and navigate; the powers to impose civil and criminal punishment on violators were significantly increased; the application of the law, not only to legislators and staff but also to all public servants and their areas of responsibility in working with lobbyists, was expanded.

b. The Law in Israel

In Israel, too, the lobbyists' status is defined by law, but the obligations applicable to them are very limited compared with the United States. According to the Knesset Website:

In 2012, 180 lobbyists were active in the Knesset. Regulating the activity of the lobbyists in the Knesset is anchored in the Knesset Law (Amendment No. 25), 2008. According to this amendment, a lobbyist may act in the Knesset only with a permit given by a committee that is headed by the Knesset chairperson and of which two of his/her deputies are members, one from the coalition and the other from the opposition. Anyone wishing to act as a lobbyist in the Knesset is required to submit to this committee a request in which he/she will indicate his/her personal information, whether he/she operates within a corporation and the type of corporation, its name, and number, the names of the clients he/she seeks to represent in the Knesset and their field of activity, as well as the name and all areas of activity of any organization that gave him/her remuneration or benefit related to the matter for which the lobbyist asks to act in the Knesset. If the applicant is a member of a party's electorate body, he/she must specify the name of the party. The applicant must declare that he/she is obliged to act in accordance with the law.

A lobbyist visiting the Knesset is required to wear an identification tag received from the Knesset showing his/her name, and, if he/she operates within a corporation, the name of the corporation. In his/her messages to the members of the Knesset, to those who are working in their service, to the Knesset employees, and to the Knesset committees, as part of his/her lobbying, the lobbyist has to announce that he/she is acting as a lobbyist in the Knesset with a permit and specify the name of the client for whom he/she acts.

It is forbidden for lobbyists to give members of the Knesset any benefit, and they must not deceive them with regard to any substantial fact that is related to their parliamentary activities. The lobbyists must not take actions to convince members of the Knesset, their employees, or Knesset employees by any illegal means, such as pressure, threat, temptation, or promising benefits, and they are not allowed to cause MKs to pledge to vote or act in a certain way. The committee chaired by Head of the Knesset is authorized to revoke a lobbyist's permit to operate in the Knesset or even to forbid him/her entrance to the Knesset if he/she has broken the law. If the lobbyist acted as part of a corporation, the committee may take the same actions also against other lobbyists working within this corporation.

By law, the Knesset has to publish on its website the names of lobbyists who have received a permit to operate in the Knesset and the details of their clients, and, in the case of lobbyists acting within a corporation, the corporation's details. Regarding lobbyists who are members of the party electorate body, the name of the party should be given.

c.   Recommendations

Reporting requirements for lobbyists in Israel are far lower than those customary in the United States and it is easier for Israeli lobbyists to act for the benefit of a small group at the expense of the general public. Therefore, the reporting required by lobbyists should be expanded to provide sufficient transparency about their identity, characteristics, clients, and the compensation they receive for their work. Control of their activities and a full report on their overall characteristics and sources will improve the legislative process in Israel and increase the public's trust in its representatives. The principles that should be adopted, which are based largely on the legislation in the United States are presented below.

(a)   Lobbyists' Registration

1.   **Licensing requirement: any person wishing to engage in lobbying in the Knesset must obtain a permit from the officer responsible for the provisions of this law.**

2.   **People with a criminal record will not be able to obtain a permit.**

3.   **A person who wishes to act as a lobbyist will submit an application to the Commissioner of this Act with information about him or herself, including in whose name he or she plans to act.**

4. In the application, registrants will also specify the list of general topics concerning which they expect to provide lobbying services to their client and details about the specific issues that are already being handled or are likely to be handled.

5. The lobbyist will submit a separate registration request for each client.

6. Multiple clients: in cases where the lobbyist is lobbying for more than one client, a registration request must be submitted for each client separately.

7. Multiple contracts: if the lobbyist performs more than one lobbying operation for the same client, a combined registration application must be submitted for the same client, specifying the range of actions the lobbyist performs for the client.

8. End of registration validity: in any case where the lobbyist ceases to engage in lobbying after the date of registration, or does not anticipate additional future contracts for the same client, the person in charge of this act must be updated.

