



# THE PAYMENT AND SETTLEMENT SYSTEMS IN ISRAEL–2008

## 1. Main changes in the payment and settlement systems

The payment and settlement systems in Israel have undergone an upgrading process in recent years, which is now at an advanced stage. By the end of the process, the systems will meet the international standards set by the Bank of International Settlement (BIS).

The reform of the payment and settlement systems in recent years has encompassed a variety of issues, including the cancellation of retroactive entries, the extension of the bank business day and improvements in the clearing process for checks. The highlight of the reform is the creation of the Zahav system (Real Time Gross Settlement System) which began operating in the third quarter of 2007. The Zahav system enables the immediate and final settlement of large or urgent payments. It also serves as the final clearer for all the settlement systems, including the paper-based clearing house (checks), the banks' automated clearing house (known as Masav) and the Tel Aviv Securities Exchange (TASE) clearing houses. As part of the creation of the Zahav system, all the settlement systems in the economy were evaluated and some of them reorganized, thus contributing to their increased efficiency.

During the course of the year, some 216 thousand transactions were settled representing a total value of about NIS 21,850 billion. The inter-bank transactions in the Zahav system constituted about 72 percent of the total inter-bank amounts settled in the three main settlement systems (Zahav, Masav and checks).

The Bank of Israel is working to expand the use of the system and in this way encourages reinforcement of the economy's financial stability and reduction of risk in other payment systems (checks and Masav). The importance of stability in the payment systems and the reduction in risk is especially important in view of the global financial crisis, which became particularly acute in the second half of 2008. The existence of a system that enables immediate and final settlement in a period of financial uncertainty makes it possible for financial entities to implement transactions safely and without settlement risks.

In order to ensure the stability of the Zahav system and the minimization of legal risks related to it, the Bank of Israel had to create a legal framework for the system. Thus, on February 4, 2008, the Knesset approved the Payment Systems Law, 5768-2008 (hereafter: the "Law"). The Law relates to, among other things, the finality of settled payments in



the Zahav and CLS (Continuous Linked Settlement) systems, bankruptcy (dissolution) of a participant in the Zahav system and the granting of authority to the Bank of Israel to oversee the payment systems, defined as supervised.

The Zahav system has provided Israel with new options, both domestically and internationally, and made it possible for the shekel to be included in settlement by the CLS bank<sup>1</sup> in May 2008. The settlement in the CLS system is carried out simultaneously in the two relevant currencies and is final. The final and simultaneous settlement between two different currencies minimizes the risks involved in conversion transactions. The addition of the Israeli currency to the international settlement system significantly reduces the conversion risks involved in the international activity of business entities in Israel, reinforces the stability of the currency and also transforms the shekel into a convertible currency that is freely traded world wide.

The importance of joining the CLS was demonstrated in September 2008 (about four months after the shekel was added) when financial entities in Israel were able to safely continue carrying out transactions—through the CLS—with foreign banks threatened with bankruptcy.

In addition to the issues dealt with by the reform in the past, planning for check truncation was continued and a legislative memorandum for the proposed law Electronic Clearing of Checks, 5768-2008 was published. The legislation process will be voted on during 2009. At the same time, the appropriate operational infrastructure is being prepared to implement the law, which will include the ability to convey files with images of checks between the banks.

## 2. The payment systems in Israel

There are a number of interbank clearing houses operating in Israel: Zahav, the banks' clearing house (Masav), the paper-based clearing house (checks) and the TASE clearing houses (securities and derivatives). The Masav, the paper-based clearing house and the TASE clearing houses transfer net data to the Zahav clearing house. The settlement in the Zahav system is final and its results are transferred to the bookkeeping system of the Bank of Israel.

The interbank payment systems exist to facilitate payments between customers who maintain accounts at different banks. There is no need to use the interbank payment systems for transfer of payments between customers with accounts at the same bank.

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<sup>1</sup> Up until the addition of the shekel, the CLS maintained settlement accounts in 15 currencies: the US dollar, euro, pound sterling, Swiss franc, Japanese yen, etc. Together with the shekel the Mexican peso joined the CLS as well.



## The Zahav system

The Zahav system is similar to the RTGS (Real Time Gross Settlement) system existing in most other economies (both developed and emerging). The system was inaugurated at the end of July 2007 and it enables the final and immediate settlement of bilateral transactions between settlement participants, as well as net multilateral transactions initiated by the clearing houses (i.e., Masav, the TASE clearing houses and checks). Settlement in the Zahav system is safe since the participants are linked to the system through the SWIFT international communication system which is used for the safe transfer of funds in numerous countries in the world. The Zahav system meets the very high standards set by the State Authority for Information Security in Israel.

The main goal of the Zahav system is to reduced to a minimum the various risks associated with the other settlement systems, such as systemic risk, liquidity risk, credit risk, legal risk and operational risk. The system's settlement of interbank payments is immediate and final, such that the balances of each of the participants in the system are final.

The Zahav system operates from 7:45 to 18:30 each business day. The system is managed by a control room in the Bank of Israel, which is responsible for ensuring the ongoing operation of the system, treating various types of business problems, giving warnings on technical problems. The control room also provides help desk services to system participants.

