



MINISTRY OF FINANCE

OFFICE OF THE DIRECTOR-GENERAL

ECONOMICS AND RESEARCH DEPARTMENT

**REVIEW OF THE STATE OF THE ECONOMY
AND MACROECONOMIC FORECASTS PRIOR
TO THE 2009 BUDGET**

JUNE 2008

Table of contents

Chapter A. Macroeconomic Review for 2007 and the First Quarter of 2008	3
1. General	3
2. Private consumption	4
3. Public consumption	5
4. The budget deficit	5
5. The public debt	6
6. Investment	8
7. Foreign investment	8
8. Real exchange rate developments	9
9. Exports	10
10. Imports	12
11. The current account	13
12. The labor market	14
13. Monetary policy and prices	17
14. Productivity in the business sector	18
Chapter B. Macro-Economic Forecasts for the Years 2008 and 2009	20
1. General	20
2. Main assumptions behind the growth forecast for the years 2008 and 2009	21
3. Main elements of the forecast for 2008	22
4. Main elements of the forecast for 2009	23
Tables – macroeconomic forecasts	25
Appendix A: The Financial Crisis and Growth Forecasts for the USA and the Eurozone	28

a. Macroeconomic Review for 2007 and the First Quarter of 2008¹

1. General

2007 was notable for a continued rapid expansion in all GDP components, following the high rate of growth recorded in the years 2004-2006. The rapid growth in the last four years came after the deep recession that began at the end of the year 2000 and continued until mid-2003. The Second Lebanon War, which adversely affected growth in the third quarter of 2006, had an only temporary short-term impact. This was apparent from the immediate rebound at the end of that year, and from the sustained rapid economic expansion in 2007.

Gross domestic product rose by 5.3% in 2007 and business sector GDP went up by 6.1%. GDP per capita increased by 3.4%. These growth rates are similar to the growth rates recorded in the previous three years. The growth included most of GDP components and among them a rapid expansion in private consumption, fixed asset investment, exports and imports. Furthermore, a current account surplus and a large volume of foreign investment were recorded.

In 2007 as in the years 2004-2006, the business sector expanded faster than the economy as a whole. At the same time, the improvement in the labor market continued, as reflected by a large increase in the number of employed persons, a rise in the labor force participation rate, and a decline in the unemployment rate.

The output gap contracted in 2007 and reflected a more advanced stage of growth. Today's growth is accompanied by an expansion in the factors of production. This is in contrast to the initial stage of the exit from the recession, when growth was mainly apparent from the increased utilization of existing production factors.

The rapid growth in the economy led to high tax revenue. As a result, 2007 ended with a balanced budget concurrent with a continued reduction in the tax burden and a decrease in the public debt. These processes had the effect of increasing the Israeli economy's stability in the face of shocks – a development that is also reflected in the stability of the exchange rate. The shekel strengthened significantly against the US dollar in 2007 and remained unchanged against other major currencies. Since the beginning of 2008, the shekel has strengthened against other currencies as well, such as the euro². The stability of the shekel is supported by the continued balance-of-payments surplus and the large volume of foreign investment in Israel.

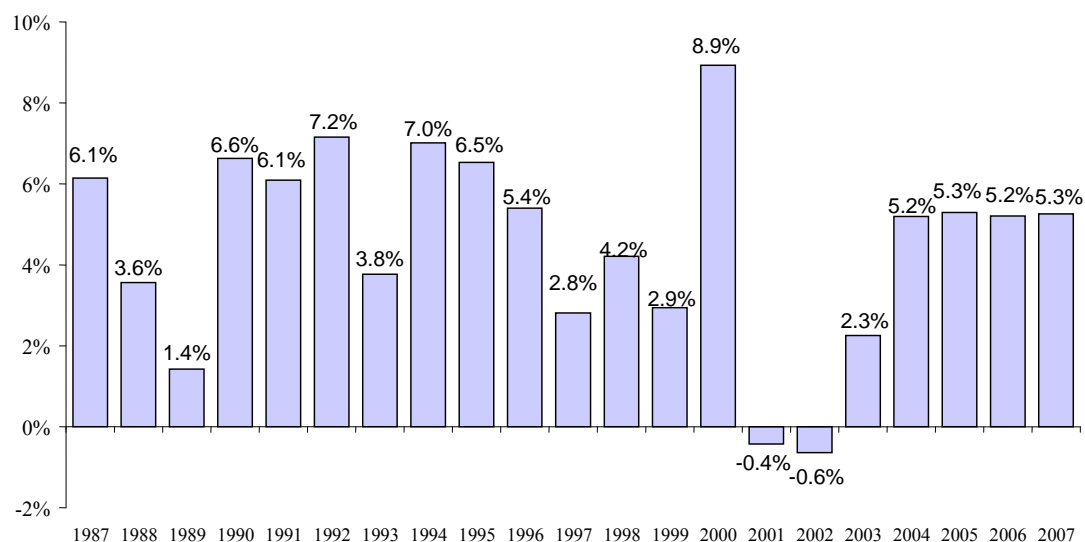
Monetary policy was directed at maintaining a low real interest rate concurrent with keeping price stability. However, in the second half of 2007 the trend changed and prices rose, largely as a result of the increase in world prices for raw materials and food.

¹ The data is updated to the end of May 2008.

² The shekel appreciated by 8% against the dollar in 2007 compared with 2006. (The rates of change refer to the average for the period compared with the average for the previous period). During the first five months of 2008, the appreciation continued. The exchange rate against the dollar rose by another 13% from the end of 2007 to mid-May 2008. The situation with respect to the euro is different. The value of the shekel against the euro remained practically unchanged in 2007. From the beginning of 2008 to mid-May however, the shekel strengthened against the euro by 8%.

Contributing to the fast growth in 2007 was high domestic demand and external factors such as sustained global growth and the expansion of world trade. Other major factors contributing to the growth in the economy were the stability of the economy and a responsible fiscal policy, which had the effect of reducing the budget deficit and the debt burden. The impact of the global financial crisis resulting from the crisis in the subprime mortgage market in the USA has yet to affect the real activity (in growth and its components in 2007 and the first quarter of 2008) of the Israeli economy. (See Appendix A for an analysis of the financial crisis.)

Annual GDP Growth Rates



Rapid growth of 5.4%³ with a continued expansion in the majority of GDP components was recorded in the first quarter of 2008.

2. Private consumption

Private consumption rose by 6.6% in 2007, following an increase of 4.5% in 2006, 4.0% in 2005 and 5.6% in 2004. The expansion in private consumption during the years 2004-2007 resulted from the higher disposable income deriving from the rise in real wages,⁴ a growth in employment, the reduction in tax rates and the expectation of further reductions in the tax burden in view of the multi-year tax program, the increase in the value of the public's asset portfolio⁵ and the decline in the real interest rate. Consumption also increased as a result of the economic and price stability, which reduced the level of uncertainty.

³ This figure was calculated on an annualized basis compared with the previous quarter. Hereinafter, all the data presented concerning the first quarter of 2008 were calculated in the same manner unless otherwise stated.

⁴ 1.8% in 2007.

⁵ The public's asset portfolio expanded by 13.2% (NIS 246 billion in 2007), and totaled NIS 2,106 billion at the end of the year. The expansion resulted, among other things, from the 29% rise in the Tel Aviv 25 Index during 2007.

A major factor which contributed to the growth in private consumption was the 23.6% increase in consumption of consumer durables in 2007 (purchases of private vehicles increased by 30.7% due partly to the reduced rates of tax on private cars) following a decrease of 0.9% in 2006.

Private consumption rose by 14.1% in the first quarter of 2008. Leading the consumption growth were purchases of consumer durables such as private vehicles, washing machines, refrigerators and air conditioners. Private consumption excluding consumer durables rose by 6.4%.

3. Public consumption

Public consumption increased by 2.6% in real terms in 2007 after rising by 2.3% in 2006. The increase in 2007 derived, among other things, from a 3.9% growth in civilian consumption and a 0.6% decrease in defense consumption following a 4.4% increase in 2006 as a result of the Second Lebanon War. The decrease in defense consumption was reflected in imports, which fell by 4.5%, offsetting a 0.6% increase in domestic consumption (of which procurement rose by 2.6% and labor expenses fell by 1.1%).

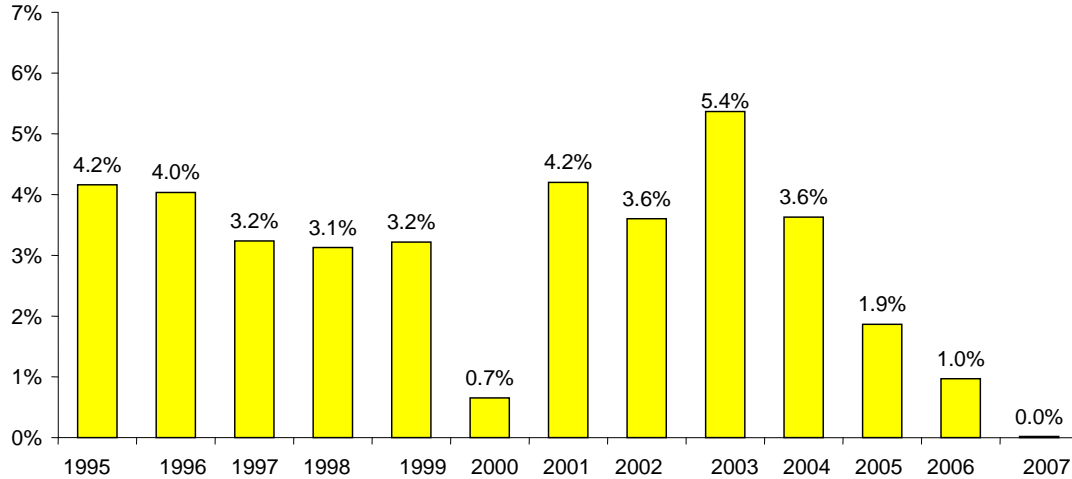
The growth in public expenditure (which apart from public consumption includes such components as transfer payments, supports and interest) amounted to 3.4% in real terms (CPI adjusted).

