

Chapter 1

The Economy and Economic Policy

- In 2012, economic growth slowed to 3.1 percent, inflation was 1.6 percent, the current account was close to balance, the unemployment rate remained stable at its lowest level in the past 30 years, and the government deficit widened to 4.2 percent of GDP.
- GDP growth slowed in line with a slowdown in global growth, an increase in expenditure on import of energy products, and a moderation in growth in the construction industry.
- Monetary policy supported economic activity, through measured reductions in the Bank of Israel interest rate, continuing the reduction in the second half of 2011.
- The decline in tax revenues as a percent of GDP led to an increase in the government deficit beyond the target. The government first allowed the “automatic stabilizers” to operate, but with the widening of the deficit, decided to increase taxes. The structural deficit, which remained large and limited the government’s ability to deal with crises in the future, as well as the increase in budget commitments beyond the expenditure rule, present a challenge to fiscal policy.
- The increase in home prices resumed during the second half of 2012, and for the entire year, home prices increased by 5 percent in real terms. The number of transactions and housing credit both grew significantly, and activity, employment and wages in the construction sector continued to grow, though there was some slowdown in building starts. These developments were affected by the multiyear shortage in homes relative to population needs, limitations in issuing building permits which negatively impacted the supply of homes, as well as the decline in interest rates and alternative yields, which supported demand for homes both for residential purposes and as investment assets.
- In 2012, share prices increased slightly, relative to their increases worldwide. Yields on Israeli government bonds continued to decline during the year, and reached a historic low, but at the same time there was an increase in the yield spreads versus similar bonds of other advanced economies.
- Two risks left their mark this year on developments in the Israeli economy: the global economic risk, which resulted mainly from the debt crisis experienced by many countries in the world, particularly in Europe; and Israel’s domestic risk, which resulted from geopolitical developments.
- The economy’s relatively good macroeconomic situation enables the country to begin dealing with structural problems, such as: (a) the government’s large structural deficit and the increase in commitments to expenditures beyond those allowed by the expenditure rule require an immediate cut in expenditure and/or increased tax revenues; (b) labor productivity in Israel, which is low compared to the average for OECD countries, can be increased by improving educational and physical infrastructure, improving the business environment, reducing the burden of bureaucracy, and increasing competition in the economy; (c) the need to reduce the cost of living, which led in 2011 to the social issues protest, and (d) the need to continue to reduce inequality.

1. MAIN DEVELOPMENTS

The growth of the economy moderated to 3.1 percent this year against the background of the global slowdown.

World trade had a direct effect on the economy through exports and disposable income, and an indirect effect through its influence on private consumption and on investments.

Expansionary monetary policy has supported economic activity.

The increase in the deficit reflects fiscal expansion, and is a significant challenge for policy makers.

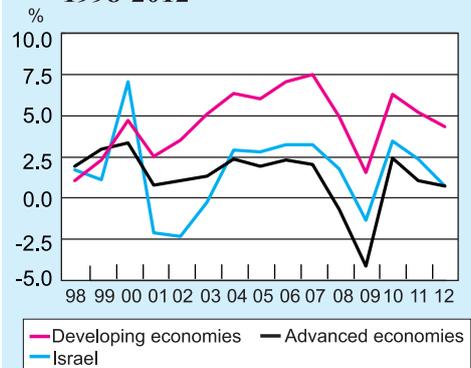
The growth of the economy moderated during 2012 to 3.1 percent, against the background of the global slowdown. Increased expenditure on energy imports and a slowdown in the expansion of the construction industry also contributed to the slowdown in growth. In response, monetary and fiscal policy both supported the expansion of activity. Inflation in 2012 of 1.6 percent was below the midpoint of the target range.

The slowdown in the growth of global activity affected the economy, primarily through a moderation in the growth of world trade, which has a direct effect on the economy through exports and disposable income. The global economy also has an indirect effect on the economy through its influence on private consumption and on investments. There was a slowdown in the consumption of durable goods and in investments during 2012 against the background of pessimism during the year due to the deepening of the European debt crisis. These developments also clouded global and domestic capital markets for most of the year, and served as a channel for the slowdown in the growth of demand.

The global slowdown made it difficult to maintain a high and sustainable growth rate, and this has been one of the main challenges facing policymakers over the past few years. Starting in the summer of 2011, and throughout 2012, the Governor, and then the Monetary Committee¹ responded to this challenge by reducing interest rates. This was intended to strengthen domestic demand and support the depreciation of the shekel, while maintaining inflation within the target range. The residential housing and construction industry was also influenced by monetary policy. During the past 3 years, activity in this industry grew by more than 20 percent, and is currently at a high level.

In addition to monetary policy, fiscal expansion also supported economic activity.² Fiscal policy during this period has had to deal with a significant challenge in maintaining credibility in light of the large structural deficit in the state budget, which was not dealt with during the period of rapid growth in

**Figure 1.1
Growth per Capita in Israel,
Advanced Economies and
Developing Economies,
1998-2012**



SOURCE: Central Bureau of Statistics and based on IMF data.

¹ The Monetary Committee began its work as the body determining monetary policy at the end of October 2011.

² For a description of the fiscal multiplier in Israel, which reflects the effect of fiscal policy on economic activity, see Box 6.1 in this report. As shown in the box, on the expense side, the fiscal multiplier fluctuates between 0.5 and 0.8, while on the revenue side it is smaller.

Table 1.1
Main Developments in Israel and Around the World, 2009–12

	2009	2010	2011	2012
Israel				
GDP ^a	1.1	5.0	4.6	3.1
Exports (excluding diamonds) ^a	-9.9	10.8	4.1	4.2
Private consumption ^a	1.9	5.3	3.8	2.7
Unemployment rate ^b	9.5	8.4	7.1	6.9
Inflation ^c	3.9	2.7	2.2	1.6
1-year real interest rate ^b	-0.4	-0.7	0.3	-0.1
Current account of the balance of payments (\$ billion)	8.1	8.1	3.4	-0.2
General government deficit (actual, percent of GDP)	5.1	3.7	3.3	4.2
Public debt/GDP ratio ^d	79.5	76.0	73.9	73.0
Real effective exchange rate ^e	1.8	-5.1	-1.4	3.7
Nominal effective exchange rate ^e	4.3	-4.8	-1.0	3.7
Tel Aviv 100 Index ^f	88.8	14.9	-20.1	7.2
Around the world				
GDP of advanced economies ^a	-3.4	3.0	1.6	1.3
GDP of developing countries ^a	2.6	7.4	6.3	5.1
World trade ^a	-10.7	12.6	5.9	2.8
Commodities Price Index (Merrill Lynch) ^f	51.5	22.6	0.6	0.2
MSCI share index of developed markets ^f	27.0	9.6	-7.6	13.2
MSCI share index of emerging markets ^f	74.5	16.4	-20.4	15.1

^a Real rate of change, percent.

^b Annual average, percent.

^c During the year, December vis-a-vis December of previous year, percent.

^d End of year, percent.

^e Rate of change, annual average compared with previous year's average. A negative figure indicates appreciation.

^f Nominal change during the year: Final day in December compared with final day in December of previous year.

SOURCE: Bank of Israel, Central Bureau of Statistics, Tel Aviv Stock Exchange, IMF, and MSCI Barra.

2010 and 2011. While dealing with this challenge is an integral part of formulating fiscal policy, the challenge was particularly significant this year in light of the pressure to expand public social services, the regional geopolitical changes and the slowdown in growth which led to a decline in revenues as a percent of GDP.

Fiscal policy responded to these challenges and pressures by increasing expenditures and future expenditure commitments, by increasing taxes, and by increasing the budget deficit target for 2013. The increase in expenditures and expenditure commitments resulted from a combination of public sector wage agreements and reforms and the implementation of the recommendations of the Trajtenberg Committee—the Committee for Economic and Social Change—to expand the government’s social services, alongside the decision to avoid cutting the defense budget. As a result, the gap between the cost of government commitments for various activities and its permitted expenditures based on the fiscal rule that was approved by the government and the Knesset in 2010 grew. The slowdown in the economy’s growth rate began from the second half of 2011 and led to a decline in the rate of growth of tax revenues, a decline which was not dealt with at the beginning of 2012 and led to a widening of the deficit. When the slowdown in the growth rate became entrenched during 2012, and the deficit swelled, the government decided, as was necessary, to increase taxes. The attempt to reduce the deficit in response to its rapid expansion signaled that the government was striving to maintain fiscal discipline, and the choice to raise taxes seemed preferable to cutting expenses for two reasons. First, expanding public services in 2012 (particularly the expansion of free education to three- and four-year-olds) mainly reduced the expenses of those with middle and high incomes.³ Second, raising taxes during a slowdown restrains economic activity less than cutting expenses does.

Reducing the structural deficit is currently the main challenge facing the government. Another challenge is strengthening the control mechanism over future expenses.

An analysis of fiscal policy from a slightly broader perspective shows that reducing the structural deficit is currently the main challenge facing the government. Reducing the structural deficit will support a reduction in the public debt to GDP ratio, and will allow the government to expand the deficit during a slowdown or security crisis without worrying about a loss of creditability or a spike in financing costs. Another challenge to fiscal policy involves the need to strengthen the control mechanism over future expenses. During the past few years, it has become clear that the government’s commitments would increase expenditure beyond what is permitted by the expenditure ceiling that it set for itself. Prior to the 2013 state budget, commitments exceeding what is permitted have reached NIS 13 billion (1.3 percent of GDP). The establishment of a control mechanism that will ensure that the government’s future commitments are compatible with its policy will strengthen the policy’s credibility, minimizing the likelihood that the government will be forced to retreat from plans to which it has committed.

³ Free education for three- and four-year-olds mainly helped middle and upper class families since some of the lower class families were already benefiting from partial or full subsidies for education of children of these ages.