 (b)   Reports by Registered Lobbyists

1. The lobbyist must submit a quarterly report electronically to the Knesset Chairperson and the Knesset Secretary describing the lobbying activities in which he or she took part during the quarter. A separate report must be submitted for each registered client of the lobbyist. The quarterly report must include:

    ›   Client information and identification of other parties funding the lobbyist's operation;

    ›   The objectives of each client the lobbyist represents;

    ›   The payment he or she has received from the client for promoting their interests;

    ›   If the lobbyist performs more than one activity for the client, he or she must report on each of them separately, included the remuneration received;

    ›   Any contributions by the client or lobbyist to any political body.

2. Any interested party acting on his or her own behalf in the Knesset, or using a lobbyist, will also be required to submit reports identical to the lobbyists' reports and including all the details itemized above.

3. **Reporting will be done electronically to allow for the establishment of a convenient and easy-to-handle online database.** The Knesset will publish all the data in the database online: the names of registered lobbyists, periodic reports, and other information they were asked to report.

(c) Appearing before the Knesset Committees

In order to maximize the transparency of lobbyists and stakeholders appearing before the committees,[82] the staff of the Israel Democracy Institute (Kremenitzer, Sidur and Shapiro, 2013) proposed encouraging anyone who is invited to appear before a committee to give at least a written summary of his or her position. This abstract will be published in the portal of the committee in advance of the hearing. This recommendation, while useful, is not sufficient. Since interested parties are involved, the material provided to the committee should be examined by an objective body. Therefore it is recommended that:

> **Lobbyists appearing before the committee must provide their reasoned position in writing for consideration by the Knesset research and Information Center (MMM).[83] Only then will their positions and opinions be distributed to the committee members who discuss the issue and the chairman has the discretion whether or not to allow the lobbyists to present their material to the committee.**

(d) Code of Conduct

1. **The lobbyist must identify him or herself before the Knesset members and public servants with whom he or she converses.**

› The lobbyist will inform Knesset members and public servants whether he or she has a permit to operate as a lobbyist and the name of the client for whom she or he works. The lobbyist must also present his or her operating license;

› This obligation applies to any communication, whether oral or in writing, including emails;

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82 It should be noted that there are no uniform rules about the presence of lobbyists in committees or their right to present their views. Both are subject to the decisions of the chairpersons of the committees. In practice, there is great variation among the committees.

83 This recommendation may require an expansion of the powers of M.M.M., so that the Center employees can present not only their opinions on different issues, but also their opinions on the documents submitted to the Knesset members or its committees.

2. The lobbyists must not mislead public servants in relation to substantive facts they provide, nor give public servants any benefit, including gifts, meals, trips, travel, etc.

3. Public servants will not accept any benefit, including gifts, meals, trips, travel, etc. from the lobbyist.

4. All conversations of lobbyists with members of the Knesset should be documented so they may be revealed to the public.

(e) Enforcement

1. The authority and responsibility for regulating and enforcing the law will be held by the Knesset Chairman and the Knesset Secretary.

Alternatively, a new and independent body will be established, which will be entrusted with the law's regulation and enforcement.

2. The person responsible for the execution of the provisions of this act shall be in charge of new regulations that will be presented for the approval of the Committee.

3. The person charged with implementing this law shall be responsible for making the information and audit reports available to the public and will be responsible for notifying the State Attorney's Office in the case of a violation of the law. The lobbyist will receive 60 days to give an appropriate response.

4. To enforce reporting, appropriate enforcement powers shall be granted to the Commissioner for the implementation of the law, including the ability to require Knesset members and public officials to ratify the reports of lobbyists.

5. The person responsible for the implementation of the law shall submit periodic reports to the Knesset Committee and the State Comptroller regarding his or her enforcement activity, such as the number of complaints filed, the number of complaints handled, the number of investigations being held, fines, etc.

6. A cooling-off period of two years will be set for ministers, Knesset members, and other public officials before they can be engaged as lobbyists after leaving public office.

7. A reporting requirement will be imposed on public officials who negotiate a future contract with "supervised" parties while in public office.

8. The State Comptroller shall conduct an annual random check of the reports of lobbyists and their compliance with the provisions of this law.

(f) Civil and Criminal Punishment

1. The person responsible for the implementation of the law will be entitled to revoke the licenses of lobbyists and prohibit their entry to the Knesset ad hoc for five years from the date the license was denied, similar to the provisions of the bill of Yehudit Naot of 2001.

