

# Israel's National Security Economy: Defense and Social Challenges

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Over the past five years the Israeli economy has demonstrated impressive stability and growth in comparison with other developed countries, and in May 2010 Israel gained membership in the Organization for Economic Cooperation and Development (OECD). Nonetheless, the Israeli economy faces difficult long term challenges, with potential implications for the state's ability to finance high defense consumption, the economy's effect on internal socioeconomic stability, and even Israel's global status. These risks are in part a function of the decline of human capital in Israel (due to the weak education system), instability in the global economy, and the security situation. On the other hand, Israel also has opportunities that allow rapid long term growth. This chapter analyzes Israel's economic situation in the broader sense of national security.

## **What is “National Security”**

In its narrow connotation, national security focuses on foreign affairs and security alone. In the broader sense of the term, however, national security is the ability of a nation to defend itself and achieve its national goals at – at least – a minimum basic level<sup>1</sup> in security, foreign policy, welfare, economy, science, and so on. The strategic document prepared by the US National Security Council and distributed by the White House in May 2010 defines four main areas of focus: security, prosperity, values, and international order. Prosperity includes: strengthening human capital and education relevant to national security; promoting science, technology,

and innovation; achieving balanced and stable economic growth; and heightening efficiency in the use of taxpayers' money. Commenting on the document, Secretary of State Hillary Clinton said that for the first time, emphasis was placed on the economy and national debt in the context of US national security, an important and far reaching change from the approach of previous administrations.<sup>2</sup>

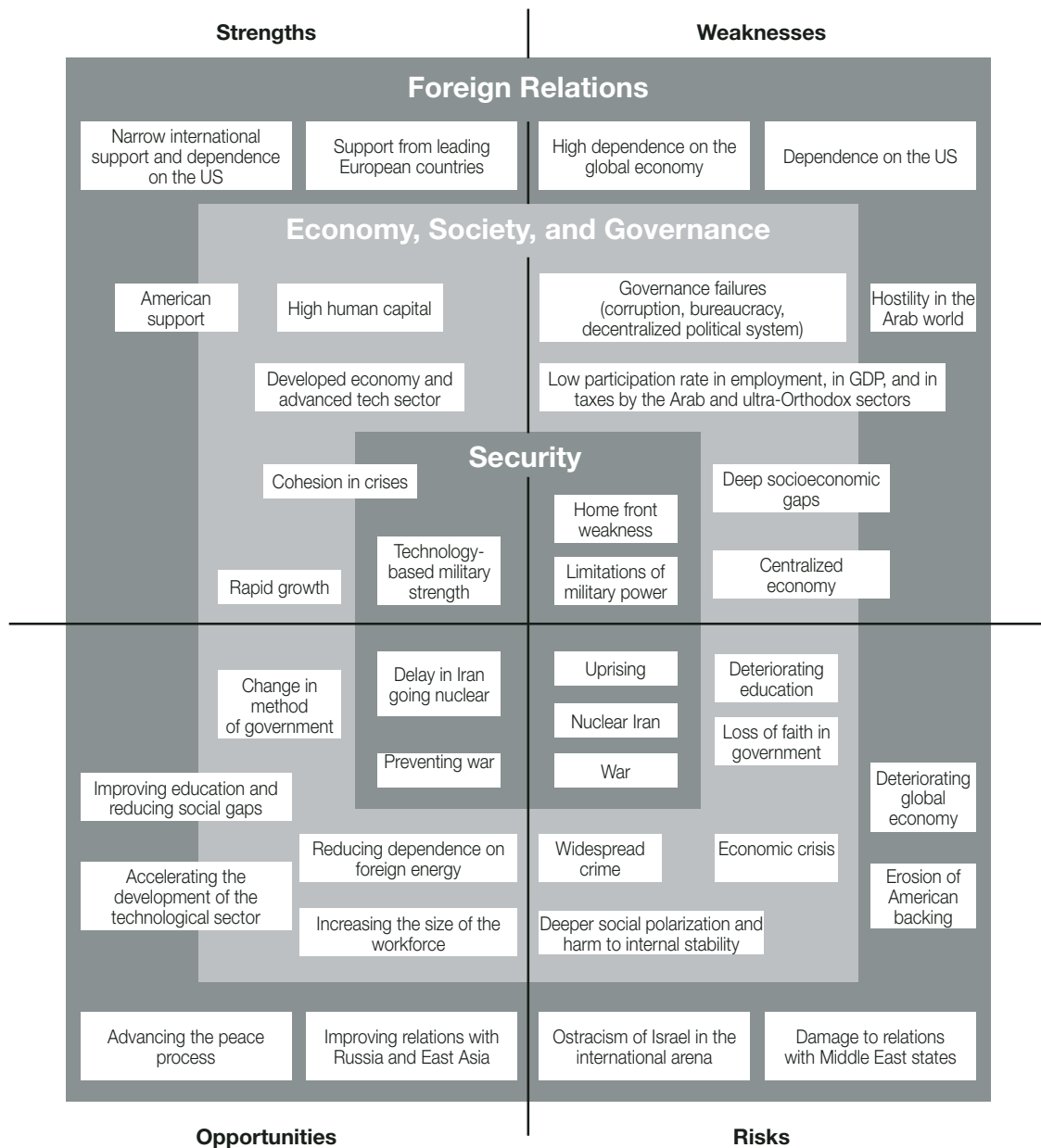
The broader definition of national security makes it possible to discuss a variety of risks facing the nation in a single risk management framework. For example, war risks can be weighed against the risks to internal stability that stem from economic and social issues. A broad perspective also makes it possible to take into account interdisciplinary synergy (between economics, foreign affairs, social policy, demographics, technological development, defense, and so on) and identify opportunities from an overall perspective (figure 1). Still, it is incumbent on every government to define the concept of national security as it sees fit, along with the indices to achieve it. Without limiting the concept, the issue is liable to lose focus because it is possible to connect any and every topic in some manner to national security in its broader sense.