The employment and labor force participation rates continued to increase in 2012, and the unemployment rate remained stable at a low level. However, it seems that during the year, weaknesses began to be indicated in the labor market, reflected in a decline in the number of available posts. At the same time, in light of the moderation in growth, developments in the labor market are positive, and also reflect a long-term process of structural change in the labor market. An analysis of developments in the number of available posts and in the unemployment rate in recent years shows that the labor market has become more efficient, leading to an average unemployment level over the course of the business cycle that is lower than it has been in the past. Wage flexibility and flexibility in work hours, which are higher than in other developed countries, reduce the erosion in employers' profitability during the slowdown, and contribute to the efficiency of the market and to the reduction in variance of the unemployment rate, so that the increase in unemployment is smaller during a slowdown.

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Despite the increase in the participation rate over the past few years, and despite the streamlining of the labor market, policy remains faced with a vital challenge: increase labor productivity in order to support growth. Labor productivity data indicate that Israel is in the bottom third among OECD countries and that since 1995, labor productivity growth has been lower than both the average among OECD countries and what would be expected based on the country's level of development. Productivity could be increased by a number of factors that are important to promote: an increase in the level of education among workers; increasing competition, since this should lead to greater efficiency among firms and the advancement of new technologies; improved business activity environment, reducing the bureaucratic burden, and investment in infrastructure. In addition, a reduction in the number of foreign workers will also likely support an increase in labor productivity, since it will cause an increase in cost of labor, thereby contributing to the implementation of technological improvements and an increase in the ratio of capital per worker in the economy. (A detailed discussion of this appears in Box 2.1.)

Increasing labor productivity is important for strengthening economic growth.

Israel's current account was balanced in 2012, following a long period of surplus. The decline in the surplus, following its shrinkage last year, results from a sharp increase in expenditures on the import of energy products and from a slowdown in exports, alongside the moderate effects of the global slowdown on domestic uses. From the standpoint of savings and investment, the increase in investment in construction and in principal industries contributed to the reduction in the current account surplus. The beginning of the flow of natural gas from the "Tamar" field during the second quarter of 2013 is expected to renew the surplus in the current account during 2013.

Developments in the capital and money markets in Israel in 2012 reflected developments in the global environment and the geopolitical risks in Israel. Following the deteriorating growth rates in global activity and in growth forecasts both in Israel and abroad that began in the summer of 2011, share prices dropped sharply, and the yield spreads on corporate bonds, which reflect credit risk in the business sector,

The Israeli stock market underperformed other markets worldwide.

The seriousness of the global crisis became increasingly clear during the year, more than three years after the crisis began.

increased and remained at high levels during most of 2012. These developments signaled moderation in the growth of real activity from the middle of 2011. The seriousness of the global crisis became clearer during the first quarter of 2012, more than three years after the crisis began. In Israel, geopolitical uncertainty also increased due to concerns over a military confrontation with Iran, regime change in neighboring countries, and the continuation of the civil war in Syria. The strengthening of these concerns was reflected in the fact that growth in the Israeli stock market was less than in other world markets. Nominal and real yields to maturity on long-term government bonds continued to decline during 2012, reaching historic lows while remaining above the levels of other advanced economies that are considered safe and stable, as the spread between levels in Israel and those countries increased.

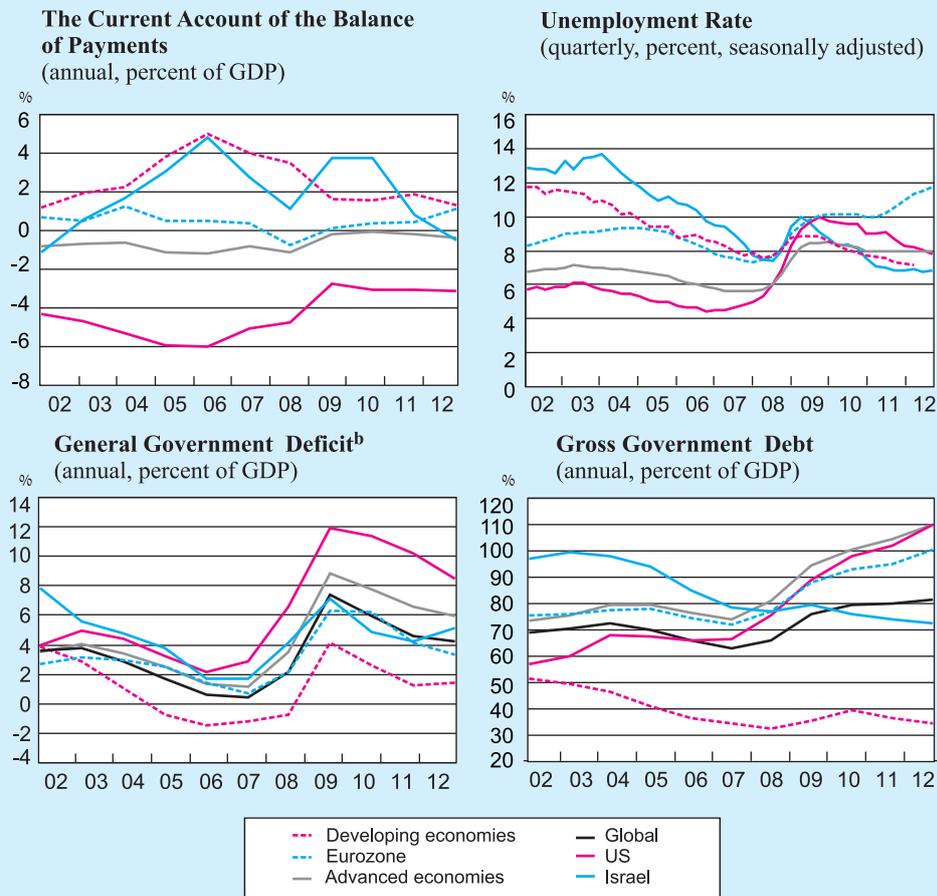
The path of the nominal effective exchange rate mainly reflected developments in geopolitical risk.

The nominal effective exchange rate remained almost unchanged at the end of the year, compared to the beginning of 2012, but with wide fluctuation during the course of the year. During the summer, there was a depreciation of about 4 percent, which was offset by an appreciation of a similar amount beginning in September. This path mainly reflects developments in geopolitical risk as considered by foreign investors. Overall during 2012, the shekel depreciated compared with the 2011 average as a result of the reduction in the gap between the domestic short-term interest rate and interest rates abroad, and of the reduction in incentives for bringing foreign capital into Israel. This reduction in incentives was a result of steps taken by the Ministry of Finance and the Bank of Israel, including the cancellation of tax benefits on investments in shekel denominated short-term government bonds for foreign investors, imposing reserve requirements on transactions in foreign exchange derivatives and reporting requirements on large transactions. From the standpoint of real activity, the reduction in the current account surplus due to factors exogenous to the economy and the slowdown in growth compared to OECD countries contributed to the weakening of the shekel.

2. THE GLOBAL ENVIRONMENT

Israel, as a small and open economy, is affected to a major degree by developments in the global economy. During the last two years, global developments have had a dampening effect on the local economy, primarily through the reduced rate of growth in global demand, which has hurt exports and reduced the economy's income. There are also indirect effects, the impact of which is difficult to measure. These include the drop in securities prices worldwide, which has reduced private consumption, particularly the consumption of durables, and the increasing expectation that economic activity will recover slowly, which is likely to discourage investment. There are other financial channels through which global developments influence the economy. For example, the interest rate gap vis-à-vis other countries is likely to result in the flow of capital into or out of the domestic economy while the high level of liquidity is likely to support domestic demand. In contrast, the drop in real and nominal yields, which have

Figure 1.2
Indicators of Economic Activity in Israel and around the World,^a 2002-12



^a The aggregates in all graphs are taken from the IMF World Economic Outlook, except for unemployment, for which the figure for the advanced economies is taken from the OECD database, and the figure for developing countries is calculated from the weighted average (the weights relate to size of GDP in PPP terms) of Argentina, Brazil, Bulgaria, Colombia, Latvia, Lithuania, Malaysia, Peru, the Philippines, Russia, South Africa and Thailand.

^b The figure for Israel is adjusted to conform with the international definition to enable the international comparison to be made. A positive sign denotes a deficit.

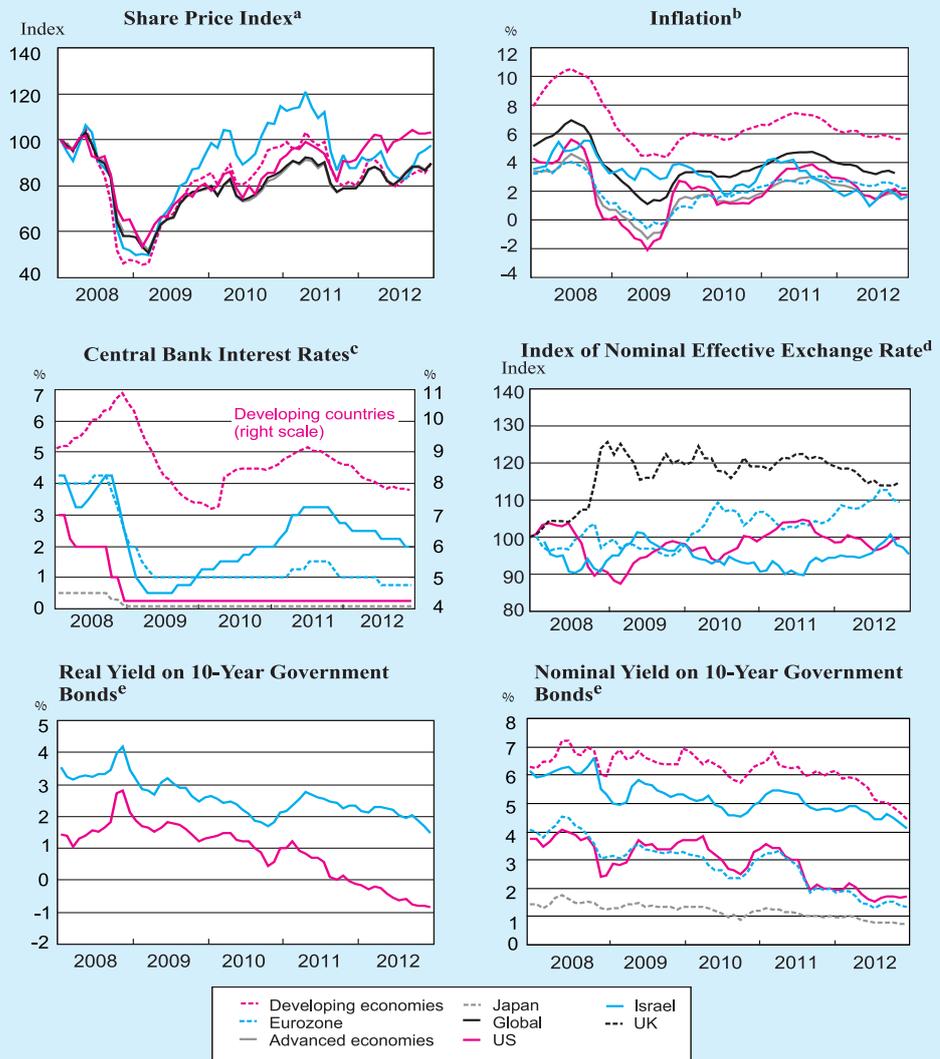
SOURCE: Central Bureau of Statistics, IMF, and OECD.

reached historic lows, offsets part of the effect of the global recession and supports domestic economic activity.

