

# Chapter 1

## *The Economy and Economic Policy*

- ◆ After five years of rapid growth, Israel's economy suffered a reversal in the second half of 2008, and started sliding towards a recession, against the background of the increase in the severity of the global crisis and its effects on the economy. Although GDP increased by an average of 4 percent over the year, in the fourth quarter it actually contracted.
- ◆ In the first part of the year, the trends that characterized the period of rapid growth continued—a high level of economic activity, low unemployment, a surplus in the current account of the balance of payments, a high rate of saving, a significant cumulative reduction in the public debt/GDP ratio, and a high level of profitability in the business sector.
- ◆ The effects of the crisis became more acute towards the end of the year, expressed in steep declines in exports and tax revenues and a decline in private consumption. Employment stopped rising, wages dropped, and unemployment started to climb.
- ◆ The turnaround was also evident in inflation: till September it was high, reflecting the increase in global oil and commodity prices and the excess demand in the economy, and then it declined sharply, in light of the fall in world prices and the moderation of excess demand. The CPI increased by 3.8 percent in 2008, exceeding the upper limit of the inflation target range.
- ◆ Monetary policy in 2008 closely reflected the effects of global developments—the changes in world prices and the changes in assessments of the seriousness of the crisis and its effects on Israel. From September the interest rate was reduced significantly several times, and it reached its lowest level ever. In 2008 the Bank of Israel bought considerable quantities of foreign currency to increase the level of the reserves, and against the background of rapid appreciation of the shekel.
- ◆ There was great upheaval in Israel's financial system, but it was moderate compared with the situation abroad. Prices of shares and corporate bonds fell, and spreads in the credit market widened considerably. The financial institutions, including the banks, exhibited resilience. The strongest impact was on the nonbank credit market, which became the principal risk of the financial system and the main cause of the contraction of the supply of credit.
- ◆ The public debt/GDP ratio declined further, albeit more slowly than before, and the deficit increased, due to the continued cuts in tax rates, the slowdown in activity, and the falls in the capital market, which had an adverse effect on tax revenues.
- ◆ The permeation of growth into the weaker sections of the population via the labor market was evident in the increase in employment among the low-educated, and was reflected in a reduction in the incidence of poverty in 2007 and the first half of 2008.
- ◆ There is a need for a policy to deal with the expected recession, aimed at minimizing its negative effect on growth, employment and welfare. It will be judged not only in the light of the decisions taken, but also in light of the ability to implement them quickly and on the required scale. In the financial area it is important that lessons be learned and implemented. Moreover, the policy must meet the long-term challenges facing the economy and society.

## 1. MAIN DEVELOPMENTS

Israel's economy started sliding towards a recession in the second half of 2008.

After five years of rapid growth, Israel's economy suffered a reversal in the second half of 2008, and started sliding towards a recession, against the background of the increase in the severity of the global crisis and its effects on the economy. In the course of the year, the trends that characterized the period of rapid growth and the buoyancy in the financial markets continued, but towards the end of the year the effects of the global crisis, which till then had been quite moderate, became more pronounced. The impact of the crisis halted those trends, and in some instances even reversed them. The turnaround was reflected in many ways in real activity and in the financial system, as well as in the development of inflation and monetary policy (Table 1.3).

The positive developments of previous years were evident also in 2008.

The rapid growth since the recovery from the previous recession combined with a supportive macroeconomic policy were expressed by many positive developments evident also in 2008, including a high level of economic activity, low unemployment, a surplus in the current account of the balance of payments, a high rate of saving, a significant cumulative reduction in the public debt/GDP ratio, a high level of foreign exchange reserves, which increased in 2008, a high level of profitability in the business sector, and a banking system whose resilience increased greatly in the last few years. There was no bubble in real estate prices. All the above placed the economy in a relatively advantageous position at the outbreak of the global crisis, but they could not and cannot offer complete protection from it.

The global crisis became more severe, and its impact on Israel's economy intensified.

The increased severity of the global crisis and the intensification of its impact on Israel's economy constituted the major change in the macroeconomic background; the features of the crisis as they affect Israel's economy are discussed in section 2 below. Also affecting the economy in 2008 was the sharp change in the global development of oil and raw material prices during the year, which was itself related to the global crisis.

The rate of growth slowed in 2008, and the slowdown became more severe towards the end of the year.

The rate of growth slowed to 4 percent in 2008 (Table 1.1). Demand-side factors had led the accelerated growth in the last few years, and now led the turnaround. The moderate slowdown in the rate of growth at the beginning of the year was the result mainly of the closure of the output gap; the greater severity of the slowdown during the year reflected the effect of the global crisis on demand, while the effect of the contraction of credit sources on the supply side was not yet evident. The narrowing of the output gap against the background of demand-led growth continued the trend of the previous years, and was expressed by greater reliance of the supply side on an increase in the quantity of factors of production and a cyclical reduction in the rate of increase of productivity. Excess demand was also reflected in domestic inflationary pressures, real appreciation, and a reduction in the current account surplus. Excess demand and the convergence to the supply constraint were especially evident in the labor market with the continued decline in the rate of unemployment, which reached the very low level of 6.1 percent (annual average, Figure 1.1), the rise in the nominal wage, and increased employment among the low-educated. The effect

**Table 1.1**  
**Israel: Basic Economic Data,<sup>a</sup> 2000–2008**

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Mean population ('000)	6,289	6,439	6,570	6,690	6,809	6,930	7,054	7,180	7,306
Population growth rate (percent)	2.7	2.4	2.0	1.8	1.8	1.8	1.8	1.8	1.7
Israelis employed ('000)	2,216	2,265	2,284	2,330	2,401	2,494	2,574	2,682	2,777
GDP (NIS billion, 2008 prices)	557	555	552	562	590	620	652	687	714
GDP growth rate (percent)	8.9	-0.4	-0.7	1.8	5.0	5.1	5.2	5.4	4.0
Per capita GDP (\$ '000, current prices)	19.7	18.9	17.0	17.6	18.5	19.2	20.4	22.8	27.3
Unemployment rate (percent)	8.8	9.3	10.3	10.7	10.4	9.0	8.4	7.3	6.1
Real wage per employee post (percent change)	6.2	3.0	-6.2	-3.0	2.5	1.0	1.3	1.6	-0.9
Nominal wage per employee post (NIS per month, current prices)	6,850	7,133	7,074	6,909	7,051	7,221	7,468	7,630	7,909
Change in real income of family in lowest quintile (percent)	2.8	1.7	-7.6	-2.4	-1.7	2.4	7.6	4.1	..
Rate of employment in 25- to 64-year age group (percent)	..	66.4	66.0	66.2	66.7	67.5	68.5	70.1	71.0
Inflation rate (during the year, percent)	0.0	1.4	6.5	-1.9	1.2	2.4	-0.1	3.4	3.8
NIS/\$ exchange rate (percent change, during the year)	-2.7	4.8	9.8	-6.4	-1.2	6.2	-8.9	-7.1	-0.9
Nominal effective exchange rate (percentage change, during the year) <sup>b</sup>	-9.5	0.9	16.6	3.5	4.4	0.0	-3.5	-1.4	-8.3
Public expenditure (percent of GDP)	47.3	49.7	51.1	50.3	47.4	45.2	44.7	44.0	43.3
Tax revenue (percent of GDP)	37.0	36.9	36.2	35.4	35.5	35.6	36.1	36.5	33.9
Actual budget deficit (percent of GDP)	0.6	4.1	3.5	5.3	3.6	1.8	0.9	0.0	2.1
Gross public debt (percent of GDP, year-end)	85.1	89.9	97.6	99.9	98.2	94.2	85.7	79.4	78.0
Goods and services exports (\$ billion, current prices) <sup>c</sup>	39.5	34.9	32.5	35.7	43.1	47.1	53.3	60.7	70.8
Goods and services imports (\$ billion, current prices) <sup>c</sup>	40.3	38.4	36.1	37.2	43.6	48.4	53.4	64.1	75.4
Current account (percent of GDP)	-1.8	-1.6	-1.1	0.5	1.7	3.1	5.0	2.6	0.8
Net external debt (percent of GDP)	6.3	3.4	-0.6	-4.3	-8.5	-16.3	-21.8	-24.9	-25.1

<sup>a</sup> Annual averages.

<sup>b</sup> The average shekel exchange rate against the currencies of Israel's trading partners, weighted according to the volume of Israel's trade with them.

<sup>c</sup> Excluding diamonds.

SOURCE: Based on Central Bureau of Statistics data.

of the crisis as the year progressed was apparent in the sharp drop in exports and in tax revenues, and in the slowdown in the rate of increase of private consumption. The labor market also reacted to the crisis, and already in the fourth quarter a significant change could be seen in wages and employment. The reversal during the year was seen also in inflation: till September it was high, in light of the global rise in oil and raw material prices and excess demand; thereafter it declined rapidly, as world prices fell and excess demand moderated. Over the whole of 2008 the CPI increased by 3.8 percent, exceeding the upper limit of the target range.

The upheaval in the financial system in Israel in 2008, mainly since the deterioration in the global crisis in September, was quite marked, but nevertheless more moderate

The upheaval in the financial system in Israel was quite marked, but was more moderate than abroad.

**Table 1.2**  
**Basic Economic Data: International Comparison<sup>a</sup>, 1998-2008**

	2007				2008				Average 1998-2008			
	Israel	US	Eurozone	OECD	Israel	US	Eurozone	OECD	Israel	US	Eurozone	OECD
GDP growth rate	5.4	2.0	2.9	3.7	4.0	1.4	1.5	1.8	3.8	2.7	2.5	3.1
Per capita GDP growth <sup>b</sup>	3.5	1.0	2.4	3.2	2.1	0.4	1.0	1.3	1.7	1.7	2.0	2.5
Per capita GDP (\$'000) <sup>b,c</sup>	22.8	45.1	45.7	40.1	27.3	46.3	50.2	43.8	19.8	38.5	32.4	28.7
Population growth rate <sup>b</sup>	1.8	1.0	0.5	0.5	1.7	1.0	0.5	0.5	2.1	1.0	0.5	0.5
Civilian labor force participation rate	56.3	75.5	73.6	73.7	56.5	..	74.0	73.9	54.8	6.4	70.5	72.7
Unemployment rate	7.3	4.6	6.7	5.9	6.1	5.7	6.8	5.8	8.9	5.0	7.6	6.8
Inflation rate (during year)	3.4	4.1	3.2	3.5	3.8	4.9	3.4	4.7	2.4	2.9	2.5	4.0
Exports (percent of GDP) <sup>d,e</sup>	37.1	12.1	48.5	44.8	38.6	..	..	..	32.1	10.7	45.2	40.9
Gross investment (percent of GDP) <sup>e</sup>	20.1	18.3	22.9	23.5	19.1	..	..	..	19.4	19.2	22.1	22.7
National saving (percent of GDP) <sup>e</sup>	22.8	13.7	21.6	21.8	19.8	..	..	..	20.3	15.3	21.6	21.9
Current account (percent of GDP)	2.6	-5.3	-1.7	-1.3	0.8	-4.9	-2.6	-2.3	0.6	-4.6	-0.7	-0.8
Public expenditure (percent of GDP)	44.0	37.4	45.2	42.5	43.3	38.6	45.7	42.7	47.5	36.1	46.0	43.5
Tax revenue (percent of GDP) <sup>e,f</sup>	36.5	28.3	39.6	36.8	33.9	..	..	..	35.9	27.9	38.5	35.9
Gross public debt (percent of GDP) <sup>g</sup>	79.4	62.9	66.8	57.6	78.0	73.2	68.0	58.4	91.3	61.5	73.6	62.0

<sup>a</sup> Figures for the Eurozone and OECD countries are simple averages of the countries in each group (excluding Luxembourg).

<sup>b</sup> Population figures for the US, Eurozone and OECD countries for 2008 are estimates.

<sup>c</sup> At current prices.

<sup>d</sup> For Israel, exports excluding diamonds.