In Israel, there is no single entity that deals with national security in its broader sense, including the National Security Council, which is charged with this challenge. The only entity in the country that comes close to seeing the entire picture is the Ministry of Finance, charged with preparing the nation's budget. However, it maintains its own particular perspective and is not responsible for analyzing non-economic strategic threats.

The primary functions of the state and its institutions with regard to the economy are as follows:

- a. Optimal management of the economy, while providing freedom to market forces on the one hand and intervening in the market for the general good on the other. This includes shaping policy and creating conditions for reliable economic growth and full employment.
- b. Providing resources to the public sector for the sake of achieving national goals (defense, education, health, welfare, science, culture) and fostering efficient utilization of those resources.
- c. Developing and maintaining infrastructures for economic and social activity (energy, food, transportation, finance, and so on).

**Figure 1. Selected Factors Affecting National Security**



- d. Ensuring economic stability (e.g., price stability, labor market, financial system).
- e. Making and encouraging investments to generate economic resources that will make it possible to fulfill national needs in the coming years, and avoiding liabilities that will mortgage the resources of coming generations.
- f. Taking advantage of opportunities to expand trade and foreign economic ties.
- g. Reducing as much as possible dependence on foreign parties in areas liable to constrain the economy and national security (e.g., debt and energy sources).

## **Major Developments in the Israeli Economy**

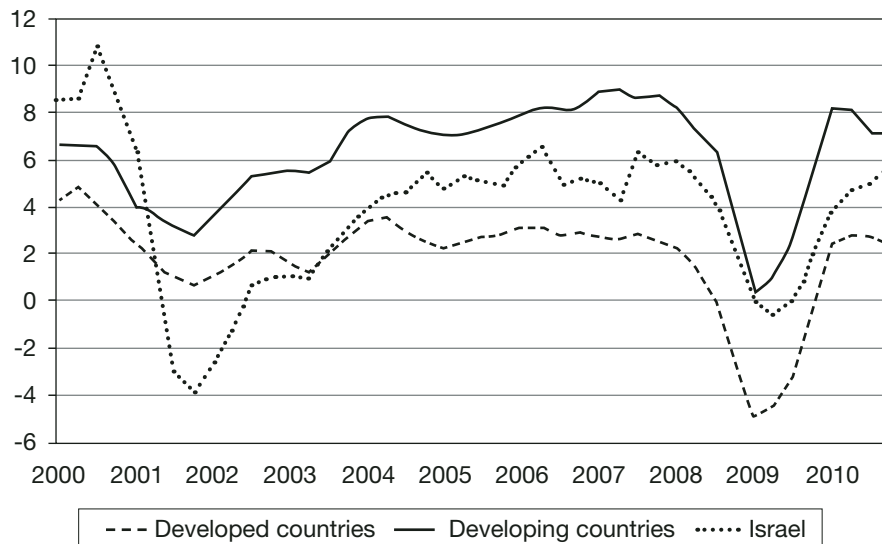
### ***GDP and Growth***

To a large extent, Israel's long term national security depends on the Gross Domestic Product (GDP) – the main source of civilian consumption, defense consumption, and investment. In 2010, Israel's GDP totaled 811.4 billion NIS, and per capita GDP reached 105,000 NIS (\$27,700).<sup>3</sup> In real terms, GDP (growth) rose 4.6 percent in 2010, following increases of 0.8 percent in 2009 and 4.2 percent in 2008.<sup>4</sup> For the sake of comparison, OECD countries experienced a growth rate of 2.8 percent in 2010 (figure 2). Nonetheless, per capita GDP in Israel (in terms of purchasing power) is still 16 percent lower than the OECD per capita average.

The Israeli economy is export oriented. In 2010 Israel's export of goods and services totaled 300 billion NIS (37 percent of the GDP), compared with 266 billion NIS in 2009 and 290 billion NIS in 2008. In 2010, imports of goods and services totaled 283 billion NIS, compared with 247 billion NIS in 2009 and 301 billion NIS in 2008.

These figures highlight the economy's dependence on overseas markets for growth and for imports of raw materials, consumer goods, and services. This dependence obligates Israel to maintain a high level of competitiveness in the world market and adapt the economy dynamically to structural changes in the global market. As such, Israel must: identify areas in which Israel has relative advantages likely to enhance its ability to tap opportunities in growing markets; channel education, training, and

**Figure 2. GDP Growth in Israel vs. in Developed and Developing Countries, 2000-2010**



**Note:** Quarterly data: changes in quarterly percentages in comparison with the corresponding quarter in the preceding year.