Four years after the onset of the crisis, which began in the US and spread to the eurozone, there has still not been a return to pre-crisis growth levels in advanced economies, and furthermore, projections for 2013 do not foresee a recovery. In comparison to 2011, the global rate of growth slowed this year, as a result of, among other things, slower growth in the developing countries, and was significantly lower

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Figure 1.3
Monetary Indicators, Israel and Abroad, 2008-12



^a Based on monthly average, in dollar terms. Advanced economies, developing countries, and global—based on MSCI indices; Israel—Tel Aviv 100 Index; US—S&P 500 Index. SOURCE: Bloomberg and TASE.

^b Inflation over the previous twelve months. The groups of countries are as per the IFS definition. SOURCE: IFS database.

^c SOURCE: Israel—Bank of Israel; Japan, US, ECB—Bloomberg; developing countries—weighted average (weighted by size of GDP in 2011, in PPP terms) of the interest rates in Argentina, Brazil, Chile, Colombia, Russia, South Africa, Thailand, and Turkey.

^d Increase indicates depreciation. SOURCE: IFS database.

^e SOURCE: Bloomberg and Bank of Israel. Developing economies—average of South Africa, Mexico, Thailand, Korea, Slovakia, Turkey, Poland, and Hungary. SOURCE: The Federal Reserve, Bloomberg, and the Bank of Israel.

than in 2010. The advanced economies grew at a rate of 1.3 percent, the lowest rate during almost the last three decades, excluding the outlier years of 2008 and 2009. The rate of growth in the developing countries was somewhat higher than 5 percent, which is also low relative to the trend during the pre-crisis years. The main factor behind the slow global growth this year was the increasingly clear picture of the magnitude of the government debt crisis in Europe, with some large economies, such as Spain and Italy, sinking into recession and dragging down other members of the EU, in particular Germany. The unemployment rate in the EU continued to climb and reached a level of over 10.5 percent. The contractionary fiscal policy adopted by the EU countries in response to the rapid rise in their debt and the negative sentiment in the markets are making an economic recovery in Europe difficult.

The main factor behind the slow global growth this year was the increasingly clear picture of the magnitude of the government debt crisis in Europe.

In contrast to most of the European countries, the growth rate in the US was somewhat higher than in 2011. Thus, it appears that the US economy is continuing its slow recovery, which rests largely on an expansionary monetary policy and on renewed investment in the real estate industry. At the same time, the concern resulting from the “fiscal cliff”⁴ and the uncertainty as to how to deal with it and with other fiscal problems which it represents, have restrained local demand in the US, in particular the demand for investment.

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The emerging markets, and in particular China and India, whose growth is based primarily on exports to, among others, the advanced economies, so far have not managed a smooth transition to growth based on local demand and their rates of growth are lower by about 2 percent than the average during the decade prior to 2008. The slowdown in demand in China, India and other emerging markets has had negative feedback on the developed countries since exports are an important component of their growth.

The economic developments were reflected in the cost of raising capital and the recycling of debt in various countries, as well as volatility in share indices. During the first half of the year, with increased concern that the crisis would worsen, risk premiums (as represented by CDS spreads) of the affected countries reached record levels and stock prices in global markets fell. In August, the markets calmed down somewhat as a result of significant steps taken by the authorities in Europe. These included a new program to buy bonds in the secondary market from governments in distress (OMT⁵), the declaration of a commitment to maintain the integrity of the eurozone and the preparation of a program for greater integration of financial regulation in the EU countries, including the centralized supervision of the banks. As a result of these measures, the credit risk of the distressed European countries, primarily Spain and Italy, was reduced and the nominal 10-year yields to maturity of these countries declined by two percentage points, on average, to a level of about 5 percent at the end of the year. At the same time, the 10-year yields in Germany, the UK, and France,

Real economic developments were reflected in the cost of raising capital and the recycling of debt in various countries, as well as volatility in share indices.

⁴ This term relates to the sharp fiscal contraction which had been expected to go into effect automatically in the US at the beginning of 2013. Estimates of its magnitude were in the vicinity of 4 percent of GDP and it involves both tax increases and expenditure cuts.

⁵ Outright Monetary Transactions.

which are perceived as safe and stable economies, did not continue to fall during the second half of the year and even rose somewhat. The average yield of 1.5 percent to 2.0 percent is still at very low levels historically. A contribution to stability in the US, which impacted on global financial markets, was made in September by the Federal Reserve when it declared a third program of quantitative easing (QE3). These returns were also reflected in fluctuations in the global share markets, with share prices rising during the second half of the year, thanks to the quantitative easing programs.

3. THE ISRAELI ECONOMY

a. Real activity

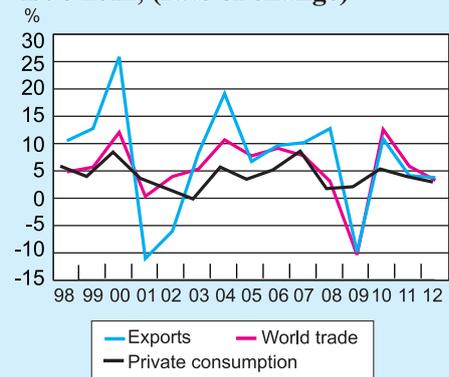
The rate of economic growth slowed this year. Production potential expanded, but it appears that it has not been fully utilized.

The rate of economic growth slowed this year relative to 2011, primarily as a result of the slowdown in demand worldwide. An analysis of growth figures during the year indicates that the slowdown began in mid-2011 and that during most of 2012 the rate of growth remained relatively stable, with additional slowing in the final quarter, due to, among other reasons, the effect of Operation Pillar of Defense. Another contribution to the slowdown in economic growth derived from the slowdown in growth of the construction industry. The participation rate increased, as did the rate of employment; however, there was no change in labor productivity. The unemployment rate remained stable. The production potential of the economy expanded this year, but as labor productivity remained unchanged, it appears that the potential growth has not been fully utilized. The real exchange rate depreciated relative to the previous year in terms of the annual average and the surplus in the current account disappeared, a reflection of the slowdown in exports and the increased expenditure on energy. From the perspective of savings and investment, it appears that the increase in investment in the construction and other industries contributed as well to the elimination of the surplus in the current account during the past two years.

Growth in three of the main components of GDP—exports, private consumption and investment—slowed this year in comparison to 2010 and the first half of 2011.

Growth in three of the main components of GDP—exports, private consumption and investment—slowed this year in comparison to 2010 and the first half of 2011. Exports were affected directly by the slowdown in world trade. Many studies, as well as analyses in past Bank of Israel Annual Reports, have shown that world trade explains the trend in exports to a large extent in the short and intermediate terms, and that an increase of one percent in the growth of world trade is expected to contribute almost one

Figure 1.4
Word Trade, Exports (Excluding Diamonds) and Private Consumption, 1998-2012, (rate of change)



SOURCE: Central Bureau of Statistics and IMF.

percent to the growth in Israeli exports.^{6,7} In 2012, world trade grew by 2.8 percent, which was low relative to both 2010 and 2011 and relative to the average growth rate in each of the two decades preceding the crisis of 2008. As a result, Israeli exports grew only moderately and if it had not been for the contribution to exports of the new Intel factory, exports would virtually have not grown at all (for a discussion of exports, see Chapter 7).

Private consumption and investment were also affected by the global slowdown, although in this case it is more difficult to identify the channels through which this occurred. Private consumption was influenced through the effect of exports on disposable income and also through a separate channel involving the expectations of future income. With regard to the latter, the worsening of the debt crisis in Europe during the year increased pessimism with respect to the timing of Europe's recovery, which in turn reinforced the drop in domestic private consumption and the increase in private saving. The slowdown in expansion of private consumption was manifested primarily in the consumption of durable goods, which are more sensitive to fluctuations in income. The slowdown in expansion of investment in the economy was the result of expectations of continued slowdown in growth of GDP, combined with the high level of investments as a percent of GDP relative to previous years. (For an analysis of the development of private consumption and investment in the economy, see Chapter 2.)

Domestic factors also contributed to the slowdown in the growth rate of the economy, particularly the moderation in the growth rate of the construction industry. Following two years of rapid growth, which contributed about 0.7 percentage points on average to the growth in business output in 2010–11, growth in the construction industry slowed this year.⁸ As a result, the contribution of the construction industry to growth was only marginal this year, although the level of activity in the industry remained high. The rapid growth in the construction industry in recent years was part of the industry's reaction to increased demand for homes. The increase in activity in the construction industry supported economic growth during a period in which the main engine of growth—exports—weakens. However, following two years of rapid growth, it appears that the contribution of the construction industry to GDP growth will decline. (For a comprehensive discussion of the construction industry, see the separate section in this chapter and also Chapter 2.)

An additional factor contributing to the slowdown in the growth rate this year was the sharp rise in the cost of fuel for electricity production. The halt of the flow of natural gas from Egypt and the diminishing supply from the Mari B reservoir forced

The main domestic factor in the slowdown in the growth rate was the decline in the growth rate of the construction industry.