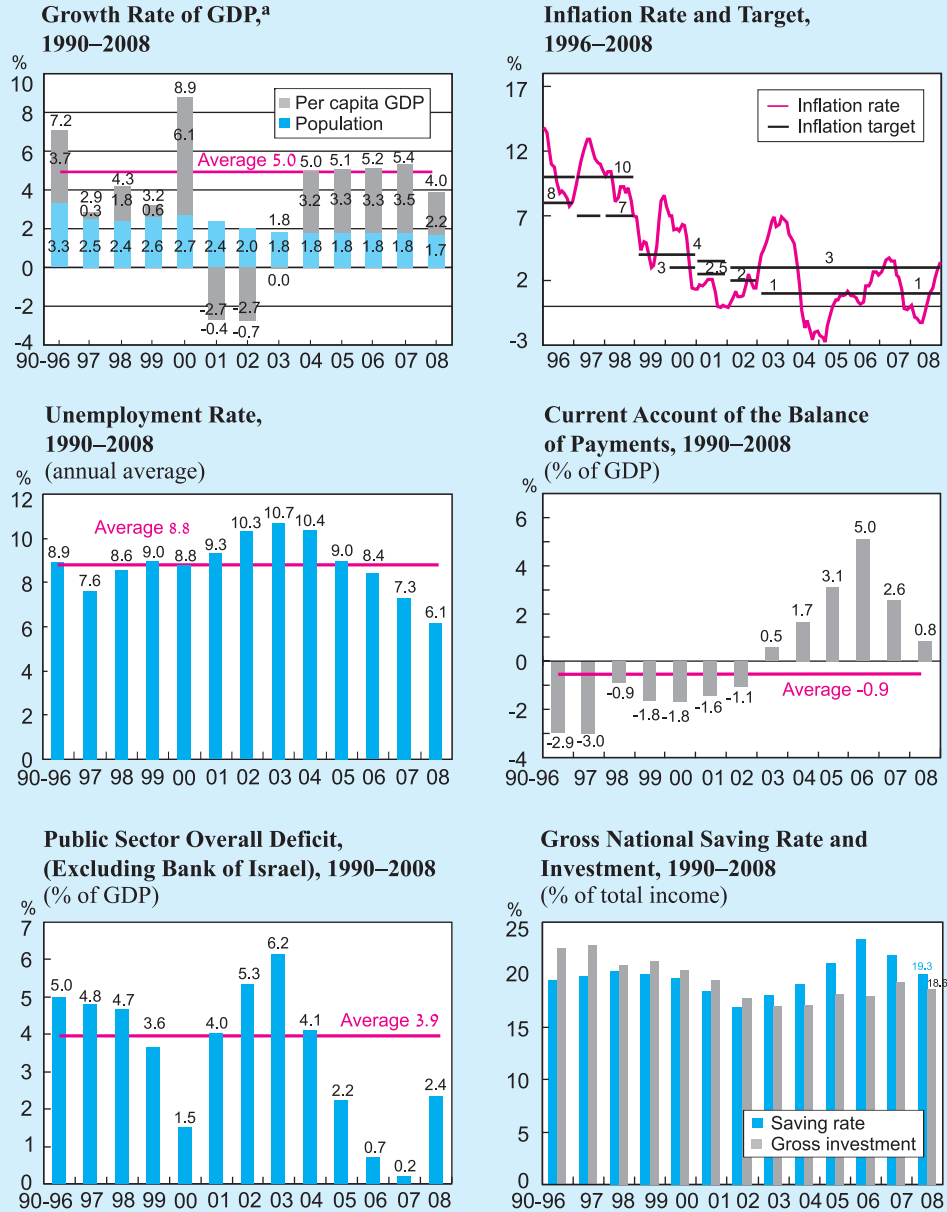
<sup>e</sup> The international data are calculated for the period 1998-2007.

<sup>f</sup> No data were available for Australia, Greece, Japan and Poland for 2007.

<sup>g</sup> At year end.

SOURCE: OECD Economic Outlook, 2008; IMF World Economic Outlook, 2008; OECD Revenue Statistics 2008 and Bank of Israel.

**Figure 1.1**  
**Key Economic Indicators, 1990–2008**



<sup>a</sup>Differences between the growth rate of GDP and the sum of changes in per capita GDP and in population are due to rounding.

SOURCE: Based on Central Bureau of Statistics data.

than abroad, and it did not have a uniform effect on the different segments of the system. The strength of the turmoil was expressed among other things by the fall in share and corporate bond prices and by the widening of spreads in the credit market. The fact that the effect was more moderate than abroad could be seen in the resilience of the financial institutions, including the banks, not one of which collapsed or required rescue by government intervention. That said, the profitability of the banks and insurance companies suffered a serious reversal. The relatively moderate effect felt by the banks was due to several factors: their cautious approach; the tight supervision over them, including the requirement to increase their capital adequacy; the limited exposure of Israeli financial institutions to composite assets, particularly in the area of securitization, assets that were at the center of the global crisis, both because they bought only relatively small quantities of these assets abroad and because these assets had not yet been developed in Israel. The strongest impact was felt in the nonbank credit market, which became the risk focus of the financial system and the main cause of the cutback in the supply of credit to the economy. The fall in share prices, and even more so the fall in corporate bond prices had a strong effect also on long-term saving, as their share in the portfolios of the provident and pension funds increased steeply in the last few years. In contrast, the banks continued functioning normally and actually increased the amount of credit they advanced to the business sector.

The supply of credit  
fell.

The turmoil in the financial system and the increased risks reduced the supply of credit, but to a smaller extent than occurred abroad. The rate of increase of the supply of credit to the business sector slowed, and there was a steep increase in the cost of raising capital and in credit spreads. The increase in bank credit offset only a part of the reduction in nonbank credit.

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2008 closely reflected  
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started buying foreign  
currency.

Monetary policy in 2008 closely reflected the effects of the global developments—the changes in oil and commodity prices, and the changes in the assessments of the severity of the crisis and its effects on Israel. The changes in the assessments played a part in the switch from reductions in the interest rate in March–April to increases in the following months, and since September to several deep and successive cuts in the rate to bring it to its lowest ever level. The cuts were in line with those around the world at that time, and were intended to ease financing difficulties and to support aggregate demand, and were made possible by the steep decline in inflation and inflation expectations. At that time monetary policy had to contend with unusual challenges, including forces acting counter to it: while the Bank of Israel reduced the interest rate sharply, the increase in risks and spreads exerted pressure in the opposite direction on the interest on bank credit. Another exceptional step taken by the Bank of Israel was the purchase of considerable quantities of foreign currency in order to increase the level of the foreign exchange reserves and against the background of rapid appreciation of the shekel. The level of purchases was increased after a while in light of the assessment that the economy was entering a serious slowdown.

For the first time since 2004 fiscal policy was expansionary, the outcome of several decisions taken in previous years, headed by further cuts in the rates of direct taxes.

**Table 1.3**  
**Economic Indicators, Changes in 2008**

	I	II	III	IV
GDP <sup>a</sup>	4.7	3.4	1.3	-0.5
Business sector product <sup>a</sup>	5.7	3.7	1.0	-1.6
Exports excluding diamonds <sup>a</sup>	29.4	-10.7	7.1	-31.6
Private consumption <sup>a</sup>	7.6	0.2	0.6	-3.1
Unemployment <sup>b</sup>	6.2	6.0	6.0	6.3
Inflation <sup>c</sup>	0.4	9.3	8.3	-2.2
Bank of Israel interest rate <sup>d</sup>	3.75	3.50	4.25	2.50
Tax revenue <sup>e</sup>	-4.6	-3.8	-10.7	-13.6
Nonresidents' portfolio investment in Israel, net (\$ million)	164	526	-1,155	680
Israelis' portfolio investment abroad, net (\$ million)	-683	1,371	-176	1,175

<sup>a</sup> Percent volume change, in annual terms, seasonally adjusted.

<sup>b</sup> Quarterly average, percent.

<sup>c</sup> During the quarter, annual rate.

<sup>d</sup> Published rate, last month in quarter.

<sup>e</sup> Percent volume change, compared with same quarter in 2007.

SOURCE: Based on Central Bureau of Statistics data and Bank of Israel.

The combination of this policy with the effect of the slowdown in economic activity and the falls in the capital market, that had a negative impact on tax revenues, resulted in an increase in the deficit in 2008, for the first time since the recovery from the last recession, and in a slower reduction in the public debt/GDP ratio. Following the deterioration in the global crisis, programs to deal with its effects were adopted, to be implemented in 2009.

Growth permeated via the labor market into the weaker sections of the population, with increased employment among the low-educated. This was reflected by a decline in the incidence of poverty in 2007 and in the first half of 2008 over and above the effect of growth in raising the poverty line itself. However, joining the labor market does not yet ensure an escape route from poverty, and the weaker groups are especially vulnerable to changes in the business cycle. In 2008 for the first time an earned income tax credit (EITC) program was operated in several regions, an important step in increasing the income of low paid employees. At the same time the number of foreign workers surged, and this has an adverse effect on the chances of low-educated Israelis finding work and on the level of their wages.

Looking to the future, what is needed is a policy for dealing with the expected recession, directed at minimizing its effect on growth, employment and welfare. It will be judged not only in the light of the decisions taken, but also in light of the ability to implement them quickly and on the required scale. In the financial area

The deficit increased, and the rate of decline of the public debt/GDP ratio slowed.

Growth permeated via the labor market into the weaker sections of the population.



it is important that lessons be learned and implemented. Moreover, the policy must meet the long-term challenges facing the economy and society. The targets and policy recommendations are set out at the end of this chapter.

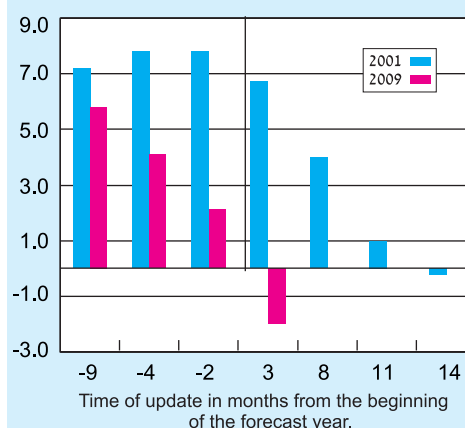
## 2. CHARACTERISTICS OF THE GLOBAL CRISIS AND THEIR EFFECT ON THE ISRAELI ECONOMY

The global crisis is exceptional in scale and severity.

The most conspicuous characteristics of the global crisis are severity, diffusion, recurrent surprise about both, fears of its implications and uncertainty about its continuation, and the uniqueness of the global response of economic policy to the characteristics previously listed. The global crisis is exceptional in scale and severity and appears to be the gravest since the Great Depression of the 1930s. It has spread over time, economic sectors, and countries. It erupted in 2007 and has been escalating perceptibly since the collapse of American financial institutions in September 2008. It began as a financial crisis but spread to the real economy. Its global financial implications are reflected, among

other things, in the collapse of institutions, severe degradation of market activity, a precipitous decline in the prices of financial assets, liquidity and credit crunches, and a crisis of confidence in the financial system. In the real domain, the slowdown in economic activity around the world has intensified. The crisis began in the United States but subsequently spread to additional developed countries, foremost in Europe and later in Asia, and to emerging markets elsewhere. The extent and severity of the crisis has repeatedly and conspicuously been the topic of surprise, a surprise that reflects difficulty in understanding the crisis' nature and implications. One manifestation of this is the repeated updating of world growth outlooks in terms of the severity of the slowdown and the extent of its effect on different countries. The updates of the International Monetary Fund outlooks are a case in point (Figure 1.2). The uncertainty has been reflected in the markets as well, and at the present writing it remains in effect in regard to both the depth of the crisis and the extent of its continuation. The intensity of the fear of events to come was reflected, among other things, in a steep rise in the estimation of risks in financial markets and in consumers' response.

**Figure 1.2**  
IMF Forecasts of Growth in World Trade, 2001 and 2009  
(volume growth, percent)



SOURCE: Based on IMF data.



The characteristics of the crisis were evident in the patterns of policy responses around the world. The intensity of the crisis as already perceived, coupled with concern about further intensification in the future, have led to policy responses on magnitudes that are exceptional if not unprecedented, and to willingness to adopt extraordinary measures. The intensity of the response is visible, among other things, in steep and sometimes coordinated rate cutting and the steadily growing scope of fiscal intervention programs. Governments have acted to rescue firms in ways—acquisition of assets, takeovers, and injections of capital—that would have seemed unimaginable a short time ago. The policy responses displayed differences of approaches among countries, a wide range of measures invoked or considered, frequent updating and expansion of programs, and, at times, changes in the policy approach over time. These features attested to the difficulty that policymakers have encountered in keeping up with the pace of market developments, identifying the policy measures needed, and understanding the scope of the requisite measures—all of which accompanied by immense uncertainty about how well the programs would succeed. Generally speaking, the responses focused first on treating the financial system itself and easing the liquidity crunch; later the emphasis shifted to support of aggregate demand.

These characteristics are important for understanding the background against which the Israeli economy and its policymakers reacted. The effect of the crisis was initially mild; it worsened only later on, foremost since the turning point in September. The crisis had an earlier and stronger effect on the financial system than on real activity, naturally enough. The uncertainty, the surprise, the adjustments of outlooks on the severity of the crisis, the updating of the estimated scale of the policy response required, and the idea that the crisis would focus on developed markets only—characteristics that were not specific to Israel—were manifested, among other things, in a change of direction in monetary policy and several fiscal decisions since September. The crisis has battered both the real economy and the financial system, and the problems in both fields are exacerbating each other abroad and in Israel. In Israel, as elsewhere, the policy response initially focused on the financial system; the central bank responded by announcing extraordinary rate cuts that had the further purpose of combating recession and had become possible due to the steep downturn in inflation.