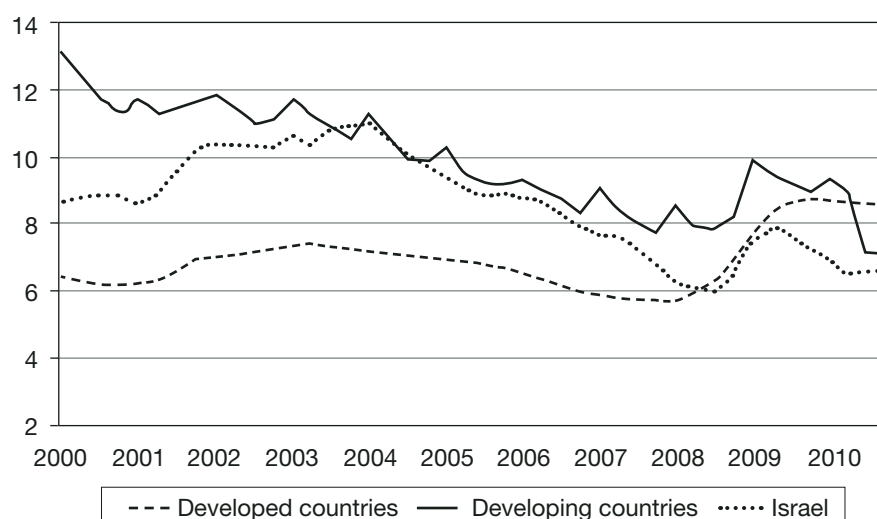
**Source:** Bank of Israel, March 30, 2011

employment to sectors in which Israel will be able to compete in knowledge-intensive fields in the global market; diversify efforts among the global markets to reduce the economy's vulnerability to international crises and changes in currency exchange rates; and develop foreign relations in order to maintain the necessary level of exports.

### ***Employment***

The labor market has a notable effect on national security, because the work force is the most important production factor in the economy and because employment is important to social stability. At high (two digit) unemployment levels, unemployment is liable to have widespread negative systemic effects, such as loss of GDP and the diversion of more resources to social needs at the expense of other national needs.

**Figure 3. Unemployment in Israel vs. in Developed and Developing Countries, 2000-2010**



**Note:** Seasonally adjusted quarterly changes

**Source:** Bank of Israel, March 30, 2011

The rapid growth experienced by Israel has improved the labor market. At the end of 2010 the unemployment rate in Israel was 6.6 percent of the (civilian) labor force, compared with 10 percent in the Euro bloc and 9.6 percent in the US (figure 3). According to the Bank of Israel forecast, unemployment will continue falling to 6.1 percent in 2011 and 5.9 percent in 2012.

Concomitantly, the degree of participation in the work force in Israel has increased, rising from 54.5 percent in 2003 to 56.3 percent in 2007 and 57.3 percent in 2010. This phenomenon was accompanied by further positive changes in the labor market, such as the transition of workers from the services sector to the business sector and the rise in the number of full time jobs (the number of part time jobs rose at a lower rate). The explanation for this trend lies in an improved economic situation and specific government measures, such as a reduction in the employment of foreign workers, the introduction of a negative income tax, and a higher retirement age in Israel, which contributed to an increase in the number of older adults in the work

force. Yet despite these achievements, the rate of participation in the work force in Israel is still lower than in other developed countries. In the US, for example, participation in the work force of working age people is over 65 percent.

The low percentage of potential laborers in the work force in Israel is due in part to the low representation of the ultra-Orthodox and Arab sectors (about 30 percent of the population), especially by women in the Arab sector<sup>5</sup> and men in the ultra-Orthodox sector. In comparison with the rest of the population, these two sectors have high natural population growth rates and low labor productivity, but typically receive a large share of government stipends.

A forecast of the labor market is made through the prism of the education system: in 2014, the percentage of those studying in the ultra-Orthodox and Arab education systems will reach 50 percent of the total number of students in Israel, compared with 34 percent at the beginning of the century. This trend has not been accompanied by implementation of a core curriculum and the basic education essential for the inclusion of pupils from these sectors in the future labor market.<sup>6</sup> The risk inherent in this trend is that continued rapid growth of assisted populations (needing governmental monetary supplements in order to subsist) and the difficulty in raising additional resources from the upper income levels are liable to impede growth, lower the standard of living of the entire population, and even encourage emigration among those with superior qualifications and labor productivity, particularly during periods of prosperity in the global economy. Conversely, developing these sectors and creating conditions in the labor market for their employment are likely to lead to a rise in Israel's GDP and a reduction in poverty.

### ***The Income Gaps in Israeli Society***

Despite the improved rate of participation in the labor market and the impressive data on growth, a large proportion of the population is not benefiting from it<sup>7</sup> and is experiencing relatively low wages and income. Wage gaps are the result both of wage stagnation or lower wages among the lower percentiles and of the excellence of workers, mostly among the upper income percentiles, well equipped to compete in the global economy

**Table 1. Distribution of Income and the Income Tax Burden in Israel**

Population Decile	Ratio of gross income to total gross income (%)	Ratio of income tax to total income tax paid (%)
1	1.0	0.0
2	2.0	0.0
3	3.1	0.0
4	4.3	0.0
5	5.5	0.2
6	6.8	1.0
7	8.6	2.4
8	11.2	6.1
9	16.1	15.6
10	41.4	74.7
	100.0	100.0

**Source:** Tax model of the Ministry of Finance Economic Research and State Revenue Administration, from Merav Arlosoroff, “No One in Israel Left to Pay Income Tax,” *The Marker*, April 11, 2011.

thanks to their skills. At the same time, many senior personnel in the Israeli economy receive high pay, not necessarily related to their contribution to the GDP. Thus, Israel is plagued by extreme income gaps (table 1), and these constitute the main reason for the large socioeconomic gap that contains the potential for social instability.

