
RECENT ECONOMIC DEVELOPMENTS*

Main developments

The economic indicators that have provided evidence of an economic recession since the last quarter of 2000 showed no improvement in the second half of 2002 (henceforth 'the period reviewed'), and some actually indicate further deterioration. Real activity contracted due to a fall in domestic demand and the slow growth of world trade. Israel's foreign trade reacted slowly to the significant real depreciation that took place in the first half of 2002 real wages declined markedly for the first time, and the rapid rise of prices in the first half of the year halted, following a series of measures instituted by the policymakers towards the end of the first half of the year.

The following aspects of real activity showed similarities in both halves of the year: the slowdown in economic activity became more severe; the labor market was in recession, and this has not yet been fully reflected in the rate of unemployment; Israel's share of worldwide exports fell, per capita GDP declined, and the business-sector output gap increased/widened. The difference between the first half-year and the second was in the uneasiness in the financial markets in the first half, and in the reduced contraction in real activity in the second half. The uneasiness in the first half increased to the extent that it became concern about the stability of the markets—due *inter alia* to the persistent and growing weakness in the economy—and was reflected in accelerated depreciation of the NIS, which was translated into considerable real depreciation, a sharp rise in prices far in excess of the upper limit of the target inflation range, expectations that inflation would accelerate, and a marked change in the composition of the public's assets portfolio with a move into indexed channels. The relative calm in the financial markets in the period reviewed followed the introduction of severe policy measures that included fiscal restraint by the government and a sharp hike in the Bank of Israel interest rate towards the end of the first half of the year. As a result of these steps the CPI rose at a minimal rate, with a decline in short term inflation expectations and

gradual, albeit incomplete, return by the public to its former asset portfolio.

Per capita GDP which serves as an indicator of the standard of living, went down by 3 percent, based on preliminary estimates of the National Accounts, having declined in 2001 too. GDP and business-sector product in particular decreased at a faster rate, domestic uses fell, the persistent decline in the composite state-of-the-economy index that started in 2000:IV continued, and all the components of the index contracted. Activity was at a low level in most of the principal industries, including on the one hand the advanced export-oriented ones that were adversely affected by the slow rise in world demand and by the sharp fall in share prices in the domestic and foreign capital markets, among other things, and on the other hand also the traditional industries that were affected mainly by the fall in domestic demand. An analysis by the Bank of Israel Research Department shows that unlike in 2001, when the *intifada* and the global high-tech crisis were equally responsible for the loss of output, in 2002 (and in the period reviewed) the *intifada* accounted for the major part of the loss (see also Box 1).

The measures introduced at the beginning of the period reviewed should have been sufficient to re-establish calm in the financial markets in an economy suffering from a recession, but additional, mainly external elements developed during the period that added to the uncertainty and uneasiness. Short-term inflation expectations remained above the upper limit of the target range until the end of November, long-term yields on financial assets stayed high, long-term inflation expectations stayed significantly above the level considered price stability, and the public still bought CPI-indexed assets. The elements that contributed to unrest in the financial markets in the period reviewed included the deterioration in the security situation, the persistent and growing weakness in most of the principal industries that raised the risk of an increase in doubtful debts in the banking system, the increased likelihood of war with Iraq, concern over the possible downgrading of Israel's credit rating, uncertainty regarding the approval of the budget by the Knesset, and growing awareness that the proposed budget is incompatible with the 2003 deficit target of 3 percent of GDP.

* For diagrams (bilingual) please turn to Hebrew section.

Table 1. Indicators of Business Activity, 2001–2002
(seasonally adjusted)

	2000	2001	2001		2002			Jul-Dec*		***
			III	IV	I	II	III	2001	2002	
Rates of change (annual averages, percent), compared with preceding quarter										
State-of-the-economy index	-2.4	-3.9	-3.9	-2.5	-4.2	-4.4	-4.5	-4.1	-3.8	12
Large-scale retail trade	4.0	-2.9	-1.2	-5.9	-4.3	-9.1	-2.3	2.0	-5.3	12
Manufacturing production (excl. diamonds)	-4.7	-3.3	-3.9	-1.0	2.9	-4.6	-1.9	-8.5	-1.4	11
Business-sector consumption										
of electricity	2.3	3.4	-0.5	-0.5	11.2	13.4	-2.1	1.6	5.7	11
Index of revenue in commerce	0.1	-3.4	6.8	-10.0	-2.3	0.4	-8.3	-2.4	-3.1	11
Index of total revenue	1.9	-2.6	6.3	-5.2	-2.0	-5.1	-8.1	-1.3	-2.9	11
Rates of change (percent), compared with preceding quarter										
Tourist arrivals	-50.2	-29.8	-16.7	-0.1	-24.8	22.8	3.4	-54.6	-13.3	11
Immigrant arrivals	-27.6	-23.7	-11.8	-30.7	-1.7	26.4	-3.0	-26.8	-24.5	10
Residential starts	-31.3	-14.7	9.7	8.9	-10.4	-0.1		-32.2	0.6	10
of which:										
Government-initiated	-50.9	-19.6	17.6	-9.1	10.2	-32.0		-57.7	-14.8	10
Residential completions	-10.1	-15.7	10.4	-12.0	-9.9	4.9		13.3	-14.4	10
of which:										
Government-initiated	-17.7	4.4	12.1	-4.8	-13.6	39.9		-12.6	23.8	10
Survey of companies (percent) ^a										
Output of manufacturing firms (not adjusted)	-15	-10 **	-18 **	-13 **	0 **	-13	-16			12
Output of manufacturing firms (adjusted)	-14	-10 **	-18 **	-5 **	-4 **	-15	-17			12
Sales by commercial firms (not adjusted)	-24	-32 **	-23 **	-48 **	-40 **	-19	-22			12
Sales by commercial firms (adjusted)	-24	-32 **	-16 **	-45	-40 **	-27	-17			12

* Compared with same period in preceding year.

** Not significant at 5% level.

*** Last month for which data available.

^a 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.