4. The budget deficit

The year 2007 ended with a balanced budget.⁶ The decline in the budget deficit continued for the fourth consecutive year following a high deficit of 5.4% in 2003, 3.6% in 2004, 1.9% in 2005 and 1.0% in 2006. The consistent decline in the budget deficit during recent years was supported by the adherence to the Deficit Reduction Law and by the limits on the growth in expenditure, which served as an anchor for this process. In 2008, the deficit ceiling is restricted to 1.6% of GDP and real increase in expenditure to 1.7%. The budget balance recorded in 2007 mainly reflects the effect of economic growth that was accompanied by a large rise in government revenue, over and above the planned increase in the original budget, concurrent with a nearly full performance on the expenditure side to the extent of 98% of the planned budget. During the first five months of 2008, tax revenue continued to expand, albeit at a more moderate rate. Revenue year to date is consistent with the revenue forecast in the 2008 budget. Privatization revenue of NIS 6.3 billion was recorded in 2007. Since privatization receipts are used for reducing the government debt, they do not affect the size of the budget deficit.

⁶ The general government's budget deficit (the total deficit and the current deficit) fell considerably compared with previous years. The general government's total budget deficit amounted to 0.7% of GDP in 2007 and the current budget moved from a deficit, to a surplus of 0.7% of GDP.

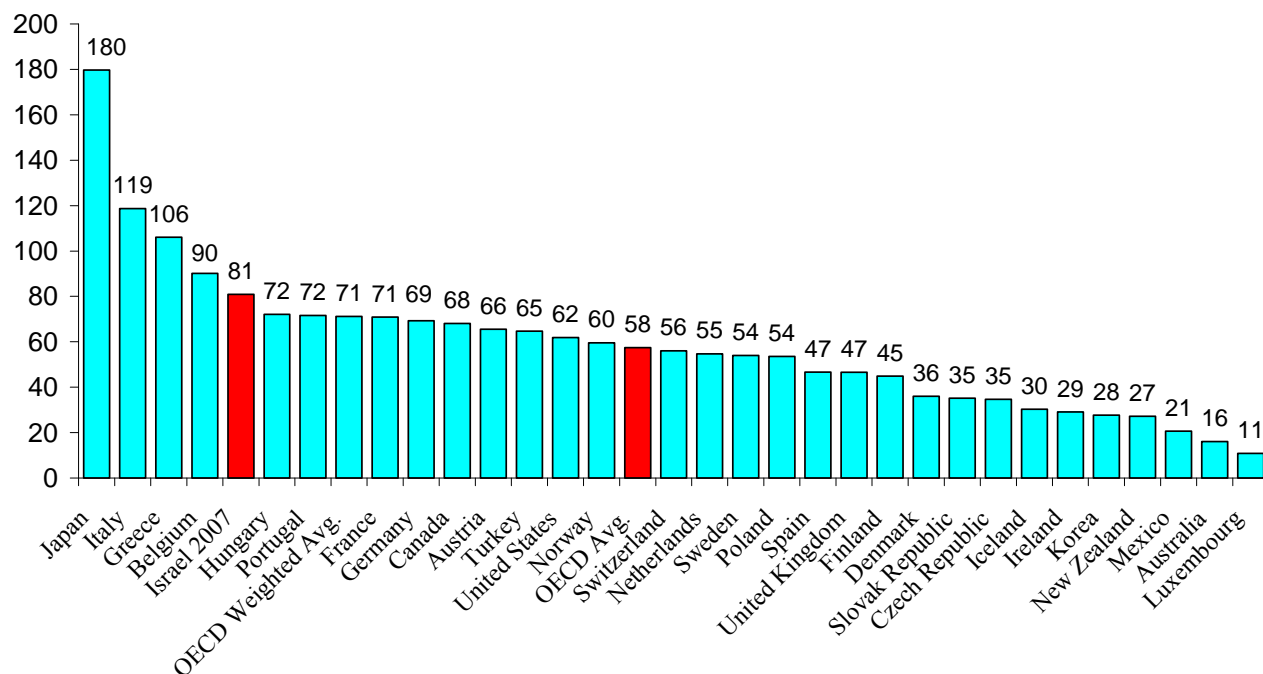
Budget Deficit (as percentage of GDP)



5. The public debt

The gross public debt (the absolute majority of which is government debt) as a ratio of GDP continued to decline rapidly in 2007. The debt-GDP ratio at the end of 2007 amounted to 80.8%, a decline from 86.7% in 2006 and 95.9% in 2005. The decrease derived from the low budget deficit, the high GDP growth rate and the strengthening of the shekel (approximately a quarter of the public debt is in foreign currency). Privatization revenue also contributed to the decline in the debt-GDP ratio, as stated. Despite the significant decrease in the debt-GDP ratio during recent years, its level is still high by international standards. It should be noted that the decline in the debt during recent years followed an upsurge in the debt during the years 2001-2003 – from 87.1% in 2000 to 101.7% in 2003. This increase, which derived from the recession and the large budget deficit in those years, undermined financial stability and as a result, led to a large increase in debt financing costs.

Public Debt
as percentage of GDP, 2006

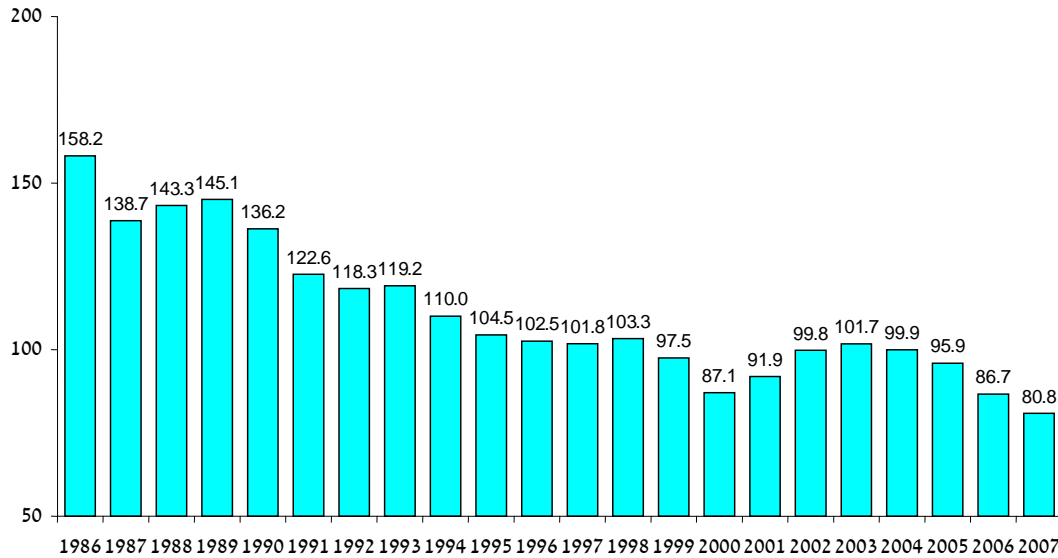


A simulation run at the Ministry of Finance shows that under reasonable assumptions of growth (growth of 3.5% a year) and the retention of the government's fiscal objectives (including a budget deficit of up to 1.0% per year), a debt-GDP ratio of 58.0%⁷, similar to the average for the OECD countries in 2006, can be attained by the year 2015.

Reducing the debt increases the stability of the economy, facilitates a reduction in the interest rate and long-term interest payments, frees more resources for investment in the business sector, reduces the Israeli economy's risk as perceived by foreign investors and makes it possible to adopt an anti-cyclical policy. A reduction in the debt is therefore a prerequisite for creating the conditions for sustained growth and higher employment in the economy. A reduction in the debt will also make it possible to reduce interest expenses and direct the sources freed as a result to promoting the government's order of priorities without having to increase the total budget.

⁷ This estimate does not take into account future revenue from privatization and long-term changes in the shekel/dollar exchange rate.

The Gross Public Debt as Percentage of GDP



6. Investment

Investment in fixed assets rose by a high rate of 14.2% in 2007. This included an increase of 22.4% in investment in machinery, equipment and transportation equipment (16.0% in investment excluding transportation vehicles and 21.6% in land transportation vehicles), an increase of 14.8% in investment in intangible assets and a 6.5% growth in construction investment (investment in housing construction rose by 2.9%). The fast growth in fixed asset investment during the last two years, following a minor increase in 2005 and a decrease during the previous years reflects among other things the rapid growth in those years, which led to a more complete utilization of existing capital and the need to increase this capital. The investment expansion is also supported by a continued growth in exports and low real interest rates.

