EXPLANATORY REMARKS TO THE 2016 FINANCIAL STATEMENTS

1. Introduction

The Bank of Israel (hereinafter, “the Bank”) performs its functions as a central bank and acts to achieve the objectives established for it pursuant to the Bank of Israel Law, 5770-2010 (hereinafter, “the BOI Law” or “the Law”)—maintaining price stability, and supporting growth, employment, the reduction of social gaps, and the stability and orderly activity of the financial system. The Bank’s activity is not necessarily intended to yield profits. Certain of the actions taken by the Bank have significant implications on its financial statements, yet at the same time, the achievement of the Bank’s objectives and the fulfillment of its functions have market-wide economic benefits, which are not reflected in the financial statements.

According to the Law, the Bank’s functions consist of the following: managing monetary policy; holding and managing the foreign currency reserves of the State; supporting the orderly activity of the foreign currency market in Israel; acting as banker of the Government; regulating the economy’s payment and settlement systems so as to ensure their efficiency and stability; issuing currency and regulating and guiding the cash system of the economy; supervising and regulating the banking system.

2. The Principal Changes in the Financial Statements

2.1 The Bank’s Balance Sheet

The Bank of Israel’s Balance Sheet at the end of 2016 totaled approximately NIS 394 billion, compared with approximately NIS 369 billion at the end of 2015 (an increase of approximately NIS 25 billion, 7 percent).

The main increase in the assets side is attributed to the increase in the balance of “Foreign currency assets abroad” by approximately NIS 27 billion to approximately NIS 384 billion. In dollar terms, the scope of foreign exchange reserves[1] increased by approximately \$8 billion, and their balance at year end amounted to approximately \$98.4 billion. The increase is mainly a result of foreign currency purchases by the Bank in a total of approximately \$6 billion, and transfers by the Government totaling approximately \$2 billion.

[1] In these explanatory remarks, the term “foreign exchange reserves” is used in its economic sense. The foreign exchange reserves are composed of the balance of “Foreign currency assets abroad”, less the balance of “Foreign currency liabilities abroad”. The change in the balance of “Foreign currency assets abroad” in 2016 amounted to approximately NIS 27 billion and the change in the balance of “Foreign currency liabilities abroad” in 2016 amounted to approximately NIS 2 billion.

Total liabilities on the Balance Sheet increased by approximately NIS 32 billion, as a result of several principal factors: (1) an increase in the net balance of monetary instruments[2]—makam and time deposits—by approximately NIS 17 billion, to approximately NIS 277 billion. Part of the increase derived from the need to sterilize the excess liquidity injected into the markets, mainly as a result of said purchases of foreign exchange reserves; (2) an increase of approximately NIS 11 billion in the monetary base in circulation, consisting of banknotes and coins in circulation and the banks' demand deposits in NIS. This increase was affected by the reduction of the BOI interest rate to 0.1 percent in 2015; (3) an increase in the Government's deposits in the Bank by approximately NIS 2 billion.

The Bank's equity deficit in 2016 increased by about NIS 5 billion, in the amount of the annual loss, with a deficit balance of about NIS 61.5 billion at the end of the year (see Section 4.5, "the Bank's Equity").

2.2 Statement of Operations

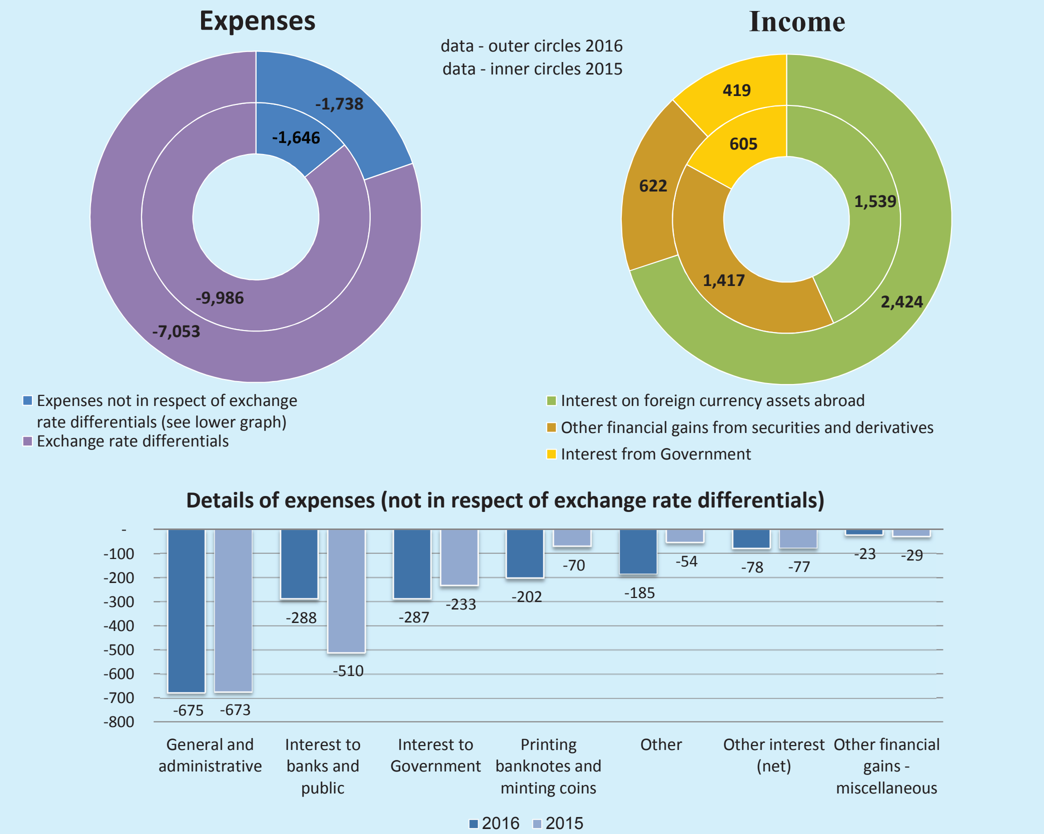
The loss in the current year amounted to about NIS 5.3 billion, compared with a loss of approximately NIS 8.1 billion in 2015. The annual loss was principally affected by expenses in respect of exchange rate differentials, totaling approximately NIS 7.1 billion this year, most of which resulted from the depreciation of the euro and the pound sterling against the shekel. In contrast, there was a decrease by about NIS 2.9 billion in expenses in respect of exchange rate differentials compared with 2015 (Figure 1). Most of the decrease was a result of the decline in expenses in respect of exchange rate differentials due to the appreciation of the shekel against the euro by a lower rate this year (about 4.8 percent this year compared with 10.1 percent in 2015). In contrast, there was an increase in expenses in respect of exchange rate differentials mainly due to the appreciation of the shekel against the pound sterling by a higher rate this year (about 18.3 percent this year compared with 4.6 percent in 2015).

The Statement of Operations does not include unrealized gains[3] from exchange rate differentials on foreign exchange reserves, which are reflected in the revaluation account on the Balance Sheet (see Notes 1 and 15 to the financial statements). Unrealized losses from exchange rate differentials, mainly in respect of the dollar at a scope of about NIS 3.5 billion, were offset against retained earnings in the revaluation accounts and were excluded from the Statement of Operations.

