Bank of Israel
Monetary Committee Secretariat

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

Update of the foreign exchange reserves investment policy guidelines

The discussions were held on December 18, 2019, January 1, 2020, June 10, 2020, July 15 and 22, 2020, October 28, 2020, November 11, 2020, December 16, 2020, January 6 and 20, 2021, and April 7, 2021.

Decision on changes in the investment policy guidelines for the foreign exchange reserves

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

1. Change two investment policy goals—"Maintaining the purchasing power of the reserves in terms of the numeraire" and "Achieving an appropriate return"—to the following two investment policy goals:

   a. Achieving a return in shekel terms that, in the long term, will cover at least the financing cost of holding the reserves;

   b. Maximizing the holding rate of return in the medium term, in terms of the currency benchmark and within the framework of the risk profile, subject to attaining the goal of managing the reserves with a high level of liquidity.
2. Changing the maximum risk constraint from a CVaR level of 475 basis points to a CVaR level of 900 basis points over a 1-year horizon.
3. Changing the investment constraint in equities from 17.5 percent to 27 percent of total reserves.
4. Adding the possibility of investing in below investment grade (high yield) corporate debt, up to 5 percent of total reserves.

5. Changing the investment constraint in total risk assets—the constraint on investment in equities and in investment-grade corporate bonds and in below investment grade (high yield) corporate bonds was increased from 25 percent to 35 percent of total reserves.
6. The measurement of the holding rate of return on the foreign exchange reserves, the currency benchmark and the principles for its determination—the composition of the currency benchmark will be examined by the Monetary Committee on the basis of the Markets Department's recommendation, in accordance with changes in global markets, at the end of each year or if there are material changes in circumstances. The currency benchmark will be determined by the Committee based on the following principles: currency diversification, stability, inclusion of reserve currencies only, varied and liquid asset markets, and the volatility of the return on the reserves in shekel terms in the long term.

The background to the changes:

The Committee this year examined the goals of the investment policy, the measurement currency of the reserves, and their risk profile. The analysis was carried out in view of the increase in the level of the foreign exchange reserves, $184 billion, relative to the adequate level, an increase that is even expected to continue. The increase is the result of the implementation of the monetary policy and in the past year is also the result of exchanging foreign currency for the government following Ministry of Finance issuances abroad.

The main goal of holding the reserves is to supply the economy with foreign currency at a sufficient amount in times of crisis or emergency, so that the reserves will remain the country's main source of financing in foreign currency. As such, one of the main goals of the reserves investment policy that was set in the past, when the level of the reserves was much lower, was to maintain the purchasing power of the reserves in terms of their expected uses in a crisis. This is so that in a scenario of sharp depreciation of the currencies in which the reserves are invested vis-à-vis the usage currencies, the ability of the reserves to finance the uses will not be adversely impacted.

The higher the reserves level is, and the further it is from the adequate level of the reserves, the smaller the sensitivity of the reserves to a deviation from the currency composition of the uses. Moreover, the Committee is of the view that at the current level of the reserves, it is not relevant to maintain the purchasing power of the reserves in terms of the uses, as there is a sufficiently large buffer that makes it possible to invest the reserves at a currency composition that is different from the composition of the uses without risking their ability to finance the uses, even in a scenario of sharp deprecation of those currencies vis-à-vis the usage currencies. In addition, the larger the cushion is, it is desirable and even appropriate to manage the reserves

with a longer investment horizon and to achieve in the long term a return in shekel terms that will at least cover the financing cost[1] of holding the reserves, even at the cost of some increase in the level of risk in the short term. This is in order to enable the Bank of Israel to continue to use the purchases tool as one of its monetary tools for the economy's benefit.

Meeting these goals will be made possible by extending the investment horizon of the reserves and increasing the risk level, which will be reflected in a change in the maximum CVaR risk index allowed in the short term and in a change in the maximum investment constraints of the risk assets.

In parallel with changing the investment policy goals, as the reserves are invested only in foreign currency, the Committee also determined that they will be managed against a currency benchmark, which will replace the numeraire. The Monetary Committee is of the view that the holding rate of return on the reserves should be measured and reported in terms of the currency benchmark and in shekel terms. The currency benchmark will be determined based on several principles that will be specified in the investment guidelines. This benchmark will also be used for measuring the risk and for the asset allocation.

The proposed changes in the investment guidelines were submitted on January 26, 2021 to the Minister of Finance, in order to hold consultations, as required by Section 40(b) of the Bank of Israel Law, 5770-2010.

Following the end of the consultation process with the Ministry of Finance, the revised guidelines came into effect on April 7, 2021.

The new guidelines are attached as an Appendix.

Participants:

[1] The financing cost of holding the reserves is the gap between the cost of raising the capital in shekels required for holding the reserves and the return of the foreign exchange reserves in terms of the currency benchmark with the addition of the gain or loss from the currency exposure vis-à-vis the shekel.

