

Recent Economic Developments

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April - September 2006

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Part 1: Review of Recent Economic Developments, April-September 2006

Main developments

The war in the north, the central event during the period reviewed—April to September 2006—had a considerable effect on current economic developments. The few economic indicators covering the period after the end of the war does not allow us yet to estimate with assurance the strength of the war's impact, but the existing indicators point to a positive trend in most fields. The forecast of the Research Department, published in September, indicates continued growth, though at a slightly lower rate than earlier forecasts had predicted (4.6 percent in 2006 and 4 percent in 2007, compared to 5.4 percent and 4.1 percent respectively without the war).¹

At the beginning of the period reviewed, Israel's economy showed continued expansion of real activity, expressed, *inter alia*, in sustained fast growth of GDP, with an accelerated rate of growth in manufacturing and services industries and a considerable acceleration in exports. The consolidation of this growth was reflected in the considerable improvement in all real indicators and included most industries (except for the construction industry), though it was particularly prominent in the services industry, a continuation of the structural change that gathered speed in 2005. The effect of growth on the financial markets was less prominent, as this was tempered by local events and global developments which contributed to highly volatile prices of shares and other securities. On the nominal side, at the beginning of the period inflationary pressures—also an outcome of local developments and global influences²—contributed to the concern that inflation may exceed the upper limit of the target range. These concerns brought about three hikes in the interest rate during the period, in April, May and August.

The outbreak of the war in the north at the start of the third quarter had a considerable influence on real activity. The major impact was felt in the trade and services industries, particularly in incoming tourism.³ The financial markets

¹ For further details of the forecasts and their underlying assumptions see <http://www.bankisrael.gov.il/press/eng/060927/060927e.htm>

² Domestic factors include the continued rapid growth rate, the Knesset elections and the formation of a new government. External factors include the rise in import prices, particularly of oil, and inflationary pressures in developed countries and the subsequent raise of their interest rates.

³ The effect of the war on domestic tourism in the north was greatly offset by a rise in the activity of the tourist industry in the south of the country.

demonstrated relative stability, and after a fall in share prices and a rise in the dollar with the outbreak of the war, share prices later rebounded as did the shekel which further strengthened against the dollar. On the nominal side, against the background of considerable appreciation of the shekel and falling energy prices, inflation expectations fell during the period reviewed which, together with other indicators, raised a concern that inflation would undershoot the target range by the end of the period.

The labor market remained stable during the period reviewed, with the rate of unemployment remaining steady and the participation rate rising slightly, while wages increased moderately. Unit labor costs fell slightly in the second quarter of 2006 further to falling in the past two years. The lower unit labor costs reflect the relatively rapid rise in labor productivity, while hourly wages rose more moderately.

The period reviewed can be divided into two totally separate periods: In the second quarter of 2006, the current account registered a surplus of \$ 1.7 billion, which, brought the cumulative surplus in the first half of 2006 to around \$ 3.6 billion, compared to around \$ 4 billion for the whole of 2005. This current account surplus expresses the continued rapid rise in exports in general and in services in particular, as well as the increase in Israel's income from investments abroad following the considerable increase in investments abroad, influenced, *inter alia*, by various capital market reforms. The mirror image of the current account surplus is the significant rise in capital exports in recent years, an increase that supported the real depreciation in recent years and that has recently moderated.

Part 2 of this review features broader discussions on three topical subjects: (1) the budgetary effects of the hostilities in the north; (2) an initial analysis of the state budget for 2007 and a multi-year forecast of budget developments; and (3) another look at poverty in Israel – the use of the Luxembourg Income Studies' measuring scales.

Aggregate and by-industry real activity

The period reviewed—April to September 2006—could well be split, as said, into two periods, each significantly different from the other. In the second quarter the economy sustained rapid growth, with an expansion of activity in most industries; the war that broke out at the beginning of the third quarter caused a brake in the positive developments

and even a significant drop in activity and GDP, particularly in the trade and services industries.

GDP grew in the second quarter of 2006 by 6.1 percent, driven by business-sector product which grew by 7.5 percent; and in so doing maintained the rapid growth rate of the first quarter. The uses, and particular that of investment, were greatly volatile between the first and second quarter, but overall for the first half of the year this item was firmly on a growth path, and this was apparent among all items of use. Exports, the growth of which accelerated, continued to be a major driving force for growth in the economy, together with private consumption which continued to grow rapidly.

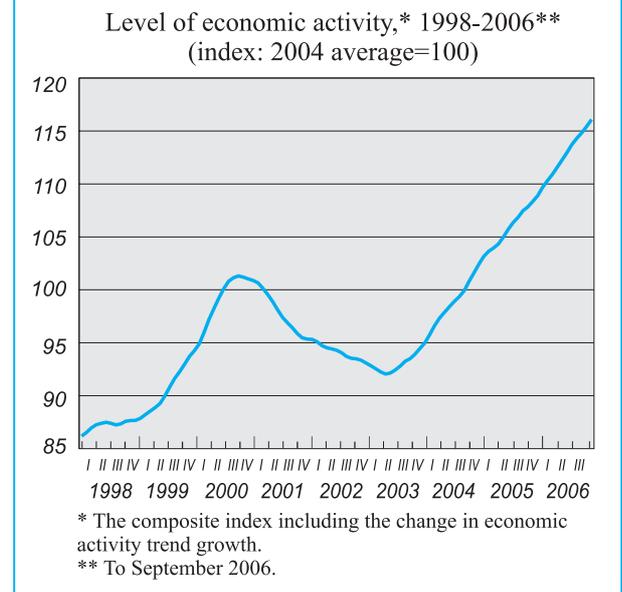
On the resources side, industry-based GDP data indicate an acceleration in the growth rate of manufacturing product after it moderated considerably in 2005. Despite this and against the continued rapid increase in services product, particularly of business and financial services and of accommodation services and restaurants, the trend of structural change—that of a considerable increase in services as a share of GDP—that had accelerated in the past two years, continued.

National Accounts estimates for the second half of 2006 present continued expansion of GDP although at a slower rate than was expected prior to the war. Gross domestic product is expected to rise in the second half of the year by 1.9 percent, with the growth rate of the business product slowing down considerably (to only 1.1 percent), and a sharp rise in domestic public consumption, which will be seen principally in the rise of defense consumption due to the war. The rate of increase forecast for private consumption is also slightly lower than in the first half, and gross domestic investment, which began falling in the first half, is expected to continue falling sharply, mainly due to a reduction of inventories. Among investments, the expected increase in housing investment is noticeable, and reflects the need for rebuilding in the north.

GDP growth in the past two years has been accompanied by a considerable rise in labor productivity, as measured by product per hour worked. Against this, use of equipment and machinery, as measured by the company reports in the Bank of Israel's Companies Survey, remained stable in the past two years at the relatively high level reached in the first quarter of 2004. This leads to the conclusion that despite assessments of a gradual contraction in the output gap, the gap is still sufficient to allow the economy to grow without significant pressures on wages or prices.

Other indicators of activity in the major industries of the economy point to a mixed picture: the composite state-of-the-economy index, that weights various indicators to provide a general picture of economic activity, rose rapidly

Figure 1.1



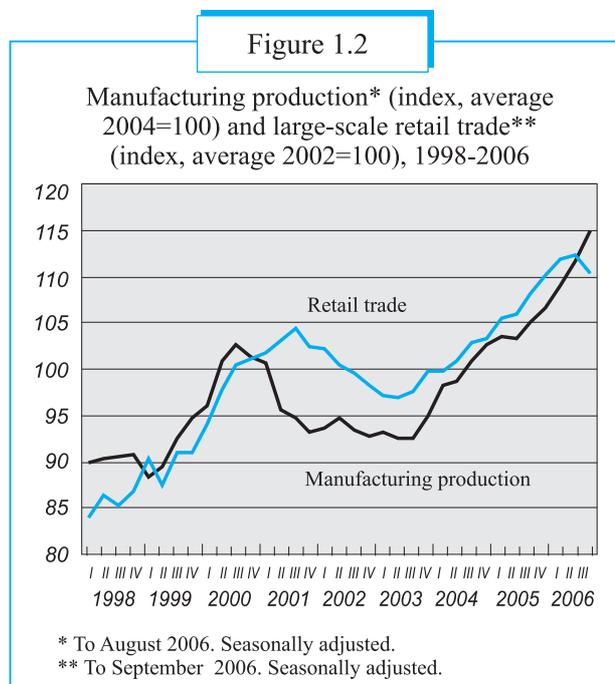
throughout the period, except for a slight moderation in July; the manufacturing production index maintained its fast pace of growth throughout the period reviewed, despite the war; production in the high-tech and traditional industries rose sharply in July too, further to their increase in the second quarter, though production in the medium-technology industries declined. A similar picture emerges from the reports of manufacturing companies in the Companies Survey for the third quarter: these indicated a continued expansion in activity and orders for the domestic market, though their expectations for export orders moderated considerably. Revenues for the trade and services industries, which continued to rise at the beginning of the period reviewed, fell sharply in June and continued to fall in July, affected by the war.⁴ This drop in activity for the trade and services industries was also seen in the Companies Survey.⁵

Analyzing the Companies Survey by region, it was found that the principal effect of the war in the north was felt in the business services and tourist industries, and companies in

⁴ Data on revenues for the trade and services industries for July are partial estimates as businesses in the north were allowed to delay their VAT returns for the month. The Central Bureau of Statistics estimated the accounts, by industry, for those businesses that have yet to report, and took into account partial activity.

⁵ The business services industry reported in the third quarter a considerable moderation in its expansion of activity overall and in sales of services in Israel, and reported too that orders from abroad in the fourth quarter held firm while sales of services abroad and domestic orders continued to rise. The trade industry reported quite the reverse—a continued rise in sales in the third quarter and expectations of a considerable slowing down in sales in the fourth quarter.

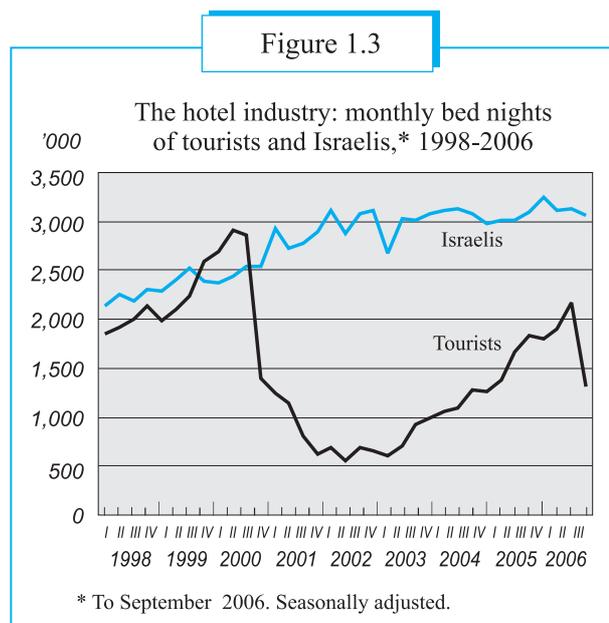
these industries in the north reported a veritable contraction in activity, while elsewhere the effect on activity was considerably less. The war's effect on manufacturing was less prominent: activity continued to expand, and only manufacturing companies in the north reported some moderation in the rate of increase in activity.



The **tourist** industry suffered the most marked impact of the war. After the first half of the year saw a 19-percent increase in the numbers of incoming tourists on the first half of 2005 (entry of tourists by air, original data), the number of entries dropped considerably in July and August, and these numbers were some 30 percent lower than in 2005. The number of tourist bed nights in July–August were also 30 percent down on July–August 2005, after a decent rise (of 33 percent) in the first half of the year. This decrease continued into September (both in comparison to July–August and in comparison to September 2005) despite the war having already ended. However the number of Israelis' bed nights rose in July–August by about 4 percent, reflecting the shift of hotel bed nights from the north (which dropped by more than 50 percent) to the rest of the country, as well as the temporary move of northern residents to the rest of the country, from fear of Katyusha rockets. The number of Israelis' bed nights in September fell slightly.

A similar picture emerges from the Companies Survey: **in the second quarter** the survey indicated a significant rise in activity among hotel companies, reflecting a rise in the number of bed nights, an increase in average revenues per

room, and stability in the number of Israelis' bed nights. Expectations for the third quarter at that stage were very optimistic: about 60 percent of companies expected an expansion in activity (compared to the parallel quarter of 2005). Despite this, the survey showed that in the third quarter all hotels in the north reported lower activity and a drop in orders for the next quarter. About half of the hotels in the south reported a modest increase in their business. The net balance of hotels overall showed a drastic drop both in total activity and in orders for the next quarter.

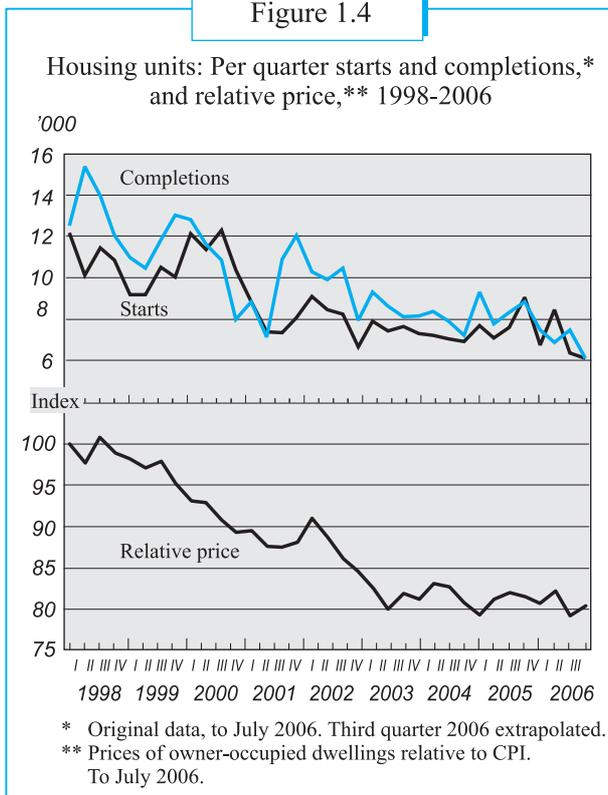


Such rises that characterized the other industries of the economy in the second quarter were not felt in **the construction industry**; the downward trend in the industry which started in the last quarter of 2005 continued throughout the first half of 2006, and could be seen both in housing starts and completions (Table 2, Figure 1.4). In terms of number of apartments and in land under construction there was a rise in private construction, but this was completely offset by the sharp drop in construction in the public sector, so that overall the level of activity in the industry contracted considerably in comparison to the corresponding period of 2005.

