
**Bank of Israel**

*Comptroller's Office and*
*Payment and Settlement Systems*

# *FINANCIAL STATEMENTS*

*and Review of the Payment and Settlement Systems*

# *FOR 2010*

ENGLISH EDITION PUBLISHED May 2011–AV 5771


ISSN 1565-3358
Catalogue 3140110005/7
Typesetting and design by 'Bank of Israel'
Printed in Israel by Maor Wallach, Jerusalem
http://www.bankisrael.gov.il

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# Independent Auditors' Report to the Governor and Management of the Bank of Israel

We have audited the accompanying balance sheets of the Bank of Israel (hereinafter "the Bank") as of December 31, 2010 and 2009, and the related statements of operations and changes in equity of the Bank for each of the years ending on such dates (hereinafter "the financial statements") appearing on pages 6 to 37. These financial statements are the responsibility of the Governor and Management of the Bank. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards in Israel, including standards prescribed by the Auditors Regulations (Manner of Auditor's Performance)-1973. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Management of the Bank, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Bank as of December 31, 2010 and 2009, and the results of its operations and changes in equity for each of the years ending on such dates, in conformity with generally accepted accounting principles in Israel (Israeli GAAP), adapted for principles applicable to central banks, as detailed in Note 1a.

Somekh Chaikin
Certified Public Accountants (Isr.)

February 17, 2011

# BALANCE SHEET AS OF DECEMBER 31, 2010

(TEVET 24, 5771)

| | Note | 2010 | 2009 |
|---|---|---|---|
| **Assets** | | | |
| **Foreign currency assets** | | | |
| **Foreign currency assets abroad** | 2 | | |
| Demand deposits | | 229 | *114 |
| Short-term deposits | | 20,399 | 12,836 |
| Tradable securities | | 224,308 | 204,007 |
| Reverse repurchase agreements | | 1,767 | *6,524 |
| Derivative financial instruments | | - | 23 |
| The International Monetary Fund | 3 | 5,850 | 5,742 |
| **Total foreign currency assets abroad** | | **252,553** | **229,246** |
| **Other foreign currency assets** | | | |
| Credit to the government | 4 | 117 | 502 |
| **Total foreign currency assets** | | **252,670** | **229,748** |
| **Local currency assets** | | | |
| Credit to the government | 4 | - | 249 |
| Loans | 5 | - | 420 |
| Tradable securities | 6 | 19,672 | 20,221 |
| Other | 7 | 168 | 199 |
| **Total local currency assets** | | **19,840** | **21,089** |
| **Other assets** | | | |
| International financial institutions | 8 | 926 | 836 |
| Fixed assets | 9 | 278 | 256 |
| **Total other assets** | | **1,204** | **1,092** |
| **Total** | | **273,714** | **251,929** |

* Reclassified.

The accompanying notes are an integral part of the financial statements.

(NIS million, reported amounts)

| | Note | 2010 | 2009 |
|---|---|---|---|
| **Liabilities and equity** | | | |
| **Banknotes and coins in circulation** | 10 | **44,828** | **41,490** |
| **Foreign currency liabilities** | | | |
| **Foreign currency liabilities abroad** | 2 | | |
| Repurchase agreements | | - | 435 |
| Derivative financial instruments | | 882 | - |
| **Total foreign currency liabilities abroad** | | **882** | **435** |
| **Other foreign currency liabilities** | | | |
| Government deposits | 11 | 1,228 | 8,480 |
| Deposits of banking corporations | 12 | 1,541 | 1,700 |
| International financial institutions | 13 | 4,890 | 5,276 |
| **Total other foreign currency liabilities** | | **7,659** | **15,456** |
| **Total foreign currency liabilities** | | **8,541** | **15,891** |
| **Local currency liabilities** | | | |
| Government deposits | 11 | 12,979 | 11,852 |
| Deposits of banking corporations | 12 | 99,857 | 104,815 |
| Makam | 14 | 134,909 | 85,406 |
| Other liabilities | 15 | 4,356 | 4,411 |
| **Total local currency liabilities** | | **252,101** | **206,484** |
| **Total liabilities** | | **305,470** | **263,865** |
| **Revaluation accounts** | 16 | **2,204** | **4,153** |
| **Equity** | | | |
| Share capital and general reserve | 17 | 3,985 | 3,985 |
| Accumulated losses | | (37,945) | (20,074) |
| **Total equity (deficit)** | | **(33,960)** | **(16,089)** |
| **Total** | | **273,714** | **251,929** |

Stanley Fischer
Governor

Raphael Lankri
Head of Comptroller's Office and Payment Systems

February 17, 2011

# STATEMENT OF OPERATIONS

FOR THE YEAR ENDED DECEMBER 31, 2010

**(NIS million, reported amounts)**

| | | FOR THE YEAR ENDED DECEMBER 31 | |
|---|---|---|---|
| | Note | 2010 | 2009 |
| **Interest income from** | | | |
| Assets in foreign currency abroad | 20 | 2,959 | 2,567 |
| The government | 21 | 1,022 | 905 |
| Other | 22 | 8 | 12 |
| **Total interest income** | | **3,989** | **3,484** |
| **Interest expense** | | | |
| On liabilities in foreign currency abroad | 23 | 4 | 5 |
| To banks and the public | 24 | 3,500 | 2,394 |
| To the government | 25 | 328 | 430 |
| Other | 26 | 130 | 103 |
| **Total interest expense** | | **3,962** | **2,932** |
| **Net interest income** | | **27** | **552** |
| **Other financial income (expense)** | | | |
| Securities and derivative financial instruments | 27 | (69) | 2,644 |
| Exchange rate differentials | 28 | (17,562) | (923) |
| Miscellaneous | 29 | 211 | (26) |
| **Total other financial income (expense)** | | **(17,420)** | **1,695** |
| **Profit on financial transactions** | | **(17,393)** | **2,247** |
| **Expenses on printing banknotes and minting coins** | | **(53)** | **(72)** |
| **Administrative and general expenses** | 30 | **(528)** | **(879)** |
| **Other income** | 31 | **103** | **64** |
| **Net profit (loss)** | | **(17,871)** | **1,360** |

The accompanying notes are an integral part of the statements.

# STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED DECEMBER 31, 2010

**(NIS million, reported amounts)**

| | share capital and general reserve | Accumulated losses | Total deficit in equity |
|---|---|---|---|
| **Balance as of January 1, 2009** | 3,985 | (21,434) | (17,449) |
| Net profit for the year | - | 1,360 | 1,360 |
| **Balance as of December 31, 2009** | 3,985 | (20,074) | (16,089) |
| Net loss for the year | - | (17,871) | (17,871) |
| **Balance as of December 31, 2010** | **3,985** | **(37,945)** | **(33,960)** |

The accompanying notes are an integral part of the statements.

# NOTES TO THE FINANCIAL STATEMENTS FOR 2010



## 1. Accounting policies

### a. General

The financial statements are presented in accordance with generally accepted accounting principles (Israeli GAAP), adapted for the special activity of a central bank and consistent with the practice of other central banks.

The main items presented in accordance with generally accepted accounting principles of central banks are:

1. Revaluation accounts—as detailed in Section 1.m below.
2. Cash-flow statements—as detailed in Section 1.t below.

### b. Definitions

In these financial statements:

1. **"The Bank"**—the Bank of Israel.
2. **"CPI"**—the Consumer Price Index as published by the Central Bureau of Statistics.
3. "**Adjusted amount**"—the nominal historical amount adjusted to the CPI in respect of December 2003, in accordance with the provisions of Opinions 23 and 36 of the Institute of Certified Public Accountants in Israel.
4. **"Reported amount"**—the adjusted amount at the transition date (December 31, 2003), with additional amounts in nominal values that were added after the transition date, less amounts subtracted after the transition date.
5. **"Nominal financial reporting"**—financial reporting based on reported amounts.
6. **"Fair value"**—the amount for which it was possible to acquire or sell an asset (to undertake or repay a liability) in a current transaction between parties acting voluntarily.

### c. Financial statements in reported amounts

1. In October 2001, the Israel Accounting Standards Board published Accounting Standard No. 12, "Discontinuance of Adjustment of Financial Statements". Pursuant to this standard, and in accordance with Accounting Standard No. 17, which was published in December 2002, the adjustment of financial statements for the effect of inflation was discontinued as of January 1, 2004.

2. In the past, the Bank prepared its financial statements on the basis of historical cost, with no adjustment for changes in purchasing power of the Israeli currency. In the financial statements for 2005, comparative figures for the year ended December 31, 2003, were recalculated on a historical-cost basis, adjusted for changes in the CPI as required by Accounting Standard No. 12, in order to prepare for the transition to nominal financial reporting.

   The adjusted amounts at December 31, 2003 constituted the starting point for the nominal financial report as of January 1, 2004. Any additions and disposals made during the period were included in their nominal values.
3. Amounts of non-monetary assets do not necessarily reflect their realizable value or current economic value, but only the reported amounts of those assets.
4. The term "cost" in these financial statements, denotes the reported amount of cost.

## d. Reporting principles

1. Balance Sheet:
   a. Non-monetary items (mainly fixed assets and investments shown at cost) are stated in reported amounts.
   b. Monetary items are stated in the balance sheet at their nominal values at the balance sheet date.
   c. The balance sheet is presented in the format generally accepted by central banks worldwide.
2. Statement of Operations:
   a. Income and expenses originating in non-monetary items (e.g., depreciation, prepaid expenses, and deferred income) or from provisions included in the balance sheet, are derived from the difference between the reported amount of the opening balance and the reported amount of the closing balance.
   b. All other operating items (such as interest income and expense) are stated at their nominal values.
3. Statement of changes in equity:

   In March 2010 the Knesset passed a new Bank of Israel law—Bank of Israel Law, 5770-2010. The new law came into effect on June 1, 2010 and on that date the Bank of Israel Law, 5714-1954 was repealed.

   In accordance with Section 76 of Bank of Israel Law, 5770-2010, within three months from the end of each year the Bank will transfer its profits to the government according to the following provisions:
   a. If the equity amounts to 2.5 percent or more of total assets, the government will receive an amount equal to the net profit, less any deficit in retained earnings.

b. If the equity amounts to more than 1 percent of total assets but less than 2.5 percent of total assets, the government will receive 50 percent of the net profit, less any deficit in retained earnings.

c. If the equity amounts to 1 percent or less of total assets, the government will not receive any profits.

The Bank is permitted to record capital reserves arising from accounting principles, providing that the balance of net profit not transferred to the government as aforementioned is added to the retained earnings and not recognized as another capital item, unless agreed otherwise between the Governor and the Minister of Finance.

In accordance with these provisions, as of December 31, 2010 there is no obligation to transfer funds to the government.

## e. Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires the Bank's management to make estimates and assumptions regarding transactions or matters the final effect of which, on the financial statements, cannot be determined with precision at the time the statements are prepared. Even though the estimates and assumptions are based on management's best judgment, the final effect of such transactions or matters may be different from the estimates and assumptions made in their respect.

## f. Income recognition

Income and expenditure are charged to the Statement of Operations on an accrual basis.

Realized profits or losses from foreign currency and securities in local and foreign currency are transferred to the Statement of Operations. These profits or losses are calculated on the basis of average cost of the balances in that asset.

Unrealized profits are not transferred to the Statement of Operations, instead they are charged to the "Revaluation accounts" line in the balance sheet.

Unrealized losses are transferred to the Statement of Operations after offsetting unrealized profits in the same asset. These losses originate in the difference between the average cost of an asset and its fair value.

Unrealized losses from foreign currency securities, from local currency securities, or a specific foreign currency are not offset against unrealized profits from other securities or foreign currency.

Losses recognized in the Statement of Operations are not offset against unrealized profits accrued in the future.

## g. Securities

### Foreign currency securities

Tradable foreign currency securities are stated in the balance sheet at their fair value at the balance sheet date. The fair value of quoted securities is based on market prices. Unquoted securities are revalued on the basis of data obtained from outside sources. Securities with maturity dates of up to three months are stated at an adjusted cost that constitutes a reasonable approximation of their fair value.

The adjusted cost of securities is their face value plus the interest, indexation differentials and the balance of the premium or discount not yet amortized. The premium or discount is amortized over the period from the date of purchase until the date of redemption.

The difference between the original cost of the securities and their face value plus interest and the balance of the premium or discount not yet amortized is charged to the Statement of Operations.

Indexation differentials published overseas accumulated on the principal and not yet realized, as well as the difference between the fair value of the securities and their adjusted cost, are charged to the "Revaluation account" line in the balance sheet.

Interest income and amortization of the premium or discount are charged to the Statement of Operations on an accrual basis, and are stated in the item "Interest income from assets in foreign currency abroad".

Income from the disposal of securities is stated under "Other financial income from (expenses on) securities and derivative financial instruments".

The balance of the unrealized losses is charged to the Statement of Operations at the end of the year and stated under "Other financial income from (expenses on) securities and derivative financial instruments".

### Local currency securities

Tradable local currency government securities are stated in the balance sheet at their fair value.

The difference between the original cost of securities and their face value, plus interest and the balance of the premium or discount not yet amortized, is charged to the Statement of Operations.

Indexation differentials accumulated on the principal and as yet unrealized, as well as the difference between the fair value of the securities and their adjusted cost, are charged to the "Revaluation accounts" line in the balance sheet.

Interest income from local-currency securities and amortization of the premium or discount are charged to the Statement of Operations on an accrual basis, and stated under "Interest income from the government".

The balance of unrealized losses is charged to the Statement of Operations at the end of the year and stated under "Other financial income from (expenses on) securities and derivative financial instruments".

## h. International financial institutions

### International Monetary Fund (IMF)

The Bank of Israel's participation in the IMF less its liabilities on account of this participation, is shown on the Assets side of the "International Monetary Fund" item.

The Bank's Special Drawing Rights Holdings (SDR Holdings) are shown on the Assets side of the balance sheet under the item "International Monetary Fund".

Liabilities in respect of Drawing Rights granted by the IMF are shown on the liabilities side of the "International financial institutions" item.

### Balances related to other international financial institutions and investment in shares of the Bank for International Settlements (BIS)

The Bank of Israel's participation in other international financial institutions includes initial participation in their capital and additional participation payments towards increases in these institutions' capital. The Bank of Israel's participation in other international financial institutions is shown on the Assets side of the "International financial institutions" item according to the cost in the currency in which the participation was paid, expressed at the exchange rate on the transaction date. Liabilities to international financial institutions are shown on the Liabilities side of the "International financial institutions" item.

## i. Fixed assets

1. Fixed assets are stated at cost less accumulated depreciation. Cost includes expenses directly attributable to the purchase of the asset.
2. Improvements and enhancements are charged to the cost of the assets, whereas maintenance and repairs expenses are charged to the Statement of Operations as incurred.
3. Depreciation is calculated by the straight-line method on the basis of the estimated useful life of the asset:
   Buildings—fifty to sixty-seven years;
   Motor vehicles—six and a half years;

Computers—four years;
Equipment—ten years.

4. Purchases of fixed assets in insignificant amounts are charged to the Statement of Operations.
5. Software that is not an integral part of the related hardware is shown under fixed assets at cost and depreciated by the straight-line method over four years.

## j. Banknotes and coins in circulation

Banknotes and coins in circulation that were issued by the Bank reflect a liability on the Bank's part to their holders. This liability is shown in the Bank's balance at face value.

## k. Short-term loan

The balance of short-term loan (called *makam*, their Hebrew acronym) in the balance sheet reflects the redemption price of *makam* held by the public, less the balance of unamortized discount. *Makam* sold by the government to the Bank of Israel but not yet sold to the public are not included in this balance.

*Makam* are issued for a period of up to a year. The discount is the difference between the redemption price of the *makam* and the proceeds of their sale to the public. The discount is amortized by the straight-line method.

Expenses for amortization of the discount on the balance of *makam* held by the public are shown in the Statement of Operations in the "Interest expense to banks and the public" item.

## l. Liabilities on account of employees' entitlements

All liabilities on account of employer-employee relations have corresponding reserves in accordance with law, agreement, practice and management's expectations. Liabilities on account of employee pensions and severance pay are calculated by an expert actuary using the method of estimation of cumulative benefits with probabilities taken into account on the basis of past experience. The discount rate applying to the reserves is set in accordance with the rate established in directives issued by the Supervisor of Banks, and the rate of future salary increases is estimated by the management. The provision for vacation pay is computed on the basis of the accrued vacation days at October 31, 2010 and the effective salary for vacation redemption at the balance sheet date. The difference in the liability that derives from the accrual of vacation days between October 31, 2010 and December 31, 2010 is immaterial. (see Note 15.)

## m. Revaluation accounts

The revaluation accounts include unrealized profits from exchange rate differentials on balances denominated in foreign currency and unrealized profits from indexation and the revaluation of tradable securities in local currency and foreign currency to their fair value.

Separate revaluation accounts are maintained for each item (currency, security) and are transferred to the Statement of Operations when the item is fully or partially realized. No offsetting among different types of items is performed.

Any net loss in the revaluation accounts that originates in indexation differentials and price differentials in local currency and foreign currency securities and exchange rate differentials on foreign currency balances is transferred to the Statement of Operations at the end of the year. (See also Section f above).

## n. Foreign currency

Assets and liabilities denominated in or indexed to foreign currency are shown in New Israel Shekel (NIS) according to the representative rate of exchange published by the Bank of Israel at the balance sheet date.

Income and expenses in foreign currency are included in the Statement of Operations at the representative rates of exchange in effect on the value day of the performance of each transaction.

Exchange rate differentials arising from the adjustment of assets and liabilities due to changes in the exchange rate include realized and unrealized exchange rate differentials.

Unrealized exchange rate differentials are charged separately for each currency to the "Revaluation accounts" item. Realized exchange rate differentials are transferred to the Statement of Operations and are calculated on the basis of the average cost of the balances of the currency at issue. Realization is calculated separately for foreign currency assets and foreign currency liabilities in each calendar month and for each currency. The loss balance in the revaluation accounts at the end of the year is transferred to the Statement of Operations and is not offset against future unrealized profits. Unrealized losses in one currency are not offset against unrealized profits in another currency.

The following table details NIS exchange rates against other key currencies:

| | December 31 | | | Change | |
|---|---|---|---|---|---|
| | 2010 | 2009 | 2008 | 2010 | 2009 |
| | (NIS) | | | (Percent) | |
| US$ | 3.5490 | 3.7750 | 3.8020 | (6.0) | (0.7) |
| Euro | 4.7379 | 5.4417 | 5.2973 | (12.9) | 2.7 |
| Pound sterling | 5.4928 | 6.1112 | 5.5481 | (10.1) | 10.1 |
| Special drawing rights (SDR)[a] | 5.4825 | 5.9180 | 5.8561 | (7.4) | 1.1 |
| First currency basket[b] | 4.1646 | 4.6522 | 4.5214 | (10.5) | 2.9 |

[a] The SDR rate is published by the IMF, and is based on a weighted 4–currency basket consisting of US$, €, ¥ and £.
[b] The first currency basket was in effect until July 31, 1986, and consisted of: US$ 0.3500; £ 0.1295; and € 0.4667. The rates shown in the table are calculated on that basis.

## o. Indexation

Assets and liabilities linked to the CPI are shown in accordance with the indexation conditions determined for each balance.

Following are details of the CPI (based on the 2002 average):

| | | December 31 | | | Change | |
|---|---|---|---|---|---|---|
| | | 2010 | 2009 | 2008 | 2010 | 2009 |
| | | (points) | | | (Percent) | |
| CPI | November | 117.4 | 114.8 | 110.6 | 2.3 | 3.8 |
| | December | 117.8 | 114.8 | 110.4 | 2.6 | 3.9 |

## p. Interest rates

Some of the local currency interest on the government's and the banks' balances, which are collected or paid by the Bank of Israel, are based on the Bank of Israel interest rate or the prime interest rate.

