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Press Release:

Research Department Staff Forecast, April 2020

Abstract

This forecast was compiled in the midst of the coronavirus crisis, and against the background of the steps being taken worldwide to prevent the further spread of the virus. This period has an exceptional level of uncertainty—regarding the depth of the crisis, its length, and its ramifications for the medium and long terms.[1,2]

According to the staff forecast, gross domestic product (GDP) is projected to contract by 5.3 percent in 2020, and to grow by 8.7 percent in 2021. The inflation rate in 2020 is expected to be negative, at -0.8 percent, and to be 0.9 percent in 2021. According to the forecast, the Bank of Israel interest rate in the end of 2020 is expected to be in the range of 0.0–0.1 percent, and at the end of 2021, it is expected to be in the range of 0.00-0.25 percent.

Three of the working assumptions that were used in the compilation of the forecast are of particular note. The first is that the steps taken will achieve their goal in limiting the scope of morbidity and mortality. Second, that additional limitations will not be imposed beyond those in effect as of the morning of April 5, 2020. Third, that the main part of the limitations restricting economic activity will be lifted, gradually, by the end of June. Therefore, after a marked contraction of activity in the first half of 2020, which will also be accompanied by an increase in the unemployment rate, beginning from the second half of 2020 we are assuming a gradual return to regular activity and to a path of growth.

[1] The data and assessments regarding the development of the crisis are based on information as of April 5, 2020.

[2] Governments around the world at this time are formulating significant steps to respond to the crisis. These steps will impact markedly on the macroeconomic situation later on, and there is a great deal of uncertainty about them. This is the case as well for the extent and type of the restrictions that will be adopted to prevent the further spread of the coronavirus later on. Against this background, and against the background of the suddenness and the rapidity with which the virus spread worldwide, the international institutions (IMF and OECD) have not yet published official forecasts that take into account the packages of fiscal steps. Against the background of this situation, the current forecast should be seen as an initial one, and it may be assumed that it will be updated as more robust data on the state of the economy become available.

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 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.[3] The model provides a framework for analyzing the forces that have an effect on the economy, and allows information from various sources to be combined into a macroeconomic forecast of real and nominal variables, with an internally consistent "economic story".

In the current quarter, special emphasis was placed on an analysis by industry in order to understand the economic impacts of the crisis and the policy steps on the economy. In particular, the forecast is based on assessments with regard to the shutdown of industries as a result of the government's steps to combat the spread of the coronavirus. In addition, the forecast is based on the assumption that the steps taken will be temporary, which in actuality will be based on the specifics of the contagion and the load placed on hospital infrastructures in Israel.

a. The global environment

Our assessments of the expected developments in the global environment were formulated through our assessments based on previous crises and on the following of projections being compiled by international institutions and foreign investment houses. With the outbreak of the crisis, there was a marked decline in projections regarding GDP growth, inflation and interest rates in advanced economies in 2020, with a very marked increase in uncertainty surrounding those forecasts and assessments. In our assessment, GDP in advanced economies will contract by 6 percent this year, but in 2021 it is expected to grow by about 5 percent. In particular, we assume that imports by advanced economies in 2020 will contract by approximately 10 percent, and in 2021 they are expected to return to a path of growth and to expand by approximately 8 percent. (In the previous forecast, before the outbreak of the crisis, we assumed an expansion of 2.0–2.5 percent in each of the years.) After central banks reduced interest rates sharply, some of them in the framework of decisions that were not regularly scheduled, in all the major economies the interest rates today are at a near-zero level and we assume that they will not be raised before the end of 2021. The price of oil declined sharply against the background of the crisis—the average price of a barrel of Brent crude oil in the first quarter of 2020 was $51, and during the end of the quarter it was actually lower than $25.

b. Real activity in Israel (see Table 1)

The decisions reached in Israel and abroad to halt the spread of the coronavirus have a significant impact on GDP and employment. The impact on the various industries in the economy has not been uniform, with some experiencing a complete halt of activity. At the aggregate level, GDP is expected to contract by 5.3 percent in 2020. This is, as noted, assuming that the main part of the restrictions intended to prevent the further spread of the virus will be lifted gradually by the end of June, so that in the second half

[3] A Discussion Paper on the DSGE 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.

of the year the economy will return to activity without limitations on movement or employment, and will switch to a path of growth.

However, some of the economic ramifications are of a longer term nature. Therefore, even after limitations are removed, the recovery—even if relatively rapid—is expected to be gradual. Accordingly, unemployment in the second half of the year is expected to be 8 percent (among the prime working ages), and only at the end of 2021 is the labor market expected to be characterized by a scope of employment close to that which characterized it prior to the crisis.

In order to reduce the length, and magnitude, of the economic crisis, particularly expansionary fiscal policy is expected, both in Israel and abroad. Alongside marked growth of government expenditures, a notable decline in tax revenues this year is expected as well, within the framework of the action of the automatic stabilizers. The combination of these two is expected to be reflected in an exceptional deficit, of about 11 percent of GDP in 2020. In addition, as noted, a contraction of 5.3 percent in GDP itself is expected, so that the debt to GDP ratio is expected to grow to about 75 percent at the end of the year.