The principal industries

All the indicators relating to Israel's economy showed that activity continued at a low level in the period reviewed, and most suggested that it actually became even more sluggish during the period (Table 1 and Figure 1).¹ National Accounts data for 2002:III indicate

¹ To assess the deterioration during the year, seasonally adjusted data for consecutive quarters were compared, rather than data for equivalent quarters in the previous year, which is the approach followed in other parts of this review.

that economic activity is settling at the low level that has prevailed since 2000:IV. The value of transactions in the goods and services account declined in the period reviewed. Goods and services exports (in NIS terms, in the seasonally adjusted National Accounts data) fell in the two quarters of the period reviewed, and their real decline from the level in the first half of the year came to 7.7 percent. Goods and services imports, which provide an indirect indication of economic activity fell by 8.4 percent in real terms. The Bank of Israel Companies Survey for 2002:IV shows that in that quarter the decline in activity in all the major industries continued, and was

Table 2. National Accounts, 2001–2002
(seasonally adjusted)

	2001	2002	2001	2002				Jul–Dec*		**
			IV	I	II	III	IV	2001	2002	
Rates of change (annual averages, percent, constant prices), compared with preceding quarter										
GDP	-0.9	-1.0	-3.2	1.6	-0.7	0.1		-3.9	-0.6	9
Business-sector product	-2.4	-3.1	-7.0	0.2	-2.3	-0.6		-6.4	-2.5	9
Business-sector product excl. start-ups	-1.1	-2.2	-4.7	-0.1	-2.7	1.6		-3.5	-1.5	9
Private consumption	2.5	-0.6	-2.4	0.5	-2.6	-0.2		1.5	-1.2	9
Gross domestic investment	-2.6	-8.0	-53.5	29.9	0.2	14.9		7.9	-8.7	9
Gross domestic investment excl. start-ups	-4.8	-4.8	-30.8	27.5	1.1	-12.4		-8.3	-6.0	9
Goods and services exports	-11.7	-5.4	0.1	-4.8	3.8	-13.3		-22.9	-3.8	9
Goods and services exports excl. start-ups and diamonds	-6.9	-9.5	-11.4	-10.6	-10.1	-0.9		-12.6	-8.4	9
Goods and services imports	-4.5	-3.0	-5.8	6.5	11.1	-12.3		-8.6	-0.6	9
Goods and services imports excl. diamonds	-4.2	-6.3	-15.9	6.3	-6.1	-10.1		-6.5	-6.8	9
Public-sector consumption	3.3	5.5	37.7	6.6	5.8	4.5		-1.6	12.9	9

* Compared with same period in preceding year.

** Last month for which data available.

steeper than in the first three quarters of the year. The decrease was seen in most aspects of companies' activity—output and domestic and export sales—and also in inventories and staffing, and most reported that the main constraint on expanding activity was the low level of demand.

Manufacturing output fell in the period reviewed, despite some signs that it was stabilizing in the first half of the year, and despite a rise in goods exports in 2002:IV. This points to a further slump in domestic

demand. The recession in activity was also reflected in labor input; labor productivity in manufacturing rose by about one percent (seasonally adjusted), and the wage per man-hour fell by 0.4 percent. From July to October the upward trend of high-tech production strengthened (from a monthly rise of 0.2 percent in the trend data from the beginning of 2002 to a rise of 0.9 percent in October), the rise in production of mixed-traditional industries slowed (from 0.4 percent to 0.2 percent), while in other industries the downward trend persisted, and even intensified markedly in the traditional indus-

Box 1

GDP Growth in East Asian Countries With IT-Oriented Exports and in Israel

The downward trend in exports of Israel's IT industry was checked at the beginning of 2002, and it began to rise in 2002:I,¹ led by the global recovery of this industry during the year. The development of GDP in the east Asian countries whose exports are led by IT (see diagram on page 17 in Hebrew section) indicates that their growth rates were adversely affected in 2001 but rallied in 2002. The rate at which Israel's GDP contracted in 2002 was similar to that of 2001, in contrast to the east Asian countries shown here. This reinforces the assessment that the adverse effect on Israel's GDP growth in 2002 was primarily due to domestic shocks.

¹ We do not have monthly data on exports of IT services. The annual figures indicate that exports fell in 2002 at a far slower rate than in 2001, supporting the assessment that the downward trend in exports of IT services, as in those of the IT industry, was checked during the year.

Table 3. Indicators of Labor Market Developments, 2001–2002
(seasonally adjusted)

	2001	2002	2001		2002			Jul-Dec*		**
			IV	I	II	III	IV	2001	2002	
	('000s)									
Civilian labor force	2,499	2,537	2,518	2,535	2,531	2,544		2.8	1.2	9
Israelis employed	2,265	2,272	2,258	2,268	2,270	2,279		2.0	0.3	9
Business sector	1,574	1,560	1,556	1,553	1,555	1,572		1.1	-0.5	9
General government	692	712	702	713	714	710		4.5	2.1	9
Average weekly hours worked per employee	37	37	37	37	37	37		-4.8	1.9	9
Business sector	40	40	39	40	40	40		-4.6	1.7	9
General government	31	31	30	31	31	31		-5.2	4.4	9
Labor input of employed Israelis	83,821	84,383	82,865	84,124	83,774	85,250		-2.9	2.3	9
Business sector	62,609	62,489	61,058	62,464	61,952	63,051		-3.5	1.2	9
General government	21,149	22,199	21,275	22,115	22,317	22,165		-0.9	6.5	9
Claims for unemployment benefit	117	118	128	130	129	114	100	19.0	-14.6	12
Work seekers	186	195	203	203	203	194	181	18.0	-5.6	12
Real wage per employee post (NIS) ^{a,b}	4,680	4,435	4,621	4,543	4,463	4,374	4,361	0.3	-6.6	10
of which: Business sector	4,802	4,513	4,741	4,611	4,608	4,445	4,389	0.6	-7.1	10
General government	4,412	4,222	4,358	4,400	4,211	4,160	4,118	-0.2	-5.3	10
Unemployment rate (%)	9.3	10.4	10.3	10.6	10.3	10.4				9

* Percent change compared with same period in preceding year.