In the second quarter of 2006 the downward trend in activity returned to the construction industry, after an improvement in the second and third quarters of 2005 and a considerable rise in the first quarter of 2006, which could have been interpreted as the harbinger of the industry's recovery. The low level of activity in the second quarter was reflected in the decrease in most indicators of activity in the industry.

The Companies Survey painted a slightly different picture: after the industry began to stabilize in 2005 after a long slump, the first two quarters of 2006 saw a relatively high positive net balance of the industry, particularly in infrastructure, possibly due to the construction plans of the security fence. In the third quarter activity declined noticeably, with a drop in activity of medium-sized construction companies, although the large companies reported an increase in activity. There was a similar distinction between companies in their expectations for the fourth quarter, with medium-sized companies forecasting stability and large companies expecting a rise in activity.

Figure 1.4



The labor market

In the second quarter of 2006 the rapid expansion of employment in the business sector that had been prevalent in previous quarters, expressing the growth in the economy, came to a halt. Labor Survey data show a decent rise in the participation rate of the workforce while unemployment holds steady, therefore a rise in the employment rate, but this expansion in employment reflected the expansion in public services (by 5.1 percent), whose share of total

employment stabilized after dropping considerably since the end of 2003. In contrast, the business sector registered stable employment (Table 3, Figure 1.5). Furthermore, the rise in employment was expressed entirely in an increase in part-time jobs, with the number of full-time jobs falling, resulting in a contraction of Israelis' labor input in the business sector by 1.5 percent. At the same time, depth of unemployment (the rate of those seeking work for more than six months) worsened considerably to a record level of 44.7 percent. Despite this, one should remember that developments in employment in the second quarter offset to some extent earlier positive developments, so that it is doubtful if these point to a change in the positive trend. Trend data for July and August indicate a slight drop in the unemployment rate, to 8.8 percent and 8.7 percent, respectively. The number of non-Israeli workers fell in the second quarter of 2006 after rising in the first quarter, and further to a significant drop in the last quarter of 2005. This was the result of government policy to reduce the number of non-Israeli workers after its considerable rise in 2005.

Analysis by industry of employment developments shows the outstanding contribution of the business services industry⁶ in reducing unemployment: the industry took on some 14,000 additional employees (an increase of 4.2 percent on the first quarter of 2006). In the public sector the expansion in employment was concentrated in health and welfare services (an additional 22,500 employees, an increase of 9.4 percent) and in education (an additional 15,000 employees, 4.8 percent increase).⁷ These data are indicators of a structural change, which has strengthened in the past two years and is reflected also in the National Accounts data.

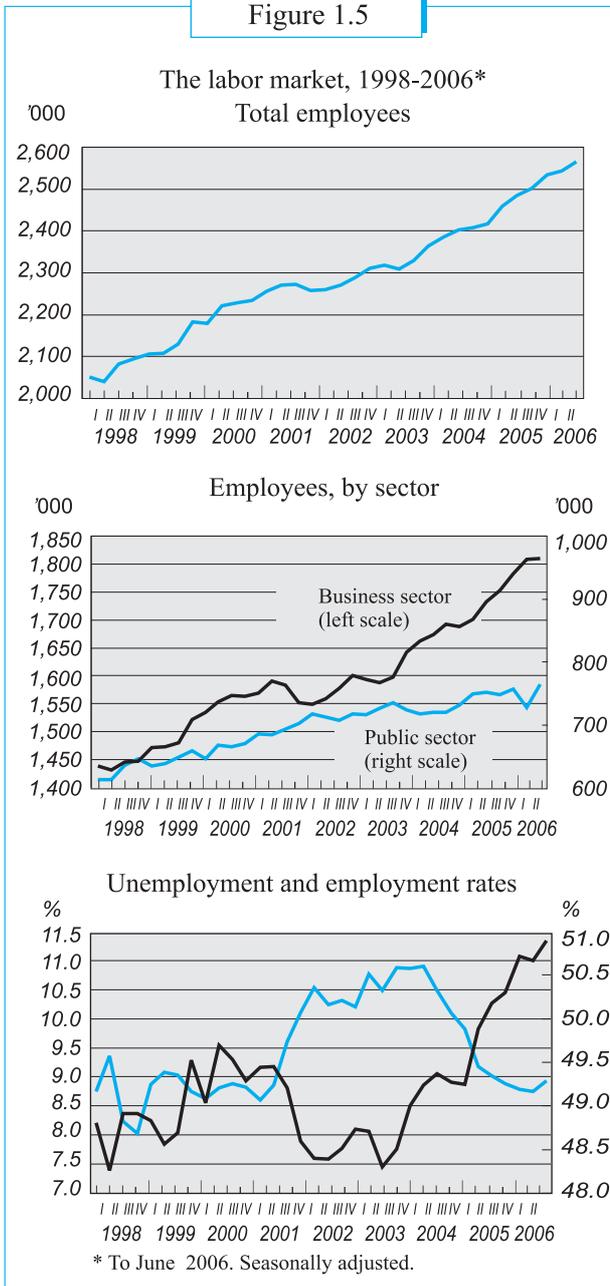
The rise in real wages during the period reviewed was relatively modest (Table 3, Figure 1.6); real wage per employee post rose in the first seven months of 2006 by only 1.2 percent. This rise reflects a considerable increase in real wages in the banking, insurance and finances industry and in the electricity and water industries, as well as a more modest rise in business services and public administration, and a drop in wages in most other industries. The most significant drop in wages took place in those industries that saw an increase in the number of employee posts, so it is reasonable to assume that it expresses, at least partially, a change in the composition of employees and the entry of young low-

⁶ It is important to note that there is a relatively high prevalence of part-time jobs in the business services industry, as well as workers earning less than half the average wage.

⁷ These industries are considered part of the public sector though a sizeable part of them are financed privately. Therefore it is possible that most of the expansion in employment does not reflect an expansion in publicly-financed employment.

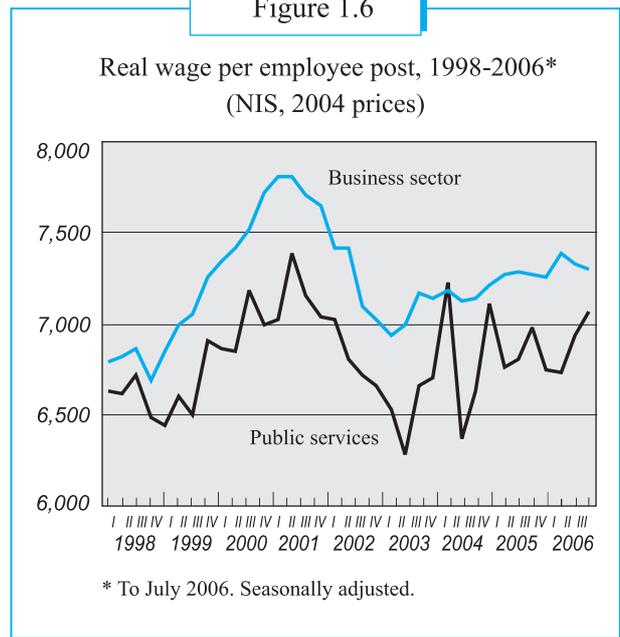
waged workers, or a change in the industrial composition of employment.⁸

Figure 1.5



⁸ From examining the effect of a change in employment composition on wages in the business services industry (where employment expanded by 6.7 percent), it appears that the change in wages stems almost entirely from the change in employment composition between the sub-industries. This assessment omits the effect of a change in the employment composition as the calculation does not take into account the changes in composition within sub-industries.

Figure 1.6



The moderate rise in real wages characterizes the past three years, as does the rapid growth in the economy, coming after two years of considerable erosion of real wages. Besides the flexibility in the labor market that enabled this erosion in wages and a more rapid response in employment to an expansion in economic activity, the erosion in wages could also testify to the slack that still exists in the labor market and that slows down or reduces the size of response to growth in the economy. A hint of this possibility can be found in the continued drop in unit labor costs; the Central Bureau of Statistics estimates that unit labor costs fell slightly in the second quarter of 2006 too because of the relatively rapid growth in this quarter, together with a drop in labor input, bringing about a faster rise in output per hour of labor than the rise in costs per hour of labor.

The minimum wage was raised in June by NIS 128 to NIS 3,585 after a rise of NIS 121 in April, as part of a plan to raise the minimum wage gradually to NIS 4,600. The National Insurance Institute published its poverty report for 2005 in August which showed poverty indicators remaining steady among families, while poverty increased among individuals and children, with an increasing gap in disposable incomes. Poverty among the elderly fell. (For further details on measuring poverty and how the equivalence scales influence the measures, see Part B of this review.)

At the beginning of September the Minister of Industry, Trade and Labor, Eli Yishay, announced a number of changes in the "Wisconsin Plan" (welfare-to-work programs) for the benefit

of several sections of the population: single mothers, older participants, and new immigrants. These new conditions will apply to around 25 percent of participants in the plan.

The government

Similar to the other real developments, one can divide the fiscal developments in the period reviewed into two distinct periods (Table 6, Figure 1.7): at the beginning of the period reviewed—from April to June—the government's domestic budget deficit (excluding credit) remained below the seasonal trajectory commensurate with meeting the deficit target (hereafter the trajectory), as a result of revenues that were far higher than the trajectory and matching expenditures. At the end of the second quarter the cumulative deficit was NIS 9.1 billion below the trajectory. In the third quarter, the war in the north broke out (in July), and resulted in government expenditure increase and fall in revenues, such that the deficit grew considerably, far beyond the seasonal trajectory. At the end of the period reviewed the cumulative deficit was NIS 7.5 billion below the trajectory (or NIS 3.7 billion below, discounting the tax revenues from the sale of Iscar).

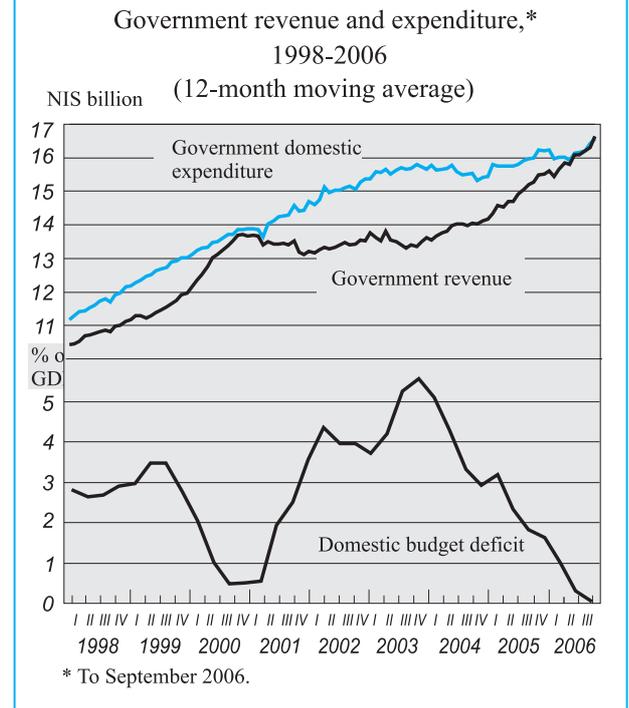
Government income during the entire period reviewed was significantly higher in real terms than income in the corresponding period of 2005 (even without the Iscar deal). Not so with tax revenues: due to the highs of economic activity these were considerably higher than the trajectory and than income in the corresponding period of 2005 in the second quarter only, but in the third quarter they fell considerably and were below the trajectory. Most of the drop in tax revenues stemmed from the fall in revenues from indirect taxes, while real income from direct taxes was similar to that in the corresponding period of 2005.⁹ In total, revenues from taxes since the beginning of the year were NIS 9.4 billion higher than the trajectory.¹⁰ According to assessments of the Research Department the effect of the war in the north will be expressed in a loss of accumulated revenues of NIS 2.3 billion, which has already been reflected in its entirety in the revenues for the third quarter. (For further details on budget implications of the war in the north, see Part B of this review.)

Other government income (i.e., not from taxes) since the beginning of the year was lower than the trajectory. Most of the gap between actual income and that forecast in the budget stems from the fall in National Insurance surpluses,

⁹ Real income from direct taxes in 2006 was 14 percent higher than in 2005, though during the year, even before the war began, there was a drop in the rate of increase.

¹⁰ Of which NIS 5.25 billion were one-time income, and of that NIS 3.75 billion were from capital gains on the sale of the Iscar company.

Figure 1.7



which reflects principally the rise in allowances to the elderly, single mothers and children, together with the real drop in unemployment benefit and income maintenance payments.

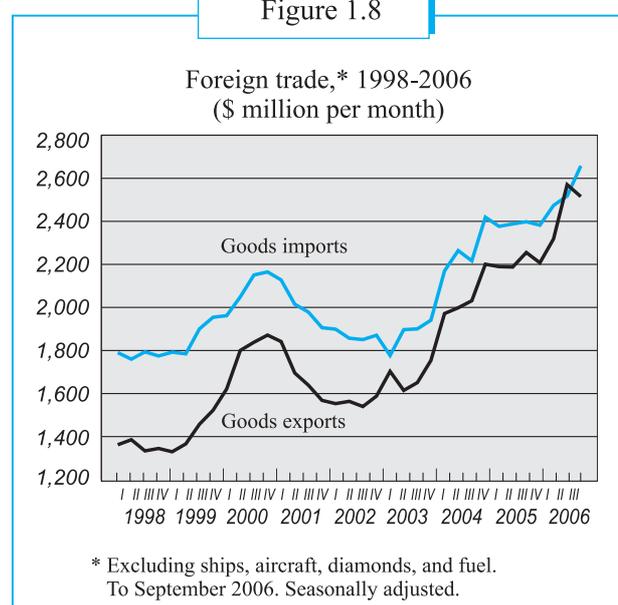
Government domestic expenditure (excluding net credit) during the review period was about NIS 4 billion above the annual trajectory that would correspond to full performance of the budget. This deviation from the trajectory is entirely due to the increase in expenditure in the third quarter, as the second quarter saw a slight underperformance in terms of the budget, and for the first quarter expenditure was significantly lower than the trajectory. Most of the increase in expenditure stemmed from the rise in spending by the defense and administrative government ministries. In total, in the first nine months of the year government expenditure was some NIS 0.5 billion higher than the annual trajectory that would correspond to full performance of the budget, a real increase of 3.3 percent compared to the same period last year.¹¹

¹¹ The rate of increase in expenditure is higher than the target of expenditure as set by the Budget Law (a rise of 1 percent in 2006). However, given the growth in revenues beyond that forecast in the budget, which will cover all the unexpected increase in expenditure, the government is not expected to surpass the ceiling on the budget deficit target for 2006.