Several characteristics of Israel's economy and financial system served to moderate the effects of the crisis. They include the auspicious state of the economy before the crisis erupted, manifested particularly in a high saving rate, a small government deficit, a surplus on balance of payments current account, strong business sector profitability, and the absence of a real estate price bubble. Characteristics of the financial system that mitigated the adverse effects of the crisis include an improvement in the resilience of the banking system in recent years, prudent banking conduct, strong banking supervision, and limited exposure of financial institutions to composite assets, especially those relating to securitization. (For expanded discussion, see Section 4 below.)

However, several other characteristics of the economy exacerbated Israeli's vulnerability to the crisis: severe dependency on exports (especially to the United

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States, the epicenter of the crisis); growing integration into the world's financial system in the last ten years and its concomitant, greater exposure to foreign assets and to the effect of capital inflows and outflows; structural changes in the financial system that abetted the rapid development of the nonbank credit market, which lay at the focus of the shock in Israel during the review year; and proportional growth of the risk assets component of the public's portfolio. The global crisis found the domestic financial system in the midst of significant and rapid structural changes with which the regulation and supervision systems had not yet managed to cope. A high debt/GDP ratio limited the government's maneuvering room for the implementation of a countercyclical policy.

### 3. PRODUCT AND USES

GDP contracted in the fourth quarter.

After five years of rapid growth, the growth rate slowed to 4 percent in the review year. The slowdown gathered momentum as the year progressed and ended with the contraction of GDP in Q4 (Table 1.3). The deceleration was gentle at the beginning of the year, originating in the continuing contraction of the output gap; later it gathered steam against the background of the worsening global crisis. Economic growth in 2008, as in previous years, was powered by the growth of business sector product (4.4 percent), which changed direction toward the end of the year.

In the first part of the year capital stock and labor input continued to expand briskly.

The continuation of the previous years' growth trend was reflected on the supply side in growing reliance on a quantitative increase in factor inputs and a decline in the growth rate of productivity. Capital stock and labor input continued to expand briskly. The concurrence of slowing productivity growth and continued economic growth occurred due to the changeover from cyclical growth, which reflects increased utilization, to growth based on technological improvements, and a cyclical decrease in labor force quality.<sup>1</sup> However, the intensification of the slowdown in the growth rate of productivity in 2008, until the rate flattened altogether, may also reflect the onset of the new recession that was precipitated by the global crisis. At the beginning of a recession, a decline in output precedes the decline in employment and is reflected in a downturn in productivity—a phenomenon observed in Israel's previous recession and in foreign recessions as well. Even though the crisis is financial in origin and may have important supply-side effects by drying up sources of finance and increasing the cost of raising capital, Israel did not sustain meaningful supply-side damage during the review year. However, the Bank of Israel Companies Survey reported an increase in financing difficulties toward year's end as an activity constraint. From the opposite direction, the decline in oil and raw material prices in the second half of the year provided supply-side relief.

Exports and private consumption continued to grow rapidly in Q1; in Q4 they decreased.

The development of uses in 2008 reflected the growing effects of the global crisis during the year and the persistence of several trends from previous years (Figure 1.3).

<sup>1</sup> For broader discussion of change in productivity and factor-input utilization, see Box 2.1.

The crisis dampened the growth of all uses other than public consumption; the slowdown worsened toward year's end. Private consumption and, in particular, exports—which continued to grow rapidly as late as Q1—decreased in Q4. The slowing of (non-diamond) export growth for the second straight year was only partly occasioned by the global crisis; it was also abetted by the worsening of terms of trade in the beginning of the year (due to the increase in oil prices) and real appreciation. Nevertheless, exports posted another strong increase in 2008 and were central in economic growth. The decline in domestic demand was manifested, among other things, in a decrease in manufacturing sales to the domestic market for the first time since the end of the previous recession—the pace of the decline worsened as the year progressed—and in the slowing of commerce activity (see the Manufacturing and Commerce and Services sections in Chapter 2.)

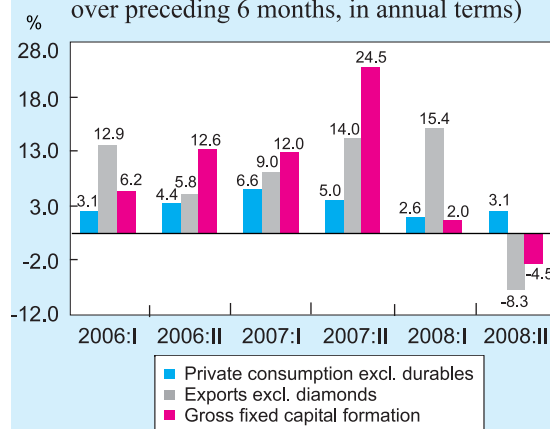
Demand factors continued to lead economic developments, both in the rapid growth phase and after the crisis loomed; thus, the trend in the excess demand and the output gap changed direction toward year's end. Economic growth in recent years has been powered by a combination of escalating demand and a rapid but not full response by supply. The excess demand, which began to build up in 2007 in view of the narrowing of the output gap, surged in the first part of the review year. This was reflected, among other things, in the rapid development of uses as against GDP in Q1 and continuing declines in unemployment, coupled with increases in nominal wages and the import surplus; it also contributed to a rise in the inflation environment and the sizable real appreciation. The impact of the global crisis on real activity in Israel

**Figure 1.3****a. GDP and Business Sector Product, 2006–08**

(seasonally adjusted data, rate of change over preceding 6 months, in annual terms)

**b. Exports, Private Consumption and Gross Fixed Capital Formation, 2006–08**

(seasonally adjusted data, rate of change over preceding 6 months, in annual terms)



SOURCE: Based on Central Bureau of Statistics data.

Demand factors continued to lead economic developments.

has been expressed mainly, thus far, in the deceleration of demand growth (global and domestic). Accordingly, as the year wound down, the excess demand contracted and the output gap widened for the first time since the end of the previous recession,<sup>2</sup> helping to lower the inflation environment and stem real appreciation.

The crisis affected private consumption.

The growth rate of private consumption slowed in 2008 relative to 2007. Although the resulting pace resembled that of 2005–06 and the growth rate of product in 2008, the effect of the crisis on consumption was evident. Several factors stimulated consumption in 2008: continued increases in disposable income and employment, falling prices of imported consumer goods (other than fuel), tax cuts at the beginning of the year and expectations of a further decrease at the beginning of 2009, and, perhaps, two developments that boosted income among low income earners, whose marginal propensity to consume is greater: an increase in the minimum wage and an influx of low income workers into the labor market. From the contrasting direction, the implications of the crisis are expected to dampen consumption in several ways: a decrease in the value of the public's portfolio of financial assets, the general activity slowdown, the rise in uncertainty and concern about further deterioration and job loss, and higher cost of consumer credit. Evidence of the downward effect of the crisis on consumption may be gleaned from the protracted slump in the consumer confidence index, the significant deceleration in the growth of consumption of nondurables (an indicator that usually responds mildly to shocks), and a steep decrease in purchases of durable goods in the second half of the year, as the crisis ramped up and two spot factors (the tax cut on motor vehicles and the currency appreciation), which pushed durables purchases upward early in the year, used up their effect. Two additional factors, however—the relatively auspicious state of the economy and the high savings rate—eased the impact of the crisis on consumption.

The rate of savings dipped in 2008.

The private savings rate dipped in 2008. Considerations related to smoothing of consumption dampened savings during the review year in view of the slowdown in activity. In contrast, the decrease in portfolio value, expectations of further economic deterioration, and the rise in uncertainty had a positive effect on private saving. The decline in public saving was also expected to boost the private savings rate but did not have this effect as of year's end, possibly due to surprise over the extent of the downturn in public saving, much like the lag observed in this response in 2007. In any event, national savings decreased in 2008.

The growth rate of nonresidential investment remained relatively strong although somewhat less vigorous than in 2006–07. Factors contributing to the increase in investment were the narrowing of the output gap, due to which any increase in supply entails an increase in capital stock, and the continuing slippage of investment prices. In contrast, expectations of a slowdown in demand, the increase in risks and uncertainty, and financing difficulties had downward effects on investment.

Homebuilding investment has not increased substantially since the end of the recession at the beginning of this decade. After a slight acceleration in 2006–07, the

<sup>2</sup> According to the Bank of Israel Companies Survey, utilization was falling at year's end.

growth rate of this investment receded in 2008. Moreover, the investment growth in the review year originated not in a larger number of housing starts—the number actually declined—but in more dwellings under construction. Nevertheless, the industry did not tumble into the sort of real estate crisis that evolved abroad. For expanded discussion of this industry, see the Construction section in Chapter 2.

#### 4. THE FINANCIAL SYSTEM

In 2008, the financial system affected the economy not only by passing through the direct effects of the global crisis but also by influencing purely domestic economic developments. The severity of the crisis in Israel, while expressed in a range of indicators, was weaker than abroad. The significance of financial aspects in the current crisis is one of the conspicuous factors that distinguish between the situation today and previous recessions in Israel. It also explains the policy response, which differed from the response in previous recessions due to its focus, at least at first, on the domain of credit and the capital markets. The implications of the crisis halted or at least suspended several processes that the financial system had been undergoing, including the growth of its nonbanking sector.

The financial system played a central role in developments in 2008.

The global financial crisis affected the domestic financial system and, in turn, the economy at large in several ways:

- it eroded the value of foreign financial assets held by domestic financial institutions;
- it made the raising of capital abroad more difficult and expensive;
- it caused foreign investment to decline and prompted Israeli banks and other investors to realize foreign assets;
- it triggered developments in the domestic capital market, including the widening of spreads and contraction of the primary corporate bond market, the source of most of the increase in business credit in recent years; this market almost vanished in the second half of the year.

The blow that the domestic financial system absorbed from September onward, while perceptible, was gentler than abroad and less intense in some parts of the system than in others. The ferocity of the shock was reflected in a range of indicators: steep declines in prices of equities (Figure 1.4) and corporate bonds, a rise in market volatility that included the foreign currency market, the widening of spreads in credit markets, and an increase in the cost of raising capital. The moderate nature of the jolt in Israel relative to the rest of the world was evident, among other things, in the resilience of the Israeli financial institutions, including banks, although their profitability was affected. In Israel, unlike other countries, neither banks nor other financial institutions collapsed and the government did not need to intervene in any specific case to prevent such a collapse. The variance in the effect of the shock on Israel's system was manifested particularly in the intensity of the response of the equities and corporate bond markets relative to the resilience of the financial institutions, including the banks.

Several characteristics of the conduct of the Israeli financial institutions and of the structure of the domestic market contributed to the resilience of the financial system.

Several characteristics of the financial system—some pertaining to the conduct of the Israeli financial institutions, and others associated with the structure of the domestic market—contributed to the system's resilience and the gentle effect of the shocks in Israel relative to the rest of the world, apart from the auspicious state the economy on the eve of the crisis:

- the limited exposure of most Israeli institutions to composite financial assets abroad, which played a central role in the global crisis when the perception of their implicit risk changed;
- domestic banks' limited reliance on domestic and foreign capital markets for the raising of sources;
- strong banking supervision, including the requirement that banks continue adjusting to and adopting the rules of Basel II; within this framework, the banks were required to strengthen their risk weighted capital ratios by raising capital;
- the absence of the most complex instruments, especially those involving securitization, in Israel;
- scanty involvement of foreign banks in domestic financial intermediation.

In contrast, several processes in Israel's economy and financial system in recent years amplified the effects of the global crisis on the system:

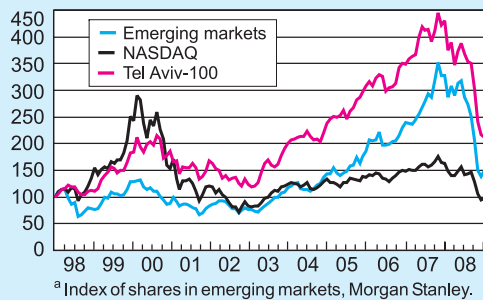
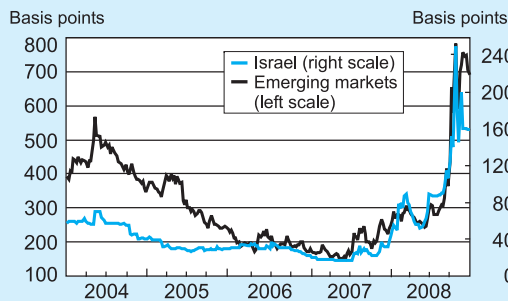
- profound structural changes in the financial system, including equalization of tax rates on income from investments in Israel and abroad, lowering of restrictions on institutional investors, reducing the issue of designated bonds, and lowering the public debt/GDP ratio, both of which reduced the supply of government bonds;
- increasing integration of the domestic economy into the global system;
- rapid economic and financial growth, resulting in greater supply of the public's savings and demand for capital by the business sector;
- a low interest environment, domestically and abroad.

