

## **POLICY PAPER SERIES**

### **A MACRO PERSPECTIVE**

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# A Macro Perspective

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Eran Yashiv\*

## *Abstract*

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*The current chapter surveys macroeconomic developments in Israel in 2010. It examines the discrepancy between Israel's good situation, as reflected in various macroeconomic indicators, and its worrying long-term economic problems. Current data indicate respectable growth in terms of GDP and employment, relatively low unemployment, current account surpluses, and reasonable inflation. The long-term problems include relatively low investment, lagging physical infrastructure, and numerous labor market problems, which negatively affect the quality of human capital and labor productivity in Israel. The chapter concludes with a discussion of the considerable problems that stand in the way of attempts to modify Israel's fiscal policy in order to resolve these problems.*

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**T**he current chapter surveys macroeconomic developments in Israel, distinguishing between current developments, and long-term processes and structural problems. The data point to one key message: while the current macroeconomic indicators are good, or even very good, the Israeli economy suffers from considerable structural problems. In terms of real growth, employment, inflation, and current account

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I am grateful to Nir Eilam for his extensive help in gathering and analyzing the data.

surpluses, Israel's economy is strong both in historical perspective and in internationally comparative terms. It suffers, however, from fundamental long-term problems which, if left unresolved, could impact its future performance. The current chapter discusses the obstacles standing in the way of fiscal policies which may help resolve these long-term problems. Section 1 discusses current developments in Israel's economy; Section 2 addresses the long-term problems; Section 3 discusses government policy; and Section 4 offers a brief summary of the entire discussion.

## *1. Current Developments in Israel's Economy*

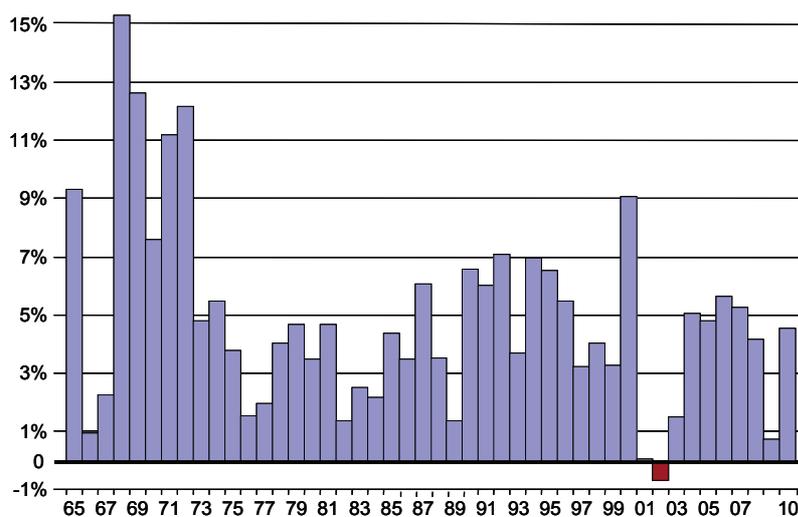
Israel's economy is exceedingly open to international trade in goods, services, and financial capital. Although all macroeconomic indicators worsened in the last quarter of 2008 following the global financial crisis set off in September of that year, Israel's economy rebounded during 2009 and 2010 and is presently in good macroeconomic condition. The main current developments are surveyed below.

### *1.A. Real Economic Activity*

As Figures 1 and 2 show, growth slowed down in 2009, with total GDP and business sector GDP growing by only 0.8 and 0.1 percent, respectively. They significantly increased in 2010, with total GDP and business sector GDP growing by 4.6 and 5.3 percent, numbers almost identical to the average annual growth rate of 4.5 and 5.3 percent, respectively, for the period between 1987 (after inflation was stabilized) and 2007 (see Appendix Table 1). GDP per capita grew by 2.7 percent in 2010 after having dropped by one percent in the preceding year. In other words, Israel's economy recovered rapidly from the global crisis, returning quickly to a reasonable trajectory of growth. Interestingly, Israel's economy shrank only twice in its 63 years of existence, in 1953 and in 2001-2002. The local economic recession of the early 2000s was deeper, then, than the globally induced one of 2009. The growth of GDP

uses<sup>1</sup> in 2010 reflects the considerable growth of exports and investments, a phenomenon that bodes well for the future.

Figure 1  
**GDP growth**  
annual percent changes in real GDP, 1965-2010

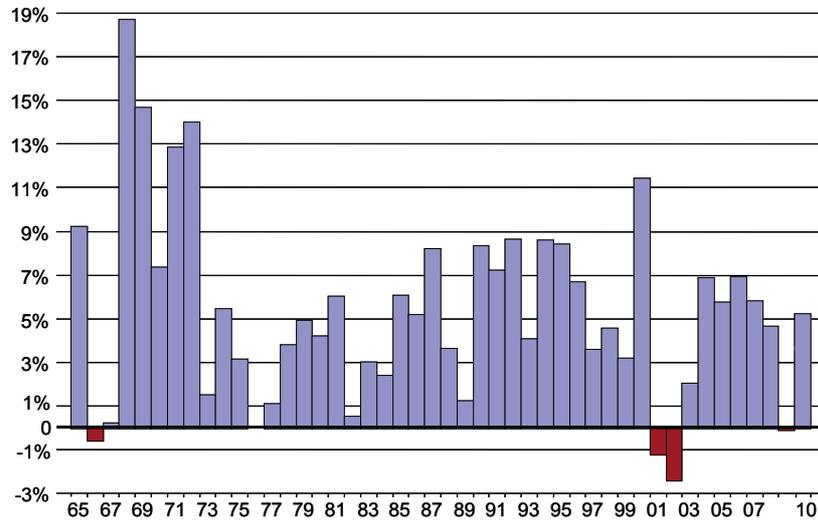


**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Central Bureau of Statistics and Bank of Israel.

<sup>1</sup> GDP uses are the sum total of private consumption, public consumption, investments, and exports.

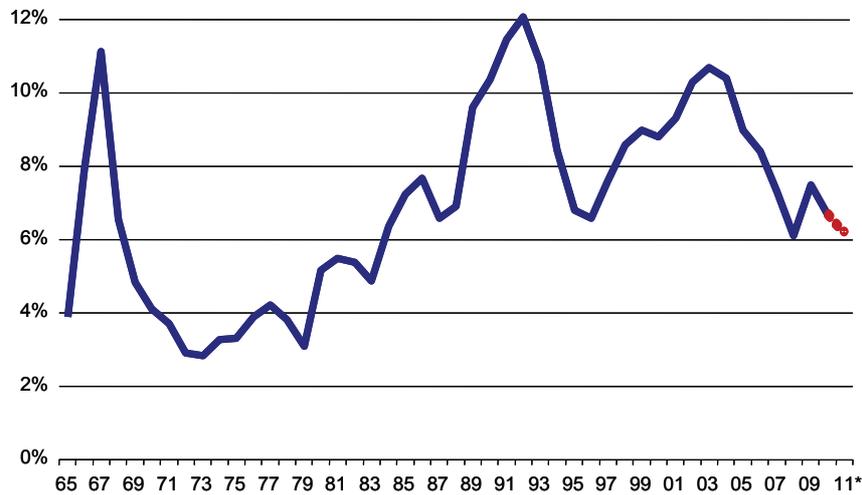
Figure 2  
**Growth in business sector GDP**  
 annual percent changes in real business sector GDP, 1965-2010



**Source:** Taub Center for Social Policy Studies in Israel.  
**Data:** Central Bureau of Statistics and Bank of Israel.