[2] The balance of makam decreased by approximately NIS 11 billion and the balance of time deposits increased by approximately NIS 28 billion.

[3] In accordance with the Bank's accounting policy, gains deriving from holding the reserves as well as other gains are classified as either realized gains, and are included in the Bank's income, or as unrealized revaluation gains. The latter are carried to the revaluation accounts in the Balance Sheet and are not reflected in the Bank's income for the relevant year. The accumulated losses in the revaluation accounts are carried to the Statement of Operations at the end of the year.

Figure 1
Income and Expenses in 2016 and 2015
(NIS million)



Source: Bank of Israel.

The Bank's net income from investment of the foreign exchange reserves, consisting of interest and other financial gains and excluding exchange rate differentials, remained practically unchanged at about NIS 3 billion in 2016 (in 2015 - about NIS 2.9 billion). This net income, however, was affected by two contrasting trends: the increase of about NIS 0.9 billion in interest income on foreign exchange reserves in 2016 against a decrease of about NIS 0.8 billion in other financial gains from foreign exchange reserves.

The Statement of Operations also does not include unrealized gains from the effect of the changes in the revaluation of tradable securities which are reflected in the revaluation accounts in the Balance Sheet. (See Note 1 to the financial statements). The revaluation of readable securities in local currency reduced the revaluation account in 2016 by about NIS 0.3 billion (as opposed to a reduction by about NIS 0.4 billion in 2015).

Interest expenses to banks and the public this year totaled only about NIS 0.3 billion (a decrease of about NIS 0.2 billion compared with 2015) - the result of the decrease in issuances of makam and the reduction of the Bank of Israel's interest to 0.1 percent in March 2015.

3. Analysis and Explanation of the Principal Changes in the Financial Statements

3.1 Characteristics and Composition of the Financial Statements

The financial statements have been prepared in conformity with generally accepted accounting principles in Israel (Israeli GAAP), adjusted to the special activity which is characteristic of a central bank, as generally practiced by other central banks (see Note 1 to the financial statements).

The Bank's financial statements are characterized by considerable currency imbalance in the composition of the Bank's assets and liabilities. This imbalance persisted in 2016. A large majority of the Bank's assets are denominated in foreign currency (about 98 percent at the end of 2016), whereas the Bank's liabilities are mostly in shekels; the liabilities in foreign currency only account for about 5 percent of the total Balance Sheet (Figure 2).

This situation exposes the Bank to fluctuations in the reported financial results due to changes in the shekel's exchange rate in relation to foreign currencies and to changes in local interest rates in relation to other economies.[4]

In 2008–16, foreign exchange reserves grew due to substantial purchases; partly as a result of the plan designed to moderate extreme exchange rate fluctuations that are not in line with economic fundamentals, and later as part of the plan to moderate the effect of natural gas production on the exchange rate, a plan which was put into practice in May 2013. These purchases increased the foreign exchange reserves managed by the Bank, while at the same time increasing the scope of monetary instruments used to absorb the excess funds injected in return for the purchase of foreign currency. This increase in the Bank's Balance Sheet enhances the risk of fluctuations in the Bank's profits given the gap between the yield on the reserves and the expenses in respect of the monetary instruments which now address a larger base. However, the negative gap between the yields narrowed markedly in recent years and even reversed the trend whereby gains on the foreign exchange reserves have exceeded the financial expenses of foreign currency purchases using monetary instruments. The main reason for the reversal in the last decade is the reduction of the interest rate gaps between Israel and the markets in which the reserves are invested, specifically the United States, and the change in the risk profile of the investment portfolio due to the increase in the share component.

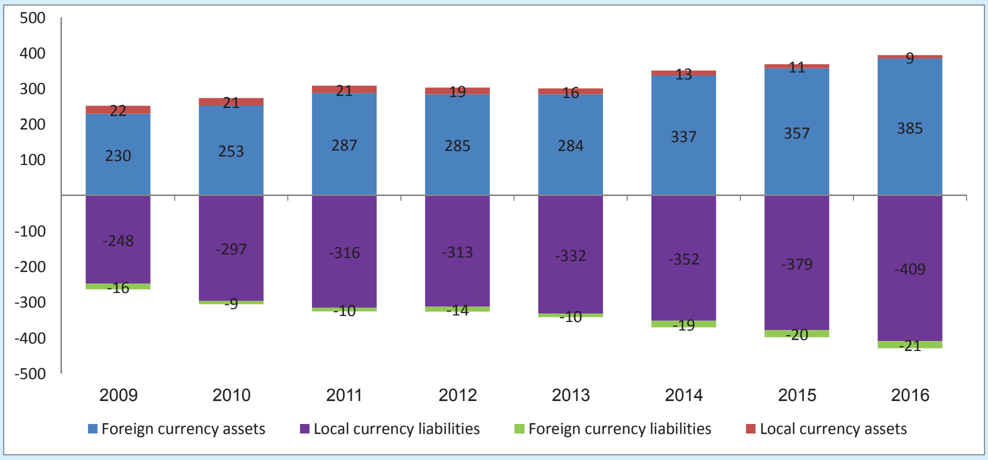
[4] The currency imbalance was first experienced in 1995–97 during which period the Bank adopted a tightening monetary policy to achieve the Government's inflation target. As a result of the ensuing capital inflows by the private sector, the Bank of Israel was forced to purchase foreign currency from the public to maintain the exchange rate at the lower end of the currency band and reabsorb the shekels injected to the market accordingly. The foreign exchange reserves grew from an average of a few billion dollars in previous decades to about $98.4 billion at the end of 2016. Simultaneously, the balance of monetary instruments, which until 1994 was substantially composed of monetary loans, as customary in central banks around the world, has been since composed of liabilities. In 2008-2016, the balance of liabilities gradually increased to about NIS 277 billion at the end of 2016, as a result of the sterilization of injection using time deposits and makam.

The interest rate spread between Israel and the United States, which in early 2008 was 1.25 percent, reached -0.65 percent in late 2016, with the raising of the US federal funds rate (Figure 4). In addition to the changes in interest rates, which resulted in the minimization of the gap between the yields on the reserves and expenses on the monetary instruments, the decrease in yields and the gains from the investment in shares also contributed to increasing the yield on foreign exchange reserves.

The purchases of foreign currency have had another impact on the volatility of profits which arises from their exchange rate differentials: as a result of the increased scope of foreign exchange reserves in the Bank's Balance Sheet, the rate of change in the exchange rate leads to higher reserves and therefore might enhance the volatility in the Bank's gains from this component.

In contrast to the trend of the narrowing of the gap between the gains on foreign exchange reserves and the cost of monetary instruments in recent years, there is an increased risk of exchange rate losses caused by sharp appreciation, which is a main factor in the Bank's losses and accumulated deficit—a deficit that at the end of 2016 amounted to approximately NIS 61.5 billion (see more details in Section 4.5.2, "The Development of the Bank's Equity Deficit"). The balance of the revaluation account which consists of unrealized gains at year end amounted to approximately NIS 25.6 billion, so that when examining the deficit from a broader perspective while including the balance of the revaluation accounts, the deficit balance totaled only about NIS 35.9 billion.

Figure 2
The Development in the Bank's Assets and Liabilities, 2009-2016
(NIS billion)



Source: Bank of Israel.