The system is used to settle bilateral transactions between customers and between banks, as well as transactions between the banks and the Bank of Israel, including credit to the banks, banks' deposits with the Bank of Israel, withdrawal of cash from the Bank of Israel, etc. In addition, the system settles the net results of the other payment systems (Masav, the paper-based clearing house and the TASE clearing houses).

In 2008, a total of 193,500 transactions were settled in the Zahav system, which represents an average of 645 transactions per business day and a total of about NIS 6,480 billion for the year. The remainder of the transactions in the Zahav system were carried out by the clearing houses and by the Bank of Israel and totaled about NIS 15,370 billion.

**Table 1**  
**Activity in the Zahav System, January–December 2008**

|              | Total                  |                   | Interbank transactions* |                  |
|--------------|------------------------|-------------------|-------------------------|------------------|
|              | Number of transactions | Value             | Number of transactions  | Value            |
|              |                        | (NIS million)     |                         | (NIS million)    |
| January      | 22,039                 | 2,017,494         | 19,938                  | 638,853          |
| February     | 20,030                 | 1,766,263         | 18,148                  | 573,925          |
| March        | 21,947                 | 1,821,358         | 20,252                  | 686,934          |
| April        | 19,911                 | 1,773,874         | 18,315                  | 597,756          |
| May          | 18,194                 | 1,953,038         | 16,294                  | 529,900          |
| June         | 17,163                 | 2,293,280         | 14,973                  | 546,177          |
| July         | 18,286                 | 1,929,742         | 15,616                  | 566,758          |
| August       | 15,186                 | 1,842,560         | 13,297                  | 464,954          |
| September    | 16,341                 | 1,692,060         | 14,664                  | 526,628          |
| October      | 14,682                 | 1,382,779         | 13,264                  | 458,207          |
| November     | 15,712                 | 1,523,965         | 13,883                  | 431,202          |
| December     | 17,047                 | 1,854,398         | 14,847                  | 459,048          |
| <b>Total</b> | <b>216,538</b>         | <b>21,850,811</b> | <b>193,491</b>          | <b>6,480,342</b> |

\*Including transactions of the banks and their customers.

## The banks' clearing house

The banks' clearing house is composed of the paper-based clearing house (checks) and the Masav automated clearing house (Masav). 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' clearing house is managed by its Board which consists of 14 members, half of whom are from the Bank of Israel and half of whom are from the banking system. The banks' clearing house operates according to the "clearing house regulations," which are periodically updated by the Board. The Board meets every month to discuss the ongoing needs of the clearing house and to update the clearing house regulations according to those needs. Once a year the Board publishes the report regarding its activity.



## Paper-based clearing house (checks)

The instruments presented by the banks to the paper-based clearing house are primarily checks, which are currently presented electronically only. In addition, non-magnetic debits and credits (which are manual transmissions) are also presented, as well as returned checks and manual transmissions.

The number of checks drawn in 2008 (including checks deposited at the bank from which they were drawn) totaled 159 million units, with a value of NIS 924 billion (Table 7). About NIS 800 billion, which represents about 86 percent of total checks presented and drawn, were presented at the inter-bank clearing house; the rest were deposited at the banks from which they were drawn.

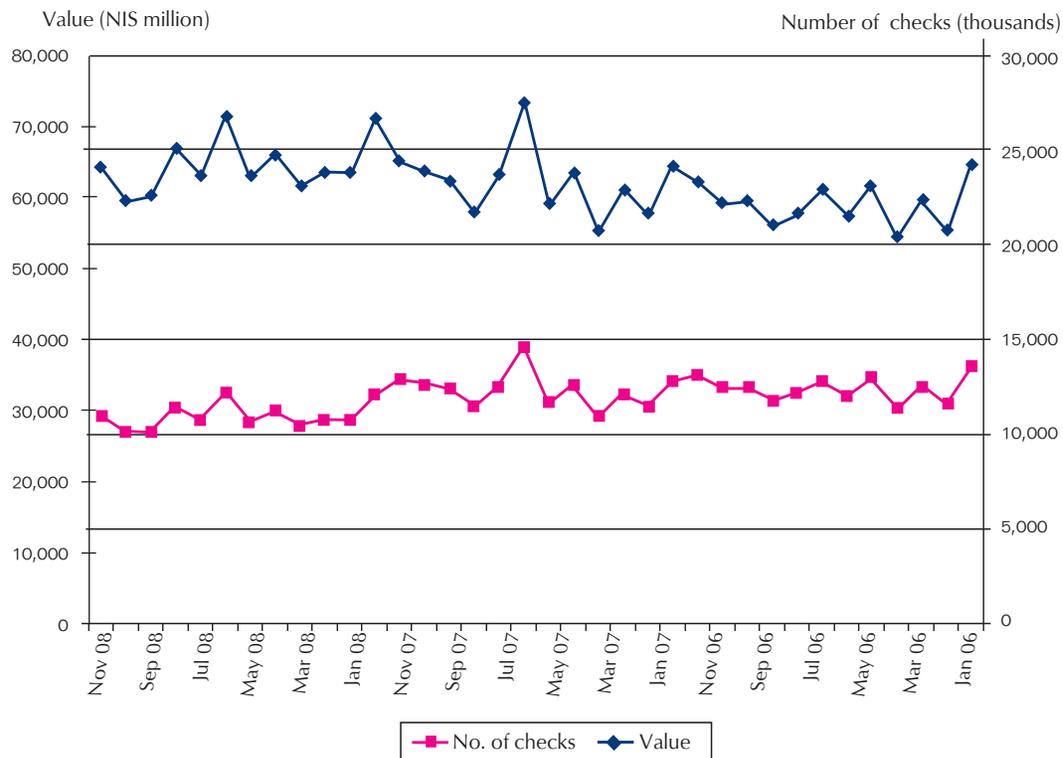
In the past, the banks' reports to the Bank of Israel included the amount of a debit or a credit for checks presented and returned to other banks. Starting in October 2008, the banks also report the number of checks transferred or received from other banks, as well as the number of returned checks that were transferred or received. The numbers of checks cleared from periods prior to October 2008 shown in Figure 1 and Table 2 are estimates based on the figures reported for October–December 2008.

