

Bank of Israel

INFLATION REPORT

October-December 2008

25

January 2009

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ANK OF JSRAEL

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27 January 2009

Letter of the Governor accompanying the Inflation Report for October-December 2008

This Inflation Report, covering the fourth quarter of 2008, is submitted to the government, the Knesset and the public as part of the process of periodic monitoring of the inflation rate and adherence to the inflation target set by the government. The Report was prepared in the Senior Monetary Forum of the Bank of Israel, headed by the Governor, the forum in which the Governor makes decisions on the interest rate.

The severity of the global economic crisis increased markedly in the middle of September 2008 when some of the largest and most important commercial banks and investment banks in the US and other advanced economies collapsed. Governments quickly introduced rescue plans to ensure continuity in the payment systems and reasonable functioning of the financial system. The crisis persists, with an increasingly severe slowdown in real economic activity world wide. Policy makers have adopted extensive measures, in many cases unconventional and unprecedented, geared towards easing the situation.

When the crisis erupted, Israel's economy was in a relatively favorable situation after five years of rapid growth and low inflation, with the banking system in sound condition. In the fourth quarter of 2008, however, the ongoing global crisis began to have a dominant impact in Israel too as the CPI declined by about half a percent and GDP growth was near zero, following slowdowns in the previous two quarters. The combination of extremely low real growth and negative inflation in the fourth quarter substantiates the highly negative effect that the global economic crisis had on demand for Israeli product recently.

The negative inflation recorded in 2008:Q4 was to a great extent due to the drop in world oil and raw material prices, in contrast to their effect in the twelve months prior to that quarter. Local factors also contributed to price changes in the two periods: the economic boom contributed to the high inflation prevailing until the third quarter of 2008, while the sharp reversal of the economic situation in the last quarter supported price reductions. Housing prices, measured mainly by renewed rental contracts, rose in the fourth quarter, apparently because of the persistent downward trend in the stock of available apartments; the construction industry is the only one in which supply appears to have declined faster than demand, a feature reflected also in rising prices in sales of second-hand apartments.

The declines in economic growth and in inflation spurred a change in monetary policy. In the first three quarters of the year, inflation rose above its target range (defined as a rise of 1–3 percent in the CPI over the previous twelve months), due primarily to the continued increases in world raw material prices. Thus, the interest rate had to be increased, especially in the third quarter, even though as early as the end of the first quarter and in the second there were indications that Israel's economy might be adversely affected by the global crisis. In light of these signs, the Bank of Israel had reduced the interest rate as early as end-February (i.e., the interest rate for March). The rapid and serious deterioration in the global economy from mid-September necessitated deep cuts in the interest rate, similar to steps taken by other central banks, and the Bank reduced the rate from 4.25 percent at the beginning of the last quarter to 1.75 percent in January 2009, and to 1 percent in February—its lowest levels ever.

The objective of these rate reductions is to support real economic activity and limit any deviation of inflation below target in light of the severe drop in demand and the fall in commodity prices in the last quarter of 2008,

along with assessments that the slowdown will continue in 2009. This is in contrast to the situation of conflicting considerations prevailing upon the interest rate decisions from May to September, when inflation was above the target range but when there was concern over the slowdown in real activity.

The crisis, however, limits the effectiveness of interest rate policy alone: at the current rates, the ability of monetary policy to further boost demand for investment and private consumption is limited, mainly because of the increased risk premium on credit interest deriving from the economic crisis and concern over borrowers' repayment ability.

Another instrument in the Bank of Israel's arsenal is its purchase of about \$100 million a day in the forex market. This enhances Israel's resilience in the face of possible additional shocks by increasing the foreign exchange reserves. Augmenting the forex reserves assumes even greater importance, as small economies such as Israel's, freely open to trade in goods and services and in the financial markets, are very exposed to the possibility of strong international capital flows in reaction to shocks abroad and domestic shocks, both economic or financial, and geopolitical.

Entering 2009, there is great uncertainty regarding developments in the coming year and beyond: there may be further, even significant, deterioration in the situation, but there are also assessments that some improvement in the global environment is possible as early as the second half of 2009, in which case the economic decline in Israel would likely be more moderate than that in other countries. The Bank of Israel will continue to employ the instruments available to it with the purpose of minimizing the impact of the imported crisis on real activity and employment, while returning inflation to the target range.

Stanley Finder

Stanley Fischer Governor, Bank of Israel

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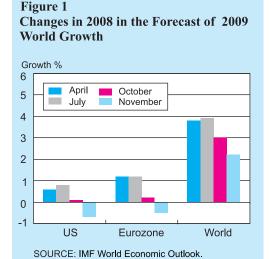
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Summary

- The rate of inflation changed sharply in the last quarter of 2008, with the CPI falling by 0.6 percent. Seasonally adjusted, the index did not change in the fourth quarter, compared with annual rates of increase of 6 percent and 7 percent in the second and third quarters respectively. Among the reasons for the change in the development of prices were the falls in prices of food, fruit and vegetables and energy, which offset the continued rise in housing prices. Over the whole of 2008 the CPI rose by 3.8 percent, above the upper limit of the inflation target range of 1–3 percent a year. The index excluding energy, food, fruit and vegetables and housing rose by 1.8 percent in 2008, close to the midpoint of the range.
- In the fourth quarter the slowdown in real economic activity in Israel became more severe in light of the worsening of the global crisis and expectations of its further deterioration. Central banks and governments around the world took unprecedented expansionary measures in the fourth quarter, intended to moderate the drop in demand and to reestablish confidence in the financial systems and capital markets, but the level of risk remained high, unemployment was expected to deepen further, and GDP to fall in most of the advanced economies. These developments greatly eased upward pressure on prices, caused a decline in commodity and food prices, and to a reversal in the path of inflation in Israel.
- In the last quarter of 2008 the Bank of Israel cut the interest rate five times (including twice in inter-meeting decisions), from 4.25 percent to 1.75 percent, and at the end of January reduced the rate to 1 percent, its lowest levels ever. It did so to moderate the effects of the global financial crisis on real economic activity in Israel, on the availability of liquidity, and on the stability of the financial system. The slowdown in the rate of actual price rises and the assessment that the upward pressures on prices evident during the year had eased greatly made it possible to attempt to achieve the inflation target and to support real activity by means of an expansionary monetary policy, which also helped deal with the credit shortage. Nevertheless, as a result of the increased risk in the markets around the world and in Israel, the rates of interest confronting the business sector rose, as reflected by the corporate bond market.
- The Bank of Israel forecasts are of a rapid fall in the rate of inflation and its entering the inflation target range (measured over the previous twelve months) as soon as in the first or second quarter of 2009. Due to the sharp turnaround of inflation, the deepening of the crisis, the slowdown in economic activity, and the steep fall in commodity and energy prices, inflation in 2009 is expected to be below the lower limit of the target range, and possibly even negative in the second half of the year.