The changes in the Bank's Financial Statements are presented in Table 1 below in a different manner than in the Financial Statements for the purpose of economic analysis. The net balances are presented in the Balance Sheet and the net operating results are presented in the Statement of Operations, in accordance with economic aggregates and the Bank's functions, for analyzing their effect on the Financial Statements for accounting purposes.

Table 1
Aggregate Balance Sheet Balances and the Resulting Profit and Loss

	December 31		Year ended December 31	
	2016	2015	2016	2015
	Balances		Income (expenses)	
	NIS million			
Net assets				
Foreign exchange reserves[a]	378,528	353,423	3,015	2,924
Securities portfolio in shekels	8,662	10,092	343	529
Total	**387,190**	**363,515**	**3,358**	**3,453**
Net liabilities and equity				
Monetary aggregate[b]	276,935	259,934	(288)	(510)
Monetary base[c]	110,498	99,711	(201)	(69)
Government balances[d]	24,289	22,412	(211)	(157)
Deposits of banking corporations in foreign currency	772	1,136	-	-
Other[e]	10,597	9,751	(931)	(802)
Revaluation accounts[f]	25,564	26,710	(7,053)	(9,986)
Bank's equity	(61,465)	(56,139)	-	-
Total	**387,190**	**363,515**	**(8,684)**	**(11,524)**
Net loss			**(5,326)**	**(8,071)**

[a] Foreign exchange reserves consist of total "Foreign currency assets abroad" under assets in the Bank's Balance Sheet less total "Foreign currency liabilities abroad" under liabilities in the Balance Sheet.
[b] The balance of *makam* (central bank bills) and time deposits in local currency less monetary loans.
[c] The balance of banknotes and coins in circulation with the addition of the balance of the shekel demand deposits of banking corporations in the Bank. The expenses in respect of this item include money printing expenses and the income is from banks' local currency demand deposits.
[d] The balance of government deposits in foreign currency with the addition of the balance of government deposits in local currency less the outstanding credit to the government.
[e] The "Other" item consists of other balances in local currency with the addition of total other assets (fixed assets and international financial institutions) less the balance of other liabilities in local currency and other liabilities in foreign currency in respect of the IMF and international financial institutions.
[f] The item consists of exchange rate differentials on foreign exchange reserves (see Notes 1f and 1n to the financial statements. The capital gains are presented in the item from which they derive).

3.2 Effect of the Economic Environment on the Financial Statements

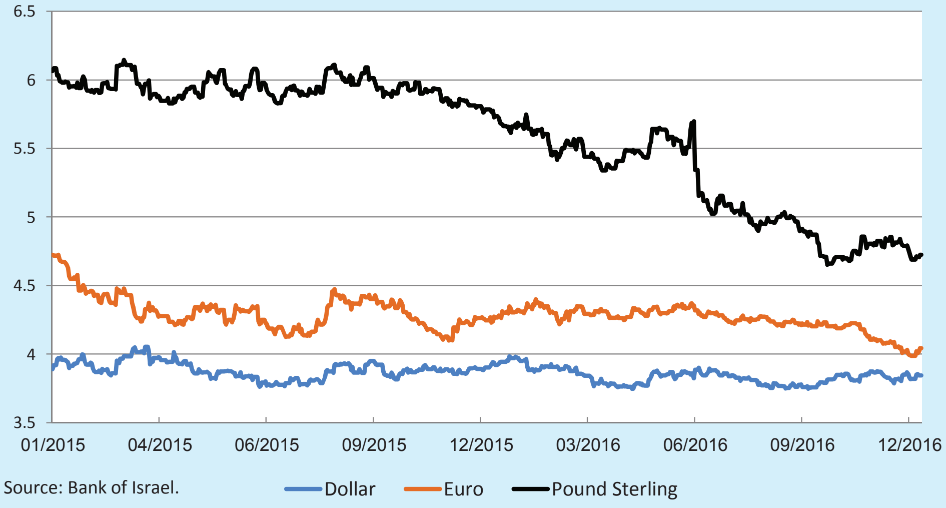
The trends which characterized 2015 continued throughout most of 2016—sluggish growth in the global economy, and the continuing accommodative monetary policy worldwide and its enhancement in some countries (as opposed to a reversed trend in the United States). These trends were expressed in extremely low interest rates around the world, even reaching negative levels in several countries, including the eurozone countries.

However, the developments in global yields were inconsistent: in contrast to the continuing declines in yields in the eurozone countries in the course of the year, US yields increased in 2016 with the US federal funds rate reaching 0.75 percent at the end of the year, continuing the trend of 2015.

The rise in yields improves the Bank's profits from the interest component but at the same time reduces its capital gains. A decline in yields has an opposite effect.

This year the shekel appreciated in relation to the main currencies in which the foreign exchange reserves are held: about 1.5 percent against the dollar, about 4.8 percent against the euro and about 18.3 percent against the pound sterling (Figure 3). The appreciation of the shekel leads to recording expenses in respect of exchange rate differentials, which as noted above accounted for the majority of the loss in the year.

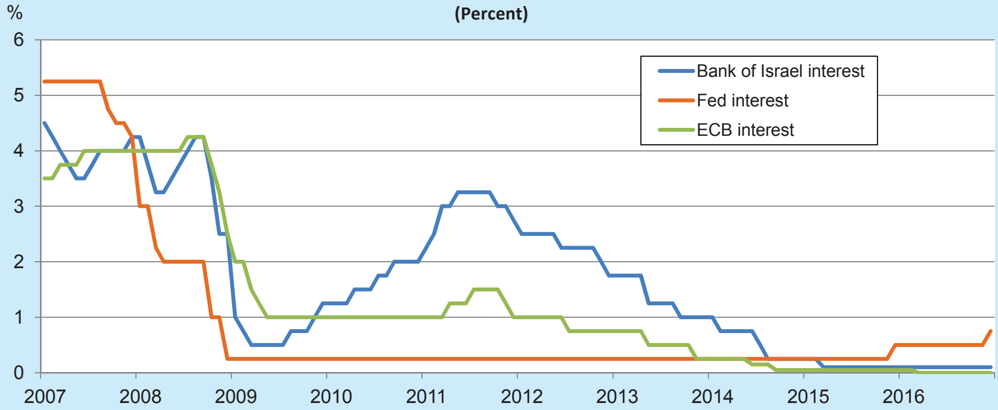
Figure 3
Development of Shekel Exchange Rates in relation to the US Dollar, Euro and Pound Sterling
2015 and 2016



Source: Bank of Israel.

Global stock market indices increased in 2016 with the US stock market recording a better yield than most major stock markets around the globe. The investment in equities in 2016 yielded positive returns for the Bank. The expansion of interest rate spreads on foreign currency derivatives enhanced the attractiveness of these instruments, increasing the scope of their use and the interest gains therefrom.

Figure 4
Short-term Interest Rates in Israel, the U.S and the Eurozone, 2007-2016
(Percent)



Source: Bank of Israel.

The Bank of Israel's interest rate remained unchanged during the year at 0.1 percent, the result of the reductions which began in late 2011. This level contributed to a significant reduction in the Bank's expenses on the monetary aggregate in relation to previous years (Figure 10). In early 2015, Israeli inflation reached a low point of -1 percent. Since then, it has remained negative, reaching -0.2 percent in 2016, the highest rate in the last two years. The negative inflation was reflected in the decrease in the indexation component of the balance of NIS tradable securities in the Balance Sheet compared with last year.

