

Research Department Staff Forecast, September 2014

Abstract

This document presents the forecast of macroeconomic developments compiled by the Bank of Israel Research Department in September 2014. The forecast was presented to the Monetary Committee on September 21, 2014, during its meeting prior to the decision on the Bank of Israel interest rate for October 2014. According to the staff forecast, gross domestic product (GDP) is projected to increase by 2.3 percent in 2014, and by 3.0 percent in 2015. The rate of inflation over the next year (ending in the third quarter of 2015) is expected to be 1 percent. The Bank of Israel interest rate is expected to be 0.25 percent during 2015.

Forecast

The Bank of Israel Research Department compiles a staff forecast of macroeconomic developments on a quarterly basis. The staff forecast is based on several models, various data sources, and assessments based on economists' judgment. The Bank's medium scale DSGE (Dynamic Stochastic General Equilibrium) model developed in the Research Department—a structural model based on microeconomic foundations—plays a primary role in formulating the macroeconomic forecast. The model provides a framework for analyzing the forces which have an effect on the economy, and allows the integration of information from various sources into a macroeconomic forecast for real and nominal variables, with an internally consistent "economic story".

a. The global environment

The assumptions about the global economy are primarily based on forecasts by international financial institutions (the IMF and OECD) and foreign investment houses. The forecasts reflect the assessment that in 2014 and 2015, economic activity in the G4 economies³ will continue to gradually recover from the economic crisis, mainly due to the US and UK, where decent growth rates are expected, while stagnation in economic activity is expected to continue in the eurozone and in Japan. In Europe there is concern of deflation, which may further strengthen the slowdown in economic activity there.

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¹ An explanation of the staff macroeconomic forecast, and an overview of the models on which it is based, can be found in Inflation Report 31 for the second quarter of 2010, section 3-C.

² A Discussion Paper on the model is available on the Bank of Israel website, under the title: "MOISE: A DSGE Model for the Israeli Economy," Discussion Paper No. 2012.06.

³ The G4 economies include the eurozone, the UK, the US and Japan.

The current assessments of the pace of growth in GDP in the G4 economies, and regarding imports in OECD countries for the years 2014 and 2015 declined slightly compared with our assessments when compiling the previous forecast (in June). The change reflects the negative surprise in National Accounts data for the first quarter of the year in the US, but also reflects continued pessimism regarding the eurozone. In particular, the GDP growth rate in the G4 economies is projected to be 1.7 percent in 2014, and 2.4 percent in 2015, while growth of imports in OECD countries is expected to be 3 percent in 2014 and 5 percent in 2015.

According to those same assessments, inflation in the G4 economies is projected to be stable, at 1.7 percent in 2014 and 1.8 percent in 2015. These assessments are slightly higher than those included in the June forecast.

Oil (Brent crude) prices have been in a downward trend for the past few months, with prices lower than they were one year ago. The average price of oil in the third quarter was \$105 per barrel. The global food index and commodities prices excluding energy declined by about 9 percent since the beginning of the third quarter, continuing the decline that began in the second quarter.

b. Real activity in Israel

GDP growth is expected to be 2.3 percent in 2014. This projection is significantly lower than the estimate in the previous forecast (at the end of June), which was 2.9 percent. A main contributing factor to this is Operation "Protective Edge" which we estimate detracted about 0.4 percent from GDP growth. The negative impact from Operation "Protective Edge" is mainly reflected in private consumption, where it is expected to be short-term, and in the export of tourism services, where it is expected to be of a longer duration. A further negative contribution to the updated forecast is the result of the GDP growth rate, which was surprisingly lower in the second quarter than we estimated in June.

GDP in 2015 is expected to grow by 3 percent, unchanged from the previous assessment in June. The expected growth in 2015 reflects a return to what would have been the activity environment had Operation "Protective Edge" not taken place, and also reflects expectations of a global economic recovery. Decent growth rates are expected in all GDP items. Despite a decent growth rate during 2015, most of the indicators point to a level of activity lower than the economy's potential.

The assessment regarding fiscal policy is that public consumption will grow by 4.1 percent in 2014, higher than our estimation in the June forecast (3.6 percent), due to an increase in defense purchases resulting from Operation "Protective Edge". Regarding 2015, since the budget has not yet been presented, the forecast was developed on the assumption that the government will adhere to the expenditure rule and will not make an adjustment to it in respect of lower than expected inflation in 2013–14. Based on this assumption, an increase in public consumption is expected in

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⁴ In the previous forecast from June, GDP growth in the G4 economies was projected to be 2.1 percent in 2014 and 2.7 percent in 2015, and growth in imports of the OECD countries was projected to be 3.6 percent in 2014 and 5.7 percent in 2015.

2015 as well, relative to the June assessment. Thus, the rate of growth in public consumption in 2015 is expected to be 1.5 percent, compared to the previous projection of 0.1 percent in the June forecast.

Assuming that there are no additional taxation measures beyond the reduction of VAT on new homes to zero for eligible buyers, the deficit in 2014 is expected to be 3.3 percent of GDP, while it is expected to be 3.4 percent of GDP in 2015—higher than the target of 2.5 percent.

Table 1: Economic Indicators
Research Department Staff Forecast for 2014 to 2015

(rates of change, percent, unless stated otherwise)

		Bank	Bank
		of	of
		Israel	Israel
	Actual	forecast	forecast
	2013	2014	2015
GDP	3.2	2.3	3.0
Civilian imports (excluding diamonds, ships, and aircraft)	-2.7	0.8	7.5
Private consumption	3.3	2.0	3.4
Fixed capital formation	0.5	-1.4	6.6
Public sector consumption (excluding defense imports)	3.3	4.1	1.5
Exports (excluding diamonds and start-ups)	-0.3	4.1	5.2
Unemployment rate ^a	6.3	6.3	6.9
Inflation rate ^b	1.8	0.0	1.0
Bank of Israel interest rate ^c	1.00	0.25	0.25

a) Annual average.