⁶ See for example, "A real model of the Israeli economy", Discussion Paper 2010.03, Bank of Israel, Research Department; Y. Soffer (2005), "Measuring the real exchange rate in Israel and its effect on exports and imports", Issues in Foreign Currency 1/05, Bank of Israel; Box 2.3 p. 79–83 in the Bank of Israel Annual Report 2008; and Box 6.2 pp. 198–99, Bank of Israel Annual Report 1999.

⁷ In the long term, exports are influenced by domestic factors that in the end determine the level of exports as a percentage of GDP.

⁸ Beyond the direct contribution of the growth of the construction industry to the growth of business output, it also contributed to the expansion of demand for the output of other industries, such as that of the manufacturing industries, which produce inputs for construction.

Israel to import more expensive fuels as a substitute.⁹ The increased prices of raw material for electricity production were borne partially by consumers, which reduced their disposable income. The remainder was absorbed by the Israel Electric Company, which exacerbated its already difficult financial situation. However, this situation is expected to end during the first half of 2013, when natural gas from the Tamar reservoir becomes available to consumers in the economy and in particular to the Israel Electric Company. (For a discussion of the implications of the supply of gas from the offshore reservoirs located in Israel's exclusive economic zone, see Section 5 below, and Chapter 7.)

Despite the slowdown in the rate of growth, the labor force participation rate continued to grow this year, and the unemployment rate remained stable at low levels.

Despite the slowdown in the rate of growth, the labor force participation rate continued to grow this year, and the unemployment rate remained stable at low levels. The lack of change in the unemployment rate was primarily the result of the flexibility in wages and work hours in the economy. This flexibility is evident from the previous two crises, i.e., 2001–02 and 2008–09, during which workers shared the burden of reduced profits with employers through fewer work hours (which was manifested in a drop in monthly wages) and a reduction in the level of wages. This makes it easier for employers to hire new workers according to the needs of the business even when there is concern of a slowdown, and allows them to minimize the number of workers laid off.

The number of employees in the economy increased this year by 3.4 percent which is similar to the rate of growth in GDP. This implies that worker productivity did not grow this year, compared with its average annual increase of about one percent during the period 1996 to 2010. This is an indication that the rate of growth in GDP this year was lower than its potential.

b. Price developments

Inflation this year was 1.6 percent, a rate that is in the lower part of the target range.

Inflation this year was 1.6 percent, below the midpoint of the target range. During the course of the year, inflation fluctuated around the center of the target range, which was mainly the result of the changes made to regulated prices, the reform in the communications industry and the change in the VAT rate. Toward the end of the year, the CPI declined more than forecast.

The price of housing services increased by 3.3 percent, exceeding the rate of increase in the Consumer Price Index for the fifth straight year.

The increase in prices in Israel was primarily the result of three factors: The first was the increase in prices of housing services, which constitute about 24 percent of the CPI.¹⁰ In 2008, the housing component began to increase at an annual rate of more than 10 percent, which gradually declined until it reached 3.3 percent in 2012. This exceeded the rate of increase in the CPI for the fifth year running. The second factor was the increase in the prices of imported energy, which although they fell on a global level, were influenced by the change in the mix of fuels imported into Israel. The third factor was the increase in food prices in Israel. As a result of the social

⁹ In 2010, about 40 percent of electricity was produced using natural gas.

¹⁰ The prices of housing services are included in the CPI within the housing component. The weight of this component in the CPI increased to 25.2 percent in January 2013.

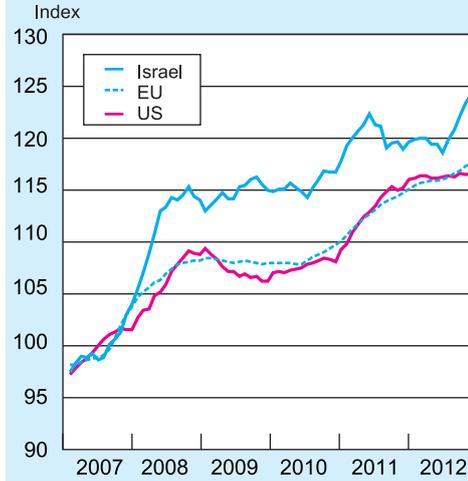
protest, the prices of food fell last year and remained stable during the first half of 2012. Although the food component is influenced by global prices both simultaneously and with somewhat of a lag, starting in August of this year the index of food prices in Israel increased at a rate that was significantly above the trend in various other countries (Figure 1.5). The index of food prices in Israel rose by 4 percent during this period, while the CPI rose by only 0.5 percent. This trend in food prices offset the drop in prices that began in 2011, which was also unique to Israel.

There were two components of the CPI that partially offset the increase in prices: the price of education and culture and the price of communications. The decline in the price of education was mainly the result of a significant decline in the cost of daycare services, following the implementation of the Trajtenberg Committee recommendations. The price of communications fell sharply as a result of increased competition in the cellular phone industry.

The moderation in the rate of inflation, which first appeared in mid-2011 and continued during 2012, is consistent with the slowdown in growth. In the labor market, there was no discernible upward pressure on prices either, even though in recent years the rate of unemployment has fallen to historic lows. Unit labor cost (see Figure 3.12 in Chapter 3) has fluctuated around its long-term level during the last four years, which indicates a lack of inflationary pressures originating in the labor market. The developments in 2012 indicate that unit labor cost even fell to below its long-term level, which reflects moderating forces on inflation.

The slower rate of inflation and its stability during the course of the year should be viewed against the background of a depreciation of about 4 percent in the effective exchange rate during the summer, which was offset by an appreciation of a similar magnitude starting in September and lasting to the end of 2012. The short-term changes in the exchange rate in recent years have had a reduced effect on prices, primarily because prices in the housing market are no longer denominated in dollars, but also as a result of the weakened transmission to other components of the CPI. The weakening of the transmission mechanism can be seen in the empirical research that examined the effect of the exchange rate, both simultaneous and with a lag, on

Figure 1.5
Indices of Food Prices^a in Israel, US, and EU, 2007-12
(2007 = 100)



^a Local currency, excluding fruit and vegetables, meals outside the home, and alcoholic beverages. SOURCE: Based on: Israel-Central Bureau of Statistics. US-US Department of Labor. EU-Eurostat.

The index of food prices rose during 2012, offsetting the drop in prices that began in 2011 following the social protests.

Prices of education and culture, and communications prices, declined this year.

The moderation in the rate of inflation, which first appeared in mid-2011 and continued during 2012, is consistent with the slowdown in the growth rate of real activity.

Short-term changes in the exchange rate in recent years have had only a weak effect on prices.

the CPI.¹¹ These changes have reduced the volatility of the CPI. Thus, the standard deviation of the CPI's monthly changes has markedly declined during the past three years compared with previous periods.

c. The financial markets

Two principal risks left their mark on the Israeli economy this year: the global economic risk and the domestic risk in Israel.

The developments in the capital and money markets during 2012 reflected the slowdown in global growth and the marked growth in credit risk in several advanced economy countries, as well as developments in the domestic environment which occurred against the background of Israel's geopolitical risk. Following the downturn in economic activity in mid-2011 and in growth forecasts—as the extent of the government debt situation in many advanced economy countries became clearer—stock prices fell sharply worldwide. The severity of the global crisis became increasingly clear during the first quarter of 2012, more than three years since the crisis began. Added to that, in Israel, there were domestic risks which resulted from growing geopolitical uncertainty, due to the concern of a military confrontation with Iran, regime changes in neighboring countries, and continued civil war in Syria. As a result of these growing concerns, the market underperformed in 2011 and for most of 2012 relative to other stock markets. Regulatory changes in the insurance, food, and communications industries, which weighed on the market capitalizations of companies in those industries, also moderated the increase in stock market indices in Israel. However, during the second half of 2012, stock prices in Israel rose and during the final months of the year the previous underperformance was partially offset (Figure 1.6).

The Tel Aviv 100 Index increased by 7 percent in 2012, underperforming other markets worldwide.

The Tel Aviv 100 Index increased by 7 percent in 2012. This trend was consistent with the weak economic growth in Israel and worldwide, and the low forecasts of growth for coming years, and, in contrast, was influenced by the injection of liquidity due to the monetary expansion carried out by central banks worldwide, including the Bank of Israel.

The profitability of TASE-traded companies, as measured by various financial ratios, is low, as typical in a moderate growth environment. This conclusion is based on an examination of various ratios which allow the analysis of stock prices in terms of the data in the companies' financial statements. The return on equity—a company's profit divided by its equity—continued to decline during 2012 as well, reaching a level of less than 10 percent. This is a historically low level that has only appeared at the height of financial crises, such as that in 2009 (see Figure 1.7). The “return on share”¹²—a company's profit divided by its market capitalization—has remained stable during the last three years at above 6 percent, a low rate relative to the pre-crisis years but still higher than the yield to maturity on government bonds.

¹¹ See Box 3.2 of the Bank of Israel 2007 Annual Report,

¹² The return on share is the inverse of the price earnings ratio, an important financial ratio. For further details, see the article by Stein, Steinberg, and Zalkinder (2012), “A Suggested Methodology for Analyzing Stock Price Levels”, Occasional Papers, 2012.03, Bank of Israel.

Figure 1.6
Tel Aviv 100 Index (in dollars) Relative to MSCI Index of Emerging Markets, 1991-2012
(January 1991 = 100)



SOURCE: Tel Aviv Stock Exchange and Bloomberg database.

The yields to maturity, both nominal and real, on long-term government bonds continued to decline in 2012 and reached historically low levels (Figure 1.3). At the same time, during most of 2012, the gap widened between the yields on 10-year government bonds and the average yield on bonds of selected advanced economies (Figure 4.1), which was a continuation of the trend that began at the beginning of 2011. The spread widened despite the fact that in Israel there has been a decline in the ratio of government debt to GDP while in many advanced economy countries it has increased. It can therefore be concluded that there are other reasons for the widening gap. One of them is the increased geopolitical tension, which began with the “Arab Spring” in Egypt (January 2011), strengthened during the past two years, and reached a peak during the first half of this year as a result of the concern of the Iranian nuclear threat. Additional support for the possibility that domestic risk

Figure 1.7
Financial Ratios, Tel Aviv 100 Index, 2005-12



SOURCE: Based on Tel Aviv Stock Exchange.