Table 1
Economic Indicators
Research Department Staff Forecast for 2020–2021

(rates of change, percent, unless stated otherwise)

	2019[a]	Bank of Israel forecast for 2020	Change from the previous forecast	Bank of Israel forecast for 2021	Change from the previous forecast
GDP	3.5	-5.3	-8.2	8.7	5.5
Private consumption	3.9	-5.0	-7.5	9.5	7.0
Fixed capital formation (excluding ships and aircraft)	1.2	-10.5	-10.0	4.5	1.5
Public sector consumption (excluding defense imports)	3.5	5.0	2.5	-0.5	-3.0
Exports (excluding diamonds and start-ups)	5.7	-15.0	-19.5	15.5	11.5
Civilian imports (excluding diamonds, ships, and aircraft)	4.5	-13.5	-14.5	9.0	6.5
Unemployment rate[b]	3.3	6.0	2.7	5.5	2.2
Inflation rate[c]	0.4	-0.8	-1.8	0.9	-0.5
Bank of Israel interest rate[d]	0.25	0-0.1		0-0.25	

a) National Accounts data—based on revised estimates by the Central Bureau of Statistics, as of March 10, 2020.
b) Annual average of unemployment in the prime working ages (25–64).
c) Average CPI reading in the final quarter of the year compared with the final-quarter average in the previous year.
d) At year end.

c. Inflation and interest rate estimates

According to the staff forecast, **the inflation rate in the next four quarters is expected to be -0.5 percent, but during the course of 2021 it is expected to total 0.9 percent.**[4] Even before the start of the crisis, the expected inflation path for the coming months was low. Now, due to the crisis, inflation is expected to be even lower—as a result of the sharp decline in the price of oil and other commodities, the increase in unemployment and its impact on wages, and as a result of possible moderation in the

[4] In the coming months, a methodological difficulty is expected in calculating inflation and in analyzing its meaning, so long as the severe limitations on economic activity lead to difficulty in measuring the prices of many goods and services (this difficulty is relevant to about 20 percent of the weight of the CPI components) and there is a marked change in the composition of households' consumption basket.

pace of growth in rents, at least for some time. However, as of now, there does not appear to be a significant shortage of raw materials or critical goods, so that there does not appear to be a notable contribution to inflation from this source. The forecast also reflects the recent depreciation in the shekel and its contribution to inflation, and assumes stability in the exchange rate going forward from now. Accordingly, the inflation forecast was markedly lowered compared to the previous forecast (which was 1.0 percent for 2020). Against the background of the expected switch to a trend of recovery in the third quarter of the current year, an inflation rate of 0.9 percent is expected for 2021 (compared with 1.4 percent in the previous forecast).

We assess that **the Bank of Israel interest rate in the end of 2020 will be in the 0.0–0.1 percent range** (Table 2). Recall that alongside the interest rate, the Bank of Israel operates additional policy tools, in order to provide a response to the economy's liquidity needs and to moderate the increase of yields in the credit market, both in domestic and foreign currency.

Table 2 indicates that the forecast compiled by the Research Department regarding inflation is markedly lower than those of the private forecasters. With regard to inflation expectations derived from the capital market—these are particularly low, but are based on volatile trade data, and are likely biased relative to participants' expectations. The Bank of Israel interest rate in the end of 2020, according to the staff forecast, will be in the range 0.0-0.1 percent, and according to the private forecasters and the capital market – in the range of 0–0.25 percent.

Table 2
Inflation and interest rate forecasts for the coming year

(percent)

	Bank of Israel Research Department	Capital markets[a]	Private forecasters[b]
Inflation rate[c] (range of forecasts)	-0.5	-1.3	0.3 (-0.3 – 0.7)
Interest rate[d] (range of forecasts)	0–0.1	0.18	0.07 (-0.4 – 0.25)

a) As of April 5th, 2020. Inflation expectations are seasonally adjusted.
b) 12-month ahead forecasts, as of April 5th. The average is based only on forecasts updated following the publication of February's CPI.
c) Inflation rate in the coming year. Research Department: in the four quarters ending in the first quarter of 2021.
d) The interest rate one year from now. (Research Department: in the first quarter of 2021.) Expectations from the capital market are based on the Telbor market.
SOURCE: Bank of Israel.

d. Main risks to the forecast

The coming period is characterized by particularly high uncertainty. This is because the global and domestic crisis, against the background of the coronavirus pandemic, is unprecedented in its scope and characteristics. Therefore, it is difficult to assess the extent and magnitude of its economic impacts. A deferral of a month in the process of removing the limitations, compared with the assumption at the basis of the above forecast, and a contraction of 15 percent in world trade, will lead in our assessment to a sharper contraction of GDP in 2020, of about 8.8 percent, and will add about 2 percentage points to the average unemployment rate in 2020.

In addition, in the period of time that will pass until the beginning of the term of the new government, there will be uncertainty regarding the policy steps that will be taken in various areas (with and without connection to the coronavirus crisis) and with regard to their impacts on growth, employment, inflation, and the interest rate.[5]

[5] In this forecast, in view of the exceptional features of the uncertainty characterizing the forecast, it is being published without fan charts for the inflation rate or GDP.