The following are the interest rates as at December 31:

| | December 31 | | | Change | |
|---|---|---|---|---|---|
| | 2010 | 2009 | 2008 | 2010 | 2009 |
| | (percent) | | | | |
| Bank of Israel interest rate | 2.00 | 1.25 | 2.50 | 60.0 | (50.0) |
| Prime | 3.50 | 2.50 | 4.00 | 40.0 | (37.5) |

## q. Financial instruments

The Bank of Israel uses derivatives in its monetary policy and foreign exchange activities, both in Israel and overseas.

### Activity in financial instruments in Israel

**1. Reverse repurchase agreements (R. Repo) for *makam* and government bonds**

During the course of 2007 the Bank of Israel began to perform R. Repo transactions in *makam* and government bonds. These transactions are treated as secured debt and accordingly, securities purchased within the framework of these transactions do not appear in the balance sheet. The Bank's R. Repo transactions involving *makam* and government bonds were discontinued on September 21, 2009.

Interest income accrued on account of these transactions is stated under "Other interest income".

**2. Forward NIS/USD conversion transactions**

These transactions are shown net in the balance sheet under "Other assets" or "Other liabilities": future receipt of US dollars less future remittance of NIS.

In the Statement of Operations, the results of the transactions are shown under "Interest income from assets in foreign currency abroad".

### Financial instruments in activities abroad

**1. Repurchase (Repo) and Reverse-Repurchase (R.Repo) Agreements**

The Bank carries out repurchase (Repo) agreements. Such a transaction is composed of the sale of securities under an agreement to purchase them in the future. The transaction is treated as a secured debt and accordingly the securities sold under its terms are not subtracted from the Bank's assets. The liability to purchase the securities is included in the "Repurchase agreements" item. In the Statement of Operations, the results of these transactions are shown in the "Interest expense on liabilities in foreign currency abroad" item.

The Bank also carries out reverse repo (R. Repo) agreements. These transactions are treated as a secured debt, and are included in the "Reverse repurchase agreements" item. Securities purchased within the framework of these agreements do not appear in the balance sheet. In the Statement of Operations, the results of these transactions are shown in the "Interest income from assets in foreign currency abroad" item.

**2. Foreign currency swaps and forwards**

These transactions are included in the balance sheet in the sum of the differences between the foreign currency received and the foreign currency to be remitted in future, and are shown in net form in the "Derivative financial instruments" item.

In the Statement of Operations the results of these transactions are included in the "Interest income from assets in foreign currency abroad" item.

**3. Futures**

The balance of futures contracts at market prices on the date of the financial statement is shown in Note 19—"Contingent liabilities and commitments".

In the Statement of Operations, the change in the value of the contracts is recorded under "Other financial income from (expenses on) securities and derivative financial instruments".

## r. Offsetting financial balances

Financial assets and liabilities are presented in the balance sheet in net amount only when the Bank has a legal and enforceable offsetting right, and when it is intended to settle the asset or liability on a net basis or to realize the asset and settle the liability simultaneously.

## s. Impairment of assets

The Bank applies Accounting Standard No. 15 (Amended)—Impairment of Assets (hereinafter: the Standard), which establishes procedures that the Bank must apply to ensure that its assets in the balance sheet (to which the Standard applies) are not stated in an amount greater than the recoverable amount, i.e., the net sale price or usage value (the present value of the estimated future cash flows expected to derive from the use and realization of the asset), whichever is higher.

The Standard applies to all balance sheet assets, except for financial assets. The Standard also lays down presentation and disclosure rules for assets that have been impaired. Where the value of an asset in the balance sheet exceeds its recoverable amount, the Bank recognizes an impairment loss in the amount of the difference between the asset's book value and its recoverable amount. A loss recognized in this manner is annulled only if changes occur in the estimates that were used to determine the recoverable amount of the asset from the date on which the last loss from impairment was recognized.

### t. Cash-flow statements

These financial statements do not include cash-flow statements because such statements provide no significant information beyond that appearing in the financial statements; this practice corresponds with the general practice among central banks world wide.

### u. Taxes

According to the Bank of Israel Law, 5770-2010, regarding the payment of taxes, municipal taxes, levies and other mandatory payments, the Bank is synonymous with to the State of Israel, and therefore exempt from paying certain taxes such as income tax and capital gains tax.

## 2. Foreign currency assets and liabilities abroad

### Foreign exchange reserves

As presented in the explanatory remarks, the economic analysis refers to foreign exchange reserves which consist of the balance of the "Foreign currency assets abroad" item less the balance in the "Foreign currency liabilities abroad" item.

The Bank's investment policy relates to these balances.

Following is the composition of the foreign exchange reserves:

| | December 31 | | December 31 | |
|---|---|---|---|---|
| | 2010 | 2009 | 2010 | 2009 |
| | (NIS million) | | ($ million) | |
| Foreign currency assets abroad | 252,553 | 229,246 | 71,161 | 60,727 |
| Less Foreign currency liabilities abroad | (882) | (435) | (248) | (115) |
| **Total foreign exchange reserves** | **251,671** | **228,811** | **70,913** | **60,612** |

# 3. International Monetary Fund (IMF)

| | December 31 | | December 31 | |
|---|---|---|---|---|
| | 2010 | 2009 | 2010 | 2009 |
| | (NIS million) | | (SDR million) | |
| IMF quota | 5,089 | 5,493 | 928 | 928 |
| Less liability for the quota | (3,953) | (4,402) | (721) | (744) |
| **Reserve tranche[a]** | **1,136** | **1,091** | **207** | **184** |
| **Special Drawing Rights (SDRs)** | **4,714** | **4,651** | **860** | **786** |
| **Total balance with IMF** | **5,850** | **5,742** | **1,067** | **970** |

[a] The surplus of the reserve tranche over the basic sum of SDR 33 million bears interest at a rate set by the IMF from time to time. The annual rate of interest on December 31, 2010 was 0.31 percent (on December 31, 2009, 0.22 percent).

## a. Bank of Israel participation in the IMF

Each member country of the International Monetary Fund has a quota for its participation in the Fund's capital which is denominated in the SDR currency. The quota is determined according to the country's economic indicators (national income, exports, balance of payments, and level of reserves) and it also determines the country's voting rights. The part of the quota that is paid in cash (the Reserve Tranche) is transferred to the Fund in foreign currency and may be withdrawn by the country, whereas the rest is deposited with the country's central bank in deposits and notes indexed to SDR.

Since 1999 Israel has been part of IMF's Financial Transaction Plan. This plan is a mechanism through which an IMF member country may exchange SDR or foreign currency against its local currency, and another country is asked to perform a counter exchange. These exchanges can affect the composition of the quota (between the Reserve Tranche and the notes and deposits), and liabilities on account of the quota, but they do not affect the level of the quota.

In 2010 Israel joined the IMF's arrangement known as NAB (New Arrangements to Borrow), the aim of which is to increase, when necessary, the IMF's resources for assisting countries experiencing a financial crisis. This is an arrangement by which countries provide a credit line to the IMF, thus expressing readiness to lend to the IMF at times of need, so that it can provide credit to the countries experiencing a crisis.

In accordance with this arrangement, Bank of Israel provides a credit line in the amount of SDR 500 million that can be used by the IMF at times of need. In the event of any action being taken in the framework of this arrangement, the funds will be transferred from the foreign exchange reserves of Israel. The IMF will pay the SDR interest on this

loan, which is for two years. The loan may be returned to Israel at an earlier date at its request, if it should need these funds.

The IMF is in the process of increasing quotas, following which the quota of Israel in the IMF is expected to increase in two tranches.

### b. Special Drawing Rights (SDRs)

The balance includes SDRs allotted by the IMF to Israel. Against these SDRs the Bank has a liability towards the IMF with no repayment date, which is shown in the liabilities side under the 'International financial institutions' item.

Following the economic crisis, in 2009 the IMF decided to grant its members SDRs in the amount of USD 250 trillion to support their foreign currency balances. In this context, in August and September 2009, the IMF made two SDR allocations, in which SDR 777 million was granted to Israel. In all, the IMF has granted Israel SDR 884 million to date. (see Note 13.)

At the end of 2009, Israel joined another IMF plan, "Voluntary arrangement for the purchase and sale of SDRs". Within the framework of this plan, Israel may be asked to sell or buy SDRs from other IMF members, as instructed by the Fund. These transactions may range from 50% to 145% of the accumulated allocation balance of the SDRs granted to Israel to date. Such activity may affect the balance of the SDRs held by the Bank of Israel, but not the balance of the Reserve Tranche.

## 4. Credit to the government

Credit to the government is composed of foreign currency and local currency balances.

| | December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| **In foreign currency** | | |
| Long-term indexed advances[a] | - | 377 |
| Binational funds | 117 | 125 |
| **Total foreign currency credit to the government** | **117** | **502** |
| **In local currency** | | |
| **Long-term unindexed advance[b]** | - | 249 |
| **Total credit to the government** | **117** | **751** |

[a] This credit is indexed to the first currency basket and bears annual interest of 8 percent, indexed to that basket. (See Section b below.)

[b] This credit bears interest at prime rate plus 2 percent. The average rate of interest in 2010 was 5.12 percent. (in 2009, 4.26 percent.) (See Section b below.)

### a. Binational funds

Credit on account of binational funds was given to the government of Israel for investment in conjunction with the United States government in binational funds involved for research, industrial development, and science. The funds deposited these amounts with the Bank of Israel and they are shown in the balance sheet as liabilities under the "Other liabilities" item. Part of the funds' credit and deposits earn fixed interest of 4%-4.125% and the other part earns interest on the basis of LIBOR.

### b. Long-term advances

Credit to the government consists of unindexed long-term advances and long-term advances indexed to the first basket of currencies, which were given to the government until 1988.

In March 2010, an agreement was signed with the government regarding the restructuring of the debt with an option for early repayment, thus ending the disagreements between the Bank and the government regarding these amounts.

In accordance with the agreement, the debt was calculated for purposes of the restructuring, and Bank of Israel agreed to lower the interest rate and extend the repayment period. In addition, in accordance with the new conditions the government was granted an early repayment option at amounts discounted to the date of payment. The government took advantage of the option and repaid the debt of NIS 394 million early, on March 9, 2010. The difference between the balance of the debt before signing the agreement and the amount of the early repayment was recognized in the Statement of Operations.

Most of the effect of the above restructuring was recognized as a provision in the previous year, since the outline of the agreement was known already at the end of 2009 (see Notes 15, 21 and 25).

## 5. Loans

The balance at December 31, 2009 is for credit window monetary loans.

Where necessary, the Bank of Israel provides banking corporations with monetary loans via auction and a credit window in response to a request for monetary loans. The credit window monetary loans provided to banking corporations were given at interest of 0.5 percent above the Bank of Israel rate (until November 24, 2010—0.25 percent above the Bank of Israel rate; until February 25, 2009—0.5 percent above the Bank of Israel rate). The loans are not limited by quota and are given against appropriate guarantees.

The average interest rate for these loans in 2010 was 2.08 percent (in 2009—1.5 percent).

# 6. Tradable local currency securities

This item consists of tradable government securities indexed to the last CPI known on the balance sheet date, as well as unindexed securities. The securities are shown at fair value.

The yield to maturity on the securities portfolio at December 31, 2010 is 2.85 percent (December 31, 2009—3.35 percent).

# 7. Other assets

| | December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS millions) | |
| Loans to employees | 162 | 188 |
| Sundry receivables | 6 | 11 |
| **Total other assets** | **168** | **199** |

# 8. International financial institutions

| | December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| Investment in BIS shares | 282 | 282 |
| Balance related to other international financial institutions[a,b] | 644 | 554 |
| **Total** | **926** | **836** |

[a] As follows:
i) The World Bank Group
1. IBRD—The International Bank for Reconstruction and Development
2. IDA—The International Development Agency
3. MIGA—The Multilateral Investment Guarantee Agency
4. IFC—The International Finance Corporation
ii) EBRD—The European Bank for reconstruction and Development
iii) IDB—The Inter-American Development Bank
IIC—The Inter-American Investment Corporation

[b] During the year there was a change in the method for measuring and estimating the cost of investments and the investment estimates in reported values. The effect of the change amounted to NIS 90 million.

# 9. Fixed assets[a]

| | Land and buildings[b] | Equipment, furniture, computers, software, and vehicles | Total |
|---|---|---|---|
| | (NIS million) | | |
| **Cost** | | | |
| Balance as of December 31, 2009 | 226 | 158 | 384 |
| Additions | 3 | 39 | 42 |
| Disposals | - | (1) | (1) |
| **Balance as of December 31, 2010** | **229** | **196** | **425** |
| **Accumulated depreciation** | | | |
| Balance as of December 31, 2009 | 40 | 88 | 128 |
| Additions | 5 | 15 | 20 |
| Disposals | - | (1) | (1) |
| **Balance as of December 31, 2010** | **45** | **102** | **147** |
| **Net book balance as of December 31, 2010** | **184** | **94** | **278** |
| **Net book balance as of December 31, 2009** | **186** | **70** | **256** |

[a] A numismatic collection is kept at the Bank of Israel, which includes banknotes and coins issued in Israel from ancient times until today, along with various other items. According to an expert appraisal in November 2005, the value of the ancient coin collection is US$ 1.7 million (the rest of the collection has yet to be appraised). The "Fixed assets" item does not include this collection.

[b] The land of the Bank's premises in Jerusalem, with a depreciated cost of structures thereon amounting to NIS 174 million as of December 31, 2010 (NIS 175 million as of December 31, 2009), is leased from the Israel Lands Administration through June 30, 2016. The Bank holds an option to extend the lease for another 49 years.

# 10. Banknotes and coins in circulation

| | December 31, 2010 | | December 31, 2009 | |
|---|---|---|---|---|
| | Quantity | NIS | Quantity | NIS |
| | (million) | | (million) | |
| **Banknotes in circulation** | | | | |
| NIS 20 | 35 | 709 | 32 | 637 |
| NIS 50 | 48 | 2,397 | 51 | 2,535 |
| NIS 100 | 145 | 14,486 | 154 | 15,425 |
| NIS 200 | 129 | 25,773 | 107 | 21,485 |
| Coins in circulation | | 1,461 | | 1,376 |
| Other[a] | | 2 | | 32 |
| **Total** | | **44,828** | | **41,490** |

[a] Consisting mainly of old banknotes that can be exchanged in the Bank of Israel.

On December 31, 2010 the legal date passed for exchanging Series A NIS banknotes and coins of a value of 5 agorot. On the same day the Bank recognized income in the amount of the face value of the Series A NIS banknotes and coins of a value of 5 agorot that are held by the public and were not exchanged in an amount of NIS 220 million. (See Note 29.)

# 11. Government deposits

Government balances comprise balances in local currency and balances in foreign currency.

All the Government local currency balances in the Bank of Israel (excluding several extraordinary balances) can be offset against each other. The parties have no intention of offsetting the government's local currency balances with its foreign currency balances, and these balances are therefore stated separately.

| | December 31 | | December 31 | |
|---|---|---|---|---|
| | 2010 | 2009 | 2010 | 2009 |
| | (NIS million) | | ($ million) | |
| **Foreign currency**[a] | | | | |
| Deposit for money borrowed under US government guarantee | - | 7,180 | - | 1,901 |
| Current deposits | 307 | 1,173 | 87 | 311 |
| Other foreign currency deposit | 921 | 127 | 259 | 34 |
| **Total foreign currency deposits** | **1,228** | **8,480** | **346** | **2,246** |
| **Local currency**[b] | | | | |
| Current deposits | **12,979** | **11,852** | | |
| **Total government deposits** | **14,207** | **20,332** | | |

[a] **Government foreign currency deposits**
Government foreign currency deposits derived from borrowing under a US government guarantee and some other foreign currency deposits bear interest at the rate paid on US Treasury bills with an average of six months to maturity. The rate of interest on December 31, 2010 was 0.19 percent (on December 31, 2009, 0.20 percent).

[b] **Government local currency deposits**
Current deposits consist of balances used for bond lending and balances for financing budgetary activity. The part of government balances used for bond lending bears interest at the Bank of Israel interest rate. The average rate of interest in 2010 on these balances was 1.6 percent (in 2009, 0.77 percent). The other part of the government balances bears (when in debit) or is paid (when in credit) interest at prime. The average prime rate in 2010 was 3.1 percent (in 2009, 2.26 percent).

# 12. Deposits of banking corporations

| | December 31 | | December 31 | |
|---|---|---|---|---|
| | 2010 | 2009 | 2010 | 2009 |
| | (NIS million) | | ($ million) | |
| **Foreign currency deposits**[a] | | | | |
| **Demand deposits** | **1,541** | **1,700** | **434** | **450** |
| **Local currency deposits**[b] | | | | |
| Time deposits | 78,374 | 91,503 | | |
| Demand deposits | 21,483 | 13,312 | | |
| **Total local currency deposits** | **99,857** | **104,815** | | |
| **Total deposits of banking corporations** | **101,398** | **106,515** | | |

[a] **Foreign currency deposits**

Foreign currency demand deposits (called Pamach) serve as a liquid asset against nonresidents' foreign currency deposits. The reserve requirement ranges from 0 percent to 6 percent, depending on the term of the deposit.

[b] **Local currency deposits**

1. The Bank of Israel receives local currency time deposits from the banks. The deposits are allocated by auction for terms of one day or one week. The deposits are not considered liquid assets with regard to the banking corporations' reserve requirements. In addition, deposits are received at the (overnight) deposit window available to the banking corporations at an interest rate of 0.5 percentage points under the Bank of Israel interest rate (until November 24, 2010 it was 0.25 percent under the Bank of Israel interest rate; until February 25, 2009, 0.5 percent under the Bank of Israel interest rate).

   The interest rate for deposits at the window on December 31, 2010 was 1.5 percent (on December 31, 2009, 1 percent).

   The average interest rate for deposits at the window in 2010 was 1.4 percent (in 2009, 0.51 percent).

   The average interest rate for time deposits by auction on December 31, 2010 was 1.99 percent (on December 31, 2009, 1.24 percent).

   The average interest rate for time deposits by auction in 2010 was 1.59 percent (in 2009, 0.72 percent).
2. The banking corporations' local currency demand deposits serve as a liquid asset against residents' local currency deposits. The reserve requirements ranges from 0 percent to 6 percent, depending on the term of the deposit.

# 13. International financial institutions

| | December 31 | | December 31 | |
|---|---|---|---|---|
| | 2010 | 2009 | 2010 | 2009 |
| | (NIS million) | | (SDR million) | |
| Special Drawing Rights allocated[a] | 4,846 | 5,230 | 884 | 884 |
| Liabilities to international financial institutions[b] | 44 | 46 | 8 | 8 |
| **Total** | **4,890** | **5,276** | **892** | **892** |

[a] Special Drawing Rights (SDRs) are sums that member states in the International Monetary Fund (IMF) undertook to purchase from the Fund. No repayment date has been set for this liability. The IMF allocates SDR to its constituent states commensurate with the size of their quotas. In 2009 the IMF made two allocations to Israel, totaling SDR 777 million. (see Note 3.) Israel's allocation so far is SDR 884 million.

[b] Liabilities in notes, deposits or letters of guarantee to the following institutions: IDA, EBRD, MIGA and IDB (see Note 1.h.)

# 14. *Makam*

| | December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| Redemption value of *makam* sold to the public | 136,418 | 86,082 |
| Less discount at time of sale to public | (2,975) | (1,320) |
| **Proceeds of sale of *makam* to the public** | **133,443** | **84,762** |
| Plus reduction in discount for period to balance sheet date | 1,466 | 644 |
| **Total balance of *makam*** | **134,909** | **85,406** |

The Short-Term Loan Law, 5744-1984, authorizes the government to issue short-term bills (called *makam*, their Hebrew acronym) to be sold only to the Bank of Israel, with the Bank selling them to, and buying them from, the public in order to regulate the money supply and carry out its functions. The government must deposit all proceeds from sales of these bills with the Bank of Israel and may not use them for any purpose other than repayment of the loan taken under said Law, or payment of the yield on it. The purchase of bills from the government by the Bank of Israel and the deposit of the proceeds of this sale with the Bank of Israel are not reflected in the Bank's balance sheet.