The balance of payments

Foreign trade data pointed to a continued rapid rise in exports and imports of goods during the whole of the period reviewed (Table 4 and Figure 1.8). Though exports fell in July, which offset the sharp rise in June,¹² by August they were back on the rise again, reaching the trend line from before the outbreak of war. This development encompassed exports of all technologies, though it was more pronounced in the high-tech industries. Foreign trade data complements the balance of payments data for the second quarter which indicated a rise of 7.4 percent in exports and of 7.2 percent in imports.

Figure 1.8



In the second quarter the current account registered a surplus of \$ 1.7 billion, bringing the cumulative surplus at the first half of 2006 to \$ 3.6 billion, compared to a surplus of about \$ 4 billion for the whole of 2005. The growth in the current account surplus expressed a fair rise in exports of goods and a more rapid increase in exports of services,¹³ a continuation of the trend that services account for an increasing share of

¹² The drop in exports that appears in Table 4 reflects the exceptional drop in exports in July compared to June, when exports had been exceptionally high.

¹³ Exports of services grew in the second quarter by 7.9 percent compared to the first quarter. Of this, there was a 4.5 percent rise in exports of tourist services (excluding expenditure on foreign workers), a 73 percent rise in exports of R&D, an 18 percent rise in exports of computer services, a 10 percent rise in exports of other business activities, and a 50 percent rise in exports of telecoms services.

total exports. Israelis' income from investments abroad also grew greatly, in line with the sharp increase in investments abroad. The 7.2 percent rise in imports of goods and services reflect the rise of all items of goods and services. In particular, the imports of fuel (mostly following the rise in price) stood out. The terms-of-trade index (excluding diamonds, ships, planes and fuel) worsened in the second quarter (both compared to the second quarter of 2005 and in comparison to the first quarter of 2006) as a result of the far faster rise in prices of imports than that of exports. The overall terms of trade worsened even more so due to the rising prices of fuel.

Net capital exports totaled about \$ 0.5 billion in the second quarter, compared to more than \$ 3 billion in the first quarter.¹⁴ Beyond being the mirror image of the current account surplus, net capital exports reflect part of the trend in significant changes in the Israeli capital market, both in Israelis' investments abroad and in nonresidents' investments in Israel. The second quarter of 2006 showed relative calm in capital movements, except for the Iscar deal, after a very active year in 2005. Nevertheless it appears that the process of adjustment to the series of far-reaching reforms that affected the capital market in 2005 has not yet ended. (For details of these changes and their influences see the Bank of Israel Annual Report 2005.) This assessment is supported by the institutional investors' increasing investments in assets abroad that began in August, after these investments had slumped to almost nothing in June and July. It is these capital flows that supported the shekel's real depreciation of recent years, that has only recently moderated.

Global developments

The consolidation of Israel's rapid growth in the second quarter of 2006 was supported by positive global economic developments. In the first half of the year, activity in most areas grew at a faster pace than earlier forecast (Table 5). This expansion in activity was most prominent in the US, where the rate of growth remained relatively high although lower than in previous quarters. Growth continued in Japan and even accelerated in the euro zone. The emerging economies (China, particularly) and the developing countries also registered rapid growth. However the sustained growth in the developed countries, together with the rise in fuel and metal prices, created inflationary pressures which led to a series of interest rate hikes and to vast capital movements in the capital markets from May.

¹⁴ The exceptional figure for the first quarter reflected Teva's purchase of Ivax for \$ 7.8 billion.

After particularly fast growth in the first quarter, the US saw a slowdown in its growth rate during the period reviewed, although it remained relatively high. The dominant factor in this slowdown was the cooling off in the US housing market, alongside the rise in energy prices and a continued hike in interest rates, which acted to curtail consumer expenditure. At the end of the period the American labor market also showed signs of moderation.

The euro zone showed signs of significant strengthening by the beginning of the period: growth accelerated, becoming more established and wide-spread than in the previous period, with a significant contraction in the output gap. A major factor in this improvement was the continued increase in investments, influenced by good conditions for financing, the structural changes in companies' balance sheets and the improved profitability and efficiency of businesses. Demand from the business side accelerated, and private consumption strengthened against a background of falling unemployment.

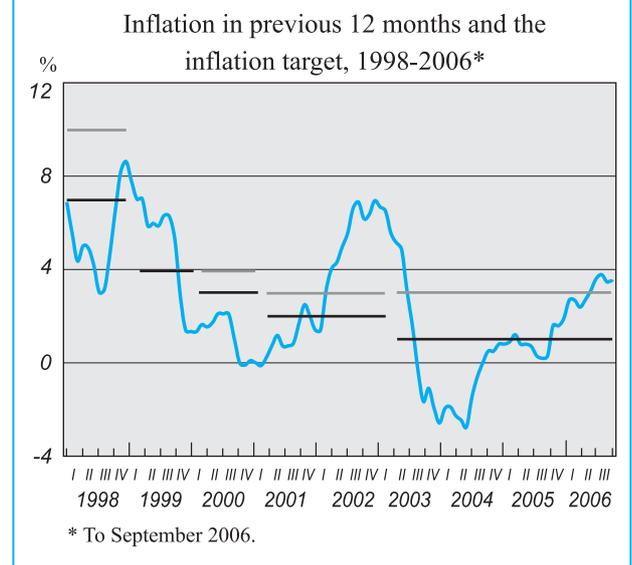
The global rise in investors' risk aversion that began in mid-May affected the emerging markets most particularly: after a long period of sharply rising prices in the share markets, falling bond yields and strengthened currencies, in mid-May investors began to close their risky positions, and this was seen in sharp falls in the bond markets, in shares and in these countries' currencies. And this occurred despite no significant change in the basic background conditions of these markets. From July, the risk related to the emerging economies abated somewhat, and this was reflected in a partial offset of the developments of May-June.

The International Monetary Fund revised its forecasts for global growth upward in September so that the forecast for 2006 stands now at 5.1 percent (Table 5). The IMF also revised upward its forecast for the rise in prices of goods, particularly oil, and the rate of price increases. The most notable risk to the global outlook is, according to the IMF economists, from prices; inflationary pressures could intensify leading to tighter monetary policies or oil prices could increase further against a background of geopolitical uncertainties and limited spare capacity. The cooling of housing market in the US and its effect on private consumption and investment could provide a further risk factor. In contrast to the IMF's basically optimistic forecast, the leading composite index of the OECD, published in October, points to a moderation in growth for the developed countries.

Prices, monetary policy, and the money and capital markets

The consumer price index rose during the period reviewed by 0.2 percent, and by 1.3 percent in the 12 months to September, close to the lower limit of the inflation target range (of 1 percent to 3 percent; Table 7 and Figure 1.10). This change in the index reflects a great variation in nominal developments during the period reviewed; at the beginning it was feared that inflation would rise beyond the inflation target's upper limit. This was supported by both real domestic developments and external factors: high import prices and inflationary pressures in some of the developed countries, particularly the US, which dragged up interest rates in those countries. The exceptional rise of the CPI in April (of 0.9 percent)¹⁵ seemed to confirm this concern. Against this background, the Bank of Israel raised its interest rate three times during the period reviewed, in April, May and August (Table 9). During the period reviewed, the reasons why inflation turned out to be lower than originally forecast became clear: the real and nominal developments during the period, including a stabilization of the political situation after elections to the Knesset and the formation of a new coalition, budget discipline and fiscal restraint, the shekel's appreciation against the dollar, and later, the drop

Figure 1.9



¹⁵ A dominant indicator that affected the Bank of Israel's assessment and increased the fear that inflation would deviate beyond its limit was the inflation rate for the past 12 months, which was particularly high—higher than the target limit—because of, *inter alia*, the exceptional rise in the CPI in July 2005.

in oil prices, all of which contributed to a stabilization in the CPI and a fall in inflation expectations. These, together with the surprising CPI for September—which fell 0.9 percent—brought about a concern by the end of the period reviewed that inflation could slip below the target's lower limit.

Inflation expectations to twelve months ahead were particularly high at the beginning of the period reviewed (April), at 3.3 percent, beyond the upper limit of the target inflation range, and fell gradually during the period reviewed to 2 percent—the mid-point of the target range (Table 9 and Figure 1.10). Inflation expectations for longer periods ahead were at the beginning of the period below the inflation target's upper limit and continued to fall during the period reviewed.

Figure 1.11

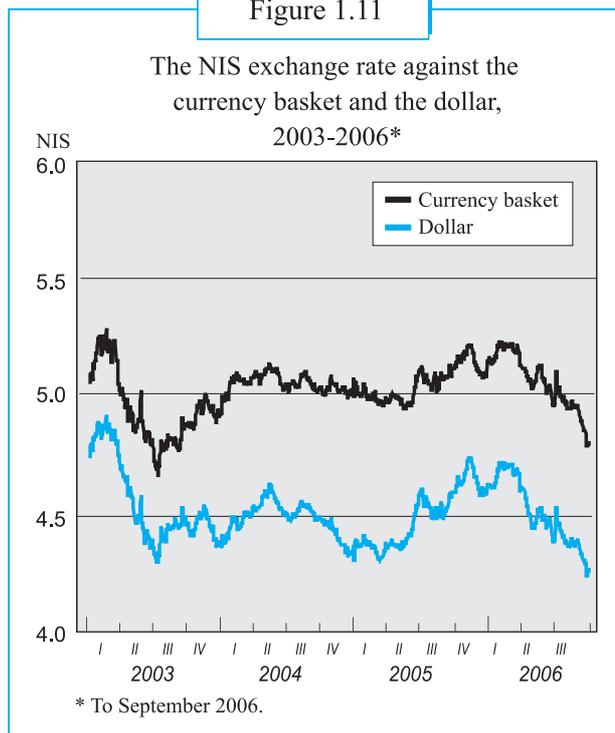
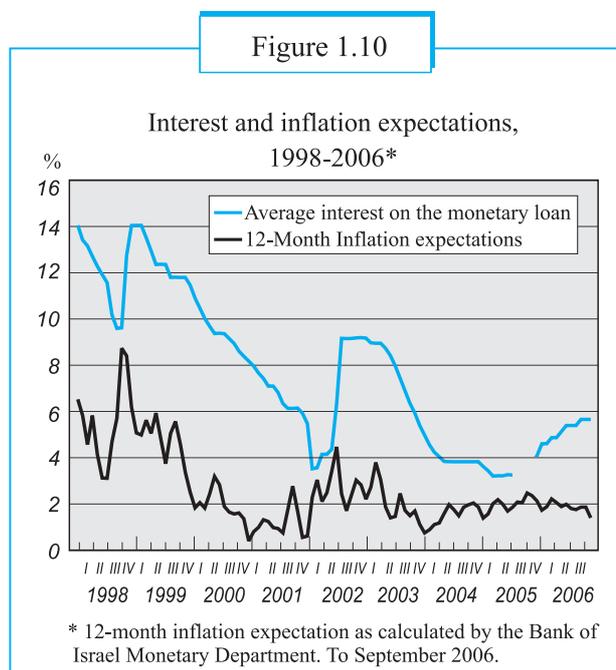


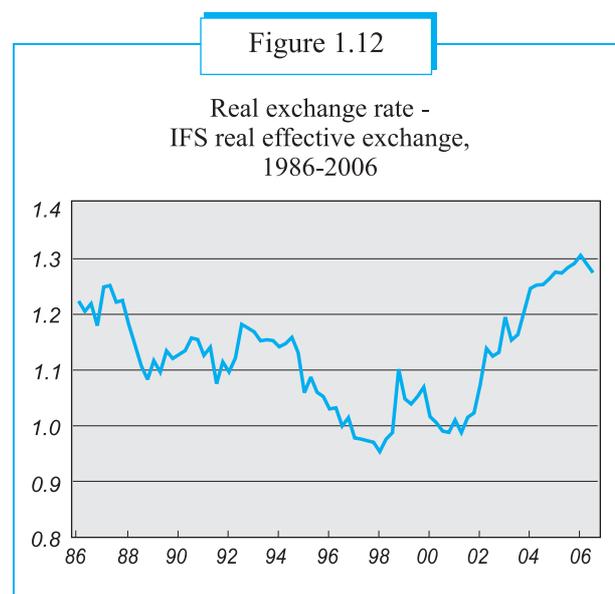
Figure 1.10



The **exchange rate** of the shekel against the dollar appreciated considerably during the period, after depreciating in the first quarter of the year and for the whole of 2005. The shekel appreciated throughout the period reviewed, except for a temporary depreciation at the outbreak of the war (Figure 1.11). The real exchange rate (Figure 1.12) however appreciated during the period reviewed, although it remained at a relatively depreciated level.

The rapid growth in Israel in recent years was led by manufacturing for export, with labor productivity rising over time at a faster rate than in the nontradable sector, and therefore contributing to a real appreciation of the currency. Moreover it is reasonable to assume that a

Figure 1.12

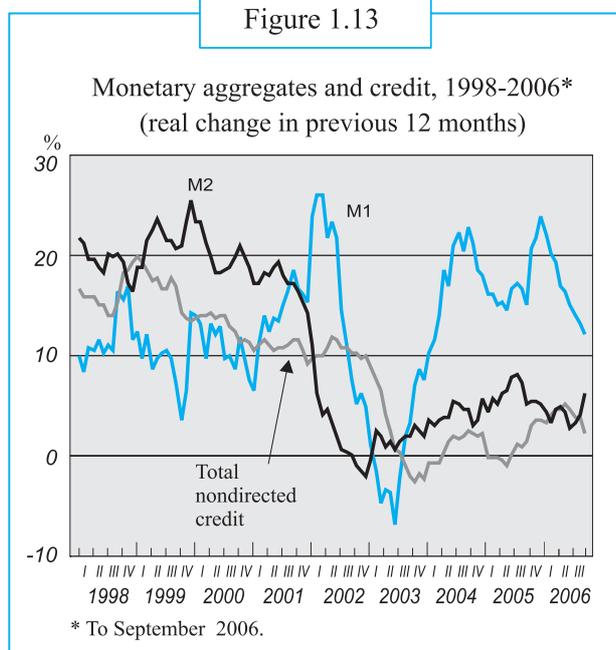


process of emerging from a recession by gradually closing the output gap will be accompanied by rising prices, and therefore, by real appreciation. The current account surplus (which became possible, *inter alia*, due to fiscal restraint) also supports a real appreciation, particularly given the significantly real depreciation of the currency since 2001.