** Last month for which data available.

^a At 1994 prices.

^b Real wage per employee post relate to Israelis and to foreign workers with work permits, and does not include Palestinians.

tries (from a slight rise to a decline of 0.2 percent). The Companies Survey shows that in the fourth quarter the traditional industries experienced the greatest contraction in activity, in contrast to the beginning of the current recession when the advanced industries suffered most.

All the indicators relating to the construction industry show that the slack evident since 1995 continued, but they provided no evidence that the situation deteriorated. In 2002:III building starts remained stable at their low level, and the number of completions increased by 5 percent (Table 1). On the other hand, in August–November 2002 sales of new apartments in all parts of the country slowed considerably; the reasons for this include the rise in mortgage interest rates and in the VAT rate on new apartments in the middle of the year. The area of construction for all purposes contracted, and in September was 3 percent lower than at the end of 2001. Building time lengthened, and the number of mortgages taken up decreased. One indirect indication of the direction of demand for construction output is the

level of immigration to Israel, which fell in the period reviewed. National Accounts data reveal that construction investment continued to drop in the second half of the year, and the Companies Survey provides similar evidence—following moderate reductions in 2002:II and 2002:III, the decline in construction activity intensified in 2002:IV, and the dollar prices of apartments fell.

The trends in tourism do not indicate that the situation has worsened, but that the slump has become established. The number of tourist arrivals increased in 2002:III, and continued rising in 2002:IV (seasonally adjusted data). The slow rise in the number of bed-nights in tourist hotels that started in the second half of 2002 derives mainly from internal tourism,² but for the first time the number of foreign tourist bed-nights was stable, albeit at a low level. Activity in the other industries became even more sluggish (Table 1). The retail trade

² In 2002, for the first time in more than a decade, the number of Israelis traveling abroad fell.

Table 4. Balance of Payments, Foreign Trade,^a and the Reserves, 2001–2002
(\$ million, current prices)

	2001	2002	2001	2002				Jul–Dec		*
			IV	I	II	III	IV	2001	2002	
Monthly averages										
Trade deficit	315	300	341	345	301	327	228	334	277	12
Goods imports	1986	1871	1882	1905	1883	1861	1834	1908	1848	12
Consumer goods	387	363	380	397	355	356	343	383	350	12
Capital goods	499	456	462	442	463	434	485	478	459	12
Intermediates	1098	1050	1039	1065	1063	1068	1005	1045	1037	12
Goods exports	1671	1570	1541	1560	1581	1533	1607	1574	1570	12
Manufacturing	1615	1517	1492	1513	1525	1476	1554	1522	1515	12
High-tech	834	739	723	764	733	680	780	769	730	12
Quarterly averages										
Net current account	-463	-875	690	-542	-878	-1207		-347		9
Financial account (excl. foreign-currency balances)	-119	5	-583	348	875	-1208		-55		9
Nonresidents' direct and portfolio investment	806	318	581	-192	822	323		625		9
Nonresidents' portfolio investment	72	335	-560	722	34	249		-492		9
Residents' direct and portfolio investment	671	1096	840	1796	1423	70		755		9
Net foreign debt (% of GDP)	2.86	2.16	2.92	2.56	2.46	2.18		2.73		9
End-period Bank of Israel reserves	23181	23664	23181	23945	24790	24229	23664	23181	23664	12

* Last month for which data available.

^a Foreign trade data are seasonally adjusted and do not include ships, aircraft, diamonds, and fuel.

index fell in both quarters in the period reviewed despite the rise in private consumption, and in the commerce and services industries total revenue went down in both quarters in the period reviewed.

The labor market

The slack in demand prevailing in the economy since the end of 2000 was expressed in 2002, for the first time in many years, in a marked decline in the real wage, which apparently prevented a steep rise in the rate of unemployment. The persistence of the recession over such a long period was reflected in a gradual reduction in the rates of employment in the working-age population and in a change in the relative strengths of the organizations active in the labor market. The number of employees and labor input rose during the period reviewed, and at the same time dismissals increased, there were more frequent announcements by large employers of future layoffs, and disruptions in work relations connected with wages and work conditions

became less intense. The rate of unemployment, that had reached 10.6 percent in February in terms of trend data, dipped slightly thereafter, although the upward trend in the size of the labor force continued, and from the beginning of the period reviewed till October the trend data settled at a rate of 10.4 percent. The seasonally adjusted labor supply of Israelis rose in 2002:III, as is reflected in the number of participants in the civilian labor force; as the number of Israelis employed in the business sector rose more slowly, the rate of unemployment edged up a little. The number of work-seekers continued to fall, as did the number of claims for unemployment benefit (Table 3), apparently due to the more stringent criteria determining entitlement and sanctions in the labor exchanges.

In 2002:III the participation rate in the labor force settled at the same level as in the previous quarter, 53.9 percent, its lowest level for the last three years, with a slight increase in the share of women in the labor force. The change in the participation rate is affected by long-

term developments such as immigrants settling in Israel, institutional arrangements for early retirement, and a long-term change in the industry structure of the economy at the expense of traditional, male-employee-intensive industries, and also by short-term factors deriving from the level of demand. In 2002 the rising trend of the share of immigrants in the labor force ended, as did their positive contribution to the participation rate. In 2002:III the decline in males' participation rate in the labor force, which had stopped three years earlier, restarted, and the quarterly rate, 59.8 percent, was its lowest level for a long time. The reduction on this occasion may be related mainly to the 'discouraged worker' effect (describing an unemployed worker who does not look for work in a recession, as his assessment is that the chances of finding a job are very low), which operates in the short term and becomes stronger the longer the recession continues. The rising trend in the participation rate among women did not end (a trend evident also among newly arrived immigrants), but the rise in the rate in 2002 may have been due to the 'additional worker' effect (another family member looking for work in place of a member who has stopped working) which acts in the short term.