The balance of *makam* shown in the balance sheet reflects the redemption value of bills held by the public, less the balance of the unamortized discount.

# 15. Other liabilities

| | December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| Pension and severance pay liabilities[a] | 3,771 | 3,780 |
| Other liabilities on employees' rights | 116 | 128 |
| Binational funds | 117 | 125 |
| Accounts payable[b] | 352 | 378 |
| **Total other liabilities** | **4,356** | **4,411** |

[a] The balance in 2009 includes for the first time the effect of the wage agreement signed on April 17, 2008, and an addition for wage erosion pursuant to the ruling of the District Labor Court in August 2008.
[b] The balance includes a provision for a loss on the expected recycling of long-term advances given to the government. (see Notes 4, 21 and 25.)

## a. Pension and severance pay liabilities

Pension liability is calculated according to the pension agreements with the Bank's employees and pensioners who commenced their employment before September 2002 and their survivors (on December 31, 2010—368 employees, 663 retirees; on December 31, 2009—of 378 employees, and 666 retirees). The pension liability includes future payment of benefits for Bank employees, former Bank employees whose pensions have been frozen, retirees, and survivors. It also includes obligations on account of the cash value of unused sick leave upon retirement and retirement grants.

The Bank's liability is calculated on the basis of salary and pension data for December 2010 and actuarial calculations. The calculation was performed using a method of estimating benefits which are accrued under various parameters: early retirement rates, pension rates for surviving spouses and orphans, employees' seniority and grade, relevant tax rates, etc.

The actuarial calculation is based on foreseen changes in white-collar mortality rates, in accordance with the Pension Fund Directives published by the Capital Market, Insurance, and Savings Division of the Ministry of Finance on May 17, 2007.

The Bank's actuarial liability was calculated on the basis of a 4 percent discount rate, in accordance with the public reporting directives of the Supervisor of Banks and based on past experience. The calculation assumes a real annual wage increase of up to 1.5 percent.

For Bank employees who commenced their employment after September 2002, the Bank's liability for pension and severance pay is covered by regular deposits with a recognized pension and severance-pay fund on behalf of the individual employee. Since sums deposited in said manner are neither controlled nor managed by the Bank, neither they nor the liabilities against which they were deposited are reflected in the balance sheet.

### b. Liability for employees' and other rights

This item consists mainly of an NIS 92 million liability for employees' vacation. (in 2009 —NIS 81 million.)

The liability at December 31, 2009 was calculated on the basis of the determining salary for the redemption of vacation and the number of vacation days accrued up to the balance sheet date.

The liability at December 31, 2010 is calculated on the basis of the accrued vacation days due at October 31, 2010 and the effective salary for vacation redemption at the balance sheet date. The difference in the liability that derives from the accrual of vacation days between October 31, 2010 and December 31, 2010 is immaterial.

## 16. Revaluation accounts

Revaluation accounts include unrealized profits from the revaluation of the following items (see Notes 1.g, 1.m, and 1.n):

| | December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| Foreign currency balances | 317 | 2,530 |
| Tradable foreign currency securities | 742 | 899 |
| Tradable local currency securities | 1,145 | 724 |
| **Total revaluation accounts** | **2,204** | **4,153** |

## 17. Share capital and general reserves in historical nominal values

Data on the Bank's share capital and general reserve appear in the financial statements in reported values. (See Note 1.c.). The amount in historical nominal values is NIS 320 million at December 31, 2010 and 2009.

The general reserve served in the past to increase the Bank's capital in accordance with Section 6 of the Bank of Israel Law, 5714-1954.

# 18. Assets and liabilities according to indexation bases

| | December 31, 2010 | | | | December 31, 2009 | | | |
|---|---|---|---|---|---|---|---|---|
| | In local currency | In foreign currency[a] | Nonfinancial items | **Total** | In local currency | In foreign currency[a] | Nonfinancial items | **Total** |
| | (NIS million) | | | | (NIS million) | | | |
| **Assets** | | | | | | | | |
| Foreign-currency assets abroad | - | 252,553 | - | **252,553** | - | 229,246 | - | **229,246** |
| Credit to the government[b] | - | 117 | - | **117** | 249 | 502 | - | **751** |
| Loans | - | - | - | **-** | 420 | - | - | **420** |
| Tradable securities in local currency | 19,672 | - | - | **19,672** | 20,221 | - | - | **20,221** |
| Other assets | 168 | - | - | **168** | 199 | - | - | **199** |
| International financial institutions | - | - | 926 | **926** | - | - | 836 | **836** |
| Fixed assets | - | - | 278 | **278** | - | - | 256 | **256** |
| **Total assets** | **19,840** | **252,670** | **1,204** | **273,714** | **21,089** | **229,748** | **1,092** | **251,929** |
| **Liabilities** | | | | | | | | |
| Banknotes and coins in circulation | 44,828 | - | - | **44,828** | 41,490 | - | - | **41,490** |
| Foreign-currency liabilities abroad | - | 882 | - | **882** | - | 435 | - | **435** |
| Government deposits | 12,979 | 1,228 | - | **14,207** | 11,852 | 8,480 | - | **20,332** |
| Deposits of banking corporations | 99,857 | 1,541 | - | **101,398** | 104,815 | 1,700 | - | **106,515** |
| International financial institutions | - | 4,890 | - | **4,890** | - | 5,276 | - | **5,276** |
| *Makam* | 134,909 | - | - | **134,909** | 85,406 | - | - | **85,406** |
| Other liabilities | 4,239 | 117 | - | **4,356** | 4,286 | 125 | - | **4,411** |
| Revaluation accounts | 1,145 | 1,059 | - | **2,204** | 724 | 3,429 | - | **4,153** |
| **Total liabilities** | **297,957** | **9,717** | **-** | **307,674** | **248,573** | **19,445** | **-** | **268,018** |
| **Difference** | **(278,117)** | **242,953** | **1,204** | **(33,960)** | **(227,484)** | **210,303** | **1,092** | **(16,089)** |

[a] Including foreign currency indexed.
[b] Foreign currency credit to the government includes long-term advances totaling NIS 377 million in shekels indexed to the first currency basket exchange rate.

# 19. Contingent liabilities[a] and commitments

| | 31 December | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| **Off-balance-sheet financial instruments** | | |
| Guarantees for government exports | 233 | *265 |
| Liabilities to pay international financial institutions on demand | 3,024 | 3,181 |
| Liabilities to pay International Monetary Fund on demand[b] | 2,741 | - |
| **Commitments** | | |
| **Financial instruments in activity abroad** | | |
| Currency swaps and forward transactions | | |
| Future receipts of foreign currency | 21,620 | 4,588 |
| Future payments of foreign currency | 22,478 | 4,564 |
| **Repurchase Agreements (Repo) and Reverse Repurchase Agreements (R.Repo)** | | |
| Repo | - | 434 |
| R.Repo | 1,784 | *8,991 |
| **Futures transactions on interest—in face value terms** | | |
| Purchase commitments | - | 9,350 |
| **Futures transactions on bonds—in face value terms** | | |
| Sales commitments | 320 | - |

* Reclassified.
[a] Several claims are pending against the Bank of Israel. However, it is the Bank's opinion, based on the opinion of the Bank's Legal Department, that the probability of these claims being upheld is low, or that the sums involved are not significant.
[b] See Note 3.a.

# 20. Interest income from financial assets in foreign currency abroad

| | For the year ended December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| Demand deposits | 4 | 2 |
| Short-term deposits | 33 | 6 |
| Tradable securities | 2,900 | 2,530 |
| Securities purchased under R.Repo agreements | 21 | 25 |
| Derivative financial instruments, net | (15) | (3) |
| IMF | 16 | 7 |
| **Total interest income from assets in foreign currency abroad** | **2,959** | **2,567** |

### Interest income from (expense on) foreign currency abroad

The following shows the composition of interest income from (expense on) foreign exchange reserves (see Notes 2 and 23.)

| | For the year ended December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| Interest income from foreign currency assets abroad | 2,959 | 2,567 |
| less Interest paid on foreign currency liabilities abroad | (4) | (5) |
| **Total income from foreign exchange reserves** | **2,955** | **2,562** |

## 21. Interest income from the government

| | For the year ended December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| **Long-term advances**[a] | | |
| Indexed | - | 38 |
| Unindexed | 2 | 7 |
| **From binational funds** | 72 | 71 |
| **From local currency securities** | 948 | 789 |
| **Total** | **1,022** | **905** |

[a] The interest income for 2009 includes the effect of lowering the interest on the expected recycling of advances in accordance with the principles agreed with the government. (See Notes 4, 15 and 25.)

## 22. Other interest income

This item consists of interest income from banks in respect of balances carrying the Bank of Israel interest rate.

## 23. Interest expense on financial liabilities in foreign currency abroad

This item consists of interest expense in respect of securities sold within the framework of repurchase agreements. (see Note 20.)

# 24. Interest expense to banks and the public

| | For the year ended December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| **In local currency** | | |
| *Makam* | 2,234 | 1,969 |
| Time deposits | 1,266 | 425 |
| **Total** | **3,500** | **2,394** |

# 25. Interest expense to the government

| | For the year ended December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| On account of local currency balances[a] | 318 | 410 |
| On account of foreign currency balances | 10 | 20 |
| **Total** | **328** | **430** |

[a] The expense of local currency interest paid to the government includes interest expense on government balances for financing the budget. In 2009 the expense also includes the provision for loss from interest arising on the expected restructuring of long-term advances made to the government. (See Notes 4, 15 and 21.)

# 26. Other interest expense

This item consists mainly of interest expense to international financial institutions, on deposits of the US-Israel Binational Industrial Research and Development Foundation, on deposit of the US-Israel Binational Science Foundation, and expenses with respect to the National Insurance Institute and the Postal Bank.

# 27. Other financial income from (expense on) securities and derivatives

| | For the year ended December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| **Securities**[a] | | |
| In foreign currency | 36 | 2,704 |
| In local currency | - | (54) |
| **Total securities** | **36** | **2,650** |
| **Derivative financial instruments**[b] | | |
| In foreign currency | (105) | (6) |
| **Total** | **(69)** | **2,644** |

[a] Gain from the sale of securities and loss from reduction in their value at the end of the year, net.
[b] Including financial income from (expense on) the realization of derivative financial instruments.

# 28. Other financial income from (expense on) exchange rate differentials

This item consists of realized exchange rate differentials on account of balances denominated in foreign currency. (see Notes 1.m and 1.n.)

# 29. Other financial income (expense)—miscellaneous[a]

| | For the year ended December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| In local currency[a] | 223 | 4 |
| In foreign currency | (12) | (30) |
| **Total**[b] | **211** | **(26)** |

[a] Including income in an amount of NIS 220 million in respect of Series A NIS banknotes and coins of a value of 5 agorot that are held by the public and were not exchanged. (see Note 10.)
[b] The other income (expenses) from fees is from the Bank of Israel's financial activities.

# 30. Administrative and general expenses

| | For the year ended December 31 | |
|---|---|---|
| | 2010 | 2009 |
| | (NIS million) | |
| Staff wages and employees' rights[a] | 450 | 804 |
| General expenses | 78 | 75 |
| **Total** | **528** | **879** |

[a] Consisting mainly of employees' salaries (on December 31, 2010 there were 708 employee posts, and on December 31, 2009, 691), unfunded (non-contributory) pension payments, and an update of the Bank's pension and vacation liabilities to employees. (see Note 15.)

# 31. Other income

In 2010 this item consists of dividend income and the effect of changing the method for measuring the cost of investments in reported values in international financial institutions and the resulting change in estimates. (See Note 8).

In 2009 this item consisted mainly of income from refunds for expenses paid by the Bank in the past, within the framework of guarantees given to banks in liquidation.

# EXPLANATORY REMARKS TO THE 2010 FINANCIAL STATEMENTS

## 1. The Principal Changes in the Financial Statements

### 1.1 The Bank of Israel's balance sheet

The Bank of Israel's balance sheet totaled NIS 274 billion at the end of 2010 as against NIS 252 billion at the end of 2009—an increase of about NIS 22 billion (8.6 percent).

On the Assets side, this increase can be attributed to an increase of NIS 22 billion in the Bank's foreign currency financial assets abroad.

In 2010 the Bank purchased on the shekel-foreign currency market about $11.9 billion, following the purchase of about $32 billion in total during 2008 and 2009, which is due in part to the plan to purchase fixed amounts of foreign currency, a plan that commenced in March 2008 and ended in August 2009. As from August 2009 the Bank's policy is to intervene in the foreign currency market when there are irregular fluctuations in the exchange rate that do not correspond with the basic economic conditions of the economy.

The foreign exchange reserves[1] increased from $61 billion at the end of 2009 to $71 billion at the end of 2010 (an increase of about 17 percent).

On the Liabilities and Equity side, the increase can be attributed mainly to a mixed effect of changes: on the one hand there was an increase of NIS 36 billion in monetary absorption instruments—which was due to an increase of NIS 50 billion in the makam and a decrease of NIS 14 billion in time deposits—and an increase of NIS 3 billion in notes and coins in circulation; whereas on the other hand, there was a decrease of NIS 2 billion in revaluation accounts and a decrease of NIS 17.9 billion in the Bank's equity, which is a result of the loss for the year.

This purchase of foreign currency injected liquidity into the economy above the increase required in the monetary base[2], and the Bank absorbed these surpluses with the use of monetary tools—expanding the issue of *makam* to the public and reducing the time deposits that it held for the commercial banks. Increasing the relative share of the *makam* in the monetary tools to 63 percent at the end of 2010, compared with 48 percent

[1] In these notes, the term "foreign exchange reserves" is used in its economic sense. The reserves are composed of the balance of "Foreign currency assets abroad" on the Assets side of the Bank's balance sheet, less the balance of "Foreign currency liabilities abroad" on the liabilities side of the balance sheet. These balances are used to determine the Bank of Israel's investment policy and its reporting to various entities and they therefore constitute the basis for the analysis of trends in these Explanatory Remarks.

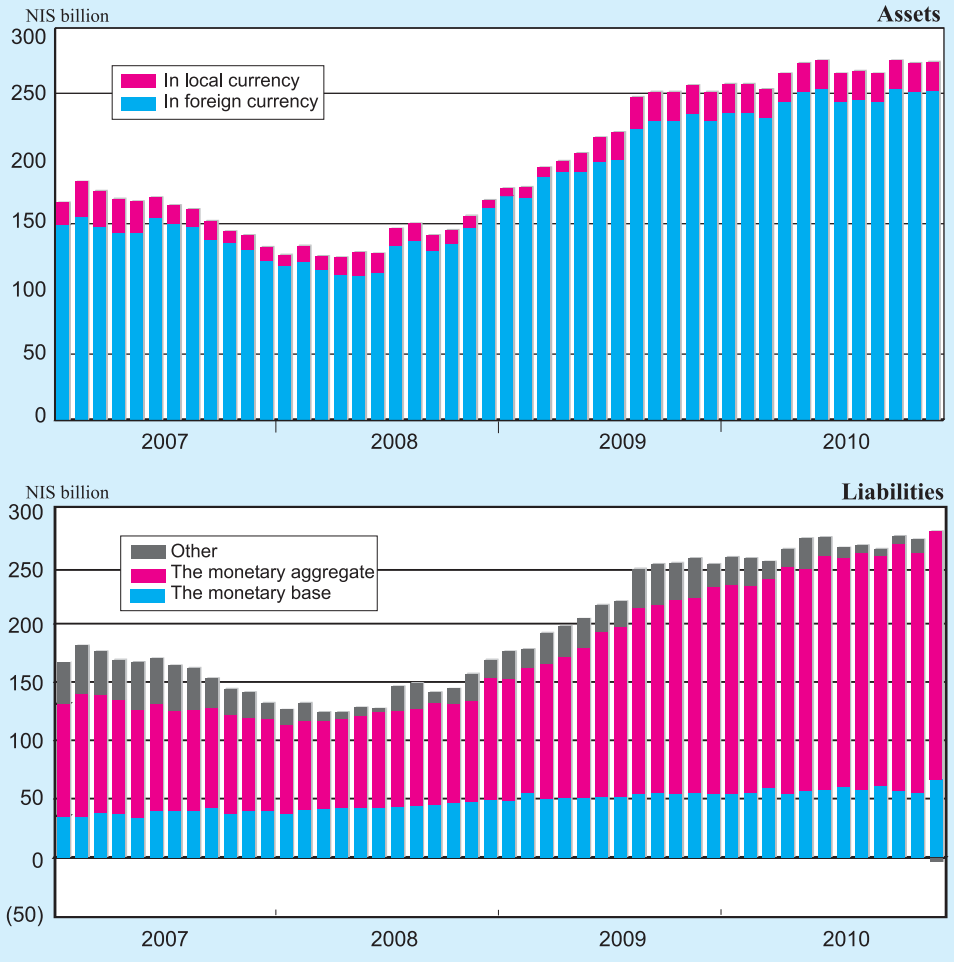
[2] The monetary base is composed of banknotes and coins in circulation and of the NIS-denominated current deposits of the banks with Bank of Israel.

at the end of 2009, derives from the goal to continue perfecting the money market in Israel, and from other advantages of makam over deposits as a monetary tool.

As a result, the combination of monetary tools[3] at the end of 2010 continued to comprise liabilities only and amounted to NIS 213 billion, compared with NIS 176 billion at the end of 2009, an increase of 21 percent.

The increase in the reserve of banknotes and coins in circulation, which together with the banks' local currency current deposits in the Bank of Israel form the narrow monetary basis, was largely the outcome of the relatively low rate of interest in the economy during 2010 (notwithstanding its increase to 2 percent), which generated an increase in the demand for money and the aforesaid increase in the monetary base.

**Figure 1**
**The Bank's Assets and Liabilities, 2007-2010**




[3] Makam and time deposits less monetary loans and repo auctions. The balance of monetary loans was zero at the end of 2010. The balances of repo auctions were zero at the end of 2010 and 2009.

These changes in the Bank's balance sheet led to an increase in surplus assets over liabilities in foreign currency in the amount of NIS 33 billion (about 16 percent), from NIS 210 billion at the end of 2009 to NIS 243 billion at the end of 2010. The surplus of liabilities over assets in local currency grew from NIS 227 billion at the end of 2009 to NIS 278 billion at the end of 2010, an increase of NIS 51 billion or 22 percent. (see Note 18 to the Financial Statements.)

In 2010, similar to recent years, there was an increase in the currency asymmetry in the composition of Bank of Israel's assets and liabilities. The currency asymmetry has been a feature of the Bank's balance sheet for more than ten years, since most of the Bank's assets are denominated in foreign currency, whereas its liabilities are primarily in shekel. The asymmetry exposes the Bank to fluctuations in its reported financial results as a result of changes in the exchange rates of the shekel in relation to foreign currencies, and to changes in Israel's interest trajectory relative to those of other economies (Figure 1)[4].

## 1.2 Statement of Operations

In the Statement of Operations, the Bank recorded a loss of NIS 17.9 billion in 2010, compared with a profit of NIS 1.4 billion in 2009. The loss is attributed principally to the significant increase in exchange rate differential expenses.

Net interest income amounted to NIS 27 million this year, compared with NIS 552 million in 2009, a decrease of NIS 525 million.

Other financial expenses in respect of securities and derivatives amounted to NIS 69 million, compared with income of NIS 2.6 billion in 2009.

The other financial expenses, in respect of exchange rate differentials, amounted to NIS 17.6 billion, compared with NIS 0.9 billion in 2009.

The Bank's general and administrative expenses amounted to NIS 528 million in 2010, compared with NIS 879 million in 2009, a decrease of NIS 351 million (40 percent).

Net interest income amounted to NIS 27 million in 2010, compared with NIS 552 million in 2009.

Interest income from foreign currency abroad amounted to NIS 3 billion this year, compared with NIS 2.6 billion in 2009. The increase of NIS 0.4 billion is principally due to an increase in foreign currency assets.