^{*} The monetary regime within which the Bank of Israel operates is aimed at achieving price stability, defined as an inflation rate of between 1 percent and 3 percent a year. (For details see Box 1 on page 11 in the Bank of Israel Inflation Report No. 17, July–December 2005.)



I. INFLATION AND THE BACKGROUND¹

a. The international background

In the second half of September there was a dramatic deterioration in the financial crisis in the US—with the collapse of international financial institutions—which necessitated the rapid intervention of the US government. These developments spilled over into the capital markets around the world and into the financial systems in Europe, Japan and the emerging market countries. Against the background of the expectation that the recession would become more severe (Figure 1), these developments led to most central banks adopting emerging measures to deal with the crisis immediately, and programs for fiscal expansion and direct assistance to affected sectors were activated. As the crisis spread to emerging market countries, some of them needed help from the IMF to deal with the shortage of foreign currency as their currencies depreciated rapidly and in light of the danger of collapse of their financial systems.

As a result of the global slowdown, commodity and energy prices fell steeply, leading to reduced risks of inflation in the advanced economies. Against this background, and with the aim of dealing with the slowdown in activity and with the deterioration in the financial situation, central banks made more frequent and larger cuts in their interest rates than in the past.

The effects of the global financial crisis, the slowdown in economic activity world wide, the drop in food and energy prices and the reduction of interest rates around the world were felt in Israel too—economic activity slowed, but after a certain lag, and they contributed to a moderation in the rate of price increases and inflation expectations.

The worsening of the global financial crisis

The financial crisis in the US became more severe from September 2008, reflected by steeper and steeper drops in share prices and their increased volatility. The situation made the rapid rescue of financial institutions necessary, with direct government intervention and the injection of capital and liquidity into the financial system.

The financial crisis paralyzed the liquidity system and raised interbank interest rates, as a result of the institutional risk and concern over the possibility of the collapse of financial institutions whose ratings until a year earlier were similar to those of advanced

¹ The data shown herein are based on those that were available at the time of the interest rate discussions at the end of January 2009.

Table 1 The CPI and Selected Components in Israel and Abroad, 2007 and 2008

				(pe	rcent chang	e in previo	ous twelve	months)
	Israel			US			Europe	
		2008			2008			2008
2007	2008	Q4*	2007	2008	Q4*	2007	2008	Q4*
3.4	3.8	-2.2	4.1	0.1	-12.7	3.1	1.6	-2.6

9.2

5.1

3.1

1.9

-3.7

3.5

2.8

1.8

-40.7

1.4

12.5

3.5

CPI	3.4	3.8	-2.2	4.1	0.1	-12./	
Energy	14.4	-9.5	-49.1	17.4	-21.3	-76.6	
Food (excluding fruit and veg-							
etables)	6.3	9.1	-1.0	4.8	5.9	1.4	
Fruit and vegetables	7.0	-2.0	-36.2	5.9	3.4	-25.0	
CPI excluding energy, food,							
and fruit and vegetables	1.6	3.6	6.4	2.4	1.8	-0.3	

* Annual rate.

CDI

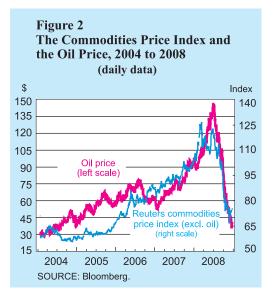
SOURCE: Based on Central Bureau of Statistics, ECB, Eurostat, and US Bureau of Labor Statistics data.

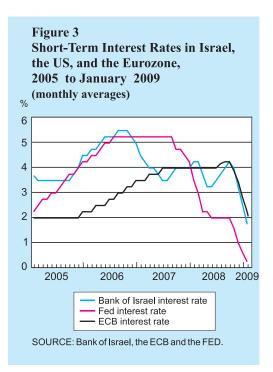
economies. With the implementation of the policy measures by the central banks, which greater coordination than in the past, the spreads on interbank credit declined during the quarter, but remained high relative to their levels over the long term.

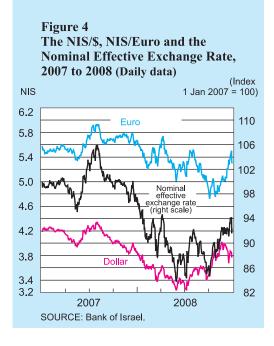
The financial crisis and the heightened uncertainty brought capital market activity to a halt, and banks' became very unwilling to lend. The central banks therefore provided credit channels that enabled the credit system to continue functioning. At the same time, in light of the increased risks, governments bought part ownership of financial institutions in order to broaden their capital base and to enable activity to continue.

Inflation around the world

The steep falls in commodity and energy prices together with the severe economic slowdown led to a significant worldwide reduction in inflation. Oil prices plunged by more than 50 percent, and commodity prices also fell heavily. Inflation in 2008 in the US declined to zero, and prices fell by 12 percent, annual rate, in the last quarter (see Table 1). In Europe too prices fell in the last quarter of 2008. The main cause of the drop in inflation was the steep drop in energy prices in the US and Europe, at an annual rate of about 30 percent. Expectations of a slowdown in economic activity and its effects on commodity and energy prices, and the deep recession in the housing market led to a sharp decline in inflation expectations and to concern that prices would continue to fall. Inflation declined in the emerging market countries too, but in some of them their currencies depreciated rapidly in light of deficits in the current accounts and heavy internal and external debts. This led to concern that they would experience a recession in activity together with accelerating inflation.







Monetary policy around the world

In light of the financial crisis and the deteriorating slowdown in economic activity, the US persisted with an unprecedentedly expansionary monetary policy: deep cuts were made to the interest rate till it reached a level of between zero and a quarter percent in December 2008, with the Fed stating that it intended to maintain that low level in the near future, and to continue its expansionary policy by means of various quantitative instruments In response to the liquidity crisis and the problems of stability in the financial institutions, the Fed injected capital and provided guarantees, purchased "toxic" assets in order to enable the financial institutions to continue operating, and increased the rate of its injection to stop the dive in domestic demand. Funds were also injected into the automobile industry to prevent its collapse. Together with the monetary measures taken, fiscal programs of support on unprecedented scales were introduced. Data on interbank credit spreads for the fourth quarter of 2008 show that liquidity and the crisis situation eased, but the serious real economic problems-mainly the rise in unemployment and the sharp drop in activity-still persist. Moreover, there is concern over additional problems in the area of credit via credit cards, loans for vehicle purchases, etc. So far the expansionary policy has not succeeded in slowing the decline in demand, particularly for private consumption.