The income-based structure in Israel has also led to erosion of the middle class, i.e., the people in Israel who constitute the backbone of the country’s work force, society, and defense. For example, the six middle deciles (the third, fourth, fifth, sixth, seventh, and eighth deciles, accounting for 60 percent of the population) earn only 40 percent of the gross income in Israel. Only in the top layer of this group is there equality between its relative percentage of the population and its share of income.

Table 1 shows that only about one half of the population pays income taxes, because the other half earns less than the tax-paying threshold. It also shows the dependence of the state treasury on the income of the top decile, which constitutes the source of 75 percent of the income tax paid in Israel and 65 percent of Israel’s direct taxes (income tax, National Insurance Institute payments, and health tax). At the same time, direct tax



rates have fallen in recent years, while indirect tax rates (VAT, taxes on fuel and cigarettes, and so on), which also affect people who do not pay income tax, have risen. In 2010 indirect taxes exceeded 50 percent of total tax collections in Israel, putting Israel in third place among OECD countries in terms of the indirect tax burden.<sup>8</sup>

### ***Education***

Human capital is Israel's main asset, representing the growth engine of the country's economy and society. The downward trend in the educational level in Israel is therefore particularly alarming. A January 2010 OECD report indicated that the level of high school students in Israel in mathematics, reading, and science was lower than that of their counterparts in other developed countries.<sup>9</sup>

The proposed state budget for 2011-2012 states:

The level of achievement of Israeli students, including those at the highest level, is comparatively low: the achievements of the higher education system are declining, together with the aging of the academic staff and the high rate of Israeli academics assuming teaching and research positions in foreign universities. The decline in the volume of investment in the risk capital industry, together with its growth in competing countries, is detracting from this sector's ability to continue growing, especially when it is joined by a decline in the number of those earning science and engineering degrees, while these fields are experiencing accelerated development in a host of developing countries.<sup>10</sup>

If the decline in the level of scientific and technological education continues, it is liable to be reflected in the erosion of Israel's human capital relevant to its economy's competitiveness. One may expect this to be followed by a drop in exports and GDP growth. Furthermore, a negative impact on military power, which relies more and more on highly advanced technologies, is possible. Generating a change in education is not easy, but it is achievable and indeed indispensable for Israel's national security.

### ***Financial System and Price Stability***

The Israeli financial system, particularly compared to the financial systems in the US and Europe, demonstrated its robustness during the 2008-2009 global crisis. According to the Bank of Israel, the financial institutions, including the banks, gained additional stability thanks to the lessons of the crisis, reflected in part in the continued strengthening of their capital structure. Nevertheless, the real estate market is one of the risk factors in the financial system. The risk lies in a decline in the ability of homeowners and construction companies to meet their obligations to the financial system should market conditions change, as occurred in the crisis in the US. From the recession of early 2008 until the end of 2010, housing prices in Israel rose 39 percent in real terms and homeowners took large mortgages, some at variable interest rates (which are on an upward trend). Following this development and the housing crunch in Israel, the Bank of Israel and the government have taken steps to moderate the real estate market.

Inflation – the uncontrolled rise in prices – constitutes one of the basic risks to economic stability, as occurred in Israel in the first half of the 1980s. In the twelve months between June 2010 and June 2011, inflation reached 4.2 percent, higher than the 1-3 percent target set by the government. Israel's current rate of inflation does not constitute a risk to market stability, but by the middle of 2011 the rising prices of essential goods (such as food, water, electricity, and housing), along with the large wage gaps, sparked the outbreak of social protests that gained strength, momentum, and popularity throughout the country in the weeks and months that followed.

As part of the effort to check inflation, the Bank of Israel increased the rate of monetary interest from a low of 0.5 percent in September 2009 to 3.25 percent in June 2011 (though this is still a negative real interest rate). The difference in interest rates between Israel and other countries and the surplus in the current account in the balance of payments (\$6.7 billion in 2010) increased the flow of capital to Israel and strengthened the shekel against the dollar and other currencies. While the strong shekel is evidence of the trust of global markets in the Israeli economy, it has a negative impact on the competitiveness of Israeli enterprises in both the overseas and the domestic markets. At the same time, the Bank of Israel

and the treasury have taken steps to decrease the profitability of financial investment by foreign residents in short term government bonds.