Investment in fixed assets rose by the high rate of 9.6% in the first quarter of 2008.⁸

7. Foreign investment

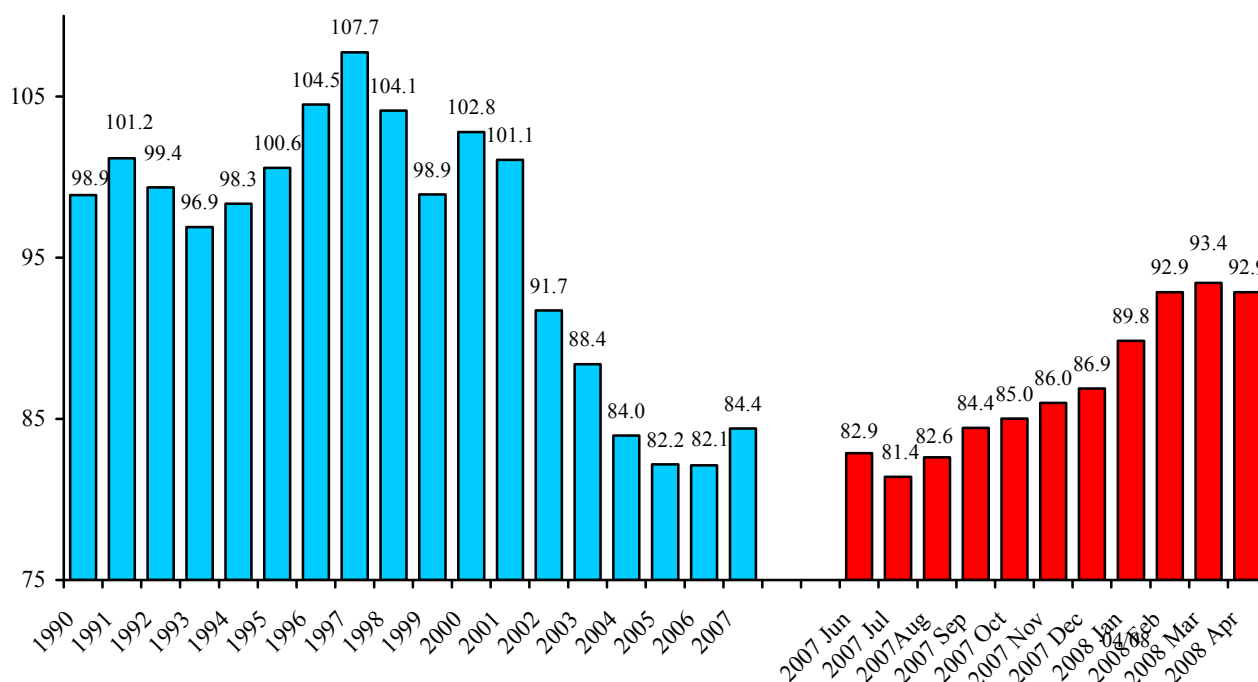
Foreign investment (direct investment in Israeli enterprises, portfolio investment and other investment) amounted to \$ 13.6 billion in 2007, following foreign investment of \$ 18.0 billion in 2006 (excluding the Teva-Ivax transaction) and \$ 9.5 billion in 2005. Direct foreign investment totaled \$ 10.3 billion in 2007, following investment of \$ 14.7 billion in 2006 and \$ 4.9 billion in 2005. During the first four months of 2008, total foreign investment amounted to \$ 2.6 billion (\$ 7.9 billion annualized).

⁸ One explanation for the large growth in investment in fixed assets is the substantial increase in purchases of private cars in the first quarter of 2008 following the large increase recorded in 2007. This development resulted at least partly, from the reduction in purchase taxes to 84.0% and 78.0% at the beginning of 2007 and the beginning of 2008 respectively compared with the previous rate of 89.0%.

8. Real exchange rate developments

The appreciation of the nominal exchange rate in 2007 and 2008 was translated into a real appreciation.⁹ The real exchange rate of the shekel appreciated by 7% during the first four months of 2008 compared with the end of 2007, following an appreciation of 3% in 2007 compared with 2006. In 2006, the real exchange rate remained unchanged.

Real Exchange Rate 1990-2008



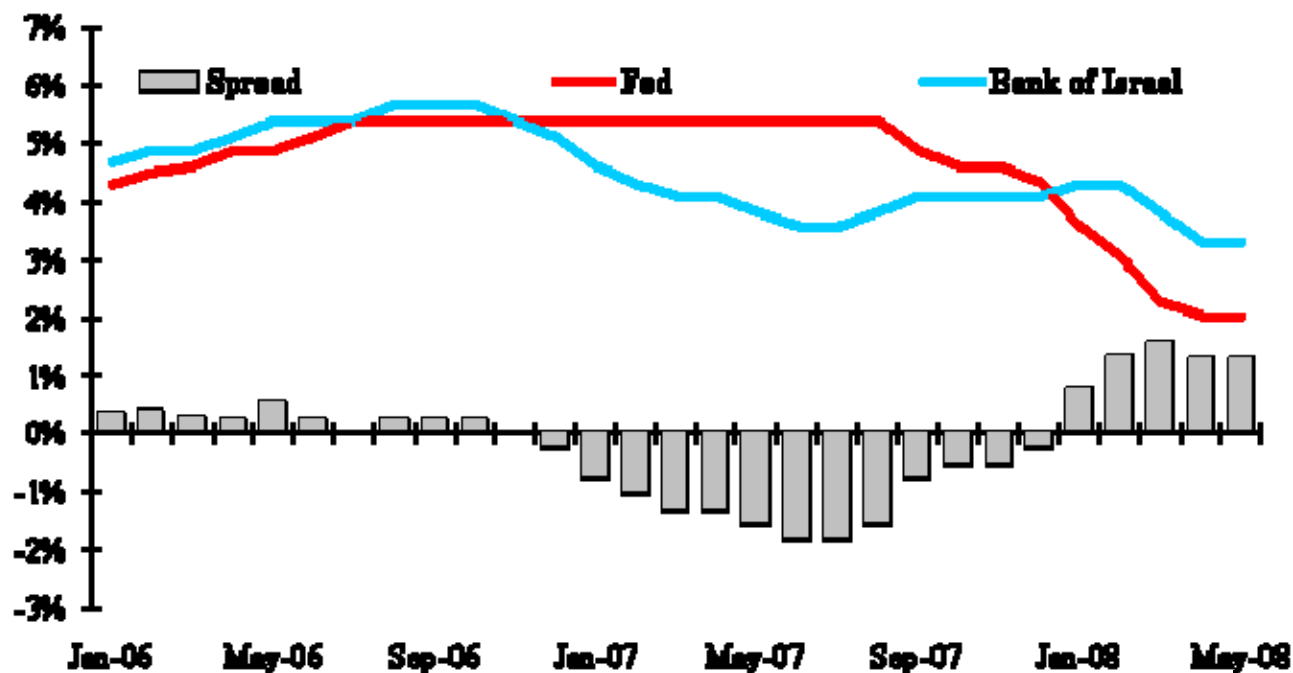
SOURCE: IMF; Economics and Research Department calculations.

The appreciation of the exchange rate resulted from the inflow of foreign currency into the economy. Encouraging this inflow were the balance-of-payments surplus, the rapid interest rate cuts in the USA (see the graph below), the stability in interest rates in Europe, the influx of foreign investment into the economy resulting from the rapid growth and increasingly strong indicators of economic stability.

In summary, the appreciation in 2007 and at the beginning of 2008 is expected to lead to a slower pace of export growth and to an increase in imports.

⁹ The real exchange rate measures the “genuine” exchange rate of the economy. The rate reflects the extent of the economy’s competitiveness (from the aspect of price levels) with its trading partners. As an example, an appreciation of the real exchange rate implies that Israeli goods become more expensive for consumers abroad while imported goods become less expensive for the Israeli consumer.

The Bank of Israel Interest Rate and the Fed Fund's Rate



SOURCE: Bank of Israel and the Federal Reserve Bank.

9. Exports

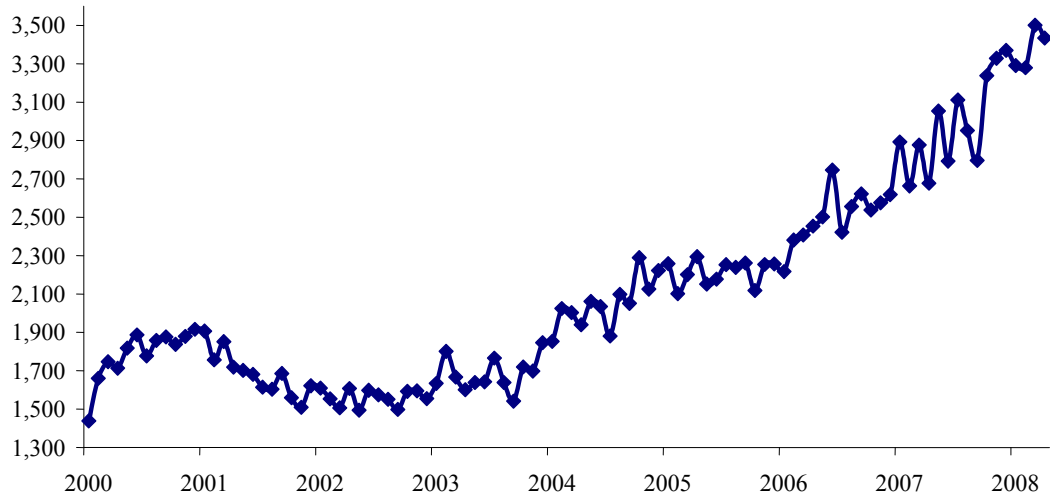
Israel's export expansion continued in 2007. Exports rose by 8.4% in real terms (9.8% excluding diamonds and startups). Exports of goods increased by 8.9% while exports of services rose by 7.3%. Exports of tourism services grew by 16.5% due to the rapid rebound in the tourism industry after the Second Lebanon War in the summer of 2006.