As Figure 3 indicates, the temporary economic downturn impacted the labor market, with the rate of unemployment rising to 7.5 percent in 2009 but returning to 6.7 percent in 2010. In comparative international terms this is a reasonable unemployment rate, lower than the eight to ten percent rates (and beyond) currently afflicting the United States and many European countries due to the global economic crisis.

Figure 3  
**Unemployment rates**  
 1965-2011



\* projection for 2011.

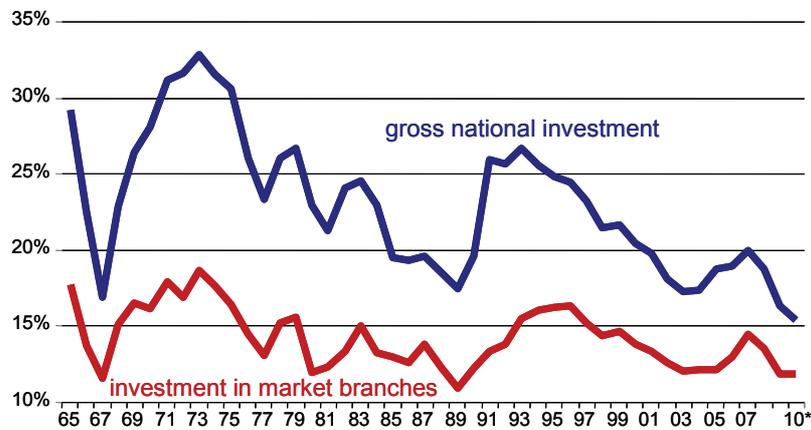
**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Central Bureau of Statistics and Bank of Israel.

One related indicator, which admittedly fares worse, is gross domestic investment, reflecting capital purchases (equipment, machinery, buildings, etc.) and construction. As Figure 4 shows, gross domestic investment as a share of GDP has declined over the years – from 33 percent in the early 1970s to roughly 15 percent at present, with a five percent decrease in the last decade alone. It has not increased more in the recent past according to the latest data. Investment in equipment and structures (excluding construction) has followed a similar trend. Private savings have also fallen in recent years, from 24 percent of GDP four years ago to 18 percent at present, and is not high in international terms.

Though investments in a developed economy need not be as high as they ought to be in developing ones, their current levels appear to be too low. The current investment rate is lower than the 20 to 24 percent of GDP level typical of the world's most developed economies (the United States, the Eurozone countries, Japan). Given Israel's lagging physical infrastructure and outdated (labor- rather than capital-intensive) production methods (both of which are discussed in the next section), the low investment rate is a cause for concern.

Figure 4  
**Investment**  
 as a percent of GDP, 1965-2010



\* projection for 2010.

**Source:** Taub Center for Social Policy Studies in Israel.

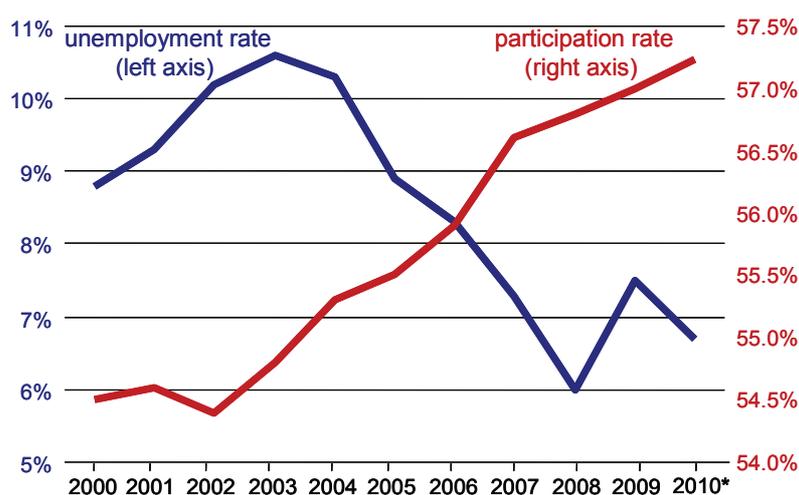
**Data:** Central Bureau of Statistics.

In this context, it is worth noting Goldman Sachs' December 2010 Growth Environment Score [GES] (Goldman Sachs, 2010), which predicts with fair reliability GDP per capita growth given an initial level of income. One of the GES's variables is the rate of investment. At 57<sup>th</sup> (out of a total of 182 countries), Israel is ranked fairly low, below, for

example, Poland, Chile, Hungary, and the Czech Republic, and well below its 42<sup>nd</sup> place ranking in 1997.

In the labor market, the period from 2007 to 2009 witnessed growing labor supply and falling labor demand. On the demand side, the decrease was due to lower foreign demand for Israeli goods and services in the wake of the global crisis. On the supply side, rising labor market participation rates (see Figure 5) were related to long-term trends of entry into the labor market among different population groups. These developments reduced the number of job vacancies (see Appendix Figures 1 and 2), slowed employment growth, and reduced the total number of work hours (see Appendix Table 2).

Figure 5  
Unemployment and labor force participation  
2000-2010



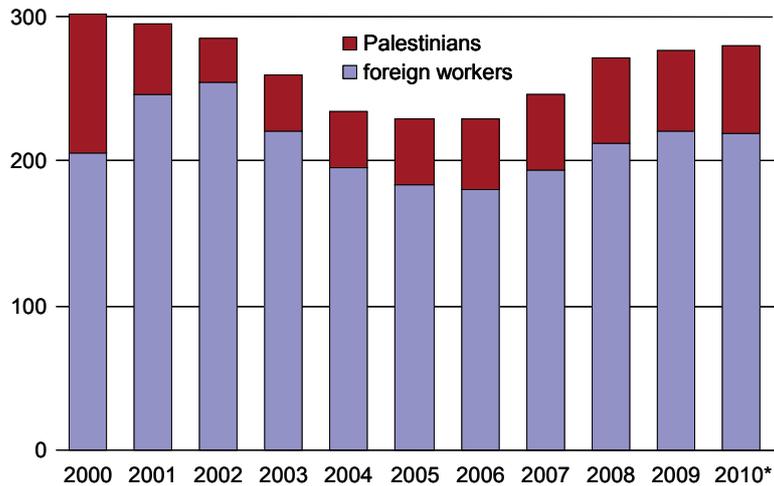
\* January-September, 2010.