The yields to maturity on long-term government bonds continued to decline in 2012 and reached historically low levels, as the yield gap between Israel and other developed countries widened.

rose relative to that in the rest of the world can be found in the underperformance of the Israeli share index relative to worldwide share indices. A second reason for the widening gap is the differences in monetary policy. These are manifested not only in the monetary interest rate gaps but also in the expansionary programs that the US and EU continued to carry out during 2012.¹³ However, during the second half of the year, the yield to maturity on the bonds of advanced economy countries that are considered to be safe and stable (such as France, Germany and the US) rose somewhat and the yield to maturity on the bonds of advanced economy countries that are perceived as risky (Spain and Italy) declined somewhat, within the framework of a decline in the risks related to the European debt crisis. As a result, during the last quarter of the year the gap in nominal 10-year yields between Israel and the rest of the world narrowed somewhat, though it remained relatively large. It is possible that the change in trend was a result of the decline in some of the risks that arise from the European debt crisis and the reduction in perceived geopolitical risk. Evidence of this can be seen both in the appreciation of the nominal effective exchange rate during this period and the decline in CDS prices, since these indicators reflect the country's credit risk premium.

This year, the corporate bond market again reflected high credit risk among corporations.

The corporate bond market reflected again this year high credit risk among corporations, which has prevailed since mid-2011. This situation was another indication of the deterioration in real economic activity during 2012. While yield spreads of business firms remained stable at high levels during 2012, those of holding companies continued to widen significantly during the year, as a result of the high levels of leverage that these companies are exposed to. The high yield spreads were manifested in, among other things, the debt restructuring which continued in 2012. This involved a wider variety of companies in various industries than in the previous two years, when it involved mainly real estate companies. However, some of the companies in distress at the end of 2011 managed to repay their debts without restructuring them, by selling off assets. During the last quarter of 2012, following a drop in Israel's risk premium and the recovery in capital markets worldwide, the public increased its holdings in mutual funds that specialize in corporate bonds, yield spreads narrowed and issues by large high-rated companies became possible even beyond the amounts needed for debt recycling.

Credit to the business sector remained almost unchanged in 2012 relative to the year before, with bank credit decreasing and non-bank credit increasing, primarily as a result of direct loans from institutional investors. This new channel enabled institutional investors to provide companies with additional credit, on top of that which the investors provide through their holding corporate bonds. This channel for providing credit is relatively quick, is characterized by low transparency and is not subject to the instructions of the Hodek Committee. Using this channel, the banks can share portfolios of new loans with institutional investors or sell them existing loans and thus free up sources for new credit. Currently, this channel is developing rapidly and

¹³ The quantitative easing programs that were declared in the US were Operation Twist at the beginning of 2012 and the third quantitative easing program (QE3) in September.

it is important that it have regulation comparable to the accepted standards applying to alternative credit channels. To formulate recommendations for the regulation of this credit channel, the Ministry of Finance, in the beginning of 2013, established a committee headed by Dr. Amnon Goldschmidt.

The decline in bank credit to the business sector was accompanied by an increase in bank credit to households and thus the banks in Israel continued to adjust their credit portfolio by increasing the proportion of mortgages. Total credit to households grew by 5.5 percent in 2012, which followed a period of even higher rates in recent years (at least since 2008), as a result of the growth in mortgages. The share of the business sector in the bank credit portfolio declined during the past 5 years, as a result of, among other things, the increase in the credit risk of the business sector that occurred at the end of 2008 and the efforts by the Banking Supervision Department to reduce concentration, including updating the limitations on the size of bank exposure to a single borrower and to groups of borrowers. Another explanation for the change in the credit portfolio may be the adoption of the international standard for capital adequacy (Basel II), according to which the requirements for capital allocation in respect of households are lower than the requirements in effect on business sector credit.¹⁴ (This is due, among other things, to the working assumption that the credit is more diversified among households than in the business sector.)

The increase in the share of household credit in general, and mortgages in particular, continued to increase this year at the expense of the share of bank credit to the business sector.

d. The housing market

The housing market was again at the center of public discourse in 2012, particularly in view of the high level of home prices in Israel and the share of housing within the total expenditures of an average family. Home prices began to increase again during the second half of 2012, in contrast to the last six months of 2011, when they declined, and the beginning of 2012 when they rose only slightly. For the year as a whole, home prices increased by 5 percent in real terms, following a cumulative rise of about 40 percent in 2008–11. In parallel with the renewed rise in home prices, the number of transactions and the quantity of housing credit grew significantly, reflecting an expansion of demand for homes. Nonetheless, there was somewhat of a slowdown in building starts—to about 40,000—in 2012.

Home prices began to increase again during the second half of 2012. The number of transactions, and credit for housing, grew significantly.

The slowing of building starts this year followed a period of four years in which they grew. In 2011, building starts reached a level of 45,000 housing units, which was higher than the number required based on the growth in the number of households in Israel. During 2012, activity in the construction industry reached a decade-high level, with construction in progress of about 84,000 homes in comparison to about 60,000 on average during the period 2002–08. It thus appears that the contribution of the construction industry to the growth of the economy will decline, although the question of the optimal level of activity in the industry and number of housing starts remains open. The government is the key factor in determining the supply of housing

The slowing of building starts this year followed four years of rapid growth. In this context, the government must decide the extent to which activity in the industry needs to be supported.

¹⁴ The share of risk from mortgages for purposes of calculating a risk-weighted assets aggregate was 50 percent according to Basel I, which was reduced to 35 percent in Basel II.

and it must decide the extent to which activity in the industry needs to be encouraged, according to the prices it wishes to see in the market.

The slight slowdown in building starts this year reduced the rate of expansion in the supply of housing, and to the extent that the rate of growth of demand does not slow, it may lead to continued price increases. Various factors were responsible for the slowdown in building starts this year, beyond the fact that there was a large inventory of new homes for sale this year. In the center of the country, there is apparently a shortage of available land for marketing and construction (i.e., land that has passed through all the planning stages and is on the verge of receiving a building permit) and this is the main reason for the drop in housing starts in that region. In the periphery, on the other hand, the drop in building starts was apparently due to the slowdown in the activity of contractors in areas where profits are low relative to the risk involved. This can be seen in the results of auctions of land in the periphery, in which land was sold at low prices or the auctions failed altogether, i.e., the land was not purchased.

A range of factors worked on the housing demand side, including demographic changes, the rise in the standard of living, and the general decline in interest rates and in alternative investment yields in the economy this year. The ratio between the level of annual rent and the price of a home reflected the yield on a home as an investment asset and this estimate can be compared to the yields on alternative investments, such as CPI-indexed government bonds, particularly those with long-term maturities.¹⁵ Thus, similar to what transpired worldwide, during the last four years, the yield on government bonds declined to particularly low levels historically and at the same time there has been an increase in rents. The combination of these trends has increased the demand for homes as an investment. The slowdown in growth and the assessment that as a result real interest rates will continue to be low for quite some time supported demand for homes. (For further discussion of this topic, see Chapter 3.)

Although it is likely that an increase in the Bank of Israel interest rate would have helped to reduce demand for homes and support a slowdown in the increase of home prices, interest rate policy has an impact on the overall economy. If the Bank of Israel interest rate would have been kept higher, it would have led to additional appreciation of the shekel, which would have negatively impacted Israeli exports. As a result, growth in Israel would have been slower, unemployment would have been higher, and construction activity would have been slower. Under these circumstances, increasing the supply of land available for building is the main step to take in order to support growth in the supply of homes, and a decline in prices.

With the renewed growth in home prices, the quantity of mortgages and the size of the average mortgage also increased. As a result, the average monthly repayment increased for new mortgage takers. The increase in mortgage repayment increased its relative share of average real disposable income and thus contributed to an increase in the risk implicit in the banks' mortgage portfolio. Sharp price declines, should

In recent years, the average mortgage repayment as a share of the average real disposable income increased. As a result, the risk implicit in the banks' mortgage portfolio has increased.

¹⁵ Although these two investments are of a different nature and have different risk. Despite these differences, it appears that the yields on these two investments are characterized by similar trends.

they occur in the future, constitute an additional risk to the banking system since homes serve as the collateral against mortgages.¹⁶ Thus, toward the end of 2012, the Supervisor of Banks imposed additional limitations on the loan to value ratio of new mortgages, and in the beginning of 2013 he issued directives including a requirement to increase capital allocations in respect of housing credit and increased group allowances for credit losses in respect of housing credit. These directives are expected to strengthen the resilience of the banking system to shocks.

4. ECONOMIC POLICY

Economic policy in 2012 was influenced by four major developments—the effects of Europe’s worsening debt crisis on economic activity there; a moderation of inflation amid continued increases in home prices; regional geopolitical developments and their implications on government defense expenditure and Israel’s sovereign credit risk; the social-political pressures to expand public services, the implementation of the Trajtenberg Committee recommendations and new wage agreements in the public sector. The slowdown in global economic activity and expectations of a slow and moderate recovery allowed economic policy to stimulate domestic economic activity via monetary and fiscal expansion without creating inflation pressures.

The slowdown in economic activity allowed economic policy to adopt monetary and fiscal expansion without creating inflation pressures.

a. Monetary and macroprudential policy

The Bank of Israel’s Monetary Committee responded in 2012 to developments during the year and was in line with monetary policies of many other central banks. The Bank began to slowly reduce the interest rate in the second half of 2011 and continued to do so in 2012: from 2.75 percent at the beginning of the year to 2 percent by year’s end (and to 1.75 percent for January 2013).

The Bank of Israel reduced the monetary interest rate from 2.75 percent at the beginning of the year to 2 percent by year's end.