Source: Bank of Israel.

c. Inflation and interest rate estimates

In our assessment, the rate of inflation during the four quarters ending in the third quarter of 2015 will be 1 percent—the lower bound of the inflation target range of 1–3 percent.

The low inflation rate during the next year is the result of both moderating supply and demand factors. The moderating supply factors include the decline in the prices of oil and commodities, low and stable global inflation, and the absence of wage pressures from the public sector. There was an unexpected decline in domestic demand, mainly in the second and third quarters of this year, the moderating effect of which on inflation is expected to be reflected in 2014 and in 2015.

Still, as before, the housing component in the CPI (rents) is an expansionary force for increased inflation in the coming year. In addition, the weakness of the shekel during

b) Average CPI reading in the final quarter of the year compared with the final quarter average in the previous year.

c) Average for the final quarter of the year.

the recent period is expected to have an effect on higher inflation in the next few quarters.

The Research Department's assessment is that the **Bank of Israel interest rate** is expected to be 0.25 percent during 2015. This is a result of the decline in the inflation environment and the slowdown in the level of activity. It is possible that, in order to encourage economic activity and to increase inflation, an interest rate reduction and/or the implementation of additional accommodative measures may be required.

Figure 2 shows that the expected path of the interest rate has been significantly revised downward relative to the path that was presented in the previous Staff Forecast, in parallel with a significant revision in the path of inflation expected in the coming year.

Table 2 indicates that, with regard to the coming year, the Research Department's forecast of the inflation rate is slightly lower than that of private forecasters and expectations derived from capital markets. In relation to the interest rate, the Research Department projection is similar to the expectations derived from the capital markets and slightly lower than that of private forecasters.

Table 2
Forecasts for inflation rate and interest rate for the coming year

(percent)				
	Bank of Israel			
	Research	Capital		
	Department	markets ^a	Private forecasters ^b	
Inflation rate ^c	1	1.2	1.1	
(range of forecasts)			(0.5-1.4)	
Interest rate ^d	0.25	0.25	0.5	
(range of forecasts)			(0.25-1)	

a) Interest rate and seasonally adjusted inflation expectations are those published following the publication of the Consumer Price Index.

Source: Bank of Israel.

d. Balance of risks in the forecast

Unforeseen domestic and global factors may lead to developments in the domestic economy that are different than those in the baseline forecast. Domestic factors may, for instance, include geopolitical developments in the Middle East, which may be reflected in the risk level of the domestic economy, changes in fiscal policy for 2015 (on both the expenditure side and the revenue side), reforms that may be reflected in price changes (such as the reform in the cellular communications market), and others.

b) Inflation and interest rate forecasts are after the publication of the CPI reading for August.

c) Inflation rate over the next 12 months (Research Department: in the next four quarters).

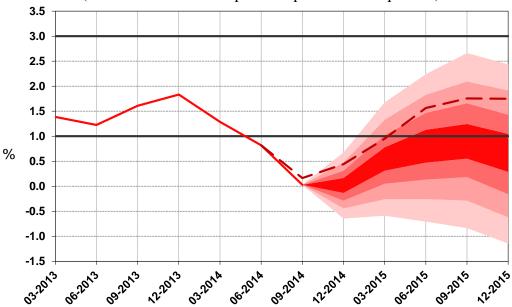
d) The interest rate one year from now. Capital markets forecast derived from Telbor rates.

Globally, the estimates of major international institutions are that the risks to growth forecasts still tend to the downside. The major risk derives from uncertainty regarding the real economic situation in Europe. Moreover, there is increasing concern of deflation in European countries, a situation that may negatively impact economic activity even further, in view of near-zero interest rates.

Figures 1 and 2 present fan charts around the inflation rate and interest rate forecasts (the broken line represents the baseline forecast of June 2014). The width of the fan is derived from the **estimated** distributions of the shocks in the Research Department's DSGE model.

Figure 1 Actual Inflation and Fan Chart of Expected Inflation

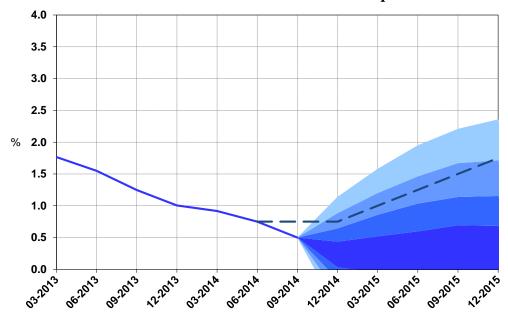
(cumulative increase in prices in previous four quarters)



The center of the fan chart is based on the Bank of Israel Research Department assessment. The width of the fan is based on the Department's medium-scale DSGE (dynamic stochastic general equilibrium) model. The full fan covers 66 percent of the distribution of expected inflation.

The dotted line corresponds to the previous staff forecast (published in June 2014). Source: Bank of Israel.

Figure 2
Actual Bank of Israel Interest Rate and Fan Chart of Expected Interest Rate



The center of the fan chart is based on the Bank of Israel Research Department assessment. The width of the fan is based on the Department's medium-scale DSGE (dynamic stochastic general equilibrium) model. The full fan covers 66 percent of the distribution of expected interest rate.

The dotted line corresponds to the previous staff forecast (published in June 2014). Source: Bank of Israel.