Source: Taub Center for Social Policy Studies in Israel.

Data: Central Bureau of Statistics and Bank of Israel.

They also slowed the growth in the number of foreign and Palestinian workers (see Figure 6). These declines are consistent with the slowed growth in GDP and in business sector GDP during this period. Growing labor supply and falling labor demand depressed real wages (see Appendix Figure 3) and increased unemployment. The government-set minimum wage also fell in real terms, as did labor productivity growth rate (i.e. the growth rate of GDP per worker). In 2010 there was an increase in global demand for Israeli goods and services and consequently an increase in labor demand. With the exception of the labor force participation rate and the minimum wage, all the aforementioned variables rebounded as well.

Figure 6  
**Non-Israeli workers**  
 thousands, 2000-2010



\* January-September, 2010.

**Source:** Taub Center for Social Policy Studies in Israel.

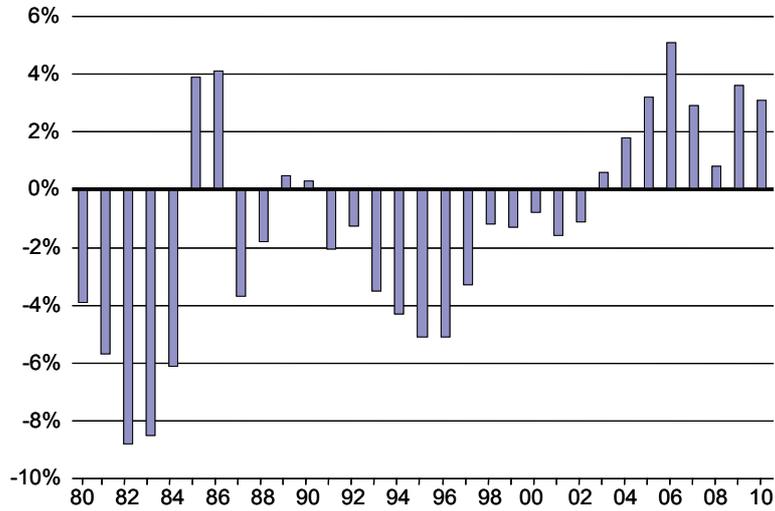
**Data:** Central Bureau of Statistics and Bank of Israel.

The data for 2009 and 2010 indicate several problematic trends in the Israeli labor market (for a more extensive discussion, see the following section). The public sector is relatively large, approximately 42.5 percent of the size of the private sector in terms of the number of workers. Foreign workers also constitute a large share of the labor market – eleven percent of all private sector employees. About 34 percent of the population is below the poverty line prior to transfer payments and taxes, though a relatively high level of transfer payments per capita (approximately NIS 7,000 per capita annually) lowers the poverty rate to approximately 25 percent. None of these problems have seen improvement in recent years; on the contrary, the above data indicate some deterioration.

### *1.B. Foreign Trade*

Figure 7 presents Israel's current account, which represents the total value of exports minus the total value of imports plus foreign transfers to Israel (e.g. U.S. foreign aid). The account total represents the scope of Israel's foreign trade. Current account deficits and surpluses represent Israel's total debts and assets relative to foreign economies. As the data indicate, Israel's current account has seen improvement in recent years. The current account surplus resumed its growth in 2009 after falling in 2008. This improvement is especially striking given the increase in imports and decrease in exports due to the appreciation, both nominal and real, of the Israeli currency (New Israeli Shekel, NIS) in recent years. It is worth noting that Israel's economy maintained a current account surplus for most of the last decade, after twenty years of mostly deficits. Thanks to the surplus, and because differences between interest and yield rates in Israel and abroad have favored financial investment in the country, Israel has attracted large flows of foreign currency, which sustained the appreciation of the NIS relative to the dollar and the Euro.

Figure 7  
**Balance of payments, current account**  
 as a percent of GDP, 1980-2009



**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Central Bureau of Statistics and Bank of Israel.

Figure 8, which presents NIS/dollar exchange rate, shows that until the early 2000s, as long as inflation was higher in Israel than in the U.S., the NIS tended to depreciate. After Israeli inflation was stabilized at rates comparable to the U.S., depreciation stopped and was replaced for several years by fluctuations within the 3.5 to 4.5 NIS-per-dollar range. From 2006, however, the NIS has tended to appreciate; this is consistent with the aforementioned current account flows and interest rate differentials.

Figure 8  
Dollar-Shekel exchange rate  
1986-2010



**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Bank of Israel.

The Bank of Israel's intervention in the foreign exchange market has probably restrained the NIS's appreciation to some extent, increasing the Bank's foreign currency reserves from less than \$30 billion in the first quarter of 2008 to \$71 billion in late December 2010. The Bank of Israel purchased \$12 billion worth of foreign currency in 2010 alone. The intervention has occurred in spite of studies – some noted in the Bank's own research (e.g. Lavi and Friedman, 2006) – showing that the real exchange rate has relatively little influence on Israeli exports.

There are indications, however, that not all is well with Israel's economy with respect to foreign financial markets. For example, Israel's default risk premium as reflected in the credit default swaps (CDS) market is relatively high. Credit default swaps serve as insurance

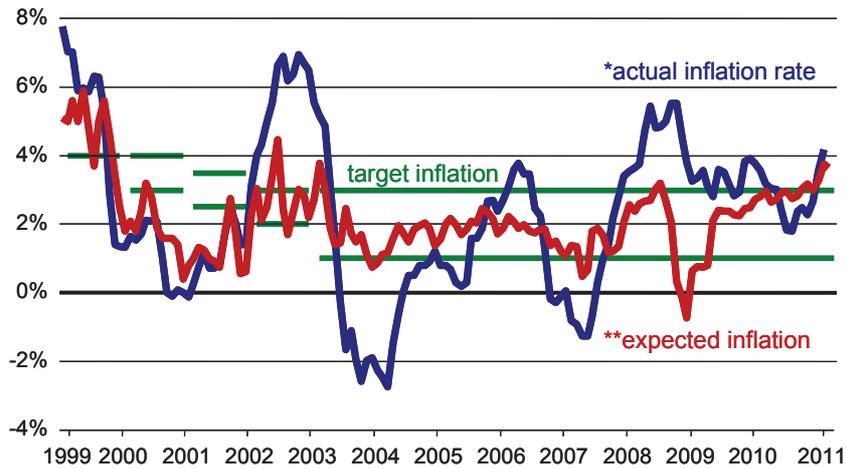
protection against government bond defaults, where, in case of default, CDS holders are compensated by the issuer. As of March 2011, Israel had a higher risk premium than China, Thailand, Malaysia, South Korea, Chile, Brazil, and Panama, among others. Although Israel is ranked higher than many other countries in this regard, estimates circulating in the financial markets indicate that the premium may have been at about a third of its current level if not for the widespread perception of Israel as a relatively high-risk country due to its geopolitical (rather than macroeconomic) circumstances.