2. The Commissioner under the law shall have the authority to impose significant penalties on those who do not correct the deficiencies found in his or her reports within 60 days.

3. Those who violated the law intentionally and acted corruptly shall be subject to imprisonment of up to five years and penalties as prescribed by the law.

4. A long statute of limitations period will be set, of up to ten years, for violations of the law.

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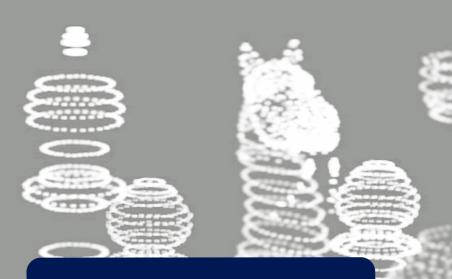
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MEMBERS
OF THE
FORUM

APPENDIX

FORUM
פורום
לאסטרטגיה-על

MEMBERS OF THE GRAND STRATEGY FORUM

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Adamsky, Dima	Dr.; Lauder School of Government, Diplomacy and Strategy, IDC Herzliya
Adiri, Jonathan	Founder and CEO, OwnHealth Digital Healthcare
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Al-Krenawi, Alean	Prof.; President Achva Academic College
Alper, Yossi	Held senior positions at the PM's Office
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Amidror, Yaakov	Maj. Gen. (Res.), Former National Security Advisor to the PM and Head of the NSC
Amrani, Yossi	Amb.; Head of the Policy Planning Department, Ministry of Foreign Affairs
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Arens, Moshe	Former Minister of Defense and Minister of Foreign Affairs
Ariav, Yarom	Chairman of Lavie Capital; Former Director General, Ministry of Finance
Arnon, Ruth	Prof.; The Weizmann Institute of Science, Former President, Israel Academy of Sciences and Humanities; Israel Prize Laureate

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Lifshitz, Yaacov	Prof.; Department of Economics, Tel Aviv University; Former Director-General, Israel Finance Ministry
Litvak, Meir	Prof.; Head, Center for Iranian Studies at Tel Aviv University
Lotan, Tomer	Director of the Center of Citizen Empowerment; Former Director, Center for Local Government and Regional Development, JDC
Maital, Shlomo	Prof. (Emeritus); Faculty of Industrial Engineering and Management, Technion; Senior Fellow, S. Neaman Institute, Technion
Margalit, Oded	Dr.; CTO, IBM Cybersecurity Center of Excellence
Matania, Eviatar	Dr.; Head, National Cyber Bureau, PM's Office
Matias, Shavit	Dr., Research Fellow, Hoover Institution, Stanford University; Lauder School of Government, Diplomacy and Strategy, IDC Herzliya; Former Deputy Attorney General of Israel
Mehoudar, Rafael	Inventor, Patent Developer, Entrepreneur and Businessman
Megidor, Menachem	Prof. (Emeritus); The Einstein Institute of Mathematics, Hebrew University of Jerusalem; Former President, Hebrew University
Melnick, Rafi	Prof.; Tiomkin School of Economics, IDC Herzliya
Meridor, Sallai	International Chairman; the Jerusalem Foundation, Former Israeli Ambassador to the U.S
Merkel, Shlomo	Brig. Gen. (Res.); VP Board Qom, CEO, Ramot, Tel Aviv University; Former Chief Material Command, Israel Navy
Miarri, Sami H.	Dr.; Department of Labor Studies, Tel Aviv University
Michaeli, Israel	Former Acting Head of the NSC, Former Deputy Head of NSC and Israeli Ambassador to the International Atomic Energy Agency - IAEA
Mientkavich, Arie	COB of RDC and Deputy Chairman of Gazit Globe
Mintz, Alex	Prof.; Head of the Institute for Policy and Strategy and Chair of the Herzliya Conference Series, Lauder School of Government, Diplomacy and Strategy, IDC Herzliya
Mitzna, Amram	Maj. Gen. (Res.); Former Member of the Knesset; Former Mayor of Haifa
Mizrachi, Shlomo	Prof.; Faculty member of the Department of Public Policy and Administration. Ben-Gurion University
Movshovitz-Hadar, Nitsa	Prof., Senior Fellow, S. Neaman Institute, Technion; Former Dean of the Faculty of Education of Science & Technology, Technion
Moyal, Ami	Prof.; President, Afeka College, Former CEO of NSC