As a result, the Bank of Israel finds itself maneuvering between two contradictory tasks: on the one hand it has raised the interest rate (thereby supporting a strong shekel) in order to curb inflation,<sup>11</sup> while on the other hand it has purchased foreign currency in the domestic market (in order to weaken the shekel). As a result of foreign currency purchases, in June 2011 the Bank of Israel's foreign currency reserves reached an all-time peak of \$77 billion; however, the exchange rate remains low (hovering around 3.50 NIS to the dollar). According to the Bank of Israel, these balances will strengthen the economy's ability to withstand geopolitical risks,<sup>12</sup> as they allow the country to finance imports for a long time during a crisis. Critics of this policy say that it is contrary to market forces and is also very costly.

### ***Debt-to-GDP Ratio***

The public debt is a direct function of past budget deficits, and reflects the resources mortgaged by previous governments at the expense of the future. The ratio between the gross public debt and the product (debt-to-GDP ratio) is considered an important index measuring the stability of the public sector. This figure also has implications for the defense sector, because a relatively low debt allows the state to raise a good deal of capital when the security situation requires it to do so, whereas a large debt mortgages a significant portion of the government's resources to debt repayments and interest at the expense of other uses, including security.

Israel's situation in terms of its debt-to-GDP ratio is more favorable than that of many other countries and relative to its own situation in the past. In 2010 Israel's debt-to-GDP ratio was 76.3 percent of the GDP, versus 79.3 percent in 2009 and 99 percent in 2003. The Bank of Israel forecasts a further reduction of the ratio to 75.2 percent in 2012. The aim of the Israeli government is to reach a debt-to-GDP ratio of around 60 percent by 2020. Attaining this objective requires the combination of continued rapid growth and budgetary restraint.

### ***Energy Security***

Israel is in the midst of a new era in the energy field, dominated by a transition to the use of natural gas and an increased use of renewable energy over oil consumption. In 2010 natural gas consumption in Israel reached 5 billion cubic meters, at a value of 3 billion NIS, and gas accounted for 37 percent of electricity production in Israel. Gas consumption is likely to at least double in the coming decade;<sup>13</sup> primary gas consumers are power plants and industrial enterprises, and in the future they will be joined by the transportation sector.<sup>14</sup> Most of the gas comes from Israeli offshore gas fields in the Mediterranean Sea, with the remainder imported from Egypt. The use of gas saves money on energy and contributes to the environment. When the gas comes from Israeli fields, it has additional advantages, such as large revenues for the state treasury,<sup>15</sup> increased investment in Israel, growth in the GDP, and reduced energy dependence on overseas sources.

This trend was made possible primarily due to the discovery of gas fields near Israel's shores. In this context three milestones are noteworthy.<sup>16</sup> The first is the discovery in 1999-2000 of a gas field off the Ashkelon coast (the Tethys Sea reserves), which has provided the Israeli economy with natural gas since February 2004. A large portion of the gas in these reserves has already been used, while the remainder is slated to serve the gas economy at least until the supply of gas from the Tamar field is well established some time in 2013. The second is the discovery in 2009 of the Tamar field, 90 kilometers west of Haifa. Estimates of the gas reserves in this field range from 184 to 247 billion cubic meters. Within a few years, the Tamar field is due to become the main source of gas energy in Israel for many years. In 2009, gas was also discovered in the Dalit field about 60 kilometers west of Hadera. The reserves in this field are estimated at only 14 billion cubic meters, which makes its development less worthwhile. The third milestone is the discovery in 2010 of gas in the Leviathan formation (the Amit and Rachel fields west of the Tamar field). Estimates of the gas reserves in this formation range from 320 to 450 billion cubic meters. Development of the Leviathan formation will allow large scale gas exports.

The discoveries of gas in Israel reduce dependence on imported fuels, at least for the Israel Electric Company and industrial uses. The use of natural gas increases the feasibility of desalinizing seawater, thereby

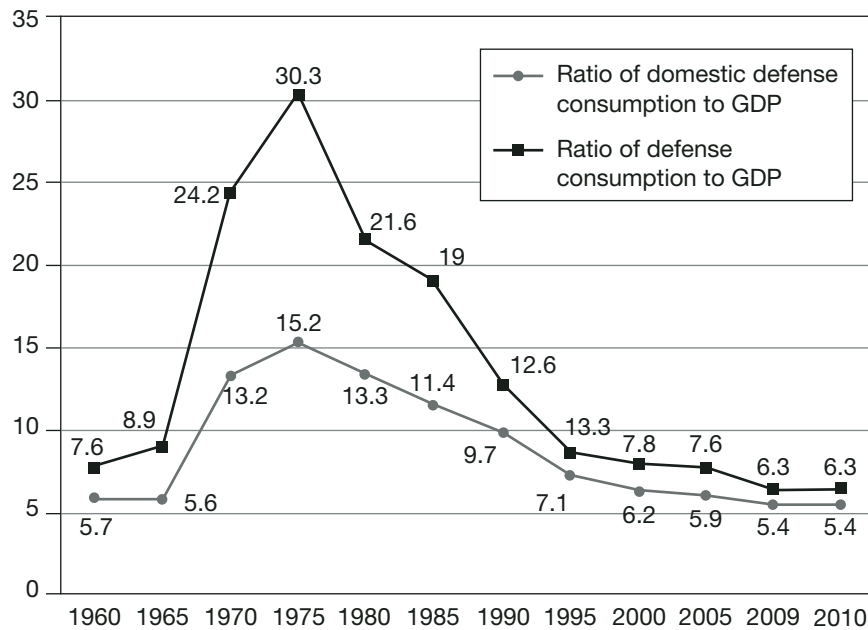
solving the ongoing water shortage in Israel and reducing the potential for confrontations based on the regional distribution of water. This is a good example of a situation in which capital can alleviate political tension. At the same time, it is necessary to safeguard gas production and pipelines and maintain alternatives in case of system malfunctions or irregularities.