The real depreciation in recent years is a deviation from the long-term trend of real appreciation, expressed in the fall in the real exchange rate throughout the 1990s. This deviation can be seen particularly in the context of the depreciation in 2002 and the significant rise in Israel's export prices in markets overseas.

The rate of expansion of the **M1 money aggregate** moderated considerably during the period reviewed, though remained higher than the inflation rate *plus* the GDP growth rate. However under a regime of an inflation target, with the interest rate as a leading policy instrument, the influence of the quantity of money on prices is doubtful, and therefore the weight of this indicator in setting policy is relatively low. The rate of increase in the M2 aggregate slightly accelerated (Table 8 and Figure 1.13) despite this, and following the considerable rise in tradable securities (bonds and shares) in the assets portfolio, there was no significant change in the level of liquidity of the portfolio.¹⁶ The rate of expansion of nondirected **bank credit** slowed down during the period reviewed. This slowdown followed four years of particularly slow expansion in bank credit, with the level remaining relatively low. This low level of bank credit reflects the shift of raising funds to non-bank sources, which saw impressive growth in recent years. At the same time, there was a change in the composition of bank credit—an expansion in unindexed shekel credit and a reduction in indexed and dollar credit—which mainly expressed the developments of the exchange rate and the CPI.

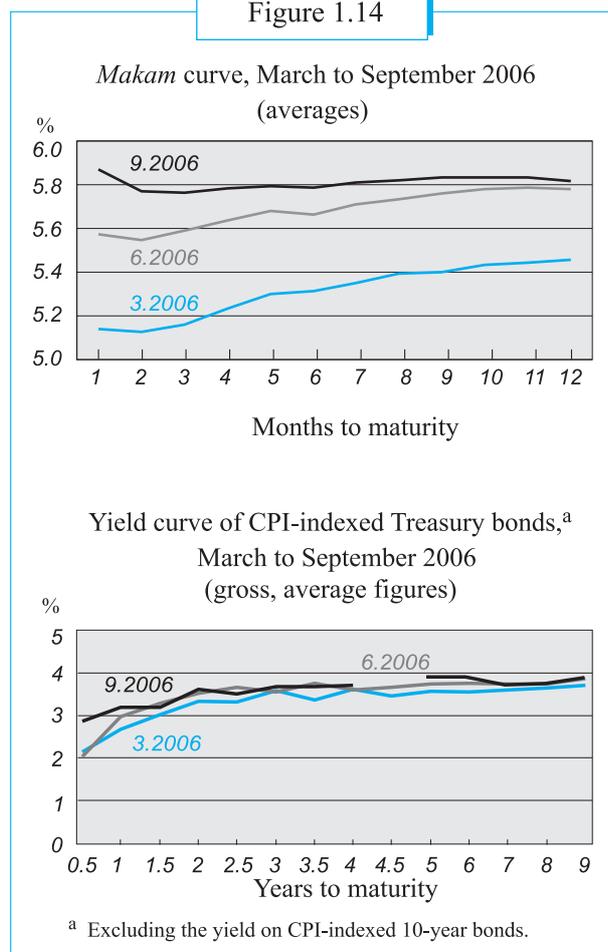
Figure 1.13



¹⁶ Investment in tradable securities is classified as medium-term investment.

The *makam* curve rose significantly in the second quarter of 2006, all along its curve. In the third quarter it continued to rise, while leveling out and even changing slope, though more gently than in the second quarter (Figure 1.14). The rise of the curve reflects the Bank of Israel's hike in interest rate as well as the expectations of further rises. At the end of the period, the curve indicated expectations of a 25 basis-point reduction in the interest rate.

Figure 1.14



Real yields were influenced during the period reviewed by two opposing forces: on the one hand, a drop in the government's budget deficit and lower borrowing by the government, together with easing restrictions on institutional investors' investments, and relative stability in Israel's risk premium, all acted to raise the demand for bonds (and therefore to push down yields); developments in the global capital markets, first and foremost the hikes in interest rates in the developed countries, acted to raise yields. The combination of these opposing forces was expressed in the

stability of the **yields-to-redemption** of indexed bonds (Table 9 and Figure 1.14) which remained almost unchanged throughout the period reviewed, at 3.8 percent.

The Tel Aviv Stock Exchange was influenced throughout the period reviewed by a long series of events and developments, both in the domestic market and in world capital markets, whose succession and strength led to high volatility in share prices, and high volumes of trading. Among the factors affecting the TASE were developments in the exchange rate, the raising of interest rates both in Israel and abroad, developments on stock exchanges worldwide, the political and security situation and real domestic developments, which were themselves affected by these factors albeit differently. At the beginning of the period reviewed, share prices continued to rise sharply, against a background of real positive developments in the economy, the elections to the

Knesset and the formation of a new government, as well as solid conditions abroad. These price rises were completely offset as prices dropped in May, mainly due to the effect of falling share prices in markets abroad. However one must note that share prices in Israel fell significantly less than in the emerging markets, and were more in line with those of the developed countries. In July, share prices began to climb again despite developments on the security front, which moderated the price rises and increased volatility, and continued to rise into August and September with high levels of volatility. At the end of the period reviewed the general share index was 3.7 percent lower than at the beginning of the period. These developments demonstrate the clear influence of global developments, against a background of globalization and liberalization in capital flows.

Table 1. National Accounts,^a 2005-2006

	2005			2006		2006	Last month for which data available
	2005	III	IV	I	II	II ^b	
GDP	5.2	4.4	5.1	5.7	6.1	5.3	Jun
Business-sector product	6.7	6.0	6.7	7.8	7.5	7.0	Jun
Private consumption	3.4	3.2	1.8	7.8	4.3	4.3	Jun
Gross domestic investment	11.5	14.5	5.9	-4.5	-21.3	-2.3	Jun
Fixed investment	2.9	4.6	7.2	5.2	-4.6	3.0	Jun
Goods and services exports ^c	5.1	4.2	-3.1	3.4	36.2	9.2	Jun
Goods and services exports							
excl. diamonds	7.5	8.0	4.5	6.5	38.4	13.6	Jun
Goods and services imports ^d	3.4	-1.2	-8.7	7.2	13.9	2.5	Jun
Goods and services imports							
excl. diamonds	5.2	3.2	-0.6	9.3	12.2	5.9	Jun
Public sector consumption	2.7	-1.5	-0.1	3.1	1.6	0.8	Jun
Public sector consumption							
excl. defense imports	1.8	2.8	2.9	2.7	2.2	2.7	Jun

^a Percentage change from previous period, in annual terms, at constant prices, seasonally adjusted.

^b Compared with 2005:II

^c New calculation, without subsidies.

^d New calculation, without taxes.

SOURCE: Central Bureau of Statistics.

Table 2. Indicators of Business Activity,^a 2005-2006

	2005			2006			Apr 06- Sep 06 ^b	Last month for which data available
	2005	III	IV	I	II	III		
Composite state-of-the-economy index	3.2	6.1	6.6	7.4	7.7	6.4	7.0	Sep
Large-scale retail trade	5.6	7.9	7.7	6.8	1.4	-7.0	4.0	Sep
Manufacturing production								
(excl. diamonds)	4.5	7.3	6.0	9.7	9.8	11.9	8.7	Aug
Index of revenue in commerce	7.4	8.5	9.7	5.1	6.9	-6.2	6.2	Aug
Index of commerce and services revenue	8.1	13.0	13.3	7.4	7.6	-3.1	8.8	Aug
Index of services exports	15.6	-4.1	-11.4	-11.8	-4.5	10.7	-6.3	Sep
Tourist arrivals	26.9	78.9	3.5	7.3	-6.9	-78.9	-9.3	Sep
Residential construction ^c								
Starts	5.8	31.2	-12.0	18.9	-16.5		-24.2	Jul
Completions	-1.3	22.3	-19.7	-11.1	-10.2		-15.5	Jul
Nonresidential construction								
Area of starts		44.3	2.3	67.9	-7.6		-7.6	Jun
Survey of companies (net balance, percent) ^d								
Weighted balance of the business sector		26	27	38	26	12 ^e		Sep
Output of manufacturing firms	25	29	30	38	33	24		Sep
Sales by trading firms	27	28	24	38	28	19 ^e		Sep

^a Percentage change from previous period, in annual terms, at constant prices, seasonally adjusted except for construction industry data.

^b Compared with April 2005 - September 2005.

^c Change from equivalent period one year earlier

^d The net balance is defined as the difference between the number of firms reporting a rise and those reporting a decline, as a proportion of all reporting firms.

^e Not significant at 10% level.

SOURCE: Central Bureau of Statistics.

Table 3. Indicators of Labor Market Developments,^a 2005-2006

	2006		2005			2006		Apr 06- Sep 06 ^b	Last month for which data available
	II	III	III	IV	I	II	III		
	('000s)		percent change from previous quarter						
Civilian labor force	2,817		0.5	1.2	0.3	1.1		3.5	Jun
Israeli employees	2,566		0.7	1.3	0.4	0.9		3.6	Jun
<i>Of which:</i> in general government	765		-0.4	1.1	-3.8	5.1		1.8	Jun
in business sector	1,809		1.2	1.8	1.4	0.1		4.4	Jun
Foreign workers and Palestinians (unadjusted)	338		-0.4	-5.3	1.1	-1.6		-6.1	Jun
Average hours worked weekly per employee	36.2		-2.2	-1.1	0.8	-0.3		-2.8	Jun
Labor input in business sector (incl. foreign workers and Palestinians)	83,270		0.4	-1.6	3.2	-1.6		0.3	Jun
<i>Of which:</i> Israelis	73,521		0.4	-0.9	3.5	-1.5		0.6	Jun
Labor input in general government (Israelis)	18,926		-2.0	-0.8	-1.7	3.5		1.3	Jun
Unemployed	252		-0.9	0.0	0.0	3.2		2.3	Jun
Work seekers	220	214	-1.2	-1.2	-2.2	-0.5	-2.6	-4.7	Aug
Claims for unemployment benefit	70	70	0.9	-4.4	1.6	-0.8	-0.6	-3.0	Aug
	Nominal NIS (unadjusted) ^c								
Real wage per employee post ^c	7,188	7,344	0.7	-1.8	1.1	0.9	0.2	1.2	Jul
In general government	7,004	7,333	2.5	-3.4	-0.1	3.1	1.9	2.2	Jul
In business sector	7,276	7,349	-0.2	-0.1	1.7	-0.7	-0.3	0.7	Jul
Nominal wage per employee post ^c	7,492	7,666	2.0	-0.8	1.5	1.7	0.2	4.5	Jul
In general government	7,300	7,655	3.7	-2.6	0.4	4.0	2.1	5.5	Jul
In business sector	7,583	7,672	1.3	0.9	2.3	-0.3	-0.2	4.1	Jul
Participation rate			55.2	55.6	55.5	55.9		1.3	Jun
Employment rate			50.3	50.7	50.7	50.9		1.4	Jun
Unemployment rate			8.9	8.8	8.8	8.9		-0.9	Jun
Depth of unemployment ^d			36.6	36.1	39.7	44.7		1.8	Jun

^a Seasonally adjusted.

^b Compared with April 2005 - September 2005 (unadjusted).

^c Including foreign workers and Palestinians.

^d Percent of unemployed seeking work for more than six months (unadjusted).

SOURCE: Central Bureau of Statistics, Labor Force Survey, except for data on Israelis, non-Israelis, and labor input in the business sector, and total Israelis employed, which are the Central Bureau of Statistics' National Accounts estimates.

Table 4. Foreign Trade, Balance of Payments, and the Reserves,^a 2005-2006

	2005			2006			Apr 06- Sep 06 ^b	Last month for which data available
	2005	III	IV	I	II	III		
Percent change from previous period ^c								
Trade in goods ^d								
Goods imports	5.2	-0.1	-0.4	4.1	1.9	5.2	8.2	Sep
<i>Of which:</i> Consumer goods	7.2	-3.4	0.3	7.7	2.1	2.1	9.5	Sep
Capital goods	4.3	2.7	-5.0	5.1	-2.9	7.8	2.0	Sep
Intermediates	4.9	0.0	1.1	2.5	3.6	5.2	10.2	Sep
Goods exports	7.8	2.7	-2.8	5.1	11.0	-2.0	14.9	Sep
<i>Of which:</i> Manufacturing	7.6	2.9	-2.0	5.2	11.6	-2.2	15.3	Sep
<i>Of which:</i> High-tech	6.1	0.5	0.0	5.5	18.9	-2.6		Sep
\$ million								
Balance of payments								
Goods and services exports	57,874	14,896	14,559	14,883	15,986			Jun
Goods and services imports	57,525	14,693	14,404	14,582	15,634			Jun
Balance of trade in goods and services	349	204	155	301	352			Jun
Current account	3,756	1,542	881	1,920	1,678			Jun
Financial account (excl. foreign exchange reserves) ^e	-1,291	-533	-1,834	-3,304	-1,301			Jun
<i>Of which:</i> Nonresidents' direct investment ^e	1,396	394	2,183	2,309	1,810			Jun
Nonresidents' portfolio investment ^e	1,154	-168	1,400	8,707	-1,704			Jun
Residents' direct and portfolio investment abroad ^e	2,239	2,751	2,257	13,770	1,108			Jun
Net foreign debt (percent of GDP) ^e	-18.5	-15.7	-18.1	-17.8	-16.8			Jun
Bank of Israel reserves, end-period ^e	27,858	27,319	27,858	27,896	27,345	27,615		Sep

^a Seasonally adjusted.

^b Compared with April 2005 - September 2005 (unadjusted).

^c The change relates to the dollar values of imports and exports, not to their volumes.

^d Data on trade in goods do not include ships, aircraft, diamonds, and fuel.

^e Unadjusted data.

SOURCE: Central Bureau of Statistics.