Members of the Monetary Committee

Prof. Amir Yaron, Governor of the Bank of Israel and Chairperson

Mr. Andrew Abir, Deputy Governor of the Bank of Israel

Prof. Reuben Gronau

Prof. Moshe Hazan

Prof. Zvi Hercowitz

Prof. Michel Strawczynski

Other participants

Ms. Shiran Azarzar, Markets Department (participated in some of the discussions)

Mr. Barak Ettinger, Markets Department (participated in some of the discussions)

Mr. Tal Biber, Head of Markets Division in Markets Department

Mr. Mickey Blank, Markets Department

Dr. Golan Benita, Chief of Staff to the Governor

Ms. Deborah Ben-Ezra, Markets Department (participated in some of the discussions)

Ms. Francoise Ben-Zur, Head of Financial Division in Markets Department

Mr. Uri Barazani, Spokesperson of the Bank (participated in some of the discussions)

Ms. Guenia De Mayo, Markets Department (participated in some of the discussions)

Mr. David Hoffman, Markets Department (participated in some of the discussions)

Mr. Hanoch Danenberg, Markets Department (participated in some of the discussions)

Mr. Oren Hadjes, Markets Department (participated in some of the discussions)

Ms. Hagit Waknin, Markets Department (participated in some of the discussions)

Mr. Mark Yohai, Markets Department (participated in some of the discussions)

Ms. Ketty Cohen, Markets Department (participated in some of the discussions)

Mr. Dor Lev, Markets Department (participated in some of the discussions)

Mr. Roee Levy, Markets Department (participated in some of the discussions)

Mr. Arad May, Secretariat of the Monetary Committee and the Supervisory Council

Mr. Ori Marilus, Markets Department (participated in some of the discussions)

Mr. Yoav Soffer, Advisor to the Deputy Governor (participated in some of the discussions)

Ms. Michal Sinai Livyatan, Legal Department

Ms. Jenny Seri, Markets Department (participated in some of the discussions)

Dr. Amit Friedman, Advisor to the Markets Department Director (participated in some of the discussions)

Mr. Ran Tzion, Markets Department (participated in some of the discussions)

Mr. Idan Sneer, Markets Department (participated in some of the discussions)

Ms. Esti Schwartz, Secretary of the Monetary Committee and the Supervisory Council (participated in some of the discussions)

Ms. Tida Shamir, General Counsel (participated in some of the discussions)

Ms. Jeanina Tirosh, Markets Department (participated in some of the discussions)

Appendix

Bank of Israel

Monetary Committee Secretariat

Foreign Exchange Reserves: Investment Policy Guidelines[2]

In effect from April 7, 2021

In accordance with Section 40(b) of the Bank of Israel Law, 5770-2010 (hereinafter, "the Law"), 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) Achieving a return in shekel terms that, in the long term, will cover at least the financing cost of holding the reserves[3];

b) Maximizing the holding rate of return in the medium term, in terms of the currency benchmark (see 3. below) and within the framework of the risk profile (see 4. below), subject to attaining goal (c) below;

c) 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 decreased to the extent that the ratio of the actual level of reserves relative to the adequate level is high (5(f) below).

---

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

[3] The financing cost of holding the reserves is the gap between the cost of raising the capital in shekels required for holding the reserves and the return of the foreign exchange reserves in terms of the currency benchmark with the addition of the gain or loss from the currency exposure vis-à-vis the shekel.

2. The division of work between the Monetary Committee and the Markets Department

In implementing Section 40(b) of the Law, the Committee shall make 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 Department.

The Markets Department will implement the investment policy, within the framework of degrees of freedom which will be set periodically by the Monetary Committee, and will report to the Monetary 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 Markets Department will advise the Monetary Committee on fulfilling its functions, through position papers and suggestions for discussion in the Committee.

The Monetary Committee will approve and update as needed the division of authorities regarding the investment policy of the foreign exchange reserves.

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

The holding rate of return on the reserves shall be measured and reported in Monetary Committee reports in terms of the currency benchmark and in shekel terms. The currency benchmark is a basket of currencies that will be used, in addition to the shekel, for measuring the rate of return on the foreign exchange reserves. As the rate of return on the foreign exchange reserves will also be measured in terms of the currency benchmark, its composition will be defined as the risk-free currency composition for the reserves portfolio managers.