4. Selected Items

4.1 Foreign Exchange Reserves[5]

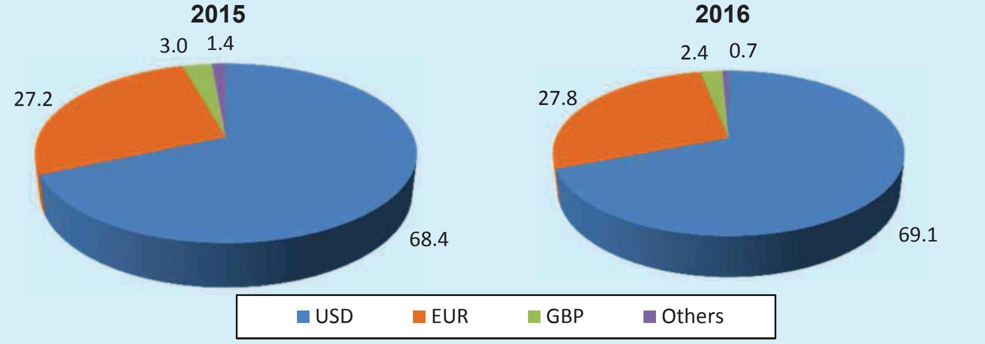
One of the Bank's functions according to the Bank of Israel Law, 5770-2010, is to hold and manage the State's foreign exchange reserves.[6] In accordance with the BOI Law, the Monetary Committee, headed by the Governor, was granted various authorities pertaining to managing the reserves, outlining the reserves' investment policy guidelines and monitoring the implementation of the policy. The investment made in keeping with this policy is reflected in the distribution of the reserve portfolio assets and currencies. The reserves portfolio currency distribution at the end of 2016 was similar to that of the end of 2015 (Figure 5). The shares of the main currencies in the portfolio—US Dollar,

[5] See details in the 2016 Investment of Foreign Exchange Reserves Report, which is published separately. In this report, the yield on holding the reserve portfolio is measured in currency basket terms—the numeraire. The numeraire represents the multicurrency composition of the basket which reflects the potential uses of the reserves.

[6] Foreign exchange reserves are comprised of the balance of "Foreign currency assets abroad" less the balance of "Foreign currency liabilities abroad" in the Bank's Balance Sheet (see Note 2 to the financial statements). These balances are used to determine the Bank's investment policy and are reported to various entities, and therefore form the basis for the analysis of trends in these explanatory remarks.

Euro and Pound Sterling—were mostly unchanged. However, the weight of the other currencies in the reserve portfolio was reduced (from 1.4 percent in 2015 to 0.7 percent at the end of 2016).

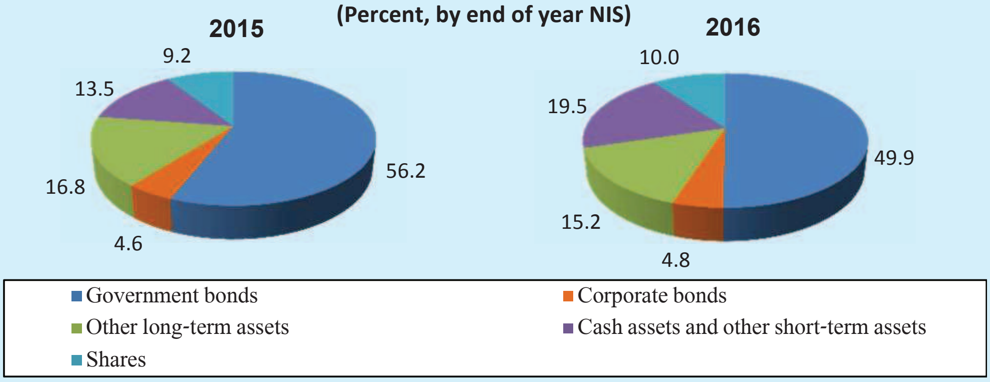
Figure 5
Currency Contribution of the Reserves Portfolio, 2016 and 2015
(Percent, by end of year NIS)



Source: Bank of Israel calculations.

The investment policy is reflected in the asset distribution of the reserves at the end of 2016 and 2015. Towards the end of 2016, the short-term spread assets in the portfolio increased at the expense of the investments in short-term Government bonds which decreased against the background of the yield spread that opened between them. The percentage of the investment in shares and corporate bonds also increased (Figure 6).

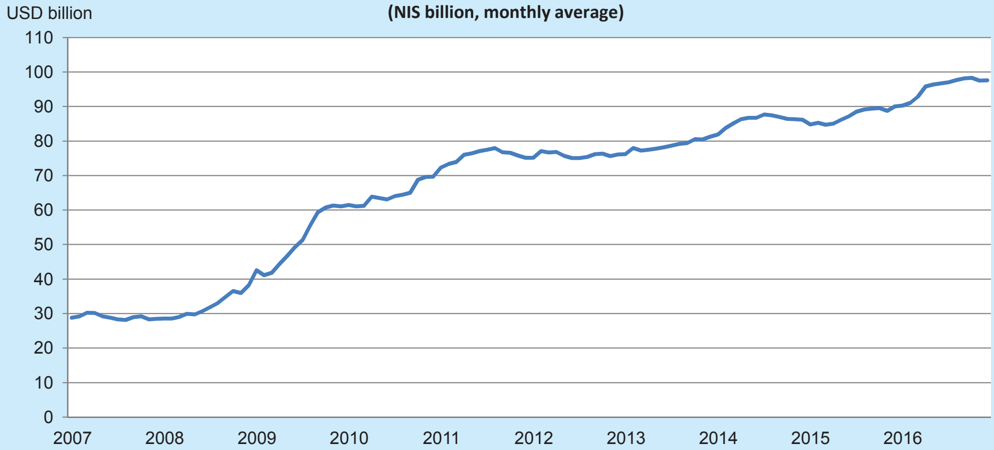
Figure 6
Asset Distribution of the Foreign Exchange Reserves Portfolio, 2016 and 2015
(Percent, by end of year NIS)



Source: Bank of Israel calculations.

As discussed above, the foreign exchange reserves increased mainly due to large scale purchases between 2008 and 2016[7] and their balance at the end of 2016 was approximately $98.4 billion (approximately NIS 379 billion). The developments in foreign exchange reserves during those years are presented in Figure 7.

Figure 7
Israel's Foreign Exchange Reserves, 2007-2016
(NIS billion, monthly average)



Source: Bank of Israel calculations.

This year, foreign exchange reserves increased by about NIS 25 billion (about $8 billion). The increase derives mainly from foreign exchange purchases by the Bank of Israel totaling approximately NIS 23 billion (about $ 6 billion) (Table 2). About two-thirds of the purchases were made within the framework of the Bank's intervention designed to moderate exchange rate fluctuations that are not in line with fundamental economic market conditions. The remaining third was purchased in the context of the plan intended to offset the effects of natural gas production on the current account.