The transmissions settled manually in 2008 constituted about one percent of the total transmissions (checks and manual transmissions) settled by the paper-based clearing house, although they represented about three percent of the total value. The value of manual transmissions in 2008 totaled about NIS 26 billion, as compared to NIS 106 billion in 2007. The significant decline was primarily the result of the reduction in issues of shares that were carried out in the past using manual debits, as well as the transfer of large sums between the banks, some of which had previously been transferred through manual credits and this year were implemented through the Zahav system, or through Masav.

During 2008, various measures were taken to halt the use of manual transmissions and this process will continue in 2009, such that the return of credits in Masav, which is currently done by manual credits, will be carried out by Masav, and the electronic collection docketts will be cleared in the electronic clearing house, like checks.

The figure below shows amounts and totals of the cleared checks.

**Figure 1**  
**Checks cleared, 2006 to 2008**



Comment: The number of checks up until September 2008 is only an estimate.

In 2008, about 138 million transmissions were received by the paper-based clearing house (of which 136 million were checks) with a value of about NIS 826 billion. The number of checks returned constituted 2.4 percent of the number of checks presented to the paper-based clearing house.



**Table 2**  
**The Paper-Based Clearing House, by Type of Instrument, 2006–08**

(Instruments presented and returns, monthly average)

|                           | 2006           |                | 2007           |                | 2008           |                | Change in 2008 |              |
|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|
|                           | Value          | Number         | Value          | Number         | Value          | Number         | Value          | Number       |
|                           | (NIS million)  | (thousands)    | (NIS million)  | (thousands)    | (NIS million)  | (thousands)    | percent(       | (percent)    |
| <b>Manual instruments</b> | <b>101,104</b> | <b>1,056</b>   | <b>106,328</b> | <b>3,172</b>   | <b>26,359</b>  | <b>1,994</b>   | <b>-75.2</b>   | <b>-37.1</b> |
| Debits                    | 36,477         | 369            | 54,836         | 2,737          | 21,360         | 1,742          | -61.0          | -36.3        |
| Credits                   | 64,627         | 687            | 51,492         | 435            | 4,999          | 251            | -90.3          | -42.2        |
| <b>Checks</b>             | <b>730,220</b> | <b>152,579</b> | <b>772,128</b> | <b>151,762</b> | <b>800,123</b> | <b>135,348</b> | <b>3.6</b>     | <b>-10.8</b> |
| Presented                 | 710,269        | 149,145        | 748,528        | 148,254        | 776,264        | 131,739        | 3.7            | -11.1        |
| Returns                   | 19,951         | 3,434          | 23,601         | 3,508          | 23,859         | 3,609          | 1.1            | 2.9          |
| <b>Total</b>              | <b>831,323</b> | <b>153,636</b> | <b>878,457</b> | <b>154,934</b> | <b>826,482</b> | <b>137,342</b> | <b>-5.9</b>    | <b>-11.4</b> |

SOURCE: State Loans Administration, Clearing Section.

The above figures indicate that the number of checks presented fell by about 11 percent relative to the previous year, while their value grew by about 4 percent. Thus, the average value of checks presented to the paper-based clearing house grew from NIS 5,090 in 2007 to NIS 5,900 in 2008. This is explained by the fact that starting in October 2008 real figures were received for the number of checks while previously only an estimate was made.

### Automated clearing house (Masav)

The automated banks' clearing house (Masav) settles inter-bank transactions that are not based on paper or cash. Thus, Masav handles direct credits and debits for non-bank institutions.

The total value of transactions cleared by Masav in 2008 was NIS 1,738 billion, of which credits accounted for about NIS 1,473 billion, authorized debits for NIS 261 billion and the return of debits for NIS 5 billion. The return of credits is handled by the paper-based clearing house, and not by Masav, using manual transmissions. During 2008, preparations were made for the creation of a system for the return of credits in Masav, which should begin operating fully during the second half of 2009.