Two prominent export growth areas were industrial exports (excluding diamonds), which rose by 10.0% and in particular, agricultural exports which increased by the high rate of 23.1% after remaining unchanged in 2006. However, diamond exports rose by the low rate of 3.3% after falling by 13.6% in 2006.

The growth in exports despite the real appreciation of the shekel and the increase in the unit labor cost indicate that the majority of Israeli exports are focused on sophisticated products for which demand is buoyant.

Exports of goods

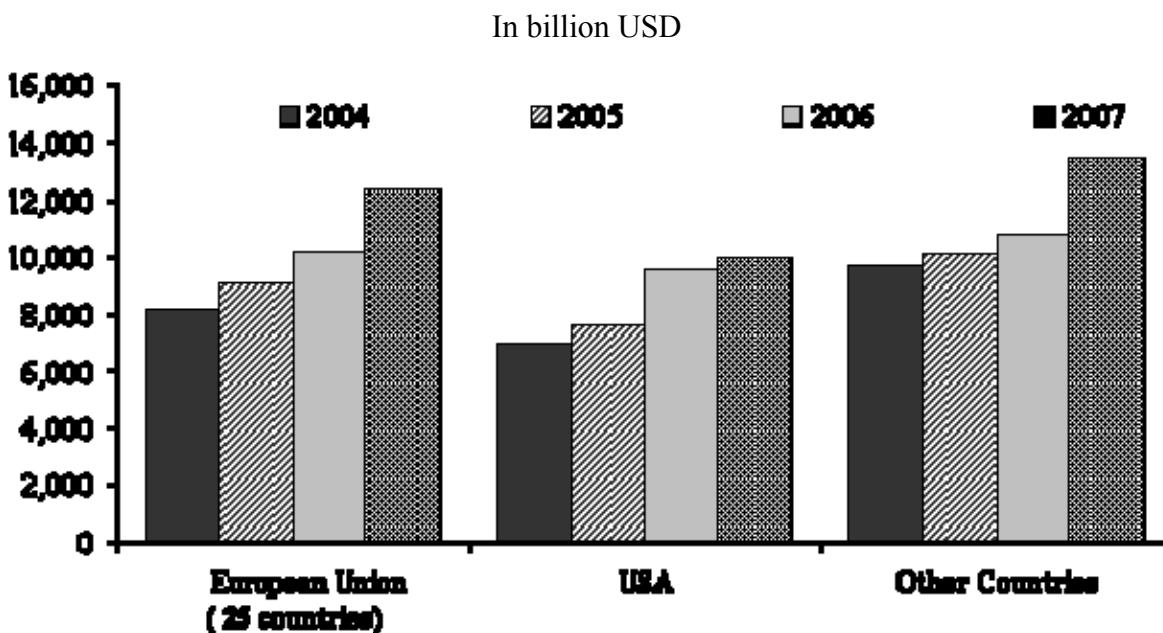
(Monthly data in millions of dollars,
excluding diamonds, ships and aircraft)



Global growth and the expansion in world trade contributed to the rise in exports. Another important development in 2007 was the diversification of the target markets for Israeli exports. Exports of goods¹⁰ to the USA rose by a relatively slow 4.5% in dollar terms, compared with large increases of 21.4% to the countries of the European Union and 24.5% to the rest of the world. Market diversification is a positive process, because it reduces Israeli exports reliance on the American market and their high level of sensitivity to developments in the American economy. The diversification process can be attributed to the weakening of the dollar, which made it less worthwhile to export to the American market, and to the slower pace of growth in the USA compared with the rapid growth in the emerging markets. In 2007, 35% of the exports of goods went to the countries of the European Union, 28% to the USA and 38% to the rest of the world.

¹⁰ The foreign trade data which is presented is exclusive of ships, planes and diamonds.

Exports of goods to the USA, the European Union and other destinations, 2004-2007



SOURCE: CBS.

Exports rose by 12.6% annualized in the first quarter of 2008. Most of the increase derived from a 41.8% growth in exports of services, while exports of goods expanded by only 2.0%.

10. Imports

Imports rose by 12.3% in 2007 following a moderate increase of 3.3% in 2006. The import growth in 2007 derived from an 11.4% increase in imports of civilian goods and from a large 17.8% expansion in imports of services. On the other hand, defense imports fell by 4.0% following a significant 11.8% increase in 2006. The growth in defense imports in 2006 resulted from the Second Lebanon War.

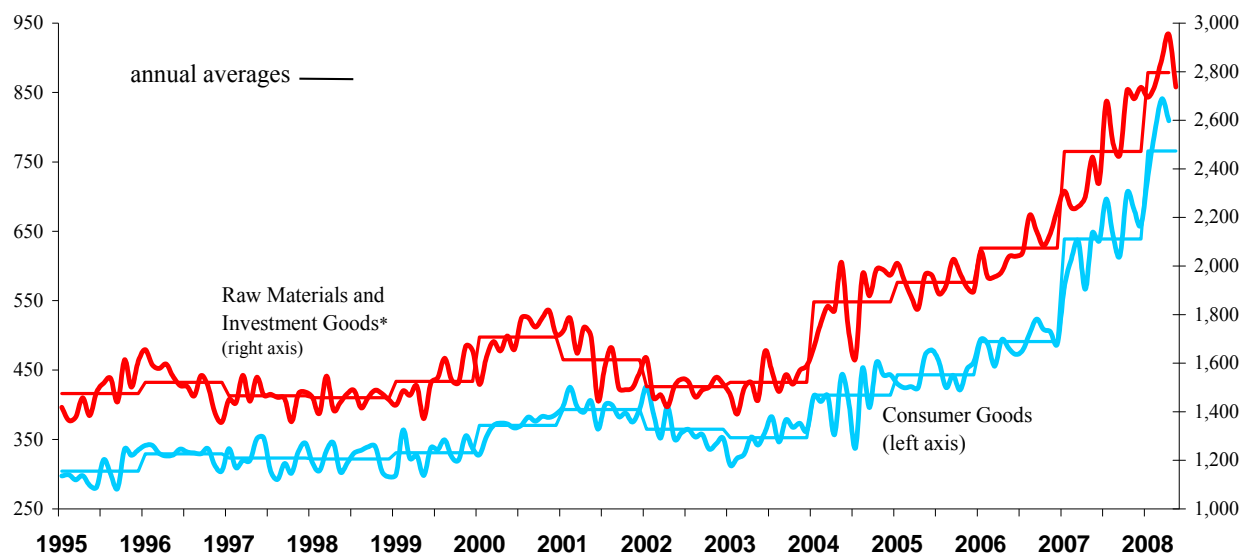
The growth in imports was reflected by increased imports of consumer goods (principally consumer durables) and capital goods. The increase derived from:

- A decrease in the relative price of imports (a real appreciation of the shekel).
- A growth in imports from developing countries such as China and India.
- A reduction in taxes on imported goods.

Imports of raw material, however, rose at an only moderate rate. The moderate increase in these imports is consistent with the economy's long-term shift from raw material intensive industries to human capital intensive industries and services.

Imports of goods (in dollar terms)¹¹ from the USA and the European Union rose by the high rate of 24% and 15% respectively. Imports from the rest of the world rose by 21.0%.

Imports of goods
Million USD, January 1995 – April 2008



*Excluding diamonds, ships, aircraft and fuel

During the first quarter of 2008 imports rose by 18.7% annualized in shekel terms. Imports of civilian goods increased by 11.0% and imports of services grew by 39.5%.

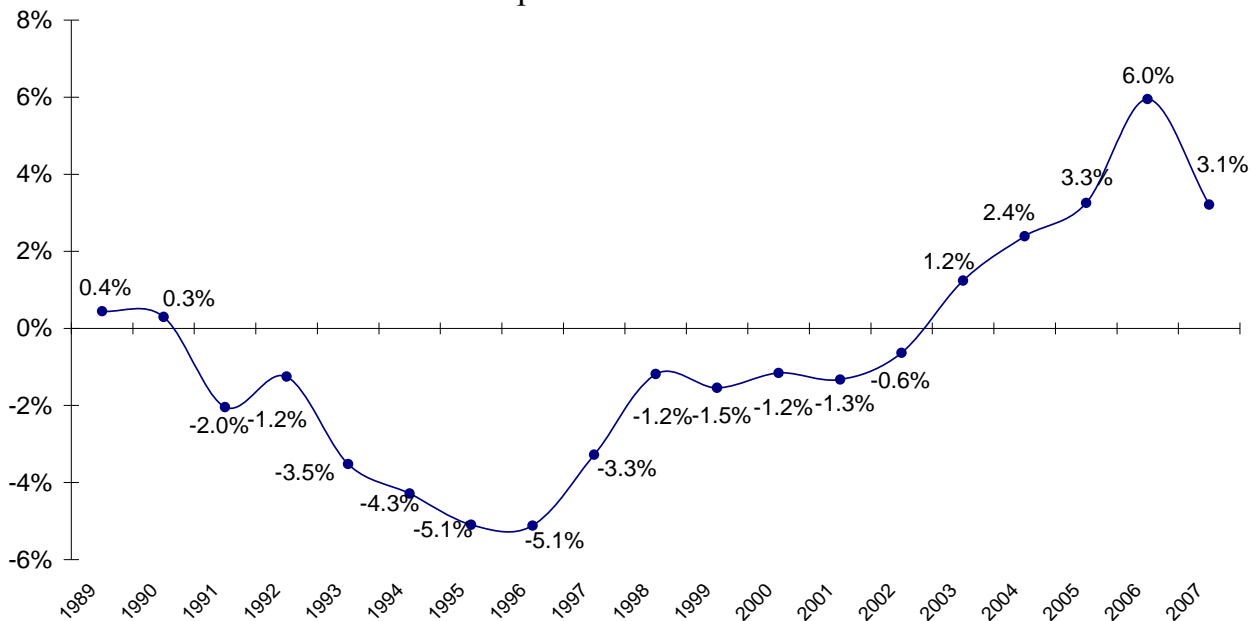
11. The current account

A current account deficit was recorded from the beginning of the 1990s and peaked in the middle of the 1990s (5.1% of GDP). The current account deficit declined from the middle of the 1990s and a surplus was recorded from 2003. While a deficit of \$ 0.7 billion (0.6% of GDP) was recorded in 2002, a surplus of \$ 8.5 billion (6.0% of GDP) was recorded in 2006. This surplus contracted to \$ 5 billion (3.1% of GDP) in 2007, mainly due to the growth in imports of goods and services.¹² A further decrease in the surplus is forecast for the next two years. This trend is expected to reduce the pressure for an appreciation of the shekel, and could actually reverse the trend and lead to a gradual depreciation.