Interest income and realized capital gains from foreign exchange reserves, excluding exchange rate differentials, contributed approximately NIS 3 billion to the increase in reserves (approximately $ 0.8 billion). Moreover, the price revaluation contributed approximately NIS 2.7 billion (approximately $ 0.7 billion) to the increase in reserves. In contrast, negative exchange rate differentials were a main factor in the decrease of approximately NIS 11.3 billion (approximately $ 1.6 billion) in reserves. The negative exchange rate differentials were mainly accrued as a result of the appreciation of the shekel by about 1.5 percent against the dollar, about 4.8 percent against the euro and about 18.3 percent against the pound sterling (Figure 3).

[7] Partly as a direct result of the plan designed to moderate atypical exchange rate fluctuations that do not correspond to the economic fundamentals and later as a result of the adoption of a plan to moderate the effects of natural gas production on the exchange rate which was put into practice in May 2013.

Government and private sector transfers to abroad (net) totaled approximately NIS 8 billion (approximately $ 2 billion) in 2016.

Table 2
Contribution to Foreign Exchange Reserves, by Sector

	2016	2015	2016	2015
	NIS million		USD million	
Change in foreign exchange reserves	**25,105**	**18,575**	**7,872**	**4,474**
Bank of Israel				
Purchases	23,086	33,842	6,040	8,770
Profits	3,015	2,924	785	748
Price revaluation	2,734	(968)	728	(253)
Exchange rate differentials and other[a]	(11,289)	(10,185)	(1,604)	(2,965)
Total Bank of Israel	**17,546**	**25,613**	**5,949**	**6,300**
The government[b]	**7,532**	**(5,056)**	**1,920**	**(1,310)**
The private sector[c]	**27**	**(1,982)**	**3**	**(516)**

[a] Includes the Bank's payments and receipts in foreign currency.
[b] Transfers from abroad by the Government and national institutions.
[c] Includes income tax payments of the sector in foreign currency.

4.1.1 Income from the Foreign Exchange Reserves

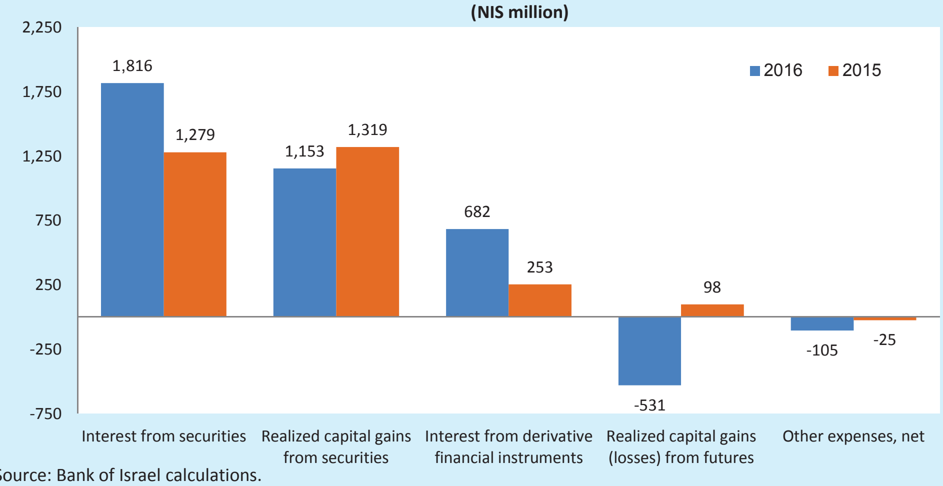
The income from interest and capital gains[8],[9] in respect of foreign exchange reserves, excluding exchange rate differentials, amounted in 2016 to approximately NIS 3 billion (Table 3). The income is comprised of: interest income of approximately NIS 2.4 billion and income from capital gains and other income of approximately NIS 0.6 billion (in 2015—NIS 1.5 billion in interest and NIS 1.4 billion in capital gains).

The income from interest and capital gains is mainly in respect of securities and is comprised of interest income totaling approximately NIS 1.8 billion and income from capital gains totaling approximately NIS 1.2 billion. (In 2015—approximately NIS 1.3 billion in interest and approximately NIS 1.3 billion in capital gains). Figure 8 below presents the composition of gains based on the type and source of income.

The analysis of realized gains from foreign exchange reserves demonstrates that income from securities, from interest and from capital gains increased by approximately NIS 371 million compared with last year. Significant gains were recorded in respect of interest on bonds.

[8] Based on the Bank's accounting policy, gains deriving from holding the reserves are classified into "realized" gains that are included in the Bank's earnings, and unrealized revaluation gains that are carried to the revaluation accounts in the Balance Sheet and are not expressed in the Bank's income for the year.
[9] Capital gains are included in the Financial Statements in "Other financial income".

Figure 8
Composition of Realized Gains from Foreign Exchange Reserves, 2016 and 2015
(NIS million)



Source: Bank of Israel calculations.

Derivative financial instruments made a positive contribution to gains from foreign exchange reserves this year. Interest income was recognized from derivative financial instruments and there were gains on investments in foreign currency derivatives in a total of approximately NIS 682 million, which reflected attractive interest rate spreads in these transactions in the year in growing numbers.

In contrast, capital losses from foreign currency derivatives were recorded in a total of NIS 531 million (in 2015 - capital gains of approximately NIS 98 million), which resulted from stock market index futures in euros and dollars. These investments are a small part of the overall equity investment, in which gains were recorded.

In 2016, unrealized gains from foreign exchange reserves increased, as reflected by the fair value of the assets in the revaluation account at year end. The balance of this account, which is unrealized and not included in the Bank's profits, increased by approximately NIS 2.7 billion in 2016, compared with a decrease of approximately NIS 968 million last year (Table 3). The increase in the revaluation account this year was mostly derived from the rise in share prices.

From an overall perspective of realized and unrealized gains from foreign exchange reserves, excluding exchange rate differentials, income grew by approximately NIS 3.8 billion (compared with a decline of approximately NIS 2.4 billion in 2015), reflected in the increase in yield from interest and capital gains to 1.64 percent this year, compared with 0.65 percent in 2015 (Table 3). Nevertheless, since the reserve portfolio comprises multiple currencies, measuring the yield in specific currency terms is greatly arbitrary, as expressed by the difference between the yield measurements of the various currencies and the measurements over the years. The yield on exchange rate differentials in shekel terms in the year was negative at -3.05 percent and reflected the realized and unrealized negative exchange rate differentials accrued in the year which resulted from the appreciation of the shekel in relation to the principal currencies underlying the reserves. In dollar terms, the yield rate on exchange rate differentials at the end of 2016 was -1.59 percent, compared with -3.43 percent at the end of 2015.

Table 3
Foreign Exchange Reserves—Total Income, Exchange Rate Differentials and Yields

		2016	2015	2014
Total foreign exchange reserves:			USD million	
End of year		98,447	90,575	86,101
Annual average		95,777	87,389	85,973
Income (expenses) and exchange rate differentials - economic calculation:			NIS million	
Interest and capital gains		3,015	2,924	2,435
Unrealized price differentials[a]		2,734	(968)	1,918
Exchange rate differentials		(11,069)	(10,093)	22,088
Total		**(5,320)**	**(8,137)**	**26,441**
Income (expenses) and exchange rate differentials- economic calculation:			USD million	
Interest and capital gains		785	748	674
Unrealized price differentials[a]		728	(253)	386
Exchange rate differentials		(1,552)	(2,943)	(3,726)
Total		**(39)**	**(2,448)**	**(2,666)**
Rates of return[b]:			Percent	
In shekel terms	Interest and capital gains	1.64	0.65	1.29
	Exchange rate differentials	(3.05)	(3.12)	7.42
	Total	**(1.41)**	**(2.47)**	**8.71**
In dollar terms	Interest and capital gains	1.64	0.65	1.29
	Exchange rate differentials	(1.59)	(3.43)	(4.25)
	Total	**0.05**	**(2.78)**	**(2.96)**
In numeraire terms of foreign exchange reserves		**1.56**	**0.64**	**1.28**

[a] Unrealized price differentials express the annual change in the revaluation account of foreign currency tradable securities (see Note 15 to the financial statements).
[b] Rates of return, which are shown in annual terms, are based on daily calculations, and relate to income from the foreign exchange reserves, including gains or losses resulting from market price changes.