Due to this set of circumstances, Israelis made larger investments abroad and in domestic equities and, in particular, nonbank credit (corporate bonds) developed rapidly. In the public's portfolio of financial assets, the share of assets issued by business burgeoned and the share of foreign assets grew, albeit less vigorously (Figure 1.5). Furthermore, the extent of nonbank credit taken by the business sector in bond issues increased immensely and came to about half of total credit. These changes in the composition of the portfolio and the business sector's sources of finance amplified the direct and, foremost, the indirect effects of the global crisis on the financial system. The direct effect was the decrease in value of foreign financial assets and greater difficulty in raising capital abroad; the main blow to portfolio value was brought on by the tumbling prices of domestic equities and severe shock to the corporate bond market. The shock that this market absorbed also became the principal risk to the financial system and an important factor in the contraction of sources of finance for the business sector.

A central question is how bad the contraction of credit supply in Israel's economy was. While the growth rate of credit for the business sector slowed severely in 2008,

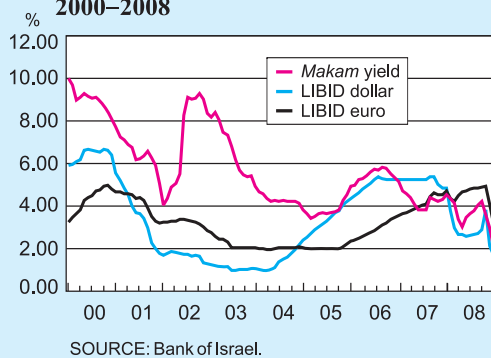
Several processes in Israel's financial system in recent years amplified the effects on it of the global crisis.



**Figure 1.4****a. Share Index Developments in Israel and Abroad,<sup>a</sup> 1998–2008****b. Risk Premium, Israel<sup>a</sup> and the Emerging Markets,<sup>b</sup> 2004–2008**

<sup>a</sup> Premium on Israel government 5-year bonds relative to the US.

<sup>b</sup> Emerging markets premium (excluding Argentina) calculated by J.P. Morgan.

**c. Yields on Three-Month *Makam* and Three-Month LIBID Dollar and Euro, 2000–2008**

the deceleration followed years of rapid increase. The slowdown does not indicate in itself that less credit was available because it may also have reflected a decrease in credit demand due to the slowdown of growth and the decrease in demand for investment. However, the increase in the cost of raising capital and, above all, the widening spreads, against the background a rise in risks, shows that total credit supply did contract. Further evidence of the contraction of credit supply was the escalation of financing difficulties as an activity constraint toward year's end, as the Bank of Israel Companies Survey shows. The implications of the reduction in credit supply were also accentuated by the expected level of nonbank credit due in 2008: NIS 14.5 billion (based on payback tables).

The contraction of nonbank credit gave the banks a greater role to play as suppliers of credit. Bank lending to the business sector increased by 8 percent in 2008 and continued to expand even after the crisis worsened in the last few months. This offset only some of the decrease in nonbank credit, the raising of which ground to a total halt in the second half. However, the continued sound functioning of Israel's banks, as opposed to those several other countries, made the contraction in credit supply less

The total supply of credit contracted; the cost of raising capital increased, and spreads widened.

Bank credit increased in 2008.

severe in Israel than abroad. As the crisis worsened, interest on bank loans initially rose and then receded due to rate cutting by the Bank of Israel. However, since the decrease in interest on deposits was even steeper, bank spreads widened overall.



Much of what the authorities did late in the year focused on an attempt to stanch the contraction of credit supply. The government's actions included state guarantees to induce more lending by banks, the establishment of funds for the expansion of nonbank credit, and larger guarantees for loans to small and medium-sized businesses, to name only a few. The Bank of Israel also took several steps other than rate cuts to enhance liquidity; they are described in detail in Section 2c of Chapter 4.

The value of the public's portfolio fell sharply.

The value of the public's portfolio fell sharply and its composition changed (Figure 1.5). The decline in portfolio value after three years of rapid growth traced to tumbling asset prices; the recomposition originated in the aforementioned factor and also in investors' responses to the increase in risk perception. The change halted the upward trend in the share of tradable and relatively risky assets (equities and corporate bonds) in recent years; instead, the share of less risky assets, e.g., government bonds and bank deposits, climbed in 2008. Reflecting investors' decisions to tilt their portfolios more in the direction of less risky assets, there were large scale redemptions from mutual and provident funds during the year, on the one hand, and deposits in local currency money funds and banks, on the other. (In regard to the money funds, see Box 4.3.) Households also redeemed mutual and provident funds to draw down the share of overseas investments in their portfolios, in contrast to the upward trend in previous years. After several years of steady decline in the share of bank deposits in the portfolio, the weight of this vehicle turned upward late in the year even though the interest rate on deposits fell steeply, reflecting the public's perception of these instruments as relatively safe and also the state of the alternatives.

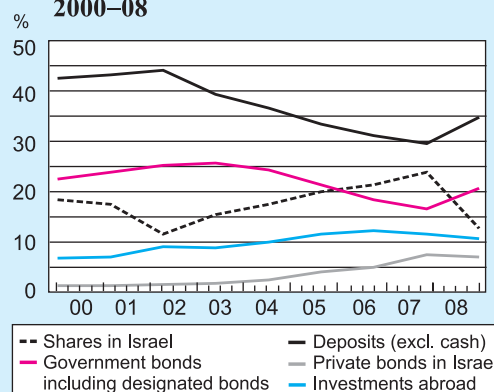
The crisis focused special interest on the management of pension savings by institutional investors.

The crisis focused special interest on the management of long-term savings by institutional investors (provident and pension funds). The share of risk assets in the provident funds' portfolios—foreign investments, equities, and, in particular, corporate bonds—has grown tremendously in recent years in view of the structural changes described above and structural problems in the management and supervision of this industry. (For an expanded discussion, see Section 4c and Box 1 in Chapter 4.) The decline in the prices of these assets and the heightened risk attributed to them during the review year had several repercussions, including large redemptions that, as stated, reflected savers' wish to switch to safer assets. The redemptions also attested to the public's inadequate awareness of the rise in the riskiness of the portfolios that the funds managed for them. The savers' overreaction even raises the possibility that they were inadequately aware of how they should respond to volatility in the value of risk assets kept in long-term savings. The redemptions exacerbated the decline in asset prices due to the funds' large share in the corporate bond market and structural problems in this market; thus they caused further damage to the value of the asset portfolio and aggravated of the economy's credit difficulties. Furthermore, harm to pension savings is an especially sensitive matter, as manifested among other things by public pressure for the introduction of a safety net for these savings. Hence, the effect of the crisis on pension savings may have long-term fiscal implications as well, especially for the public debt.

The financial system reforms that took place in recent years, including those that enabled the nonbank credit market to develop, were immensely important and contributed to favorable developments in the capital markets. These developments, however, took place very quickly and the regulation and supervision systems did not keep up. The global crisis broke out at this especially sensitive time. The gap that had opened between the development of the markets and the development of regulation aggravated the effects of the crisis on the domestic financial system and accented many of the

system's deficiencies. Although these deficiencies were known before the crisis and the need to correct them had been discussed at length, not enough was done at the time. The appropriate conclusion is that the requisite adjustments should be made and the reforms should not be cancelled sweepingly. For an expanded discussion of the system's weaknesses that came to light and the desired policy measures, see Chapter 4 and the Policy section at the end of this chapter.

**Figure 1.5**  
**Components of Asset Portfolio,<sup>a</sup>**  
**2000–08**



<sup>a</sup> Total assets include also *makam*, cash held by the public and other assets.

## 5. INFLATION AND MONETARY POLICY

### a. Inflation

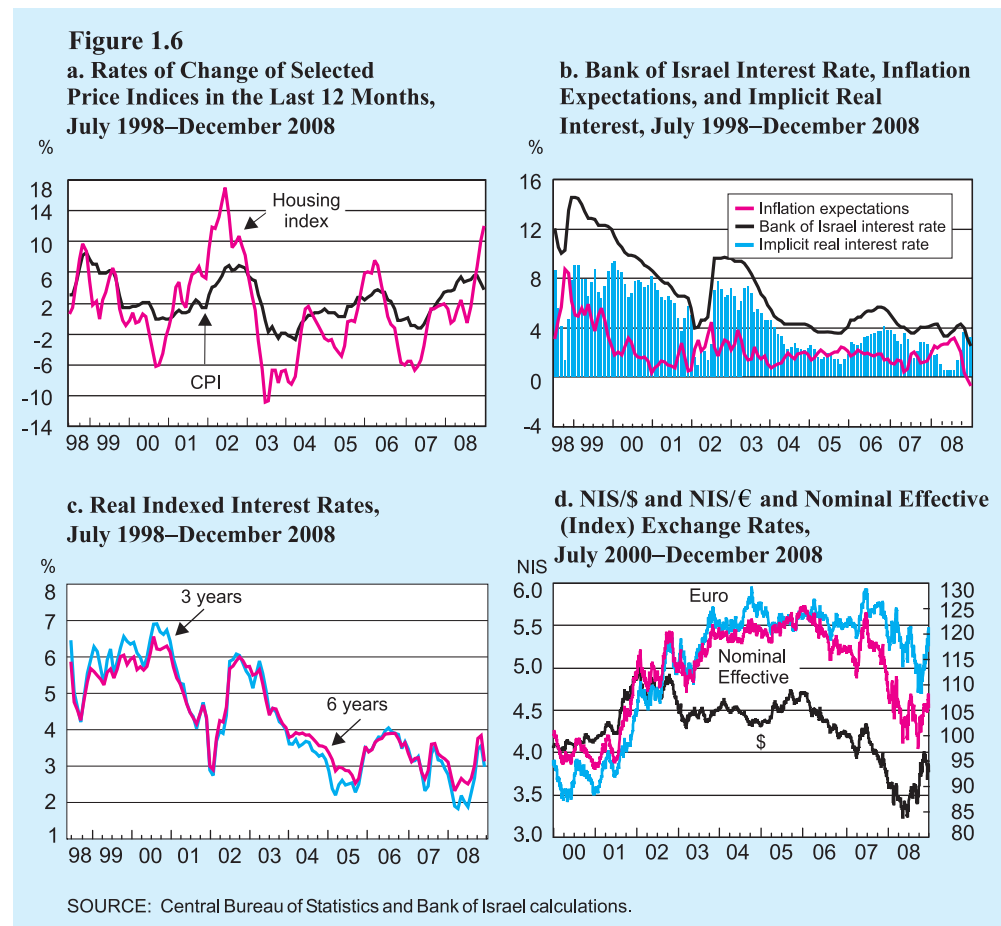
The Consumer Price Index rose by 3.8 percent in 2008, overshooting the upper bound of the target (Figure 1.6). In inflation, as in other matters described in this chapter, the review year was divided into two distinct periods: high until September and much lower from then on, including negative inflation in Q4.

Inflation was high in the first part of the year due to ongoing increases in the prices of fuel, raw materials, and unprocessed food abroad and the continued narrowing of the output gap, which was also reflected in rapid real appreciation. In fact, this marked the continuation of the trend and the forces that operated in the second half of 2007. Inflation pressure from the labor market was mild even though nominal wage rose more rapidly than in previous years. The inflation rate plummeted from September onward due to the abrupt downturn in global prices that had begun several months earlier (Figure 3.4) and the domestic economic slowdown. Another indication of the effect of domestic activity was the decrease in the indices excluding energy, food, fruit and vegetables, and housing at the time. The behavior of the exchange rate offset some of the inflationary effect of global prices and excess demand in both parts of the

The Consumer Price Index rose by 3.8 percent in 2008.

Inflation was high in the first part of the year; from September it declined steeply.

year, due to appreciation in the first half of the year and depreciation in the second half. However, the exchange rate had less of an effect on inflation than it once did because of the decreased use of indexation, including that applying to apartment rents. The strong upward movement of housing prices, especially in the second half of the year—a surprising development in view of the slackening of other kinds of domestic demand—mitigated the decline in the inflation rate.



## b. Monetary policy

Monetary policy in 2008 was unique in several respects: the key rate changed direction frequently; the pace and, on two occasions, the timing of rate cuts from September onward were unusual; the policy was accompanied by extraordinary actions by the Bank of Israel in the use of other tools and operations in other areas; from September on, strong forces acted to offset the effect of policy on market interest rates; and an especially strong correlation was observed between changes in domestic and foreign interest toward year's end. All of these reflect the immense uncertainty, the changes

that occurred in the first part of the year in estimating the risks of the global crisis to Israel and when they would strike the domestic economy, and the steep escalation of the crisis and its repercussions for Israel from September 2008 onward. Until September, the situation elicited contrasting considerations as to the desired interest trajectory; from then on, all considerations pointed in one direction.