[4] This currency asymmetry first began to manifest itself during the years 1995-1997, when the Bank adopted a contractionary monetary policy in order to attain the inflation targets set by the government. The resulting import of capital by the private sector forced the Bank of Israel to purchase foreign currency from the public in order to keep the exchange rate at the lower limit of the crawling band that was used at the time to re-absorb the local currency that was injected into the economy for this purpose. The foreign exchange reserves grew from an average of several billion US dollars in previous decades to $23 billion in 1998. At the same time, the balance of monetary instruments, which until 1994 was composed mainly of monetary loans, as accepted by central banks world wide, has since then been composed of liabilities.

The interest expense to banks and the public, which are the interest expenses on the monetary aggregate, amounted to NIS 3.5 billion this year, compared with NIS 2.4 billion in 2009. The increase in interest expense, of approximately NIS 1.1 billion, is principally due to an increase in absorption using monetary instruments—*makam* and time deposits—in 2010, and to the expansion of the interest spread between the shekel interest rate and interest rates abroad, as a result of the interest rates in the developed countries remaining at their low levels and the interest of Bank of Israel being raised by about 1 percent to a level of 2 percent in October 2010. Conversely, the growth in the monetary base, which reduced the extent of required absorption, contributed to reducing the interest expenses.

Interest income from the government increased by about NIS 117 million, from NIS 905 million in 2009 to NIS 1,022 million in 2010. The increase in income was affected this year by two opposing factors: on the one hand, interest income from securities in local currency increased while on the other hand there was a decrease in credit to the government following the debt restructuring agreement[5] that was signed with the government that includes an early repayment option, following which there was a decrease in interest income.

Interest expense to the government decreased by about NIS 102 million, from NIS 430 million in 2009 to NIS 328 million in 2010. This is a result of two opposing factors: the decrease of the government's foreign currency deposits caused a decrease of interest expense while an increase in the government's local currency balances and the gradual increase of the interest rate led to an increase in the expense.

Net interest expense to the government, excluding interest income from securities in local currency, amounted to NIS 254 million, compared with NIS 314 million in 2009.

Net interest income from foreign exchange reserves was NIS 3 billion this year, compared with NIS 2.6 billion in 2009.

Other financial expenses in respect of securities and derivative financial instruments amounted to NIS 69 million, compared with NIS 2.6 billion in 2009. The change is mainly due to a significant decline in capital gains from securities traded in foreign currency.

An economic review of the Bank's capital gains requires adding the realized gains (losses) together with the change in the balance of the relevant item in the revaluation accounts (unrealized gains).

Overall, The Bank of Israel earned this year capital gains from foreign currency securities in the amount of NIS 0.3 billion, compared with NIS 2.8 billion in 2009. The decline in

[5] In March 2010 a debt restructuring agreement including an early repayment option was signed with the government. In the agreement, Bank of Israel agreed to reduce the interest and extend the repayment period; alternatively the government was granted an option to early repay the debt in amounts discounted to the date of repayment. On March 9, 2010 the government early, repaid the debt pursuant to the option.

capital gains compared with last year, even with an increase in foreign currency assets abroad, is attributed mainly to increases in the yields to maturity of government bonds in the USA and Europe in the last four months of 2010, following concerns regarding the economic recovery in the USA and the repayment abilities of countries having large amounts of national debt.

In 2010, the NIS appreciated 6 percent against the US dollar, compared with appreciation of 0.7 percent in 2009. The nominal effective exchange rate[6] of the NIS appreciated by 7 percent, compared with a devaluation of 2.5 percent in 2009. The change in the exchange rate was not uniform throughout the year; in the first half of the year the NIS weakened by 3 percent compared to the dollar, whereas in the second half it strengthened by 9 percent. These trends mainly reflect the weakening of the euro compared to the dollar in the first half and its strengthening in the second half. A similar trend is evident in the exchange rates of other principal foreign currencies against the shekel—a weakening of 10.1 percent in the pound sterling (an increase of 10.1 percent in 2009) and a weakening of 12.9 percent in the euro (an increase of 2.7 percent in 2009). These effects were reflected in the Bank's high expenses on exchange rate differentials this year.

General and administrative expenses decreased this year by NIS 351 million. This is the result of a decrease in wages and benefits to the Bank's employees and pensioners. The decrease in these expenses is due to a onetime adjustment of the actuarial liability for retirement payments to employees and pensioners, recorded in 2009.

## 2. Analysis and Explanation of the Principal Changes in the Financial Statements

The Bank of Israel performs the responsibilities imposed on it, and acts to achieve the goals that were set for it by law in its capacity as a central bank. Therefore, its activity is not necessarily aimed at achieving profits. Some of the Bank's responsibilities—including managing foreign exchange reserves, managing the monetary policy, providing banking services to the government, issuing currency and organizing the economy's cash system—have significant effects on the financial statements. Along with this, the Bank's achievement of its goals and fulfillment of its responsibilities have economic benefits for the economy in general, which are not necessarily reflected in the financial statements.

The Bank's financial statements are prepared in accordance with generally accepted accounting principles (GAAP), adapted for the special activity of a central bank, as

[6] The nominal effective exchange rate is calculated as the weighted average of the shekel exchange rate against 28 currencies (representing 38 countries) according to the trade weight of Israel with these countries.

adopted by central banks. In order to understand the effect of the economic developments on the financial statements, presented hereunder is an analysis of the data in the financial statements, according to economic aggregates in line with the Bank's functions.

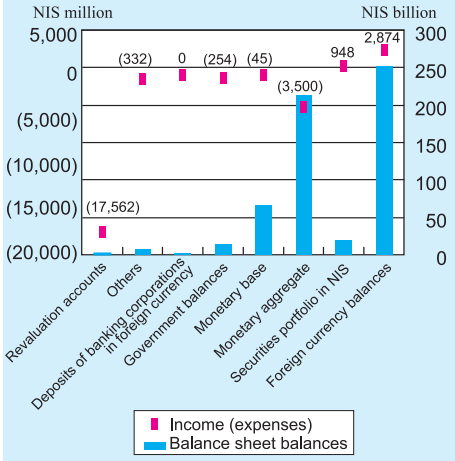
**Table 1**
**Aggregate Balance Sheet Balances, and the Resulting Profit and Loss**

| | December 31 | | For year ended December 31 | |
|---|---|---|---|---|
| | 2010 | 2009 | 2010 | 2009 |
| | Balances | | Income (expenses) | |
| | (NIS million) | | | |
| **Assets, net** | | | | |
| Foreign currency balances[a] | 251,671 | 228,811 | 2,874 | 5,230 |
| Securities portfolio in NIS | 19,672 | 20,221 | 948 | 735 |
| **Total** | **271,343** | **249,032** | **3,822** | **5,965** |
| **Liabilities and equity, net** | | | | |
| Monetary aggregate[b] | 213,283 | 176,489 | (3,500) | (2,385) |
| Monetary base[c] | 66,311 | 54,802 | (45) | (69) |
| Government balances[d] | 14,090 | 19,581 | (254) | (315) |
| Deposits of banking corporations in foreign currency | 1,541 | 1,700 | - | - |
| Others[e] | 7,874 | 8,396 | (332) | (913) |
| Revaluation accounts[f] | 2,204 | 4,153 | (17,562) | (923) |
| Equity of the Bank | (33,960) | (16,089) | - | - |
| **Total** | **271,343** | **249,032** | **(21,693)** | **(4,605)** |
| **Net profit (loss)** | **-** | **-** | **(17,871)** | **1,360** |

[a] Consisting of the balance in the item "Foreign currency assets abroad" on the asset side of the Bank's balance sheet, minus the balance in the item "Foreign currency liabilities abroad" on the liabilities side of the balance sheet.
[b] Consisting of the balance of makam and time deposits in local currency minus the monetary loans and repurchase auctions.
[c] Consisting of banknotes and coins in circulation plus the banks' local currency demand deposits in the Bank of Israel. The expenses in respect of this item are mainly money printing expenses.
[d] Consisting of the government's foreign currency deposits plus the government's local currency deposits minus the balance of credit to the government.
[e] The others balance consists of other balances in local currency plus the total of other assets (fixed assets and international financial institutions) minus other liabilities in foreign currency in respect of international financial institutions.
[f] The profit (loss) on this item includes realized exchange rate differentials on foreign currency balances. (Realized capital gains are shown in the item to which they are related.)

Table 1 and Figure 2 show the financial statements of the Bank in net amounts—that is net balance sheet amounts and net operating results in the Statement of Operations according to the functions performed by the Bank, and according to the principal activity it performs. The manner of their presentation is different from the accepted accounting presentation, for the purpose of analyzing the changes in the financial statements.

**Figure 2**
**Aggregate Balance Sheet Balances, and the Resulting Profit and Loss, 2010**




SOURCE: Bank of Israel.

## 2.1 Foreign exchange reserves

Foreign exchange reserves[7] account for the largest part of the Bank's assets—about 92 percent of the Bank's total assets at the end of 2010 (Table 1). In accordance with the Bank of Israel Law, 5770-2010, one of the Bank's responsibilities is to hold and manage the country's foreign exchange reserves[8].

Holding and managing an appropriate level of foreign exchange reserves serve the goals of the Bank as provided in the Law and help it to fulfill its other responsibilities.

The foreign exchange reserves serve as a foreign currency source of liquidity that the Bank can use when needed, and their existence provides benefits to the economy —such as reducing the probability of a crisis in Israel's foreign exchange market and enhancing Israel's status in global financial markets, benefits that also support the Bank in achieving its goals and performing its responsibilities. The desired level of the reserves, the principles that guide the Governor with respect to that level, and the investment policy of the reserves and its underlying guidelines, all derive from the possible uses of the reserves and the benefits arising from having them.

Possible uses Bank of Israel can make of the reserves are: (1) As the government's banker—selling foreign currency to the government when needed, for example for servicing the country's foreign currency debts or for financing imports in time of emergency; (2) Any use contributing to achieving the Bank's goal of supporting the stability and normal functioning of the financial system; (3) Using the reserves to perform

[7] Foreign exchange reserves are composed of the balance of the "Financial foreign currency assets abroad item" in the Bank's balance sheet, less the balance of "Financial foreign currency liabilities abroad" item. These balances are used to determine the Bank's investment policy and its reportage to various entities, and therefore form the basis for the analysis of trends in these Explanatory Remarks.

[8] Until the Bank of Israel Law, 5770-2110 came into effect on June 1, the reserves were managed in accordance with the Bank of Israel Law, 5714-1954 and the legal interpretation that was added to it over the years, and according to the investment policy established by the Bank's Governor.

the Bank's responsibilities: (a) implementing the monetary policy; (b) supporting the normal operation of the foreign currency market in Israel.

At the end of 2010 the foreign exchange reserves amounted to $71 billion, compared with $61 billion at the end of 2009, an increase of $10 billion (about 16 percent).

In NIS terms, the foreign exchange reserves amounted to NIS 252 billion at the end of 2010, compared with NIS 229 billion at the end of 2009, an increase of NIS 23 billion or about 10 percent (Figure 3).

Several factors explain the increase in the reserves (Table 4). As in last year, most of the increase this year was due to the purchase of $11.9 billion of foreign currency by the Bank of Israel in the NIS-foreign currency market, compared with $19.6 billion in 2009.

This increase was offset by an overall loss of Bank of Israel from interest and financial gains in the amount of $0.8 billion, compared with a profit of $2.1 billion in 2009.

The financial gains are calculated in dollar terms, and therefore are greatly affected by changes in the exchange rate of the dollar in relation to the other currencies in which the reserves are invested.

Furthermore, the increase in the foreign exchange reserves was offset by withdrawals of the public sector in the amount of $0.2 billion and of the government and national institutions in the amount of $0.7 billion (last year—$4.6 billion and $0.2 billion, respectively).

From August 2009, the Bank of Israel began to operate in the foreign exchange market only when there were serious fluctuations in the NIS exchange rate inconsistent with basic economic conditions, or when the foreign exchange market failed to function normally.

The government's net withdrawals from the foreign exchange reserves amounted to $0.9 billion in 2010, similar to their amount in 2009 (about $0.4 billion).

The global financial crisis led to a dramatic increase in credit risks in the international banking sector. Consequently, in September 2008 the Bank of Israel decided to discontinue making deposits in the international banking system and this directive remains in force to date. The balance in short-term deposits of NIS 20.4 billion at the end of 2010 consists of deposits in international financial institutions and of deposits in foreign banks which are fully guaranteed by governments abroad (an increase of $7.6 billion).

### 2.1.1 Rate of return on the foreign exchange reserves

The Bank of Israel invests the foreign exchange reserves primarily in tradable assets having a relatively short average duration. This is done to ensure an appropriate level of liquidity and avoid the risk of large fluctuations in portfolio value as a result of possible swings in the financial markets.

The Bank of Israel measures the return on the foreign exchange reserves in terms of

the currency numeraire, a basket comprised of a number of currencies in which most of the reserves are held. The composition of the numeraire's currency basket is determined according to fixed principles, which reflect the objectives of holding the reserves. Its composition is adjusted from time to time as needed, and is always known in advance. The numeraire also serves as an anchor for the currency risk of the reserves.

The returns obtained on the investment of the foreign exchange reserves are judged against a benchmark return. The benchmark is based on a hypothetical portfolio that is created according to pre-set rules and reflects the Bank's long-term investment strategy. The returns on the holding of assets included in the benchmark, in all currencies, are weighted according to the weights of the currencies in the numeraire. The target duration of the benchmark is set according to the shortfall approach, in which benchmark duration is set so that the annual holding rate of return of the portfolio should not fall below a minimum desired threshold at the desired level of safety. The Bank's risk preference forms the basis for determining the parameters for this duration.

A change in duration may occur due to a change in the parameters of the approach or in the yield to maturity and risk data in the foreign bond markets where the reserves are invested. At the end of 2010, the benchmark duration was nine to ten months in the US dollar portfolio and in the euro portfolio. The benchmark duration for other currencies was longer.

The actual annual rate of return on the reserve portfolio in the numeraire was 1.24 percent in 2010, as against a return of 1.14 percent on the benchmark[9] (Table 2).

The difference between them of 0.10 percent is the surplus yield in the reserve portfolio, reflecting the contribution of investment decisions made according to the permitted degrees of freedom in the active management of the reserves, which are reflected in deviations of the composition of the portfolio from the benchmark composition. These degrees of freedom are relatively limited and are restricted by a set of compliance rules that is part of the investment policy for the reserves. The added value of the active management of the reserves is expressed in the difference in yields between the foreign exchange reserves portfolio and its benchmark, which is usually positive and amounted to 0.09 percent on average for the period 1999-2008 and also in 2010. In 2009, the difference was extremely high at 1.1 percent—following the recovery of the global financial markets from the crisis, which led to an increase in the value of many financial assets held in the reserves portfolio but not held in the benchmark (spread assets). The contribution of the active management in the years from 2001 until 2010 was on average 0.20 percent.

[9] The return on the foreign exchange reserves in 2010 did not include the return originating in the foreign currency deposits of Israeli commercial banks. These deposits are managed separately from the rest of the reserves in order to offset the Bank of Israel's exposure to the currency and interest risks that result from the acceptance of these deposits.

**Table 2**
**The Foreign Exchange Reserves—Total Income, Exchange Rate Differentials and Yield**

| | | 2010 | 2009 | 2008 |
|---|---|---|---|---|
| **Total foreign exchange reserves** | | | ($ million) | |
| End of year | | (70,913) | (60,612) | (42,513) |
| Annual average | | (64,665) | (51,310) | (32,270) |
| **Income and cross rate differentials** | | | (NIS million) | |
| Interest and capital gains | | 2,874 | 5,230 | 5,700 |
| Unrealized price differentials[a] | | (157) | (1,533) | 841 |
| Cross rate differentials | | (20,187) | 454 | (1,837) |
| **Total** | | **(17,470)** | **4,151** | **4,704** |
| | | | ($ million) | |
| Interest and capital gains | | 776 | 1,330 | 1,593 |
| Unrealized price differentials[a] | | (29) | (401) | 226 |
| Cross rate differentials | | (1,495) | 1,169 | (1,034) |
| **Total** | | **(748)** | **2,098** | **785** |
| **Yields[b]** | | | (Percent) | |
| In terms of NIS | Interest and capital gains | 1.2 | 1.8 | 5.9 |
| | Exchange rate differentials | (8.3) | 1.8 | (4.3) |
| | **Total** | **(7.1)** | **3.6** | **1.6** |
| In terms of euro | **Total** | **6.7** | **0.8** | **8.6** |
| In terms of $ | Interest and capital gains | 1.2 | 1.8 | 5.9 |
| | Exchange rate differentials | (2.4) | 2.5 | (3.1) |
| | **Total** | **(1.2)** | **4.3** | **2.8** |
| **In terms of use of foreign reserves** | | **1.2** | **1.9** | **5.9** |
| **Benchmark yield** | | **1.1** | **0.8** | **6.1** |

[a] Unrealized price differentials express the annual change in the revaluation account of foreign currency tradable securities. (see Note 16 to the Financial Statements.)
[b] Yields, which are shown at annual rates, are based on daily calculations, and relate to income from the foreign exchange reserves, including profit or loss resulting from market price changes.

The return on the investment of the foreign exchange reserves is measured in terms of the numeraire. The arbitrary nature of measuring return in terms of a specific currency is particularly evident when assessing return in terms of dollars (a negative return of 1.2 percent this year) and in terms of euros (a positive return of 6.7 percent this year), and the

high volatility of these returns over time (Table 2). In NIS terms, the rate of return in 2010 was negative at 7.1 percent (compared with a positive return of 3.6 percent in 2009), due to the negative contribution made by exchange rate differentials to the total yield, which is the result of the NIS strengthening against the dollar and the euro, in which most of the reserves are invested. Importantly, the NIS rate of return, like all the rates in Table 2, is calculated by weighting the daily rates of return over time, irrespective of increases or decreases in the level of the reserves. Accordingly, it was not affected by the level of the Bank of Israel's purchases of foreign currency during the year.

## 2.2 Revaluation accounts

The revaluation accounts are composed of unrealized profits from exchange rate differentials on balances denominated in foreign currency and of unrealized profits from indexation differentials and revaluation of tradable securities in local and foreign currency to their fair value. The revaluation accounts are managed separately for each item (currency, security) and are recognized in the Statement of Operations when all or part of the item is realized. There is no offset between different types of items. The balance of the loss in the revaluation accounts, which derives from linkage differentials and price differences of securities in local and foreign currency and from exchange rate differentials on balances denominated in foreign currency, is recognized at the end of the year in the Statement of Operations.

The balance of the revaluation accounts declined by NIS 2 billion, from NIS 4.2 billion at the end of 2009 to NIS 2.2 billion at the end of 2010. This consists of a decline of NIS 2.2 billion in the revaluation account for balances denominated in foreign currency, a decline of NIS 0.1 billion in the revaluation account for tradable foreign currency securities and an increase of NIS 0.4 billion in the balance of the revaluation account for tradable local currency securities.

### 2.2.1 Revaluation account for balances denominated in foreign currency

According to the accounting method used in the Bank's financial statements, exchange rate differentials on balance sheet balances are not fully charged to the Statement of Operations unless they are realized. Realization for a particular foreign currency is recognized only when the balance held in that currency declines.

Unrealized exchange rate differentials are charged to the Revaluation Accounts item in the balance sheet. Future losses from a particular currency are first offset against the revaluation account for that currency, if such an account exists, and only afterwards are they charged to the Statement of Operations. A negative balance in the revaluation account of a particular currency at the end of the year is charged to the Statement of

Operations.

In 2010 net losses from exchange rate differentials in the amount of NIS 17.6 billion on account of adjusting the balances denominated in foreign currency to the representative exchange rate were realized, compared with NIS 0.9 billion in 2009 (Table 3). These differentials were due to the weakening against the shekel of the US dollar, the euro and the other currencies in which the balances are held during the year.

