Bank of Israel
Monetary Committee Secretariat

Summary of the Monetary Committee discussions held at the Bank of Israel regarding management of the foreign exchange reserves

The discussions were held on August 1 and 15, October 3 and 24, 2018, and on January 23, 2019

Decision on changes in investment policy guidelines for foreign exchange reserves

Following the end of the consultation process with the Minister of Finance, the Monetary Committee decided to make the following changes to the investment policy guidelines:

Background

The Committee decided, subject to consultation with the Minister of Finance, to change the foreign exchange reserves investment policy guidelines. The Committee's decisions were:

1. Section 1 of the guidelines details the 3 investment policy targets of the foreign exchange reserves, based on achieving the Bank of Israel's objectives and on adequately fulfilling its functions detailed in the Bank of Israel Law: (1) Maintaining the purchasing power of the reserves (safety); (2) Managing the reserves with a high level of liquidity; (3) Achieving an appropriate return at an accepted level of risk, so long as this does not negatively impact the achievement of the previous targets.
   The following sentence will be added to this section:
   The investment strategy of the reserves portfolio shall be formulated with weight given to the risk profile and to the portfolio's returns in the short term and medium term, subject to compliance with the safety and liquidity limitations at any given moment.
2. With the goal of increasing the probability of complying with the target of maintaining the purchasing power in the medium-term, the CVaR level for a 1-year horizon was changed from 400 to 475 basis points.
3. The limitation on investment in equities was changed from 15 percent to 17.5 percent, with the limitation on combined investment in equities and corporate bonds remaining at 25 percent.

The background to the changes:

The main goal of the proposed changes to the guidelines is to allow a more correct balance between the portfolio's short-term risk profile, which is impacted mostly by concern of the materialization of reputation risk, and the risk and return of the portfolio in the medium term.
The foreign exchange reserves are intended to provide the economy an emergency stock of foreign currency for times of crisis or emergency. As even in a severe emergency the use of reserves is expected to be gradual and spread over time, not all the reserves have to be available for immediate use. The larger the reserves level, the smaller the relative portion of the reserves that needs to be available for immediate use needs to be.

Therefore, it is possible and even appropriate to invest part of the reserves with a longer investment horizon. With the growth in the level of the reserves, the importance of achieving an adequate return that will compensate for the cost of holding them increases, and that is even at the cost of some increase in the risk level in the short term. Managing the reserves with a focus on the level of risk in the short term, without considering the portfolio's returns in the medium term, is liable to lead to achieving a lower return over time and even to increase the risk level of the portfolio in the medium term.

In view of the historically low levels of yields to maturity worldwide in the years after the crisis, it is reasonable to assume that in the medium term the yields to maturity in countries in which the foreign exchange reserves are invested will increase gradually, and therefore the real holding returns of government bonds, which are held in the foreign exchange reserves, are expected to be low and even negative in some of the countries. Therefore, as opposed to the past, it will be difficult to maintain the purchasing power of the reserves by only investing in government bonds. Adding equities to the portfolio up to approximately 17.5 percent is expected to reduce the risk of a negative real rate of return on the reserves in the medium term, without adversely impacting the safety and liquidity targets of the investmentpolicy. The equities in which the Bank of Israel has invested since 2012 are considered reserve assets as the investment is in liquid equity markets.

It should be emphasized that the guidelines outline the foreign exchange reserves investment policy, and among other things, they establish the assets in which it is permitted to invest and the limitations of investment in some of them, but they do not serve as a recommendation for the actual share of investment in the various asset classes. The actual share of investment is established within the framework of the strategic allocation process, subject to the maximum level of risk determined by the Monetary Committee and based on assessments regarding expected conditions in the relevant financial markets.

The proposed changes in the guidelines were submitted to the Minister of Finance on October 31, 2018, for consultation, as required by Section 40(b) of the Bank of Israel Law, 2010.

With the end of the consultation process with the Ministry of Finance, the revised guidelines came into effect on January 23, 2019.

The new guidelines are attached as an Appendix.