The Bank of Israel changed the interest trend three times in 2008, an extraordinary frequency relative to the past (Figure 1.6). The first change in direction—rate cuts in March and April—reflected concern about damage to the level of activity and the reassessment of inflation risks due to the crisis and took place against the background of significant currency appreciation. Accordingly, the rate was cut despite the high inflation environment and excess demand that existed at the time. The rate cuts took the markets by surprise and were accompanied by purchases of foreign currency—initially via nonrecurring intervention and later as part of a systematic program for such purchases (see description below); this also had the potential of slowing the currency appreciation and, in turn, bringing on inflation pressure. The second change in direction—the cumulative raising of the key rate by 1 percentage point starting in June—reflected three factors: the reassessment that the global crisis posed less of a risk to the economy than before, an increase in inflation expectations, and an uptick in actual inflation.

The third change in direction had to do with the watershed change in the global crisis in September. From then until year's end, the rate was lowered by a steep 2.5 percentage points,<sup>3</sup> twice in extraordinary decisions, and sank by year's end to the lowest level in Israel's history. These rate cuts were abetted by the slowing of actual inflation and a steep decline in inflation expectations, but their characteristics show that they were also meant to tackle the implications of the crisis for financial stability, cope with the financing and liquidity hardships, and support real activity—since a monetary policy that intends to cope with inflation only is usually typified by gentle and regular rate adjustments.

The connection between the rate cuts in September–December and the global crisis is also manifested in their strong resemblance to concurrent rate cuts abroad (Figure 3.1) and should be viewed against the background of an exceptionally large and partly coordinated global move. Until September, in contrast, Israel's interest trajectory was different from that in the U.S. and Europe and reflected differences in economic developments and perceptions of the risk that the crisis posed to the respective economies.

One of the exceptional characteristics of Israel's rate cuts since September, as stated, is that the decisions about two of them were made at times other than the regular monthly date. The unusually timed rate cuts allowed policy to respond more seamlessly to the rapid pace of global developments and the accumulation of information about the extent of the crisis; it also assured a better match with the exceptional rate changes

The Bank of Israel changed the interest rate trend three times in 2008.

The cuts in the interest rate since September were related to the worsening of the global crisis.

<sup>3</sup> Including the decision in late December 2008 to lower the rate by 0.75 percentage point in January 2009.

that were made in other countries. This flexibility of response was needed mainly due to considerations of financial stability.

Towards the end of 2008 monetary policy faced exceptional circumstances.

The special circumstances that surrounded the implementation of monetary policy in late 2008 were manifested in additional ways that illuminate the unique difficulties that the policy faced at this time. Monetary policy had to cope with powerful forces that acted to offset its effect on market interest rates. This was one of the reasons for the use—late in the year—of additional liquidity enhancing tools (the Bank of Israel’s liquidity buildup program). The pass-through of the cuts in the key rate to credit rates did not take place immediately due to the widening of spreads (Figure 4.14) and the real expected interest rate did not decline due to the steep and protracted decline in inflation expectations (Figure 1.6). Both phenomena reflected the rapid pace of developments and greater market fears of the intensity of the looming recession, with which the rate cuts could hardly keep up. Furthermore, the cumulative interest reductions lowered the key rate to a nominal point that verged on, although did not fall to, zero. Such an environment raises issues in monetary policy management that also occupy central banks abroad. Finally, the policy mix from September onward was different in Israel than in the developed countries. The developed countries’ governments unveiled massive fiscal intervention programs along with rate cuts; in Israel, in contrast, the government refrained from such intervention until the end of the year, for reasons including political circumstances that thwarted the passage of the 2009 state budget, and settled for several measures that were meant chiefly to alleviate financing hardships (the “Acceleration Plan,” scheduled for implementation in 2009). Accordingly, monetary policy played a greater role in coping with the crisis in Israel than it did elsewhere—it being borne in mind, however, that the implications of the crisis were much milder for Israel than for other developed countries.

The Bank of Israel interest rate reached its lowest ever level.

From a long-term perspective, monetary policy in late 2008 underscored two phenomena that may give evidence of the auspicious developments in Israel and its macroeconomic policy in recent years: (a) the key rate in early 2009 fell to a historical low; (b) in the current crisis, unlike previous bouts of financial turbulence in which a tight monetary policy was needed in order to maintain financial stability and keep the exchange rate from skidding, the Bank of Israel slashed its rate in tandem with central banks abroad. However, the rate cutting was facilitated by developments abroad as well: the current shock, unlike many shocks that buffeted Israel in the past, is exogenous and has had less of an effect on Israel than on other countries. Furthermore, Israel’s rate cutting coincided with similar policies abroad.

Inflation overshot the target.

Also viewed from a multiannual perspective, the annual inflation rate overshot the target range in 2008 for the third consecutive year and has been within the range only two years since the beginning of the decade. A thorough assessment of the monetary policy, however, should take a broader picture into account. First, the policy relates to a continuous inflation target and, from this point of view, inflation was on target over longer periods of time. Second, inflation expectations remained within the range most of the time, even when actual inflation did not—an important reflection of

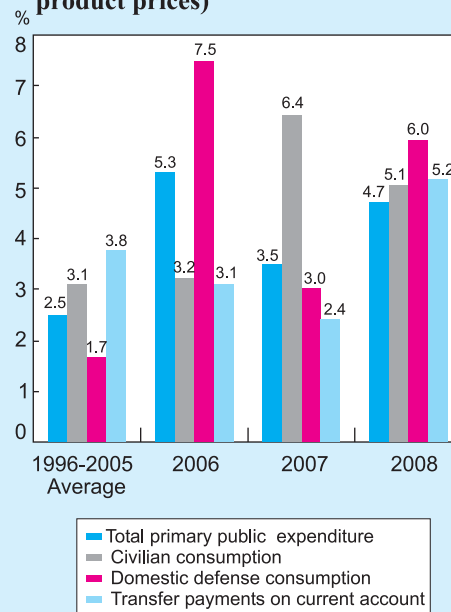
the credibility of the policy. Third, in each of the past three years, the inflation rate changed significantly during the year, largely due to exogenous shocks, i.e., changes in global prices of oil and raw materials. The origin and the extent of surprise of the shock presented policymakers with a special challenge, since coping with exogenous price pressure from the supply side is more complex than contending with demand pressures. As for the element of surprise, since monetary policy has a lagged effect on inflation and tends to smooth the interest rate in ordinary times, it acts to return inflation to the target range after surprises gradually. Furthermore, monetary policy has to strike a balance between the inflation target and considerations of financial stability and the level of real activity, which sometimes present clashing demands. The first part of 2008, described above, is a case in point.

## 6. FISCAL POLICY

The trends in several fiscal aggregates changed in 2008 relative to recent years (Table 1.1). For the first time since the end of the previous recession (2004), the government deficit (excluding net issue of credit) increased, even overshooting the upper bound of its target, and the tax revenue/GDP ratio declined. The public debt/GDP ratio continued to decline but did so much more slowly. These developments trace to the effects of the crisis on the economy, which escalated as the year progressed, coupled with the continued process of lowering tax rates. However, the public expenditure/GDP ratio continued to decline.

The crisis reduced tax revenues on account of real activity by slowing growth<sup>4</sup> and imports (only part of the latter decline originates in the slowdown in growth) and by reducing tax revenue from the capital markets due to the aforementioned decreases. These effects were evidenced in the rates of revenue decrease on account of direct and indirect taxes in the second half of the year. The declines

**Figure 1.7**  
**Real Rates of Change in Public Expenditure, 1996–2008**  
(deflated by index of business sector product prices)



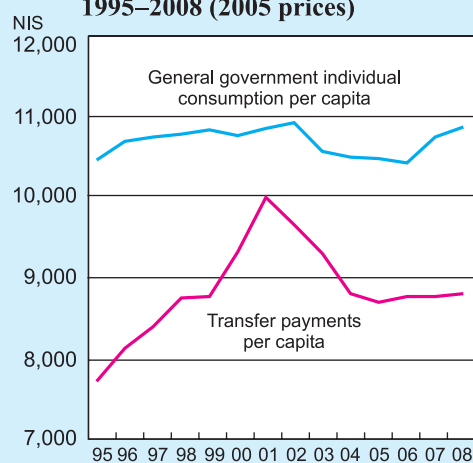
SOURCE: Central Bureau of Statistics.

The crisis reduced tax revenues.

<sup>4</sup> The undershooting of tax revenues relative to the budget outlook cannot be blamed on the growth slowdown because actual growth in 2008 met the outlook. For the same reason, the slowdown cannot explain the entire increase in the deficit in 2008.



**Figure 1.8**  
**Transfer Payments and General**  
**Government Individual**  
**Consumption<sup>a</sup> per Capita,**  
**1995–2008 (2005 prices)**



<sup>a</sup> General government services supplied to individuals, e.g. health and education.

SOURCE: Based on Central Bureau of Statistics data.

Fiscal policy in 2008 was expansionary; tax cuts contributed to the fall in tax revenues.

in purchases of tax intensive imported durable goods in the second half of 2008 were especially salient. Although this component of consumption is especially sensitive to changes in income, as stated, its decrease evidently traces to other factors as well. The contraction of tax revenues from mid-year onward was one of the earliest and clearest indications of a more severe impact of the crisis on the domestic economy. It also demonstrated the high elasticity of tax revenues with respect to various components of activity and triggered fiscal policy's automatic stabilizers at a relatively early stage of the impact of the crisis.

Fiscal policy in 2008 was expansionary, as evidenced in the cycle-adjusted deficit (Table 6.7) and the tax cuts; the latter explain almost half of the

decline in the tax/GDP ratio in the review year. Aberrant expenditure was recorded in December because various outlays on account of 2009 were moved up; this gives the government greater latitude in coping with the crisis during 2009. At year's end, several measures to cope with the crisis were decided upon (the "Acceleration Plan"). Mostly scheduled for implementation in 2009, they concern themselves mainly with guarantees and loans, as opposed to an increase in budget expenditure. The government's ability to respond to the crisis was also limited by the non-passage of the 2009 budget on time. The tax cuts scheduled for the beginning of 2009 went through as planned; this may prove helpful to economic activity.

From a broader perspective, the level of the fiscal aggregates shows the cumulative effect of the insistence on budget discipline, the tax cuts, and the rapid growth in recent years:

- The share of taxes in GDP fell below the average in the developed economies (Figure 6.7) and the tax rate on wages is lower than in those economies at almost all wage levels (Box 6.2).
- The share of public expenditure in GDP fell to its lowest level since the late 1960s and, while slightly higher than in some developed economies, resembles the European Union average (Figure 6.6).
- The public debt/GDP ratio also fell to its lowest level since the 1960s but remained high (78 percent) by the standards of developed economies.



Much of the improvement in these indicators since the end of the previous recession originates in rapid growth and indicates their sensitivity to cyclical changes. This is reflected in the gap that formed in 2008 in the cycle-adjusted deficit between Israel and the developed economies (Table 6.7). The lowering of the debt in recent years reduces the government's interest payments and permits faster increases in other components of expenditure (Figures 1.7 and 1.8).

## 7. THE LABOR MARKET

Developments in the labor market during the review year mirror the economy's transition from rapid growth, accompanied by a excess demand, to deceleration of activity and perceptible moderation of demand. Thus, the market continued to surge in the first half of the year but increasingly showed the effects of the slowdown toward year's end. The surge, a cumulative outcome of growth and additional processes in recent years, placed the labor market at a relatively convenient point of departure for the slowdown.

Reflecting the boom in the labor market, the unemployment rate continued to fall rapidly and settled at 6.1 percent (on annual average), an especially low rate from a long-term perspective (Figure 1.1), as both the number of employed and employment rate climbed swiftly. These developments were powered by an expansion of labor demand that was not fully matched by supply as the economy approached its labor supply constraint. Thus, the excess demand already evident in 2007 increased in the review year. The growth of labor demand mirrored the general increase in demand in the economy and also its growth phase, which is typified by a quantitative increase in factor inputs. Evidence of the excess demand was the decrease in unemployment despite a rising participation rate, an increase in unit labor cost, and acceleration in the growth of nominal wage. The approaching supply constraint was evidenced in the high participation rate (the highest in Israel's history), a slowdown in the growth of this indicator, the low unemployment rate, the transition from part-time to full-time posts, and the steep increase in hours worked per employed person in the past two years. In another indication that the supply constraint was being approached, the economy was increasingly reliant on workers with low labor productivity whose employment changes with the business cycle, a feature that also slowed the growth of total productivity. Thus, the rate of increase in the number of Israelis employed in 2007 decelerated and that of non-Israelis accelerated briskly. Furthermore, contrary to the trend in recent years, the unemployment rate among Israelis with especially poor schooling (0–8 years) plummeted in 2008. However, the increase in the number of foreign workers also reflected laxity in enforcing the policy that called for less use of this source of labor, and the increase in the employment of poorly educated workers may also be indicative of the policy that encouraged them to participate in the labor market.

The boom in the labor market continued in the first half of the year: unemployment fell to a very low level, and employment climbed swiftly.