¹¹ Excluding ships, planes and diamonds.

¹² A deficit of 1.5% of GDP was recorded in the goods and services account in 2007 compared with a surplus of 0.8% of GDP in 2006.

The Current Account as percent of GDP



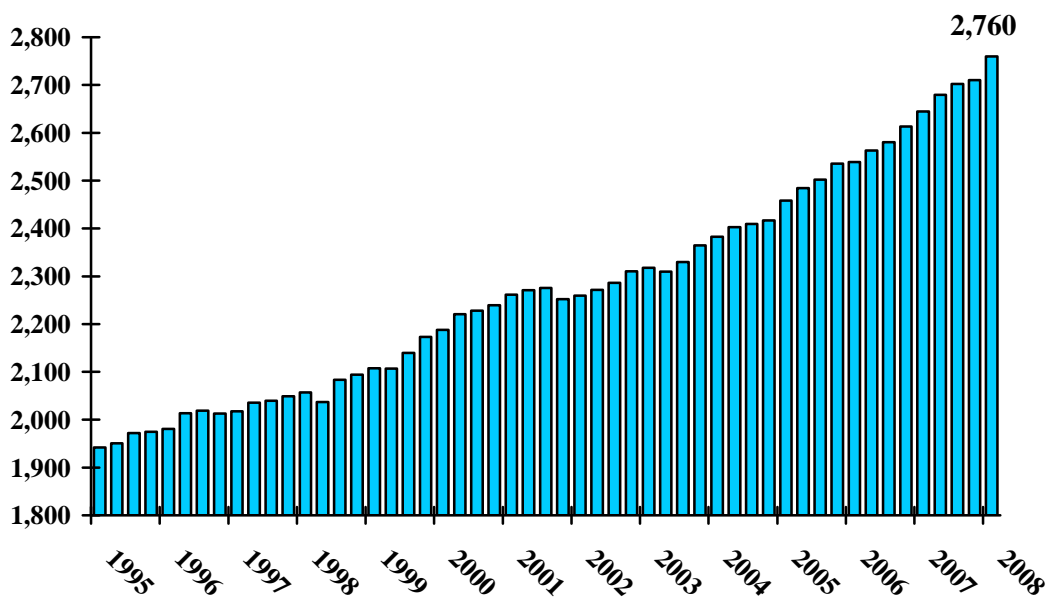
12. The labor market

The improvement in the labor market continued during 2007. The rapid growth in the economy led to an increase in the number of Israeli employed persons, a rise in the labor force participation rate and to a large decline in the unemployment rate. The unemployment rate, which peaked at 10.9% in the second half of 2003, fell heavily during the years 2004-2007. In 2007 the unemployment rate amounted to 7.3% compared with 8.4% in 2006 and 9.0% in 2005. The improvement in the labor market over the past year was mainly reflected by a sharp decline in the unemployment rate, which amounted to 6.3% in the first quarter of 2008 compared with 7.8% in the first quarter of 2007.

The number of Israeli employed persons rose by 90 thousand in 2007 (2007 fourth quarter compared with 2006 fourth quarter), an increase of 3.6%. Since this increase was much larger than the growth in the working-age labor force, it facilitated a decline in the unemployment rate concurrent with a rise in the labor force participation rate. The halt to the growth in the number of employed persons in the last quarter of 2007 came as a surprise, because it was inconsistent with the other developments in the economy. However, a large growth in employment was recorded in the first quarter of 2008, and thereby compensated for the lack of increase in the fourth quarter of 2007. Compared with the first quarter of 2007, the number of employed persons rose by 115 thousand, a substantial increase of 4.3%, far higher than the growth in the civilian labor force in the same period, which amounted to 1.8%. The number of persons employed in

full-time posts in that period rose by 101 thousand concurrent with a decrease of 18 thousand in the number of persons employed in a part-time post.¹³

Number of Israeli persons employed
(Thousands)

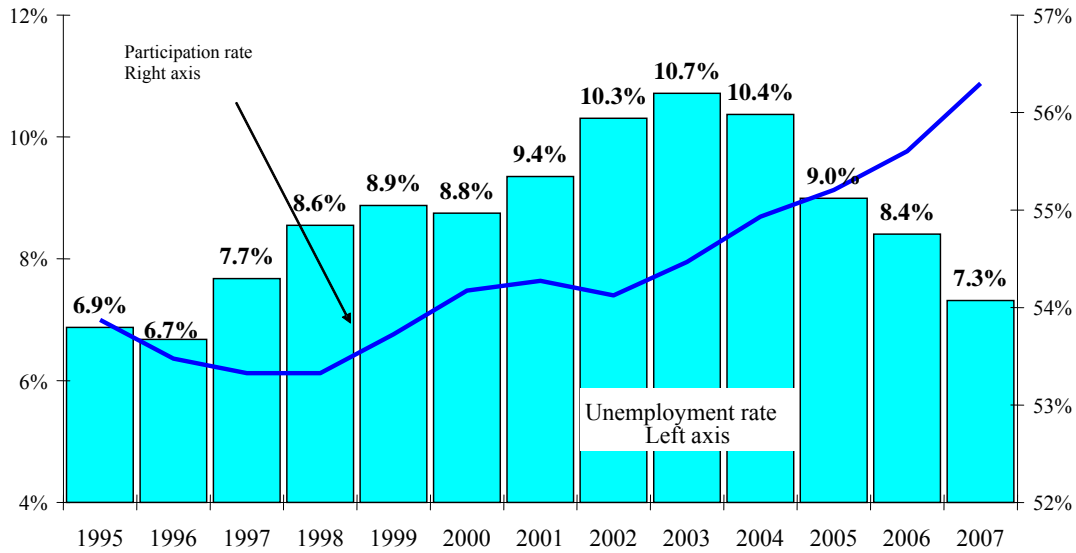


The labor force participation rate rose to 56.3% in 2007, compared with 55.6% in 2006 and 55.2% in 2005. The rise in the participation rate during recent years reflects the increased demand for workers, an increase in women’s participation rate, a rise in the level of education, a gradual rise in the retirement age and the government’s policy of reducing allowances.

The labor force participation rate amounted to 56.6% in the first quarter of 2008, similar to the figure for the second and third quarters of 2007 (56.5%) and far higher than the rate recorded in the fourth quarter of 2007 (56.1%). No reason for the decline in the participation rate in the fourth quarter is apparent.

¹³ The difference between the total number of employed persons and the number of persons employed in a full-time and part-time post resulted from temporary absence from the place of work.

The labor force participation rate and the unemployment rate



Principal labor market indicators, 2003-2007 and 2008/Q1

	<u>Participation rate</u>	<u>Unemployment rate</u>	<u>Employed persons</u>	<u>Unemployed persons</u>	<u>Full-time post</u>	<u>Part-time post</u>
2003	54.5%	10.7%	2,330.2	279.8	1,536.1	644.3
2004	54.9%	10.4%	2,400.8	277.7	1,541.3	703.5
2005	55.2%	9.0%	2,493.6	246.4	1,595.1	733.9
2006	55.6%	8.4%	2,573.6	236.1	1,641.0	749.6
2007	56.3%	7.3%	2,683.4	211.7	1,714.5	785.8
2007 Q1	56.2%	7.8%	2,644.7	224.2	1,699.8	763.5
2008 Q1	56.6%	6.3%	2,759.6	184.6	1,800.4	745.5

SOURCE: Economics and Research Department calculations from Labor Force Survey data for the first quarter of 2008 and previous from Labor Force Survey Surveys.

NOTE: The difference between the total number of employed persons and the aggregate number of full and part-time posts derives from the number of temporary absent employees.

The average real wage in the economy rose by 1.8% in 2007¹⁴ after increasing by 1.3% in 2006¹⁵ and 1.0% in 2005. The relatively moderate increase in real wages, despite the high growth rate, can be attributed to the following factors:

- The rise in the participation rate (the additional participation of low-wage workers).
- A decrease in the rate of tax on labor is reducing pressure for wage increases.

It should be noted that for the first time in several years, an increase was recorded in the unit labor cost, which is indicative of a contraction in the output gap.

