



Research Department Staff Forecast, June 2015

Abstract

This document presents the forecast of macroeconomic developments compiled by the Bank of Israel Research Department in June 2015. The forecast was presented to the Monetary Committee on June 21, 2015, during its meeting prior to the decision on the Bank of Israel interest rate for July 2015. According to the staff forecast, gross domestic product (GDP) is projected to increase by 3.0 percent in 2015, and by 3.7 percent in 2016. The rate of inflation over the next year (ending in the second quarter of 2016) is expected to be 1.6 percent. The Bank of Israel interest rate is expected to remain at its current level of 0.1 percent until the end of 2015, and to increase gradually in 2016.

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.¹ 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.² 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 current assessments of expected developments in the global environment are based mainly on projections by international institutions (the International Monetary Fund and the OECD) and of foreign investment houses. The projections currently reflect optimism regarding the real economy in the US, and recently also in Europe, and there is less likelihood of a worsening in the real economy. This is reflected in estimations that the GDP growth rate in the G4 economies will improve in 2016 relative to 2015. The forecast for 2016 is also higher than the estimations that were available in March.

As a result of the increase in GDP growth expected in 2016, there is also expected to be an increase in the growth rate of imports to the OECD countries, to 5.3 percent compared to 4.6 percent in 2015. This forecast is higher than the forecast in March—

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.

by about one percentage point in relation to 2015, and by about half a percentage point higher in relation to 2016.

Oil prices have increased since the publication of the previous staff forecast in March. The average price of Brent crude oil during the second quarter (until mid-June) is about 15 percent higher than the price assumed by the previous staff forecast for the same period. Commodities prices excluding energy and global food prices recently stabilized, after an earlier downward trend. Inflation in the G4 economies is expected to increase from the expected low level of 0.8 percent in 2015 to 1.8 percent in 2016.

b. Real activity in Israel

GDP growth is expected to be 3.0 percent in 2015, 0.2 percentage points lower than the previous staff forecast in March. Most of the revision is the result of the negative surprise—relative to previous assessments—in investments and exports in the National Accounts data for the first quarter. GDP growth in 2015 is mainly led by private consumption, which is growing nicely, among other things as a result of the low level of the interest rate over time. The growth rate of exports is expected to be close to the relatively high growth rate of imports in the OECD countries.

The growth forecast for 2016 was revised to 3.7 percent, compared to the 3.5 percent forecast in March. This positive revision is attributed to a higher increase in public expenditure, and to an increase in exports due to an upward revision of the forecast for imports by OECD countries. These two factors are also the main explanation for the higher GDP growth in 2016 than in 2015.

The high rate of increase in investment in 2016 is attributed for the most part to investment in a large company (which will almost completely be imputed to the import of machines and equipment). The growth rate of private consumption is expected to moderate in 2016, due to an expected gradual increase in interest rates, and also reflecting a correction to the high level of private consumption in 2015.

Table 1: Economic Indicators
Research Department Staff Forecast for 2015 to 2016

(rates of change, percent, unless stated otherwise)

	Actual 2014	Bank of Israel forecast 2015	Bank of Israel forecast 2016
GDP	2.8	3.0	3.7
Civilian imports (excluding diamonds, ships, and aircraft)	2.4	6.0	7.2
Private consumption	4.0	5.3	3.5
Fixed capital formation	-1.7	-1.0	7.0
Public sector consumption (excluding defense imports)	3.9	2.2	3.2
Exports (excluding diamonds and start-ups)	4.7	3.5	5.3
Unemployment rate ^a	6.0	5.4	5.4
Inflation rate ^b	-0.2	0.1	2.0
Bank of Israel interest rate ^c	0.25	0.10	1.25

a) Annual average.

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

c) At the end of the year.

Source: Bank of Israel.

c. Inflation and interest rate estimates

In our assessment, the rate of inflation during the four quarters ending in the second quarter of 2016 will be 1.6 percent.

This forecast is slightly higher than the previous forecast in March, and is affected by, among other things, the increase in the minimum wage, an increase in transfer payments, and an increase in the growth rate. In addition, the moderating forces on the supply side, such as the decline in electricity and water prices, have weakened, and even oil prices have recently increased following an earlier prolonged decline. Our assessment is that inflation in the coming quarters will return to a rate that is close to the middle of the inflation target range, such that in the second half of 2016—looking at the previous four quarters—annual inflation will return to 2 percent.

According to the Research Department’s assessment, the Bank of Israel interest rate is expected to be 0.1 percent until the end of 2015, and to begin increasing in 2016. Our assessment is that the monetary interest rate will remain at its current level until the end of 2015, and will gradually raise it in 2016 to reach 1.25 percent by the end of 2016, against the background of expected strengthening of growth in real activity, an increase in inflation, and an expected increase in the interest rate in the US and in other advanced economies. According to senior Federal Reserve officials, the Federal Funds Rate at the end of 2015 will be about 0.6 percent, and about 1.6 percent

at the end of 2016. Regarding Europe, the assessment is that the interest rate will remain near zero in 2016 as well.