Moreover, despite the gas discoveries, Israel has an interest in continuing to import gas from Egypt, a significant element in their bilateral relations, which are almost completely devoid of other economic and social elements of normalization. This source is also important in preserving competition among the gas producers. Nevertheless, the interruptions in Egyptian gas exports to Israel caused by several terrorist attacks on the gas pipeline in Sinai and the sensitive political debate in Egypt over the issue of continuing its gas supply to Israel highlight the risk in relying on this source.

### **The Israeli Economy and the Security Establishment**

The strength of the military is the heart of any national security program; this is especially true of Israel in which military defeat is potentially an existential issue. The resources channeled to the security establishment affect its ability to defend the state and its sovereignty from war, terrorism, and other hostile activities, its ability to deter enemies, thereby preventing war and hostile acts, and its ability to keep military confrontations short, thereby limiting their damage. Proper defense preparation saves not only lives but also serious damage to the economy. Conversely, undermining security over the long term has a significant negative impact on the economy, as was the case during the second intifada, for example.

*Defense expenditure.* The serious risks Israel faces have spurred it to make an extraordinary effort in the field of security and defense, resulting in Israel's defense expenditures being high, relative to other nations. The high defense expenditure is also a factor of the IDF being a capital-intensive army, because of Israel's demographic inferiority compared with its enemies, the nation's high degree of sensitivity to loss of life, and the nation's technological and economic advantages. The asymmetrical confrontations Israel faces (terrorism, guerilla, non-conventional weapons) have intensified the asymmetry between the capital needs of the defender and the capital needs of the aggressors. In other words, Israel needs more

**Figure 4. The Defense Burden in Israel, 1960-2010**

**Source:** Central Bureau of Statistics

capital in order to defend itself against attacks that can be carried out at relatively low cost. In addition, the IDF's high capital reserves entail significant physical and technological depreciation, adding to the high costs.

In 2010 defense consumption in Israel<sup>17</sup> totaled 50.9 billion NIS, while domestic defense consumption<sup>18</sup> totaled 43.9 billion NIS. This makes the ratio of domestic defense consumption to the GDP only 5.4 percent, compared with 6.2 percent in 2000 and 9.7 percent in 1990. These figures reflect a longstanding trend towards a reduction in the defense burden on the economy to the level that prevailed in the 1960s (figure 4). In contrast to the situation in the 1970s and 1980s, the defense budget at its current level has no substantial impact on economic stability, though it still represents a significant component of government spending.<sup>19</sup>

In addition to the defense consumption outlined above, there are other costs not included in the regular data and for the most part not stipulated in the nation's budget, such as the alternative value of labor of soldiers doing compulsory military service, additional payments by employees to supplement the salaries of those doing reserve duty, the cost of maintaining emergency inventories, and investing in the construction of bomb shelters. The Central Bureau of Statistics estimates that these additional costs totaled 11.3 billion NIS in 2009,<sup>20</sup> on top of the direct defense consumption of 48.6 billion NIS, making the total cost of defense close to 60 billion NIS.<sup>21</sup>

In addition to its contribution to security, the IDF also makes indirect contributions to the economy and society, such as instilling work habits and character traits of leadership and excellence,<sup>22</sup> serving as a source of skilled employees, managers, and entrepreneurs (particularly in technology and communications), contributing to technological development (many breakthroughs on the technology front now used in the civilian market originated with the army), and contributing to social integration, education, and more. In many respects, the IDF is an invaluable school and training center for the civilian economy.

*The economy and the security concept.* The traditional Israeli security concept (known by its components of deterrence, early warning, and decision) is partially based on mutual interdependence between the IDF and the Israeli economy. From this perspective, the three components are seen as follows: deterrence is supposed to prevent wars, thereby saving lives and capital; early warning is supposed to reduce the time needed to transfer human resources and capital to the defense establishment and turn them into military power; and decision is supposed to end wars quickly and restore resources to the economy, thereby allowing for rapid economic recovery. Consider, for example, the reserves model: early warning is supposed to allow the recruitment of reservists to active duty while decision is supposed to end the war quickly and return them to the labor force.

In addition to this logic inherent in the traditional security concept, the defense establishment is now called on to defend the civilian front, including economic infrastructures, given the growing (in quantitative and qualitative terms) threat of missiles and rockets. This challenge constitutes part of the defense component of the current security concept.<sup>23</sup> Thus,

the challenges facing the Israeli economy in a war are providing capital resources and manpower to the war effort, as in the past, and continuing to function as well as possible under fire over time. While the economy withstood these tests with relative ease during security events that were limited in time, scope, and intensity, such as the Second Lebanon War in 2006 and Operation Cast Lead in the Gaza Strip in 2008-9, the scenarios for future wars involve attacks on the home front whose scope and damage to the economy will be much greater.<sup>24</sup> The growth in the threat to the civilian front has already resulted in significant resources being diverted to develop defenses against missiles and rockets, but defense is only one component of the security strategy intended to buy time for the IDF to eliminate the threat. The second necessary component – likewise from the economy's perspective – is the ability to conclude military confrontations quickly, or at least to neutralize the enemy's ability to damage the functioning of the economy in the long term.