In 2002:III the utilization of the labor force rose, with an increase in the share of full-time employees and a reduction in part-time employees and temporary absentees. A rise in labor-force utilization at the same time as a rise in the unemployment rate usually occurs when employees consider the recession to be long term.

Total labor input in the business sector went down by 1.4 percent in 2002, after a similar decline in 2001. The entire decrease occurred among workers from the Palestinian Autonomy, partly due to the renewed closure imposed in the wake of the spate of terrorist attacks that preceded the Defensive Shield campaign. The number of foreign workers reached 260,000 at the end of 2002, having risen at an annual rate of 5 percent, despite the reduction in the number of work permits, compared with a rise of 16 percent a year in 2000 and 2001.

Slack demand in the labor market normally activates an automatic stabilization mechanism. Layoffs in the business sector create demand for personnel mainly in the public services (in educational institutions, further education, and welfare services), thereby creating a diversion towards the public sector. Unlike in other recessions the recession in demand in 2002 was associated with a deterioration in the security situation, which in itself increased demand for certain workers in the business sector (security personnel and guards). Thus

in 2002:III the number of Israeli employees was only half a percent lower than in 2001:III. (This was especially notable in commerce, in which revenue fell rapidly in 2002:I and 2002:II, while the number of employees went down slowly, and in 2002:III despite the continued decline in revenue, the number of employees actually rose.) As expected, the number of public-sector employees rose by 2 percent, as a result of a marked increase in health and welfare services.

The real wage per employee post fell in January–September by an unprecedented 5.7 percent in the business sector and 3.8 percent in the public sector compared with the equivalent period in 2001. The real wage declined in all the main industries, and was especially notable in banking, insurance and financial institutions, where it fell by 8 percent. In nominal terms the overall wage remained stable, with a slight drop in the number of employee posts, which may indicate that the real erosion of the wage derived also from the lower demand for labor and from the surprise inflation in the first half of the year. A comparison of employment data and wage data in different industries gives rise to another possible explanation of the change in the wage: the largest nominal rise in the wage (3.7 percent) occurred in education services, in which employment did not rise; in health and welfare services the nominal wage went down by 1.3 percent, with a sharp rise (of 5.8 percent) in the number of employees, and it seems that the additional manpower in this industry at the low average wage levels prevailing in it may explain the overall reduction in the industry's wage.³ In the business sector, on the other hand, the largest rise in the nominal wage (2.3 percent) was paid in the construction industry (including Palestinian workers), while employment in it went down by 4 percent. It seems that in this case too part of the change in the wage is related to workers earning below the industry average leaving the industry. The other part can be explained by the depreciation of the NIS, as the wages paid to foreign workers, who constitute a large part of the industry work force, are denominated in dollars.

Rationalization agreements were signed in several large organizations, and labor relations in the public sector did not deteriorate to the extent that they have in the past in pre-election periods, apparently due in part to the recession in the labor market. A cost-of-living-allowance agreement between the Histadrut (the Labour

³ To illustrate: it can be shown that the addition to the manpower of the above industry at a wage equal to three-quarters of the average wage in it reduces it by 1.3 percent.

Federation) and the employers, which gave workers a one-off payment of 2.1 percent of the wage up to a maximum of NIS 68.6. In the same month a wage agreement was signed with the public-sector employees.

The balance of payments

The current-account deficit in 2002:III increased to \$ 1.2 billion, up from a quarterly average of \$ 0.7 billion in the first half of the year. In the first nine months of the year the deficit reached \$2.6 billion, similar to its level in the equivalent period in 2001. There were no marked changes in the trade account items during the year. The deficit in the services account was slightly higher in 2002 than in 2001, due to the relatively large reduction (of about \$ 2.2 billion in the first nine months of the year) in income from the export of 'other services,' which include software services, and in income from foreign tourists, which were down in the first three quarters of the year to half their level in the first three quarters of 2001.

The deficit in the goods account (seasonally adjusted, and excluding ships, airplanes, diamonds and fuel) declined in the period reviewed, with fluctuations between the two quarters⁴ and differences between the component industries; the reduction can be explained by the gradual decrease in imports. The foreign trade trend data (after adjusting for seasonal and exceptional factors) actually emphasize the contribution of exports to the reduction in the trade deficit. According to these data a decline in both imports and exports started in January 2001. At the beginning of 2002 the import and export trend data were stable, and in 2002:IV, when stability in imports continued, goods exports rose at an annual rate of 8 percent, possibly a delayed reaction to the significant real depreciation in the first half of the year. As a result of these developments, the trend of the trade deficit was essentially stable during the first three quarters of the year, followed by a steep decline in 2002:IV to a level unseen for a long time. Using seasonally adjusted figures the deficit in the last quarter was a third lower than its level in 2001:IV (Table 4).

Trend data of imports show that following a slow decline in all components of consumer goods imports, they were all stable in 2002:IV, with possibly the first signs of a slow increase. Raw material imports, which serve as an

indicator of current economic activity, showed a slight fall in the period reviewed, mainly in raw materials for the machine, electronics, and non-ferrous metals industries, while capital goods imports, which indicate future activity, rose a little.

Goods exports in the period reviewed were at a level similar to that in the second half of 2001, with the fluctuations from quarter to quarter essentially offsetting each other. The composition of goods exports changed during the period, with a marked rise in the high-tech industries, which after falling at an average annual rate of 11 percent in the first seven months of 2002, rose steeply in the remaining months of 2002, at an annual rate of 27 percent. Trend data of exports of the other industries according to their degree of technological innovation show a decline in mixed industries, and a notable slowdown in the rate of increase in the traditional industries.