**Table 3**  
**Transactions in the Banks' Automated Clearing House (Masav), 2006-08**

|                 | 2006           |              | 2007           |              | 2008           |              | change in 2008 |              |
|-----------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|
|                 | Value          | Transactions | Value          | Transactions | Value          | Transactions | Value          | Transactions |
|                 | (NIS billion)  | (Million)    | (NIS billion)  | (Million)    | (NIS billion)  | (Million)    | (Percent)      | (Million)    |
| Credits         | 5,436.7        | 89.0         | 5,940.0        | 93.0         | 1,472.8        | 96.3         | -75.2          | 3.6          |
| Debits          | 215.0          | 141.0        | 235.0          | 146.0        | 260.8          | 152.9        | 11.0           | 4.7          |
| Debits returned | 3.6            | 4.4          | 3.9            | 4.5          | 4.9            | 5.0          | 26.7           | 10.3         |
| <b>Total</b>    | <b>5,655.2</b> | <b>234.4</b> | <b>6,178.9</b> | <b>243.5</b> | <b>1,738.5</b> | <b>254.2</b> | <b>-71.9</b>   | <b>4.4</b>   |

SOURCE: Masav.

Of the credits, 8 percent were transferred by banks, about 72 percent were transferred directly by the institutions for the payment of salaries and other credits and about 20 percent were transferred to banks, which sent them previously. The share of inter-bank transfers within total credits in Masav was about 37 percent, while the value of credits sent directly by the institutions constituted about 42 percent.

**Table 4**  
**Credits via Masav, by Type of Recipient, 2008**

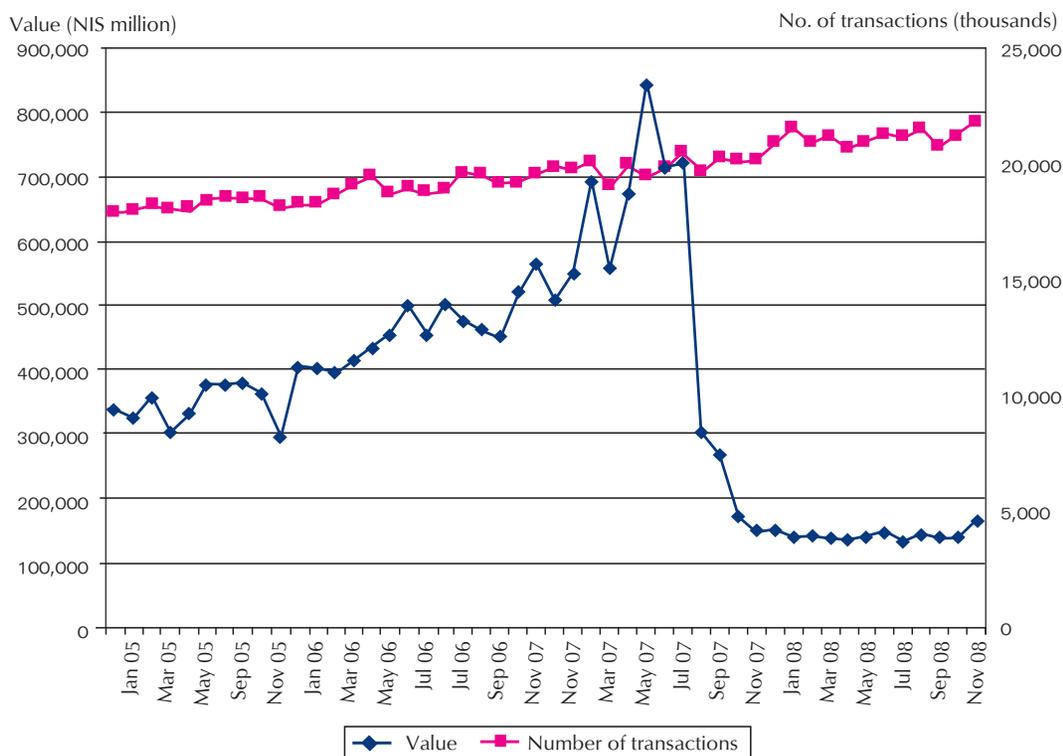
|                      | Transactions | Value          | Transactions | Value        |
|----------------------|--------------|----------------|--------------|--------------|
|                      | (million)    | (NIS billion)  | (percent )   | (percent)    |
| Interbank            | 7.4          | 541.9          | 7.7          | 36.8         |
| Salaries             | 49.9         | 238.1          | 51.8         | 16.2         |
| Institutions         | 19.1         | 381.9          | 19.8         | 25.9         |
| Without clearance    | 19.9         | 310.9          | 20.7         | 21.1         |
| <b>Total credits</b> | <b>96.3</b>  | <b>1,472.8</b> | <b>100.0</b> | <b>100.0</b> |

SOURCE: Based on Masav.

With the introduction of the Zahav system, part of credits, particularly those initiated by the banks, was transferred to it from Masav. As a result, total credits this year declined by about 75 percent relative to the previous year (NIS 1,473 billion in 2008 as compared to NIS 5,940 billion in 2007). The main impact of the Zahav system on credits in Masav was in total inter-bank credits, which totaled about NIS 542 billion this year as compared to an estimated NIS 4,384 billion in the previous year. Credits carried out directly by the institutions through Masav (salaries and other credits) fell relative to the previous year, but

at a more moderate rate. According to the regulations of the Bank of Israel,<sup>2</sup> it is prohibited to implement payments in Masav or the paper-based clearing house (manual credits) in an amount exceeding NIS 3 billion, except in extraordinary circumstances as defined by the Bank of Israel, such as the transfer of payments by banks or institutions in batches. These regulations went into effect in November 2007 and resulted in a sharp drop in the number of transactions in excess of NIS 3 billion in Masav (to a monthly average of about 1,900 transactions as compared to 9,000 transactions per month in the previous year).