In Europe too the central banks continued to cut their interest rates faster than previously, and activated fiscal programs, albeit on a smaller scale than those in the US. The ECB cut its interest rate by 2.25 percentage points in the last few months, to 2 percent. The effects of the slump in global demand reached East Asian countries and China, which also adopted expansionary fiscal and monetary policies to deal with the pronounced slowdown in their exports and in domestic demand. With global effects so contagious, the need for coordinated policies by different countries assumes even greater importance, as they may increase the chances of a speedy recovery of economic activity.

b. The exchange rate and the balance of payments

In the fourth quarter of 2008 the shekel depreciated against the dollar, but in December it appreciated against the background of the weakening of the dollar word wide following the reduction of the Fed interest rate to between zero and a quarter percent. The

nominal effective exchange rate of the shekel² (Figure 4) in 2008: Q4 stayed at its average 2008 level, but reflected appreciation of 10 percent over its 2007 level. The latest balance of payments data, for the third quarter of 2008, indicate a continued surplus in the current account, of about \$0.5 billion, similar to its average level in the first half of the year. The import surplus since the beginning of 2008 was \$1.6 billion, compared with more than \$3 billion in the equivalent period in 2007. It should be noted, however, that the improvement in the terms of trade that resulted from the steep drop in prices of imported fuel products and food is expected to lead to an improved trade balance. During the quarter nonresident investors' sales of their investments in tradable securities increased, but the inflow of direct investment continued. Israeli companies increased their investments abroad, but the institutional investors heavily reduced their foreign investments, in light of the relative situations of the overseas markets.

At the end of November the Bank of Israel declared that it was extending its policy of purchasing foreign currency at the rate of \$100 million a day after reaching the target set when the program was announced in March 2008. The reserves at the end of November had reached \$37 billion, and the target was increased to between \$40 billion and \$44 billion. Since the start of the intervention in the market until the end of December, the Bank's purchases totaled about \$12 billion, and apparently contributed to the weakening of the shekel, easing the situation with regard to exporters' profitability at a time of a steep decline in world demand (Figure 5).

c. Developments on the real side

Initial National Accounts estimates for the second half of 2008 and preliminary indicators relating to the level of activity in the last months of 2008 point to a worsening of the slowdown in economic activity. Business sector product grew at an annual rate of 2.8 percent in the second half of the year, compared with 5 percent in the first half. After four years of rapid growth, in 2008 the economy encountered a slowdown in activity, which worsened in the last quarter. This was caused by the global financial crisis, the slowdown in world demand, the impact on the public's wealth and its effect on consumption. The cyclical decline in activity also served to reduce inflationary pressures,

² Calculated as the average shekel exchange rate against 24 currencies (representing 33 countries) weighted according to the volume of trade with those countries.

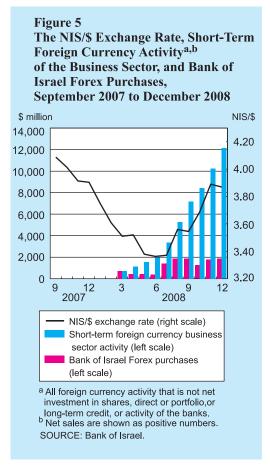
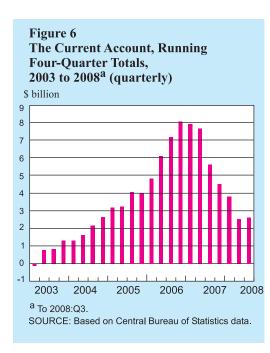


Table 2GDP, Imports and Uses, 2005-2008

(volume change from previous period, percent, seasonally adjusted, in annual terms)

	2005	2006	2007	2008	2007 Jan-Jun	2007 Jul-Dec	2008 Jan-Jun	2008 Jul-Dec
GDP	5.1	5.2	5.4	4.1	6.1	6.0	4.9	1.8
Business sector output	6.2	6.4	6.2	4.5	7.3	7.3	5.7	1.3
Imports excluding defense imports, ships, aircraft and diamonds	5.3	5.4	13.5	7.5	17.3	15.2	6.9	1.8
Private consumption	3.9	4.0	6.7	3.9	7.4	6.0	5.0	-0.4
of which: Private consumption excluding consumer durables	4.0	3.7	5.5	3.3	6.6	4.9	2.6	2.8
Public consumption	1.7	2.7	2.9	3.2	2.4	1.1	2.4	4.2
of which: Public consumption excluding defense imports	0.7	2.0	3.5	3.0	4.3	2.2	1.4	5.3
Gross domestic investment	12.7	6.5	12.0	4.1	15.4	15.7	-4.2	17.9
<i>of which</i> : Fixed investment, excluding ships and aircraft	3.4	9.8	13.3	5.4	12.4	23.7	1.5	-1.6
Exports excluding diamonds	6.5	10.3	9.5	8.5	9.9	12.6	15.3	-4.9
of which: Exports excluding start-ups	7.3	9.7	10.0	7.8	11.6	12.0	12.9	-2.5

SOURCE: Based on Central Bureau of Statistics data.



after the contraction of the output gap in the last few years had had the opposite effect. The slowdown was reflected in a marked easing of the upward pressure on prices, a decline in domestic and foreign demand, and cutbacks in consumption and investment. The composite state-of-the-economy index for December dropped by one percent, after falling in October and November, an indication of the increased severity of the decline in activity. The data in the Bank of Israel's Companies Survey for the last quarter of 2008 also show the intensification of the slowdown, and a decline in business activity in all the major industries. This is the greatest decline in activity since mid-2003. The slowdown in economic activity in Israel hitherto is less severe than that in other advanced economies, apparently because of its advantageous starting point: a restrained budget, a balance of payments surplus, and a banking system that hardly felt the impact of the serious effects of the current global financial crisis. All the above have so far moderated the extent of the slowdown in domestic activity. Nevertheless, the high exposure of Israel's exports to the advanced economies did affect and will continue to affect growth and employment.

In the last quarter of 2008 the government decided to operate programs to support economic activity and to ease the credit shortage. These programs included increased infrastructure investment, and setting up a fund together with other, private, entities to buy corporate bonds, with the government undertaking to be the first to bear a loss, if any. It was also decided to set up funds to encourage the banking system to supply credit, and to create a legal framework that would give various bodies the authority to act as credit officers and bring about the arrangement of the tradable debts of companies that had issued corporate bonds in the past. It should be noted that using fiscal programs, that may be necessary because of the intensification of the slowdown, is problematic due to legal limitations on approving an increase to the budget in the run-up to a general election.

Private consumption rose at a rate of only 1.8 percent in the fourth quarter, and in the second half of the year it fell by half a percent. This reduction reflects a sharp fall in the purchase of durables, and in particular, car purchases. Current consumption increased in the second half of the year by about 2.8 percent, similar to its rise in the first half, but apparently it declined in the fourth quarter. Preliminary indicators for that quarter show a further significant slowdown in private consumption growth, in light of the erosion of wealth and expectations of a slowdown in activity and rising unemployment.

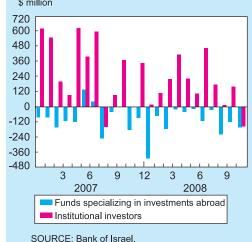
Exports excluding diamonds dropped by about 5 percent in the second half of 2008, reflecting the steep fall in goods exports that became even steeper in the fourth quarter. **Total imports** (excluding defense imports, ships and aircraft) increased by only 2 percent, and actually declined in the fourth quarter. The decline encompassed all components of imports, with the reductions in vehicle imports, other durables and raw materials being the most prominent.