In the absence of Bank of Israel intervention in the foreign-currency market, balance of payments capital flows are very sensitive to exchange-rate fluctuations—they both affect and are affected by the exchange rate. In 1999–2001 the developments in the financial account and exchange rate were generally led by nonresidents' investments, with capital flows of Israelis partly offsetting them. In the first half of 2002, in the light of concern over a financial crisis, Israelis began to export capital, thereby creating pressure for depreciation of the NIS. At the beginning of the period reviewed, with the steep rise in the Bank of Israel interest rate, there was a slowdown in the capital outflow trend (described in detail in the section on monetary policy, below). In September 2002, in the light of concern over the possible lowering of Israel's and its banks' credit ratings nonresidents started to buy foreign currency. This stopped in November, when President Bush proclaimed that the US government supported Israel's economy; nonresidents began selling foreign currency, and the NIS appreciated.

The Bank of Israel's foreign-exchange reserves at the end of 2002 stood at \$ 23.6 billion, having fallen by \$ 1.1 billion during the year. Most of the reduction resulted from the decrease from month to month in banks' deposits with the Bank of Israel. In the course of the period reviewed the Bank of Israel's profits, totaling \$ 644 million, were added to the foreign-exchange reserves, and due to the fall in the value of the dollar against the euro, the reserves, denominated in dollars, showed valuation differences of \$ 359 million.

⁴ In 2002:III the deficit increased, with a deterioration of one percent in the terms of trade, without which the deficit in the period reviewed would have been even lower.

Table 5. Indicators of Economic Developments in Advanced and Developing Countries,^a and Forecast for 2003^b

	2000	2001	Estimate 2002	Forecast 2003
World GDP	4.7	2.2	2.8	3.7
Advanced countries	3.8	0.8	1.7	2.5
Developing countries	5.7	3.9	4.2	5.2
World trade	12.6	-0.1	2.1	6.1
Advanced countries				
Imports	11.8	-1.3	1.7	6.2
Exports	12.0	-1.1	1.2	5.4
Developing countries				
Imports	15.9	1.6	3.8	7.1
Exports	15.0	2.6	3.2	6.5
Inflation (CPI)				
Advanced countries	2.3	2.2	1.4	1.7
Developing countries	6.1	5.7	5.6	6.0
Countries in transition	20.2	15.9	11.3	8.8
Prices of unprocessed goods (US\$)				
Oil	57.0	-14.0	0.5	-0.8
Other	1.8	-5.4	4.2	5.7
Short-term interest ^c (%)				
Dollar deposits	6.6	3.7	2.1	3.2
Yen deposits	0.3	0.2	0.1	0.1
Euro deposits	4.6	4.1	3.4	3.8
Unemployment rate in OECD countries	6.6	6.6	6.8	6.9

^a According to "World Economic Outlook," Israel is classified as an advanced country.

^b Annual rates of change.

^c Six-month Libor rate.

SOURCE: "World Economic Outlook" (IMF), September 2002, and OECD Journal 72.

Global developments

After the growth of the global economy slowed and the expansion of world trade was checked in 2001, economic activity rallied at the beginning of 2002, especially in North America, but weakened later in the year, with the exception of the Asian countries. This was expressed in the rise in the unemployment rate and decline in indices of consumer and business confidence in the west. Many international entities now regard the expected economic recovery in 2003 as more tentative and less comprehensive than had been forecast in mid-2002. Although this is not an unusual development in the early stages of economic recovery, in this instance it has occurred against the backdrop of the continued deterioration in the assets and currency markets, and thus differs from the familiar business cycle.

The macroeconomic policy of the industrialized countries has helped their economies in the short run. Central banks have kept interest rates relatively low, and towards the end of the year—in an attempt to stimulate activity—interest rates were even reduced in western economies. The European central bank reduced its interest rate to 2.75 percent, while the US Fed lowered its rate by half a percentage point, to 1.25 percent, the lowest rate for several decades. In addition, as a share of actual and potential GDP, fiscal deficits and public debts were higher than in previous years (especially in Japan, whose deficits were several times higher than in the other industrialized countries).

In November, when the Fed reduced its interest rate by half a percentage point, the NIS/dollar interest-rate spread rose to 7.85 percent, its highest level since December 2000.

Table 6. Selected Price Indices, 2001–2002
(percent)

	2001	2002	2001	2002				Jul–Dec		*
			IV	I	II	III	IV	2001	2002	
				Compared with previous quarter				Compared with previous 6 months		
CPI	1.4	6.5	-0.6	2.4	3.8	0.6	-0.5	0.3	0.2	12
CPI excl. housing, fruit and vegetables	0.2	6.3	-0.6	0.8	3.9	1.4	0.1	-0.5	1.5	12
CPI excl. housing, fruit and vegetables, controlled goods, clothing and footwear	0.2	6.9	-1.1	1.5	3.8	1.5	-0.1	-0.8	1.4	12
Index of housing prices	5.2	8.2	-0.1	8.1	5.1	-3.3	-1.5	2.9	-4.7	12
Wholesale price index	-1.9	6.9	-0.7	1.8	3.8	1.0	0.2	-2.1	1.2	12
NIS/\$ exchange rate	4.8	9.8	-1.1	9.1	5.9	-3.3	-1.7	2.7	-5.0	12
NIS/currency-basket rate	3.7	14.2	-1.9	8.4	8.6	-2.3	-0.7	3.6	-3.0	12

* Last month for which data available.

The global macroeconomic forecast for 2003 does not favor Israel's economy,⁵ and its by-industry composition does not appear to support its growth either. Note, too, that Israel's exports did not rise in 2002 despite the expansion of the volume of trade of both the developed and the developing countries and the marked real depreciation of the NIS (Figure 9). This may be connected with the *intifada*, which has repercussions on exporters' ability to meet future contracts, as well as with the reluctance—particularly in continental Europe—to trade with Israel, for political reasons.

During 2002 the NIS weakened by more than 10 percent against most foreign currencies, further to its depreciation in 2001, while in the period reviewed it remained stable vis-à-vis the dollar and the yen, but depreciated by 0.5 percent against the European currencies, which appreciated against the dollar in 2002.