**Figure 2**  
**Transactions in the Masav Clearing House, 2005 to 2008**



The sharp reduction in the value of transactions in Masav in the last months of 2007, which can be clearly seen in Figure 2 above, was a result of the beginning of the Zahav system's operation.

In addition to the decline in the total value of transactions in Masav, there was also a drop in the average value of credits (inter-bank and others) from about NIS 64,000 in 2007 to about NIS 15,000. This was due to the transfer of the settlement of large credits to the Zahav system.

<sup>2</sup> Letter from the head of the comptroller's office dated October 31, 2007.

## The TASE clearing houses

The TASE calculates the net value for each bank and transfers the results to the Zahav system for the purpose of settlement and debiting/crediting of the banks' relevant accounts at the Bank of Israel. The clearing houses settle the transactions related to all securities and provide additional services, such as the payment of interest, dividends and redemptions of bonds. In addition, the TASE clearing houses settle payments resulting from the purchase of derivatives and their expiry in the Maof clearing house.

Since the introduction of the Zahav system, the settlement of paper-based transactions has been completely parallel (including time of settlement) to the financial settlement (i.e., delivery versus payment).

**Table 5**  
**Turnover of Trade in Securities, 2005–08**

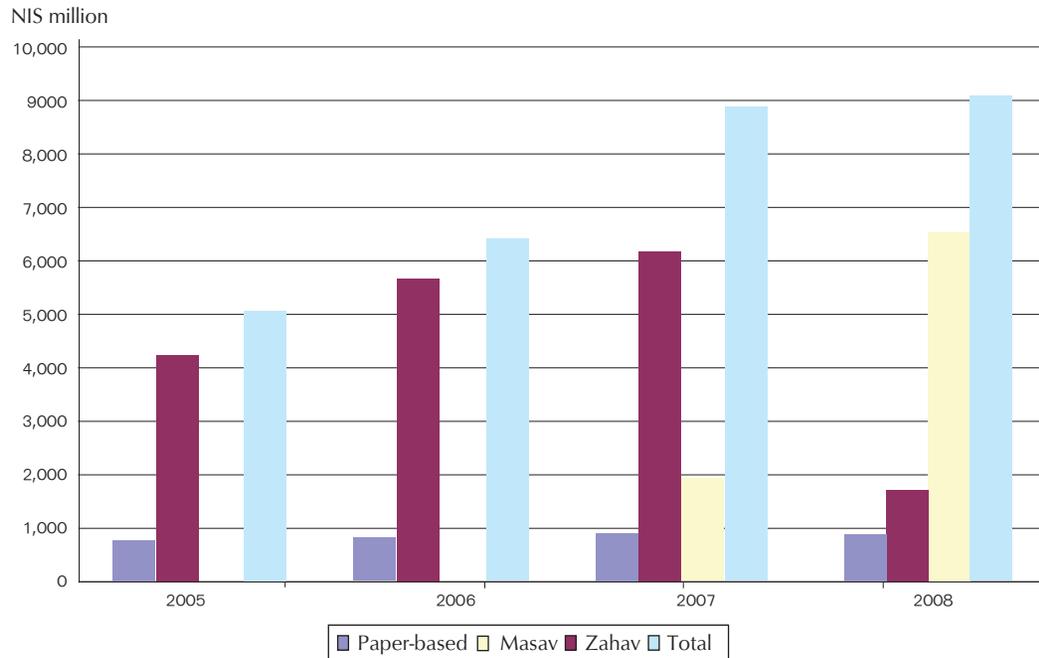
| Period                      | Shares and convertibles | (NIS billion) |             | Bonds       |             |            |
|-----------------------------|-------------------------|---------------|-------------|-------------|-------------|------------|
|                             |                         | Government    | Other       | Total       | Makam       | Total      |
| 2005                        | 245.4                   | 275.1         | 53.1        | 328.2       | 165.6       | 739.2      |
| 2006                        | 360.3                   | 356.0         | 68.1        | 424.1       | 197.5       | 981.9      |
| 2007                        | 506.2                   | 635.7         | 164.7       | 800.4       | 207.0       | 1,513.6    |
| 2008                        | 481.3                   | 760.6         | 224.2       | 984.8       | 192.1       | 1,658.2    |
| <b>Increase in 2008 (%)</b> | <b>-4.9</b>             | <b>19.6</b>   | <b>36.1</b> | <b>23.0</b> | <b>-7.2</b> | <b>9.6</b> |

SOURCE: TASE.

## Summary of payment systems activity

The Zahav system operated for a full calendar year in 2008 as opposed to its activity during only part of 2007. Prior to the introduction of the Zahav system, when the settlement of funds was carried out only in the check clearing house and Masav, Masav's average share was about 85 percent while the check clearing house's share was about 15 percent. In 2008, most of the large inter-bank amounts were transferred to the Zahav system for direct settlement and therefore the relative shares of the clearing houses (Masav, checks and Zahav) changed significantly. In 2008, about 72 percent of the total value of inter-bank transactions handled by the payment systems was settled in the Zahav system. Masav settled about 19 percent of the total value (credits, about 16 percent; debits, about 3 percent) and the checks clearing house settled about 9 percent of the total value.