### *1.C. Inflation, Interest Rates, and Financial Markets*

Israel's monetary and financial indicators are fairly good. As Figure 9 shows, the rate of inflation has remained within the inflation target range (one to three percent annually) in recent years, as have the financial market's inflation forecasts. It should be noted, however, that the inflation rate frequently exceeded the inflation target range during this period, partly due to the steep rise in housing prices (35 percent in the last two years alone), and has been particularly high in the last months of 2010.

Figures 4 and 5 in the Appendix present changes in the Bank of Israel's interest rate and in two market interest rates – the yield for *SHAHAR* (a NIS government bond), and the overdraft interest rate – which serve here as indicators for a range of credit interest rates. The first figure spans the fifteen-year period between 1995 and 2010, the second, the period since 2008. The apparent trend is one of steadily falling interest rates, in tandem with falling inflation rates and lower inflation forecasts. The Bank of Israel raised its interest rates in 2009 as the economy was emerging from the global crisis; the increase has been gradual and moderate, however, so that real interest is still negative. As the two figures show, the overdraft interest rate and the five-year yield for *SHAHAR* have followed the Bank of Israel's interest policy.

Figure 9  
**Inflation**  
 1999-2011



\* inflation rate in the last 12 months (monthly averages).

\*\* expected inflation for the next 12 months (monthly averages).

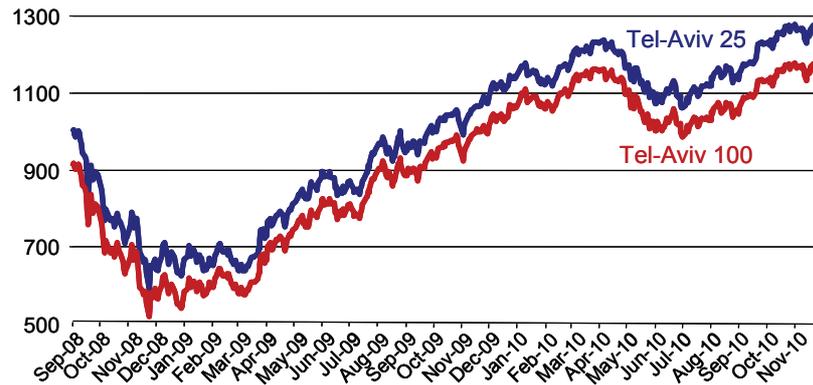
**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Central Bureau of Statistics and Bank of Israel.

As Figure 10 and Appendix Figure 6 show, Tel-Aviv's stock market and corporate bond indexes have sustained their post-March 2009 increases despite the rising interest and yield rates, reflecting (among other things) investors' trust in Israel's economic trajectory. The markets seem to be more responsive to real economic activity and to corporate profits than to rising interest rates (the cost of capital). We can thus conclude that Israel's monetary policy has contributed to the expansion of real economic activity.

The latter policy has been shaped by a balance of conflicting considerations. On the one hand, the aforementioned economic expansion has been reflected (according to some assessments) in a closing of the GDP gap (the difference between potential and actual output); and the steep rise in housing prices requires higher interest rates. On the other hand, interest rates around the world are currently low, with any interest differential in favor of Israel encouraging more capital to flow into the Israeli economy. High demand for the NIS leads to its appreciation, however, which may be detrimental to Israeli exports. The moderate increase in interest rates represents an effort to respond to these conflicting pressures.

Figure 10  
**Tel-Aviv stock market index**  
 September 2008 – November 2010

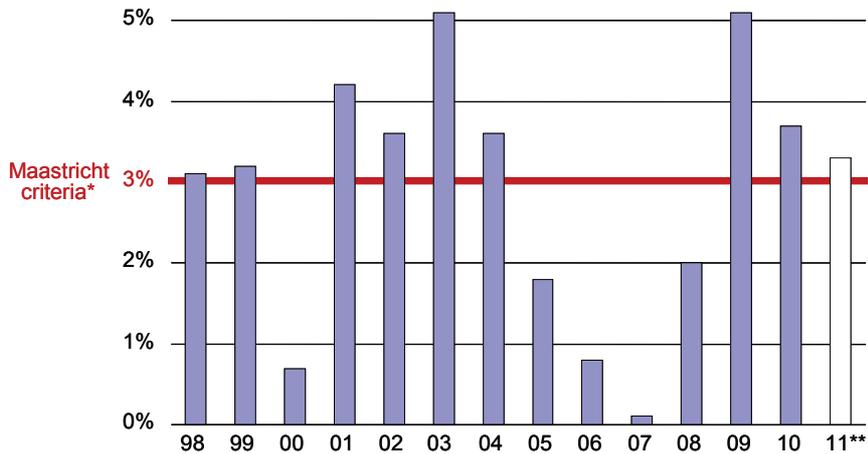


**Source:** Taub Center for Social Policy Studies in Israel.  
**Data:** Tel-Aviv Stock Exchange.

### 1.D. Fiscal Policy

The decline in economic activity during economic crises tends to decrease government tax revenues at the same time that it aggravates social ills through higher unemployment and falling incomes, requiring that the government increase its social support. During the recent crisis, the difference between government revenues and spending – i.e. the budget deficit – increased to 5.1 percent of GDP in 2009. It fell back to 3.7 percent of GDP in 2010, however, and is expected to fall further to 3.3 percent in 2011 (Figure 11).

Figure 11  
**General government deficit**  
 as a percent of GDP, 1998-2011



\* Using the Maastricht criteria from 1991 of the European Union, the debt is not to exceed 3 percent of the GDP. This agreement became accepted worldwide as a reasonable debt ceiling.

\*\* Bank of Israel projection for 2011.

Source: Taub Center for Social Policy Studies in Israel.

Data: Central Bureau of Statistics and Bank of Israel.

In other words, Israel's fiscal (as well as its monetary) policy has been expansionary. Most changes in the deficit have been due to tax revenue fluctuations following the fluctuations in economic activity. The government itself initiated few changes – which, as will be discussed in Section 4 – is typical in Israel. In fact, in stark contrast to the expansionary fiscal policy measures undertaken in many other developed nations, including the United States and the Eurozone countries, the Israeli government did not initiate any active counter-cyclical policy measures during the crisis. In retrospect, the actual indicators show that no such measures were needed.

In May 2010, the *Knesset* enacted a new fiscal rule for the calculation of spending limits, based on the current deficit ceiling as set by the Budget Deficit Reduction Law. The new rule aims to strike a balance between two objectives: the continued reduction of public debt, and the maintenance of adequate levels of spending on public services. This dual objective seems to be sound in its non-dogmatic approach to spending increases. It contributes, however, to the recent trend of frequent revisions to fiscal rules, which diminish their reliability.