The annual yield on the portfolio in numeraire terms[10] in 2016 amounted to 1.56 percent, exceeding the yield of 0.64 percent in 2015, and approximating the average yield in the years following the global financial crisis (2009–16).

4.2 Revaluation Accounts

The revaluation accounts are composed of unrealized gains from exchange rate differentials on balances denominated in foreign currency and of unrealized gains from indexation and revaluation of tradable securities in local and foreign currency to their fair value. Effective from 2015, this item also includes a revaluation account arising from changes in actuarial assumptions underlying the calculation of the pension allowance (see Notes 1m and 15 to the financial statements).

4.2.1 Revaluation Account of Balances denominated in Foreign Currency

The balance of the revaluation account of balances denominated in foreign currency at year end was approximately NIS 19.6 billion, compared with approximately NIS 23 billion in 2015, a decrease of approximately NIS 3.5 billion.

In 2016, negative exchange rate differentials were accrued in respect of the adjustment of the balances denominated in foreign currency to the representative exchange rates in a total of approximately NIS 10.5 billion (Table 4). This was a result of the appreciation of the shekel in relation to the major currencies in the foreign exchange reserves portfolio (Figure 3). Since at the end of the year a negative revaluation balance was obtained, mainly due to the decline of the exchange rates of the euro and pound sterling, losses totaling approximately NIS 7.1 billion from exchange rate differentials were recorded in the Statement of Operations. The remaining amount of approximately NIS 3.5 billion was carried to the revaluation account and offset against a retained credit right. The weakening of the euro was mainly a result of the widening of the accommodative monetary policy in the eurozone. The pound sterling weakened due to the Brexit, the UK's withdrawal from the European Union.

There was a similar trend in 2015, in which losses from exchange rate differentials in a total of approximately NIS 9.6 billion were accrued, mainly as a result of the weakening of the euro, at about 10.1 percent, and of other currencies in relation to the NIS. Nearly all the losses from exchange rate differentials were carried to profit and loss. Realized losses from exchange rate differentials in 2015 amounted to approximately NIS 10 billion. The remaining amount of approximately NIS 0.4 billion was offset against the revaluation account.

[10] See details in the separately issued report on investment of the foreign exchange reserves for 2016. In that report, the yield of holding the reserve portfolio is measured in numeraire terms. The numeraire is a multi-currency composition which reflects the potential uses of the reserves.

Table 4
Exchange Rate Differentials due to Adjustment of Foreign Currency Balances to the Representative Exchange Rate

	2016	2015
	NIS million	
Assets		
Foreign currency balances	(11,069)	(10,093)
Credit to the government—binational foundations	(2)	-
Liabilities		
Government deposits	306	230
Foreign currency deposits of banking corporations	33	21
International financial institutions	211	201
Binational foundation deposits	2	-
Total	**(10,519)**	**(9,641)**
Realized exchange rate differentials	(7,053)	(9,986)
Unrealized exchange rate differentials	(3,466)	345

4.2.2 Revaluation Account from Tradable Securities in Foreign Currency

The balance of the revaluation account from tradable securities in foreign currency at the end of 2016 was approximately NIS 7.1 billion, compared with approximately NIS 4.4 billion in 2015. The increase of approximately NIS 2.7 billion derived mainly from the increase in the revaluation account in respect of the investments in equities due to the rise in global stock markets at the end of 2016.

4.2.3 Revaluation Account from Tradable Securities in Local Currency

The balance of the revaluation account from tradable securities in local currency at the end of 2016 was approximately NIS 0.9 billion, a decrease of approximately NIS 0.3 million compared with 2015. The decrease was mostly affected by the drop in market prices of tradable securities in local currency.

4.2.4 Revaluation Account from Changes in Actuarial Assumptions for Computing Pension Accruals

In 2015, the Bank modified its accounting policy underlying the recognition and calculation of the pension and severance liability. According to the new policy, the Bank uses a discount rate based on the government-interest yield curve.[11] The Bank concurrently modified the accounting treatment of pension accruals and adapted it to

[11] A series of yields to maturity of Israeli Government bonds with different maturities.

generally accepted accounting principles for central banks worldwide. According to the new method, changes made to the pension accruals arising from changes in actuarial assumptions are carried to the revaluation account in the Balance Sheet. This account may also represent a debit balance at year end, contrary to the other revaluation accounts described above.

The revaluation account from changes in actuarial assumptions underlying the calculation of pension accruals at the end of 2016 had a debit balance of approximately NIS 2.1 billion, similar to the balance in 2015 (approximately NIS 1.9 billion). The change was a result of updating the accrued pension due to changes in actuarial assumptions.[12] Other changes to pension accruals are carried to the Statement of Operations.

4.3 Monetary Base

The monetary base is comprised of the total banknotes and coins in circulation and the demand deposits of the commercial banks in the Bank of Israel[13] and is determined according to the liquidity demand at the Bank's given interest rate. The monetary base is affected both by factors which are not under the control of the Bank, such as government accounts[14], and by factors which are controlled by the Bank, such as purchases of foreign exchange and bonds[15], as a means of achieving the various objectives of the monetary policy (Table 5). The Bank either absorbs liquidity from the markets or injects liquidity to the commercial banks to satisfy demand for the monetary base based on the BOI's interest rate.

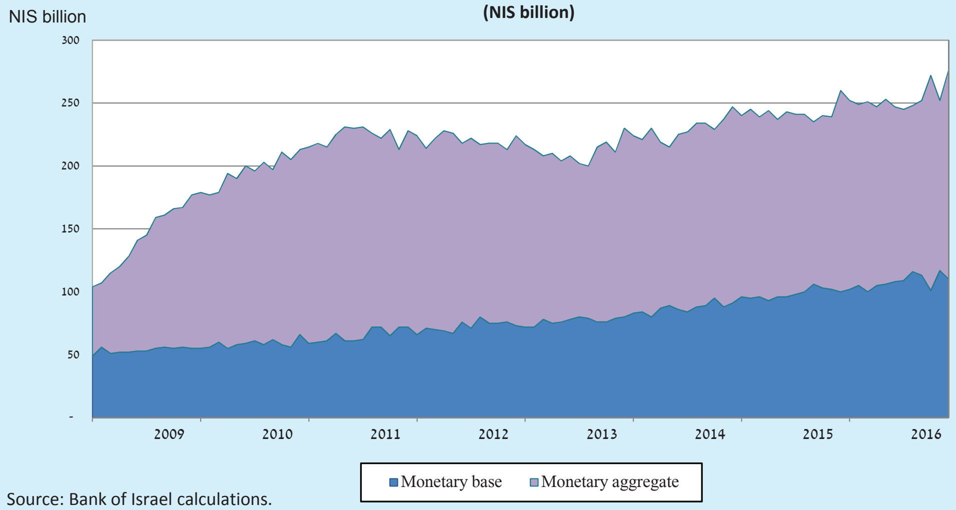
The Bank adapts the monetary base to the interest rate using monetary instruments—by issuing makam and by using auctioned interest-bearing deposits or loans of the banks, which are not included in the monetary base[16], in accordance with their liquidity needs. In 2013, the Bank renewed its intervention in the foreign exchange market in accordance with its policy to operate in this market when the shekel exchange rate is not in line with the fundamental economic conditions underlying its development. In this context, in 2013, the Bank declared a plan for the purchase of foreign currency to offset the effect of natural gas production on the exchange rate.