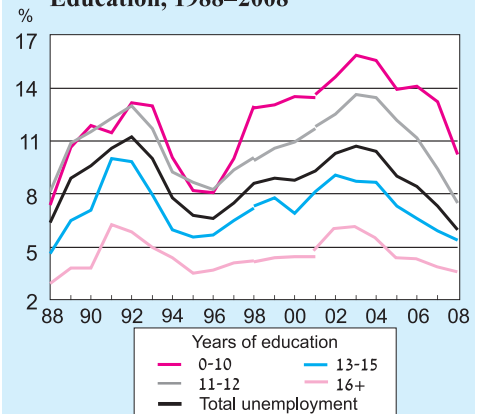
At the beginning of the year the rate of increase of the nominal wage accelerated.

The rate of increase of the nominal wage accelerated in 2008 and reached the fastest rise the end of the previous recession. This development, consistent with the increase in labor excess demand in the first half of the year, may also have been a belated response to the unexpected inflationary spurt in the second half of 2007, which eroded real wages at the time. However, the increase in nominal wages was moderate considering the growth rate and the flourishing labor market; real business sector wages actually slipped slightly in 2008. This moderate increase is characteristic of the current business cycle and persisted even amid continuing growth and falling unemployment. It supported the sustainability of growth and restrained domestic inflationary pressures. The rapid increase in labor supply, changes in the quality and sectoral composition of the labor force, and the continued lowering of direct tax rates provide a partial explanation for the gentleness of the increase in wage. The decline in real wage in mid-year may also reflect surprise over the upturn in inflation at that time. The intensification of the effects of the crisis during the year and fears that the crisis would worsen, especially toward year's end, also had a restraining effect on wages.

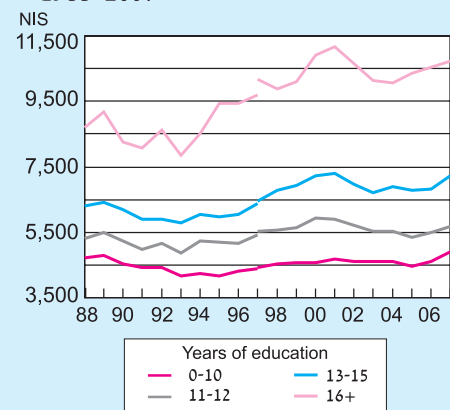
The unemployment rate began to rise in Q4.

Employment among the less educated increased.

**Figure 1.9**  
**a. Unemployment Rate, by Years of Education, 1988–2008**



**b. Real Wage<sup>a</sup> by Years of Education, 1988–2007**



<sup>a</sup> At 2005 prices.

SOURCE: Based on Central Bureau of Statistics data.

The implications of the global crisis for the Israeli labor market were clearly in evidence in the second half of the year. From Q3 onward, nominal wage declined—demonstrating the high elasticity of the labor market, which was also evidenced in the previous recession—and the growth of business sector employment was arrested. The unemployment rate stopped falling in Q3 and began to rise in Q4 for the first time since the end of the previous recession. The effect of the crisis on the economy was also apparent in the sectoral development of employment (see Chapter 5).

The increase in employment among the less educated (those with 0–12 years of schooling) stood out in the review year: the unemployment rate among members of this group declined (Figure 1.9) and the employment of Israelis in commerce and

services, which are intensive in low-educated labor, expanded conspicuously. The improvement in employment of the low-educated relative to the well schooled clashes with long-term trends of relative decline in demand for these workers; it has proceeded since the end of the previous recession and shows that the economic growth has been trickling down, albeit slowly, to weak population groups. However, the unemployment rate among the less schooled remained high and the severe dependence of this group on cyclical elements for the improvement of their employment situation shows how vulnerable these workers are to a slowdown in growth. The expansion of employment among the less educated may also have been abetted by the policy of encouraging them to participate in the labor market. Notwithstanding the excess demand, the commerce and services sector, which is intensive in this kind of labor, posted a steeper decline in real wages than other industries did. Contributing factors in this respect were a change in the composition of the low-educated workers as the especially low-educated entered the market, and the slackness of the supply constraint in this group in view of its high unemployment rate, its still low participation rate, and the increased use of foreign workers.

The contribution of growth and the policy of encouraging the poorly educated to enter the labor market was also apparent in the trend in poverty. The incidence of poverty decreased in 2007 and the first half of 2008 by means of the labor market above all, since the direct contribution of transfer payments to the easing of poverty was weaker than in the past. However, the growth of employment among the low-educated contributed to an increase in poverty among single-breadwinner households, and entering the labor market could not yet assure extrication from poverty (Chapter 8).

The number of foreign workers increased considerably in 2008, continuing the increase evident in 2007, in response to growing excess demand in the economy. The increase clashes with the declared policy of employing fewer foreign workers and gives evidence of laxity in enforcing this policy. The growing use of foreign workers is especially harmful to poorly educated Israelis and contradicts the policy of enhancing their integration into the labor market and reducing poverty.

The number of foreign workers increased.

Government intervention to enhance the labor force integration of weak population groups was scanty in 2008, focusing on enforcement and helping specific groups fit into the labor market. Among other measures, the “Visions for Employment” program (a literal translation of its Hebrew name, Orot le-Ta’asuka) continued to operate (Box 5.3) and an EITC (negative income-tax) program was implemented in several parts of the country toward year’s end.<sup>5</sup> (For a detailed account of the policy measures, see Chapter 5.) By and large, the government’s labor market policy in recent years has focused on increasing supply; such a policy is especially well suited to a period of demand driven growth, in which labor demand is strong to begin with.

<sup>5</sup> For an analysis of initial findings in regard to its implementation, see Recent Economic Developments 123, Bank of Israel, January 2009.

In 2007, the government set the target of boosting the employment rate among those aged 25–64 to 71.7 percent by 2010. Despite the increase in 2008, the rate still fell short of the target. Box 5.2 analyzes the employment rate sector by sector in view of the target.

## 8. THE BALANCE OF PAYMENTS

The current account of the balance of payments had a surplus of \$1.6 billion in the review year, down for the second consecutive year and the smallest since the end of the previous recession (Figure 1.1).

In the balance of payments, as in other domains, developments during the year reflected a combination of processes continuing from 2007 and changes related to the global crisis. The implications of the global crisis were felt earlier and more powerfully in this field than in others, because the balance of payments mirrors the direct effects of events abroad on export demand, capital flows, etc.

### a. The current account

The decline of the current account surplus in 2008, especially in the beginning of the year, is partly the continuation of a process that began in 2007 in view of the exceptional surplus recorded in 2006. The process traces to the buildup of forces that applied upward pressure to the deficit on goods and services account (the import surplus). These forces, which remained in effect in the first half of 2008, included the intensification of excess demand, real appreciation, and the deterioration of the terms of trade. The global crisis precipitated a steep decrease in exports late in the year, although the damage to many export industries had become visible earlier, and contributed to the formation of a large deficit on the income account. The buildup of the import surplus demonstrates that the shock to the domestic economy was exogenous; accordingly, the response was a decline in exports and a milder and slower response of imports, which reflects the trickling down of the crisis to domestic demand. Thus, while the pace of import volume growth (excluding diamonds) decreased relative to its especially strong rate of increase in 2007, it resembled that of 2005–06. As the year wound down and the crisis worsened, the decreases in world fuel and commodity prices mitigated the increase in the import surplus.

Steep real appreciation continued for the second consecutive year. Although it was abetted by several fundamental factors, including the output gap and the current account surplus, these factors cannot explain the entire appreciation, indicating that over-appreciation ensued in 2008 (Box 2.2). The over-appreciation may have originated in the faster and more powerful effect of the crisis on foreign economies than on Israel's, inducing an increase in capital inflows and, in particular, the realization of Israelis' investments abroad. Appreciation erodes the current account surplus mainly by increasing imports and, to a lesser degree, causing exports to decline. The pace of

The current account surplus fell; in the last quarter of the year exports fell sharply.

Steep real appreciation continued for most of the year.

real appreciation escalated in the first half of the year and the nominal exchange rate of the NIS against both the USD and the “currency basket,” weighted by the share of each basket currency in Israel’s foreign trade, also appreciated strongly during that time.<sup>6</sup> The rapid appreciation was one of the considerations behind the Bank of Israel’s decision to increase its purchases of foreign currency,<sup>7</sup> and the purchases (which began in March) did appear to slow the nominal appreciation.<sup>8</sup> However, the rate increases in mid-year and, in turn, the widening of the U.S.–Israel interest spread, had an upward effect on the appreciation. Toward year’s end, the real appreciation was arrested.

The escalation of the global crisis late in the year stopped the protracted deterioration of Israel’s terms of trade. The deterioration of the terms of trade, powered for several years by the steep rise in world prices of fuel, raw materials, and food, made a salient contribution to the buildup of the import surplus and the acceleration of inflation in 2007–08. The turnaround of global prices late in 2008, foremost in fuel, improved the terms of trade enormously (Figure 7.2) and made an important contribution to restraining the import surplus and bringing down the inflation rate at year’s end.<sup>9</sup> The price decreases also mitigated the domestic economic consequences of the global crisis both on the supply side and in terms of harm to disposable income. Analysis of the factors that affect manufacturing exports shows that they are strongly influenced by the terms of trade (Box 2.3).

From a sectoral perspective, mixed-technology exports (foremost of chemicals) surged in 2008, pursuant to strong growth in 2007, in view of the global surge of commodity prices. However, high-tech (both goods and services) remained central in exports. Israel has a higher share of high-tech in its total exports than almost all developed countries, reflecting a revealed comparative advantage in this type of exports, especially in services (Box 7.1).

After an anomalous surge in 2007, the volume growth rate of imports in 2008 was similar to the 2005–06 level even though the growth rate of the economy slowed. Import growth derived from, among other things, the domestic excess demand, the ongoing decline in the relative prices of imported consumer and investment goods (Table 7.6), the currency appreciation, and an additional tax cut on motor vehicles at the beginning of the year. Since raw material imports are price inelastic, the increase in their prices around the world had little effect on their volume increase.

The income account recorded a large deficit in 2008 after several years of steady improvement, explaining much of the deterioration of the current account surplus. The deficit was abetted by a decline in Israelis’ income on investments abroad, tracing to lower yields on foreign debt instruments owned by Israelis and realization of investments abroad in view of the economic crisis.

The deterioration in Israel’s terms of trade stopped.

The income account recorded a large deficit in 2008.

<sup>6</sup> For discussion of developments in nominal exchange rates, see Chapter 4, Section 5a.

<sup>7</sup> See Bank of Israel press release, July 10, 2008.

<sup>8</sup> For discussion of how the purchases affected the exchange rate, see the Financial Account section in Chapter 7.

<sup>9</sup> For detailed discussion of the terms of trade, see the Current Account section in Chapter 7.

## b. The financial account

The financial account provided an emphatic and rapid expression of the development of the global crisis and changes in the assessment of Israel's relative situation during the year. The evidence appeared in the strong connection between the timing of the developments and the response of portfolio capital flows, and in the intensity of the reactions. The intensity manifested itself in phenomena that clashed with trends in recent years that had been based on structural changes in, and the strong performance of, the domestic and foreign capital markets: this year, foreign investment inflows and Israeli outflows decreased.

In the first half of the year, the inflow of foreign portfolio investment continued; thereafter, foreign investors realized financial assets.

In the first half of the year, the inflow of foreign portfolio investment continued, setting Israel apart from the decline in emerging markets. This, coupled with the superior yield of Israel's equity indices and its currency appreciation, reflected the assessments, dominant at the time, that the economic impact of the crisis would be especially mild in Israel's case. Such assessments were also reflected in the Bank of Israel's rate increases at the time. In the second half of the year, the worsening global crisis prompted foreign investors to realize Israeli financial assets on a rather large scale. (See the Financial Account section in Chapter 7.)

The decline in Israelis' portfolio investments abroad in 2008 was notable as were differences among types of investors. While institutional players, mainly pension funds, built up their holdings of foreign equities, households realized foreign assets, chiefly by redeeming mutual and provident funds. This disparity may reflect differences in the respective investors' saving horizons, assessments of risks, or ways of responding to risks. However, it may also indicate a mismatch between households' portfolio preferences and the composition of the portfolio that the institutional players build for them—a possibility also suggested by additional phenomena in the capital market. (See discussion of the financial system.) Israeli banks realized investments in foreign banks that proved to be risky, in contrast with the upward trend in these investments over the past decade.

The Bank of Israel started to buy foreign currency.

In 2008, the Bank of Israel intervened in the foreign currency market for the first time in ten years. From March onward, the central bank made regular purchases of foreign currency as part of a declared program that aimed to build up its foreign reserves; in all, it bought around \$12 billion during the review year.<sup>10</sup> Thus, the program began before the global crisis worsened in September and before its implications for Israel took a turn for the dire. The buildup of the reserves mitigates the risk of a domestic financial crisis, the importance of which increases due to the global crisis and the escalation of risks and uncertainties. The abating of risk may also lower the cost of raising capital, although it comes at a cost to the economy because of the lower yield on a short-term safe asset. A cross country comparison shows that Israel's reserves at year's end (after

<sup>10</sup> The first intervention, in the second week of March, was explained as a response to anomalous behavior of the exchange rate and was not associated with the level of the reserves. On March 20, the reserve buildup program was released. The increase in the level of daily purchases as part of the program, starting on July 10, was also explained in light of the currency appreciation.



the buildup) were not exceptionally large by the standards of countries that exhibit similar risk levels (Box 7.2).