Growth began to moderate in the second half of 2011 after advancing rapidly in 2010 and the first half of 2011 and after estimations that the output gap¹⁷—an indicator of the state of the business cycle and a benchmark for inflation pressures—had more or less closed.¹⁸ There was a marked slowing of growth in world trade in 2012, a development that had an adverse effect on Israel’s foreign trade, especially on the export side. Therefore, the deceleration of growth, even if the level of activity was close to its potential, tended to be reflected by a slowdown in the rate of expansion of activity and in a slowing rate of inflation. In such a state of affairs, monetary policy can stimulate economic activity by means of lower interest rates without risking an upturn in domestic inflation.

¹⁶ Personal guarantees of mortgage borrowers serve as additional security that banks have against the mortgage loan.

¹⁷ The output gap is the difference between actual GDP and potential GDP. For elaboration, see Box 2.2 in Chapter 2 of the Bank of Israel Annual Report for 2011.

¹⁸ See the Bank of Israel Annual Report for 2011.

From late 2008, when the crisis escalated, to the end of 2012, monetary policy reduced the real short-term interest rate to zero, and even lower, meaning that it had an accommodative effect on demand throughout this period. The accommodation peaked in the middle of 2009, consistent with the fact that the monetary rate had reached a low of 0.5 percent at that time. From then until October 2011, monetary expansion retreated somewhat, as a result of Bank of Israel interest rate increases that brought the monetary rate to 3.25 percent in the middle of 2011, as inflation expectations rose to above 3 percent. In the second half of that year, domestic growth slowed and the Bank of Israel began to lower the monetary interest rate as inflation expectations declined. It maintained this policy in 2012, when it reduced the interest rate at a measured pace, as inflation expectations declined to below the midpoint of the target range.

The Bank of Israel has been mindful of financial stability considerations in its policy-making.

Pursuant to the crisis that erupted in 2008, the Bank of Israel—like many central banks—has been mindful of financial stability considerations in its policy-making and in recent years has wielded macroprudential tools to mitigate financial risks to the economy’s resilience. Thus, the Bank applied macroprudential policies to both the foreign-currency and the mortgage loan markets. There were fewer short term capital flows in the foreign currency market in 2012, relative to the past, and there was no need to use additional tools and make more intensive use of existing ones. In the housing market, in contrast, there was an uptick in demand for home purchases in 2012. After increases in prices moderated in the second half of 2011 and the first quarter of 2012, they resumed later in the year and the growth of housing credit began to accelerate, all of which came after a cumulative real increase of about 40 percent in home prices in 2008–11. Consequently, the Supervisor of Banks issued another directive limiting the loan-to-value ratio in mortgage loans, primarily for investors.¹⁹ The new directive was meant chiefly to reduce the risk to the banking system inherent in the housing credit portfolio.

Monetary policy decisions give significant weight to global developments.

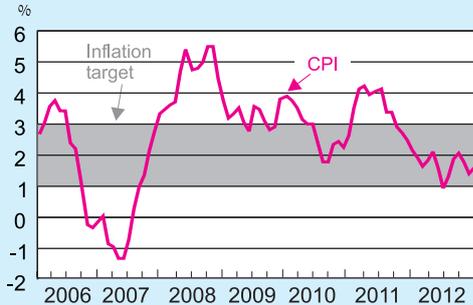
Since the Israeli economy is small and open, it is affected by developments abroad and thus monetary policy decisions give significant weight to such developments. First, global economic activity strongly affects domestic developments, primarily via the level of world trade. Second, monetary policy abroad affects the domestic economy as well, chiefly via yield spreads and the relative profitability of investing in domestic debt assets. In 2010 and early 2011, Israel debt assets became more worthwhile investments because the Bank of Israel began to attenuate its monetary accommodation in response to an upturn in domestic inflation and an increase in the growth rate. This induced a major acceleration in short-term capital inflows, causing the currency to appreciate and adversely affecting an important component of economic activity, exports. During these years, the Bank of Israel, as noted, adopted macroprudential measures in the foreign exchange market in order to strengthen the ability to achieve the policy goals.²⁰ The Bank’s monetary policy in 2012, in contrast,

¹⁹ For elaboration, see Chapter 4, Section 1c.

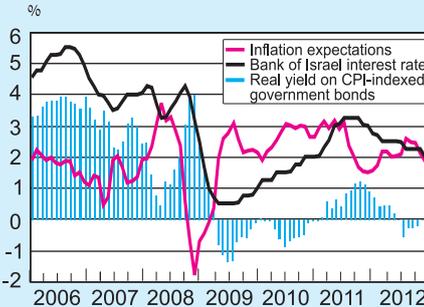
²⁰ See Chapter 4 of the Bank of Israel Annual Report for 2011.

Figure 1.8

a. Rate of Change in Consumer Price Index in the Preceding 12 Months, 2006-12



b. Bank of Israel Interest Rate, 1-Year Inflation Expectations, and Real 1-Year Yield on CPI-Indexed Government Bonds, 2006-12



c. Real Interest Rates, 2006-12



d. NIS/\$ and NIS/€ and Nominal Effective Exchange Rates (Index), 2006-12



SOURCE: Based on Central Bureau of Statistics data.

was compatible with monetary policies abroad, and domestic debt assets became less attractive to foreign investors.

b. Fiscal policy

The total general government deficit increased by about 1 percentage point of GDP, to 4.5 percent of GDP in 2012 due to an unexpected decline in the ratio of revenues to GDP, while the share of expenditures in GDP remained stable. The increase in the deficit reflects the fiscal expansion that the government applied during the year. Given its large structural deficit, however, the government has little maneuvering room in which to apply a countercyclical policy. Thus, in the summer, when the magnitude of the budget deficit became clear, there was concern of a negative impact to the credibility of fiscal policy. In response, the government decided to raise taxes by nearly 1 percent of GDP.

The 2012 government budget deficit overshoot the deficit ceiling in the original budget by more than 2 percent of GDP. In fact, it was clear by the end of 2011 that

The total general government deficit increased to 4.5 percent of GDP in 2012 due to an unexpected decline in the ratio of revenues to GDP.

Due to the two-year budget, the Knesset did not have to discuss a government response to the overrun of the deficit target at the end of 2011.

the government would not attain the 2012 deficit target. Given that the government was operating within the framework of a two-year budget, the Knesset did not have to discuss a government response to the overrun. Furthermore, the social protests and the concomitant pressure to expand social services caused the 2012 budget reserves to be used even though the deficit target had been exceeded. In the government discussion in January 2012, it was even decided to markedly increase expenditure, which was reflected in the end of the year in expenditures greater than the original budget, an occurrence which has not been common in Israel's budget management in the past 2 decades.

The budget deficit is large considering the low level of unemployment, reflecting a large structural deficit that has persisted for several years.

The budget deficit is large considering the low level of unemployment. It reflects a large structural deficit that has persisted for several years, following the decreases of tax rates in 2005–08. It is important to reduce the structural deficit so that the government may enjoy flexibility in implementing its policies and, in particular, to apply a countercyclical policy and respond to exceptional events that entail large nonrecurring expenditure. In view of the growth slowdown, the desired solution appears to be a multiyear deficit-cutting program that would specify and legislate the measures to be taken to reach the goal, similar to programs adopted in 1985 and in 2003.

Reducing the deficit would help to reduce the public debt and the interest payments that are made on its account.

A smaller deficit would help to reduce the public debt and the interest payments that are made on its account, thereby allowing civilian services to expand over the long term. Israel's government expenditure on interest (including interest on the issue of new bonds) is large by international standards, due to the geopolitical situation and the resulting risk premium that the government has to pay. Since the risk premium is an expenditure for which the general government receives nothing in return, the return on a cutback is higher in Israel than it would be in other countries with similar levels of debt.

5. ADDITIONAL MATTERS

a. The long-term effects of Israeli gas

Natural gas from the Tamar field is expected to reach consumers in the second quarter of 2013. This has numerous implications for the economy, primarily a reduction in the cost of electricity production and a reduction in net imports of energy products.

Natural gas from the Tamar field, one of the two large gas fields discovered offshore in Israel's exclusive economic zone, is expected to reach consumers in the second quarter of 2013. This has numerous implications for the economy, primarily a reduction in the cost of electricity production, a reduction in the cost of energy for industry, and increased certainty over price levels.²¹ The decrease in the cost of electricity production will be considerable, especially in view of the energy price increases resulting from the cutoff in the supply of natural gas from Egypt in 2011 and the depletion of the Mari B field. Together with the delay in approval for connecting the Tamar field to the Israeli shoreline, these two developments made it necessary

²¹ In addition, compared with other fuels, natural gas has another advantage in that it is less polluting.

for the electricity company to import expensive fuels in order to produce electricity. Since the usage of gas is more efficient in many cases, its use in industry is expected to substantially reduce production costs in energy intensive manufacturing plants. An additional benefit of the use of gas in industry is that it increases certainty over pricing levels. This is because gas supply contracts to industry are long term in nature and are mostly indexed to the price of electricity production.²² According to Bank of Israel assessments, the flow of natural gas from the offshore reserves will have the effect of reducing net energy imports by about \$2–3 billion a year. This will be as early as the coming year. Once Israel begins to export natural gas, toward the end of the decade, this amount is expected to increase considerably and contribute to a current account surplus.

Apart from reducing imports and boosting exports, gas from the Tamar field is expected to contribute to a current account surplus for two other important reasons. One reason is the fact that about 60 percent of the Tamar field is owned by Israelis, and the other reason is the taxes which the partners will pay to the State on profits from sales of the gas. These two factors mean that a large part of the gas producers' profits will remain in Israel. Clearly, this marks a major change from a situation in which energy is imported for local use while all of the producers' profits are left in foreign hands.

The expected improvement in the current account due to gas production has been known for a long time. It is therefore reasonable to assume that part of its impact on the exchange rate is already apparent. As time passes, the optimistic scenario—a marked decline in foreign-currency expenditures on energy and an expansion in the current account surplus—may well materialize, thereby increasing the pressures for a continued appreciation of the exchange rate. Such pressures are an expression of the economic value of the gas fields from which the economy will benefit. However, it is feared that these pressures will harm the competitiveness of the tradable sectors and future growth (a phenomenon known as “Dutch disease”).