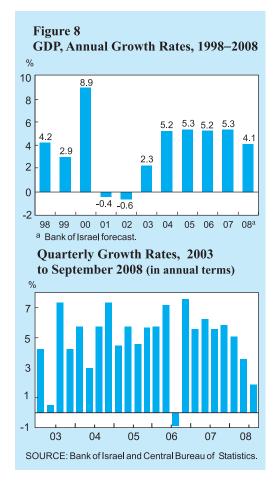
Fixed investment went down by about 1.6 percent in the second half of 2008, which is consistent with the decline in capital goods imports. It appears that expectations of a slowdown in activity lead to the postponement of investment plans, especially taking into account the sharp increase in financing costs and the difficulty in raising capital due to the standstill in the nonbank credit market.

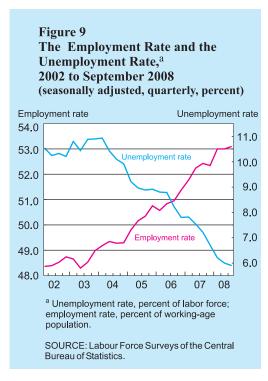
Public consumption increased at a rate of 4.2 percent in the second half of the year, reflecting mainly a 9.5 percent surge in domestic defense consumption. Government activity showed a slowdown in expenditure in the last few months of 2008, the significance of which is fiscal restraint at a time when what was required was expansion, to deal with the slowdown in economic activity. At the same time the downward trend in tax revenues continued. Corporation tax revenues declined in all industries, a sign of the spread of the crisis. Towards the end of the year indirect tax revenues also fell, as did capital market taxes and

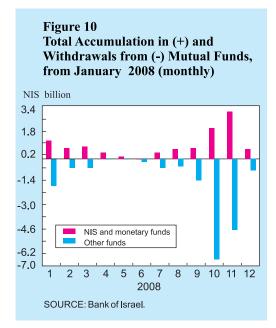
Figure 7











VAT revenues, due to the drop in the import of durables. The government's domestic deficit excluding credit is expected to exceed the ceiling of 1.6 percent of GDP in 2009, and to reach 2.1 percent of GDP. This is due to the pre-recording of government expenditure following underspending in 2008, which enabled unbudgeted activity to be added in 2009 without exceeding the expenditure ceiling. The debt/GDP ratio continued to decline in 2008, albeit more slowly than in the past, as a result of the increase in the deficit and slower increase in GDP.

Data from the Manpower Survey of the Central Bureau of Statistics for the third quarter of 2008 indicate that the labor market was stable, with a small increase in the number of employee posts and a slight drop in the wage, particularly in the business sector. The rise in inflation led to a decline of about one percent in the real wage in 2008. Unemployment stayed at a low level, viewed over the long term, in the third quarter, at about 6 percent, with an unprecedented high level of participation of 56.4 percent. Most of the rise in the number of employees in the third quarter was in the public sector, with no net increase in the business sector, and an actual decline in manufacturing. In the third quarter the number of hours worked per employee fell, but not the number of employees, a characteristic delayed reaction of the labor market to a recession, and in the fourth quarter many manufacturing and financial companies announced staff dismissals. The October and November Employers' Surveys point to a slowdown in the labor market, and the number of terminations of employment surpassed the number of workers taken on, for the first time since 2003. It is reasonable to expect that the slack in the labor market will be reflected in little, if any, pressure for wage increases, despite the erosion of the real wage resulting from the rise in inflation in 2008, so that upward pressure on prices is not expected from this direction. It is worth remembering that in the last recession, at the beginning of the decade, there were actually some reductions in nominal wages.

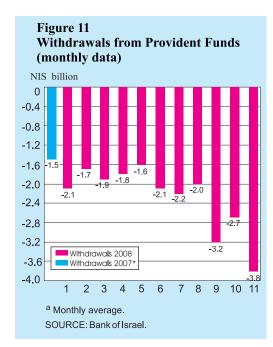
d. Financial developments

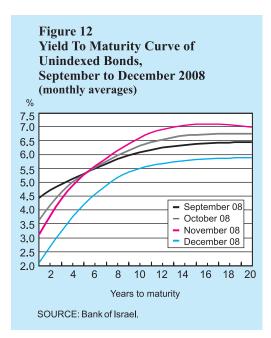
The effects of the global crisis on the domestic capital markets were clearly evident: share prices dropped a further 35 percent in the last quarter of 2008, and over the year as a whole they fell by almost 50 percent. This reflects the expectations of a drop in companies' profitability due to the slowdown in activity, and a rise in risks and uncertainty, which was also express by the steep increase in yields on corporate bonds. Raising funds by companies via the issue of corporate bonds, which had become the main

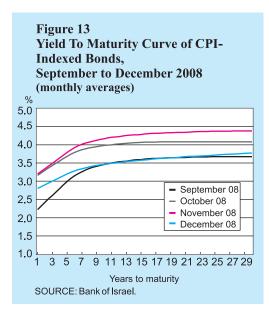
source of finance for the private sector, halted; the rate of return on some of those bonds reached tens of percent, reflecting market assessments of the possibility of a not inconsiderable number of bankruptcies among those companies, mainly in the real estate sector. The yield gaps between private and government indexed bonds widened greatly, continuing the trend evident in the third quarter: in unrated bonds the gap reached about 22 percentage points, with bonds of real estate companies-suffering from the impact of the global real estate crisis-featuring prominently. In banking, interest rate spreads expanded to 2.3 percentage points, against the background of the expected deterioration in credit portfolios. Real yields on government bonds also rose in the last quarter of 2008, because of the increased risk and the public's withdrawals of long-term savings which obliged the institutional investors to sell government bonds, which are more liquid and more easily realizable. The real yield curve rose along almost its whole length, except for the short term, in October and November, and declined again only in December, apparently due to lower withdrawals, especially from provident funds (Figure 13).

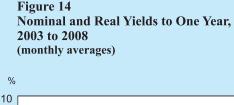
Credit became less available to the business sector as the issue of corporate bonds, which had become the main source of finance in 2006–07, came to an almost complete halt. Companies' reports in the Companies Survey also refer to the difficulty of obtaining credit as one of the reasons for their reduced activity. Bank credit increased by a nominal 10 percent, with local currency credit the main component. It is worth noting that the cuts totaling more than 2 percentage points in the Bank of Israel interest rate in the last quarter of 2008 were only partially reflected in the rates charged by banks to households and businesses (November data). This was apparently due not only to the rise in credit risk, but also because of the change in Israel's credit market-as it became less possible to raise direct credit abroad with the increased risks there, and impossible to raise capital in the bond market via the issue of corporate bonds, the field was left almost exclusively to Israel's banking system. In practice, the increase in real interest facing borrowers placed them in an environment of restraint with regard to credit sources, despite the Bank of Israel's expansionary policy.