Participants:

Members of the Monetary Committee
Prof. Amir Yaron, Governor of the Bank of Israel and Chairperson (participated in the discussion on January 23, 2019)
Dr. Karnit Flug, outgoing Governor of the Bank of Israel who served as Chairperson (except for the discussion on January 23, 2019)
Dr. Nadine Baudot-Trajtenberg, Deputy Governor of the Bank of Israel
Mr. Andrew Abir, Market Operations Department Director
Prof. Reuben Gronau
Prof. Moshe Hazan
Prof. Zvi Hercowitz

Other participants

Mr. Eddy Azoulay, Chief of Staff to the Governor

Mr. David Ettun, Economist in Risk Management Unit in Market Operations Department (participated in discussion on October 3, 2018)

Mr. Tal Biber, Head of Markets Division in Market Operations Department (participated in discussions on August 1 and October 24, 2018)

Mr. Mickey Blank, Head of Dealing Unit in Market Operations Department (except for discussions on August 15 and October 24, 2018)

Dr. Golan Benita, Head of Strategic Risk Management Unit in Market Operations Department (except for discussions on October 3 and 24, 2018)

Ms. Francoise Ben-Zur, Head of Finance Division in Market Operations Department

Ms. Guenia De Mayo, Head of Risk Management Unit in Market Operations Department (except for discussions on August 1 and15, 2018)

Mr. David Hoffman, Senior Economist, Market Operations Department (participated in discussion on August 1, 2018)

Mr. Mark Yohai, Senior Economist, Market Operations Department (except for discussion on August 15, 2018)

Mr. Dor Lev, Economist, Market Operations Department (participated in discussions on October 3 and 24, 2018)

Mr. Roee Levy, Economist in Risk Management Unit in Market Operations Department

Mr. Yoav Soffer, Acting Spokesperson of the Bank of Israel (participated in discussions on October 24, 2018 and January 23, 2019)

Prof. Michel Strawczynski, Research Department Director

Ms. Michal Sinai Livyatan, Legal Department (participated in discussion on October 3, 2018)

Dr. Amit Friedman, Department Management, Market Operations Department

Ms. Esti Schwartz, Secretary of the Monetary Committee and the Supervisory Council

Appendix

Bank of Israel
Monetary Committee Secretariat

Foreign Exchange Reserves: Investment Policy Guidelines[1]

In effect from January 23, 2019

In accordance with Section 40(b) of the Bank of Israel Law, 5770-2010, the Monetary Committee is to establish the guidelines for the investment policy of the foreign exchange reserves.

1. Basic guidelines derived from the goals of holding the reserves

The investment policy of the reserves portfolio is based on the main goal of achieving the Bank of Israel's objectives and proper fulfillment of its functions as they are detailed in the Bank of Israel Law. Subject to that, the investment policy is also based on the following goals:

a) **Maintaining the purchasing power of the reserves:** This principle is interpreted as preserving the value of the reserves in terms of measurement currency chosen by the Bank—the numeraire (see 3 below).
b) **Managing the reserves with a high level of liquidity:** A large part of the reserves are to be invested in assets that can be liquidated rapidly at short notice and without negatively impacting their value. The precise level of liquidity is to be increased to the extent that the actual level of reserves relative to the desired level is low (5(e) below).
c) **Achieving an appropriate return on the reserves portfolio,** at an acceptable level of risk, to the extent that it does not negatively impact the achievement of the previous goals (see 4 below).

The investment strategy of the reserves portfolio shall be formulated with weight given to the risk profile and to the portfolio's returns in the short term and medium term, subject to compliance with the safety and liquidity limitations at any given moment.

2. The division of work between the Monetary Committee, the Foreign Currency Committee, and the Markets Operations Department

In implementing Section 40(b) of the Bank of Israel Law, the Committee made a distinction between establishing the guidelines and periodic monitoring, and setting the detailed instructions for the day to day management of the portfolio.

The Monetary Committee will set the guidelines, in consultation with the Minister of Finance as established by law, will update the guidelines to the extent necessary, and will monitor the implementation of the investment policy by the Markets Operations Department.