## 9. TARGETS AND POLICIES FOR COMING YEARS

The immediate policy challenge concerns coping with the crisis. Furthermore, lessons need to be learned in the financial domain. Beyond these, however, policy has to contend with the long-term challenges that Israel's economy and society face.

### a. Coping with the global crisis<sup>11</sup>

The goal of the policy is to ease the effect of the looming recession on growth, employment, and welfare while minimizing the impact on the economy's long-term growth capacity. A variety of measures that address both the real aspects and the difficulties in the financial system is needed. However, since the crisis is a global one and Israel's economy is small, open, and strongly dependent on world demand, policy cannot offset all the damage that the crisis will inflict.

Measures are needed that will deal with both the real aspects and the difficulties in the financial system.

The measures to be taken should satisfy several principles: their scale should be significant; they should be immediately applicable and should have a rapid and strong effect on activity; they must be varied, temporary, and flexible in terms of the duration, nature, and scale of the intervention; and they must be as consistent as possible with long-term policy targets.

The fiscal framework should strike a balance between the expected benefits of the intervention and the maintenance of fiscal credibility in view of the high public debt/GDP ratio. The measures taken in the financial field should alleviate the business sector's credit difficulties and reinforce trust in the financial system. The tools proposed in the real domain should stimulate demand and sustain employment in domestic oriented industries, whereas those relating to export oriented industries should preserve human capital and create an infrastructure for response to the growth of demand once the world recovers from the crisis. The measures relating to the labor market should serve the goals of employment, sustaining demand, welfare considerations, and the government's long-term targets.

Implementation of the measures rapidly and on the requisite scale is a policy challenge of the highest order. Some of the measures proposed below have already been adopted and budgeted as part of the Ministry of Finance's "Acceleration Plan" and in other settings. For others, a decision has been made but budgeting has been inadequate or not yet provided at all.

<sup>11</sup> For a detailed description of the desired policy to cope with the crisis, see Israel and the Global Crisis: Policy Recommendations for the Government, Bank of Israel, March 2009 (in Hebrew).



*(1) The fiscal framework*

An increase in expenditure should be based on temporary measures and on bringing forward planned outlays.

The budget cost of the proposed measures involves a measured increase in public expenditure in 2009 beyond the existing expenditure ceiling, coupled with an increase in the deficit. Thus, the policy in question is one of fiscal expansion beyond the “automatic stabilizers” that reduce tax receipts during a recession and are expected, in themselves, to cause the deficit to overshoot the current target. It is true that increasing the deficit exposes the economy to greater risk, especially given the high level of the public debt/GDP ratio (78 percent), but the credibility that the fiscal policy has amassed in recent years makes the risk bearable. Nevertheless, to mitigate the risk and preserve credibility, the increase in expenditure should be based on temporary measures and on bringing forward outlays planned for subsequent years. The mix of extra spending that will meet these requirements and contribute the most to the attainment of the policy goals is discussed below. Given the temporary increase in the deficit, the government should adopt a policy rule reflecting its commitment to reducing the debt/GDP ratio rapidly in the medium term and including detailed measures to make sure the rule is upheld. Despite the precautions, the continuation or further worsening of the recession may push the deficit to an unexpected level and endanger fiscal credibility. In such a case, the deficit increase may be restrained by postponing the tax cuts that were planned for 2010 or suspending some of the proposed measures. Apart from increasing expenditure, the expenditure ceiling should be raised to allow the government to fund credit and guarantee programs. Box 6.1 discusses the desired fiscal policy during the crisis.

*(2) Measures relating to the real economy*

Below are measures that will put the added budget expenditure to optimal use and are consistent with the policy goals and principles set forth. Emphasis is placed on measures involving temporary increases in expenditure or earlier performance of expenditure and measures that promote the attainment of long-term policy goals.

**The labor market**

The proposed measures are meant to mitigate the deleterious effect of the crisis on employment, ease the blow to welfare due to the expected upturn in unemployment, and stem the exacerbation of poverty. These steps will also help to preserve consumers’ purchasing power and, in turn, will abet aggregate demand. Most of them are consistent with the government’s long-term objectives of enhancing the labor market integration of weak population groups and its policy of reducing poverty mainly by integrating the poor into this market.

- **Immediately extend eligibility for unemployment compensation and relax the qualifying period requirements**—unemployment compensation is exceedingly important in enabling individuals to cope with the decline in income occasioned by dismissal from work and leaving them enough time to

find work that matches their qualifications. Ongoing cutbacks in the terms of eligibility for unemployment compensation and the duration of eligibility for it have degraded this instrument badly. Today, only about one-fourth of the jobless receive unemployment compensation. The recommendation expressed above is consistent with the foregoing intervention principles: it can be applied at once and its effect is fast because it immediately transfers income to consumers whose current income is relatively low (because they have been fired), meaning that their marginal propensity to consume is high. The extent of the intervention varies with the intensity of the crisis, meaning that it will ebb once unemployment does. In other words, it is flexible and temporary. The basic purpose of unemployment compensation is to cope with adverse shocks to labor demand; this is indeed the nature of the current crisis. The immediate application of these policy adjustments will ease individuals' near term uncertainty about their income level (given the possibility that they will be laid off); accordingly, the very announcement of the change in terms will mitigate the current propensity to reduce consumption for precautionary reasons; thereby, it will help to sustain demand.

- **Reduce the number of foreign workers.** Enforcement for this purpose should be toughened in regard to illegal foreign workers; the resolutions on reducing the number of legal workers in construction and manufacturing should be implemented; and the programs on which decisions have already been made (these are on a limited scale for the time being) to replace foreign workers with Israelis in agriculture and long-term care should be applied.
- **Extend the EITC and “Visions for Employment” programs to the countrywide level.** These programs are aimed at encouraging integration into the labor market, and thus reducing poverty. Their extension at this time is therefore consistent with long term objectives. It brings forward expenses, and helps to boost the income of those with a high marginal propensity to consume, thereby encouraging domestic demand.
- **Expansion of vocational training.** The expansion has been budgeted but should be applied in an expedited manner that corresponds both to the types of occupations that employers need and the characteristics of the trainees. In particular, in-plant training should be expanded.

### Manufacturing and exports

In export oriented industries, which are especially menaced by the global crisis, the government cannot influence demand. Thus, the proposed measures for these industries focus on supply-side relief in view of greater financing problems, the preservation of employment and human capital, and the creation of an infrastructure for responding to the upswing in global demand once the world recovers from the crisis.

- **Increase the R&D budgets**—R&D activity is intensive in human capital and especially dependent on financing. The recommendation speaks of an increase in the R&D subsidy budget beyond the supplements recently decided upon, mainly

by augmenting the budget of the Chief Scientist at the Ministry of Industry, Trade, and Labor.

- **Increase the foreign trade risk insurance support**—this measure dovetails with the characteristics of the crisis, which makes the raising of finance particularly difficult, and may help to boost exports.

### **Infrastructure, construction, and other nonrecurring projects**

Since the measures in this field are meant to bolster domestic demand, they focus on labor intensive activity. The emphasis is on moving up expenditures or nonrecurring projects that are ready for imminent implementation.

- **Expedite the performance of infrastructure projects already included in the 2009 budget**—the “Acceleration Plan” approved in 2008 establishes a mechanism to accomplish this; the challenge lies in implementing it in 2009.
- **Make additional projects, especially in public transport, available for earlier implementation**—although this will probably contribute little to domestic activity in the immediate term, the measure satisfies the principle of expediting expenditure and corresponds to the need to give priority to public-transport investment.
- **Renovate public buildings and complexes in urban and tourism centers**—these construction projects are intensive in low-educated labor, and make a strong contribution to employment and domestic demand. The rundown condition of some of Israel’s tourism centers is discussed in Box 2.4. A correct choice of projects in this field will make it possible to satisfy many of the desired principles, by choosing projects that are temporary, immediately implementable, and flexible. The process of mapping the appropriate projects and starting to work on them may be speeded up by inviting municipal authorities and other entities to tender bids for projects in their purviews. The government should choose, among them, those that correspond best to the policy objectives. Another possibility is to move up other construction projects, e.g., the relocation of military bases to the Negev.
- **Have government ministries perform nonrecurring projects**—government ministries should propose programs that involve temporary and nonrecurring expenditure increases within their purviews. The programs chosen should be those that correspond to the foregoing policy principles, including contributions to employment and demand.
- **Expedite the performance of multiannual programs for the education system**—several programs relating to the education system, e.g., “New Horizon,” are earmarked for gradual implementation in coming years. Their implementation should be expedited by moving up expenditure to 2009. This activity meets the employment intensity criterion, brings expenditure forward, and corresponds to long-term objectives in the enhancement of education.
- **Encourage construction activity** by giving banks guarantees for residential construction loans and allowing a limited deferment of contractors’ tax and

development payments. The justification for intervening in this industry is its severe dependence on credit and its intensity in domestic activity and employment. The Ministry of Finance has proposed a similar program.

### *(3) The financial domain*

The current recession differs from previous recessions in Israel in that the financial system's hardships are central in the crisis, although less in Israel than in other countries. Accordingly, substantial measures are needed in the financial domain, chiefly to alleviate credit difficulties for the business sector that originate mainly in the precipitous decline in nonbank credit supply.

Most of the measures involve state guarantees to encourage the financial institutions to lend more to the business sector. Although the guarantees will have little effect on the level of budget expenditure in 2009, they imply that the government will undertake more risks that, if realized, may commit it to future budget expenditure and higher debt.

Many of the measures that follow were adopted in 2008 and are in various stages of implementation. They are desirable and important, but it is crucial to ensure that they are implemented fully, rapidly and smoothly. Later on, the use of further tools for the treatment of the nonbanking credit market may be needed.

Below are measures that are already under way and some improvements that should be made in them:<sup>12</sup>

- **Procedure for the recycling of corporate debt (the “credit officers” program)**—the program is meant to facilitate the recycling process and comes at no cost to the budget. To streamline the process, a central agency to deal with all corporations in default should be established.
- **Establishment of investment funds in partnership with the private sector (leverage funds)**—the program is meant to enlarge nonbank sources of credit for the corporate sector. The plan, to be vested by the government and institutional investors, will focus on rolling over existing debt by issuing loans and buying bonds of corporations that do most of their activity in Israel. It is important to steer fund managers away from conflicts of interest and establish a performance schedule. The possibility that the rate of insurance proposed by the government is too high should be examined.
- **Government guarantees for banks so that they can raise capital and increase their lending sources**—the advantage of this program is that it can be activated at once and is less risky to the government than the leverage funds. However, the program does not address the nonbank market and is not an alternative to leverage funds.
- **Enlarging the small-business loan fund**—small businesses are especially vulnerable to recession, the contraction of credit supply, and an increase in credit

<sup>12</sup> For a detailed description of the measures taken, see Chapter 4, Section 2c.

cost. The loans given out by the fund (which has existed since 2003) should be increased and its arrangements should be improved in several ways so that its sources may be used more efficiently.

- **Establishment of a medium-business loan fund**—this government-guaranteed fund was established at the beginning of 2009 in a format resembling that of the small-business fund.

In addition to these measures, a safety net program for pension savings was approved in early 2009. This program is not related to the treatment of the credit difficulties; its goals are to limit possible harm to savers approaching retirement age and help to restore stability in the financial markets.

The Bank of Israel took several measures to support activity and lower borrowing costs. It cut its benchmark rate significantly and set it at a very low level in early 2009. It also adjusted its monetary toolkit in several ways, including narrowing the spread around its lending rate at the credit window and on banks' deposits, in order to enhance liquidity. In February 2009, the Bank began to purchase government bonds in the secondary market in order to bring down long-term interest rates. The Bank of Israel will continue to use the tools available to it in order to boost liquidity and ease the terms of credit.

#### b. Lessons in the financial area

The deficiencies in the financial system should be corrected and its risks reduced.

The turbulence that is battering financial systems around the world, including Israel's, in the wake of the global crisis reveals many deficiencies in the systems' performance and demonstrates the need for substantial action to correct the deficiencies and mitigate system risks. Given the resemblance of some causes of the crisis abroad to those in Israel, the insights that have accumulated abroad may be put to use but must be tailored to domestic circumstances.

Many of the risks and the requisite measures in Israel were known before the crisis broke out. They were discussed extensively in view of the need, conspicuous even then, to align the regulation and supervision systems with the changes that followed the reforms that had been introduced in the system. In practice, not enough was done at the time. Be this as it may, it is important to bear in mind that the enhancement of supervision systems does not create immunity to risks, and that it is inherently difficult for these systems to keep track of the markets and adjust themselves to the rapid pace of market developments.