Worldwide experience provides an indication of the risk posed to the tradable sectors by a sharp appreciation resulting from the discovery and exploitation of natural resources. It is reasonable to assume that no weakening in the tradable sectors will be apparent at the first stage, while expenditures on energy fall and disposable income rises. At a later stage however, the loss of accumulated human capital due to the weakening of the tradable sectors could emerge as a problem. It is usually assumed that the negative impact on the competitiveness of the tradable sector has negative long-term implications. This is in view of the know-how and relative advantage which export firms accrue over time. The greater the contraction in the tradable sector, the more serious will be the adverse impact of the “Dutch disease”. It will likely be felt

Worldwide experience provides an indication of the risk posed to the tradable sectors by a sharp appreciation resulting from the discovery and exploitation of natural resources.

²² The variability in the price of natural gas indexed to the price of electricity production, compared with the variability in price of energy based on refined crude oil products, is low. Moreover, the electricity company's long-term agreement for the supply of natural gas from the Tamar field and the reduced use of oil derivatives for electricity production are expected to reduce the variability in the cost of this production.

by the economy as time passes, and especially after the reservoirs are depleted, when the importance of the tradable sector's exports will increase.

In order to alleviate the negative implications of the strengthening of the shekel resulting from the decrease in the economy's energy expenditures and the current account surplus that is expected to emerge, the government decided to establish a sovereign wealth fund which will invest gas levy receipts abroad.

In order to alleviate the negative implications of the strengthening of the shekel resulting from the decrease in the economy's energy expenditures and the current account surplus that is expected to emerge, as well as to contribute to a fair inter-generational distribution of gas revenue, the government has decided to establish a special fund (a sovereign wealth fund) which will invest gas levy receipts abroad. This fund is expected to increase public sector saving in the coming years, and to also ensure that at least part of the growth in the economy's income deriving from the use of natural gas will be directed to saving. Under the government bill drafted in this respect, the fund will transfer to the government once a year an amount reflecting the fund's total assets and average yield for the purpose of current use in the budget.²³ In the event of an occurrence with an exceptionally adverse effect on the economy, subject to the approval of a Knesset majority (at least 61 members of Knesset), the government will be able to obtain a loan from the fund.²⁴

The decline in energy prices due to the supply of gas will not be immediately reflected in electricity rates. When the supply of gas was halted, the government decided, through the Public Utilities Authority—Electricity to spread out the effect of the extraordinary cost of energy on electricity prices over 3 years. Thus, the increased cost of fuel was reflected to a large extent in a temporary increase in the Israel Electric Company's losses, which were funded by government-guaranteed loans. When the supply of gas will begin, prices will continue to increase, until the losses are covered during the coming 3 years, and only then will electricity prices decline to a level that reflects the current cost of production and households will see a price decline. Until then, the decrease in electricity production costs will be used mainly for reducing the electricity company's deficit, and households will hardly feel it. The intervention in the setting of electricity rates by the Public Utilities Authority—Electricity and the need derived from that to grant the Israel Electric Company large scale government guarantees, created a precedent. This will require, in the coming years, considerable commitment to carrying out the framework which sets rate increases as marginal costs decline. This commitment is important against the background of the Israel Electric Company's large debt.

The switch to the use of energy based on natural gas, which is sold to consumers through long-term contracts, is expected to create stability in energy prices, as well as improve the situation of Israeli consumers.

The switch to the use of energy based on natural gas, which is sold to consumers in the economy by Israeli partnerships through long-term contracts, is expected to create stability in energy prices, as well as improve the situation of Israeli consumers and especially energy-intensive manufacturing. The manufacturing industry's conversion to natural gas is expected to reduce production costs and to improve the competitiveness

²³ In its first years, the fund will transfer to the government, once a year, 3.5 percent of its assets. Afterwards, the amount that will be transferred to the government will be set by the fund's average nominal yield over the previous 10 years multiplied by its current assets.

²⁴ Although the bill was submitted to the Knesset in December 2012, since it has not passed a first reading it will be re-submitted for discussion by the Ministerial Legislative Committee after a new government is formed.

of its various branches. The move to long-term contracts will decrease the variability of production costs and will serve the economy during periods of security-related tension—periods that are sometimes accompanied by energy price increases worldwide. As such, this could increase investment in the economy. All these are the positive effects on manufacturing, and are likely to become apparent during the coming years concurrent with the increased usage of natural gas in manufacturing. The rate at which the usage of natural gas will expand will be dependent mainly on the pace of progress in installing infrastructure for producing natural gas and distributing it throughout the country.

Notwithstanding the advantages of using natural gas, there is concern that its low price will encourage the expansion of local industries using gas as raw material or as an energy source, which will have negative external effects. Rapid growth of such industries could shorten the lifetime of the domestic natural gas reserves, and bring forward the need for the economy to revert to basing itself on imported sources of energy. If the price of natural gas for local consumers does indeed encourage the development of gas-related industry, and especially that which also has negative external effects, the imposition of a tax on the use of gas could be considered.

The gas piped to Israel from nearby gas fields is considerably cheaper than the imported substitute—liquefied natural gas—due mainly to the costs of liquefaction and transportation from remote gas fields.²⁵ Liquefaction of the gas is a very expensive process, and is likely to at least double its price. However, liquefaction is necessary when gas has to be transported for long distances. In this respect, use of gas extracted close to Israel's shoreline leads to real savings.

The low cost of piping gas from the Tamar and Leviathan fields saves resources for consumers of the natural gas in Israel, and this is the main reason for ensuring that gas fields for domestic uses will be available over time. The more expensive imported gas is compared to local gas, the more desirable it will be to maintain the gas fields for a longer period of time. This issue occupied the Zemach Committee's discussions of the amount of gas which the government will allow to be exported. The committee reached the conclusion that gas for domestic use should be maintained for a period of 25 years. It is claimed that assuming no major contraction of the gap between the cost of importing gas and the price of gas exports, it would appear preferable to keep gas for domestic use for a longer period. The main conclusion of the Zemach Committee, which is to permit the export of 500 billion cubic meters of natural gas, was based on the assumption of a 90 percent probability that the volume of natural gas in Israel's economic territory amounts to 950 billion cubic meters. Since the Zemach Committee's conclusions were published however, the drillings in the Myra and Sara fields failed and in the drilling in the Ishai field, the gas discovered was at a lower volume than expected.

²⁵ This is before taking into account the fact that the State participates in the profits of the gas producers. Although this can be considered as an additional advantage of using gas from a local field, the State's revenues are dependent solely on the extraction of the gas, regardless of whether it is sold to domestic consumers or exported.

In order to transport natural gas from distant sources, it is necessary to liquefy it through a very expensive process. Therefore, the use of gas extracted close to Israel's shoreline leads to significant savings.

The more expensive imported gas is compared to local gas, the more desirable it will be to maintain gas in the reserves for a longer period of time.

Oil and gas exploration along the Israeli coast during recent years provides evidence of a relatively high potential of finding gas and/or oil reserves and validates the assessment that development of these reserves will be of economic benefit. Government policy with respect to the use of natural resources generally has a major impact on the economic value of the gas reserves that are found and which are expected to be found in Israel's economic zone. The rapid pace of exploration activity in itself proves that investors believe that government policy will permit the maximum exploitation of the natural resources that will be found.

b. The social protest and government policy

Although the demonstrations accompanying the social issues protest of summer 2011 have ended, their effects are still apparent in government policy. Apart from the direct impact of the adoption and implementation of the recommendations of the Trajtenberg Committee for Economic and Social Change, the public discourse that developed as a result of the social protest continued to affect policy decisions that were made in 2012. Following the decision to end the framework of tax reductions, public discourse continued regarding the extent of the services which the government should provide to the public. In addition, the social protest served to promote the adoption of the recommendations of the public committees which were established to deal with the issues of the cost of living and competition in the economy.

The government and the Knesset accepted nearly all of the Trajtenberg Committee's recommendations in the area of taxation. This represented a change in policy that had been aimed at reducing the size of the government, and decisions on the 2013 budget may be reached against the background of this change. In addition, the Trajtenberg Committee recommended an increase in direct taxes and canceling the increase in the excise duty on fuels, the abolition of import quotas, and reducing purchase taxes in competitive industries. These recommendations signaled a need to increase the progressivity of the tax system, and to limit the use of taxes as a device for protecting local production.

The fact that the government decided in mid-2012 to increase direct and indirect taxes, rather than cut expenditure as was done in the past decade when facing an unexpected budget deficit, is a clear reflection of the change in policy. The tax increases which the government resolved to adopt are equivalent to approximately one percent of GDP.²⁶ Tax hikes on such a scale have not been seen in the economy for over 15 years and given the pressures on the 2013 budget, the new government may decide on further tax hikes. However, the social protest is not the only factor that prompted the government to prefer tax hikes over expenditure cuts. It is reasonable that the government's decision in this respect also expresses the realization that it would be very difficult to continue cutting spending in a situation where the civilian expenditures of the public sector in Israel (excluding interest, as a percentage of GDP)

²⁶ Part of the changes in taxation only went into effect in January 2013.

were lower than almost all the OECD countries.²⁷ Likewise, it is difficult to cut the defense budget.

The Trajtenberg Committee's recommendations to expand free education and the aid programs for working parents with young children have had a similar effect in increasing civilian expenditures. Together with these recommendations, the committee also recommended cutting the defense budget. However, the government refrained from making such a cut, so that the overall effect of the committee's recommendations was to increase spending. With respect to 2013, the committee proposed to exploit the real increase in spending, which is permitted under the expenditure rule, in order to expand the social services which the government provides. In practice however, the government's commitments in the areas of wages, education and healthcare reforms, and infrastructure investments have already led to the utilization of this part of the budget. The result is that the government's commitments for 2013 are NIS 13 billion more than permitted under the expenditure rule, and this gap is even greater with respect to the coming years. These gaps are particularly large in comparison with previous years.