Losses from exchange rate differentials were accrued mainly on the foreign exchange reserves—about NIS 20.2 billion (Table 3). The foreign exchange reserves accumulated losses from exchange rate differentials mainly towards the end of the year, as a result of the appreciation of the shekel against the other currencies in that period.

These losses from exchange rate differentials were offset somewhat by profits from exchange rate differentials in the amount of NIS 0.4 billion that accrued on balances of international financial institutions.

The realization of losses from exchange rate differentials at the end of the year reduced the balance in the revaluation account.

**Table 3**
**Exchange Rate Differentials Due To Adjustment of Foreign Currency Balances to the Representative Exchange Rate**

| | 2010 | 2009 |
|---|---|---|
| | (NIS million) | |
| **Assets** | | |
| Foreign exchange reserves | (20,187) | 454 |
| Credit to the government—binational funds | (7) | (1) |
| The International financial institutions | (81) | (6) |
| **Liabilities** | | |
| Government deposits | 35 | 138 |
| Banks' foreign currency deposits | 71 | (1,185) |
| The International financial institutions | 387 | 38 |
| Binational fund deposits | 7 | - |
| **Total** | **(19,775)** | **(562)** |
| Realized exchange rate differentials | (17,562) | (923) |
| Unrealized exchange rate differentials | (2,213) | 361 |

### 2.2.2 Revaluation account for tradable foreign currency securities

The balance of the revaluation account for tradable foreign currency securities amounted to NIS 0.8 billion in 2010, compared with NIS 0.9 billion in 2009. (see Note 16 to the financial statements.)

### 2.2.3 Revaluation account for tradable local currency securities

The balance of the revaluation account for tradable local currency securities amounted to NIS 1.1 billion at the end of 2010, compared with NIS 0.7 billion at the end of 2009.

The reason for this is that the accrual component for indexation on the new purchases is still small, and the price differentials component was almost zero as the price of the bonds at the end of year is extremely close to their average purchase price.

## 2.3 Monetary instruments

Monetary policy is used to attain the inflation target, by supporting growth and financial stability.

The Bank of Israel sets the interest rate at which it lends to or borrows from banking corporations, as necessary. The Bank uses the various monetary instruments to inject or absorb the required level of liquidity at the set rate of interest. The monetary instruments include loans or deposits of banking corporations, as well as market instruments—*makam* and repo.

In 2010, Bank of Israel continued to purchase dollars in order to somewhat offset the effect of the significant injections of capital into the Israeli market, and into other rapidly growing economies around the world, injections which caused the strengthening of the shekel. The purchase of foreign currency injected more liquidity into the market than the required increase in the monetary base and Bank of Israel re absorbed these surpluses to ensure that the short-term interest rate would be consistent with its set interest rate. During most of the year, Bank of Israel continued to increase the relative share of *makam* from the monetary instruments, and at the end of 2010 it reached 63 percent, compared with 48 percent at the end of 2009.

At the end of 2010, the balance of monetary instruments was NIS 213 billion, compared with NIS 176 billion at the end of 2009. In 2010 the composition of the monetary instruments aggregate changed, and there was a decrease in time deposits compared to an increase in *makam*. In 2010 the monetary instruments aggregate comprised NIS 78 billion in time deposits (compared with NIS 92 billion at the end of 2009) and NIS 135 billion in *makam* (compared with NIS 85 billion at the end of 2009).

### 2.3.1 Expense on account of the monetary instruments

Net interest expense on account of the monetary instruments aggregate was NIS 3.5 billion in 2010, compared with net expenses of NIS 2.4 billion in 2009.

The increase in interest expenses is due to an increase of 1 percentage point in the Bank of Israel interest rate in 2010 and to an increase in the required absorption mainly by means of an increase in *makam*. The expenses on account of *makam* still account for the major part of the interest expense for monetary instruments—about NIS 2.2 billion.

This is because of the size of the *makam* balance (NIS 115 billion on average) relative to that of the time deposits (NIS 80 billion on average) and because *makam* are issued for a period of up to one year, so that the interest paid on account of *makam* is higher than the interest paid for time deposits, which are deposited for a day or a week.

## 2.4 Israeli currency securities portfolio

At the end of 2010, the balance of the Israeli currency securities portfolio amounted to NIS 19.7 billion, similar to that in 2009 (NIS 20.2 billion). In 2009 Bank of Israel adopted an expansionary monetary policy in an effort to reduce the impact of the global financial crisis on the Israeli economy, as was done in many other countries, and it purchased securities in the amount of NIS 18 billion on the secondary market. The purchase of bonds was designed to support the cuts in the longer-term interest rates, thus easing the shortage of credit and supporting economic activity. These purchases were discontinued in August 2009.

Interest income from this portfolio amounted to NIS 0.9 billion in 2010 (compared with NIS 0.8 billion in 2009).

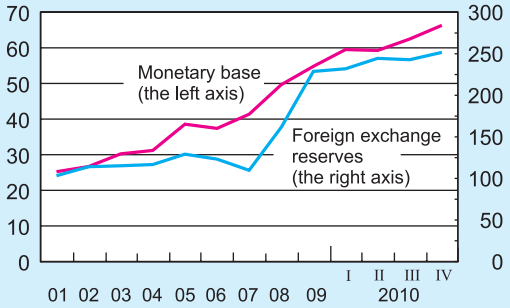
Interest income and the amortization of discount or premium for this portfolio are included in the Statement of Operations on an accrual basis. The income from indexation differentials as well as the revaluation to market value, is credited to the revaluation accounts item in the balance sheet.

A negative balance in a revaluation account is charged at the end of the year to the Statement of Operations. The balance of the revaluation account was positive at the end of 2010.

## 2.5 The monetary base

The monetary base, composed of banknotes and coins in circulation and the banks' NIS-denominated demand accounts with the Bank of Israel, rose 10 percent during the year, from NIS 54.8 billion at the end of 2009 to NIS 66.3 billion at the end of 2010 (Figure 3).

**Figure 3**
**Monetary Base and Foreign Exchange Reserves, 2001-2010**
**(NIS billion)**




SOURCE: Bank of Israel.

In an inflationary target regime, in which the interest rate is the policy instrument used to achieve the nominal goal, the amount of money is determined by the public's demand. The Bank of Israel absorbs the liquidity surpluses created in the banking system to ensure that the shortest-term interest rates are consistent with the declared interest rate. Monetary aggregate trends, including the monetary base, therefore reflect the public's demand for money, given market interest rates and market conditions.

Due to the low rate of interest on short-term deposits, the public chose to leave its money in current accounts, instead of short-term deposits, and in doing so caused the aforesaid rise in the monetary base.

The Bank of Israel injected NIS 11 billion net to the monetary base, while the government and national institutions absorbed NIS 1.4 billion (Table 4). Most of this injection can be attributed to the expansionary monetary policy adopted by the Bank this year: foreign currency purchases injected liquidity of NIS 43 billion, and the Bank of Israel fully absorbed the surplus liquidity through the monetary instruments—an amount of NIS 50 billion was absorbed through *makam*, compared with an injection of NIS 14 billion through time deposits

The cost of printing money amounted to NIS 53 million in 2010, compared with NIS 72 million in 2009.

On December 31, 2010 the legal date passed for exchanging Series A NIS banknotes and coins of a value of 5 agorot. On the same day the Bank recognized income in the amount of the face value of the Series A NIS banknotes and coins of a value of 5 agorot that are held by the public and were not exchanged in an amount of NIS 220 million. This income was presented under the item "Other financial income—miscellaneous".

## Table 4
## The Monetary Base and the Foreign Exchange Reserves—Changes and their Sources

| | Change in monetary base | | | | | The sectors' contribution to the foreign exchange reserves | | | |
|---|---|---|---|---|---|---|---|---|---|
| Year | Change in monetary base | Injection (absorption) of government and National Institutions[a] | Injection from (absorption by) Bank of Israel | Injection from foreign currency conversions by Bank of Israel | Adjustments[b] | Private sector[c] | Bank of Israel | Government and National Institutions[d] | Change in foreign exchange reserves[e] |
| | (1)=(2)+(3)+(4)+(5) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9)=(6)+(7)+(8) |
| | (NIS million) | | | | | (NIS million) | | | |
| 2001 | 4,364 | (2,611) | 7,675 | - | (700) | (105) | 1,067 | (944) | 18 |
| 2002 | 1,437 | (6,065) | 9,265 | - | (1,763) | (1,351) | 2,040 | (200) | 489 |
| 2003 | 3,567 | 3,479 | 1,425 | - | (1,337) | (1,204) | 1,445 | 1,877 | 2,118 |
| 2004 | 966 | 1,601 | 1,070 | - | (1,705) | (631) | 993 | 482 | 844 |
| 2005 | 7,357 | (1,452) | 9,920 | - | (1,111) | 1,026 | 125 | 75 | 1,226 |
| 2006 | (1,176) | (3,789) | 3,797 | - | (1,184) | 25 | 1,845 | (673) | 1,197 |
| 2007 | 3,979 | (10,809) | 15,693 | - | (905) | (196) | 2,512 | (2,912) | (596) |
| | 8,297 | (17,371) | (17,305) | 43,995 | (1,022) | 4,291 | 12,789 | (3,204) | 13,876 |
| 2009 | 5,141 | (14,195) | (58,855) | 77,413 | 778 | (4,559) | 22,866 | (208) | 18,099 |
| **2010** | **11,509** | **1,418** | **(32,962)** | **43,752** | **(699)** | **(199)** | **11,150** | **(650)** | **10,301** |
| I | 4,709 | (1,855) | (1,676) | 8,444 | (204) | (22) | 905 | 980 | 1,863 |
| II | (249) | 8,573 | (20,240) | 11,686 | (268) | (185) | 1,417 | (611) | 621 |
| III | 3,220 | (5,799) | 4,321 | 4,874 | (176) | 19 | 3,937 | (792) | 3,164 |
| IV | 3,829 | 499 | (15,367) | 18,748 | (51) | (11) | 4,891 | (227) | 4,653 |

[a] The government injection includes also the injection of the National Insurance Institute and of the Postal Bank.
[b] Adjustments include: transfers by the National Institutions from abroad via the banks but which are defined as public sector injection (in column 2). Foreign currency domestic receipts and payments of the Bank of Israel 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.
[c] Including income tax payments by the business sector in foreign currency.
[d] Government and National Institutions transfers from abroad and Bank of Israel income from the foreign exchange reserves (income from interest, capital gains and cross-rate differentials between the US$ and other currencies).
[e] Including the change in accrued interest on the foreign exchange reserves.
* Data according to value date. Other data in the table as at balance sheet date.

## 2.6 Demand deposits from banking corporations

Banking corporations use demand deposits with the Bank of Israel to fulfill their liquidity requirements in accordance with Bank of Israel directives, and to settle various payments carried out via the banks. The balance of these deposits amounted to NIS 21.5 billion at the end of 2010, compared with NIS 13.3 billion at the end of 2009.

The government absorbed NIS 2.7 billion through the commercial banks in 2010, compared with an injection of about NIS 6.6 billion in 2009. The public withdrew NIS

5.3 billion in cash from the banking corporations, compared with NIS 13.4 billion in 2009 (Table 5).

In net terms, the Bank of Israel injected NIS 11 billion into the commercial banks (compared with NIS 18 billion in 2009) by purchasing foreign currency (NIS 44 billion) and absorbing about NIS 33 billion through various monetary instruments.

**Table 5**
**Banking Corporations' Deposits in the Bank of Israel**

| | In Local currency | In foreign currency | Total | In Local currency | In foreign currency | Total | In Local currency | In foreign currency | Total |
|---|---|---|---|---|---|---|---|---|---|
| | 2010 | | | 2009 | | | 2008 | | |
| | (NIS million) | | | | | | | | |
| **Change in banking corporations' deposits**[a] | | | | | | | | | |
| Activity with the government[b] | 2,660 | 1,418 | 4,078 | (6,629) | (74) | (6,703) | (9,574) | 711 | (8,863) |
| Withdrawal (–) of banknotes from Bank of Israel | (5,254) | - | (5,254) | (13,423) | - | (13,423) | (13,393) | - | (13,393) |
| Activity with Bank of Israel[c] | (32,894) | (71) | (32,965) | (59,016) | 1,185 | (57,831) | (17,453) | 1,797 | (15,656) |
| Transfers from (+) and to (–) abroad | - | (1,511) | (1,511) | - | (19,134) | (19,134) | - | 14,916 | 14,916 |
| Foreign currency conversions at Bank of Israel | 43,752 | - | 43,752 | 77,413 | - | 77,413 | 43,995 | - | 43,995 |
| Adjustments | (93) | 5 | (88) | (334) | 12 | (322) | (672) | 14 | (658) |
| **Total change** | **8,171** | **(159)** | **8,012** | **(1,989)** | **(18,011)** | **(20,000)** | **2,903** | **17,438** | **20,341** |
| Deposit of banknotes by the Postal Bank in Bank of Israel[d] | 1,783 | - | 1,783 | 6,607 | - | 6,607 | 8,620 | - | 8,620 |

[a] Not including the change in term deposits.
[b] Government injection via the banking corporations' demand deposits.
[c] Depositing of term deposits, purchasing *makam*, selling government bonds and various interest payments.
[d] Deposits of banknotes deposited mainly by the Postal Bank; these are absorbed by the government, and are included in the definition of "government injection".

## 2.7 Banking corporations' foreign currency deposits

The balance of banks' foreign currency deposits amounted to NIS 1.5 billion at the end of 2010, similar to the balance at the end of 2009 (NIS 1.7 billion). (Table 1).

## 2.8 Government accounts

Section 48(a) of the Bank of Israel Law, 5770-2010, which came into effect on June 1, 2010, states (like the previous law), "The Bank shall be the sole banker and fiscal agent of the government in Israel". Accordingly, the government manages all of its local currency accounts, and a considerable part of its foreign currency accounts with the Bank of Israel.

Government accounts with the Bank of Israel are composed of deposits in NIS and foreign currency[10], as well as credit given to the government.

Credit to the government is composed primarily of long-term advances that the government received during the 1980s in order to finance its budget deficits. In March 2010 an agreement was signed with the government with respect to a restructuring of the debt with an option for early repayment, thus ending the previous years' disagreements between the Bank and the government regarding these amounts. The debt was calculated for purposes of the restructuring, and Bank of Israel agreed to lower the interest and extend the repayment period. In addition, in accordance with the new conditions the government was granted an option for early repayment at amounts, discounted to the date of payment. The government took advantage of the option and repaid the debt of NIS 394 million early, on March 9, 2010.

The difference between the balance of the debt before signing the agreement and the amount of the early repayment was recognized in the Statement of Operations. Most of the effect was recognized as a provision in the previous year, since the outline of the agreement was known already at the end of 2009. The effect for previous years is included in the "Interest expense to the government" item.

Therefore, the balance of credit to the government was zero at the end of 2010, compared with NIS 0.8 billion at the end of 2009.

At the end of 2010, the government held NIS 14.2 billion in deposits, compared with NIS 20.3 billion at the end of 2009. The net decrease in government deposits is mainly due to a decrease of about NIS 7.3 billion in the government's foreign currency deposits, net of an increase of about NIS 1.1 billion in local currency deposits (Table 6).

[10] Government deposits in local currency may be offset against one another, other than some special deposits, but the government does not intend to offset its local currency deposits against its foreign currency deposits and these balances are therefore stated separately in the financial statements. The economic analysis that appears in these notes refers to net government balances, i.e., the government balances that appear on the credit side of the balance sheet less the balances presented on the debit side.

Net capital raised by the government abroad was positive this year, amounting to only $44 million, as a result of the repayment of bonds. In 2010 the government issued bonds abroad in the amount of €1.5 billion, and also raised $1.1 billion through State of Israel Bonds.

**Table 6**
**Government Deposits in the Bank of Israel—Changes and their Sources**

| | 2010 | 2009 | 2008 |
|---|---|---|---|
| | | NIS million | |
| **December 31 balances** | | | |
| **Government deposits** | | | |
| Local currency deposits | 12,979 | 11,852 | 1,506 |
| Foreign currency deposits | 1,228 | 8,480 | 6,860 |
| **Total government deposits** | **14,207** | **20,332** | **8,366** |
| **Net change in government deposits** | | | |
| Government contribution to foreign reserves[a] | (3,312) | (1,278) | (12,509) |
| Government absorption (Injection) | (598) | 14,949 | 18,469 |
| Government–Bank of Israel financial flow[b] | (2,065) | (1,709) | (1,094) |
| Adjustments[c] | (150) | 4 | 201 |
| **Total change** | **(6,125)** | **11,966** | **5,067** |

[a] Government income and expenses abroad, receipt and repayment of government loans abroad.
[b] Payment of interest and redemption of government bonds held by the Bank of Israel; various fees from the government; credit to the government—interest payment, repayment of principal and payment of indexation differentials and interest on government deposits (in local and foreign currency); exchange rate differentials on government foreign currency deposits; and transfer of Bank of Israel profit.
[c] Including: interest accrued on government deposits to the end of the year; government interest payments on credit to the government for binational funds (these payments are included in "government injection", but in this table are also included in "Government—Bank of Israel financial flow"); and repayment of Israel Bonds to tourists in Israel (the repayment reduces the government's local currency deposits, but is not included in "government injection").

## 2.9 Bank of Israel equity

The Bank of Israel's equity is composed of share capital and a general reserve, less the balance of accumulated losses. In line with Accounting Standard 12 of the Israel Accounting Standards Board, the Bank's equity includes a one-time adjustment of non-monetary components in the balance sheet to the CPI for December 2003. This adjustment increased the Bank's share capital and general reserve to NIS 4 billion, as against NIS 320 million previously.

### 2.9.1 The Bank's equity deficit

At the end of 2010 the Bank's equity deficit amounted to NIS 37.9 billion, compared with NIS 20.1 billion at the end of 2009, increased by the loss of NIS 17.9 billion in 2010. The loss is mainly due to foreign exchange differentials that amounted to NIS 17.6 billion in 2010, compared with NIS 0.9 billion in 2009.

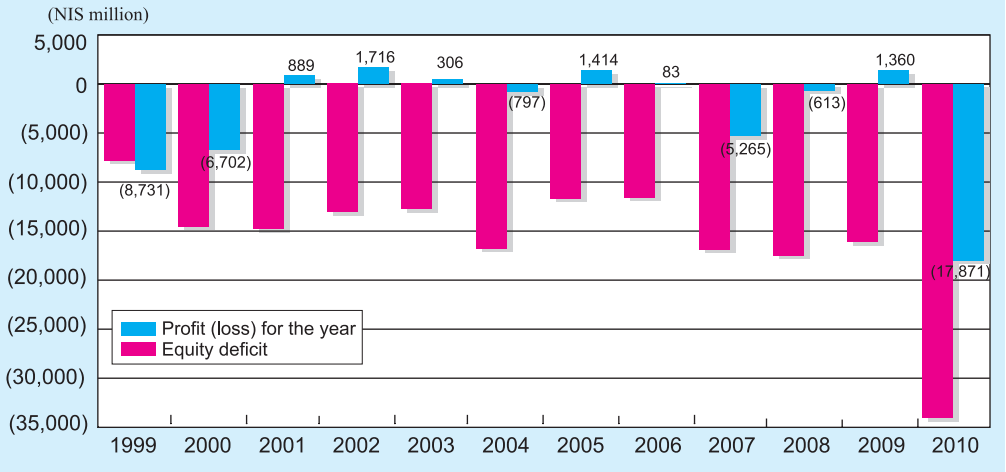
The loss for 2010 was added to the accumulated loss of the Bank (Figure 4). This is a result of the currency asymmetry in the composition of Bank of Israel's assets and liabilities. The asymmetry exposes the Bank to fluctuations in its reported financial results, so that the appreciation of the shekel in relation to the principal currencies held by Bank of Israel led to high foreign exchange differentials at the end of 2010.