The general government sector

In the course of 2002 the government moved away from the four long-term targets it had set itself—the reduction of the deficit, the public debt, the share of expenditure in GDP, and the tax burden. The deviation from the first three occurred in the first half of the year, and from the fourth during the period reviewed. The 2002 deficit

target of 3 percent of GDP was set when the budget was approved by the Knesset, but because of the deterioration in the security situation, which caused expenditure to rise, the exacerbation of the recession, which reduced revenues and increased some expenditure, as well as other factors, the deficit grew faster than planned in the first half of the year. In view of the danger that the deviation from the deficit would expand by the end of the fiscal year, with all that this implies, as well as the soaring yields on government bonds, the government decided on an emergency economic package to check the increase in the deficit, and the deficit target was accordingly raised from 3 to 3.9 percent of GDP. The annual budget deficit amounted to 4 percent of GDP. In order to meet the deficit target, short-term measures were adopted, such as deferring payments to suppliers and tax rebates, and these could have an adverse effect on the 2003 budget.

In spite of the extensive changes to tax legislation made at the beginning of the period reviewed, in 2002 as a whole tax receipts rose negligibly, creating a shortfall vis-à-vis budgeted income. This is explained mainly by the slower than forecast growth rate, as well as by the stagnation of nominal wages, which markedly reduced direct tax receipts. Public expenditure rose, especially the domestic defense consumption item—both wages and purchases—and per capita civilian consumption was up by a slight 2 percent in real terms over previous years. Concurrently, for the first time per capita current transfer payments fell, the government's debt-servicing costs were lower than predicted (*inter alia* because of the

⁵ According to *The Economist*, most international financial entities have revised their growth forecasts since the summer: the average of these forecasts for 2003 is down from 3.5 to 2.5 percent in the US, and from 2.8 to 1.3 percent in the Eurozone.

Table 7. The Budget and its Financing, 2001–2002
(cash flows, as percent of GDP)

	2001	2002	2001	2002				Jul–Dec		*
			IV	I	II	III	IV	2001	2002	
1. Government domestic expenditure	37.5	37.8	39.7	37.2	38.1	36.3	39.8	38.7	38.1	12
2. Government receipts	33.7	33.9	30.8	35.0	34.5	34.4	31.7	33.3	33.1	12
3. Domestic budget deficit (1)–(2)	3.7	4.0	9.0	2.2	3.6	1.9	8.0	5.4	5.0	12
4. Government and Jewish Agency domestic deficit ^a (5)+(6)	3.1	4.0	9.0	0.7	4.2	2.7	8.3	5.4	5.5	12
5. Government net borrowing from the public	3.7	5.3	7.4	8.6	3.8	3.8	5.1	4.4	4.5	12
6. Public-sector injection ^b	-0.6	-1.3	1.6	-7.9	0.3	-1.2	3.3	1.1	1.1	12
7. Bank of Israel injection	1.6	1.9	1.4	9.5	0.0	1.3	-2.8	-0.4	-0.8	12
8. Change in monetary base	0.9	0.3	2.4	1.2	0.0	-0.2	0.3	0.4	0.0	12

* Last month for which data available.

^a Including non-budgetary injection.

^b The public-sector injection is recorded as a change in the monetary base minus the Bank of Israel injection and adjustments. The adjustments are small and are not presented in the table.

acceleration of inflation),⁶ and investment in the transport infrastructure rose by a marked 24 percent in real terms.

The contribution of the measures introduced in the framework of the emergency economic package for reducing the deficit in 2002 is about NIS 6 billion; two-thirds of it derived from the tax increase and reductions in National Insurance allowances, and the rest from cuts and deferments of expenditure and reductions in other budget items.

Because of the budgetary deviations, the gross public debt continued to rise for the second year in succession, to stand at 107 percent of GDP at the end of 2002, similar to its rate in 1998. The increment to the deficit led to an increase in net borrowing by the government, based mostly on bond issuances and the utilization of government deposits in the Bank of Israel, thereby exerting upward pressure on government bond yields for all terms as well as on yields in the capital market in general (Table 9).⁷ Although these increases moderated in the period reviewed, the higher level of yields than in previous years places an additional burden on the

budget, raising the cost of new borrowing and of rolling over the government's existing debt.

According to data from the State Revenue Administration, total tax receipts in the period reviewed (till November) were 5 percent higher than in the equivalent period in 2001, representing a slight dip in real terms. The decline came in the wake of nominal stability in direct taxes, as was the case with nominal wages, a 2 percent drop in taxes on civilian imports, due to the volume fall in imports, and a 15 percent rise in indirect taxes on domestic production, following a one percent increase in VAT and tax hikes on fuel, cigarettes, etc., in the framework of the emergency economic package. Transfer payments to households via the National Insurance Institute during the period reviewed (till November) were 2 percent lower in real terms (deflated by the CPI) than in the equivalent period in 2001. Most of the decline during the year was in the period reviewed, when there were significant reductions in child allowances (mainly due to legislation), unemployment benefits (due to more stringent eligibility criteria), and old-age and survivors' pensions (primarily because of the inflation surprise in the second half of 2002).

At the beginning of 2003 the tax reform went into effect, and its principles are intended to be implemented in full by 2008. In the framework of this reform the tax burden on labor (primarily for middle-income groups) should be eased, in order to increase the supply

⁶ The inflation rate was taken into account in determining the interest on unindexed bonds, as this is one of the variables used in calculating debt-servicing costs in the budget.

⁷ The budgetary pressure on yields is indicated *inter alia* by the fact that they rose in the period reviewed even though the Bank of Israel's key interest rate remained unchanged.