## **Ramifications**

Over the past five years the Israeli economy has demonstrated its power and stability in terms of principal economic parameters (table 2). At the same time, the economy faces difficult long term risks and challenges with critical consequences for national security. Among other aspects, these involve Israel's small size and its exposure to upheavals in the global economy and to security threats, as well as the wide social gaps that have emerged over the years, with their potential for internal upheavals.

From an economic perspective, Israel's national security depends to a large extent on rapid growth in its GDP. Such growth is largely dependent on continued and expanded export because Israel's local market is small. In order to increase exports, Israel must bolster its competitiveness in the global market, which requires improving human capital (education and training), accelerating advances in science and technology, encouraging entrepreneurship, and more. Such steps, alongside government incentives, are likely also to increase foreign companies' willingness to invest in building plants in Israel.

*Socioeconomic stability.* Israel's positive macroeconomic data does not reflect the difficult socioeconomic challenge facing the country, currently



**Table 2. Principal Indices of the Israeli Economy**

	2003	2004	2005	2006	2007	2008	2009	2010
<b>Population</b> (millions)	6.748	6.869	6.990	7.116	7.243	7.419	7.552	7.695
<b>GDP</b>								
GDP (NIS in billions)	540.7	568.6	602.5	651.4	690.1	725.9	768.3	813.6
Real GDP growth (%)	1.5	5.1	4.9	5.7	5.3	4.2	0.8	4.6
Real per capita GDP growth (%)	-0.3	3.3	2.7	3.8	3.4	2.4	-1.1	2.7
Real business product growth (%)	2.1	6.9	5.8	7.0	5.9	4.7	0.1	5.1
<b>Consumer Price Index</b> (2010 = 100)	87.0	86.6	87.8	89.6	90.1	94.2	97.4	100.0
<b>Shekel – US dollar exchange rate</b> (end of year)	4.687	4.528	4.361	4.665	4.155	3.553	4.188	3.713
<b>Labor Market</b>								
Employment (thousands)	2,330	2,401	2,494	2,574	2,682	2,777	2,841	2,938
Participation in labor force (%)	54.5	54.9	55.2	55.6	56.3	56.5	56.9	57.3
Unemployment (%)	10.7	10.4	9.0	8.4	7.3	6.1	7.5	6.6
Average wage in NIS (current)	6,908	7,050	7,219	7,467	7,628	7,921	7,973	8,238
Real change in wage (%)	-3.0	2.5	1.0	1.3	1.6	-0.7	-2.6	0.9
<b>Fiscal Data</b>								
Government budget deficit (% of GDP)	5.2	3.5	1.8	1.0	0.0	2.1	5.2	3.7
Ratio of defense consumption to GDP (%)	8.6	7.7	7.6	7.6	7.1	6.8	6.3	6.3
Debt-to-GDP ratio (%)	99.0	97.4	93.5	84.5	77.8	77.1	79.3	76.3

**Source:** Central Bureau of Statistics, Bank of Israel, Ministry of Finance

manifested by mass protests about the economic situation, especially by the young middle class. The challenge stems from wide income gaps in comparison with most developed countries. In part, this situation is the result of globalization, from which some people benefit while others suffer, but it is also the result of inequality of opportunity in society and shortcomings in the government's performance. Many Israeli wage earners feel that they have no part in the general prosperity and find it difficult to provide for their basic needs in light of rising costs. On the other hand, many high wage earners feel that they are shouldering more than their fair share of the economic burden. This situation bears the potential for social tension and internal instability that Israel can ill afford, especially given its security and political challenges.

One of the components of the solution lies in giving top priority to the acquisition of income-oriented education<sup>25</sup> for the general population, with an emphasis on the weaker social strata and the middle class, while giving priority to outlying areas over the central region. Such education will allow many more people in all strata of Israel's population to expand their presence in the knowledge-intensive labor force and thereby also enlarge their productivity and income. Acquiring income-oriented education for the entire population is not just a necessary step in closing gaps in Israeli society, but is also an indispensable component in meeting the challenge of rapid growth; in addition, it will benefit the defense establishment, which is always in need of skilled manpower, and hence its importance for national security. Nonetheless, this solution is long term and does not address the urgent social hardships. In the meantime, the government will have to offer other solutions to reduce social distress, such as delaying the implementation of income tax reductions. Continuing the process of decreasing income tax will be made possible in the future once the GDP rises and the damages from stipends are reduced.

*Security and defense expenditures.* One may view defense expenditures as an investment intended to reduce the security risks the country faces and the impact of the damage should these risks be realized. Therefore, the challenge for the next several years lies in making efficient investment in reducing these risks and security uncertainty in light of the extreme transformations occurring in the Middle East and the current wide range

of threats and risks.<sup>26</sup> More than ever the many security challenges and the increased uncertainty of the region require the defense sector to clarify to the government, at least at the level of planning, the link between defense spending and the output that can be expected of the defense sector. For example, it must clarify which threat scenarios cannot be countered using existing means and what the costs are of creating additional capabilities that can counter the range of additional threat scenarios. Using such an approach of “menus,” the government can make decisions and take calculated risks that will be expressed in the defense budget in order to reduce the expected damages of security threats in the best way possible. The defense burden in Israel does not represent a severe limitation on the growth of the economy as it did in the past, allowing for a certain expansion of the range of solutions. Still, the range of severe threats, the steep rise in the costs of weapon systems (such as Iron Dome and the F-35 stealth bomber), and budget limitations will necessitate difficult decisions among alternative defense solutions.