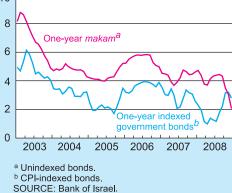
Expected inflation over the next twelve months derived from the capital market declined in 2008:Q4 from about 2 percent in September to a negative inflation expectation of almost one











percent, below the lower limit of the inflation target range,³ while expectations of the private forecasters also declined markedly (Figure 15). It seems that in the course of the last quarter there was increased awareness of the severity of the slowdown in activity, and its effects on the rate of inflation, and awareness of the expected effect of the drop in world energy and food prices, whose influence on the CPI is expected to persist in the first quarter of 2009. Longer term inflation expectations also declined, but more moderately. The relative stability of inflation expectations over the longer term in light of the external shocks is worth noting, and is a reflection of the relative strength of the economy and the credibility of monetary policy.

Two main aspects of the public's assets portfolio stand out: one is the increase in withdrawals from provident funds, against the background of the fall in the value of their assets and their exposure to the share and corporate bonds markets. The other is the rise in shekel deposits in banks, as a safe channel, in light of the reduction in asset prices and increased volatility and market risk. The monetary base also rose significantly (by about 6 percent) in 2008:Q4, against the background of the reduction in nominal interest. The switch to shekel assets was also expressed in the increase in the assets of local currency and monetary mutual funds on account of other investment channels (Figure 10). Unlike in previous financial crises, in the 1980s and 1990s, there is currently no switch to dollar indexed assets, and this is due to the relatively favorable situation in Israel's economy, expressed inter alia in the continued strengthening of the shekel. The fall in asset prices impacted on the yields of provident funds, as stated, and this mainly affected pensioners and those close to retirement age. In order to ease the situation, the government announced that it was spreading a safety net that would guarantee that the real yield on balances as at end-November would not be eroded, and that those retiring would be compensated if the real value of their savings had fallen. The right to receive compensation was given to those aged at least 57, and was limited to the total of their pension savings, without their needing to register in advance. The safety net reduces the incentive to withdraw liquid savings from the provident funds, in addition to the tax advantages of this savings channel.

³ Estimates of inflation expectations derived from the capital market may have a downward bias due to changes in the liquidity premium, the result of greater liquidity problems and the differences in liquidity between the local currency market and the indexed market, with the yield gap between them providing the basis for calculating inflation expectations.

Table 3The Domestic Assets Markets, April-December 2008

	04/08	05/08	06/08	07/08	08/08	09/08	10/08	11/08	12/08
Yields to maturity (mor	nthly aver	age, perce	nt)						
3-month makam	3.0	3.5	3.7	3.8	4.1	4.2	3.6	3.0	2.4
1-year makam	3.7	4.1	4.3	4.4	4.5	4.3	3.5	3.0	2.3
Unindexed 5-year bonds	5.1	5.4	5.4	5.3	5.2	5.2	5.3	5.3	4.4
Unindexed 20-year bonds	6.5	6.5	6.5	6.6	6.4	6.4	6.8	7.0	6.2
CPI-indexed 1-year bonds	1.0	1.4	1.3	1.2	1.7	2.2	3.1	3.1	3.2
CPI-indexed 5-year bonds	2.4	2.5	2.5	2.5	2.7	3.0	3.6	3.7	3.5
CPI-indexed 30-year bonds	3.6	3.5	3.4	3.5	3.5	3.6	4.0	4.3	3.9
Yield gap between gove	ernment b	onds and							
private bonds rated AA–AAA (percent- age points)	1.7	1.4	1.7	1.8	1.5	2.2	3.2	3.0	3.5
private unrated bonds excluding real estate ^a (percentage points)	8.9	8.4	10.4	11.5	12.8	14.4	15.3	19.8	22.8
Share market (percenta									
General share price	-88)						
index	6.5	2.1	-3.0	-4.7	-2.3	-11.8	-17.6	-5.8	-4.4
Tel Aviv 25 index	8.4	3.4	-2.9	-4.7	-2.7	-11.9	-18.2	-8.0	-1.9
Foreign currency mark	et (percei	ntage chan	ge during (the month)					
NIS/\$	-3.5	-5.7	3.7	3.5	3.5	-4.8	10.6	3.6	-3.0
NIS/€	-5.1	-6.1	5.6	2.5	-2.2	-5.6	-3.5	4.5	5.0
Effective exchange rate	-3.9	-5.9	4.4	3.4	-0.2	-5.4	4.3	3.1	0.7
Risk indices derived fro (monthly averages, per-		de in NIS/	\$ options i	n the Tel Av	iv Stock Ex	change			
Implied standard de- viation	14.5	14.3	14.9	15.8	13.1	13.8	18.0	18.4	17.5
Probability of deprecia- tion greater than 3%	12.0	11.5	12.9	14.9	10.8	11.1	16.8	21.0	21.5
Probability of apprecia- tion greater than 3%	8.8	7.3	9.1	9.6	5.7	8.7	16.3	13.6	10.8

^a CPI-indexed bonds, excluding convertibles, with a yield of up to 60 percent, and with a duration of more than one year.

SOURCE: Bank of Israel.

e. Inflation in the last quarter of 2008

There was a marked change in the rate of inflation in the quarter under review, with the CPI registering a decline of 0.6 percent, after rising steeply since the beginning of the year. Seasonally adjusted, the CPI did not rise in the last quarter of 2008, after rising at annual rates of 6 percent and 7 percent in the second and third quarters respectively. The change was due partly to the drop in food, fruit and vegetables and energy prices, which offset the persistent rise in housing prices. Over the year as a whole the CPI rose by 3.8 percent, above the upper limit of the inflation target range (Table 4 and Figure 14). The CPI excluding the energy, food, fruit and vegetables and housing components, however, rose by 1.8 percent over the year, close to the midpoint of the target range.

Table 4

Changes in Selected Components of the Consumer Price Index (CPI), their Weights, and their Contribution to the CPI, 2008

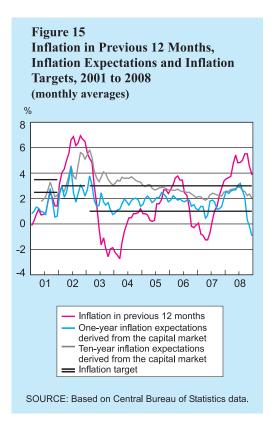
		Previous 12	2 months	2008:Q4		
	Weight in index	Rate of change in index	Contribution to CPI	Rate of change in index ^a	Contribution to CPI	
СРІ	100.0	3.8	3.8	-2.2	-2.2	
Housing	21.0	12.1	2.5	21.3	4.5	
Energy	13.7	-9.5	-1.3	-1.0	-0.1	
Food (excl. fruit and vegetables)	7.3	-2.8	-0.2	-49.1	-3.6	
Fruit and vegetables	3.4	-2.0	-0.1	-36.2	-1.2	

^a Annual rate.