Table 8. Monetary Indicators and Nondirected Bank Credit, 2001–2002
(annual terms, percent)

	2001	2002	2001		2002				Jul–Dec		*
			IV	I	II	III	IV	2001	2002		
Rates of change	Average		Compared with preceding quarter					During period			
M1 ^a	14.2	15.7	4.6	50.7	10.5	-12.8	-14.1	17.8	-11.9	12	
M2 ^b	17.2	2.2	14.2	-11.2	-2.2	2.6	5.8	13.7	5.0	12	
M3 ^c	15.5	6.1	13.1	-0.6	7.3	0.5	2.4	12.8	0.0	12	
Nondirected bank credit	10.8	10.5	8.1	9.6	15.4	9.4	5.6	8.6	5.0	12	
Unindexed local-currency credit	15.0	6.5	6.3	0.3	2.0	18.6	17.2	6.9	18.1	12	
CPI-indexed credit	4.7	7.5	9.6	1.0	12.4	10.4	-1.6	8.0	1.2	12	
Foreign-currency-indexed and denominated credit	15.7	20.6	8.2	39.2	38.8	-1.7	2.9	12.1	-3.7	12	

* Last month for which data available. Data for the last quarter are preliminary.

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

^b M1 plus unindexed time deposits (up to one year) plus self-renewing overnight deposits.

^c M2 plus deposits in and indexed to foreign-currency, and deposits indexed to the CPI (up to one year).

of labor, while income from capital will be taxed in order to reduce the inequality of income distribution after tax,⁸ and the tax on income from capital in Israel will be raised relative to that abroad in order to narrow the gap between various investment channels. Alongside the positive contribution to the economy of the tax reform, note that in budgetary terms the reform creates a deficit, and this could impair the maintenance of a declining deficit path in the future. In addition, it may be assumed that making investment abroad more attractive will create pressure for local-currency depreciation in the long term, thereby increasing exchange-rate volatility in the short term.

Prices, monetary policy, and the money and capital markets

The 6.5 percent rate of increase of the CPI in 2002 represents a marked deviation from the 2–3 percent inflation target set for the year, as well as a marked acceleration of the average annual rate of increase in the previous three years (1 percent). The difference between the two halves of the year is particularly marked. In the first half, the inflation rate accelerated to 6.3 percent (an annual rate of 13 percent), while in the second half it moderated notably in 2002:III and declined in 2002:IV, amounting to an increase of only 0.2 percent. Despite the slowing of the rate of price

increases, the variance of the monthly shifts in the components of the CPI remained high in the period reviewed and, when adjusted for seasonal factors and housing, its rate of increase is near the upper limit of the inflation target. This indicates that the process of returning to price stability has not yet become entrenched.

The success in restraining inflation in the period reviewed came on the one hand in the context of a protracted economic slump, but alongside the continued activity of the forces working to push prices up even more powerfully than in the first half of the year. The latter include increases in oil prices, in prices of controlled and supervised goods (water, bread, electricity, public transport), in indirect taxes, and seasonal increases in the prices of fruit and vegetables. The rise in the index of housing prices, which is influenced by changes in the dollar exchange rate, led the increase in the CPI in the first half of the year. While this index, which accounts for about one-fifth of the CPI, rose by 15 percent in the first half of the year, its 4.7 percent decline in the period reviewed helped to stop the rise in the CPI in this period. The effect of the development of prices of fruit and vegetables was offset over year as a whole; in the first half they served to lower the CPI, and in the second to increase it.

The NIS appreciated by 3 percent against the currency basket in the period reviewed, after depreciating by 19 percent in the first half of the year; this served to partly offset the large real depreciation in the first half of the

⁸ Imposing a tax on financial assets affects their yield rates, and this should have an effect on inflation expectations derived from the capital market (see Box 2).

Table 9. Interest Rates, Yields, and the Share-Price Index, 2001–2002

	2001	2002	2001	2002				Jul–Dec		*
			IV	I	II	III	IV	2001	2002	
Nominal interest on:										
Nondirected										
local-currency credit	10.0	9.7	9.2	7.4	8.5	11.9	11.8	9.5	11.9	11
Average monetary loan	6.7	6.7	5.8	3.7	4.9	9.1	9.1	6.0	9.1	12
SRO deposits	5.6	5.6	4.7	3.1	4.3	7.9	7.9	5.1	7.9	11
3-month Eurodollar	3.7	1.7	2.0	1.8	1.8	1.7	1.4	2.7	1.6	12
Yield to maturity on:										
Treasury bills	6.5	7.4	5.7	4.8	7.2	8.9	8.7	6.1	8.8	12
10-year bonds	4.9	5.2	4.6	4.1	5.3	5.6	5.8	4.6	5.7	12
5-year bonds	4.9	4.8	4.5	3.2	4.4	5.8	5.9	4.4	5.8	12
General Share-Price										
Index (points)	197.5	183.7	196.1	199.6	183.4	177.8	174.1	195.4	176.0	12
Expected inflation (gross)	1.9	3.3	1.7	2.8	4.3	2.6	3.5	2.3	3.0	12
Interest derived from										
expected inflation (gross)	4.3	4.1	3.6	2.2	3.3	6.1	4.8	3.6	5.5	12

* Last month for which data available

year. By contrast, the ratio of prices of tradables to those of nontradables in the CPI, which relate to a small segment of activity, rose slightly in the period reviewed, after a slight increase in the former and stability in the latter—constituting an indication of slight real depreciation.

The index of wholesale prices of manufacturing output for domestic markets rose by 2.3 percent in the period reviewed, primarily due to the rise in the prices of refining oil and its products.

In June 2002, in view of the accelerated depreciation, higher inflation, unrest in the financial markets, deviation from the deficit path, fear of losing budgetary control in view of the continued fiscal deterioration in the first half of the year, and steep fall in the real interest rate after the sharp interest-rate reduction in December 2001 which departed from the policy of gradually reducing interest, the Bank of Israel increased its key interest rate by 2.5 percentage points. In July it raised it by another 2.0 percentage points, and from then until the end of the period reviewed the Bank's effective interest rate remained 9.6 percent. In the wake of the sharp interest-rate hikes, inflation expectations declined sharply, serving to increase the real interest rate from 0.4 percent in May to 7.5 percent in August, alongside a marked rise in yields on Treasury bills and indexed bonds, so that Israel's financial markets were relatively calm.