In October 2010, the government submitted to the *Knesset* a bi-annual budget (its second so far) – another step with both advantages and disadvantages. On the positive side, bi-annual budgets allow the Ministry of Finance to draft the budget more carefully and encourage longer-term stability. On the negative side, bi-annual budgets make it harder to adjust the budget in response to emerging economic developments.

## *2. Structural Problems in Israel's Economy*

As noted at the outset, Israel's economy suffers from long-term structural problems despite its relatively good current macroeconomic indicators. Described below are two central clusters of problems – problems in the labor market, and problems concerning physical infrastructure – followed by an account of the macroeconomic implications. The Israeli economy suffers from numerous other problems as well (in education, welfare, health, etc.), but these are discussed in the Report's other chapters; the current chapter's exclusive focus is on macroeconomic issues.

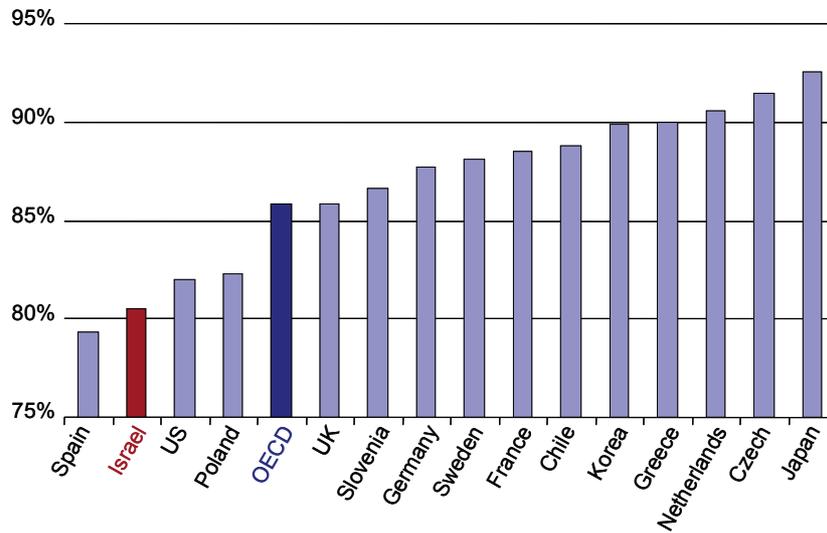
### *2.A. Structural Problems in the Labor Market*

The Israeli labor market suffers from numerous fundamental problems, some of the most important of which are outlined below:

- The **rate of employment among males** in Israel is low relative to other Western countries. As Figure 12 shows, the rate of employment among Israeli males in the prime working age group (35-54-years-old) is 80.5 percent, lower than the 85.8 percent OECD average. Despite some improvement in recent years – from 2006 to 2009, the rate of employment among males increased by 1.2 percentage points in Israel (Figure 13) while dropping by 2.6 percentage points in the OECD – Israel has a long way to go before reaching Western standards. The main reason for the low rate of employment among males is the low rate of employment among ultra-Orthodox males, a problem discussed extensively in Ayal Kimhi's chapter on the labor market (see "Income Inequality in Israel" in this volume).
- The **large-scale employment of foreign workers** (see Figure 6) is problematic in several respects: it harms the employment and pay of less skilled local workers, perpetuates outdated production methods reliant on cheap labor, and creates various social problems, thereby putting a burden on the welfare system. The appalling conditions to which many

foreign workers are subject have negative implications for all workers, foreign and local alike, by lowering the labor market's general standards. As indicated earlier, foreign workers constitute one-ninth (eleven percent) of all private sector employees in Israel, a high percentage in internationally comparative terms.

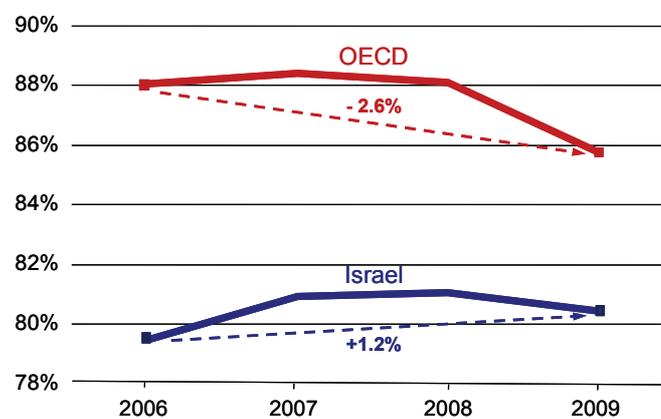
Figure 12  
**Employment rate, 2009**  
 among prime working age men (35-54)



Source: Taub Center for Social Policy Studies in Israel.

Data: OECD.

Figure 13  
**Employment rate, 2006-2009**  
among prime working age men (35-54)



Source: Taub Center for Social Policy Studies in Israel.

Data: OECD.

- There is widespread use of **employment agencies** for the employment of temporary workers. Since the phenomenon is relatively new, reliable data have yet to be compiled. Table 1 presents existing data from the Central Bureau of Statistics.

Table 1. **Temporary workers receiving salary through employment agencies and contractors, 2001-2009 (thousands)**

	Temporary workers who receive salary through employment agency*	Temporary workers through contractors**	Total	Share of all employees in the labor market
2001	48.3			
2002	36.8			
2003	36.9			
2004	41.5			
2005	45.4			
2006	46.6			
2007	50.0	112	162.0	6.1%
2008	41.8	119	160.8	5.9%
2009	32.2	124	156.2	5.7%

\* **Source:** Central Bureau of Statistics, Income Surveys, 2003-2009.

\*\* **Source:** Central Bureau of Statistics, Income survey results document, 2007-2009.

Two types of temporary employment may be distinguished: workers employed through employment agencies (see Column 2 in Table 1) are paid by the agency but supervised by the workplace in which they are placed, whereas workers employed by contractors (Column 3) are both paid and supervised by the contractor. According to the Central Bureau of Statistics, workers of the latter sort are largely employed in “security and cleaning” and “home care.”

Because of lack of data from earlier periods and for part of the last decade, the table offers only a partial view of the topic. Nevertheless, according to Column 5, the share of temporary employees in the total number of workers is very high, ranging from five to six percent.

While temporary work offers employers the advantage of hiring flexibility, its massive use, with the attendant high employee turnover, hinders the accumulation of human capital by making it difficult for workers to gain experience and skills.<sup>2</sup> Temporary work also enables firms to maximize profits at the expense of worker compensation, increasing economic inequality. Although comprehensive and reliable data on the issue have yet to be compiled, several reports show that the hiring practices in question exploit workers and involve infringements of labor rights.

- The Israeli labor market is a **dual market**. It comprises a primary labor market of skilled workers (most prominently hi-tech employees) who enjoy employment stability, and a secondary labor market of unskilled, low-wage workers, sometimes earning less than minimum wage, who suffer from low employment stability and from significant barriers to entry into the primary labor market. The secondary market includes certain groups – Arabs, foreign workers, Ethiopian Jews, and so forth – whose social vulnerability manifests itself *inter alia* in the relative absence of unionization.