**Figure 3**  
**Total Clearing House Activity, 2005 to 2008**



### 3. The impact of the financial crisis on the activity of the payment systems

The global financial crisis worsened in the third quarter of 2008 and its impact on the Israeli economy appeared towards the end of the year (November and December). Figures for the payment systems in 2008 do not indicate that the crisis had any significant effect; however, indications of its impact can be seen in certain components of the data. Following are the components of payment system activity which were most significantly affected by the crisis in the last quarter of 2008.

#### The Zahav system

The value of transactions in the Zahav system declined starting from the beginning of the year. The value of interbank transactions in the Zahav system declined continuously during the course of the year as a result of the shekel being added to the CLS. Thus, orders previously carried out directly in the Zahav system are now settled on a net basis in the CLS account within the Zahav system. There was a noticeable drop of about 13 percent in the value of inter-bank transactions during the last quarter of the year relative to the previous quarter.

## The paper-based clearing house

Total activity in the paper-based clearing house did not decline significantly during the last quarter of the year, although there were changes in its components. The total value of checks presented during the fourth quarter was lower than in the previous one by about 9 percent. At the same time, the value of returns grew by about 5 percent compared to the previous quarter. This implies that the proportion of returned checks in the total value of checks presented increased to about 3.3 percent during the last quarter of the year as compared to less than 2.9 percent in the previous quarter.

## Masav

The financial crisis had only a small impact on Masav transactions. The main change occurred in the value of credits, which fell during the last quarter of the year by only half a percent relative to the previous quarter. The significant drop in the value of credits in Masav during this quarter was a result of the drop in value of salary credits, which fell by about 18 percent relative to the previous quarter. However, since the share of salary credits within total credits in Masav is relatively small, the impact on the total value of transactions in Masav was negligible.

## The TASE clearing houses

There was no decline in the total value of settlements in the TASE clearing houses during the last quarter of the year, though there was a decline during the first and second quarters relative to the previous one.

During the fourth quarter, only the value of settlements in shares and convertibles declined compared to the previous quarter and this by 24 percent. This was a result of the downtrend in the annual yields on shares. The decline during this quarter was more severe than in previous ones.

**Table 6**

**Activity of the Components of the Payment System, by Quarter, 2008**

(Value NIS billion)

|                              | Zahav          | Paper-based      | Masav         | TASE         |                         |
|------------------------------|----------------|------------------|---------------|--------------|-------------------------|
|                              | Interbank      | Checks presented | Check returns | Salaries     | Shares and convertibles |
| Q1                           | 1,899.7        | 198.3            | 6.0           | 32.1         | 144.2                   |
| Q2                           | 1,673.8        | 191.3            | 5.9           | 42.5         | 124.2                   |
| Q3                           | 1,558.3        | 202.3            | 5.8           | 44.5         | 121.0                   |
| Q4                           | 1,348.5        | 184.3            | 6.1           | 36.5         | 91.9                    |
| <b>Total 2008</b>            | <b>6,480.3</b> | <b>776.3</b>     | <b>23.9</b>   | <b>155.5</b> | <b>481.3</b>            |
| <b>Quarterly increase, %</b> |                |                  |               |              |                         |
| Q1                           | 0.5            | 3.5              | -9.5          | -19.1        | -2.2                    |
| Q2                           | -11.9          | -3.6             | -2.9          | 32.2         | -13.9                   |
| Q3                           | -6.9           | 5.8              | -0.2          | 4.7          | -2.6                    |
| Q4                           | -13.5          | -8.9             | 5.2           | -17.9        | -24.0                   |

## 4. Means of payment

The payment and settlement systems include payments in cash and payments by way of the clearing houses. Previous sections surveyed the activity of the clearing houses in 2008; while this section will focus on the debiting of current accounts held by the public through all the means of payment, including cash withdrawals.

The public's transactions using the means of payments include the total debits of the public, i.e., checks, cash withdrawn at ATMs and banks, authorized debits (through Masav) and other types of debits, which include automated transfers (through Zahav and Masav), as well as transfers between customers and banks.

According to figures of the Banking Supervision Department the debits of current accounts held by the public totaled NIS 21,474 billion in 2008, which represents a small decrease compared to 2007 (NIS 22,750 billion). In recent years, the total value of debits of current accounts held by the public has increased by an annual rate up 15 to 30 percent. This year, however, there was a decrease of about 6 percent.

Most of the debits of current accounts held by the public are not classified into categories, but rather are defined as “other debits,” which also include credit card debits. In addition, “other debits” include business transactions between customers and banks, such as the purchase of securities, the purchase of foreign currency, the payment of commissions, etc. The remaining debits involve the withdrawal of cash by the public from the banks or from ATMs, debits by check and authorized debits.

It should be mentioned that data on the debits of the public’s accounts differ from the data on settlement, since they include all debits, even if they were carried out at the withdrawing bank and did not pass through the clearing house to reach the beneficiary bank.