In keeping with the trend of the last few years, the monetary base grew in 2016 by about NIS 10.8 billion, reaching approximately NIS 110 billion at the end of the year

[12] Actuarial assumptions consist of demographic assumptions on future characteristics of current and former employees such as mortality tables, early retirement rates, etc.; financial assumptions such as discount interest rate, and deviation of the reporting period's experience from the former period's assumptions.
[13] The public's demand deposits also form part of liquidity in the economy, yet the Bank can only influence their scope indirectly by imposing a reserve requirement on the commercial banks.
[14] The Government's actions also affect the monetary base since the Government's accounts are managed at the Bank (in conformity with the Bank of Israel Law, 5770–2010).
[15] In 2009, the Bank purchased Government bonds at a scope of about NIS 18 million.
[16] Since they are not recognized for the purpose of compliance with the reserve requirement.

(Figure 9). The largest injection to the monetary base made by the Bank this year—a total of approximately NIS 23 billion—was a result of the Bank's intervention in the foreign exchange market (Table 5), compared with approximately NIS 34 billion in 2015. The Bank absorbed the excess liquidity and partially offset the effects of its transactions on the monetary base to avoid the pressure of short-term interest being lowered to a lower level than that determined by the Bank. The absorption was carried out through the monetary instruments aggregate (makam and time deposits) in the amount of approximately NIS 17 billion, which was offset by the injection of approximately NIS 1.2 billion, partly from payments in respect of the monetary instruments.[17]

Figure 9
Developments in the Monetary Aggregate and Monetary Base, 2009-2016
(NIS billion)



Source: Bank of Israel calculations.

In 2016, the Government injected into the market approximately NIS 4 billion (as opposed to absorbing approximately NIS 14 billion in 2015).

[17] Payments which were reduced due to the lowering of the interest rate for March 2015 to a historic low of 0.1 percent.

Table 5
The Monetary Base—Changes and their Sources

Year	Change in monetary base	Injection (+) / absorption (-) by the government and national institutions[a]	Injection (+) / absorption (-) by the Bank of Israel	Injection from foreign currency conversions at the Bank of Israel	Adjustments[b]
	(1)=(2)+(3)+(4)+(5)	(2)	(3)	(4)	(5)
	NIS million				
2011	6,078	(2,142)	(7,494)	16,170	(456)
2012	748	(9,130)	10,047	-	(169)
2013	6,443	(10,452)	(2,414)	19,037	272
2014	11,699	1,171	(14,190)	24,632	86
2015	8,427	(14,036)	(11,543)	33,842	164
2016	**10,787**	**3,538**	**(15,814)**	**23,086**	**(23)**

[a] The Government's injection also includes injections by the National Insurance Institute and by the Postal Bank.
[b] Adjustments include: transfers by the national institutions from abroad via the banks but which were defined as public sector injections until the end of 2012 (in column 2). Foreign currency domestic receipts and payments by the Bank and the Government to the private sector, such as income tax receipts in foreign currency, do not change the monetary base as they are transferred directly from the private sector to the Government; on the one hand they are defined as government absorption, while on the other they are defined as the private sector contribution to the foreign exchange reserves.

4.4 Aggregate of Monetary Instruments[18]

Monetary policy in Israel in 2016 was implemented against the background of negative inflation alongside stable growth which gradually strengthened in the course of the year. The global environment was characterized by inflation and interest rates that were extremely low, even negative in certain countries (Figure 4). Israeli monetary policy in recent years was accommodative and acted to support activity and exports and restore the low inflation to its target range. The interest rate in 2016 remained historically low at 0.1 percent since its lowering in March 2015.

The determination of the monetary interest rate is the main tool used by the monetary policy to achieve its targets, primarily maintaining price stability. The monetary interest rate serves as a benchmark for market interest rates, through which it dictates individuals' consumption and savings, the scope of investment in the economy and the exchange rate, and through the latter—the profits and activity of the exports and import substitutions sector and the balance of payments. All these are factors through which the interest rate impacts on prices. To effectively implement the interest rate declared by the Bank

[18] The aggregate of monetary instruments consists of the balance of makam and term deposits in local currency less monetary loans. The balance of monetary loans at the end of 2016 and 2015 was zero.

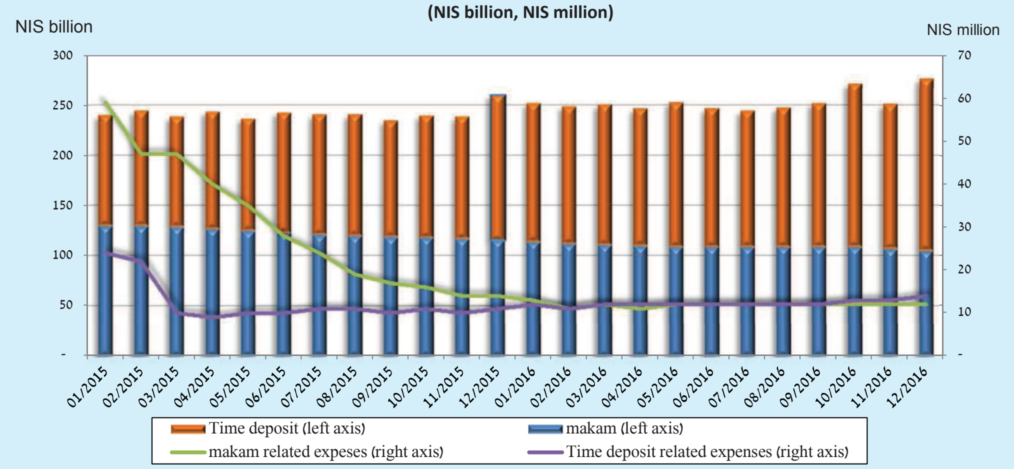
of Israel, the Bank injects or absorbs the needed funds into/from the market, in line with its own determined interest rate. This is done through extending loans to banking corporations or receiving deposits from banking corporations and through the issue of makam and Repo transactions, as applicable.

In keeping with the trend of recent years, the balance of monetary instruments remains composed of solely liabilities, amounting to approximately NIS 277 billion in late 2016, compared with approximately NIS 260 billion at the end of 2015 (an increase of about 7 percent). This increase was derived from the need to sterilize the surplus funds injected into the markets as a result of forex purchases (Figure 9). In 2016, the monetary aggregate consisted of approximately NIS 172 billion in time deposits, accounting for about 62% of total monetary instruments (compared with approximately NIS 144 billion in 2015 - about 55 percent), and approximately NIS 105 billion in makam, accounting for about 38 percent of total monetary instruments (compared with approximately NIS 116 billion in 2015, about 45 percent).