The issue of the desired proportion of public spending in GDP comes to the fore again in view of the need to reduce the growth in spending in order to adhere to expenditure rule, which has to be faced prior to the decision regarding the 2013 budget. In 2010, the government and the Knesset adopted a new expenditure rule stipulating that government expenditures must not increase in real terms by a rate higher than the average GDP growth rate in the last decade multiplied by the ratio between 60 and the public debt/GDP ratio. The new rule has considerable value—by substantially weakening the relationship between the government budget and the business cycle, it makes it easier for the government to manage a counter-cyclical economic policy without harming the credibility of this policy. The dynamics of the expenditure rule enables it to operate for a long period without the need to revise it. Adoption of the rule effectively determines the proportion of public spending in GDP.²⁸

Three prominent committees dealt with the matter of increasing the level of competition in the economy, and submitted their recommendations during 2012: The Committee to Increase Competitiveness in the Economy ("the Concentration Committee"), the Team to Examine Increasing Competitiveness in the Banking Industry, and the Committee to Examine the Competitiveness in the Food Industry ("the Kedmi Committee"). Although the Concentration Committee was formed before the outbreak of the social protest, it is reasonable to assume that public sentiment helped to advance its recommendations toward their implementation.

²⁷ The civilian expenditures of the general government (excluding interest) in the OECD countries average 43 percent of GDP while in Israel, this ratio amounts to 33 percent.

²⁸ Under the expenditure rule, the proportion of spending in GDP should decrease by a moderate rate for as long as the public debt is greater than 60 percent of GDP. In practice however, considering that the rate of growth in the labor force is expected to fall during the coming years from its level of the previous decade, and given the level of the public debt, the expenditure rule leaves government spending at a more or less fixed amount relative to GDP.

The Concentration Committee referred to three channels via which it is possible to improve the allocation of capital and reduce concentration: reference to considerations of competition and concentration in the allocation of the public sector's rights to the private sector; restriction on the control of companies with a pyramid structure; and separation between the holdings of financial and real entities. Since implementation of the Concentration Committee's recommendations is clearly important for enhancing the allocation of capital in the economy, the legislation necessary for applying the recommendations should be completed as soon as possible.²⁹

The Team to Examine Increasing Competitiveness in the Banking Industry was appointed in accordance with the Trajtenberg Report recommendations. Its goal was to recommend procedures to increase competition for the household and small business sectors. The team's main recommendations concern possible ways to increase the number of players in and out of the banking system, and ways of increasing the competition among the existing players. The team recommended encouraging the establishment of credit unions and an Internet bank, and to examine mechanisms of directing the funds in long-term savings managed by institutional investors in order to increase the supply of credit to households and small businesses. In order to reduce information barriers, which are a central barrier to competition between credit providers, the team recommended enhancing the information on borrowers (credit bureau) and the possibility to transfer customer information to the customers via a banking "identification card".³⁰ Due to the importance of the small business sector, and recognizing the difficulties it faces, the team allocated a separate section of its report to deal with issues related to small businesses. Additionally, the team recommended enhancing the regulation of the non-bank credit sector—including revising the interest rate limit on non-banking loans and imposing it on the banking system as well, and creating an effective alternative for long term savings of the public through cancelling the management fees on makam and money market funds.

The Kedmi Committee's recommendations concern the different links in the value chain in the food industry, for the purpose of increasing the competition in the industry. As well as recommendations for gradually reducing quotas on agricultural produce and industrial food products, a number of the teams' recommendations concern the need for enhancing small businesses' ability to compete with the large food manufacturers and the removal of import barriers that are not import quotas. In particular, the committee recommended making it obligatory to allocate shelf space for small manufacturers, tightening the regulation over supplier-retailer relationships (and thereby weakening the large manufacturers' power compared with small and medium sized manufacturers), and making it easier for small and medium sized businesses to bid in government tenders. The committee also recommended removing the monopoly

²⁹ The bill for the application of the recommendations of the "Concentration Committee" was approved by the government, and was passed in the Knesset in a first reading.

³⁰ The lack of quality information on the borrower gives the bank where the borrower manages most of his financial activity an advantage over competitors, and the bank could exploit this. To the extent that the information is more transparent, it will improve competition between lenders.

exemption for the agricultural industries, an exemption that currently exists in the Antitrust Law. With respect to the retail link, the team focused on the recommendation to relax the procedures for opening new retail food stores, and a recommendation to restrict the expansion in an area, of retailers with a large market share in that specific area. While the government approved the team's recommendations, a large part of the recommendations require legislative changes. It will therefore take time for them to be implemented.

Table 1.A.1
Israel: Basic Economic Data,^a 2004–12

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Mean population ('000)	6,809	6,930	7,054	7,180	7,309	7,486	7,624	7,766	7,906
Population growth rate (percent)	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8
Israelis employed ('000)	2,632	2,734	2,821	2,940	3,044	3,054	3,159	3,252	3,359
Nominal GDP (NIS billion)	566.6	600.0	646.7	683.4	723.0	766.0	813.9	871.8	928.3
Real GDP growth rate (percent)	4.9	4.9	5.8	5.9	4.1	1.1	5.0	4.6	3.1
Per capita GDP (\$ '000, current prices)	18.5	19.2	20.4	23.0	27.4	26.0	28.6	31.4	30.5
Unemployment rate (percent)	13.0	11.3	10.5	9.2	7.7	9.5	8.4	7.1	6.9
Real wage per employee post (percent change)	2.5	1.0	1.3	1.6	-0.7	-2.6	0.7	0.4	0.9
Nominal wage per employee post (NIS per month, current prices)	7,051	7,220	7,468	7,630	7,921	7,974	8,247	8,563	8,780
Rate of employment in 25-64 year age group (percent)	66.7	67.5	68.6	70.1	70.9	70.1	71.2	72.1	74.0
Inflation rate (percent) ^b	1.2	2.4	-0.1	3.4	3.8	3.9	2.7	2.2	1.6
NIS/\$ exchange rate (percent) ^b	-1.2	6.2	-8.9	-7.1	-0.9	-2.1	-4.9	4.7	0.1
Nominal effective exchange rate (percent) ^{b,c}	4.4	0.0	-3.4	-1.4	-8.3	3.5	-7.1	3.6	0.6
Bank of Israel interest rate (percent)	4.2	3.7	5.1	3.9	3.7	0.8	1.6	2.9	2.3
Nominal yield on 10-year government bonds (percent)	7.9	6.7	6.4	5.7	6.1	5.4	4.9	5.1	4.6
Real yield on 10-year government bonds (percent)	4.3	3.7	3.8	3.4	3.4	2.9	2.2	2.4	2.0
Public expenditure (percent of GDP)	47.3	45.3	44.9	43.9	43.1	43.2	42.6	42.1	41.9
Tax revenue (percent of GDP)	35.3	35.5	35.8	36.3	33.7	31.3	32.4	32.6	31.4
Actual budget deficit (percent of GDP)	3.6	1.8	0.9	0.1	2.0	5.1	3.7	3.3	4.2
Gross public debt (percent of GDP, year-end)	97.8	93.9	84.9	78.5	77.1	79.5	76.0	73.9	73.0
Goods and services exports (\$ billion, current prices) ^d	43.0	47.1	53.0	60.6	72.4	62.5	72.2	80.0	81.6
Goods and services imports (\$ billion, current prices) ^d	43.7	48.5	53.3	63.8	75.3	58.2	68.2	82.1	84.8
Current account (percent of GDP)	1.7	3.1	4.8	2.7	1.1	4.2	3.7	1.4	-0.1
Net external debt (percent of GDP) ^e	-8.2	-15.6	-19.9	-23.1	-21.8	-26.6	-23.8	-23.4	-26.8

^a Annual averages.

^b Rate of change during year.

^c The shekel exchange rate against the currencies of Israel's trading partners, weighted according to the volume of Israel's trade with them.

^d Excluding diamonds.

^e A negative number indicates surplus.

SOURCE: Based on Central Bureau of Statistics data.

Table 1.A.2
Basic Economic Data: International Comparison^a, 2004–2012

	Average 2000–2010				2011				2012			
	Israel	US	Eurozone	OECD	Israel	US	Eurozone	OECD	Israel	US	Eurozone	OECD
	GDP growth rate	3.3	1.5	1.2	1.7	4.6	1.8	1.5	1.8	3.2	2.2	-0.4
GDP per capita growth	1.3	0.6	0.6	1.0	2.7	1.1	1.2	1.6	1.3	0.7	-0.7	0.7
Population growth rate	1.9	0.9	0.5	0.7	1.9	0.7	0.3	0.2	1.8	1.5	0.3	0.7
Civilian labor force participation rate, ages 25-64	75.3	79.1	75.5	75.4	77.5	77.6	77.7	76.1	78.7	..	..	..
Unemployment rate	10.8	6.1	8.5	6.8	7.1	8.9	10.0	8.0	6.9	8.1	11.1	8.0
Inflation rate (during year)	2.3	2.4	2.1	2.5	2.2	3.1	2.7	2.9	1.6	2.1	2.4	2.2
Exports (percent of GDP) ^b	35.1	10.9	38.5	25.3	38.6	14.0	44.0	29.0	39.0	..	..	..
Gross investment (percent of GDP)	17.4	18.1	20.8	20.4	17.6	14.9	19.6	18.8	18.8	..	..	..
National saving (percent of GDP)	19.3	13.8	21.1	19.2	18.4	11.6	19.7	17.7	18.5	..	..	..
Current account (percent of GDP)	1.9	-4.5	0.3	-1.1	1.4	-3.1	0.5	-0.7	-0.1	-3.0	1.4	-0.6
Public expenditure (percent of GDP)	46.0	37.7	48.0	40.6	42.1	41.6	49.5	43.2	42.0	40.2	49.5	42.6
Tax revenue (percent of GDP)	34.8	26.4	38.7	34.5	32.6	25.1	..	..	31.4	..	..	..
Gross public debt (percent of GDP)	87.3	70.1	78.6	79.3	73.9	102.2	95.2	102.9	72.7	109.8	100.6	108.7

^a Figures for the eurozone and OECD countries are weighted averages of the countries in each group, as published in the OECD Economic Outlook.

^b For Israel, exports excluding diamonds.

SOURCE: OECD data base; OECD Economic Outlook, 2012; IMF World Economic Outlook, 2012 and Bank of Israel.

