

THE PAYMENT AND SETTLEMENT SYSTEMS

1. INTRODUCTION

Payment and settlement systems are an essential part of the economic and financial infrastructure in modern economies, and their efficient functioning contributes to the economy's financial stability and development. As opposed to this, insufficiently reliable payment and settlement systems expose the participants in settlement to risks, and transmit risks from one economic system to another; this could lead to the development of "systemic risk" and a possible crisis in the economy as a whole. The growth in financial activity that characterizes many of the world's economies, as well as the growth in the volume of payments in the international capital markets, has underscored the importance of these systems—systems that can prevent or contribute to financial crises, both national and international.

Central banks strive to achieve financial stability and thus work toward promoting the safety, reliability and efficiency of the payment and settlement systems, as well as taking means to reduce the risks connected to settlement, particularly systemic risk, and liquidity and credit risks.

The increasing importance of this field has focused the attention of international financial institutions in recent years. The Bank for International Settlements, the BIS, has determined core principles for payment and settlement systems according to which all countries have to operate. The IMF has undertaken surveys to assess the extent to which payment systems in various countries adhere to the above principles, and the World Bank assists many countries, especially developing countries, in setting up modern payment and settlement systems.

The rapid technological changes that have taken place in telecommunications and computerization since the beginning of the 1980s, the growth in financial activity, and globalization processes—have all led to the increased involvement of central banks in the payment and settlement systems. The central banks have initiated reforms and have introduced changes in this area; in most countries the major payment and settlement systems are operated directly by the central bank; all the payment systems, even those operated by the private sector, are under the supervision and direction of the central bank.

A survey undertaken by the IMF in August 2001 (part of the Financial Sector Assessment Program, or FSAP) showed that Israel's payment and settlement systems did not meet certain BIS core rules—finality of settlement at the end of each business day, supervision of the payment systems, etc. In order to meet these international standards, the Bank of Israel initiated a comprehensive reform of Israel's payment and settlement systems. The reform was divided into two—bringing the existing payment and settlement systems into line with current international standards, and the establishment of a new settlement system—Real Time Gross Settlement (RTGS). As

part of the reform, the Bank of Israel, in collaboration with the banks, determined the following rules:

- Financial transactions with a retroactive value date will be eliminated in the payment and settlement systems, so that at the end of the banking business day, the balances of all the banks will be final.
- The opening and closing times of the banking business day will be changed to bring the banking business day closer to the calendar day. The banking business day, which currently starts and ends at 15:00, will start and end at 18:30.
- It has been decided that the system of settlement of checks will be upgraded so that all the banks will settle checks between themselves using the more advanced method—“electronic settlement”. The banks will also photograph all the checks (imaging), and exchange between themselves—in addition to the electronic files that contain the numerical data of the checks (amount of the check, its account number, branch number, etc)—the electronic files of their photographs as well.

In the longer term, the Bank of Israel intends to institute “check truncation” that will eliminate the need for physical transfer.

The crowning achievement of the reform is the establishment of Real Time Gross Settlement—RTGS, whose operation is planned for the beginning of 2007. After launching the RTGS and connecting it to all the systems executing payments in local currency, the settlement in local currency will no longer be undertaken by the central accounting office, which is currently the final settlement body of the payment systems in Israel. Settlement will take place with the new system, which, as aforementioned, will be final at any moment. Systems such as the monetary auctions, liquidity trading, and currency will be connected in the course of the day to the RTGS system, and in some of the systems, settlement will take place simultaneously with payment.