Table 5. Indicators of Economic Development in Advanced and Developing Countries^a
(annual rate of change, percent)^b

	2002	2003	2004	2005	Projection 2006	Projection 2007
World GDP	3.1	4.1	5.3	4.9	5.1	4.9
Advanced countries	1.5	1.9	3.2	2.6	3.1	2.7
Developing countries	5.1	6.7	7.7	7.4	7.3	7.2
World trade	3.4	5.3	10.6	7.4	8.9	7.6
Advanced countries						
Imports	2.6	4.0	9.1	6.0	7.5	6.0
Exports	2.3	3.3	8.8	5.5	8.0	6.0
Developing countries						
Imports	6.1	10.2	16.4	11.9	13.0	12.1
Exports	6.9	10.8	14.6	11.8	10.7	10.6
Commodity prices (US\$)						
Oil ^c	2.5	15.8	30.7	41.3	29.7	9.1
Nonfuel	1.7	6.9	18.5	10.3	22.1	-4.8
Inflation (CPI) in advanced countries	1.5	1.8	2.0	2.3	2.6	2.3
Short-term interest ^d (%)						
Dollar deposits	1.6	1.0	1.4	3.2	5.0	5.3
Euro deposits	3.3	2.3	2.1	2.2	3.1	3.7
Unemployment rate in advanced countries	6.3	6.6	6.3	6.0	5.6	5.5

^a According to World Economic Outlook, Israel is classified as an advanced country. The advanced countries include the industrialized countries and some emerging markets.

^b Except for unemployment and interest rates.

^c Average price per barrel in 2005 was \$53.35.

^d Six-month Libor rate for US dollar deposits, and three-month Libor rate on euro deposits.

SOURCE: World Economic Outlook (IMF), September 2006.

Table 6. Government Budget Performance vis-à-vis Deficit Target, 2005-2006

	2005	2005		2006			Apr 06- Sep 06	Last month for which data available
		III	IV	I	II	III		
Domestic deficit as percent of GDP	-0.6	-0.5	-3.8	5.9	-0.2		-0.2	Jun
Deviation from domestic budget path, excl. credit extended ^a (NIS billion) ^b								
Government revenue	-0.8	-0.2	0.4	3.2	2.2	2.5	13.5	Sep
Government expenditure	-6.2	-0.8	-2.0	-3.6	0.0	4.1	8.5	Sep
Domestic deficit	-5.4	-0.6	-2.4	-6.8	-2.2	1.6	5.4	Sep
Total government surplus (deficit)	-10.8	-1.8	-7.7	7.8	-3.1	-2.0	1.6	Sep
	Real percentage change from respective period, previous year							
Government tax revenue	6.0	8.0	3.7	8.2	3.8	11.4	7.1	Aug
<i>of which:</i> income tax, net	7.0	7.3	5.7	10.5	8.5	26.8	16.4	Aug
VAT, gross	4.4	8.8	0.4	8.5	5.2	-1.9	1.5	Sep
Government expenditure	-0.3	7.2	-8.3	-4.1	3.8	9.0	6.4	Sep
National Insurance allowances	-0.3	2.8	-1.0	1.2	0.5	1.0	1.1	Aug
<i>of which:</i> Unemployment benefit	-7.2	-0.1	-3.1	-3.4	-5.9	-8.7	-5.9	Aug
Income support	-6.9	-4.6	-8.1	-6.8	-9.0	-7.0	-8.3	Aug
National insurance contributions received from the public	3.5	6.3	2.1	-1.0	0.3	3.3	0.7	Aug

^a The path was determined on the basis of a deficit of 3.4 percent of GDP in 2005, and 3 percent of GDP in 2006.

^b Change from respective period, previous year, seasonally adjusted.

SOURCE: Based on Ministry of Finance and National Insurance Institute data.

Table 7. Selected Price Indices,^a 2005-2006

	2005	2005		2006			Apr 06- Sep 06 ^b	Last month for which data available
		III	IV	I	II	III		
CPI	2.4	1.4	0.5	0.6	1.0	-0.8	0.2	Sep
CPI excl. housing, fruit and vegetables	1.8	0.8	0.2	0.5	2.0	-0.8	1.1	Sep
CPI excl. housing, fruit and vegetables, price-controlled goods, clothing and footwear	1.7	1.6	-0.7	1.5	1.7	-0.5	1.2	Sep
Index of housing prices	5.9	3.3	2.1	0.3	-3.2	-0.3	-3.6	Sep
Wholesale price index	5.2	1.6	0.9	3.3	2.3	-0.6	1.7	Sep
NIS/\$ exchange rate	6.2	1.2	1.6	1.7	-4.6	-2.7	-7.2	Sep
NIS/currency-basket rate	1.6	1.2	0.2	2.1	-3.0	-2.5	-5.4	Sep

^a Rates of change during period, percent.

^b Change in last six months.

SOURCE: Central Bureau of Statistics.

Table 8. Monetary Aggregates and Nondirected Bank Credit, 2005-2006
(annual terms, percent)

	2005			2006			Cumulative in previous 12 months	Apr 06- Sep 06	Last month for which data available
	2005	III	IV	I	II	III			
Rates of change								During period	
M1 ^a	17.5	24.3	23.6	10.8	6.6	11.9	11.6	8.0	Sep
M2 ^b	6.1	7.9	-0.2	2.8	5.5	10.4	6.4	10.7	Sep
M3 ^c	7.9	14.0	2.6	9.1	6.1	6.5	6.8	6.8	Sep
Nondirected bank credit	1.0	5.7	9.5	0.3	4.0	-0.4	1.9	-0.5	Sep
Unindexed local-currency credit	10.8	11.9	13.8	7.2	16.8	8.3	9.7	9.3	Sep
CPI-indexed credit	-2.6	6.8	7.8	-2.1	-0.9	-1.7	-0.6	-1.9	Sep
Credit in and indexed to foreign currency	-7.8	-5.6	4.7	-7.7	-10.0	-14.2	-8.0	-15.6	Sep

^a Narrow money supply (cash in the hands of the public and demand deposits).

^b M1 plus short-term local-currency unindexed deposits.

^c M2 plus short-term CPI-indexed deposits.

SOURCE: Bank of Israel.

Table 9. Interest Rates, Yields, and the Share-Price Index, 2005-2006
(quarterly average, percent)

	2005	2005		2006			Apr 06- Sep 06 ^a	Last month for which data available
		III	IV	I	II	III		
Nominal interest								
SRO deposits	2.8	2.7	3.2	3.7	4.1		4.1	May
Nondirected local-currency credit	6.4	6.2	7.0	8.3	8.4	8.7	8.5	Aug
Effective local-currency credit	3.8	3.6	4.2	4.8	5.3	5.6	5.4	Sep
LIBID 3-month dollar interest	3.4	3.6	4.2	4.6	5.1	5.3	5.2	Sep
Yield to maturity on:								
<i>Treasury bills</i>	4.3	4.2	4.9	5.5	5.8	5.8	5.8	Sep
Yield on 5-year bonds	3.0	2.7	3.1	3.5	3.8	3.9	3.8	Sep
Risk premium ^b		0.3	0.3	0.3	0.3	0.3	0.3	Sep
Expected inflation	2.8	3.1	2.8	2.4	2.7	2.1	2.4	Sep
General Share-Price Index (change)	33.2	13.2	11.7	1.7	-8.4	5.2	-3.7	Sep

^a Compared with April 2005 - September 2005.

^b As measured by the 5-year credit-default-swap (CDS) market

^c Derived from the yield gap between indexed and unindexed bonds held by tax-exempt institutional investors, minus the x-day effect on the price of the bond.

SOURCE: Bank of Israel.

Part 2: Broader Review of Selected Issues

Budget Implications of the Hostilities in the North

The direct budget cost of the hostilities in Lebanon is estimated at NIS 13 billion, including NIS 8.2 billion in defense expenditure. This review surveys the components, spread, and financing of the budget cost and the implications of the expenditure for the budget ceiling and the fiscal policy targets.

i. Civilian expenditure

Civilian expenditure on account of war damage is estimated at NIS 4.5 billion—NIS 4 billion in compensation for direct property damage and compensation to employers for indirect economic damage, and NIS 500 million in transfers to public entities that were affected by the war. Most of the sum will be paid out this year.

Compensation for property damage is being remitted to businesses and households from the Property Tax Compensation Fund—by direct transfer of funds to the victims of damage or by renovation and reconstruction work by housing companies.

The compensation for indirect economic damage will also be paid out from the Compensation Fund. This is meant to compensate businesses in the affected area (the “restriction zone”) for the indirect economic damage that they sustained due to the war.¹ Concurrently, employers were required to make up the wages of workers who were absent from their jobs. Different compensation arrangements were set forth in different economic sectors. Businesses in the manufacturing and trade and services industries are being compensated for damage in July commensurate with the number of workers’ days of absence on the basis of 180 percent of daily wage—132.5 percent funded by the government, 20 percent covered by the employee by the subtraction of vacation days, and the rest absorbed by the employers. For damage in August, larger government compensation was set forth, at 145 percent of the wage of those absent from work. Alongside this compensation, an alternative program especially tailored to small businesses was established for August. Under this program, the level of compensation is set

on the basis of sales lost and the rate of compensation rises in inverse proportion to the annual turnover of the business. For hotels and tourist attractions, compensation is based on lost earnings. In this industry, in addition to the period when work was interrupted, a recovery period is recognized for compensation purposes. In agriculture, compensation is calculated on the basis of lost output/earnings during the war period and is adjusted according to the different sub-sectors of agriculture. Businesses in border areas along the restriction zone may choose between compensation under the rules set forth above and compensation for actual proven damage. All compensation arrangements apply in the restriction zone only. No compensation mechanism was established for indirect damage in other parts of the country, except for businesses that employ workers from the restriction zone who were absent from work. These businesses were compensated in accordance with the aforementioned arrangement for government participation in payroll.

Public entities (municipal authorities, the health system, and the National Insurance Institute) were compensated for their NIS 500 million of special outlays during the war by means of special transfers.

ii. Defense expenditure

The defense establishment will receive a non-recurring supplement in the sum of NIS 8.2 billion to cover the direct cost of the hostilities. This cost includes outlays for the replenishment of stocks of ammunition and fuel, flight hours, fielding of armed forces, payment for reserve-duty days, expenditures of the Rehabilitation Division (for disabilities and casualties), and so on. This budget increase will be spread over the years 2006 to 2008—NIS 2 billion in 2006, NIS 3.7 billion in 2007, and NIS 2.5 billion in 2008. The total includes an increase to the defense budget that was already approved in August.

Beyond the direct costs, it was decided to establish a committee to examine the defense establishment’s needs in view of the lessons of the war. The demands in this context add up to considerable sums that are expressed in two components: a one-off increase of NIS 9.6 billion, spread over 2007–08, to improve preparedness, and an NIS 3 billion permanent increase in the annual budget base. These sums are not included in the foregoing estimate of the cost of the war. When the committee debates the defense budget, it should do so from a broader perspective than the context of the lessons of the recent war only.

¹ Government aid to the north includes an additional major element—state-guaranteed loans. The loans are advanced by the banking system to small businesses located in the north or owned by soldiers who were called-up during the war which encountered liquidity problems.

iii. *Financing the outlays and the budget ceiling*

War-related expenditure in 2006 will come to NIS 6–6.5 billion and will be financed in several ways. Compensation for direct and indirect economic damage will be paid out from the Compensation Fund.

The supplement to the defense budget for 2006, approved in August, adds up to NIS 2.75 billion. However, only NIS 1.5 billion of this total was related to the war; the rest traces to previous commitments given to the defense establishment. The entire increase in 2006 will be financed by changes within the existing budget—transfers from unused (underperformed) budget items in order to finance the cost of the war and a 9 percent across-the-board cutback in the procurement budgets of most government ministries in order to finance prior commitments.² The across-the-board cutback pertains to the entire annual budget, but in 2006 will be applied only in the last four months of the year. Accordingly, the actual cutback during this time is much more severe.

The war raised the expected 2006 budget deficit by 1.1 percent of GDP relative to the prior forecast—0.7 percent of GDP due to the war-related increase in budget expenditure³ and 0.4 percent of GDP due to lost tax revenue. There has also been an acceleration of expenditure unrelated to the war since the budget was approved in June; this is expected to raise the deficit by another 0.7 percent of GDP, bringing the total foreseen deficit in 2006 to 1.8 percent of GDP, assuming that the civilian compensation is recorded as a budget expenditure and not as a financing item. Before these developments, 2006 was expected to end with the budget in balance (including tax revenues on account of the Iscar transaction).

War-related expenditure in the 2007 budget will add up to NIS 3.7 billion—the increase in the defense budget. NIS 1 billion of the total will be covered by a reduction in the budget base that was instituted this year. The government decided to declare the remainder as an exception to the expenditure increase target for 2007 (and for 2008 as well).⁴ However, the government will meet the deficit ceiling for

2007 even if these expenditures are taken into account. For a detailed discussion of the budget ceiling for the years to come, see the analysis of the budget below.

In sum, even though the war led to sizable budget outlays and some decrease in tax revenues, the credibility of the fiscal trajectory has not been impaired. By financing much of the expenditure by reducing other budget items, the government moderated the increase in total expenditure and deficit and demonstrated its commitment to budget discipline. The large surpluses in tax revenues that were amassed before the war make it certain that the actual deficit this year will still be far below the ceiling of 3 percent of GDP even after the increase in total expenditure.

When the demands of the defense establishment for a budget increase beyond the one-off supplement for the direct cost of the warfare are discussed, account should be taken of the implications of such an increase for the budget ceiling and the credibility of the fiscal trajectory (the expenditure and deficit targets). The magnitude of the demands may reverse the budget priorities and impair the success that the government has had, thus far, in minimizing the impact of the war on the fiscal trajectory. The implications of these demands for the deficit and the public debt/GDP ratio in the years to come are discussed in the analysis of the budget below.

The government refrained from raising taxes and elected to cover the costs of the war mainly by reducing other items in the 2006 budget. This policy is expected to require a significant cutback in the 2007 budget as well. By making this decision, the government demonstrated its commitment to the expenditure target and to the preservation of its credibility in fiscal policy. However, a temporary increase in the rate of Value Added Tax would have allowed the government to cover the war expenditures without having to change its priorities significantly and without making steep and sudden cutbacks in the ministries' budgets. Such a measure would also have made it possible to hold the deficit down, thereby facilitating a decrease in the public debt and, in turn, the enhancement of fiscal credibility.

² The budgets of the Ministries of Health and Welfare and of the local authorities are exempt from the cutback, and the budget of the Ministry of Internal Security was cut by a smaller amount.

³ The previous forecast was based *inter alia* on the assumption of considerable under-performance of domestic budget expenditure by various ministries prior to the war. The revised forecast takes into account the transfer from these items to meet the expenses of the war.

⁴ The government also decided to allocate NIS 1 billion to strengthen the north. This sum is not considered part of the cost of the hostilities reviewed here.