Naveh, Eyal	School of History, Tel Aviv University
Nirenstein, Fiamma	Journalist, author and politician; Former member of the Italian Parliament
Novick, Nimrod	Dr.; ALEH Board Member, Former Foreign Policy Advisor to the PM
Orbach, Danny	Dr.; Department of Asian Studies and general History, Hebrew University
Orbach, Dov	Dr.; Senior Researcher Nuclear Research Center Negev Pedagogy VP at Atid Education Network
Oren Amiram	Dr.; Geographer, Kinneret College
Oren, Michael	Dr.; Member of the Knesset for the Kulanu party; Former Israeli Ambassador to the U.S
Orion, Assaf	Brig. Gen. (Res.); Research Fellow, Institute for National Security Studies; Former Head, Strategy Division, IDF
Pazner, Avi	Amb.; Avi Pazner International Consulting Ltd.; Former senior advisor to the PM; Former Israel Ambassador to Italy and France
Peled, Yossi	Maj. Gen. (Res.), Chairman, Eilat Ashkelon Pipeline Co. LKtd. (EAPC); Former Minister; Former Commander of the Northern Command, IDF
Pinkas Malki	Dr.; Senior Researcher, Atomic Energy Commission
Plesner, Yohanan	President, The Israel Democracy Institute; Former Knesset Member for Kadima Party; Former Head of the Special Projects in the PM's Office
Polisar, Daniel (Dan)	Dr., Vice President and Academic Director, Former President, Shalem College
Polishuk-Bloch, Meli	Adv.; Former Knesset Member for Shinui party
Pridor, Adir	Dr.; Founding Head, Institute for Industrial Mathematics, Ben Gurion University, Former Head, Center for Military Research, Rafael
Rabinovich,Itamar	Prof. (Emeritus); Department of Middle Eastern and African Studies, Tel Aviv University; President Israel Institute (Washington & Jerusalem); Former Israel Ambassador to the U.S
Ramati, Yair	Ministry of Defense, Awarded the Israel Defense Prize
Rand,Omri	Prof.; Faculty of Aerospace Engineering, Former Director S. Neaman Institute, Former Dean of the Faculty of Aerospace Engineering, Technion
Recanati, Leon	President and CEO, Glenrock Israel; Founder and COB Mada-Tech Israel National Museum of Science
Regev,Tali	Dr.; Tiomkin School of Economics, IDC Herzliya
Reichman, Uriel	Prof.; Founder and President, IDC Herzliya
Rosen,Yossi	President, XT Holdings ltd.; Israeli Institute for Energy and Environmental Research

Rosner, Shmuel	Nonfiction Chief Editor, Kinneret-Zmora-Bitan Dvir Publishing House, Senior Fellow, Jewish People Policy Institute
Rotem, Zeev	Dr.; CEO of Rotem Strategy
Rousso, Haim	Former VP for Engineering and Technological Excellence, Elbit Systems Ltd
Rubin, Meir	Adv.; Executive Director, Kohelet Policy Forum
Rubin, Pinhas	Chairman of the Law Firm Gornitzky & Co
Rudnik, Raphael	Dr.; The Fisher Institute for Air and Space Strategic Studies
Samia,Yom Tov	Maj. Gen. (Res.) Dr.; CEO, IC Green Energy; Former Commander for the Southern Command, IDF
Sarel, Michael	Dr.; Senior Fellow, Kohelet Policy Forum; Former Chief Economist, Finance Ministry
Sarusi, Gabi	Prof.;Unit of Electro-Optics Engineering, Ben Gurion University
Shabtai, Shay	Department of Political Science, Bar-Ilan University
Shermeister, Eli	Brig. Gen. (Res.); Head, Mada-tech , Israel's National Museum of Science,; Former Chief of Education and Youth Corps, IDF
Schneider, Riva	Held senior positions in the PM's Office
Schueftan, Dan	Dr.; Director, National Security Studies Center, Haifa University
Schwartz, Dov	Prof.; University of Michigan, Formerly Ben Gurion University; Former Chief Scientist of the Israel Atomic Energy Commission and Deputy Director of the Nuclear Research Center Negev, Recipient of the Ben Gurion Prize 2013, Founder of the Science Education program in Yeruham
Segoli, Ephraim	Brig. Gen. (Res.); Airpower & Asymmetric conflict, The Fisher Institute for Air and Space Strategic Studies
Sela, Aviem	Dr., Col. (Res.); General Manager, Sibam Ltd., Head, Strategic and Defense Division, Matrix Co.; Former Commander of air base, IDF
Shadar, Itzhak	Former Serjeant-at-Arms, the Knesset; Held senior positions at the PM's Office
Shafir, Herzl	Maj. Gen. (Res.) Former General Commissioner, Israel Police; Former Head of the Southern Command, IDF
Shalgi, Giora	Senior Fellow, S. Neaman Institute, Technion; Former President & CEO, Rafael Advanced Systems
Shamgar, Meir	Justice (Emeritus) Former President of the Israeli Supreme Court
Shalom, Zaki	Prof.; Senior Research Fellow, Ben-Gurion Institute for National Security Studies
Sharan, Roded	Dr.; School of Computer Science, Tel Aviv University, The Young Israeli Academy