In accordance with the Bank of Israel Law, 5770-2010, within three months from the end of each year the Bank is required to transfer its profits to the government according to the following provisions:

1. If the equity amounts to 2.5 percent or more of total assets, the government will receive an amount equal to the net profit, less any negative balance of retained earnings.
2. If the equity amounts to more than one percent of total assets but less than 2.5 percent of total assets, the government will receive 50 percent of the net profit, less any negative balance of retained earnings.
3. If the equity amounts to one percent or less of total assets, the government will not receive any profits.

Since the Bank has a equity deficit, it did not transfer to the government any profits in 2010 in accordance with these provisions.

**Figure 4**
**Development of the Bank's Equity Deficit and the Current Profit (Loss), 1999-2010**



# THE PAYMENT AND SETTLEMENT SYSTEMS IN ISRAEL IN 2010



## Introduction

The payment and settlement systems are an essential part of the economic and financial infrastructure of modern markets, and their efficient functioning contributes to the development and financial stability of the economies. Payment and settlement systems that are not sufficiently reliable may expose their participants to risks, and even transfer risks from one economic system to another so much as to cause the development of a systemic risk. The rise in financial activity along with the increase in the volume of payments in the international capital markets, which are characteristic of many economies around the world, have enhanced the importance of these systems.

The worldwide recognition in recent years of the importance of payment and settlement systems has driven international financial institutions and central banks in many countries, including Israel, to increase the efficiency of settlement processes, to reduce risks and to oversee the payment and settlement systems. The Bank of Israel, as the country's central bank, strives to strengthen the economy's financial stability, and therefore acts to promote the safety, efficiency and credibility of the payment and settlement systems in Israel.

The Bank of Israel operates by virtue of **the Bank of Israel Law, 5770-2010** (hereinafter: "the Bank of Israel Law"), which provides that one of the objectives of the Bank is to arrange the economy's payment and settlement systems so as to ensure their efficiency and stability. The Bank of Israel also operates by virtue of **the Payment Systems Law, 5768-2008** (hereinafter: "the Payment Systems Law"), which provides the authority of Bank of Israel to oversee the payment systems in Israel and refers also to various arrangements required for the proper functioning of payment systems in general and the Zahav[1] system in particular.

[1] A Hebrew acronym for Real Time Credits and Transfers, known in the world as RTGS.

# 1. Principal developments in 2010

At the end of 2009 Bank of Israel began taking steps for the establishment of a new body that will oversee the payment and settlement systems in Israel, as provided in the Payment Systems Law. The establishment of an oversight body for the payment systems is a complex undertaking that will continue until 2012. The Bank of Israel is being advised and accompanied by the World Bank on this matter.

The Bank of Israel's oversight activity over the payment systems is part of its overall responsibility to ensure the stability of the financial infrastructure. The oversight activity mainly focuses on identifying potential risks in the operations of the payment systems and on taking actions to eliminate these risks or control them.

Recognition of the importance of the central bank's involvement in the payment and settlement systems is reflected in four core principles for central banks, which were provided by the Bank of International Settlement (hereinafter: "BIS"). These relate to, inter alia, the central bank's responsibility to oversee the payment and settlement systems and to cooperate with various oversight bodies and central banks around the world. Recognition of the force and size of risks relating to settlements has driven the BIS, more than a decade ago, to establish international core principles for systemically important systems.[2] The responsibility of overseeing payment systems includes, inter alia, examining compliance of the systems with these principles.

The Payment Systems Law, which is the foundation for Bank of Israel's authority to oversee the payment systems, grants the Governor of the Bank the authority to declare a payment system to be a "controlled system" or a "designated controlled system," in which the payment is considered final. Until now, the Zahav system and the CLS (Continuous Linked Settlement) system[3] have been declared designated controlled systems. Bank of Israel participates in an international oversight group that oversees the CLS and is headed by the Federal Reserve Bank. This group is comprised of representatives from all the central banks of countries whose currencies are settled on the CLS. In accordance with the law, the Tel Aviv Stock Exchange (hereinafter: "TASE") clearing houses are subject to the supervision of the Israel Securities Authority (hereinafter: "ISA"). The Bank of Israel, in its capacity as being responsible for ensuring the efficiency and stability of the payment and settlement systems, works with the cooperation of the ISA, in accordance with a memorandum of understanding that was signed by both parties.

[2] Core Principles for Systemically Important Systems (SIPS).
[3] An international system enabling settlement between 17 different currencies, including the NIS.

In addition to the project of establishing a body for the oversight of payment systems, in 2010 The Bank of Israel continued its activities for increasing the efficiency and safety of the various systems, so that the payment and settlement systems in Israel would conform to international standards.

Presented hereunder are the main actions that were performed in 2010.

## Encouraging the use of advanced and lower-risk electronic methods

In July 2010, the Bank initiated a campaign for advertising the Zahav system on the internet, economic newspapers and special pamphlets that were distributed at the branches of banks. The purpose of the advertising campaign was to increase business's awareness of the Zahav system and to present to them the advantages of the system and the simplicity of its use. At that same time the website of Bank of Israel was upgraded[4] for the purpose of making the information accessible to businesses and the general public. As a complementary act to the advertising campaign, Bank of Israel, with the cooperation of the banks, promoted a temporary reduction in the fees the customers pay in respect of transactions in the Zahav system and these were reduced by an average rate of 40 percent.[5] An additional action that was performed in this respect was lowering the threshold for transferring payments in Masav (the banks' clearing house) from NIS 3 million to NIS 1 million: any transaction higher than NIS 1 million has to be executed in the Zahav system, other than in exceptions provided by Bank of Israel. These measures resulted in an increase in the number and value of customers' transactions in the Zahav system, and in a reduction in the average amount per transaction.

## Reduction in the use of paper-based means of payment

In the year under review, Bank of Israel decided to examine the reform that was implemented by a number of countries in recent years for encouraging a reduction in the use of paper-based means of payment. The use of checks in Israel is relatively extensive compared with the accepted use in Europe:[6] checks in Israel are used by the business sector and households for, inter alia, the payment of taxes (low and high amounts). In the course of studying this matter, it was found that the level of risks involved in the use of checks is significantly higher than that involved in the use of other means of payment, and that the cost of handling a check is higher than the cost of handling an electronic

[4] The address of the website: www.bankisrael.org.il.
[5] An updated list of the fees of each bank appears on the website of The Bank of Israel under Payment and Settlement Systems, and on the websites of the banks.
[6] About 59 percent of the payment orders settled in Zahav, Masav (credits) and the paper-based clearing house, compared with zero to 20 percent in European countries.

transaction. In 2011, The Bank of Israel will study the situation in Israel together with other relevant parties.

The Bank of Israel is also examining the settlement process in the checks clearing house and has commenced developing a new clearing system that will be operated by it. In this framework the clearing house Board has continued to search for electronic alternatives for the execution of payments that are presently settled manually at the paper-based clearing house (presentations and returns of manual debits and credits). In 2010 the clearing house Board acted to reduce manual clearing, with the objective of reaching its full elimination by the end of the process.

## Increasing the safety of the payment systems

The Zahav system includes components that ensure for its participants a high level of safety that complies with international standards, including a SWIFT communication infrastructure and use of some of the most advanced technological measures. In addition, the rules of the Zahav system refer to the international standard for identifying bank account numbers (hereinafter: "IBAN") and require the use of an IBAN code in customers payments by means of the Zahav system.

IBAN
(International Bank Account Number)

An international standard (ISO 13616) for identifying bank accounts. The use of IBAN code enables straight-through processing (STP) of transactions, ensures correctness of the account number and contributes to standardization.

An IBAN code is comprised of a string of characters, which represent the bank account number, the numbers of the bank and the branch, the country code and two control digits, as indicated hereunder:

Structure of the IBAN in Israel

| Account Number | Branch code | Bank code | Control digits | Country code |
|---|---|---|---|---|
| 13 characters | 3 characters | 3 characters | 2 characters | IL |

Using an IBAN code significantly reduces errors in payment transactions by means of the payment systems. This is one of the reasons that in 2010 it was decided, together with the banks, to assimilate the use of an IBAN code throughout the general public, by exposing the customers to this code by means of direct mailing, by advertising at bank branches and possibly by also presenting the code on additional means of payment such as: payment cards and checks.

In the reviewed year The Bank of Israel continued to act to ensure the business continuity of the payment and settlement systems. In recent years The Bank of Israel created some arrangements and procedures aimed at ensuring the business continuity of the Zahav system in the event of a technical or business failure. The Bank of Israel also established backup systems for various components of the Zahav system and a complete backup site for that system – actions that reduce the operational risk. Tests were performed in 2010 that assimilated various interruptions to routine work processes – minor and extreme.

## Implementing the Bank of Israel Law

The Bank of Israel Law provides (in Paragraph 4) that one of the responsibilities of The Bank of Israel is to "regulate the economy's payment and settlement systems so as to ensure their efficiency and stability." This law, together with the Payment Systems Law, vests in The Bank of Israel the power to perform its responsibilities in the payment and settlement systems, including operating systemically important payment systems and overseeing payment systems.

During the year under review, The Bank of Israel acted to commence implementation of the new Bank of Israel Law. The new law has an effect also on the area of payment and settlement systems, as it permits, under certain circumstances of actual concern regarding the stability of the financial system or its ongoing activity, opening accounts in The Bank of Israel and providing credit to financial entities that are not banks. The Bank of Israel is also acting to establish rules and standards for the operation of the payment systems and to regularly update the existing rules.

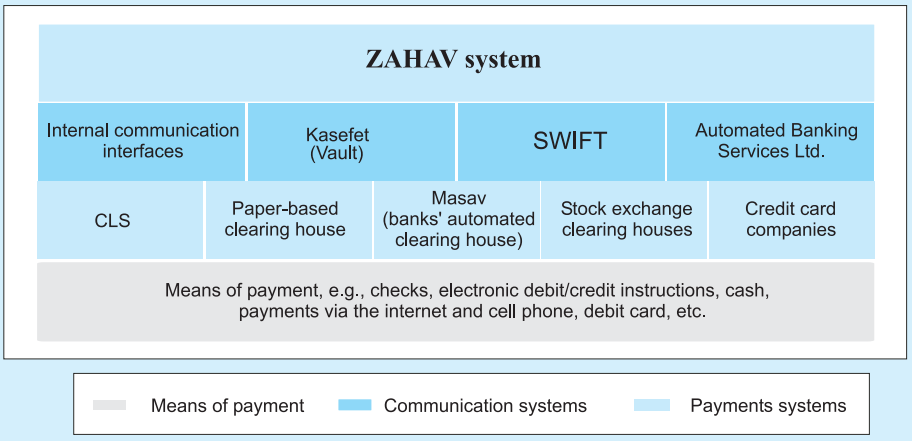
## Establishing a data base

The planning of a data base commenced in 2010 with respect to the activity of principal parties in the payment and settlement area of the Israeli economy, including the various clearing houses (Zahav, Masav, paper-based clearing house and TASE clearing houses), payment card companies and the participants in the payment systems (the banks, the Postal Bank and the CLS bank). This data base will include data that was collected in the past as well as current data, and will be used to analyze trends in the area and for internal reporting purposes and for reporting to international entities such as the BIS.

# 2. Review of the payments area in Israel

The financial infrastructure in Israel includes interbank payment and settlement systems that are used to transfer and settle payments, communication systems and means for making payments (Figure 1). The important payment systems in Israel include, inter alia, the Zahav system, which is designated for real time and final settlement of large payments; the paper-based clearing house for paper transactions (checks and various debits and credits); the Masav (banks' automated clearing house) which settles electronic debit

**Figure 1**
**Israel's Payments System**




and credit transactions; the TASE clearing houses (the securities and the Maof clearing houses) and the payment card companies. The CLS system, which operates outside Israel, is a part of Israel's payment and settlement system: it settles the Israeli currency against foreign currencies that are settled in CLS.

The payment systems encompass transactions using different payment methods, including: electronic debit/credit transactions such as payment transactions in the Zahav system or in Masav, payment by checks, payments with various types of payment cards such as credit cards, debit cards and pre-paid cards. There are also payments in cash and payments by means of the internet and cellular phone.

The participants in the various payment systems are mostly commercial banks and large institutions. The general public makes direct use of the various means of payment and needs interbank payment systems for transferring money from one bank to another. The transfer of money from one account to another account in the same bank does not require the use of an interbank payment system.

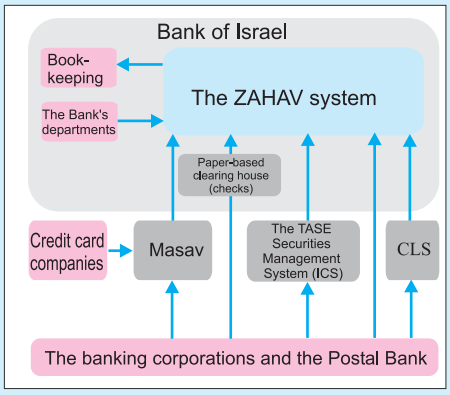
## 2.1 Payment systems operating in Israel

### 2.1.1 The Zahav system

The Zahav system, which was inaugurated in Israel at the end of July 2007, is an RTGS (Real Time Gross Settlement) system which operates in most countries of the world (developed and developing).

The system settles payments immediately, and the settled payments are final and irrevocable. Participants in the system are banks, the Postal Bank and CLS (hereinafter: "the Settlement Participants"), the clearing houses (Masav, TASE clearing houses, paper-based clearing house) and The Bank of Israel's divisions. One of the main goals of the Zahav system is to minimize the various risks associated with other settlement systems – systemic risk, liquidity risk, credit risk, legal risk and operational risk.

**Figure 2**
**The ZAHAV System as the Final Clearer**




SOURCE: Bank of Israel.

The Zahav system settles bilateral credits between customers and the settlement participants, as well as credits between the settlement participants and Bank of Israel – credit to banks, banks's deposits with Bank of Israel, cash withdrawals from Bank of Israel, etc. The Zahav system serves as the final settle for all the settlement systems in Israel as it settles the net results of other clearing houses (Masav, the paper-based and TASE).

The settlement in the Zahav system takes place in real time from 7:45 a.m. to 6:30 p.m. throughout the entire business day. Each payment received in the system is settled separately, with no offsetting between debits and credits from the bank sending the transaction. The Bank of Israel provides the settlement participats with intraday credit which they may utilize according to their needs during the system's operating hours. This credit does not bear interest, it is fully covered by collateral, and is provided for the specific day of operation only - banks must repay the credit by closing time of the Zahav system. The collateral provided against the intraday credit is government bonds, makam and the banks's deposits held with the Bank of Israel. As from the end of 2010, Bank of Israel provides credit to the participants of the Zahav system also against foreign securities.

The system enables The Bank of Israel to examine in real time financial indicators regarding the liquidity situation of the banks, and helps to maintain the stability of the system participants and of the economy's financial system.

The Zahav system combines highly advanced components that ensure a high level of safety and resilience. The interface between the system and the main participants – the commercial banks and the TASE clearing houses – is performed by means of the SWIFT system, in accordance with the accepted international standard for safe transfer of money in many countries around the world.

The number of errors in transactions performed by means of the system is very low, due to the use of the international standard for identifying bank accounts – IBAN. In addition, the Zahav system meets the very high standards of the National Authority for Information Security in Israel.

### 2.1.2 The banks' clearing house

The banks' clearing house is composed of the paper-based (checks) clearing house and the Masav automated clearing house. The clearing house operates according to an agreement between its members, i.e., the commercial banks in Israel, the Postal Bank and the Bank of Israel. Some of the clearing house members operate directly within the clearing house while others are represented by other banks. The banks operating in the Palestinian Authority are also members of the clearing house and they are represented by three banking corporations in Israel.[7]

The banks' clearing house is managed by its Board, which consists of 14 members, half of whom are from The Bank of Israel and half are from the banking system. The banks' clearing house operates according to the "clearing house regulations," which are periodically updated according to the decisions of the Board. The Board meets periodically to discuss the ongoing needs of the clearing house and to update the clearing house regulations according to those needs.

#### 2.1.2.1 Paper-based clearing house

The payments presented by the banks to the paper-based clearing house are primarily checks, which are currently presented and returned only electronically and non-magnetic debits and credits (which are manual). The banks may chose for various reasons not to honor electronic and manual transactions that were presented to them, for example – insufficient coverage, an error in details and so forth; these are usually returned on the day following their deposit and no later than three days from the date of deposit.

[7] Bank Hapoalim, Discount Bank and Mercantile-Discount Bank, other than branches operating in the Gaza Strip whose representation by Bank Hapoalim and Discount Bank was discontinued in January 2009.

In recent years progress has been made on several issues relating to the paper-based clearing house, including check imaging, measures to reduce the number of non-magnetic manual transactions in anticipation of the elimination of manual settlement, establishing a standard for a uniform check and preparing a draft **Electronic Check Clearing Law, 5768-2008**[8] (hereinafter: "Check Truncation Law"), of which one of its objectives is to arrange the acceptance of an electronic file as legal evidence. The Bank of Israel is also examining the possibility of leading a progress to reduce the use of checks.

2.1.2.2 Masav

Masav is the electronic system that clears interbank transactions in shekels that are not based on paper documents or cash – such as direct debit authorizations, salary payments and taxes – which are transferred to it by the banks and by authorized organizations. As from December 2009 Masav also clears monetary activity deriving from credit returns.

Two types of payment transactions are transferred in Masav – direct credits and direct debits. **Direct credits** are payments originating from organizations (including the government), which are essentially salaries, payments to suppliers, tax payments and also other payments, as well as payments originating from banks, which reflect the activity of customers; **direct debits** are debits originating from organizations (authorized debits).

Payment transactions are received in Masav throughout the entire business day and are settled in the evening of the transfer date, according to the value of that same day (T). The banks' settlement of the payments that were transferred in Masav is transferred to the Zahav system for settlement on the business day after the date of transfer (T+1). It is noted that the payment transactions cleared in Masav are not final, since the receiving party may return the credit within 3 days, and the debit within 5 days.

### 2.1.3 The TASE clearing houses

The TASE clearing houses settle the transactions in securities that are executed on the stock exchange and provide additional services relating to securities. The settlement complements the trading activities performed on the stock exchange: after the purchase of a share the clearing houses handle its transfer and the transfer of the money paid for it between the stock exchange members representing the buyer and the seller. The payment is transferred by means of the Zahav system.

The TASE has two clearing houses – a securities clearing house and a Maof clearing house. **The securities clearing house** settles all the transactions in securities that were executed on and off the stock exchange. It also provides services relating to mutual

[8] This draft law is also known as the draft Check Truncation Law.

funds and custody of securities, as well as executing payments of dividends, interest, etc; **The Maof clearing house** settles payments resulting from the purchase and expiry of derivatives (options and futures).

The settlement of government bonds and makam is parallel to the time of financial settlement (delivery versus payment - DVP). As from the last quarter of 2010, DVP applies also to transactions in corporate bonds.

### 2.1.4 The CLS system

The CLS system, which was established in 2002 by the largest banks in the world in order to reduce the risk in settling foreign currency transactions, operates as an international clearing house for foreign currency conversions. The operations performed in the CLS system are similar to those of an RTGS system, but instead of settlement activity in one currency, the CLS system carries out settlement and conversion activities from one currency to another currency simultaneously. The CLS system provides settlement services for 17 currencies and manages accounts on the RTGS systems of each one of the currencies. The CLS system settles more than 50 percent of all foreign currency conversion transactions worldwide.

In May 2008 the new shekel joined the CLS system. The addition of the Israeli currency to the international settlement system has significantly reduced the conversion risks involved in the activity between Israeli businesses and those abroad, reinforcing their stability. The inclusion of the new shekel among the leading currencies in the world, which are currently handled by the CLS system, greatly strengthened Israel's currency and made it a fully convertible currency that is traded freely around the world.

### 2.1.5 Payment card companies

Payment card companies in Israel issue payment cards to their customers, including debit cards and credit cards. The holder of a payment card uses the card as means of payment to a business, and the business provides goods or services to the holder of the card. In addition, the companies provide clearing services for the payment cards.