Preliminary Analysis of the Government Budget for 2007 and Forecast of Budget Developments Over the Next Few Years

A preliminary analysis of the proposed budget for 2007, presented to the Knesset at the end of October, shows that if it is passed by the Knesset the government is likely to meet the targets set for the budgetary aggregates, after meeting the targets set at the beginning of each of the preceding three years.¹ The macroeconomic assumptions underlying the budget proposal are largely consistent with the latest economic developments, and the revenue forecast is in line with these assumptions. Taking into account that some of the budget is allocated to a 'price reserve', the release of which depends on the rate of price increases, the budgeted expenditure is consistent with the ceiling set for the real increase over the next few years (a real rate of 1.7 percent a year), plus non-recurring expenditures decided upon by the government relating to the war in the north and the disengagement from Gaza. Moreover, if the government stands by its decisions regarding the budget framework and components in the next few years, it will be able to achieve a continuous reduction of the deficit, of the share of public expenditure in GDP, of the tax burden, and of the public-debt/GDP ratio. The achievement of these objectives would help provide a firm basis for sustainable economic growth while reducing the financing costs of the public sector. The frequent changes in the budget targets in the last few years and security and political developments that took place have shown, however, that adherence to macroeconomic targets set in the budget and the ability to achieve them in this geographical region should not be taken for granted.

The 2007 budget

The revenue forecast in the 2007 budget is based on a projected growth rate of 3.8 percent, similar the Bank of Israel's forecast. The budget forecast is that tax revenues in 2007 will total NIS 181 billion, and that total revenue (excluding credit) will reach NIS 221 billion. The forecasts of tax and total revenues derived from the Research Department's tax model are very close to the above forecasts. Hence, if the macroeconomic assumptions underlying the forecast are realized, the chances are high that the government's deficit will come close to the ceiling of 3 percent of GDP, even if

all budgeted expenditure is incurred.² The deficit target for 2007 is similar to the target for 2006, but significantly higher than the actual deficit expected in 2006. The main reasons for the expected increase in the deficit in 2007 compared to 2006 are the one-off large tax revenues in 2006 related to the sale of Iscar; the costs of replenishing the Israel Defense Forces stocks after the war in Lebanon, and financing the aid program for the north, which will feature more strongly in 2007 than they did in 2006; the rise in the ceiling for the increase in expenditure to 1.7 percent; and the continued reductions in tax rates. The expected deficit for 2007, according to the common international definition,³ is about 4.7 percent of GDP.

The expenditure ceiling in the 2007 budget (net, including credit granted) is a nominal 5 percent higher than that set in the 2006 budget, so that if the budget is executed in full, the share of government expenditure in GDP is not expected to fall in 2007, after falling significantly in the last three years. Since the average CPI in 2007 is expected to exceed that in 2006 by less than one percent,⁴ according to current forecasts, the real rise in budget expenditure will be more than 4 percent, far in excess of the ceiling real increase of 1.7 percent stated in the law. However, in order to examine whether the proposed budget is in accordance with government decisions, the one-off components of expenditure that the government decided on in excess of the ceiling must be deducted from total expenditure (Table 1). These components were (1) the increase of NIS 3.5 billion in the 2007 budget (and the increase in the 2008 budget of NIS 2.5 billion) to finance the replenishment of stocks of the Israel Defense Forces and aid to the north following the war in Lebanon; (2) expenditure of NIS 1.1 billion related to the disengagement from Gaza deferred from the previous two years. If these two items are deducted, the expected real increase in expenditure is about 3 percent, still some 1.3 percent above the ceiling increase. However, the increase in the budget above the ceiling reflects the unexpected drop in CPI after the budget proposal had been prepared. As a result of that reduction, the correction incorporated into the budget proposal to take account of the difference between the actual rise in prices in 2006 and that projected at the time the original budget was prepared (in autumn 2005), as well as the price increase forecast for 2007, seem high at the present

¹ Nevertheless, the expenditure ceilings set in 2004 for the next few years were raised for 2005 and 2006 to include the expenses of the disengagement from Gaza, and again for 2007 following the coalition agreements, the war in Lebanon, and the delayed financing of expenses related to the disengagement.

² The Bank of Israel's forecast of tax revenue assumes a 4 percent GDP growth rate, an average real rise of 2.2 percent in the wage per employee post, a real rise of 4 percent in imports of consumer goods, and an average exchange rate of NIS 4.5 to the dollar.

³ The calculation according to internationally accepted definitions incorporates the public sector in its entirety, is carried out on a cumulative basis, and includes indexation differentials on the local-currency-denominated public debt.

⁴ This forecast is consistent with a 2 percent rise in prices in 2007.

Table 2.1: The Expenditure Ceiling for 2007 as per Government Decisions

1	Total expenditure in 2006 budget (net, incl. credit)	219
2	of which: cost of disengagement	2.2
3	Basis for calculation of 2007 expenditure ceiling (1–2)	216.8
4	Real increase of expenditure	1.7%
5	Adjustment for difference between original forecast CPI in 2006 and the current assessments ^a	0.2%
6	Expected rate of inflation in 2007 ^b	1.0%
7	2007 expenditure ceiling excluding one-off expenditures (3)*(1+(4))*(1+5))*(1+(6))	223.1
	One-off expenditures: IDF re-equipment	2.5
	Aid to the north	1.0
	Cost of disengagement	1.1
8	Total	4.6
9	Expenditure ceiling according to government decisions (7+8)	227.7
10	Expenditure ceiling in budget proposal	230.0

^a The original forecast in the 2006 budget was for a 2 percent rise, and the current assessment is that prices will rise by 2.2 percent.

^b Annual average. This forecast is consistent with a 2 percent rise in the CPI in 2007.

time.⁵ Despite this “technical” deviation, it would seem that in these circumstances the increase in the budget in excess of the targets does not adversely affect the likelihood of achieving the targets when the budget is executed, because the proposed budget contains a price reserve of 3 percent of total expenditure, which will become available only if the actual rise in prices is in line with the forecast.

The forecast for 2007–11

The analytical framework and the main assumptions

The forecast for the years 2007–11 is based on the medium-term budget model of the Bank of Israel’s Research Department⁶ and estimates of the execution of the budget

⁵ For a detailed explanation of how the expenditure ceiling in the budget is calculated, see the Bank of Israel Annual Report for 2004, Research Department, Chapter 3 (The Budget and the General Government), Box 3.4, p.197, available on the Bank’s website, <http://boisite/publeng/publeng.htm>.

⁶ For a detailed description on the structure of the model, see K. Braude and A. Brender (2003), “The effect of the economic program on the government budget in the years 2003–08,” Bank of Israel, Position Paper (Hebrew).

in 2006. The forecast reflects the government decisions on specific measures in the budget for the next few years, and examines whether they are consistent with the deficit and government expenditure targets. The forecast rests on many assumptions, listed below. In order to check the sensitivity of the conclusions to changes in the assumptions, the analysis is repeated under alternative assumptions.

The main assumptions underlying the analysis:

- ◆ A real increase of 4 percent in GDP in 2007, and an average real increase of 3.7 percent a year in 2008–11. The expected rates of increase are based on a faster rise in employment than the rise in the labor force, so that unemployment will converge to its natural level (of about 6.5 percent) in 2010, and an annual increase of 1.25 percent in output per employee, similar to the average increase in the last thirty years
- ◆ In 2008 the expenditure ceiling will be adjusted to reflect the gap between the rise in prices assumed in the 2007 budget and the rise in prices expected currently.

- ◆ Expenditure related to the disengagement will end in 2007.
- ◆ From 2008 the real wage will rise at the same rate as output per employee.
- ◆ The real yield on government bonds issued from 2006 will be 4.0 percent, similar to the average over the last ten years (6.5 percent on unindexed 10-year bonds).
- ◆ The government will abide by its decisions regarding the freeze on the hiring of manpower and the nominal budgets in the public sector. As a result, the rate of price increases of public consumption (except for education and health) will be similar to the rise in the GDP deflator.
- ◆ The application of various private laws whose implementation was deferred in the past and which are due to become effective in the next few years will be deferred again.
- ◆ Civilian aid from the US government will end in 2007.
- ◆ Tax revenues, adjusted for changes in legislation, will rise with an elasticity of 1.08 to GDP growth from 2008, similar to their increase in the last fifteen years. Revenues in 2007 are estimated from the Research Department's tax model described above.
- ◆ The tax reforms and other tax cuts, including the reduction in employers' contributions and those of the self-employed to the National Insurance Institute, will be implemented as planned.
- ◆ The exchange rate of the shekel will be NIS 4.6 to the dollar at the end of 2007, and NIS 4.8 to the dollar from the end of 2008.⁷ The CPI will rise at 2 percent a year.
- ◆ Expenditure on education and health will rise in line with the changes in the size and composition of the relevant populations. The quantitative rise in these services per recipient will vary with the rise in output per employee, and labor productivity will not change, whereas the wage per employee in health and education will rise at the same rate as the average wage in the economy.
- ◆ Indexation differentials on indexed bonds issued by the government since 2001 will, on redemption, be recorded as a budget expenditure.
- ◆ There will be no further privatization in the next few years.
- ◆ The balance of issues under the US government guarantees arrangement will be spread evenly over the years 2007–11. The risk premiums paid on them will be recorded in the budget spread over 20 years.

⁷ Changing this assumption to an exchange rate of NIS 4.5 to the dollar at the end of 2007 would reduce the debt/GDP ratio at the end of 2007 by 0.4 percent.

A major difficulty in the forecast is the assessment of defense expenditure over the next few years. Even before the war in Lebanon there were great differences between the assessments of the defense establishment and those of the Ministry of Finance of the path that the defense budget would take following government and prime-minister decisions in the past. As a result, decisions on the size of the defense budget are taken nearly every year in discussions with the prime minister. Following the war in the north, the defense establishment made substantial budgetary demands, beyond those already authorized, and it was decided that these would be discussed by a team or committee that would make recommendations regarding the expenditure path required. Since at this stage one cannot predict how and to what extent the defense budget will be affected by these discussions, the present analysis is based on decisions taken so far and on the assumption that taking these into account, the current real level of the defense budget will be maintained until 2011. The across-the-board cuts decided upon by the government and the costs of building the security fence are deducted from this level. An alternative scenario in which the budgetary demands of the defense establishment are met in full is also presented below.

Another important element in the forecast is the estimated budget performance in 2006. Since in the last few years the share of the government budget spent in December increased considerably, and since the share of the budget actually spent also varied, the amount of budget expenditure that will actually be spent in 2006 is shrouded in uncertainty even at this late stage in the year. The present analysis is based on the assessment that by the end of the year government expenditure will total about NIS 229 billion (gross, excluding credit), the same as the original budget, and that the government's deficit will reach about 1.5 percent of GDP. This small deficit, combined with privatization proceeds and the effects of appreciation of the shekel against the dollar and the slower rise of the CPI than of the GDP deflator will bring the public-debt/GDP ratio at the end of 2006 to about 90 percent, a drop of 7 percentage points from the ratio at the end of 2005.

i. Basic scenario—staying below the expenditure ceiling

In this scenario it is assumed that the real increase in government expenditure in the years 2007–11 will be in line with the ceiling decided upon: 1.7 percent in 2007, plus the one-off expenditures authorized for 2007 and 2008. According to the expenditure forecast based on government decisions already taken relating to specific measures, the magnitude of the additional measures required for meeting the target for 2008 is about NIS 2.5 billion (in other words, expenditure will have to be cut by this amount), and in 2009 another reduction of some NIS 2 billion will have to

be made (Table 2). According to this analysis no further reduction of expenditure will be needed in 2010, and in 2011 a considerable reduction will be necessary, because, among other things, the government has not yet decided on specific steps for that year.

If the government stays below the expenditure ceiling, given the rates of growth stipulated in the scenario, it will enable the government-expenditure/GDP ratio to be reduced considerably. In 2011 this ratio is expected to reach 33 percent, 3.5 percentage points less than in 2006 and 8 percentage points less than in 2003. A reduction of such a magnitude would enable the deficit to be cut continuously following its predicted rise in 2007; this would occur in spite of the deep cuts in tax rates introduced by the government and passed by the Knesset, which would lower the ratio of taxes to GDP by about 2 percentage points up to 2006 and

would bring the tax burden in Israel to below the level in most advanced economies. According to this scenario, the deficit is expected to drop by one percentage point a year in 2008 and 2009, and to reach one percent of GDP in 2009, in line with the target. In 2011 the deficit is expected to fall to less than one half of a percent of GDP, as the unemployment rate converges to 6.5 percent. The reduction of the deficit would enable the public-debt/GDP ratio to decline continuously (Figure 1) to about 85 percent in 2009 (the first time that the debt/GDP ratio is expected to fall below its 2000 level) and to about 79 percent in 2011. Clearly the realization of this scenario depends on the implementation of government decisions already taken regarding the maximum increases in expenditure and on new decisions being taken that will ensure that the expenditure ceiling is observed in the years 2008–11.