SOURCE: Based on Central Bureau of Statistics data.

Prices were affected by several factors during the year: the first was the development of global energy and food prices, which boosted inflation until September and then caused a sharp decline in the last quarter when they fell world wide, against the background of the expected global recession in economic activity. Energy prices slumped by more than 50 percent in the last few months of 2008, and food and commodity prices dropped heavily too. The second factor influencing prices in 2008 was the increase in rent and house prices against the background of the continued reduction in the housing supply.⁴ In the whole of 2008 the housing price index rose by 12 percent, and in the last quarter its contribution to the overall index was decisive, as can be seen from the fact that the index excluding housing fell by about 8 percent, annual rate, in the last quarter. The strengthening of the dollar in the fourth quarter cannot explain the steep rise in the housing component, as renewed contracts indexed to the dollar

⁴ The sharp increase in rents in the second half of the year is partly due to the method of calculating the index and the cyclical nature of the renewal of contracts, most of which are signed in summer, and the "unlinking" of contracts from the dollar. At the beginning of the year most contracts were still indexed to the dollar, and they rose slowly due to the appreciation of the dollar; as fewer contracts were dollar indexed, the prices quoted increased to their real value in line with market conditions, so that rents rose sharply in the second half of the year.



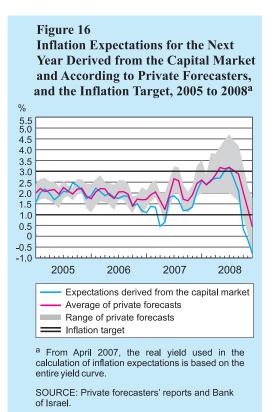


Figure 17a Changes in the Components of the CPI, 2007:Q4 and 2008:Q4 (percent)

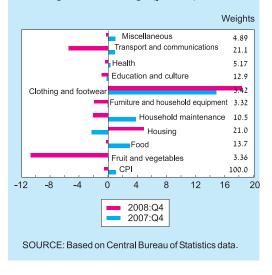
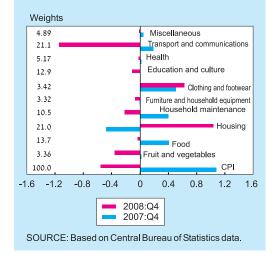
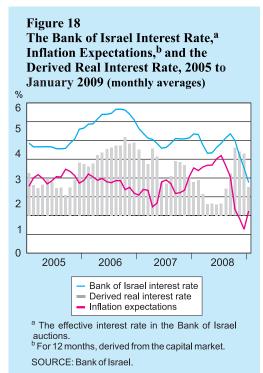


Figure 17b Contribution of the Components of the CPI to the Changes in the CPI, 2007:Q4 and 2008:Q4 (percentage points)





account for less than 20 percent of contracts, and it seems that housing demand is continuing to rise while the supply is falling. The third factor affecting prices was apparently the drop in demand and in the level of economic activity, which was reflected in falling prices in most components of the CPI in December.

The wholesale price index fell by about 10 percent in the fourth quarter of 2008, and by 4.4 percent over the year as a whole. The main reasons were the changes in energy prices throughout the year, and possibly, in the last quarter, also the slowdown in activity.

II. MONETARY POLICY

Monetary policy in 2008:Q4 acted to reduce the interest rate in order to moderate the repercussions of the global financial crisis on real economic activity, the liquidity situation, and the stability of the financial system. The slowing of the actual rate of price increases, and the assessment that the upward pressure on prices evident during the year had abated considerably, made it possible to aim at attaining the inflation target while adopting an expansionary monetary policy. During the fourth quarter the Bank of Israel's key interest rate was lowered on five occasions (two of which were not at the usual decision time), from 4.25 percent to 1.75 percent. In light of the many indicators pointing to the intensified decline in demand, the Bank of Israel continued with its expansionary policy, and cut the interest rate for February to 1 percent—its lowest level ever.

The principal factors behind the decisions to reduce the interest rate during Q4 were the significant decline in inflationary pressures in view of the steep drop in global goods and energy prices—the main reasons for price increases during the year—and the slowdown in economic growth as the global financial crisis intensified and spread to the real economic sphere. The interest rate cuts were intended also—perhaps even primarily—to ease the liquidity difficulties in the economy. While the liquidity situation was better in Israel than in other developed and in developing countries, there was some deterioration nonetheless.⁵ Against the backdrop of the decline in the pass-through from the exchange rate to inflation, the development of the inflation rate during Q4 was not as important a consideration as it had been in the past in making decisions about the interest rate. The interest rate was

⁵ In the course of Q4 the Bank of Israel announced several measures in the area of bank liquidity intended to reduce absorption by means of makam (short-term bills issued by the Bank of Israel), and also extended the term of the auctions. As stated, fewer such measures were introduced in Israel than in the developed countries, where liquidity problems threatened to paralyze financial activity.

reduced in correspondence with interest rate reductions in the US and Europe, thereby preventing the emergence of wide interest rate differentials and capital flows which could have aggravated local-currency appreciation and the moderation of exports and real economic activity. Since Israel is a small economy which is open to capital flows it cannot deviate from interest rate trends in Europe and the US.

Table 5

The Inflation Environment and Interest Rates, April-December 2008	
(monthly averages)	

	04/08	05/08	06/08	07/08	08/08	09/08	10/08	11/08	12/08
Inflation environment (percent)	01/00	00/00	00/00	01100	00,00	07/00	10/00	11,00	12,00
Monthly change in CPI	1.5	0.7	0.1	1.1	0.8	0.0	0.1	-0.6	-0.1
Forecasters' predictions of monthly									
CPI (average of forecasts prior to									
publication of CPI)	0.8	0.7	0.5	0.6	0.6	0.4	0.2	-0.6	-0.3
Annual change in CPI	7.4	5.4	4.8	4.8	5.0	5.8	5.5	4.5	3.8
One-year inflation expectations derived									
from the capital market	2.7	2.7	3.0	3.2	2.7	2.1	0.3	-0.1	-1.0
Forecasters' one-year inflation									
predictions	2.8	3.2	3.1	3.1	3.0	2.8	2.0	1.3	0.5
Forward inflation expectations ^a to diff	erent te	rms							
Short term (second and third years									
forward)	3.0	2.9	3.0	2.9	2.5	2.3	1.5	1.4	0.7
Medium term (fourth to sixth years									
forward)	2.4	2.6	2.7	2.7	2.4	2.3	2.2	2.3	2.2
Long term (seventh to tenth years									
forward)	2.9	2.8	3.0	3.0	2.9	2.9	3.1	3.4	3.2
Interest rates and interest rate different	ntials								
Bank of Israel interest rate	3.25	3.25	3.50	3.75	4.00	4.25	3.93	3.23	2.50
Derived real interest rate	0.6	0.6	0.6	0.6	1.4	2.2	3.7	3.4	3.5
Short-term interest rate differential									
between Israel and the US (prior to									
decision for the next month's rate)	1.00	1.25	1.50	1.75	2.00	2.25	2.35	2.23	1.50
Short-term interest rate differential									
between Israel and the eurozone (prior									
to decision for the next month's rate)	-0.75	-0.75	-0.50	-0.50	-0.25	0.00	-0.17	-0.22	-0.75
Forecasters' predictions of nominal									
interest rate for next month (prior to									
the decision)	0.00	0.28	0.28	0.03	0.03	0.09	-0.19	-0.39	-0.59
Forecasters' predictions of interest rate									
a year hence	3.7	3.9	4.2	4.0	4.0	4.2	4.4	2.1	1.8
Long-term (10-year) nominal interest									
rate differential between Israel and									
US	2.4	2.3	2.1	2.3	2.2	2.4	2.5	3.1	3.1
Long-term (10-year) real interest rate									
differential between Israel and US	1.8	1.8	1.6	1.7	1.6	1.6	1.1	1.2	1.2