**Table 7**  
**Debits on the Public’s Current Accounts, 2004–08**

| NIS billion                       | Checks      | Cash withdrawals | Direct debits | Other       | Total       |
|-----------------------------------|-------------|------------------|---------------|-------------|-------------|
| 2004                              | 787.0       | 115.0            | 421.0         | 11,160.0    | 12,483.0    |
| 2005                              | 821.0       | 137.0            | 471.0         | 13,731.0    | 15,160.0    |
| 2006                              | 888.0       | 143.0            | 527.0         | 15,910.0    | 17,468.0    |
| 2007                              | 970.4       | 158.0            | 572.1         | 21,050.5    | 22,750.9    |
| 2008                              | 924.1       | 162.6            | 633.8         | 19,753.6    | 21,474.0    |
| <b>Increase in 2008 (percent)</b> | <b>-4.8</b> | <b>2.9</b>       | <b>10.8</b>   | <b>-6.2</b> | <b>-5.6</b> |

| Transactions (million)            | Checks      | Cash withdrawals | Direct debits | Other       | Total       |
|-----------------------------------|-------------|------------------|---------------|-------------|-------------|
| 2004                              | 166.0       | 134.0            | 155.0         | 265.0       | 720.0       |
| 2005                              | 164.0       | 134.0            | 163.0         | 274.0       | 735.0       |
| 2006                              | 163.0       | 138.0            | 171.0         | 304.0       | 776.0       |
| 2007                              | 164.6       | 139.8            | 177.9         | 343.0       | 825.3       |
| 2008                              | 159.3       | 135.4            | 187.8         | 337.7       | 820.2       |
| <b>Increase in 2008 (percent)</b> | <b>-3.2</b> | <b>-3.2</b>      | <b>5.6</b>    | <b>-1.5</b> | <b>-0.6</b> |

SOURCE: Banking Supervision Department, Bank of Israel.



## Use of checks

According to the reports from the banks, about 159 million checks were drawn in 2009, of which about 136 million were presented to the inter-bank clearing house and the rest (about 14 percent) deposited at the bank from which they were drawn.

The number of checks drawn and their value were lower this year than in previous year, a trend which characterizes other developed countries as well and which is explained primarily by the growing use of credit cards and execution of automated transfers. According to the reports from the banks, the average value of a check was about NIS 5,800 in 2008, which is somewhat higher than in the previous year (NIS 5,700).

Of the checks drawn in 2008, about 4.4 million (about 2.8 percent) were returned. Of the total value of checks drawn (NIS 826 billion), about 2.9 percent were returned. About half of the checks were returned because of insufficient coverage, while the rest were returned for other reasons, such as checks with a no-longer-valid date, an unrecognized signature, etc.

During the last months of the year, the percentage of returned checks was higher than the average for 2008 and in December totaled about 3.25 percent of the value of checks presented.

**Table 8**  
**Checks Drawn and Checks Returned, 2008**

|              | Checks drawn   |                | Checks returned |               | Percent of returns |             |
|--------------|----------------|----------------|-----------------|---------------|--------------------|-------------|
|              | Number         | Value          | Number          | Value         | Number             | Value       |
|              | (thousands)    | (NIS million)  | (thousands)     | (NIS million) | (percent)          | (percent)   |
| January      | 13,652         | 82,148         | 373             | 2,823         | 2.73               | 3.44        |
| February     | 12,567         | 72,658         | 343             | 2,187         | 2.73               | 3.01        |
| March        | 14,002         | 78,205         | 354             | 2,156         | 2.53               | 2.76        |
| April        | 13,375         | 75,991         | 340             | 2,136         | 2.54               | 2.81        |
| May          | 12,984         | 74,379         | 353             | 2,592         | 2.72               | 3.48        |
| June         | 13,552         | 79,091         | 355             | 2,225         | 2.62               | 2.81        |
| July         | 14,091         | 83,425         | 384             | 2,411         | 2.72               | 2.89        |
| August       | 12,452         | 75,487         | 337             | 2,091         | 2.71               | 2.77        |
| September    | 13,105         | 74,392         | 352             | 2,223         | 2.69               | 2.99        |
| October      | 12,764         | 74,231         | 413             | 2,452         | 3.23               | 3.30        |
| November     | 13,294         | 74,517         | 369             | 2,288         | 2.78               | 3.07        |
| December     | 13,509         | 79,608         | 420             | 2,586         | 3.11               | 3.25        |
| <b>Total</b> | <b>159,347</b> | <b>924,131</b> | <b>4,394</b>    | <b>28,169</b> | <b>2.76</b>        | <b>3.05</b> |

SOURCE: Banking Supervision Department, Bank of Israel.

## Withdrawal of cash

The withdrawal of cash by the public totaled about NIS 163 billion this year, which is about 3 percent higher than during the previous year (NIS 158 billion). The rate of increase in the withdrawal of cash was more moderate this year, which was a result of the increased use of credit cards.

The total value of cash withdrawals from ATMs increased this year, as it has in recent years. The proportion of these withdrawals within the total value of cash withdrawals (i.e. from ATMs and via bank tellers) was about 87 percent, while its proportion of total withdrawals was 44 percent. This difference is due to the fact that the average withdrawal via bank tellers exceeds the average ATM withdrawal.