Thus, at the beginning of the period reviewed, with high real interest, a large NIS/dollar interest-rate differential, tighter budgetary discipline, and slack economic activity, the exchange rate stabilized in July–August alongside moderate local-currency appreciation which was supported by sales of foreign-currency assets. Inflation expectations for the short term returned to within the long-term target range, and nominal yields declined slightly. Nonetheless, since real yields continued to rise, even though inflation expectations for the long term dipped they remained above the upper limit of the target, and because of assessments that the effect of the interest-rate hikes had not yet been achieved in full the Bank of Israel refrained from reducing interest in August–September.

Additional elements serving to increase financial uncertainty were at work in September; these included the announcement by one of the international rating agencies that it would downgrade its rating of Israel's banking system. The chances of a war in Iraq increased, as did doubts regarding the approval of the budget framework by the Knesset. It would seem that in response to these developments there was a trend shift in the positive developments evident at the beginning of the period reviewed. The NIS depreciated by 4.5 percent against the dollar in September, and inflation expectations for the short term even rose to 4 percent, above the target.

Box 2**The Effect of the Tax Reform on Inflation Expectations as Measured from the Capital Market**

A tax reform went into effect on 1 January 2003, imposing a tax of 15 percent on yields on CPI-indexed assets and of 10 percent on yields on unindexed assets. The taxation affects the relative yields on the various assets, an effect that was evident before the reform was implemented. A model of rational expectations showed that the process of portfolio (and hence yield) adjustment would begin as soon as the intention to introduce the reform was announced—i.e., in mid-2002—but in view of past difficulties in implementing such reforms it would begin only in November, when households perceived that the reform would in fact be implemented.

The imposition of a tax on all assets traded in the capital market will take time. Treasury bills are tax-exempt in 2003, giving them a tax advantage and serving to reduce their yield. One of the variables affected by this tax advantage is 12-month inflation expectations, measured as the difference between the yield on 12-month Treasury bills and indexed bonds.

The yield on Treasury bills began to decline in the second half of November, and within three weeks it had dropped by one percentage point. This steep decline at a time when there were no unusual developments in the NIS exchange rate or in indexed bonds, is attributed primarily to the switch made by investors from unindexed assets, which are taxable from the beginning of 2003, to Treasury bills, which are tax-exempt this year.¹ This assumption is reinforced by the widening differential between yields on *Gillon* bonds which are taxed as of January 2003 and tax-exempt *Gillon* bonds—a differential which is due solely to the tax reform.² The decline in yields on Treasury bills, which derives from the tax advantage, led to an equivalent decline in inflation expectations measured from the capital market (as shown in the figure). It is expected that this temporary effect of the transition period on expectations will abate as the point at which Treasury bills become taxable (at the beginning of 2004) approaches, thereby reducing the comparative advantage of these bonds in tax terms.³

¹ The yield on Treasury bills fell by two percentage points between the end of October and the end of November. Part of the decline is ascribed to local-currency appreciation at that time, as well as to expectations that the Bank of Israel would reduce its key interest rate.

² *Gillon* bonds are unindexed variable-interest bonds.

³ At the end of the transition period it may be advisable to make adjustments to the index of inflation expectations in the light of the effect of the new tax and the tax-exemption extended to institutional investors on yields in the indexed and unindexed markets.

The fact that the Bank of Israel did not reduce its key interest rate for the rest of the period reviewed, together with other factors (including the reduction of interest in the US and the Eurozone, and assessments that the US government would grant Israel additional defense aid and guarantees), led to the persistence of the trend of local-currency appreciation in November and December and the decline in inflation expectations for the short term to the vicinity of the upper limit of the target (3 percent). After inflation expectations for the short term declined to below this level in December, the budget was passed by the Knesset, and the level of uncertainty in the markets appeared to have moderated, the Bank of

Israel reduced the interest rate by 0.2 percentage points—for the first time in six months.

The economic and security events caused the public to make marked adjustments to its investment portfolio during 2002. In the first half of the year the components indexed to the CPI and foreign currency were increased at the expense of the unindexed components and securities, mainly by withdrawals from local-currency deposits. The yield on *Shahar* (unindexed) bonds, which account for about a quarter of the total market value of negotiable government bonds, began to rise steeply in March, and this continued till the end of the year. After

the interest-rate hikes of June, the public once again increased the unindexed component of its portfolio at the expense of assets denominated in and indexed to foreign currency, although the rise in yields on *Shahar* bonds was also checked and the increase in CPI-indexed assets persisted. Local-currency deposits expanded until October, but their level reached only 40 percent of the amount withdrawn from them in the first half of the year. Withdrawals from deposits, mainly long-term ones, were renewed in November and December, and this was apparently connected with the expected taxation of medium- and long-term deposits after the reform. The foreign-currency-indexed component declined in the period reviewed, *inter alia* due to the large interest-rate differentials between local-currency and foreign-currency investments.

The Bank of Israel's interest-rate hike was reflected by the contraction of M1 in the period reviewed, after it had risen sharply—far beyond the increase in nominal GDP—in the first half of the year. The expansion of bank credit to the public slowed along with a shift in its composition. In 2002:III credit denominated in and

indexed to foreign currency contracted, and in 2002:IV CPI-indexed credit declined while unindexed local-currency credit soared. The main factor checking the rise in bank credit was the decline in demand in the wake of the protracted recession. In addition, supply-side factors were also at work, as expressed in the increased rigidity of the terms on which credit was extended by the banking system, whose profitability and return on capital declined.

Share prices declined for most of 2002, a trend that had begun in 2000:IV. The General Share-Price Index fell by 20 percent during the year (a real 25 percent fall, compared with 8 percent in 2001), and in the period reviewed it declined by 5 percent—most of it in 2002:III. There was a relatively steep increase in share prices in most industries, though trends were mixed in manufacturing firms: whereas in electrical, electronic and optical products firms there was a 30 percent decline in the year as a whole, in chemical, rubber, and plastics firms there was a 22 percent rise. The General Bond-Price Index went up in 2002:IV, but remained stable for the year as a whole.