^a Inflation expectations are measured from the difference between yields on local currency unindexed and indexed bonds These expectations include an element of risk premium, which rises with the length of the term to which the expectations relate.

SOURCE: Based on Central Bureau of Statistics data and private forecasters' reports.

The various indicators available to the Bank of Israel during 2008: Q4 supported the reduction of the interest rate. This was in contrast to the situation in the course of the year, when monetary policy could choose between easing the financial crisis and preventing the acceleration of inflation in view of the rise in global goods and energy prices and the fact that the economy was coming close to a level of activity that exceeded its potential GDP. The information available at the beginning of Q4 regarding the exacerbation of the global economic crisis, the marked slowdown of economic activity and world trade, and the expectation of a decline in goods and energy prices led the Bank of Israel to speed up the pace of interest rate reductions, and two of the decisions made in the course of Q4 were made outside the customary interest rate decision dates.

The first of these interest rate reductions was made in the first week of October, after the financial crisis in the US had worsened following the collapse of the Lehman Brothers investment firm, the liquidity crisis, and the aggravation of the global economic crisis. The second reduction made outside the usual time-frame came in the second week of November and was the result of new assessments regarding the intensity of the deterioration in global economic growth expectations and the spiraling global economic crisis, as well as increased apprehensions of a slowdown in economic activity in Israel.⁶ In Q4 the assessment of the real economic situation, which was the key factor underlying the interest rate decision, focused on up-to-date indications, in view of the sharp change in the level of economic activity and the greater slowdown in domestic economic activity.

Despite the massive cuts in the Bank of Israel's key interest rate, the real interest rate rose as a result of the steep decline in inflation expectations. The real interest rate expected for a year ahead, which was 2.2 percent at the beginning of Q4, rose to 3.2 percent in the wake of the decline in inflation expectations for a year—from about 2 percent to minus 1 percent⁷—against the backdrop of the slowdown in economic activity and the fall in goods and energy prices. Real interest rates declined further during January.

Although the short-term interest rate was reduced by the Bank

⁶ There is some disagreement with regard to the efficacy of interest rate adjustments made outside the customary time-frame: on the one hand, it is claimed that the effectiveness of policy increases when something unexpected is done; on the other, surprise is an additional source of uncertainty and is sometimes interpreted as indicating the gravity of the situation, as the Bank of Israel sometimes has more information than is available to the general public.

⁷ Estimating inflation expectations from the capital market ascribes the entire difference between yields to expected inflation, assuming that other factors remain constant. However, it is reasonable to assume that some of the difference derives from the fact that the unindexed market is more liquid and that differences in premiums due to the lack of liquidity grew because of the credit crunch.

of Israel, real long-term interest rose during Q4, and it would seem that the economy's risk premium has risen sharply. This is indicated by the increased yield gap between government bonds in Israel and the US, as well as by the rise in long-term yields on indexed government bonds. Only in December did the real yield curve dip, in view of the cumulative effect of the reductions in the short-term interest rate and enhanced awareness of the intensity of the slowdown in real economic activity.

Note that in the financial crises of the 1980s and 1990s, which increased the risk in the markets and threatened stability, the Bank of Israel had to adhere to tight monetary policy. In the present crisis, however, in view of the long-term stability of the inflation rate, the surplus on the current account, and the significant decline in the government debt/GDP ratio, it is possible to maintain expansionary monetary policy, which serves to stimulate economic activity and ease financial constraints, in line with the policy adopted by the developed countries in the present crisis. Today, however, in view of the difficulties in approving changes in the budget in the period prior to the general election, it is impossible to implement the fiscal expansion which is required; this is also the case with regard to the implementation of some of the decisions about budgetary expansion, placing a heavier burden on monetary policy in stimulating economic activity.

III. UPDATE OF FORECASTS

a. The global environment

The rate at which the global economy is slowing is accelerating constantly and is spreading all over the world. In Q4 economic activity slowed in China too, against the backdrop of the decline in its exports to the US. Labor market figures for the US show that the recession is getting wider and deeper, as is also the case in the other developed as well as the developing countries. The decline in economic activity is reflected in the steep drop in energy prices to levels below those in evidence before the crisis. In 2009 the US and European GDP growth rate is expected to be negative, and this also applies to many other countries. The extent of world trade is expected to fall by 2 percent, compared with an increase of 2 percent in the previous Inflation Report.

It is not yet clear to what extent and when the programs aimed at stimulating financial and real economic activity adopted by most countries will go into effect, and how far they will succeed in moderating the duration and intensity of the recession. Be that

	2007	2008	2009
Average GDP growth, perce	nt		
Global	5.0	3.7	2.2
Advanced economies	2.6	1.4	-0.3
US	2.0	1.4	-0.7
EU	2.6	1.2	-0.5
Japan	2.1	0.5	-0.2
Emerging markets	8.0	6.6	5.1
Inflation (during the year	, percent)		
Advanced economies	2.2	3.6	1.4
US	2.9	4.2	1.8
EU	2.1	3.5	1.9
Japan	0.0	1.6	0.9
Emerging markets	6.4	9.2	7.1

Table 6GDP Growth in 2007, and IMF Forecasts for 2008 and 2009

SOURCE: IMF World Economic Outlook, November 2008. Prior to the update to be published end of January 2009.

as it may, the extent of trade is expected to decline, and this will have a considerable effect on demand, including that for Israel's exports.

b. Real economic and financial activity in Israel

The growth rate is expected to continue to decelerate in 2009 too, in view of the exacerbation of the global slowdown. Despite the fact that Israel's economy has been doing well in the last few years-with rapid growth, high employment, a surplus on the balance of payments, and the downward path of the public debt/ GDP ratio, all of which can be expected to allay the effects of the slowdown-the deepening of the global crisis and the signs of a slowdown in Israel have caused the forecast of economic activity for 2009 to be revised downwards: whereas the previous Inflation Report predicted GDP growth of 2.7 percent, GDP is now expected to fall by 0.2 percent in 2009, largely because exports (excluding diamonds) will probably contract (by 2.4 percent, compared with the 4.0 percent increase previously predicted), and the rate of increase of private consumption is expected to fall to 1.1 percent (compared with the 3 percent rise previously predicted). The improvement in the terms of trade, primarily due to the drop in energy prices, is expected to offset some of the effect of the decline in wealth on consumption and help to improve the situation on the current account. The unemployment rate is expected to rise to an average of 7.6 percent in 2009, compared with 6 percent in 2008, and the budget deficit is expected to increase to about 4

percent of GDP in the wake of the sharp fall in tax receipts as the recession intensifies, real government expenditure rises once the 2009 budget is adopted, and prices fall below the forecast.