The dual structure of the labor market encourages the use of outdated production methods in construction, traditional manufacturing, agriculture, etc., sustaining and deepening economic inequality and making it increasingly difficult for the children of the country's most vulnerable workers to acquire human capital. As a result, output per hours worked in Israel is \$34.5 (PPP based), compared with the OECD average of \$41.8 (for a fuller comparison, see Figure 14).

Demographic trends, in particular the growing share of the Arab and ultra-Orthodox populations, along with government policies in recent decades have exacerbated these problems. Though the share of economically disadvantaged groups in the total population is expected to grow, no large-scale policy steps seem to be taken to resolve these

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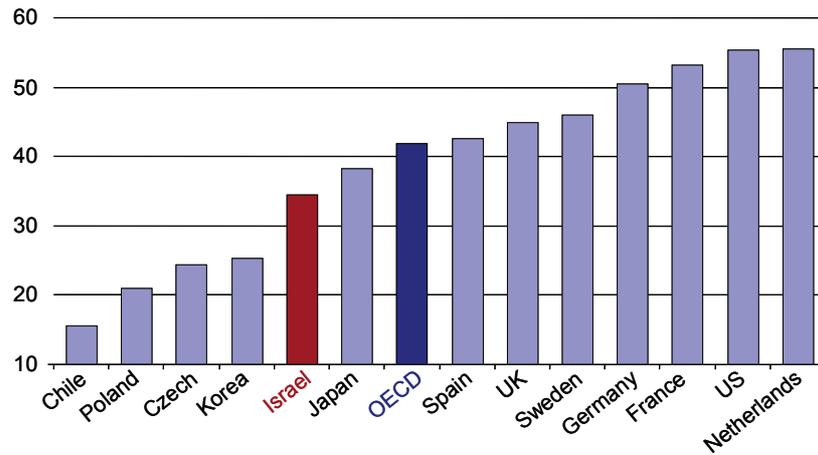
<sup>2</sup> Low-skilled employees, e.g. cleaning workers, may gain relevant work experience even when employed through an agency or a contractor.

problems. Though public awareness of the problems has increased, and though the government has delineated a social economic agenda aimed at their resolution, its plans are rather limited in scope and their slow implementation has been even more limited.

Figure 14

### Labor productivity

GDP per hour of work, dollars, PPP adjusted, 2008



Source: Taub Center for Social Policy Studies in Israel.

Data: OECD.

The above-listed problems all have negative implications for Israel's human capital and labor productivity. GDP depends not only on the quantity of workers but on their quality as well. By lowering this quality, processes like those described above are detrimental to economic growth.

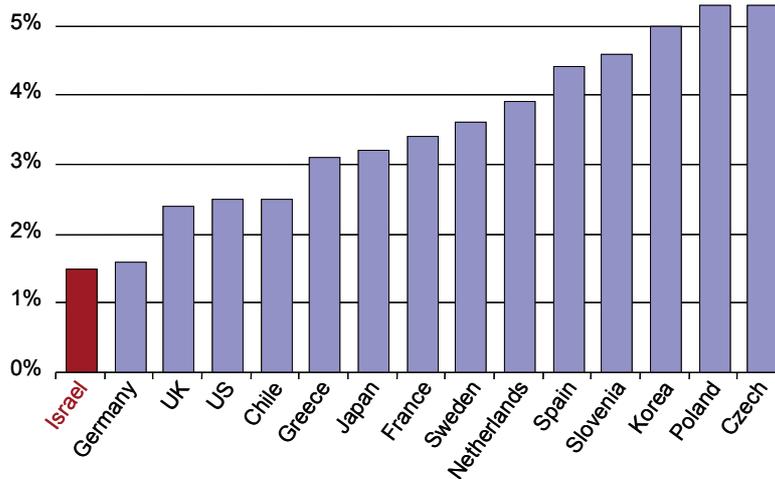
### 2.B. Physical Infrastructure

Israel lags behind the rest of the developed world in many infrastructure issues, in particular with regard to physical infrastructure: transportation,

electricity, water, sewage, rescue and firefighting services, and anti-pollution technologies. The extent of the resources devoted to infrastructure is indicated by Israel's 2011 budget, in which NIS 12.5 billion (out of a total of NIS 271 billion, excluding debt repayments) are allocated to investment. In other words, only 4.6 percent of the budget and 1.5 percent of the GDP are devoted to infrastructure investments.

Due to inconsistent definitions, international comparisons of infrastructure investment are difficult to make. The OECD publishes data on physical capital growth including data for the public sector (see Figure 15). The data reveal that government investment in Israel is low, even very low, not only compared with the world's most highly developed nations (West European countries, Japan) but also compared with such less highly developed countries as South Korea, Chile, Greece, and various other southern and eastern European countries.

Figure 15  
**Gross growth in the physical capital  
in the government sector**  
as a percent of GDP, 2009\*



\* Israel (2010); US and Korea (2008).

**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** OECD.

### *2.C. The Macroeconomic Implications of Israel's Structural Problems*

- The damage caused by the structural problems described is likely to be reflected in living standards, for example as measured by GDP per capita. Most, if not all, of the problems listed are expected to reduce growth in living standards, preventing Israel from narrowing the gap with the world's most developed countries. Thus, for example, Israel's GDP per capita has been around 60 percent of US GDP per capita for years. If these problems persist, the proportion will not grow and may even diminish.
- Some of the problems described increase economic inequality. Substantial economic inequality lowers welfare and aggravates conflicts between different population groups.
- If the problems cross a certain critical threshold, this may well have negative implications for investment incentives, including by foreign investors. For example, if Israel's physical or human infrastructure lag too far behind those of other countries this is likely to have implications for investment by foreign investors.

Finally, it should be noted that these long-term problems need not affect negatively such macroeconomic variables as inflation, interest rates, the foreign sector balance, or even unemployment rates or job openings. Therefore, even if the long-term problems have the negative implications indicated, the current macroeconomic indicators may still be sound.

### 3. Fiscal Policy

Israel's fiscal policy has to contend with a somewhat high public debt. Public debt was 76.4 percent of GDP in 2010, significantly lower than 2003's 100 percent, and similar to the OECD simple average of 76 percent (the OECD weighted average, which takes into account country size, is 97 percent). This level of public debt is nevertheless higher than that of many countries comparable to Israel, including Spain, South Korea, and the Czech Republic. Although Israel's public debt has not increased as a result of the global financial crisis (as has been the case in Greece, Portugal, Ireland, and Iceland), its current level makes it difficult to allocate more public resources to treating the economy's structural problems.

It is worth noting that at 43 percent, government spending as a share of GDP is lower than the OECD average of 47 percent, and significantly lower than the 50 to 60 percent of Europe's welfare states. When defense spending is excluded, Israel fares even worse on this measure.