Shmueli, Oded	Prof.; Department of Computer Science, Former VP for Research, Technion
Shoshani, Shimshon	Dr.; Former Director General, Ministry of Education
Shuval, Zalman	Ambassador; Former Israeli Ambassador to the U.S
Sidi, Moshe	Prof.; Electrical Engineering, Technion; Director, S. Neaman Institute, Former Senior Executive Vice President, Technion
Simhon, Avi	Dr.; Department of Environmental Agricultural Economics & Management, Hebrew University
Singer, Max	Dr.; Senior Fellow and Former President, Hudson Institute, Washington
Smooha, Sammy	Prof.; Department of Sociology and Anthropology, Haifa University; Awarded the Israel Prize
Spector, Yiftach	Brig. Gen. (Res.); Member of the Advisory Council, The Israeli Policy Forum; Former commander of airbases, Israeli Air force, IDF
Spivak, Avia	Prof.; Department of Economics, Ben Gurion University, Senior Research Fellow, Van-Leer Jerusalem Institute
Stauber, Zvi	Brig. Gen. (Res.); Former Head for the Strategic Planning Division of the IDF's Planning Department; Israel's Ambassador to Britain; Head of the Institute for National Security (INSS)
Steiner, Ami	Head, Nobel Laureates program for Excellence in Education
Stern, Yedidya	Prof.; Faculty of Law, Bar Ilan University, The Israel Democracy Institute
Stockman, Israel	Chairman of the Board, National Security Studies Center, Haifa University, Former CEO, Colmobil
Strawczynski, Michel	Prof.; Department of Economics and the Federman School of Public Policy and Government, Hebrew University; Former Acting Director Research, Bank of Israel
Strenger, Carlo	Prof.; Department of Psychology, Tel Aviv University; Columnist, Haaretz
Strum, Dror	Director, The Israeli Center for Economic Planning; former Antitrust Commissioner, Ministry of Finance
Sverdlov, Erez	Dr.; Lauder School of Economics, Diplomacy and Strategy, IDC Herzliya; Former Head, Systems Analysis Center, Planning Division, IDF
Tadmor, Zehev	Distinguished Prof (Emeritus) Chemical Engineering Technion, Chairman of S. Neaman Institute, Former President of the Technion, Member of Israel Academy of Sciences &Humanities, Awarded the Emet Prize
Tamir, Yuli	Prof.; President, Shenkar College, Former Education Minster
Tirosh, Gadi	Partner, Jerusalem Venture Partners (JVP)