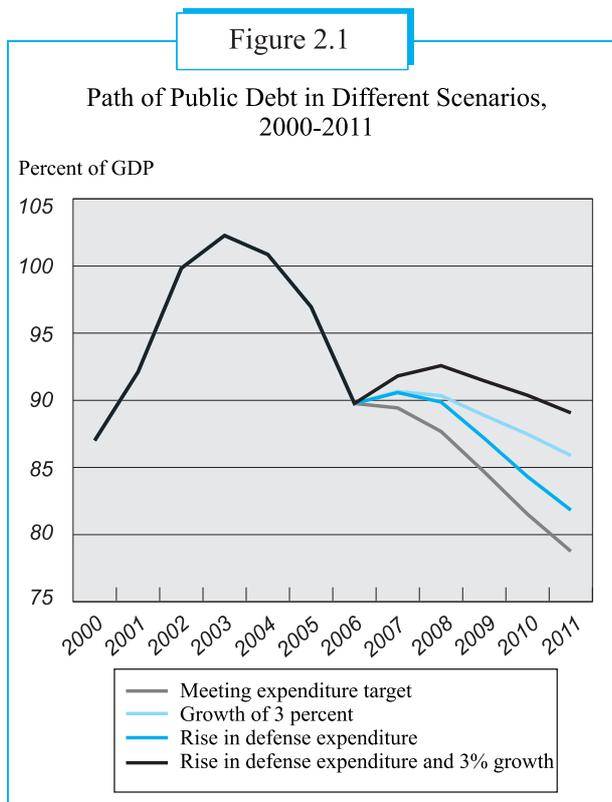
Table 2.2: Expected Path of Main Budget Aggregates in Various Scenarios, 2003 to 2011

	(percent of GDP)									
	2003	2004	Estimate		Forecast					
	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Scenario: meeting target										
Total revenues (excl. credit repayment)	35.5	35.3	35.6	34.8	33.3	33.0	32.8	32.4	32.4	
of which: taxes	27.7	27.8	28.0	28.5	27.2	26.9	26.7	26.3	26.3	
Expenses (excl. credit granted)	40.9	39.0	37.4	36.4	36.2	34.9	33.8	33.2	32.8	
Deficit excl. credit	-5.4	-3.7	-1.7	-1.6	-2.9	-1.9	-1.1	-0.8	-0.3	
Public debt (gross)	102.3	100.9	97.0	89.8	89.4	87.7	84.7	81.5	78.8	
of which: government debt	99.7	98.5	94.8	87.5	87.3	85.7	82.7	79.6	76.9	
Extent of extra steps needed to meet expenditure ceiling	0.4	0.3	0.0	0.5	
Scenario: meeting target, 3 percent growth from 2007										
Expenses (excl. credit granted)	40.9	39.0	37.4	36.4	36.5	35.5	34.7	34.3	33.9	
Deficit excl. credit	-5.4	-3.7	-1.7	-1.6	-3.3	-2.6	-2.1	-2.1	-1.6	
Public debt (gross)	102.3	100.9	97.0	89.8	90.7	90.3	88.9	87.5	85.9	
Scenario: meeting increased defense budget as requested in full										
Expenses (excl. credit granted)	40.9	39.0	37.4	36.4	37.3	36.0	34.3	33.6	33.2	
Deficit excl. credit	-5.4	-3.7	-1.7	-1.6	-4.0	-3.0	-1.5	-1.2	-0.7	
Public debt (gross)	102.3	100.9	97.0	89.8	90.6	89.9	87.2	84.3	81.8	
Public debt (gross) with 3 percent growth from 2007	102.3	100.9	97.0	89.8	91.8	92.6	91.5	90.4	89.1	

^a Assuming that the steps taken in previous years are permanent.
SOURCE: Bank of Israel.

ii. Alternative scenarios

To estimate the sensitivity of the forecast for the next few years to the assumptions regarding the rate of growth and the policy path, two alternative scenarios were examined. The first assumes a growth rate of only 3 percent in the years from 2007 to 2011. According to this scenario, the deficit in 2007 would be 3.3 percent of GDP, and in 2011, 1.1 percent, even if the government does not deviate from the expenditure target. In this case the public-debt/GDP ratio is expected to decline to 86 percent by 2011, similar to its level in 2000 (Figure 1). This analysis highlights the great vulnerability of the results of the policy to macroeconomic developments.



The second scenario examines the implications of an extreme scenario, in which the demands of the defense establishment are met in full, and the ceiling rise in expenditure is correspondingly adjusted upwards from 2007. These demands include a permanent rise of NIS 3 billion a year to the defense budget, and a one-off increase of NIS 9.6 billion to be spread over the years 2007 and 2008. The acceptance of these demands, even if it does adversely affect GDP growth and/or result in a rise in the interest rate, would bring the deficit in 2007 to 4 percent of GDP (or 5.7 percent of GDP if the common international definitions are applied), and to 1.5 percent in 2009. The public-debt/GDP ratio would

remain at 90 percent till the end of 2008, and would not fall below 80 percent even in 2011. If this increase in the budget leads to a slowdown in the growth rate to 3 percent a year over the period, the deficit in 2011 would be 2 percent of GDP and the public-debt/GDP ratio in that year would not be any lower than its level at the end of 2006.

These scenarios show that meeting the budget targets for the years from 2007 to 2011 would enable the government to lower the public-debt/GDP ratio and the share of public expenditure in GDP significantly, with a convergence, mainly towards the end of the period, to the customary levels in the advanced economies. Moreover, the tax cuts already approved are expected to lead to an ongoing reduction of the tax burden, which would also appear credible if the expenditure ceiling is observed. In that case the government could continue to support sustainable growth over the next few years. Nevertheless, the achievement of the targets depends on the government's adherence to the fiscal targets it set itself and on the macroeconomic environment in which the economy functions.

Another Look at Poverty in Israel: Using the Luxembourg Income Studies Equivalence Scale

Below we will examine the poverty rate in Israel, its development and its composition, according to a relative poverty index using the Luxembourg Income Studies (LIS) equivalence scale. The purpose of this review is to examine whether the acknowledged problem of poverty that emerges from the system of measurement used in Israel actually derives from the use of an equivalence scale that incorporates relatively small economies of scale. We therefore chose to use a scale which in addition to being the one generally accepted in the OECD, also incorporates significant economies of scale. Using the LIS equivalence scale to study poverty in Israel confirms that the problem is grave in Israel, and that it has worsened over the years, even though using this scale yields a poverty rate some 3 percentage points lower than that obtained from the index normally used. The characteristics of the poor population using this measure are similar to those obtained with the measure normally used in Israel—a high rate of poverty among the Arabs, the ultra-orthodox, large families, those with only low levels of education, and families without a breadwinner. However, the rates do vary: in particular, using the LIS scale yields a lower poverty rate among large families.

Measuring poverty in Israel—the general background

The measurement of poverty in Israel, similar to the practice in many advanced economies, is based on the relative

approach, according to which a person is considered poor if his income is below a certain threshold, determined by the society in which he lives. In Israel, as in most countries that have adopted this approach, the median disposable income was chosen as representing the income level of the society.¹ The standard of living of a household depends not only on its income but also on its requirements, which are greatly affected by the size of the family. Hence, to determine whether a family is poor, its income is considered relative to its requirements, in relation to its size, and this is carried out using an equivalence scale, defined as “the numerical relationship by which poverty thresholds vary for different sized families.” It is generally assumed that the additional income required for each additional family member to preserve the same standard of living of a family declines as the family size increases. Thus the equivalence scales generally used in Israel and throughout the world assume economies of scale in consumption. A comparison of the scales used abroad with that used in Israel shows that the former assume far larger economies of scale than that assumed in Israel.²

A closer look at the situation in Israel reveals that the actual economies of scale in consumption are greater than those reflected by the scale used (the scale of National Insurance Institute, henceforth NII). The equivalence scale used in Israel was calculated at the beginning of the 1970s, and was based on the 1968/9 Family Expenditure Survey; since then it has not been changed. The scale is based on the Engel method, according to which the share of expenditure on food in total expenditure is a good indicator of a family’s level of welfare. Underlying this approach was the empirical relation found that the share of food expenditure in total outlay declines as the standard of living rises. One can thus compare the wellbeing of families of different sizes by comparing the shares of their total expenditure that goes on food, and calculate the extra amount needed for a family to maintain its standard of living with the addition of another family member. This calculation gives the equivalence scale. The literature mentions two main drawbacks of this approach: (1) it relates to the share of total expenditure that is spent on food, in which economies of scale are relatively small, as an indicator of wellbeing, rather than the share spent on all

¹ In Israel the poverty line was set at 50 percent of the median income. In the main, the OECD countries set the figure at 60 percent, but most of them also report on other rates—50 percent and 70 percent.

² Studies made abroad that examined the equivalence scales also in countries with a large family size (i.e., with many children) showed that the economies of scale assumed in Israel’s scale was lower than those assumed in the scales in those countries too. See for example: Lancaster Geoffrey and Ranjan Ray, 2002, “International Poverty Comparisons on Unit Record Data of Developing and Developed Countries”, *Australian Economic Papers*, vol. 41, issue 2, pages 129-39.

goods; (2) it ignores the fact that the rate of food consumption of children, especially very young children, is relatively high, so that when a family increases, the share of expenditure on food is expected to increase even if its wellbeing does not change.³ These drawbacks indicate that the economies of scale incorporated in the equivalence scale constructed according to the approach generally accepted in Israel are smaller than those actually prevailing. Indeed, a study that estimated an equivalence scale for Israel⁴ proposed a scale that reflected higher economies of scale, closer to those used in the OECD countries.⁵

Table 2.3 Equivalence scales of the NII and the LIS

Number of family members	Number of standard persons	
	NII equivalence scale ^a	LIS equivalence scale ^b
1	1.25	1.00
2	2.00	1.41
3	2.65	1.73
4	3.20	2.00
5	3.75	2.24
6	4.25	2.45
7	4.75	2.65
8	5.20	2.83
9	5.60	3.00

^a The equivalence scale normally used in Israel is based on the Engel approach: From the ninth child 0.4 of a standard person is added for every additional member of the family.

^b The square root of the number of family members.

³ Nicholson, John L, 1976, “Appraisal of Different Methods of Estimating Equivalence Scales and Their Results”, *Review of Income and Wealth*, 22(1), pp. 1-11.

⁴ D. Eyal and A. Barnea (2000), “Equivalence scales in Israel—a re-examination,” *Economic Quarterly* 4, Year 47, December (Hebrew). This study derives an equivalence scale from a percentage of the family expenditure directed to the parents’ needs, according to the approach in Gronau, Reuben, 1991, “The Intrafamily Allocation of Goods: How to Separate the Adult from the Child,” *Journal of Labor Economics* 9(3), pp. 207-235.

⁵ On the other hand, the economies of scale implied in equivalence scales calculated in older research on Israel are even smaller than those assumed in the scale normally used. S. Amir, L. Achdut and Y. Shaul (1990), “Equivalence scales and their use, in 1989 Annual Review, *The National Insurance Institute*, (Hebrew) Jerusalem. Habib, Jacob and Yossi Tawil, 1974, “Equivalence Scales for Family Size: Findings from Israeli Data,” Discussion Paper 1, *The National Insurance Institute*, Jerusalem.

The high poverty rates in Israel, which in 2005 reached 20.6 percent of families and 24.7 percent of persons, highlight the need to re-examine the definition and the calculation of the poverty index in Israel, and also the equivalence scale used.⁶ The discussion on how to measure poverty, measurement which greatly affects the identification of the poor population,⁷ is needed for a deeper understanding of the problem and as an aid in formulating policy. Below we examine the rate of poverty in Israel, its development and its components using a relative poverty index, but using the equivalence scale normally based in various OECD publications, especially for international comparisons, i.e., the LIS scale.⁸ In this scale the number of standard persons is calculated as the square root of the number of persons in the family. The economies of scale in consumption in this scale are higher than those in the scale normally used in Israel.

It should be stated here that we are not recommending a change in the equivalence scale used in calculating the incidence of poverty in Israel to the LIS equivalence scale.⁹ The purpose of this discussion is to examine whether the situation regarding poverty in Israel as arises from the method of measurement used derives from an equivalence scale that incorporates small economies of scale. Hence the scale examined herein, in addition to being generally accepted for use in the OECD, also assumes larger economies of scale.

⁶ For a discussion of alternative poverty indices and their application see the 2005 Bank of Israel Annual Report, Chapter 8, Issues in Welfare Policy.

⁷ For a discussion on the sensitivity of the results of identification of the poor population in Israel to the method of measurement see E. Manirev (2002), "The effect of the method of measurement on the results of the measurement of poverty," *Economic Quarterly*, 2, Year 49, June; D. Gottlieb and R. Manor (2005), "The choice of a poverty index as a policy objective," Discussion Paper Series, Monaster Center for Economic Research, Ben Gurion University. The effect of equivalence scales on the measurement of poverty in other countries has been discussed in several studies, such as: Buhmann B., L. Rainwater, G. Schmaus and T. Smeeding, "1988 Equivalence Scales, Well-Being, Inequality and Poverty: Sensitivity Estimates Across Ten Countries Using the Luxembourg Income Study (LIS) Data Base," *Review of Income and Wealth*, Vol. 34, pp.115-142.

⁸ In the LIS method of measuring poverty the bottom part of the income distribution is also excluded. The main reason for using that scale is its simplicity. In the late 1990s the EUIROSTAT adopted another scale, according to which the head of the household is equivalent to one standard person, every additional adult is equivalent to 0.5 of a standard person, and every child, 0.3 of a standard person.

⁹ The LIS equivalence scale is not derived from an estimate of an optimal scale: nor has the appropriateness of the scale to Israel been checked. To do this requires a study of the scale taking into account Israel's demographic structure and composition of consumption.

Poverty in Israel according to the LIS equivalence scale

Using the LIS scale to measure poverty in Israel¹⁰ according to the NII definition also indicates that poverty is a serious problem and that it is becoming more serious over the years.

According to this calculation 20.3 percent of families were poor in 2005, and these families accounted for 21.6 percent of all persons and 30.3 percent of all children. The poverty rate is higher in Israel than in other advanced economies (Figure 2.2). The situation has deteriorated over the years, both in periods of recession and in periods of growth. Poverty rates have risen continuously since 1997, and at a faster rate since 2001 (Figure 2.3).

If the poverty rates obtained from the LIS and the NII equivalence scales are compared, it can be seen that the development of poverty according to both methods was similar, but the LIS scale gives lower poverty rates, particularly the rate among persons.

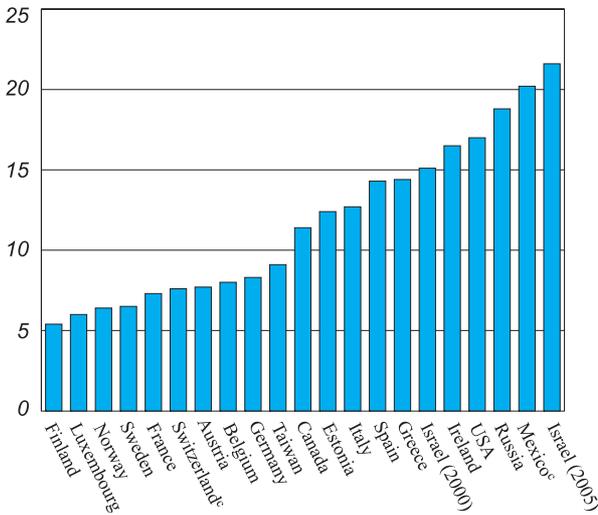
The differences between the methods of measuring poverty, as has been stated, affect the determination of who is poor, and thus also affect the composition of the poor population. Nonetheless, both methods yield similar characteristics for the populations, but at different levels (Table 2). According to both equivalence scales, the most prominent employment characteristic among the poor is the absence of a wage earner in the household, but the poverty rate is high also among families with a single breadwinner. Another salient characteristic is a low level of education. Regarding the rate of poverty among the different sectors of the population, the high rates among Arabs and the ultra-orthodox are prominent, and as far as demographic characteristics are concerned, poverty is high among large families and single-parent families. There is some correlation between certain characteristics, which serves to exacerbate the depth of poverty among some groups.