The currency benchmark will be set by the Committee based on the following principles:

(a) Diversification: The currency diversification of the currency benchmark contributes to reducing exchange rate risk vis-à-vis the shekel in the Bank’s balance sheet and encourages investment diversification;

(b) Stability: The principle of stability is important both for asset allocation as well as for currency allocation. Given that the reserves are held for the long term, frequent or sharp changes in the currency weights in the benchmark currency, which will lead as well to changes in the weight of the assets in those currencies, are liable to lead to a loss in the long term. Therefore, the stability of the composition of the currency benchmark should be maintained and frequent or sharp changes in it should be avoided;

(c) The currency benchmark shall only include reserve currencies: Due to the importance of the goals of liquidity and appropriate return, the currency benchmark will be made up of currencies that are recognized around the world as reserve currencies;

(d) The currencies that will be included in the currency benchmark will be those of countries in which there is a range of asset markets, with high liquidity;

(e) In order to achieve a return that covers, in the long term, the financing cost of holding the reserves, in choosing the currency benchmark composition the Committee will take into account the volatility of the reserves' long-term return in shekel terms.

The composition of the currency benchmark shall be examined by the Monetary Committee based on the recommendation of the Markets Department, in accordance with changes in global markets, at the end of each year or if there are material changes in said circumstances.

4. The risk profile

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 will be set so that given the worst 5 percent of outcomes, the average loss will not be greater than 900 basis points over a 1-year horizon (see 3. above). This risk level was set with the goal of limiting risk in the short term and increasing the probability of complying with the target of covering the financing cost in the long term.

The risk level will be set at least once a year by the Monetary Committee in accordance with background conditions.

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, which will be set in terms of the currency benchmark, are to be determined 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 in terms of the currency benchmark 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) issued by governments or with the full and direct guarantee of governments, or by a PSE (Public Sector Entity) or by multinational institutions
6. Equities, a maximum of 27 percent of total reserves
7. Derivatives whose underlying asset is permitted for investment. It should be clarified that the constraints in the guidelines regarding any permitted investment apply as well to investment in derivatives on the same asset as noted in this section.
8. Cash.

b) *Management against a benchmark*

Control over 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 currency benchmark (Section 3 above).
2. Strategic currency exposures relative to the composition of the currency benchmark: 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 currency benchmark: Their amount is limited to 2 percent of the total reserves. The composition and amounts of the exposures will be set by the Markets Department.

d) *Market risk:*

In order to limit the market risk to which the foreign exchange reserves are exposed the Monetary Committee set:

1. The risk profile of the foreign exchange reserves in accordance with Section 4.
2. Total combined investment in equities (Section 6.a.5) and in corporate bonds (Section 4.e.5) shall not exceed 35 percent of the total reserves.
3. A share of at least 45 percent of the total reserves is to be invested in cash, government bonds, or in deposits at central banks.

e) *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 in the currency, or denominated in the currency, of countries4 is permitted in countries whose generic credit rating5 category is at least BBB. Investment in currencies, or denominated in currencies, of countries whose generic 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 (CP) issued by governments, or with full and direct government guarantees, if their generic credit rating category is at least BBB. Investment in the

[4] Country—in this document, foreign countries.

[5] Credit rating: The credit rating of at least one of the international credit rating agencies—IBCA International Rating Agency, Moody's Investor Services, or Standard & Poor's Corporation, or another rating company based on the Bank of Israel internal rating—in accordance with the approval of the Monetary Committee.

BBB generic rating category is limited to 1 percent of total reserves, and requires the specific authorization of the Monetary Committee.

3. Investment in bonds and commercial paper (CP) of public sector entities (PSE) is limited to a maximum of 15 percent of total reserves, and only in bonds or CP whose generic credit rating category is at least A.
4. Investment in corporate bonds is limited to 15 percent of total reserves. Investment in corporate bonds for which their credit rating is below BBB- is permitted only up to a share of 5 percent of the total reserves.
5. Investment in bonds and CP of multinational financial institutions and deposits with them is limited to 15 percent of the reserves.
6. The total exposure of the reserves to the banking system and brokers should not exceed 10 percent of total reserves
7. Activity is permitted with banks and brokers whose generic credit rating category is at least BBB. Activity with banks and brokers whose generic credit rating category is BBB is limited to DVP6 (delivery versus payment) alone.
8. If a bank or a broker does not have a credit rating, DVP activity is permitted with them only upon receipt of a full and direct guarantee letter from its parent company and if its generic credit rating category is at least BBB.

f) *Liquidity risk:*

In order to provide an immediate response to the financial problems that arise during emergencies, an appropriate 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. The Monetary Committee is to set a minimum level of investment for highly liquid assets, and set a maximum level for low-liquidity assets. Classification of assets into the various liquidity levels can change due to changes in market conditions.

g) *Active management and compliance rules:*

The reserves portfolio is actively managed according to the investment policy and within the framework of limited and well defined degrees of freedom, that are to be set by the Monetary Committee.

6. The nonfinancial risks inherent in managing the reserves

In determining the investment policy for the reserves, 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—should be taken into account as well.

7. Measuring returns and reporting them

The reserves are managed with transparency. The Markets Department shall report periodically to the Monetary Committee (see 2 above) on the amount of the reserves and changes in them, the currency benchmark 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 in terms of the currency benchmark and in shekel terms. 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.

[6] 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.