13. Monetary policy and prices

The consumer price index rose by an annual average of 0.5% in 2007 but by the high rate of 3.4% during the year (December compared with December). This development derives from the large increase in prices in the second half of the year. The most notable changes during 2007 were increases in the prices of food (7.0% in fruit and vegetables and 3.1% in other food products) and decreases in the prices of clothing and footwear (2.9%) and housing (2.2%), which resulted from the continued strengthening of the shekel against the dollar. In addition, world prices for key commodities, especially oil, fuels and food products, rose in 2007.¹⁶ The considerable weakening of the dollar against the shekel reduced the tendency to index local prices, primarily housing prices, to the exchange rate of the dollar. This process is a positive development because it reduces the impact of exchange rate volatility on inflation.

The Bank of Israel's interest rate was cut during the first half of 2007 due to the large downward deviation of actual inflation from the government's inflation target and the sustained rapid growth in the economy. The low price indexes were supported by the significant strengthening of the shekel against the dollar, which fell heavily against the major currencies. The trend in interest rate policy changed in the second half of 2007. The interest rate was raised due to the relatively high indexes resulting, among other things, from the weakening of the shekel from mid-May to the end of July, the increase in world prices for raw materials (such as oil) and food, and from the contraction of the GDP gap. Another major development effecting interest rate policy was the onset of the subprime crisis in the American mortgage market, which led to a financial crisis and increased the risks in the global economy. This crisis has yet to affect real developments in the Israeli economy, and has not forced the Bank of Israel to emulate the measures taken in the USA and Europe, such as injecting liquidity into the markets. However, the crisis was immediately reflected by a price slide in the capital market. The Bank of Israel's nominal interest rate amounted to 4.0% at the end of 2007. At the beginning of 2008, the interest rate was raised by 0.25 percentage points. In March however, the Bank of Israel cut the interest rate again, and it reached a level of 3.25% in May. The interest rate cut (concurrent with the Bank of Israel's

¹⁴ 1.6% in the business sector and 2.4% in public services.

¹⁵ 1.7% in the business sector and 0.3% in public services.

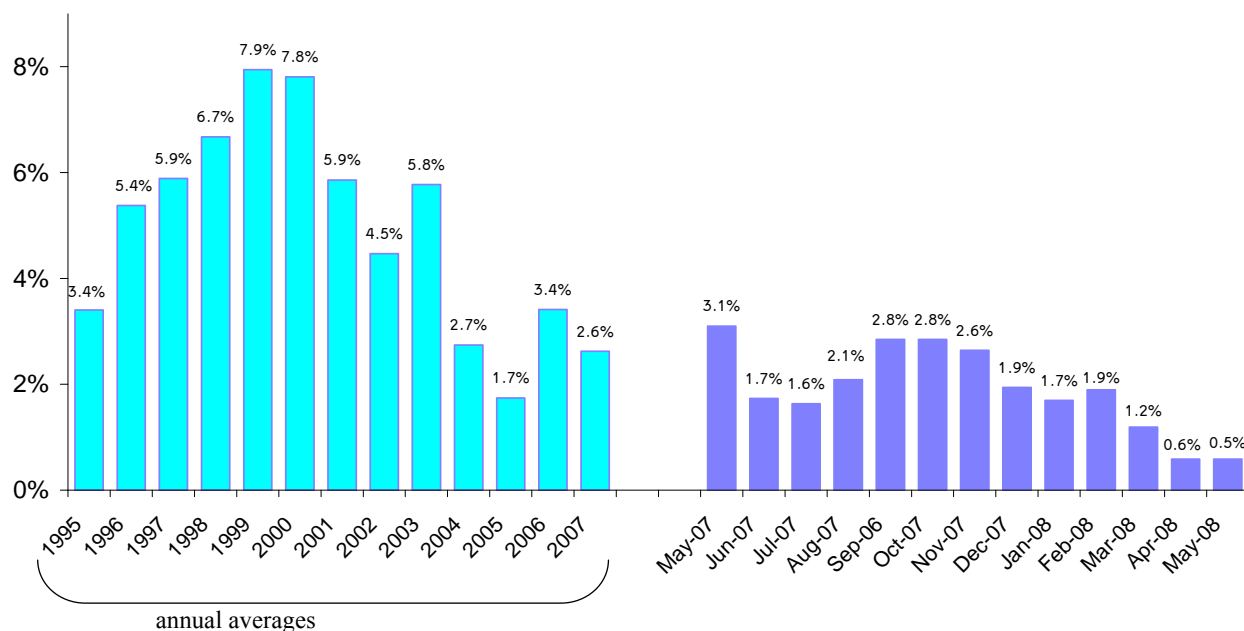
¹⁶ During the last 12 months, oil and food prices surged by 99% and 58% respectively (May 2008 compared with May 2007, according to the index published in the Economist). These price increases led to large rises in the Consumer Price Indexes in the USA (3.9%, April 2008 index compared with April 2007) and in the eurozone (3.3%, April 2008 index compared with April 2007).

intervention in foreign currency trading and its decision to increase the foreign exchange reserves) resulted, among other things, from the large appreciation of the shekel against most of the major currencies at the beginning of 2008 and concern over the adverse effect on exports concurrent with apprehension over a global slowdown and the expectation of further rate cuts in the USA. Due to the high price indexes recorded since the beginning of 2008 and growing concern of another deviation from the inflation target, the Bank of Israel raised the interest rate for June by 0.25 percentage points.

14. Productivity in the business sector

Short-Term Real Interest Rate

(Derived from the Bank of Israel's Key Lending Rate)



“Productivity isn't everything, but in the long-run it's almost everything”.¹⁷

The rapid expansion in business sector product continued in 2007, with an increase of 6.1% compared with 2006. Leading the product growth rate in 2007 was the increase in the factors of production (labor input and a growth in capital stocks),¹⁸ in contrast to the years 2004-2006, when a larger proportion of growth was based on the increased utilization of existing production factors. The large growth in the stock of capital conforms to the assessment that the output gap is contracting and that the economy is close to a pattern of long-term growth. The change in the nature of growth was apparent from the lower rate of growth in productivity in 2007 compared with 2004-2006:

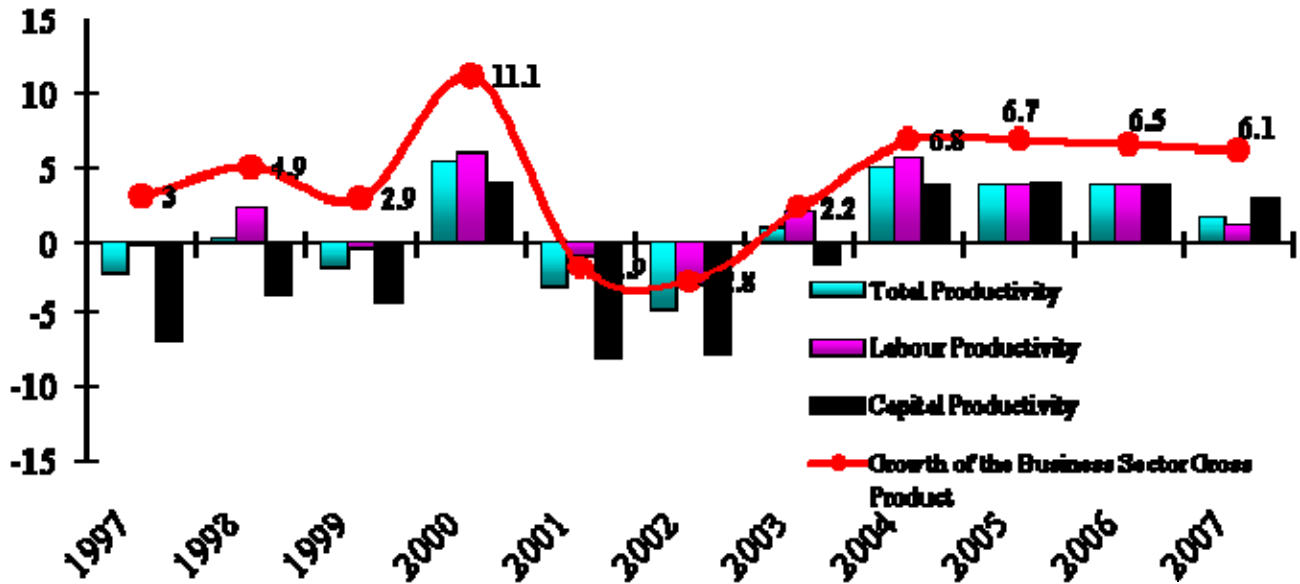
¹⁷ Paul Krugman, “The Age of Diminished Expectations”, the MIT Press, 3rd edition, 1997.

¹⁸ Capital stocks increased by 3.2% in 2007, a higher rate than in previous years. During the years 2004-2006 for example, the stock of capital rose by an annual average of 2.6%. The labor input increased by 5% in 2007 compared with 2006. The increase in the labor input reflected a rise in the participation rate concurrent with a growth in the working-age population.

- Total factor productivity¹⁹ grew by 1.6% in 2007. This is less than the 4.2% growth rate recorded in the years 2004-2006.
- Labor productivity²⁰ grew by 1.1% in 2007 following large increases in the previous years: 3.8% in 2006, 3.8% in 2005 and 5.6% in 2004.
- Capital productivity²¹ grew by 2.8% in 2007, less than the annual average growth rate of 3.9% in the years 2004-2006.

The share of wages in business sector GDP rose by 1.2% in 2008.²² This is indicative of a change in trend compared to the years 2002-2006 when the share of wages in business sector GDP decreased. This implies that wages rose more than the growth in labor productivity, which amounted to 1.1% as stated. The increase in wages could also be indicative that certain sectors of the economy are close to fully exploiting their unutilized manpower potential.