Admittedly, the relation between government spending and economic growth (and consequently living standards) is not clear-cut and may well be relatively weak. Nevertheless, given the above-listed structural problems (see Section 2), increasing government spending in such areas as education, labor market policy, physical infrastructure, etc. ought to be considered favorably. For example, government spending on active labor market policies is 0.2 percent of GDP in Israel, compared with the OECD average of 0.54 percent, and 0.6 to 1.3 percent of GDP in East and North European countries.

Attempts to modify Israel's fiscal policy face several structural obstacles:<sup>3</sup>

- Introducing fundamental changes to the budget's priorities is a difficult task. Budgetary modifications are usually done at the margin,

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<sup>3</sup> Some of what follows is based on ideas expressed by members of the Taub Center Economics Policy Program in discussions held from September 2010 to January 2011.

in the annual incremental changes to the budget, falling far short of a wholesale reevaluation of the budget. The budget's allocation is thus subject to a great deal of inertia, more so than in many other countries. Bureaucratic obstacles hinder changes even within the given budget of individual government departments.

- Israel's government structure exerts strong pressure on the size and allocation of the budget, in the cabinet as well as the parliament (*Knesset*). Budget reform is hindered by Israel's coalition government structure as well as by the absence of significant forces of reform.
- The budgetary process in Israel is highly centralized, usually controlled by the Ministry of Finance's Budget Division. To some extent, this is a reaction to the immense political pressures exerted by ministers and *Knesset* members. The relatively short terms served by recent Israeli governments and parliaments have only exacerbated the problem. Though in theory individual government departments could enjoy a greater amount of budgetary autonomy, it is not clear whether current circumstances allow this. For one thing, there is a dearth of experienced and professional civil servants capable of addressing budgetary issues in the individual government departments. For another, the individual departments lack clear methods for setting budget priorities, accountability mechanisms, etc.
- No attempts are made to reevaluate criteria for budgetary change or to reprioritize budgets. There is no clear planning for budgetary change, neither where budgets depend on population size and makeup (education, health) nor where they do not (defense). Budget allocation lacks clear connection to government objectives with regard to employment, inequality, etc.
- The Economic Arrangements Law, first enacted in 1985 as an emergency ordinance, has become a regular appendage to the annual budget. It is largely used to enact economically significant laws appended to the annual budget but not formally included in it. The very existence of this type of law reflects the problems noted above.

- Israel's large defense budget – total net defense consumption was 6.5 percent of GDP in 2009 – becomes a battleground between the defense establishment and the Ministry of Finance each year as budget preparations unfold. Coordination between the two parties has long been lacking, with the Ministry of Finance having only limited influence on changes in the allocation of the defense budget. The defense budget's dominance makes it difficult to introduce even small changes into the rest of the national budget. The multi-annual defense spending framework suggested by the Brodet Committee in 2007<sup>4</sup> was supposed to partly resolve this problem; since then, however, defense budgets seem to have strayed considerably from the suggested framework.

#### 4. Conclusion

Israel's economy is in good macroeconomic shape as far as the current macroeconomic indicators are concerned. This is due in part to Israel's adoption of sound monetary and fiscal policies (within the limitations of the latter). At the same time, Israel suffers from long-term labor market and physical capital problems which limit its capacity for economic growth, hinder its ability to advance to the living standards of the world's most developed countries, and may even cause its economy to regress. Furthermore, these problems are closely related to the increase in economic inequality which is detrimental to social welfare, perpetuates Israel's long-term problems, and causes social strife between different population groups. The *de facto* obstacles to fiscal policy reform, due in part to Israel's government structure, do not bode well, however, for Israel's ability to adopt the policies necessary to handle these problems.

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<sup>4</sup> In May 2007, the Brodet Committee, headed by David Brodet, submitted its detailed and comprehensive report on the management of the defense budget.

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## Appendix

Appendix Table 1. **Changes in GDP and its components, 1987-2010**  
rates of change\*

	1987-2007	2007	2008	2009	2010
Gross domestic product (GDP)	4.5	5.3	4.2	0.8	4.6
Private consumption (excluding durable goods)	4.9	5.1	1.8	2.6	4.2
Investment in fixed goods	4.0	14.7	3.9	-5.8	12.4
Investment in housing	1.0	2.4	10.2	5.5	11.7
Public consumption	2.5	3.1	2.6	2.5	3.1
Exports excluding diamonds	8.8	10.3	11.3	-10.0	10.9
Imports excluding diamonds	7.0	13.5	6.2	-12.5	9.3

\* Rates of change relate to the real variables (fixed prices).

**Source:** Central Bureau of Statistics and Bank of Israel calculations.

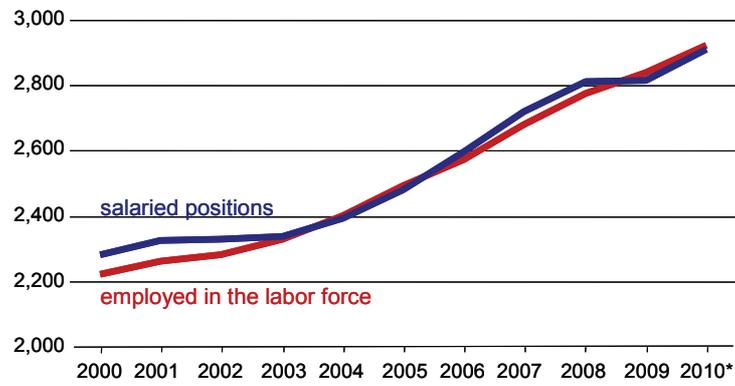
Appendix Table 2. **Labor market – various indicators, 2007-2010**

	2007	2008	2009	2010
GDP (rate of change – %)	5.3	4.2	0.8	4.6
Business sector GDP (rate of change – %)	5.8	4.7	0.1	5.3
Business sector employees (thousands, Israelis)	1,926.4	1,998.2	1,993.5	2,052.6
Public sector employees (thousands, Israelis)	808.6	833.4	847.5	871.8 *
Average weekly work hours in the business sector (Israelis, hours)	39.3	39.1	38.8	38.4 *
Wages in the business sector (Israelis, rate of change – %)	1.4	-1.1	-2.5	4.5 **
Labor productivity in the business sector (GDP per hour worked, Israelis, foreign workers and Palestinians, rate of change)	0.2	0.3	-0.1	3.8 **
Business sector unit labor cost (rate of change)	2.9	1.1	-5.0	-
Participation rate	56.6	56.8	57.0	57.2 *
Unemployment rate	7.3	6.1	7.5	6.7
Gini coefficient (by net money income per standard person)	0.382	0.384	0.389	-
Poverty incidence before transfer payments and direct taxation (persons)	32.5	32.7	33.9	-
Poverty incidence after transfer allowances and direct taxation (persons)	23.8	23.7	25.0	-
<b>Policy variables</b>				
Monthly minimum wage (NIS, 2010 prices)	4,082.0	4,010.0	3,953.0	3,850.0
Number of foreign workers (including those from the territories, thousands)	246.3	270.2	275.9	278.0 *
Total transfer payments to the public through the National Insurance Institute, per person (NIS, 2010 prices)	6,923.0	6,993.0	7,284.0	7,476.0 ***

\* Average, first three quarters of 2010. \*\* Initial estimates of the national accounts for 2010, Central Bureau of Statistics, December 2010. \*\*\* January–November, 2010 data, annual calculation.