[1] The characteristics of the reserves portfolio are reported to the public in an annual report published on the Bank of Israel website.

The Foreign Currency Committee Committee—an internal Bank of Israel committee headed by the Governor—will translate the guidelines into the detailed foreign exchange reserves investment policy.
The Market Operations Department will implement the investment policy, within the framework of degrees of freedom which will be set periodically by the Monetary Committee and the Foreign Currency Committee, and will report to the Monetary Committee and the Foreign Currency Committee on a quarterly basis on the implementation of the policy: developments in international markets and their impact on the management of the reserves, the investment decisions reached by the Department, the portfolio's rate of return, and the financial and other risks to which the portfolio is exposed.
The Market Operations Department will advise the Monetary Committee and the Foreign Currency Committee on fulfilling their functions, through position papers and suggestions for discussion in the Committees.
The Monetary Committee will approve and update periodically the division of authorities regarding the investment policy of the foreign exchange reserves.

3. The measurement currency for the holding rate of return on the foreign exchange reserves and the principles for its determination

The measurement currency for the holding rate of return on the reserves—hereinafter, the numeraire—is a basket of currencies and its composition allocation[2] is decided by the Monetary Committee. The allocation of the numeraire is set according to principles which reflect the goals of holding the reserves.
The principles according to which the composition of the numeraire is set are:

a) The currency composition of actual imports, and of imports expected in an emergency situation
b) The composition of the short and medium term external debt
c) Assessments regarding the liquidity of the various currencies in which investment is possible.

The composition of the numeraire is also examined from the perspective of the currency composition of foreign exchange reserves portfolios of all central banks of countries that are IMF members, as reported by the IMF.

The composition of the numeraire will be set at the end of each year by the Monetary Committee, on the basis of the Market Operations Department’s recommendation, in accordance with changes in domestic and global market conditions. If there are significant changes in one or more of principles (a)–(c), the composition of the numeraire will be brought to discussion by the Monetary Committee.

The reserves portfolio holding rate of return is measured in terms of the numeraire, so that the currency basket which makes up the numeraire is seen by the reserves portfolio managers as a risk-free currency composition.

4. The risk profile

[2] The numeraire is defined in terms of units of currency (i.e., X dollars, Y euro, and Z pound sterling). The ratio between the currency units (in the above example, X:Y:Z) is determined by the currency composition of the portfolio (in the above example, % of dollars in the portfolio, % euro, and % pound sterling), which is set by the Committee and the exchange rates of the numeraire currencies at the time of the decision.

The risk profile determines the maximum level of risk that the Monetary Committee is willing to accept in order to achieve the goals of holding the reserves. In establishing the risk profile, scenario analysis and a range of analytical tools to measure risk, such as VaR, CVaR, and others should be used. The risk profile is to be set by the Committee on a periodic basis in accordance with the changing conditions in the global capital markets.

The risk profile will be set so that given the worst 5 percent of outcomes, the average loss will not be greater than 475 basis points over a 1-year horizon. This risk level was established with the goal of limiting risk in the short term and increasing the probability of complying with the target of maintaining the purchasing power in the medium term.

5. The rules for managing the financial risks of the reserves

The rules for managing the financial risks to which the reserves are exposed, and their asset allocation, are to be set in accordance with the goals of the investment policy of the reserves (Section 1 above) and subject to the risk profile set by the Monetary Committee (Section 4). The asset allocation of the foreign exchange reserves will be approved at least once a year by the Monetary Committee.

a) *The types of assets approved for use in managing the reserves are:*
   1. Bonds (including bonds with fixed interest, with variable interest, and CPI-indexed bonds)
   2. Mortgage-backed securities (MBS) and asset-backed securities (ABS), a maximum of 6 percent of total reserves
   3. Tradable Certificates of Deposit (CDs)
   4. Fixed term deposits
   5. Commercial Paper (CP)
   6. Equities, a maximum of 17.5 percent of total reserves
   7. Derivatives whose underlying asset is permitted for investment.