**Labor productivity, Capital productivity,
Total Factor Productivity and growth in the business sector, 1997-2007**
Annual rates of change



SOURCE: CBS, Bank of Israel and Economic and Research Department calculations.

¹⁹ Productivity measures the efficiency with which the economy utilizes the factors of production (capital and labor). Total factor productivity measures all the factors that are not explained by a quantitative increase in the factors of production, on the assumption that the economy operates in accordance with a Cobb-Douglas production function.

²⁰ Labor productivity measures product per worker. In this section, we measured the labor input in hours and productivity therefore measures product per hour.

²¹ Capital productivity measures product per unit of capital existing in the economy.

²² In our calculations we referred only to the share of salaried employees, excluding the income of self-employed workers.

B. Macro-Economic Forecasts for the Years 2008 and 2009

1. General

Data published for the months January-April 2008 are positive and are indicative of a continued growth trend in the economy. However, developments in the global economy – the expectations of a slower pace of growth, the high level of uncertainty resulting from the financial crisis and the inflationary pressures deriving from the increase in world prices for raw materials, energy and food products – are likely to affect growth in Israel in the years 2008 and 2009. In those years, the global slowdown could impact GDP growth in Israel in a number of areas:

- Reduced demand for Israeli exports. This trend is likely to become more apparent in view of the appreciation of the real exchange rate of the shekel against the world's major currencies.
- The lower rate of growth in private consumption as a result of the reduced wealth of the Israeli public caused by the decline in the stock market indexes in Israel and abroad.
- A deterioration in Israel's terms of trade²³ due to the worldwide increase in food, fuel and raw material prices.
- A withdrawal of foreign investment in periods of uncertainty in the financial market worldwide. To date, this phenomenon has not been apparent in Israel, which is indicative of the economy's robustness and investors' perception that the risk of investment in Israel is relatively low.

Uncertainty over the extent and the end of the slowdown, especially in the USA, are making it difficult to assess its impact on growth in Israel during the coming year and even more so in 2009. Nevertheless, the present crisis is expected to have a weaker impact on the Israeli economy compared with the previous crisis in the years 2001-2002. This is because the previous crisis directly affected the high-tech industry, which accounted for a significant proportion of the rapid growth in Israel during the preceding years. The Israeli economy is less sensitive to the present crisis, which began in the subprime mortgage market in the USA and developed into a financial crisis. However, if the crisis is protracted and adversely affects the investment considerations of American firms that purchase Israeli exports, the impact on growth in the Israeli economy will be more significant. The strengthening of the exchange rate of the shekel against the dollar and from the beginning of 2008 against other currencies as well, such as the euro, will also have an adverse effect on exports.

On the other hand, after four years of growth and enhanced stability, the local economy is better positioned to cope with the global slowdown. The increase in disposable income, the rise in employment and the decline in unemployment during recent years, as well as the low real interest rate are expected to support domestic demand. We estimate that the growth rate in 2008 will amount to 4.2%. Although this growth rate would be lower than that recorded in the last four years, it reflects a continued large increase in GDP per capita of 2.4%. The growth rate forecast

²³ Israel is an importer of oil and raw materials such as grain and metals.

for 2009 is 3.5%, slightly less than in 2008 but considerably higher than the rate of growth in most of the developed countries.

2. Main assumptions behind the growth forecast for the year 2008 and 2009

The short-term growth rate in the economy is dependent on a number of factors that will impact both demand for domestic uses and exports. The main factors are:

- The rate of global growth and its composition. According to the consensus forecast, the growth rates currently expected for 2008 are 1.1% in the USA and 1.6% in the Euro area. The growth rates expected for 2009 are 1.7% in the USA and 1.5% in the Euro area. The weighted Average rate of growth of the developed countries according to their share in Israeli exports will fall from 2.6% in 2007 to 1.6% in 2008 and 1.8% in 2009. Moreover, the present forecast for global growth, in the USA in particular, is subject to major risks deriving from the uncertainty regarding the financial crisis and the inflationary pressures that will affect the extent and the length of the economic slowdown. In addition, the American economy is likely to continue suffering from the crisis in the real estate market and from structural problems, such as a high budget deficit and a balance-of-payments current account deficit, despite the considerable weakening of the dollar. The US Administration and the Federal Reserve Bank have taken various measures, such as a temporary reduction in taxes and a large injection of liquidity into the market, in order to prevent a serious slowdown. It is generally expected that the slowdown will be relatively brief and that a rebound will occur at the beginning of 2009.
- The rate of growth in world trade. According to the IMF, trade in goods and services is expected to expand by 5.6% in 2008 and 5.8% in 2009.
- The management of a responsible fiscal policy. One of the key assumptions is that the government will maintain a policy of adhering to its expenditure and deficit target.
- The extent of monetary restraint. We expect that the Bank of Israel will maintain a responsible monetary policy aimed at restoring inflation to within the targeted range.

3. Main elements of the forecast for 2008

a. Inflation

More moderate rate of price increase towards the end of the year. The price indexes in recent months were heavily affected by the worldwide increases in raw materials and food prices, as well as by high domestic demand. As a result of the high price indexes in recent months, the Bank of Israel is expected to raise the interest rate during the coming months and thereby moderate the increase in prices. We estimate that inflation will amount to 3.6% in the course of the year (December 2008 compared with December 2007), and that annual inflation will average 3.9%.

b. The labor force participation rate

Continued rise in the participation rate. The participation rate is expected to continue rising, albeit at a slower rate than in recent years. The continued rise mainly results from long-term processes that include a change in the composition of the working-age population (the young population entering the labor market is more educated than the elderly population retiring from the labor market) and the postponement of the retirement age. The participation rate is expected to rise from an average of 56.3% in 2007 to 56.8% in 2008.

c. Employment

The growth in employment will continue. The number of Israeli employed persons will continue to rise at a slightly higher rate than the growth in the civilian labor force. Employment of Israelis will increase by 3.9% while the average unemployment rate will fall to 6.1%.

d. The public debt

The ratio of the public debt to GDP will continue to decline. The debt-GDP ratio at the end of 2008 is expected to fall from its present level of 81% to 78%.²⁴ Despite the decrease however, the debt-GDP ratio in Israel is still considerably higher than in most of the developed countries. The average debt-GDP ratio in the OECD countries amounted to 58.5% in 2006.

e. Private consumption

Private consumption is expected to grow by 4.6% in 2008. Although this rate is quite high, this increase is less than that recorded in 2007. The principal factors supporting an expansion in private consumption are a continued reduction in taxes, a moderate increase in real wages, a growth in the number of employed persons, a low real interest rate and the appreciation of the shekel, which is reducing import prices. The principal factors adversely affecting private consumption are the lower rate of expansion in the public's asset portfolio resulting from the price slide in the capital market during the initial months of the year, and the impact of the worldwide increase in prices – prices of food products and energy in particular.

f. Public consumption

Public consumption is expected to grow by 2.0% in 2008. This increase takes into account the legally-prescribed 1.7% growth in expenditure, and non-recurring increments of 1.5% resulting from the Second Lebanon War and the disengagement from Gaza (as well as the offset of the non-recurring expenditures in 2007).

g. Investment in fixed assets

Investment will continue to expand but at a lower rate than in 2007. Investment in fixed assets is expected to grow by 7.3%. This increase mainly reflects the consolidation of the growth

²⁴ On the assumption that the growth rate in 2008 will amount to 4.2% and the budget deficit will amount to 1.5% of GDP.

rate and the contraction of the output gap, which necessitate further investment, low real interest rates, the continued high level of foreign investment resulting from the attractiveness of local high-tech industries, the appreciation of the shekel and enhanced economic stability. However, the slower pace of global growth is leading to increased uncertainty, and the increase in prices of raw materials will have an adverse effect on investment. In order to offset the potential adverse effects, a decision was made to introduce accelerated depreciation in the years 2008-2009.

h. Exports

Exports of goods and services will rise by 6.4% (6.5% excluding diamonds), less than in 2007. The export growth figure reflects expectations of a slower expansion in world trade as a result of the slower pace of global growth, and the adverse impact of the appreciation of the real exchange rate of the shekel. The process of export market diversification that began in 2007 and the continued rapid growth in tourism are expected to have a favorable effect.

i. Imports

Imports of goods and services are expected to rise by 7.1%. This increase reflects the expectation of a growth in imports of raw materials and capital goods as a result of the consolidation of the growth rate and the strengthening of the shekel against other currencies. The strengthening of the shekel will also affect imports of consumer goods. As in 2007, a continued growth in imports of vehicles is expected.

4. Main elements of the forecast for 2009

The assessments for 2009 consider current developments together with medium-term forecasts whereby GDP per capita within that time range (the next five years) is expected to expand by an annual average of 2.0% and business sector GDP will grow by 4.2%. These rates of growth will be supported by an annual increase of 6.0% in exports, an increase matching the forecast growth in world trade.

As previously mentioned, the reasons for the lower growth forecasts for 2009 compared with recent years are:

- The global slowdown resulting from the financial crisis. The main assumption employed in current forecasts is that the slowdown in the American economy will be brief and will be mainly apparent in 2008 and at the beginning of 2009. A more protracted crisis will further detract from growth in that year.
- The contraction of the GDP gap and the resulting increase in supply restrictions. The contraction of the GDP gap is reflected by the low unemployment rate in the first quarter of 2008 compared with the average unemployment rate in the years 2004-2007, and by the substantial growth in fixed asset investment in 2007 and 2006 compared with a more moderate increase in previous years.
- A lower rate of export growth because of the real appreciation that began in the second half of 2006.