Turning to the demographic composition of the poor population, a switch to the LIS equivalence scale (which reflects greater economies of scale) reduces the share of individuals living in large households while the share of those in small households increased. Thus the proportion of those in households with five or more members in the total poor population went down from 65.3 percent to 59.7 percent, and the proportion of those in families with up to 4 members rose by 5.5 percentage points, to 40.3 percent. The

¹⁰ The choice of equivalence scale affects the level of the poverty line. The poverty line for a standard person in 2005, calculated according to the LIS scale, was NIS 2,270, and according to the calculation normally used in Israel, NIS 1,493.

Figure 2.2

Poverty Rates^a in Israel and Selected Countries^b, 1998-2006*



^a According to the poverty line, defined as half the median per standard capita money income, using the Luxembourg Income Studies (LIS) equivalence scale (the square root of the number of persons in the household). For each country the latest observation is taken.

^b All the countries for which data for those years are available in the LIS database.

* The figures for Switzerland and Mexico are for 2002.

SOURCE: Luxembourg Income Studies and the Central Bureau of Statistics Income Surveys for 2000 and 2005.

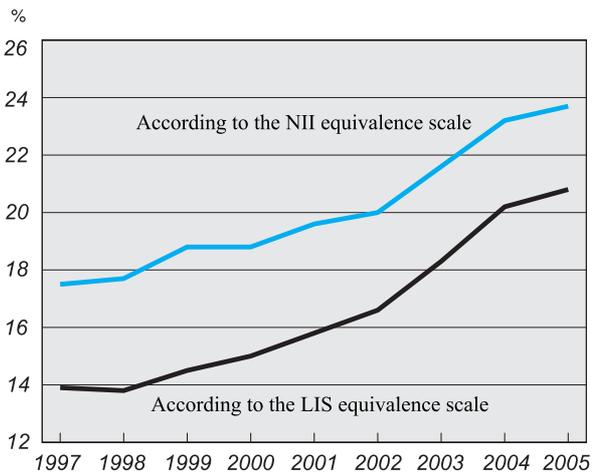
proportion of the elderly increased from 9.1 percent to 11.5 percent.

Another notable difference between the methods with regard to the poverty rate occurs with regard to the Arab population, and is due to the number of Arab families with many children. According to the NII equivalence scale, 55.4 percent of Arabs fall below the poverty line, compared with 46.2 percent according to the LIS scale. On the other hand, the reduction in the incidence of poverty among the ultra-orthodox when switching scales was similar to that in the total population, despite the large number of children in ultra-orthodox families. This finding is connected to the depth of poverty in this group.

A marked difference between the two measurement methods was observed among families with a single wage earner. This was because a sizeable share of the poor in this group are close to the poverty line as defined in Israel. Switching to the poverty line calculated using the LIS equivalence scale pushes many of this group above the poverty line.

Figure 2.3

Poverty rates^a according to the equivalence scales of the National Insurance Institute (NII) and the LIS, 1997-2005



^a Excluding the Arabs of East Jerusalem.

SOURCE: Based on the Central Bureau of Statistics Income Surveys for 1997-2005.

Table 2.4 The incidence of poverty and the distribution of the poor population^a
(persons, in percent, 2005)

	Poverty rate		Distribution of poor population	
	NII equivalence scale	LIS equivalence scale	NII equivalence scale	LIS equivalence scale
Total	24.7	21.6		
No. of working age wage earners ^b				
0	76.6	75.2	36.5	40.3
1	35.4	28.3	47.4	43.2
2+	3.9	2.3	7.3	5.0
Head of household aged 65+	25.4	28.3	9.1	11.5
Years of education of head of household				
8-0	53.4	50.2	25.1	26.9
9-10	35.8	30.5	14.4	14.0
11-12	24.7	20.5	30.9	29.4
15-13	18.7	16.3	17.6	17.6
16+	12.1	10.7	11.9	12.0
Selected population sectors				
Ultra-orthodox ^c	63.1	54.8	15.5	15.4
New immigrants (arrived since 1990)	19.6	18.8	13.3	14.6
Arabs	55.4	46.2	44.0	41.9
Single-parent families	39.5	35.8	3.5	3.6
No. of members of household (family size)				
1	22.2	29.2	4.7	7.0
4-2	14.8	14.3	30.1	33.3
6-5	26.4	21.7	32.3	30.4
8-7	51.6	42.5	20.6	19.4
9+	65.9	46.1	12.4	9.9
Children	35.4	30.6	47.3	46.8

^a Including the Arabs of East Jerusalem.

^b In families where the head of the household is less than 65 years old.

^c Identified as families in which the last educational institute attended by one of the members was a talmudical college (yeshiva).

SOURCE: Based on income surveys of the Central Bureau of Statistics 2005.

Diary of Events from April 2006 to September 2006

Month	Date	Event	Details
April	2	The Bank of Israel presents its 2005 Annual Report to the President of Israel.	The main goal of economic policy in the years to come is to create the conditions that are needed for sustainable growth, in order to enhance the welfare of the public at large and allow the country to tackle its social problems.
	3	The Research Committee, chaired by the Chief Scientist of the Ministry of Industry, Trade, and Employment, Dr. Eli Ofer, approves thirty-three R&D plans in electronics, optics, and software.	The committee reviewed fifty-seven R&D plans for which NIS 339.8 million in investment funds were requested. The committee approved thirty-three new R&D plans at an investment of NIS 144.7 million, of which NIS 59.5 million will be forwarded to companies in the form of R&D grants from the budget of the Chief Scientist.
	10	The Supervisor of Banks, Yoav Lehman, sends the banks a draft directive ordering them to amend clauses in their standard contracts.	The main deletions that the Supervisor of Banks ordered the banks to make in their contracts include any provision that absolves the bank of liability for unauthorized actions taken in the customer's account and any provision absolving the bank or any third party of liability for the transfer of any information from the bank to a third party in the course of service, or the use thereof. The directive also limits the banks' exemption from liability after mishaps and disruptions that affect service.
	11	The Acting Prime Minister and the Minister of Industry, Trade, and Employment signs a new free-import order that replaces the one enacted some thirty years ago and amended many times since in a patchwork manner. The new order provides relief to importers.	The changes in the new order: a list of officials to contact at the various ministries in, the deletion of dozens of products from the licensing requirement, the repeal of compulsory licensing for imports from several states that do not have diplomatic relations with Israel, the repeal of compulsory "Class A" marking on suppliers' invoices, and compulsory licensing of goods identified as being factors in terrorism or that may endanger the public.
May	4	The 31st Government, headed by Ehud Olmert, is presented to the Knesset and receives the Knesset's vote of confidence.	The Government is based on a coalition among Kadima, Labor, Shas, and the Pensioners.
	6	Berkshire, Warren Buffett's investment fund, acquires an 80 percent stake in Iscar for \$4 billion.	The company's plants are situated in the Tefen industrial area, in the Western Galilee. The tax to be collected on the transaction is estimated at \$1 billion.
	15	The committee that investigated barriers to small and medium businesses in government procurements presents its report to the outgoing Director General of the Ministry of Industry, Trade, and Employment, Ra'anán Dinur, and to the Accountant General, Dr. Yaron Zelikha.	The committee's report includes a mapping of barriers to the participation of small and medium businesses in government procurements, a survey of the global state of affairs in this field, solutions that selected countries have applied, and recommendations from committee members that can be applied in Israel.

Month	Date	Event	Details
	22	The Ministry of Finance adjusts its 2006 growth outlook to 5.3 percent.	After the Central Bureau of Statistics released its initial estimate of rapid growth in the first quarter of 2006, and in view of current economic indicators that point to continuation of the growth process, the Ministry of Finance adjusts its 2006 growth outlook to 5.3 percent as against the 4.1 percent outlook that it released in February.
	28	The Vice Premier and Minister of Industry, Trade, and Employment, Eli Yishai, instructs his ministry's legal bureau to distribute a legislative memorandum for an amendment to the Minimum Wage Law, enshrining in legislation the raising of the minimum wage as agreed in the government's basic guidelines.	According to the basic guidelines, a target should be established by which the minimum wage shall be raised during the tenure of the current government to NIS 4,600 (\$1,000) per month. In the first stage, the minimum wage (as it existed on April 1, 2006) is to be raised by NIS 500, in three phases: (1) half of the increment during the current fiscal year and no later than June 1, 2006; (2) one-fourth of the increment on April 1, 2007; and (3) on June 1, 2007.
	30	The Central Bureau of Statistics releases the International Monetary Fund's recommendations, part of a report produced by the IMF delegation when it visited Israel in November 2005 to examine the quality of Israel's economic and financial data.	The main recommendations: <ul style="list-style-type: none"> • *The Central Bureau of Statistics, the Bank of Israel, and the Ministry of Finance should improve their coordination. • * Israel should generate its monetary statistics on the basis of a recommended method and international standards. • *Thought should be given to releasing the Consumer Price Index earlier and separating it from the Wholesale Price Index, in order to better serve users' needs.
	31	The Accountant General reports that the government will issue its first thirty-year bonds in June. The bonds will be indexed to the CPI and will pay fixed interest.	This prolongation of the yield curve is expected to have several favorable outcomes, such as responding to the needs of pension funds and insurance companies, which incur long-term liabilities, and applying instruments that are conventional in other markets in developed Western countries.
June	7	The Knesset approves the state budget.	The 2006 state budget is NIS 271.4 billion.
	18	The banks release their first quarter 2006 earnings.	The earnings of the five largest banks were about 39 percent larger than in the year-earlier quarter.
		The government bond market reform gets underway.	In the reform, bonds will be sold directly to a list of twenty "market makers," who undertake to buy a certain amount of bonds each year and to quote purchase and sale prices for some government bonds. This will make the government-bond market more liquid.
	25	An escalation of the situation in the Gaza Strip.	The escalation is caused by an integrated attack by terrorists on an IDF base. As a result, a soldier and tank commander are killed, and another soldier kidnapped.

Month	Date	Event	Details
	26	The key rate for July 2006 will remain at 5.25 percent.	The rate for June was also left unchanged, after the quarter percentage-point increase in May. The decision not to touch the interest rate is consistent with the attainment of price stability within the 1–3 percent target range.
	29	The Fed raises its key rate by a quarter percentage-point, to 5.25 percent.	This is the Fed's seventeenth consecutive increase. In its aftermath, the shekel-dollar interest spread has fallen to zero.
July	1	Directive on arrangements of bank credit come into force.	The directive is designed to remove uncertainty among clients who stray beyond their agreed credit framework concerning banks' covering their debts, to instill an orderly bank management and to improve payment ethics in the economy.
	11	Henry Paulson, former chief executive of Goldman Sachs, sworn in as 74 th US treasury secretary.	
	12	Military flare-up in the north.	IDF begins action in south Lebanon in response to a Hezbollah attack on the IDF and the capture of two soldiers. At the same time as the Israeli response, Hezbollah fires rockets on towns in north Israel.
	24	Budgets Director updates Minister of Finance Avraham Hirschson that agreement has been reached on building a model for wage payments for workers absent from work in the north due to the security situation.	The principals of the agreement were reached by a committee set up by the Minister of Finance to solve problems of wage payments in areas of conflict. The committee included representatives of government, Histadrut labor federation and employers.
	25	Credit rating agency Standard & Poors confirms Israel's credit rating with "Stable" forecast for Israeli economy.	Prime Minister Ehud Olmert praises S&P's announcement and stresses government's need to maintain fiscal discipline, particularly budget framework and deficit and government spending targets as defined by government's basic guidelines.
	30	Government approves proposal of Minister of Finance regarding payment of wages and damage compensation in the north.	The government approves the proposal based on the arrangement reached by the Minister of Finance, the chairman of the Histadrut and president of the Coordinating Bureau of Economic Organizations.
August	14	Ceasefire comes into force, and fighting in southern Lebanon ends.	The second Lebanon war lasts 33 days, during which 3,917 rockets fell on Israel, killing 42 citizens and wounding 4,304.
	21	Ra'anana Municipality raises NIS 150 million from institutional investors.	For the first time a municipality registers on the TASE's TACT-Institutional system, which allows trading in securities between institutional investors.

Month	Date	Event	Details
	30	Knesset Finance Committee unanimously approves NIS 2 billion cut in government spending in order to cover Lebanon war expenses.	The cutback is approved after three delays in the vote and after replacement of three members of the Knesset committee before the vote.
	31	National Insurance Institute publishes its Poverty Report 2005.	Among the major findings: *Poverty among families remains stable in 2005, though poverty among individuals and children is on the rise. Gaps in disposable income continues to widen. *Against a background of rising standard of living in Israel, cutting child allowance further worsens relative situation of low wage-earning families with children.
September	4	Supervisor of Banks, Yoav Lehman, announces his departure from the Bank of Israel.	
	5	The accountant general and the Tel Aviv Stock Exchange launch the reform of the government bond market.	As part of the reforms, the accountant general appoints 18 senior market makers, committed to quoting purchase and sale prices for government bonds at large quantities and at restricted spreads. Market makers must also buy a minimum quantity of bond issues each year. This opens up to competition a large and important segment of domestic banks' activity.
	11	Bank Leumi completes transfer of Psagot-Ofek investments to the York Capital fund for NIS 1.284 billion.	This is the largest transaction to date following recommendations of the Bachar Committee.
	12	Multiyear budget plan for 2007-2009 approved by government.	
	17	Twelve years after legislation on state health insurance, treasury and Health Ministry sign agreement on passing responsibility for mental health service insurance to HMOs.	Agreement follows government decision of January 2003 by which mental health service responsibility is to be passed to HMOs, and government decision of February 2006 which sets 1/1/07 as launch date of reform in mental health service reforms.
	19	Minister of Industry, Trade and Employment will adopt recommendations of panel headed by Prof. Yossi Tamir on employment and improving social balances in welfare-to-work plans.	Principal recommendations are (in part): *Men and women seven years from retirement are exempt from regular participation in programs, and will attend special (professional) track; *Recipients of disability allowances, the mentally disabled, those in mental health care and others suffering psychosociological problems exempted from regular participation and placed on special track.
	25	State instructs state-owned companies to issue their lists of assets.	Government Companies Authority issues real estate letter instructing state-owned companies to arrange comprehensive checks of their assets. This is intended to prevent unauthorized and illegal use of company assets.

Month	Date	Event	Details
	26	Bank of Israel announces that interest for October will remain unchanged at 5.5 percent.	This is the third consecutive month that Bank of Israel interest rate remains at 5.5 percent.
	29	World Economic Forum places Israel 15 th on competition index. Previous index had placed Israel 23 rd .	Improvement in ranking stems from recovery of high-tech sector, fiscal discipline, growth and reforms in Israeli economy which increased competition.