Three principal companies operate in Israel in the area of issuing and clearing payment cards: Isracard, Leumi-Card and Cal These companies issue and clear local payment cards and international payment cards in accordance with licenses granted to them by relevant international organizations.

## 2.2 Means of payment

As noted, Israel's payment and settlement area is composed of payment systems, communication systems and means of payment. The means of payment through which

the public can make payments include cash, checks, electronic debits and credits (such as payments in Zahav and Masav), use of payment cards, authorized debits, internet-based payments, payments by cell-phone, etc.

A major trend in recent years with respect to means of payment is a significant increase in the use of electronic means of payment, and principally payment cards. The activity in this area has expanded significantly in recent years, with the reason for the increase being the considerable availability and convenience of using these cards at businesses. Also the possibility of making purchases through the internet and by phone has contributed to the increase in their use.

## 2.3 Communication systems

### 2.3.1 SWIFT

The SWIFT communication system facilitates the safe and efficient automatic transfer of payment transactions. Thus, most developed countries have a payment system based wholly or partially on this system. In Israel SWIFT serves as a means of communication between various financial entities, including for transferring payment transactions and other messages between the Zahav system and its participants and between the banks and the TASE clearing houses. SWIFT is also used by the banks and financial institutions for sending and receiving foreign currency payment transactions to and from other countries.

Due to the critical worldwide importance of the SWIFT system, the central banks of the G-10 countries decided to introduce joint supervision of the system. This supervision is led by the central bank of Belgium.[9]

### 2.3.2 ABS

The ABS (Automated Banking Services) Company (hereinafter: "the Company"), is a limited company that was established in 1978 by Israel's five largest banks with the purpose of providing services to various financial institutions – banks, financial institutions, payment card companies, provident funds, etc. The Company operates according to a permit issued by the Deputy Governor of The Bank of Israel in 1981. The Company is a joint services company as this term is defined in Section 23 of the Banking (Licensing) Law, 5741-1981.

ABS's operations focus on four key areas: management of the communication network between the payment card terminals in businesses (Point of Sale – POS) and the payment

[9] The central bank of Belgium was chosen as SWIFT's supervising body because SWIFT is registered in Belgium.

card companies, management of the network of ATMs not located at bank branches, management of the communication network of ATMs located at banks, and providing the payment card companies with communication services to Masav and to banks participating in monetary tenders vis-à-vis Bank of Israel.

### 2.3.3 Kasefet (Vault)[10]

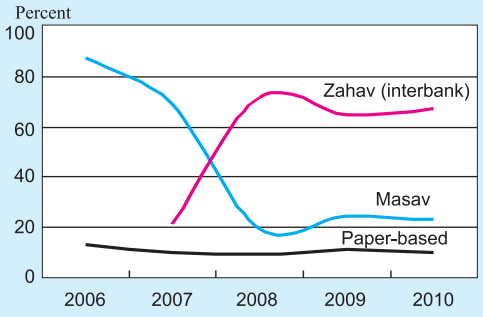
Kasefet is a means of communication that facilitates the management of a set of virtual vaults which provide the secure and encrypted transfer of information (stored in data files) between enterprises over the internet network. The Bank of Israel uses this means to transfer and receive information to and from the commercial banks.

Kasefet is also used for transferring payment transactions to the Zahav system from Masav and from government offices and for transferring settlement data of the paper-based clearing house.

# 3. The payment system in Israel – data for 2010

In 2010 – approximately three years after implementing the Zahav system – most of the large interbank amounts were settled directly through the Zahav system. As shown in Figure 3, in the reviewed year about 67 percent of the total value of interbank transactions settled on all the payment systems was settled in the Zahav system, Masav settled 23 percent, and the paper-based clearing house settled 10 percent.

**Figure 3**
**Distribution of the Clearing Houses' Activity, 2006-2010**




SOURCE: Masav and Bank of Israel.

Table 1 below presents the value and the number of transactions that were settled in the three main clearing houses – Zahav, Masav and the paper-based clearing house. It is evident that in 2010 the interbank amounts that passed through the Zahav system increased by about 20 percent, the credits on Masav increased by about 16 percent and the checks and manual transactions on the paper-based clearing house increased by about 9 percent. Regarding the number of transactions there is an evident significant increase of 37 percent in the number of

[10] Kasefet is the name of the Inter Business Vault system of the Cyber Ark company.

interbank transactions in Zahav and an increase of 6.1 percent in credits in Masav;[11] the increase in the number of transactions on the paper-based clearing house – less than one tenth of a percent.

The significant increase in the number of transactions and in the values of the interbank transactions settled on the Zahav system is due to, inter alia, the campaign The Bank of Israel led during the year for increasing business awareness of the advantages of the Zahav system.

**Table 1**
**The Clearing Houses' Activity, 2007 - 2010**

| | Zahav[a] | | Masav[b] | | Paper-based clearing house[b] | | Total activity on clearing houses | Total alternative activity[c] |
|---|---|---|---|---|---|---|---|---|
| | Interbank | Other | Credits | Debits | Checks | Manual transmissions[d] | | |
| | Value (NIS billions) | | | | | | | |
| 2007 | 2,463 | 5,807 | 5,940 | 239 | 773 | 106 | 15,328 | 9,282 |
| 2008 | 6,402 | 15,472 | 1,473 | 266 | 800 | 26 | 24,439 | 8,701 |
| 2009 | 4,742 | 57,562 | 1,502 | 277 | 749 | 38 | 64,870 | 7,031 |
| 2010 | 5,672 | 70,112 | 1,636 | 322 | 807 | 51 | 78,600 | 8,166 |
| Annual change (percent) | 19.6 | 21.8 | 16.3 | 8.9 | 7.7 | 34.2 | 21.2 | 16.1 |
| | Number of transactions (thousands) | | | | | | | |
| 2007 | 50 | 9 | 92,955 | 150,651 | 151,762 | - | 395,427 | 244,767 |
| 2008 | 193 | 23 | 96,316 | 157,895 | 135,348 | 485 | 390,260 | 232,342 |
| 2009 | 167 | 31 | 97,478 | 163,144 | 124,507 | 499 | 385,826 | 222,651 |
| 2010 | 229 | 33 | 103,430 | 173,112 | 124,608 | 431 | 401,843 | 228,698 |
| Annual change (percent) | 37.0 | 6.5 | 6.1 | 6.1 | 0.1 | -13.6 | 4.2 | 2.7 |

[a] The Zahav system began operating in July 2007.
[b] Including returns.
[c] Including interbank Zahav, credits in Masav and the paper-based clearing house.
[d] Collection of data on the number of manual transmissions commenced in 2008.
Source: Masav and Bank of Israel.

[11] The increase in credits in Masav is mainly due to an increase in payments of institutions and in interbank payments. Table 6 provides details of the credits in Masav according to destination.

## 3.1 The payment systems operating in Israel

Presented hereunder are details regarding the major payment systems operating in Israel.

### 3.1.1 The Zahav system

Table 2 below shows that about 262 thousand transactions were settled in the Zahav system in 2010 with a total value of about NIS 75,784 billion; compared with about 198 thousand transactions with a total value of about NIS 62,304 billion in 2009 (an increase of 32 percent in the number of transactions and of 22 percent in total value). In 2010 there were about 229 thousand interbank transactions in the Zahav system, constituting an average of 757 transactions per business day,[12] and having a total value of about NIS 5,672 billion for the year; compared with about 167 thousand transactions constituting about 553 transactions per business day and having a total value of NIS 4,742 billion in 2009 (an increase of 37 percent in the average number of transactions per business day).

The average amount of one interbank transaction settled by the system was NIS 25 million in 2010, compared with NIS 28 million in 2009.

**Table 2**
**Zahav System Activity[a], 2007 - 2010**

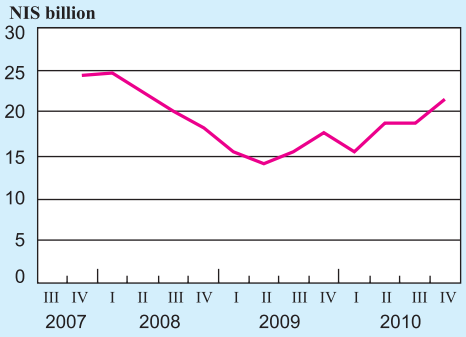
| | 2007[b] | | 2008 | | 2009 | | 2010 | |
|---|---|---|---|---|---|---|---|---|
| | Total | Interbank | Total | Interbank | Total | Interbank | Total | Interbank |
| | Value (NIS billions) | | | | | | | |
| Monthly average | 1,634 | 490 | 1,823 | 533 | 5,192 | 395 | 6,315 | 473 |
| Annual cumulative | 8,270 | 2,463 | 21,874 | 6,402 | 62,304 | 4,742 | 75,784 | 5,672 |
| Annual change (percent) | - | - | - | - | 184.8 | -25.9 | 21.6 | 19.6 |
| | Transactions (number) | | | | | | | |
| Monthly average | 11,732 | 9,956 | 18,034 | 16,125 | 16,471 | 13,905 | 21,768 | 19,054 |
| Annual cumulative | 58,900 | 49,854 | 216,404 | 193,497 | 197,649 | 166,857 | 261,217 | 228,646 |
| Annual change (percent) | - | - | - | - | -8.7 | -13.8 | 32.2 | 37.0 |

[a] The interbank transactions include the transactions of the banks and their customers.
[b] The Zahav system started operating in July 2007.
Source: Bank of Israel

[12] In 2010 there were 302 business days and in 2009 there were 303 business days.

In 2008 and in the first two quarters of 2009 there was a slowdown in interbank activity[13] in the Zahav system (Figure 4), which was reflected in a decline in the number of transactions settled in the system. This decline can be attributed to the general slowdown in the economy as a result of the global financial crisis. Also the inclusion of the new shekel in the CLS system as from May 2008 contributed to lowering the interbank amounts settled in the Zahav system, since part of the transactions that were settled in the system in the past as individual transactions are now combined in the CLS's account in the Zahav system. In the middle of 2009, along with the economy's recovery from the crisis, there was an increase in the number of transactions settled in the system, a trend that continued also in 2010.

**Figure 4**
**Value of Interbank Transactions in the ZAHAV System, 2007- 2010**
**(Daily average per quarter)**

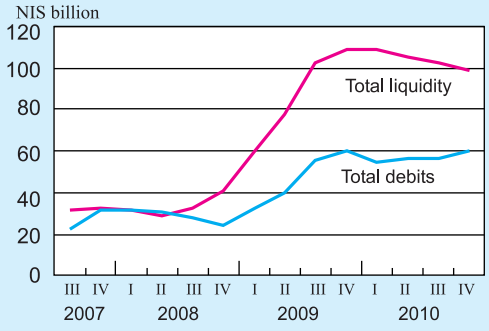



SOURCE: Bank of Israel.

In 2010 there was a decrease of about 9 percent in the average daily value of liquidity in the Zahav system (Figure 5); in the last quarter of 2010 the daily average of liquidity in the accounts of the system's participants was NIS 99 billion, compared with NIS 109 billion in the last quarter of 2009. Nevertheless, the daily average in 2010 was about 19 percent higher than the daily average in 2009.

As from the second half of 2009 there are signs of stability in the ratio between total debits[14] and the amount of liquidity in the system, so that in the last quarter of 2010 the average daily ratio was about 60 percent; compared with about 55 percent in the last quarter of 2009, about 60 percent in the last quarter of 2008 and about 94 percent in the last quarter of 2007.

**Figure 5**
**Total Liquidity and Total Debits in the ZAHAV System, 2007-2010**
**(Daily average per quarter)**




SOURCE: Bank of Israel.

[13] Interbank activity is composed of the activity of the banks in Israel, CLS and the Postal Bank.
[14] Total debits settled in the participant's current account consist of bilateral payments sent to the system by the participant, in which the participant's current account is debited, and the account of another participant in the system is credited, as well as debits to the participant's current account which are included in multilateral payments from clearing houses.

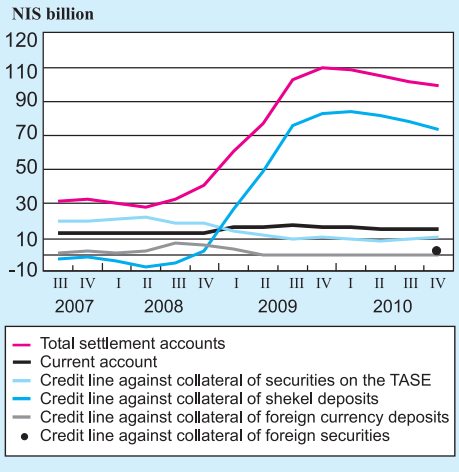
The changes in the value of liquidity can be attributed to the policy of The Bank of Israel of enhancing Israel's ability to withstand the effects of the global financial crisis. Such policy included, inter alia, the introduction of a plan to increase the foreign exchange reserves[15] as from the end of the first quarter of 2008 and to purchase government bonds[16] of different types and maturities as from February 2009.

The liquidity surpluses that flowed to the market as a result of the purchases of foreign currency were absorbed in 2008-2009 by means of deposit tenders to the commercial banks, which significantly increased the total liquidity of the participants in the Zahav system. In 2010 the Bank of Israel reduced the absorption through deposit tenders and increased the absorption through issuances of makam. Since the deposit tenders are executed in the Zahav system, whereas makam is issued in the stock exchange, reducing the use of deposit tenders is indeed reflected in the banks' liquidity in the Zahav system (Figure 6 below) whereas the increase in issuances of makam is not. Therefore, the decrease presented in the value of liquidity of the banks in the Zahav system does not indicate the liquidity situation of the commercial banks in Israel.

The Zahav system holds the settlement accounts of settlement participants. The participant's settlement account, which reflects its total liquidity in the system, consists of a current account used to settle (credit/debit) payments and its intraday credit (ICL – Intraday Credit Line) accounts. Among other things, the intraday credit accounts are composed of intraday credit the participant receives from Bank of Israel against collateral deposited in an account of Bank of Israel in the TASE clearing house and against the participant's deposits (in NIS and dollars) held at Bank of Israel. As from October 26, 2010 the participants in the Zahav system are permitted to receive credit from Bank of Israel also against collateral held in foreign securities.

Figure 6 presents the components included in the system's total liquidity and shows, as aforementioned, that in 2010 total liquidity decreased by about 9 percent. The decrease is due mainly to the decrease in the credit account against shekel deposits.

**Figure 6**
**The ZAHAV System, Components of the Clearing Account, 2007-2010**
**(Daily average per quarter)**




SOURCE: Bank of Israel.

[15] Bank of Israel press release from March 20, 2008.
[16] Bank of Israel press release from March 25, 2009.

Table 3 below shows that the amounts settled in the Zahav system increased in the reviewed year by about 22 percent. Furthermore, there was an increase of about 32 percent in the number of transactions in the system.

**Table 3**
**Activity in the Zahav System by Components, 2008-2010**

| | Interbank[a] | | | | | |
|---|---|---|---|---|---|---|
| | Excluding CLS | Only CLS | Total | Clearing houses | Bank of Israel | Total |
| | Value (NIS billions) | | | | | |
| 2008 | 5,894 | 508 | 6,402 | 7,506 | 7,966 | 21,874 |
| 2009 | 3,809 | 933 | 4,742 | 4,831 | 52,731 | 62,304 |
| 2010 | 4,575 | 1,097 | 5,672 | 4,294 | 65,818 | 75,784 |
| Annual change (percent) | 20.1 | 17.6 | 19.6 | -11.1 | 24.8 | 21.6 |
| | Transactions (number) | | | | | |
| 2008 | 185,584 | 7,913 | 193,497 | 8,948 | 13,959 | 216,404 |
| 2009 | 156,430 | 10,427 | 166,857 | 9,398 | 21,394 | 197,649 |
| 2010 | 217,872 | 10,774 | 228,646 | 10,707 | 21,864 | 261,217 |
| Annual change (percent) | 39.3 | 3.3 | 37.0 | 13.9 | 2.2 | 32.2 |

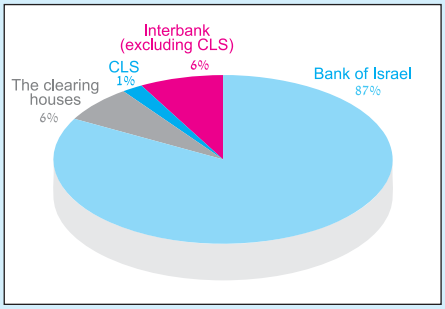
[a] Activity in NIS in CLS began on May 26, 2008.
Source: Bank of Israel.

In 2010 the value of transactions settled by the clearing houses in the Zahav system amounted to NIS 4,294 billion and their number was 10,707. The activity of Bank of Israel in the Zahav system amounted to NIS 65,818 billion in 2010, an increase of about 25 percent from the previous year.

The increase in the activity of the Bank of Israel in the Zahav system is explained by an increase in the banks' deposits in Bank of Israel, which is due to absorbing cash surpluses from the market following the purchases of dollars by Bank of Israel (as shown in Figure 6 above).

Figure 7 presents the composition of the Zahav system's activity, of which Bank of Israel accounts for about 87 percent. The activity of Bank of Israel includes payment

**Figure 7**
**Value of Activity of the ZAHAV System by Component, 2010**




SOURCE: Bank of Israel.

transactions with respect to monetary tenders, providing intraday credit to the Zahav system participants, the government's activity, the shekel side of Bank of Israel's purchases of dollars in 2010, etc.

### 3.1.2 The banks' clearing house

3.1.2.1 The paper-based clearing house[17]

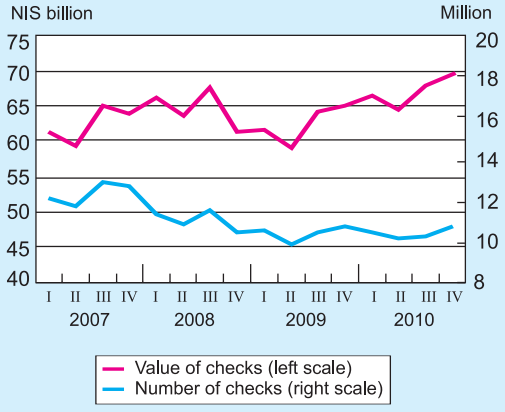
Table 4 below shows that in 2010 settlements in the paper-based clearing house amounted to about NIS 858 billion, compared with about NIS 787 billion in 2009 (an increase of 9 percent). In 2010 the number of transactions in the clearing house increased by 0.03 percent.

In 2010 the paper-based clearing house handled about 125 million transactions, of which 124.6 million were checks. Checks are now presented electronically and constitute about 99.7 percent of total settlements in the paper-based clearing house. The monthly average number of checks settled in the paper-based clearing house was 10.75 millions in 2010 (Figure 8).

The value of manual transactions in 2010 totaled about NIS 51 billion, compared with NIS 38 billion in 2009.

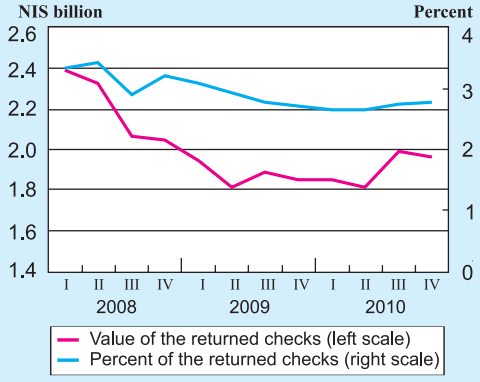
Figure 9 shows that the monthly average of returns was 2.7 percent throughout 2010, whereas the monthly average value of returns was between NIS 1.85 million and NIS 1.95 million.

**Figure 8**
**Electronic Check-Clearing, 2007-2010**
**(Monthly average per quarter)**




SOURCE: Bank of Israel.

**Figure 9**
**Paper-Based Clearing House – Returned Checks, 2008-2010**
**(The Value and Percent of Returned Checks, Monthly average per quarter)**




SOURCE: Bank of Israel.