Table 2 shows that the expected path of the interest rate is the same as the one published in the previous forecast in March, until the first half of 2016, but is higher thereafter.

Table 2
Forecasts for inflation rate and interest rate for the coming year
(percent)

	Bank of Israel		
	Research Department	Capital markets ^a	Private forecasters ^b
Inflation rate ^c	1.6	1.1	1.0
(range of forecasts)			(0.4-1.8)
Interest rate ^d	0.50	0.10	0.31
(range of forecasts)			(0.0-1.0)

a) Average for the month of June (through June 21). Seasonally adjusted inflation expectations.

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

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.

Source: Bank of Israel.

Table 2 shows that **the Research Department's forecast of inflation and the interest rate in the next are slightly higher than expectations derived from the capital market and than the projections of professional forecasters.**

d. Balance of risks in the forecast

Domestic and global factors may lead to developments in the domestic economy that are different than those in the baseline forecast. For instance, optimistic estimations regarding the situation of the real economy in Europe may not come to pass. It has recently become a tangible possibility that Greece will become insolvent and withdraw from the eurozone, and this could affect the state of the financial and real economy in the eurozone as well. It is also possible that the increase in oil prices observed recently is temporary and that its price may return to the low levels observed earlier. Future security incidents may also affect the domestic economy. Uncertainty remains regarding the budgetary conduct of the government in 2016, including planned reforms such as reducing VAT on products under government supervision.

Figures 1 and 2 present fan charts around the inflation rate and interest rate forecasts. (The broken line represents the baseline forecast of March 2015.) 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)

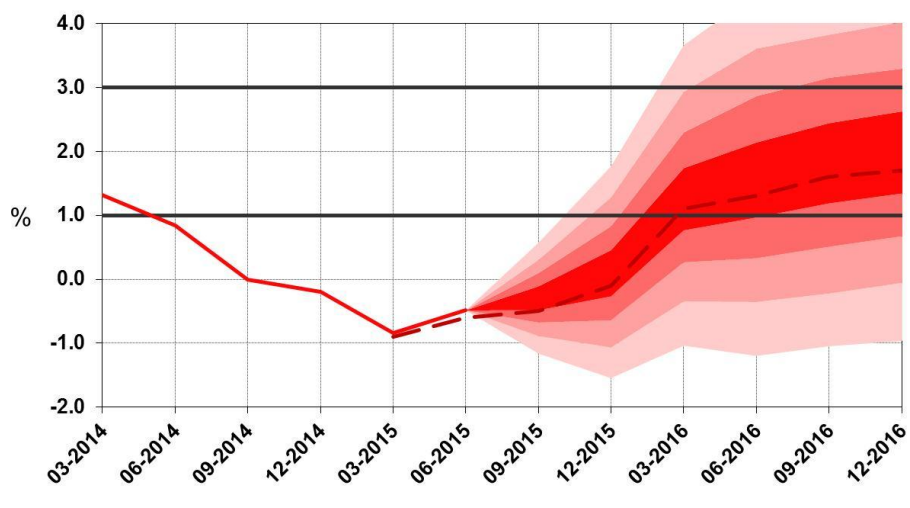
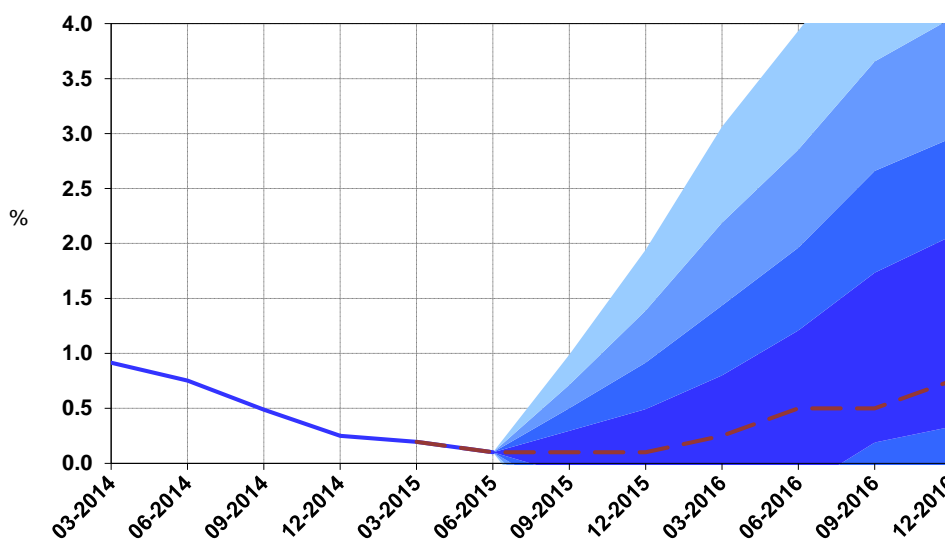


Figure 2
Actual Bank of Israel Interest Rate and Fan Chart of Expected Interest Rate



The center of the fan charts 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 expected distributions. The dotted line corresponds to the previous staff forecast (published in March 2015).

Source: Bank of Israel.