The principal risk factors in 2009 are a more serious and more protracted slowdown than expected as a result of the global financial crisis, a continued increase in prices in Israel and worldwide (at this stage, we estimate that the price increases will moderate towards the end of 2008) and a worsening in the security situation. However, the potential for higher than forecast growth rates exists providing that the risk factors do not materialize and action is taken to realize the economy's growth potential. Realization of the growth potential is dependent on the implementation of a responsible and resolute economic policy that will favorably affect growth in the economy in 2009 and in the coming years. This policy will be applied in a number of areas:

- A calculated increase in government spending in accordance with the expenditure restriction will make it possible to continue reducing the tax rates on individuals and companies (and thereby increase disposable income and private consumption) and to continue reducing the public debt as a percentage of GDP.
- A stable fiscal policy supportive of price stability, an expansionary monetary policy and a reduction in the economy's risk premium.
- Continued privatization of government companies, which will increase the efficiency of their activity and lead to the more efficient allocation of sources in the economy.
- Further investment in utilities, education, R&D and national projects will form a basis for the continued development of the business sector.
- Application of an active policy in the labor market will make it possible to continue reducing unemployment, increasing the labor force participation rate and improving the standard of living of the economically weak layers of society.
- Increasing the efficiency of the public sector.

We estimate that 2009 will be notable for:

- Sustained economic growth. The GDP growth rate will amount to 3.5%.
- A 4.1% expansion of private consumption under the impact of the same factors that affected the forecast for 2008 (see details above).
- A 1.6% increase in public consumption. Government expenditure will grow by 1.7% in real terms in accordance with the planned pattern.
- A 6.2% growth in fixed asset investment, less than in 2007 when the rise in investment reflected the consolidation of growth in the economy and compensated for the low rates of increase in investment in fixed assets in the years 2003-2006.
- A 5.1% rise in exports. Exports will be affected by the slower rate of global growth and the real appreciation during 2006 and 2007. The American economy will expand by 1.7% and the Euro area by 1.5%, according to global forecasts for 2009 as previously stated. The growth forecast for the developed countries weighted by their share in Israeli exports amounts to 1.8% in 2009, almost the same as the 1.6% growth rate forecast for 2008.

- A 6.1% increase in imports, slightly less than in 2008. This is because of the lower GDP and export growth rates forecast in comparison with 2008.
- **Price stability will be maintained.** The rate of price increase will slow during 2008, with the result that inflation will converge to within its targeted range in 2009. Average annual inflation will amount to 2.3% (an increase of 1.8% in December 2009 compared with December 2008).
- **A continued positive trend in the labor market.** The unemployment rate will fall to 5.9%. Concurrently, the number of Israeli employed persons will increase by 2.5% and the participation rate will rise to 57.0%.
- **Continued decline in the rate of the public debt.** The public debt will fall to 75% of GDP.

Table 1
Real GDP growth rate and GDP components

Real growth rate (in percent)	2004	2005	2006	2007	2008/Q1 ²⁵	2008	2009
	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast
Gross domestic product	5.2	5.3	5.2	5.3	5.4	4.2	3.5
Private consumption	5.6	3.9	4.5	6.6	14.1	4.6	4.1
Of which: by Israeli households	5.7	4.0	4.5	6.7	16.0	4.6	4.1
Public consumption	-2.6	3.0	2.3	2.6	5.1	2.0	1.6
Gross domestic investment ²⁶	2.5	10.5	6.8	14.0	2.2	7.1	6.3
Of which: investment in fixed assets	-0.4	2.3	10.1	14.2	9.6	7.3	6.2
Of which: investment in fixed assets including housing construction	-0.1	3.2	11.6	18.3	10.8	8.4	7.9
Exports	18.2	4.3	5.9	8.4	12.6	6.4	5.1
Exports excluding diamonds	20.2	6.9	10.1	9.3	16.5	6.5	5.3
Exports of goods	16	3.4	5.6	8.9	2.0	5.5	4.6
Industrial exports excluding diamonds	17.9	6.4	12.5	10.0	6.2	6.4	5.2
Service exports	23.0	6.7	6.7	7.3	41.8	8.6	6.2
Service exports excluding tourism and consumption by foreigners	25.2	5.5	8.8	6.9	55.7	8.1	5.8
Tourism exports and consumption by foreigners	11.7	13.4	-4.6	10.2	-17.0	11.7	8.4
Importers	11.8	3.3	3.3	12.3	18.7	7.1	6.1
Imports of goods	12.3	2.7	2.8	10.6	17.2	6.7	5.4
Service imports	14.2	5.9	5.1	17.8	39.5	8.2	8.1
Business sector GDP	7.2	6.5	6.5	6.1	6.1	4.9	4.1
GDP per capita	3.4	3.5	3.4	3.5	3.8	2.4	1.7

Forecast date: 29/05/08.

²⁵ Annualized rate of change compared with previous quarter, seasonally-adjusted data.

²⁶ Except for the change in startups' inventory.

Table 2
The CPI and the labor market, 2003-2009

	2003	2004	2005	2006	2007	2008	2009
	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast
Consumer price index							
Index (2002=100)	97.1	96.7	97.9	100.0	100.5	104.4	106.8
Annual change (in percent)	0.7	- 0.4	1.3	2.1	0.5	3.9	1.8
Employed persons							
No. of employed (th.)	2,590.0	2,634.0	2,723.0	2,801.0	2,919.0	3,025.1	3,095.0
Annual change (in percent)	0.8	1.7	3.4	2.9	4.2	3.6	2.3
Israeli employed persons							
No. of employed (th.)	2,330.0	2,401.0	2,494.0	2,574.0	2,683.4	2,787.8	2,856.5
Annual change (in percent)	2.0	3.0	3.9	3.2	4.3	3.9	2.5
Non-Israeli employed persons							
No. of employed (th.)	260.0	233.0	229.0	227.0	235.6	237.2	238.4
Annual change (in percent)	- 8.9	- 10.1	- 1.8	- 0.7	1.1	0.7	0.5
Unemployed persons							
No. of unemployed (th.)	280.0	278.0	246.0	236.1	211.7	182.4	179.1
Percentage of labor force	10.7	10.4	9.0	8.4	7.3	6.1	5.9
Participation rate (in percent)							
	54.5	54.9	55.2	55.6	56.3	56.8	57.0

Forecast date: 29/05/08.

Table 3
Real GDP and nominal GDP

	2003	2004	2005	2006	2007	2008	2009
	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast
GDP at fixed prices (2005 prices)	531,700	559,400	589,000	619,700	652,243	679,449	703,040
Real rate of change in real GDP (in percent)	2.3	5.2	5.3	5.2	5.4	4.2	3.5
GDP at fixed prices (NIS million)	527,000	554,100	589,000	633,057	664,764	704,264	745,478
Nominal rate of change in GDP (in percent)	1.7	5.1	6.3	7.5	5.9	5.9	5.9

Forecast date: 29/05/08.

APPENDIX A: The Financial Crisis and Growth Forecasts for the USA and the Eurozone

A financial crisis began in the USA in 2007, and spread rapidly to other countries. The crisis was triggered by a fall in the prices of homes that served as security for credit and by an increase in repayment defaults by subprime mortgage borrowers. Many financial institutions, such as commercial banks, pension funds and hedge funds, are exposed to subprime loans via debt instruments that are backed by these loans and which form of their investment portfolio. The banks' losses (reduced capital), the re-pricing of banking risks and more stringent credit policy led to difficulties in raising credit, which increased the repayment defaults on loans that had been granted in the past. Investors' uncertainty regarding the extent of the damage to the financial system and to non-financial activity resulted in heavy losses in the equities market. The financial crisis became apparent in the second half of 2007 and continued during the first five months of 2008. The most notable result of the crisis was the downward adjustment in the growth forecasts for the developed economies. Accordingly, the growth forecasts²⁷ for 2008 were sharply reduced, with the forecast for the USA in 2008 and 2009 currently amounting (May 2008) to 1.1% and 1.7% respectively.²⁸ The growth forecast for the eurozone was adjusted to a lesser extent and currently amounts (May 2008) to 1.6% and 1.5% for 2008 and 2009 respectively. In March 2008 the IMF also adjusted its growth forecasts for the American economy. Under the adjusted forecast, growth in the USA is expected to amount to 0.5% in 2008 compared with an original growth forecast of 1.5%. For 2009, the IMF reduced its growth forecast for the USA to 0.6% compared with an original forecast of 1.7%. The Federal Reserve Bank limited its growth forecast for the USA in 2008 within the range of 0.3 to 1.2%.³¹

²⁷ The consensus forecast published by the *Economist* weekly.

²⁸ The growth forecasts for the USA for 2008 and 2009 compiled in January 2008 amounted 1.8% and 2.6% respectively.

²⁹ The growth forecasts for the Euro area for the years 2008 and 2009 compiled in January 2008 amounted to 1.8% and 2.0% respectively. In March 2008 the IMF also adjusted its growth forecasts for the American economy. Under the adjusted forecast, growth in the USA is expected to amount to 0.5% in 2008 compared with an original growth forecast of 1.5%.

³⁰ "Original forecast" refers to the IMF forecast update that was issued in January 2008.

³¹ Updated as of the Fed's interest rate decision that was published on April 30, 2008.