**Source:** Central Bureau of Statistics and Bank of Israel calculations; National Insurance Institute – Gini index and the incidence of poverty.

Appendix Figure 1  
**Employed and salaried positions**  
 Israelis only, thousands, 2000-2010

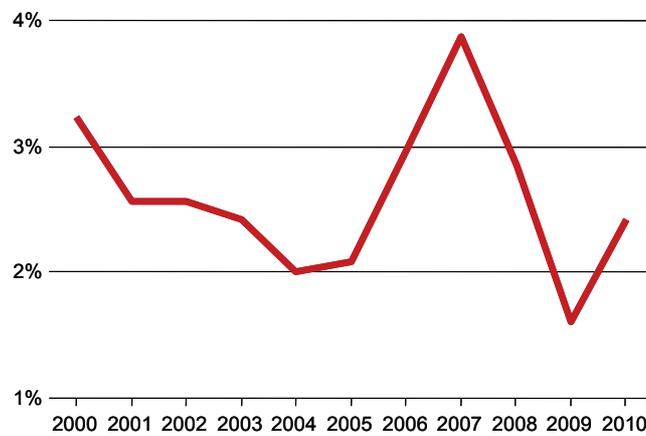


\* January-September, 2010.

**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Central Bureau of Statistics and Bank of Israel.

Appendix Figure 2  
**Job vacancy rates**  
 as a percent of all posts, 2000-2010



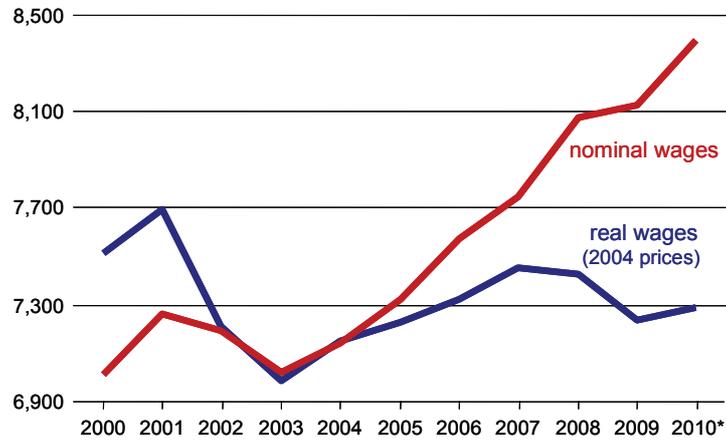
**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Ministry of Industry, Trade and Labor, Research and Economics Division.

Appendix Figure 3

**Wages**

Israeli only, thousands, 2000-2010



\* January-November, 2010.

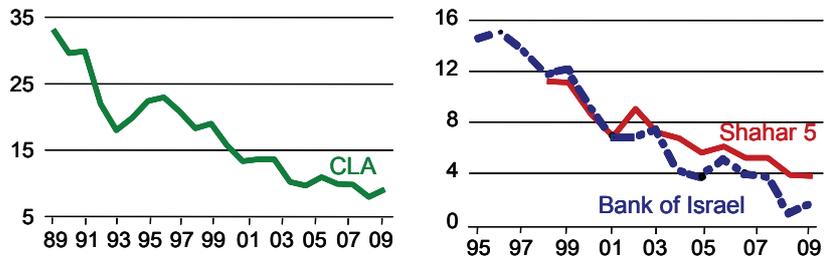
**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Central Bureau of Statistics and Bank of Israel.

Appendix Figure 4

**Israeli market yields**

1989-2010\*

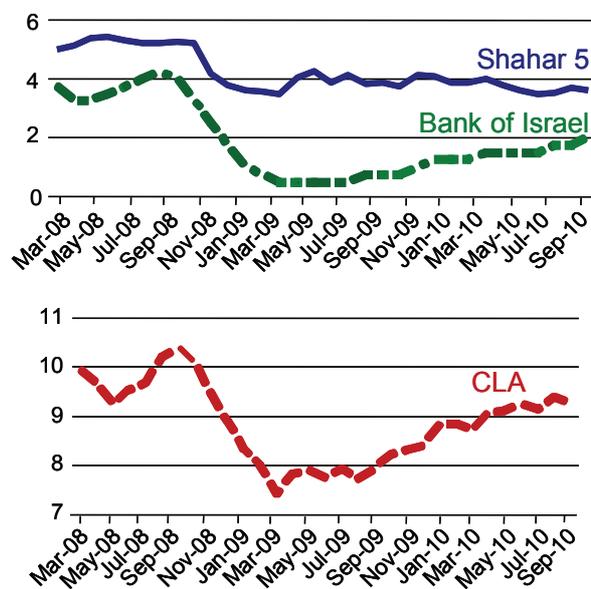


\* average Bank of Israel and CLA interest rates (annual average) and *Shahar* for five years.

**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Bank of Israel.

Appendix Figure 5  
**Israeli market yields\***  
 March 2008 – September 2010

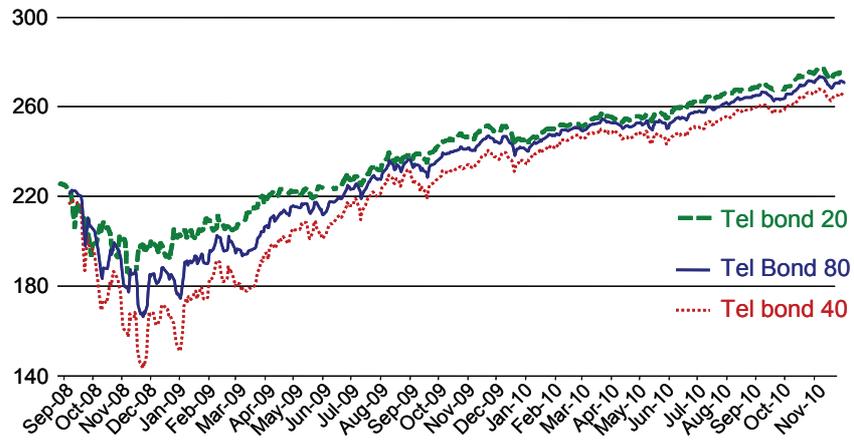


\* average Bank of Israel and CLA interest rates (annual average) and *Shahar* for five years.

**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Bank of Israel.

Appendix Figure 6  
**Tel-Aviv corporate bonds index**  
September 2008 – November 2010



**Source:** Taub Center for Social Policy Studies in Israel.

**Data:** Tel-Aviv Stock Exchange.