## Notes

- 1 “Basic level” is a minimum essential level at the lower end of the objective, less than which is liable significantly to damage the nation’s security, ability to function, and future. For example, an 8 percent unemployment rate is not a national security problem, but a sustained 16 percent and more unemployment rate is liable to create risks to internal stability.
- 2 Hillary Clinton in a speech on May 27, 2010 at the Brookings Institution for Social Policy. Source: Gary Feuerberg, “The US: A New National Security Strategy,” *Epoch Times*, June 15, 2010.
- 3 As of December 31, 2010, the population in Israel was estimated at 7,695,000, and the shekel-US dollar exchange rate was 3.549 NIS to the dollar.
- 4 Central Bureau of Statistics press release of March 10, 2011.
- 5 The number of Arab women who are not part of the work force is over 211,000, and the number of ultra-Orthodox men who are not part of the labor force is over 64,000. See Sami Peretz, “Unemployment Drops but 1 Million People Aren’t Working,” *The Marker*, September 1, 2010.
- 6 State budget proposal for the 2011-2012 financial year.
- 7 For example, according to a Market Watch survey (Channel 10 TV, March 3, 2011), when asked whether they felt affected by Israel’s economic growth, 75

percent of respondents answered “no,” 18 percent answered “somewhat,” and only 7 percent answered “yes.”

- 8 Ministry of Finance Economic Research and State Revenue Administration 2010 Report, June 2011.
- 9 “The OECD Report: Israel Poor and Unequal,” *Haaretz*, January 19, 2010.
- 10 “State Budget Proposal for 2011-2012 Fiscal Year: Economic and Budget Policy for the 2011-2012 Fiscal Year,” October 2010, p. 40.
- 11 According to the Bank of Israel Law 5770-2010, the primary job of the Bank of Israel is to maintain price stability (i.e., to curb inflation). While the Bank is also responsible for supporting other goals of the government’s fiscal policies, such as growth, employment, and reduced social gaps, this is all contingent on not damaging the chief objective of price stability over time. In addition, the Bank is in charge of financial stability.
- 12 Bank of Israel press release of February 6, 2011.
- 13 The Report of the Committee Examining Fiscal Policy Regarding Israel’s Oil and Gas Resources (the Sheshinski Committee Report), January 2011. According to the report, gas consumption is likely to reach 10 billion cubic meters in 2015 and 17 cubic meters by the end of the decade.
- 14 Powering cars on electricity produced from natural gas and powering cars directly on natural gas.
- 15 Under the Oil Profits Taxation Law passed by the Knesset on March 30, 2011 at the recommendation of the Sheshinski Committee, the state is slated to receive 52-67 percent of revenues from the sale of gas. *The Marker*, March 31, 2011.
- 16 Avner Oil Exploration Limited Partnership, *Periodic Report for 2010*, March 31, 2011.
- 17 “Defense consumption” in Israel’s national accounting refers to direct defense expenditures, and includes actual payments of the defense establishment for wages, purchase of goods and services, depreciation, and taxes on production (Central Bureau of Statistics).
- 18 “Domestic defense consumption” equals gross defense consumption, excluding defense imports (most of which is US aid).
- 19 For a broad overview of Israel’s defense burden, see Shmuel Even, “Israel’s Defense Expenditure,” *Strategic Assessment* 12, no. 4 (2010): 37-55.
- 20 See *Israel’s Defense Spending 1950-2009*, Central Bureau of Statistics, June 2011.
- 21 This figure does not include spending on civilian security services (the General Security Service, the Mossad, and the Israel Police).
- 22 For example, Procter and Gamble Israel CEO Sophie Blum cites “the very special combination of culture and training in Israel. Everyone undergoes selection at age

17, and those drafted into the armed forces undergo an experience of high-quality leadership – entailing risk-taking and maturity – that gives Israelis a competitive advantage in global society.” *Globes*, May 9, 2011.

- 23 Defense is the fourth component of a security concept proposed as an updated doctrine in April 2006 by a committee headed by Dan Meridor. While the government did not formally approve it due to disagreements among various politicians, the defense component does in fact form part of Israel’s current security concept.
- 24 Benny Liss, “Defense Minister Ehud Barak: In the Next War, 50 Tons of Explosives will Fall on Israel Every Day,” *Haaretz*, July 11, 2011.
- 25 Income-oriented education means acquiring the education and training that entail a clear contribution to the GDP and income. In practice, this means improving compulsory education in the exact sciences and foreign languages and inculcating values of excellence, entrepreneurship, contributing to society, and the state, and more.
- 26 The threats and risks include all-out war, terrorism, a third intifada, the disruption of peaceful relations with neighboring countries, and coping with the reality of a nuclear Iran (and other nations that may follow in its footsteps).