Tolkowsky, Dan	Maj. Gen. (Res.); Member of the Technion Board of Governors, Former Director, DIC, Israel Discount Bank Holding Corp,; Former Commander of the Air Force, IDF
Tomer, Haim	Held senior positions in the PM's Office
Trachtenberg, Manuel	Prof.; School of Economics, Tel Aviv University; Knesset member for the Zionist Camp Party, Former Chairman, Planning and Budgeting Committee, Council for Higher Education
Turbowicz, Yoram	Dr.; Former Chief of Staff of PM Ehud Olmert
Vaknin-Gil, Sima	Brig. Gen. (Res.); Former Chief Military Censor, IDF
Verdi, Rafael	Maj. Gen. (Res.); Former. Head of State Comptroller Office, Head of Manpower Directorate, IDF
Vigoda – Gadot, Eran	Prof.; Head of the Center for Public Management and Policy at the University of Haifa; Former Head of the School of Political Science, University of Haifa
Wald, Shalom	Dr.; Senior Fellow, Jewish People Policy Institute; Former Researcher OECD
Weintraub, Lior	Lauder School of Government, Diplomacy and Strategy, Interdisciplinary Center Herzliya; General Manager, Shearim for the Promotion of Israeli Judaism
Weiss, Ariel	CEO & President, Yad Hanadiv; Former Director of the Democratic Steering and Policy Committee, U.S. House of Representatives
Wilf, Einat	Dr.; Former Knesset member for Labor and Independence parties
Ya'ar, Itamar	Ya'ar Strategic Consultancy and Management; Former Deputy Head of the NSC
Yadlin, Amos	Maj. Gen. (Res.) Head, Institute of National Security Studies (INSS); Former Head of the Military Intelligence, IDF
Yahav, Yoram	Founder of YOYAH Group, Former Director of TIM Technion Institute of Management
Yakobson, Alexander	Prof.; Department of History, Hebrew University; Columnist Haaretz
Yanai, Shlomo	Maj. Gen. (Res.); Deputy Chairman of the Rothschild Caesarea Foundation; Former CEO, Teva Pharmaceutical Industries Ltd
Yanay, Elisha	Chairman of the Board, Israel Association of Electronics & Software Industries; Former President and General Manager, Motorola Israel
Yankelvitz, Shimon	Prof.; School of Physics and Astronomy, Tel Aviv University, Former member of the Planning and budgeting Committee Council of Higher Education
Yonath, Ada	Prof.; Nobel Laureate in Chemistry and Israel Prize Laureate; Department of Structural Biology, Weizmann Institute of Science

Zameret, Zvi	Dr.; Lauder School of Government, Diplomacy and Strategy, IDC Herzliya; Former Head, Pedagogical Secretariat, Education Ministry, Former Director of the Yad Ben Zvi Institute
Ze'evi Farkash, Aharon	Maj. Gen. (Res.); Founder of FST21 Ltd.; Former Head of Military Intelligence, IDF; Former President, Jewish People Policy Institute
Zelniker, Shimshon	Dr.; Former Director, The Van Leer Jerusalem Institute
Zisser, Eyal	Prof.; Director, The Dayan Center for Middle Eastern and African Studies, Head, Department of Middle Eastern and African Studies, Tel Aviv University
Ziv, Eli	Head of the Israeli Hotel Association
Ziv, Jacob	Distinguished Professor (Emeritus); Electrical Engineering Faculty, Technion; Former President, Israel Academy of Sciences & Humanities; Former Head of the Planning & Budgeting Committee the Council of Higher Education; Israel Prize Laureate, and awarded (twice) the Israel Defense Prize
Zohar Hefziba	Dr.; Deputy Mayor, Beersheva Municipality

SPEAKERS, PARTICIPANTS AND GUESTS FROM ABROAD

Bercuson, David	Prof.; Director, Center for Military and Strategic Studies, University of Calgary
Evans, Jonathan	Sir; Former Director-General, British Security Service MI5
Goldberg, Gary	President, Gadango Inc.; President, Galin Foundation
Groveman, Bernard	Senior Managing Director, First Manhattan Co
Joffe, Josef	Dr. Publisher-Editor, "Die Zeit"
Mintz, Jack	Prof.; Director, School of Public Policy, University of Calgary
Morse, Edward L.	Dr.; Global Head of Commodities Research, Citigroup
Paris, Jonathan	Senior Fellow, Atlantic Council; Senior Advisor, the Chertoff Group
Rosen, Stephen	Prof.; Department of Government, Harvard University
Rothkopf, David	CEO and Editor at large, Foreign Policy Group
Samore, Gary	Dr.; Executive Director for Research, Belfer Center for Science and International Affairs, Harvard University
Xiang, Lanxin	Prof.; Professor of International History and Politics, The Graduate Institute in Geneva