In view of the resilience of Israel's banking system, the financial crisis does not appear to imperil its stability. Even if the slowdown in economic activity has an adverse effect on the system's profits, the structure of capital will enable it to overcome the deterioration in its credit portfolio and the increase in risk due to the economic slowdown.

Table 7

Economic Indicators for 2007, and Bank of Israel Forecasts for 2008 and 2009 (rates of change, percent, unless stated otherwise)

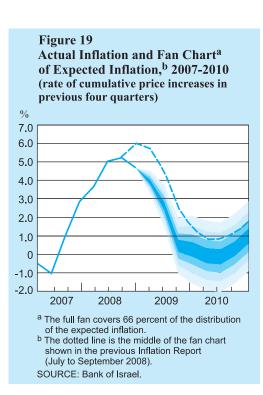
Actual Forecast 2008 2007 2009 GDP 5.4 4.0 -0.2 3.9 1.1 Private consumption 6.7 12.0 4.1 -5.9 Gross domestic investment 2.9 3.9 1.4 Public consumption 2.9 Imports 11.7 -6.4 Exports 8.5 3.6 -6.9 Net current account (\$ billion) 4.5 1.9 2.07.3 6.1 7.6 Unemployment rate Public deficit (percent of GDP)^a 1.0 2.1 4.1 Gross debt/GDP ratio 79.4 77.6 82.3

^a Excluding the Bank of Israel.

SOURCE: Central Bureau of Statistics and the Bank of Israel.

c. Assessments regarding the balance of payments

The surplus on the balance of payments is expected to remain at the same level as in 2008, as a result of the slowdown in imports and exports; this, following the expected improvement in the terms of trade due to the steep decline in energy and food prices. On the capital account, net capital inflow is expected, because Israel's economic situation is relatively good considering the global crisis. This situation is expected to act to stimulate continued investment in Israel by nonresidents and to reduce the flow of investment abroad by residents. Thus, most forces serve to strengthen the NIS, but actual change depends on additional short-term factors whose trends cannot be predicted. The Bank of Israel announced that it would continue to buy foreign currency in the amount of \$100 million a day, thereby offsetting some of



the effects that strengthen the NIS. The rise in the level of the reserves also contributes to financial stability.

d. Assessments regarding inflation and the balance of risks

In view of developments in Q4 and against the backdrop of the economic slowdown and the decline in actual inflation, various forecasts have been revised, including that of the Bank of Israel (Table 8). The rate of inflation predicted by private forecasters and derived from the capital market has been revised downwards, as is also the case with the expected interest rate. The forecasts derived from the Companies Review have also been revised downwards, and about 70 percent of the replies regarding the inflation rate expected in 2009 are within the inflation target range (1–3 percent), compared with only 40 percent at the end of Q3.

The Bank of Israel uses models to assess the future inflation rate and formulate monetary policy; these provide a framework which enables the main factors affecting the development of prices and real economic activity to be expressed, as well as making it possible to examine the contribution of various factors to the process. In Q4 there was a marked shift in the underlying data, and these gave rise to a change in the inflation and interest rates derived from the model. It was assumed that the extent of global trade would fall by 2 percent in the current quarter and that goods prices would remain unchanged, after plummeting in 2008:Q4. It was also assumed that in 2009 central banks would cut interest rates by another 0.5 percentage points from their level in 2008:Q4 (the model also expressed the credit crunch, which is expected to abate only in 2010).

Table 8

Assessments of Inflation over Next Twelve Months^a (percent)

	Target	-	Private forecasters		Bank of Israel
Average	2	0.5^{b}	0.4	2.0	
Range	1-3		-1.5 to +1.94	0.0-3.1	0.0-0.3

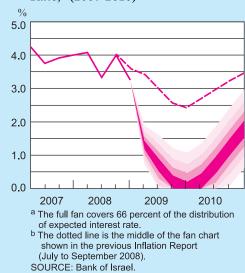
^a The forecasts are from the second half of October 2008, except for the Companies Survey, which was carried out during the third quarter of the year.
^b It is reasonable to assume that this forecast has a downward bias to the extent that the yield on CPI-indexed bonds incorporates a liquidity premium.
^c Covering 90 percent of the inflation expectations (excluding the tails).
SOURCE: Bank of Israel.

Whereas in the previous Inflation Report the Bank of Israel forecast a rise in the inflation rate in the short term and its moderation in the medium term, the forecast is now that inflation will decline rapidly and enter the target range at the beginning of 2009:Q2. Because of the sharp shift in the inflation rate—in view of the exacerbation of the crisis, the slowdown in economic activity, and the drastic fall in goods and energy prices—inflation is expected to be below the lower limit of the target rate, and even to become negative in the second half of 2009; only in 2010 is it expected to return to the target range (Figures 18 and 19). The reduction of the interest rate, which was accelerated in Q4 of 2008, is expected to persist in 2009, too.⁸

With regard to the attainment of the inflation target, the main risk for the coming year is that the inflation rate will undershoot the target. The continuation and even the aggravation of existing trends—local-currency appreciation, the worsening of the global crisis, the slowdown of domestic economic activity, and the persistent decline or even stability of energy and goods prices are expected to be expressed, according to the figures for the last twelve months, in an inflation rate that is below the target range and even negative at times. Nevertheless, there is also a risk that the rate will overshoot the target—if there is significant localcurrency depreciation as a result of a deterioration in Israel's global situation for economic or other reasons. The probability of such an occurrence is low, and even if it does transpire it will not necessarily lead to a deviation from the inflation target.

The Bank of Israel will continue to track developments and indications that the various risks will be realized. The Bank of Israel will continue to act to bring the inflation rate to within the target range of 1–3 percent, and will accordingly continue to stimulate real economic activity while maintaining economic stability.





⁸ The model is based on the assumption that the behavior of the public is rational, and that individuals act on the basis of their expectations regarding future developments. According to another model used by the Bank of Israel, which ascribes greater weight to past developments, the forecasts go in similar directions, but the downward path of inflation is higher, and this also applies to the path of forecast interest rates.