**Table 9**  
**Cash Withdrawals, 2004-08**

|      | Cash Withdrawals |                    | Currency in the hands of the public |                    |
|------|------------------|--------------------|-------------------------------------|--------------------|
|      | (NIS billion)    | (increase percent) | (average NIS billion)               | (increase percent) |
| 2004 | 115.1            | 3.5                | 20.0                                | 7.5                |
| 2005 | 137.0            | 19.0               | 22.6                                | 13.2               |
| 2006 | 143.1            | 4.5                | 25.0                                | 10.5               |
| 2007 | 158.0            | 10.4               | 27.3                                | 9.1                |
| 2008 | 162.6            | 2.9                | 31.7                                | 16.2               |

SOURCE: Banking Supervision Department, and the comptroller's office, Bank of Israel.



## Authorized debits

There were about 187 million authorized debits in 2008, as compared to 178 million in 2007, while the value of authorized debits was NIS 630 billion as compared to NIS 572 billion in 2007. This upward trend is characteristic of other developed countries as well.

Authorized debits constitute a significant proportion of total direct debits. According to data published by the BIS, the total value of these debits in the wealthiest countries grew continuously during the period 2002-06<sup>3</sup> at an average annual rate of 16 percent.

**Table 10**  
**Authorized Debits, 2004–08**

|      | Transactions<br>(million) | Value<br>(NIS billion) | Annual<br>increase<br>(percent) |
|------|---------------------------|------------------------|---------------------------------|
| 2004 | 155.4                     | 420.9                  | -0.3                            |
| 2005 | 162.6                     | 471.3                  | 12.0                            |
| 2006 | 170.6                     | 527.0                  | 11.8                            |
| 2007 | 177.9                     | 572.2                  | 8.6                             |
| 2008 | 187.5                     | 632.9                  | 10.6                            |

SOURCE: Banking Supervision Department, Bank of Israel.

## Other debits

Other debits of the public's current accounts are not classified and mainly include one-time or standing orders for the transfer of funds to an account of the same customer or that of a different customer, as well as debits resulting from business transactions between the customer and the bank. Other debits also include orders to debit an account using a credit card,<sup>4</sup> as well as payments made by the public by way of the banks in the Zahav system, though they do not include payments made by the banks for themselves.

Other debits totaled NIS 20,068 billion during the period under review, as compared to NIS 21,050 billion in the previous year. This year, for the first time, the value of other debits declined, which occurred despite the small increase in the number of transactions in this category.

<sup>3</sup> Statistics on Payments and Settlement in Selected Countries, March 2008.

<sup>4</sup> Some of the banks include this in authorized debits.

The proportion of other debits in total debits of the public was about 92 percent this year, although the number of other debits was only about 42 percent of the total number of debits of the public's accounts. This means that the average transaction in other debits (including credit-cards), NIS 58,800, was higher than for the other types of debits.

## Debits via credit cards

The data on credit card transactions are reported directly to the Banking Supervision Department by the credit card companies.

In 2008, about 641 million transactions were carried out by credit card with a total value of NIS 154 billion, which represents a 10.1 percent increase over the previous year. This rate of increase in the value of purchases is similar to the average rate in recent years.

The number of credit card transactions in 2008 was almost four times larger than the number of transactions by checks, while the total value of check transactions was six times larger than the total value of credit card transactions. The explanation for this difference lies in the fact that the average credit card transaction was NIS 241, while the average check had a value of NIS 5,800.

**Table 11**  
**The Use of Credit Cards, 2004–08**

|      | <b>Transactions</b> | <b>Value</b>  | <b>Annual change</b> |
|------|---------------------|---------------|----------------------|
|      | (thousands)         | (NIS million) | (percent)            |
| 2004 | 442,538             | 102,446       | 10.5                 |
| 2005 | 482,451             | 113,062       | 10.4                 |
| 2006 | 531,964             | 125,768       | 11.2                 |
| 2007 | 585,498             | 139,442       | 10.9                 |
| 2008 | 641,274             | 153,528       | 10.1                 |

SOURCE: Banking Supervision Department, Bank of Israel.

The figures in Table 11 relate only to transactions in shekels, including cash withdrawals by means of credit cards; however, the use of credit cards issued by Israeli companies also includes purchases and withdrawal of cash in foreign currency. The withdrawals in foreign currency, which are mainly implemented abroad, totaled NIS 7.1 billion in 2008, and the proportion of purchases abroad in total credit card purchases was 4.4 percent, which is similar to what it has been in recent years.



## Total means of payment

The public's retail means of payment consists primarily of checks, cash and credit cards. In 2008, as in previous years, the majority of payments made by the public were carried out by check, about 13 percent were in cash and the rest were made by credit card. The proportion of use of check has declined somewhat in comparison to 2004 while the use of credit cards and cash has increased somewhat.

It should be mentioned that despite the continuous increase in the value of credit card transactions in recent years (2004–08), the total value of transactions executed by check has also increased. It appears that 2008 was a turning point, with total payments by check declining by NIS 46 billion and total payments by credit card increasing by NIS 13 billion (see Table 7 and 11 above).

**Figure 4**  
**The Public's Retail Means of Payment, 2004 to 2008**