b) *Management against a benchmark*
   Control over most features of the financial risk of the reserves is anchored in their management against a system of benchmarks. The rules for managing the financial risks of the reserves generate the currency allocation of the benchmarks, the features of their price risk (such as duration) in each currency, and the asset types included in it. The investment returns of the portfolio managers are measured against these benchmarks.

c) *Currency risk:*
   The currency exposure of the reserves is set by:

1) The composition of the numeraire.
2) Strategic currency exposures relative to the composition of the numeraire: The extent of the strategic currency exposures is limited to 10 percent of total reserves. The composition and amounts of the exposures will be set by the Monetary Committee.
3) Short and medium term currency exposures relative to the composition of the numeraire: Their amount is limited to 2 percent of the total reserves. The composition and amounts of the exposures will be set by the Market Operations Department.

d) *Credit risk:*

In order to limit the credit risk inherent in day-to-day management of the reserves portfolio, the Monetary Committee set the following rules:

1. Investment is permitted in the currency of countries whose major credit rating category is at least BBB. Investment in currencies of countries whose credit rating category is BBB is limited to 1 percent of the total reserves and requires the specific authorization of the Monetary Committee.
2. Investment is permitted in bonds and commercial paper issued by governments, or with government guarantees, if their major credit rating category is at least a BBB rating. Investment in the BBB major rating category is limited to 1 percent of total reserves, and requires the specific authorization of the Monetary Committee.
3. Investment in bonds of public sector entities (PSE) is limited to a maximum of 15 percent of total reserves, and only in bonds whose major credit rating category is at least A.
4. Investment in corporate bonds is limited to 15 percent of total reserves, and only in bonds whose major credit rating category is at least BBB.
5. Investment in bonds and deposits of international financial institutions is limited to 15 percent of the reserves.
6. The exposure of the reserves to the international banking system should not be greater than 10 percent of total reserves, and that is only to banks and brokers whose major credit rating category is at least A. Activity with banks and brokers whose major credit rating category is BBB is limited to DVP[3] (delivery versus payment) alone.

e) Liquidity risk:

In order to provide an immediate response to the financial problems which arise during emergencies, a large portion of the reserves should be invested in assets that can be liquidated in large amounts at short notice and without negatively impacting their realization value.

1. The assets in which the reserves are invested are classified into 3 levels of liquidity:
    a. Highly liquid assets that can be realized within a month without negatively impacting their realization value.
    b. Assets that can be realized within three months without negatively impacting their realization value.
    c. Low-liquidity assets that can be realized in a period exceeding three months without negatively impacting their realization value.

2. A minimum level of investment was set for highly liquid assets, and a maximum level was set for low-liquidity assets. Classification of assets into the various liquidity levels can change due to changes in market conditions.

3. At least 45 percent of the total reserves are to be invested in government bonds.

f) Active management and compliance rules:

The reserves portfolio is actively managed within the framework of limited and well defined degrees of freedom, as long as the investment policy adheres to the guidelines.

[3] DVP activity is when the payment and the asset are transferred between the sides at the same time and thus the credit risk in such activity is essentially zero.

g) Risk assets:
Total combined investment in equities (Section 5.a.6) and in corporate bonds (Section 5.d.4) shall not exceed 25 percent of the total reserves.

6. The nonfinancial risks inherent in managing the reserves

In determining the investment policy for the reserves, there must be taken into account the exposure of the Bank and of the portfolio to the various nonfinancial risks inherent in investing the reserves—reputation risk, legal risk, political risk, operational risk, and so forth.

7. Measuring returns and reporting them

The reserves are managed with transparency. The Market Operations Department shall report periodically to the Monetary Committee (see 2 above) on the amount of the reserves and changes in them, the currency composition, changes in currency exposures, the asset allocation, portfolio duration, country exposure, credit risk, liquidity risk, and the return on the portfolio and its various components. The report should include an analysis of the current developments in the financial markets and their effect on the management of the reserves.

8. Handling passive breaches

The Monetary Committee will set the rules for handling passive breaches from the investment policy guidelines.