[17] The data included in "The paper-based clearing house" section refer only to interbank transactions.

**Table 4**
**Paper-Based Settlement by Components, 2007-2010**

| | Manual transmissions[a] | | | Checks | | | Total in paper-based clearing house |
|---|---|---|---|---|---|---|---|
| | Debit | Credit | Total | Presented | Returned | Total | |
| | Value (NIS billions) | | | | | | |
| 2007 | 55 | 51 | 106 | 749 | 24 | 773 | 879 |
| 2008 | 21 | 5 | 26 | 776 | 24 | 800 | 826 |
| 2009 | 29 | 9 | 38 | 727 | 22 | 749 | 787 |
| 2010 | 39 | 12 | 51 | 784 | 23 | 807 | 858 |
| Annual change (percent) | 34.5 | 33.3 | 34.2 | 7.8 | 4.5 | 7.7 | 9.0 |
| | Transactions (thousands) | | | | | | |
| 2007[b] | - | - | - | 148,254 | 3,508 | 151,762 | 151,762 |
| 2008 | 252 | 233 | 485 | 131,739 | 3,609 | 135,348 | 135,833 |
| 2009 | 229 | 270 | 499 | 121,258 | 3,249 | 124,507 | 125,006 |
| 2010 | 190 | 241 | 431 | 121,645 | 2,963 | 124,608 | 125,039 |
| Annual change (percent) | -17.0 | -10.7 | -13.6 | 0.3 | -8.8 | 0.1 | 0.03 |

[a] Following a change in the method of estimation , the number of manual transmissions presented here is different from the number presented in the reports of previous years.
[b] Data was not collected in 2007 regarding the number of manual transmissions.
Source: Bank of Israel

The number of returned checks increased in the second half of 2010, after the decline that occurred since 2008. The annual cumulative rate of returned checks in the paper-based clearing house was 2.9 percent in 2010, compared with 3 percent in 2009.

3.1.2.2 Masav

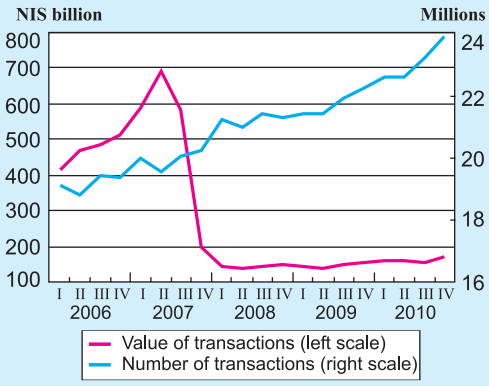
According to the directives of Bank of Israel, as from July 1, 2010 payments higher than NIS 1 million are to be settled directly in the Zahav system (and not in Masav),[18] except in extraordinary circumstances defined by Bank of Israel.[19]

The sharp drop in the value of transactions in Masav in the second half of 2007, which can be seen clearly in Figure 10, can be attributed to the inauguration of the Zahav system; whereas the number of transactions continued to increase in 2006-2010.

[18] The maximum amount permitted in Masav was NIS 3 million from the date the Zahav system began operating until June 2010. On February 6, 2010 the head of the comptroller's office issued an instruction lowering this amount to NIS 1 million as from July 1, 2010.
[19] As specified in a letter from the head of the comptroller's office dated November 22, 2007.

The number of institutions operating in Masav increased by about 5 percent in 2010 – in December 2010 there were 31,359 active institutions listed in Masav compared with 29,831 institutions in December 2009.

**Figure 10**
**Masav Activity, 2006-2010**
**(Monthly average per quarter)**




SOURCE: Bank of Israel.

In 2010 the activity of Masav increased – both in value (by about 10 percent) and in number of transactions (by about 6 percent) (Table 5). The value of transactions cleared in Masav was about NIS 1,958 billion in 2010 (compared with about NIS 1,779 billion in 2009), of which credits amounted to about NIS 1,635 billion, debits to about NIS 317 billion, returns of debits to about NIS 4.6 billion and returns of credits to about NIS 1 billion. The increase in transactions in Masav is due to both the credits component and the debits component – an increase of about 9 percent and 17 percent, respectively. The average value of a transaction in Masav was NIS 7,080 in 2010.

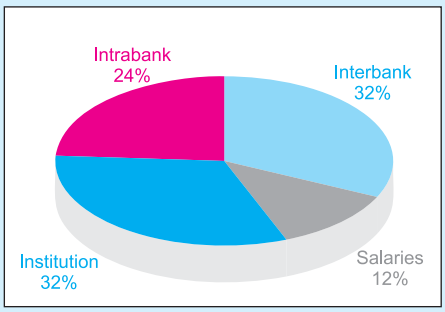
**Table 5**
**Masav by Components, 2007-2010**

| | Credits | Debits | Returned credits[a] | Returned debits | Total |
|---|---|---|---|---|---|
| | | | Values (NIS billions) | | |
| 2007 | 5,940 | 235 | - | 3.9 | 6,179 |
| 2008 | 1,473 | 261 | - | 4.9 | 1,739 |
| 2009 | 1,502 | 271 | - | 5.5 | 1,779 |
| 2010 | 1,635 | 317 | 1 | 4.6 | 1,958 |
| Annual change (percent) | 8.9 | 17.0 | - | -16.4 | 10.1 |
| | | | Transactions (thousands) | | |
| 2007 | 92,955 | 146,116 | - | 4,535 | 243,606 |
| 2008 | 96,316 | 152,892 | - | 5,003 | 254,211 |
| 2009 | 97,478 | 157,749 | - | 5,395 | 260,622 |
| 2010 | 103,326 | 168,186 | 104 | 4,926 | 276,542 |
| Annual change (percent) | 6.0 | 6.6 | - | -8.7 | 6.1 |

[a] Returned credits are settled via Masav, instead via the paper-based clearing house, since December 2009.
Source: Masav.

Table 6 shows that the aforesaid increase in the credits component derives from an increase in the value of transactions of institutions and of interbank transactions; the activity of the institutions increased by about 10 percent, and the inter-bank activity increased by about 20 percent. Furthermore, this table and Figure 11 show that most of the credit transactions transferred for clearing in the Masav system in 2010 were salary transfers (about 54 percent), although the monetary value of the salary component was the lowest (about 12 percent). Conversely, the number of interbank transactions was the lowest (about 11 percent), but their value was the highest (about 32 percent).

**Figure 11**
**Masav – Credits by Destination**
**2010**




SOURCE: Masav.

**Table 6**
**Masav - Credits by Destination, 2009 and 2010**

| | Interbank | Wages | Institutions | Intrabank | Total credits |
|---|---|---|---|---|---|
| | | | Values (NIS billions) | | |
| 2009 | 518 | 181 | 480 | 323 | 1,502 |
| 2010 | 528 | 191 | 527 | 389 | 1,635 |
| Annual change (percent) | 1.9 | 5.5 | 9.8 | 20.4 | 8.9 |
| | | | Transactions (thousands) | | |
| 2009 | 9,119 | 53,862 | 22,369 | 12,128 | 97,478 |
| 2010 | 11,455 | 55,595 | 24,446 | 11,830 | 103,326 |
| Annual change (percent) | 25.6 | 3.2 | 9.3 | -2.5 | 6.0 |

Source: Masav.

### 3.1.3 The TASE clearing houses

According to data of the TASE presented in Table 7 below, the volume of trade handled by the TASE clearing houses totaled about NIS 1,586 billion in 2010, compared with about NIS 1,596 billion in 2009 (a decline of about 0.6 percent). In the current year the component of government bonds decreased by about 27 percent, whereas trade in shares and convertibles increased by about 18 percent. The makam increased significantly by

about 82 percent, following issuances of makam by The Bank of Israel (in order to absorb surplus liquidity in the market following purchases of foreign currency). The decline in government bonds can be attributed to the recovery from the financial crisis, which led many to invest in higher risk channels bringing a return higher than the return on government bonds, meaning – investments in shares and convertibles.

**Table 7**
**Trading Volumes in Securities, 2006-2010**

| | Shares and convertibles | Bonds | | | Makam | Total |
|---|---|---|---|---|---|---|
| | | Govt. | Other | Total | | |
| | Values (NIS billions) | | | | | |
| 2006 | 360 | 356 | 68 | 424 | 198 | 982 |
| 2007 | 506 | 636 | 165 | 801 | 207 | 1,514 |
| 2008 | 481 | 761 | 224 | 985 | 192 | 1,658 |
| 2009 | 423 | 789 | 223 | 1,012 | 160 | 1,595 |
| 2010 | 498 | 579 | 218 | 797 | 291 | 1,586 |
| Annual change (percent) | 17.7 | -26.6 | -2.2 | -21.2 | 81.9 | -0.6 |

Source: TASE.

### 3.1.4 CLS system

In 2010, the CLS settled about Dollar 1,074 trillion, compared with about Dollar 870 trillion in 2009 (an increase of about 23 percent). In 2010 CLS settled an average of about Dollar 4.1 trillion daily, compared with about Dollar 3.4 trillion in 2009 (an increase of about 21 percent).

CLS handled In 2010 shekel transactions of about Dollar 294 billion (about NIS 1,097 billion) – about 0.27 percent of the total amount settled by CLS during the year. The total daily average settlement in the new shekel currency in 2010 was about Dollar 1.2 billion (about NIS 4.4 billion).

### 3.1.5 Payment card companies

The number of payment card transactions was 742 million[20] in 2010 with a total value of about NIS 176 billion – about 9 percent higher than last year. The average payment card transaction this year was NIS 237.

[20] It should be emphasized that the number of transactions shown in this table includes all the transactions listed in the customers' statements, whereas the other debits in the public's current accounts only list debits recorded in the current account (Table 8).

Table 8 below presents shekel data of transactions, including withdrawals of cash by means of payment cards and activity for obtaining information. The data in Table 8 do not include purchases and cash withdrawals in foreign currency.

**Table 8**
**Use of Payment Cards, 2005-2010**

| | Values (NIS billion) | Transactions (millions) | Annual change in value (percent) |
|---|---|---|---|
| 2005 | 113 | 482 | 10.4 |
| 2006 | 126 | 532 | 11.5 |
| 2007 | 139 | 585 | 10.3 |
| 2008 | 154 | 641 | 10.8 |
| 2009 | 161 | 685 | 4.5 |
| 2010[a] | 176 | 742 | 9.3 |

[a] Q4 data: estimate.
Source: Banking Supervision Department, Bank of Israel.

## 3.2 Means of payment

The debits of the public's current accounts include checks, cash withdrawn at ATMs and banks, authorized debits (executed through Masav) and other types of debits. Other types of debits include electronic debits and credits (through Zahav and Masav), activity by payment cards, payments by internet, and other business transactions between the customer and the bank, such as the purchase of securities, the purchase of foreign currency and bank charges.

The debits of the public's current accounts (Table 9) totaled about NIS 19,892 billion in 2010, compared with about NIS 18,058 billion in 2009. The total value of debits of current accounts held by the public increased by about 10 percent in 2010. Debits by check and debits by cash withdrawals increased this year by about 5 percent each, and authorized debits increased by about 12 percent. Also other debits increased by about 10 percent.

It should be mentioned that the data on the public's current accounts differ from the data presented in Tables 4 and 5, since those tables present only interbank transactions, whereas the data in Table 9 include all the transactions, including those settled inside the banks and did not pass through the interbank clearing houses.

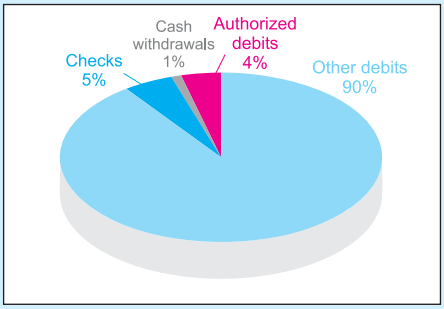
**Table 9**
**Debits Against The Public's Current Accounts, 2005–2010**

| | Checks[a] | Cash withdrawals | Direct debits | Other debits | Total |
|---|---|---|---|---|---|
| | | | Values (NIS billions) | | |
| 2005 | 821 | 137 | 471 | 13,731 | 15,160 |
| 2006 | 888 | 143 | 527 | 15,910 | 17,468 |
| 2007 | 970 | 158 | 572 | 21,051 | 22,751 |
| 2008 | 924 | 163 | 633 | 19,754 | 21,474 |
| 2009 | 860 | 175 | 649 | 16,374 | 18,058 |
| 2010 | 906 | 184 | 728 | 18,074 | 19,892 |
| Annual change (percent) | 5.3 | 5.1 | 12.2 | 10.4 | 10.2 |
| | | | Transactions (millions) | | |
| 2005 | 164 | 134 | 163 | 274 | 735 |
| 2006 | 163 | 138 | 171 | 304 | 776 |
| 2007 | 165 | 140 | 178 | 343 | 826 |
| 2008 | 159 | 135 | 187 | 338 | 819 |
| 2009 | 152 | 131 | 195 | 305 | 783 |
| 2010 | 151 | 130 | 203 | 322 | 806 |
| Annual change (percent) | -0.7 | -0.8 | 4.1 | 5.6 | 2.9 |

[a] Including returned checks.
Source: Banking Supervision Department, Bank of Israel.

Figure 12 clearly shows that the other debits are the major part of the means of payment used (about 90 percent), with checks accounting for about 5 percent, authorized debits accounting for about 4 percent, and cash withdrawals accounting for only 1 percent of the means of payment used.

**Figure 12**
**Means of Payment used (Value)**
**2010**




SOURCE: Bank of Israel.

### 3.2.1 Use of checks

According to the reports from banks (Table 10) about 150,865 thousand checks were drawn by Israelis in 2010, of which about 125,039 thousand were presented in the interbank clearing house (Table 4), and the rest (about 25,826 thousand) were deposited

in the banks from which they were drawn.

The number of checks drawn was 0.6 percent lower this year than last year, a trend which characterizes developed countries and originates primarily from the growing use of payment cards and the other automated payments.

The average amount of a check was NIS 6,005 in 2010, compared with NIS 5,665 last year. The high average amount of a check is due to the fact that checks are still being used for large payments, such as tax payments of businesses.

**Table 10**
**Checks Drawn and Checks Returned, 2005-2010**

| | Checks drawn | Checks returned | Return rate (percent) |
|---|---|---|---|
| | | Values (NIS millions) | |
| 2005 | 820,666 | 22,751 | 2.8 |
| 2006 | 887,536 | 23,013 | 2.6 |
| 2007 | 970,363 | 26,475 | 2.7 |
| 2008 | 924,131 | 28,169 | 3.0 |
| 2009 | 859,666 | 28,134 | 3.3 |
| 2010 | 905,949 | 27,392 | 3.0 |
| Annual change (percent) | 5.4 | -2.6 | -9.1 |
| | | Transactions (thousands) | |
| 2005 | 164,179 | 3,989 | 2.4 |
| 2006 | 163,013 | 4,132 | 2.5 |
| 2007 | 164,600 | 4,168 | 2.5 |
| 2008 | 159,347 | 4,394 | 2.8 |
| 2009 | 151,748 | 4,174 | 2.8 |
| 2010 | 150,865 | 3,821 | 2.5 |
| Annual change (percent) | -0.6 | -8.5 | -10.7 |

Source: Banking Supervision Department, Bank of Israel.

Of the checks drawn in 2010 about 3,821 thousand were returned (2.5 percent of the total number compared with 2.8 percent last year). Of the total value of checks drawn (NIS 905,949 million), about 3 percent were returned compared with 3.3 percent in 2009. About half of the checks were returned because of insufficient coverage, and half were returned for other reasons (for example checks presented after their validity date, an unrecognized signature, etc.).

Table 11 below presents the value and number of checks drawn and presented in 2010 by month:

**Table 11**
**Checks Drawn and Checks Returned, 2010**

| | Checks drawn | Checks returned | Return rate (percent) |
|---|---|---|---|
| | Values (NIS millions) | | |
| January | 76,128 | 2,242 | 2.9 |
| February | 63,768 | 2,138 | 3.4 |
| March | 82,567 | 2,387 | 2.9 |
| April | 68,433 | 2,115 | 3.1 |
| May | 75,360 | 2,273 | 3.0 |
| June | 74,219 | 2,170 | 2.9 |
| July | 76,099 | 2,342 | 3.1 |
| August | 80,620 | 2,479 | 3.1 |
| September | 67,628 | 1,951 | 2.9 |
| October | 80,672 | 2,341 | 2.9 |
| November | 78,304 | 2,439 | 3.1 |
| December | 82,151 | 2,515 | 3.1 |
| | Transactions (thousands) | | |
| January | 12,488 | 318 | 2.5 |
| February | 10,778 | 278 | 2.6 |
| March | 14,430 | 338 | 2.3 |
| April | 11,440 | 302 | 2.6 |
| May | 12,891 | 317 | 2.5 |
| June | 12,546 | 303 | 2.4 |
| July | 12,347 | 310 | 2.5 |
| August | 12,894 | 336 | 2.6 |
| September | 11,399 | 278 | 2.4 |
| October | 13,440 | 352 | 2.6 |
| November | 13,136 | 336 | 2.6 |
| December | 13,076 | 353 | 2.7 |

Source: Banking Supervision Department, Bank of Israel.

### 3.2.2 Cash

According to the data presented in Table 12 below cash withdrawals by the public totaled about NIS 184 billion, compared with NIS 175 billion last year (an increase of about 5 percent). Cash accounted for about one percent of all current account debits by the public – the same as last year.

Despite the increase in the use of payment cards, prepaid cards, the internet and more, the use of cash as a means of payment does not seem to be in decline; quite the contrary: cash withdrawals increased from 2005 until 2010 at a rate of about 34 percent.

**Table 12**
**Cash, 2005-2010**

| | Cash withdrawals | | Cash held by the public | |
|---|---|---|---|---|
| | Annual amount (NIS billion) | Annual change (percent) | Annual amount (NIS billion) | Annual change (percent) |
| 2005 | 137 | - | 19 | - |
| 2006 | 143 | 4.4 | 21 | 10.5 |
| 2007 | 158 | 10.5 | 23 | 9.5 |
| 2008 | 163 | 3.2 | 27 | 17.4 |
| 2009 | 175 | 7.4 | 34 | 25.9 |
| 2010 | 184 | 5.1 | 37 | 8.8 |

Source: Banking Supervision Department, Bank of Israel.

### 3.2.3 Authorized debits

According to Table 13 below, there were about 203 million authorized debits in 2010, with a value totaling NIS 728 billion, compared with 195 million transactions and a value of about NIS 649 billion last year (an increase of 12 percent in value and of 4 percent in number of transactions).

The value of authorized debits has increased by about 55 percent since 2005 until 2010 and constitutes about 4 percent of total debits in current accounts held by the public. The table shows that in 2010 the annual increase in authorized debits was relatively high compared to last year – about 12 percent compared with 2.5 percent.

**Table 13**
**Authorized Debits, 2005-2010**

| | Values (NIS billions) | Transactions (millions) | Annual change in value (percent) |
|---|---|---|---|
| 2005 | 471 | 163 | - |
| 2006 | 527 | 171 | 11.9 |
| 2007 | 572 | 178 | 8.5 |
| 2008 | 633 | 187 | 10.7 |
| 2009 | 649 | 195 | 2.5 |
| 2010 | 728 | 203 | 12.2 |

Source: Banking Supervision Department, Bank of Israel.

### 3.2.4 Other debits

Other debits of the public's current accounts are not classified and mainly include one-time orders for the transfer of funds to an account of the same customer or that of a different customer, debits resulting from business transactions between the customer and the bank (e.g., interest payments, commissions on the purchase of securities or foreign currency), orders to debit an account using a payment card[21] and payments made by the public in the Zahav system.

Other debits totaled NIS 18,074 billion for the reviewed year, compared with NIS 16,374 billion in the previous year (Table 9 above). In 2010 other debits accounted for about 90 percent of total debits in current accounts held by the public.

[21] Some of the banks include this in authorized debits.