4.4.1 Expenses in respect of Monetary Instruments

Interest expenses in respect of the aggregate of monetary instruments in 2016 amounted to approximately NIS 288 million, compared with approximately NIS 510 million in 2015. The decrease in interest expenses, despite the growth in the monetary aggregate, mostly stemmed from the decrease in the volume of makam issued and the lowering of the BOI interest rate from 0.12 percent on average in 2015 to 0.1 percent on average in 2016. The total expense in respect of the monetary aggregate in 2016 was evenly distributed between makam and time deposits (approximately NIS 144 million each). In contrast, in 2015, the substantial portion of interest expenses in respect of monetary instruments consisted of interest expenses totaling approximately NIS 362 million in respect of makam whereas the interest expenses in respect of time deposits amounted to approximately NIS 148 million (Figure 10).

Figure 10
Balances of Monetary Agregate and related Expenses, 2016 and 2015
(NIS billion, NIS million)



Source: Bank of Israel calculations.

4.5 The Bank's Equity

4.5.1 The Bank's Equity (Deficit)

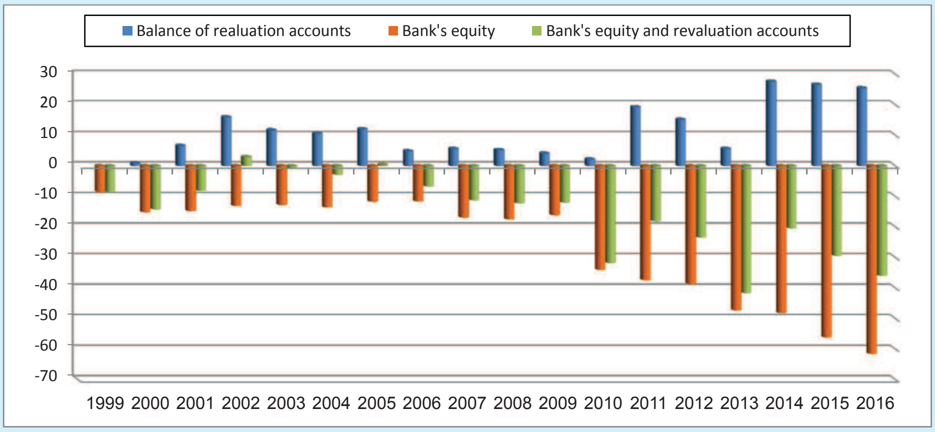
The Bank's equity is comprised of share capital and the general reserve less the accumulated losses. At the end of 2016, the Bank had an equity deficit of approximately NIS 61.5 billion. The accumulated losses, which played a major part in the creation of an equity deficit, began forming in 1999 and have remained such to date.

4.5.2 Development of the Deficit in the Bank's Equity

As discussed above, the Bank's equity deficit was initially sustained in 1999 after the Bank had transferred to the Government in 1998 some NIS 9 billion in gains, which were recognized then as realized gains, the vast majority of which deriving from exchange rate differentials due to the shekel's depreciation. In 1999, however, it became clear that the bulk of the gains were unrealized gains which, had they not been transferred to the Government, would have been offset against the losses of 1999. This is because in that year, negative exchange rate differentials were recorded following the shekel's appreciation, which resulted in a loss of NIS 8.8 billion. The loss sustained in 1999, as mentioned above, first created an equity deficit in the Bank's Balance Sheet, which has been sustained to date. In 2000, the Bank of Israel revised the accounting policy of revenue recognition and began to treat realized and unrealized gains differently, as customary in central banks around the world. Unrealized gains are carried to revaluation accounts in order to prevent the recurrence of transferring unrealized gains, mainly arising from exchange rate differentials, in years in which the shekel significantly depreciates (see Note 1f to the financial statements).

The balance of revaluation accounts at the end of 2016 amounted to approximately NIS 25.6 billion. Overall, the net balance of the Bank's equity with the addition of revaluation accounts amounts to approximately NIS 35.9 billion. Figure 11 presents the Bank's equity deficit and revaluation accounts and their general trend.

Figure 11
The Bank's Equity and Revaluation Accounts, 1999-2016
(NIS billion)



Source: Bank of Israel calculations.

4.5.3 Composition of the Equity Deficit

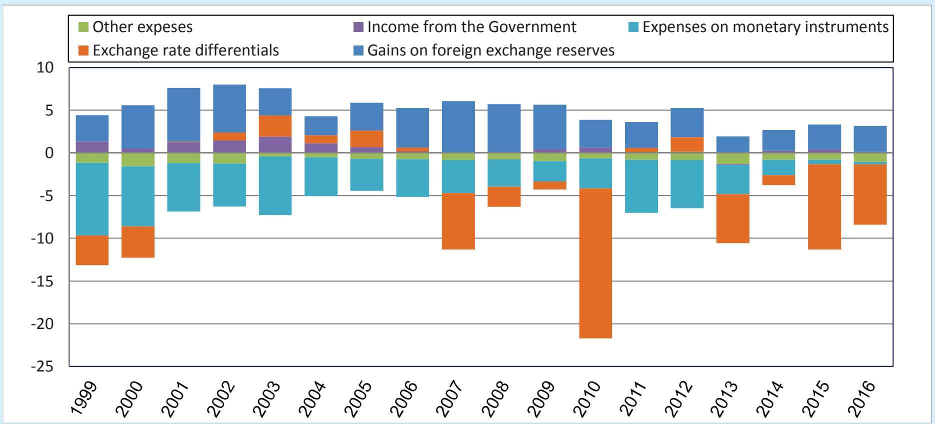
The analysis of the Bank's equity deficit indicates that the main components that contributed to the deficit are expenses in respect of exchange rate differentials which over said years aggregated approximately NIS 50 billion and expenses in respect of using monetary absorption instruments which aggregated approximately NIS 76.5 billion. In contrast, gains from foreign exchange reserves in said years totaled approximately NIS 70 billion, bringing the gap between gains from foreign exchange reserves and expenses in respect of monetary absorption instruments, excluding losses on exchange rate differentials, to some NIS 6 billion only[19]. This trend of reducing the gap between the gains from foreign exchange reserves and the cost of monetary instruments has continued in recent years with the growth in the portfolio's volume (and related income), the increase in the portfolio's equity component whose yield is higher, and the decrease in interest expenses on the monetary instruments as a result of the reducing of BOI's interest rate in recent years to 0.1 percent in the context of the accommodative monetary policy. The effect of the exchange rate differentials is large and volatile and due to the appreciation

[19] This calculation only consists of realized gains and excludes unrealized price revaluation differentials.

of the shekel in 2016 has continued to contribute to increasing the Bank's equity deficit.

Other results, which mainly comprise various interest expenses, general and administrative expenses and banknote printing expenses, contributed approximately NIS 16.5 billion to the deficit. In contrast, income from the Government (bonds and deposits) mitigated the accumulated deficit by approximately NIS 10.4 billion. Figure 12 presents the development of the main loss components of the deficit on an annual basis, from 1999 when the deficit was first created.

Figure 12
Principal Loss Components, 1999-2016
(NIS billion)



Source: Bank of Israel calculations.