The requisite measures are explained in detail in Section 2b and Box 4.1 of Chapter 4. Their gist follows:

- **Adjust the regulation of nonbank financial institutions and place them under tighter supervision**—the supervision of nonbank financial institutions, insurance companies in particular, should be tightened. These institutions have become main players both in lending and in managing the public's savings. The conflicts of interest in their activities should be narrowed and the composition of their portfolios and risk exposures should be placed under restrictions, especially

in regard to portfolios that they manage for savers approaching retirement age. The structure of incentives for those who manage the public's savings needs to be dealt with to discourage them from taking excessive risks.

- **Require greater transparency**—composite financial instruments and securitization transactions, in which the implicit risks were not understood, were marked by a salient lack of transparency, much as occurred in banks' off-balance-sheet activity. A transparency problem also surfaced in the activities of rating companies. Greater transparency should be assured in respect to the implicit risks in portfolios managed for savers, especially where long-term savings are concerned.
- **Rating companies**—these companies play a central role in the development of the crisis abroad and in Israel. Reliance on them in making investment decisions should be reduced, financial intermediators should be required to assume greater responsibility for the evaluation of implicit risks in investments, the rating process should be improved, and conflicts of interest should be dealt with.
- **Accounting and disclosure**—the accounting principles should be adjusted to improve disclosure of off-balance-sheet instruments and the exposure related to investing in them. The valuation rules for nontradable instruments should be adjusted.
- **Structure of supervisory authorities**—coordination and information exchange among supervisory authorities should be stepped up. The desired structure of the supervisory authorities and the optimum extent of integration among them are still contested.
- **Securitization market**—this market in Israel, unlike other developed countries, is only in its construction phases. As the market in Israel develops, the lessons accumulated abroad in this field due the crisis should be applied. One of the lessons of other reforms in Israel is that these lessons should be assimilated while the market is being built in order to avoid a regulatory lag as the market evolves. Care should be taken to keep assets simple and transparent so that investors and rating companies may understand them, and caution must be used in devising the structure of incentives in the market.

### c. Targets beyond the crisis

Apart from tackling the crisis and its implications, the policy should treat the various basic problems and long-term challenges of the economy and society in order to assure continued improvement in standard of living, welfare, and quality of life. Although matters have improved in several fields due to rapid economic growth and macroeconomic policy, some of the improvement is merely cyclical and no real improvement has occurred in other fields. It is important to distinguish between improvement rooted in cyclical factors and improvement based on structural factors and to adopt a policy that will bolster the latter. Strengthening the structural factors will also make the economy more resilient to crises such as the current one.



Israel's standard of living and long-term growth rate are low by developed countries' standards.

By examining the pace of economic growth, one may appreciate the importance of distinguishing between cyclical improvements and the long-term challenge. Despite rapid growth since the end of the previous recession, Israel's standard of living and long-term growth rate are low by developed countries' standards. The growth rate has been slower than these countries' rates in the past decade (Table 1.2). Observed across an even longer term, the disparity in per capita product relative to the United States is similar today to its early 1980s level (Figure 2.4); it originates in Israel's low labor force participation rate and lower productivity per hour worked.

Below are several long-term challenges that the Israeli economy faces and policy measures that are needed to cope with them. The list is not exhaustive; for the most part, it focuses on issues discussed at length in other sections of this Report:

#### *(1) Fiscal policy*

**Lowering the debt/GDP ratio**—although this ratio declined considerably in recent years, due to economic growth and steady fiscal discipline, it remains high by developed countries' standards. The current level of the ratio aggravates the economy's risks, makes capital more expensive to raise, and leaves the government less maneuvering room to adopt countercyclical policies.

**The requisite policy**—while increasing the deficit in the short term in response to the crisis, the government should adopt a multiannual fiscal rule for the medium term that will bring down the debt/GDP ratio rapidly within this term. The government will have to cope with the large disparity that exists between the expenditure trajectory implied by decisions on multiannual spending programs and the need to bring the debt down. If expenditure is increased in accordance with existing multiannual plans without a cutback in other expenditure or a tax increase, it will be impossible to return to the downward path of the debt/GDP ratio and the economy will be exposed to the significant risks that the high level of this ratio brings in train.

#### *(2) Monetary policy*

Just as various countries updated their laws that regulate central bank activity in recent years, Israel should complete the legislation of a new Bank of Israel Law. The new statute should assure the central bank's independence and define its goals clearly. The principal goal of the Bank should be defined as the maintenance of price stability in accordance with the target that the government sets, while supporting other goals—including growth and employment—without causing detriment to price stability and the orderly activity of the financial system. The Bank should be given full independence to apply the tools that are needed to attain its goals. A monetary committee should be established for decision making on monetary policy. The committee should be chaired by the Governor of the Bank of Israel and should also include members from outside the bank who have appropriate qualifications and are free of conflicts of interest.

A fiscal rule should be adopted that will bring down the debt/GDP ratio in the medium term.

It is important to complete the enactment of a new Bank of Israel Law.



*(3) Labor market and poverty rate*

In recent years, the government has pledged attention to labor market and poverty issues, as reflected (among other things) in adopting the “economic social agenda,” setting targets for the employment rate and the contraction of poverty, and implementing programs such as “Visions for Employment” and the EITC (negative income tax)—albeit on less-than-countrywide scale thus far. These measures point in the desired direction and should be followed by further action to increase employment rates, especially among Arabs and the ultra-Orthodox. This would also help to mitigate poverty, which focuses on these two population groups.

**Raising the employment and participation rates**—these rates (Table 1.2) —especially low among Arabs, the ultra-Orthodox, and the low-educated—are one of the main reasons for Israel’s relatively low per capita GDP and high incidence of poverty. Box 5.2 presents a detailed analysis of the employment rates of various population groups; Box 5.1 analyzes the labor force participation patterns of Israel’s Arab population.

**Lowering the poverty rate**—Israel’s poverty rate is high by the standards of developed countries and from its own long-term perspective, even though it fell in 2007 and the first half of 2008. It also focuses on the ultra-Orthodox and the Arabs, two groups that are typified by low employment rates and high birthrates.<sup>13</sup> However, labor force participation does not assure one’s extrication from poverty. Indeed, the poverty rate among single-breadwinner households has actually been rising for reasons including the influx of weaker population groups to the labor force. (For a detailed discussion of the poverty rates, see Chapter 8.)

**The requisite policy**—as stated, the government has done quite a bit in these fields in recent years and should continue focusing on enhancing the labor market integration of weak population groups and specific sectors: improving their willingness to join this market, increasing their prospects of finding work, and enhancing their earning ability. This approach is consistent with the policy that regards the labor market as a central instrument in bringing down poverty and also corresponds to the targets that the government set in regard to raising the employment rate and the income growth rate among bottom quintile households. (The current rates are shown in Table 1.1.)

As for what has to be done to attain these targets in the labor market, the desired measures for the long term overlap with the foregoing recommendations that relate to tackling the crisis. As stated, the number of foreign workers should be reduced with alacrity and resolve, the EITC and “Visions for Employment” programs should be expanded, and the vocational training array should be rehabilitated and tailored to the labor market’s needs. Although the crisis provides an incentive to take these actions, they are necessary irrespective of the crisis. In the longer term, improving the

Efforts to enhance the integration into the labor market of certain sectors of the population should be continued.

<sup>13</sup> For a far-reaching discussion of employment and poverty in ultra-Orthodox society, see Section 2 of Chapter 8 of the 2007 Bank of Israel Annual Report. Poverty in Bedouin society is discussed in Box 8.2 of the 2006 Annual Report.

education system is central in the enhancement of earning ability, the narrowing of gaps, and the mitigation of poverty.

#### *(4) The education system*

Educational achievements of Israeli students are lower than those of students in advanced economies; there are large disparities between achievements of students from different socioeconomic backgrounds.

**Improving the quality of the education system**—a cross country comparison of student achievements shows that Israel’s students perform poorly by the standards of developed countries, the proportion of outstanding students is low, and the disparities in achievements between students from weak socioeconomic backgrounds and those from affluent backgrounds are among the highest in the developed country class. (See Chapter 8 for details.) Even though Israel has one of the highest ratios of education expenditure to GDP among the developed countries, its per student education expenditure falls significantly short of the developed country standard due to the high proportion of children in its population (Box 8.1).

##### **The requisite policies:**

- Expedite the implementation of multiannual plans for the education system—The requisite measures for the enhancement of education may be combined with the effort to surmount the economic crisis by implementing programs such as “New Horizon” earlier than planned.
- Affirmative action—one way to narrow gaps among students of different socioeconomic backgrounds is an affirmative action policy that gives students from weak backgrounds preference in resource allocation. This policy is discussed at length in Section 2 of Chapter 8.
- Higher education—the problems that beset the higher education system, including resource distress and the need for system reform, have to be confronted.

#### *(5) The pension system*

In response to the blow that pension savings suffered in the current crisis, a safety net for savers verging on retirement age was swiftly adopted. Regulation and supervision of the pension saving system should be improved in order to mitigate the risk of similar damage in the future and a mechanism that will allow the system to cope with future financial crises should be set up where necessary.

#### *(6) Infrastructures*

The level of some of Israel’s infrastructures is inadequate. Several infrastructures show a steadily widening imbalance between demand and supply and some are inefficiently managed. The main problems are the following:

- The level of public transport, especially the kind that serves commuters to metropolitan employment centers, is unsatisfactory, and not enough is being done to shift a significant number of commuters from private vehicles to public transport. The lack of a mass transit system is especially conspicuous in Greater Tel Aviv.

- Multiannual programs have been adopted in several domains, such as rail and highway investment, but their cost has to be reconciled with the overall multiannual framework of fiscal policy.
- In the fields of energy and water, a significant supply–demand gap is taking shape and may escalate into a crisis. Even though these developments have long been foreseen, not enough has been done to cope with them in time.

**The requisite policies:**

- Public transport should be upgraded significantly, the large investments that are needed for this purpose should be made, and public transport investment should be given priority over road investment.<sup>14</sup> Projects in this field should be expedited as much as possible as part of the effort to cope with the crisis.
- Electricity generation capacity should be expanded and structural changes in electricity system for greater functional efficiency should be considered. Furthermore, action should be taken to restrain electricity demand by pricing and additional measures.
- Working efficiency at Israel's ports should be improved: the extent of success in the reform that aimed to streamline the functioning of the ports is discussed in Box 2.5.

Public transport should be upgraded.

The treatment of demand–supply gaps in various infrastructures should not be based solely on expanding supply. Since the use of some infrastructures has very significant economic and environmental externalities, a policy that restrains demand by means of pricing and taxation is also needed in various domains, especially private transport and electricity and water consumption.

A policy that restrains infrastructure demand by means of pricing and taxation is needed.

*(7) Environmental issues*

Environmental issues are of immense importance in Israel due, among other things, to its being a small and densely populated country that has a relatively high rate of population growth. Coping with these issues is important for the enhancement of welfare and quality of life; disregarding them also carries economic costs. Another reason for the necessity of confronting the issues is the importance that other countries and international organizations—including the OECD, for which Israel has begun the accession process—attribute to these issues. Israel must prepare in good time for the possibility that it will be asked to take environmental measures—under international agreements or to avert reciprocal measures by countries that wish to protect themselves from unfair competition from countries that do not adopt environmental constraints.

Environmental issues should be dealt with.

The range of environmental issues is very wide. The environmental effects include global warming; pollution of air, soil, and water sources; and degradation of open spaces. The activities that exacerbate these phenomena include fuel combustion for electricity generation and transport; sprawl of built areas for residential and other

<sup>14</sup> The desired policy in regard to public transport is discussed at length in Box 2.5 of the 2007 Bank of Israel Annual Report.

uses that damages open spaces and water sources; and burial of waste, which entails allocation of land and may pollute soil and water sources. The policy measures that may be taken are very diverse—possibly including steps to mitigate the extent of the activity that causes the problem (reducing electricity consumption or private vehicle use), reducing the quantitative extent of the harmful agent generated by the activity at issue (reducing emissions by using more efficient technologies and cleaner fuels, reducing quantities of waste), dealing with the harmful agent after it is created (recycling, treatment of waste and toxins), and correction of damage already caused (revitalization of rivers and quarries). For a survey of environmental issues, see Section 3 of Chapter 8.

It is important to  
restrain the use of  
cars.

One of the most important environmental issues relates to restraining the use of cars. This necessity was recently expressed in a salient way in the report of the Green Taxation Committee.<sup>15</sup> Section 3 of Chapter 8 presents three topics that, if addressed, may help to reduce private vehicle use: the “company car” arrangement, taxation of workplace parking, and policy on the establishment and expansion of small localities.

<sup>15</sup> Report of the Interministerial Green Taxation Committee—Ministries of Finance, Transport and Road Safety, Infrastructures and Environmental Protection, January 2008.