Figure 1
Israel's Current Settlement System, 2004

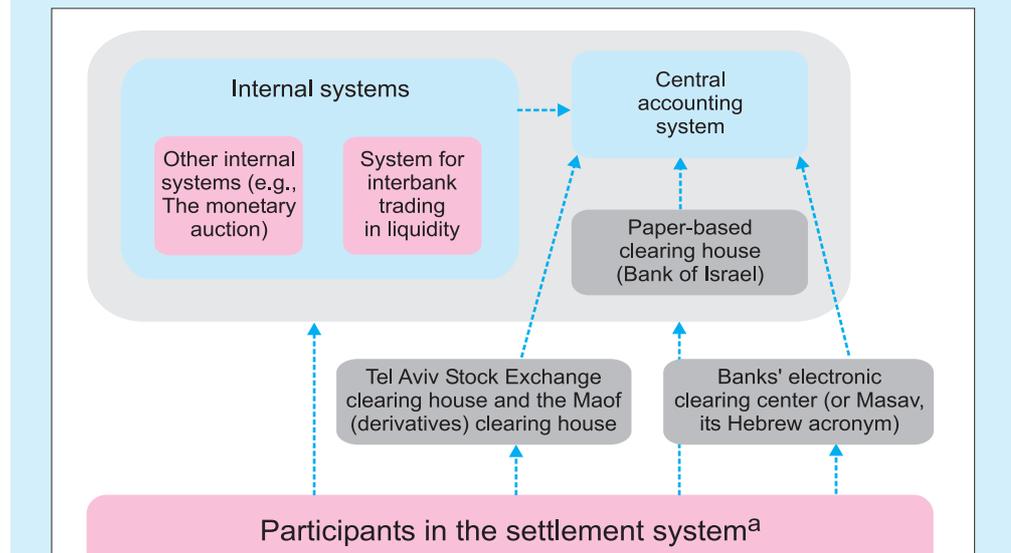
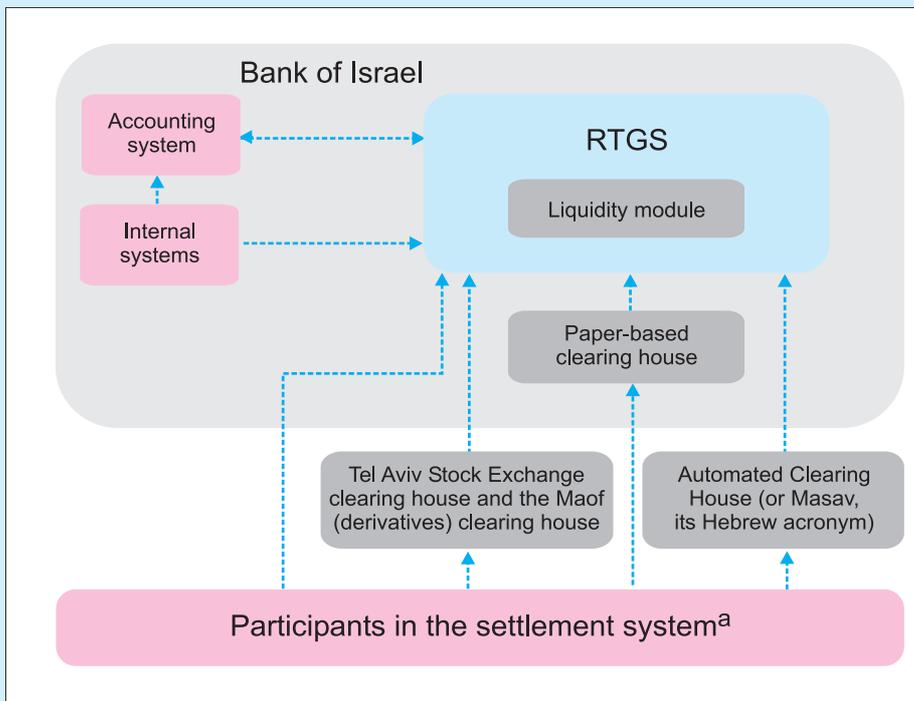


Figure 2
Israel's Future Settlement System, 2004



^a Commercial banks, the Post Office Bank and the government.

SOURCE: Bank of Israel.

2. EXISTING PAYMENT AND SETTLEMENT SYSTEMS AND THE PROPOSED CHANGES

a. Elimination of transactions with a retroactive value

In line with the core rules of the BIS, the banks' balances have to be final, at least at the end of each banking business day. Financial transactions with a retroactive value date prevent the settlement and the balances from being final at the end of the business day and they only become final later. The Bank of Israel is thus working to cease the recording of transactions with a retroactive value date between the banks and the Bank of Israel.

(1) Transactions of the government and the Bank of Israel

The Bank of Israel is the government's banker, and the bank's accounting department thus transfers government payments to the public through the commercial banks, and receives from the banks taxes and other compulsory payments that they collect from the public for the government. Part of the tax collections used to be transferred by

the banks with a day's delay and would obtain a retroactive value; these retroactive transfers were discontinued during 2004, and payments for the government are now credited on the day of their transfer.

(2) Interbank transfers

With the increasing inflation at the beginning of the 1980s, it was decided that the value day for depositing checks would be the actual day of deposit. The banks, however, claimed that they could not assess in advance the volume of checks their customers would draw on that day, possibly resulting in a situation in which the balance of the banks' liquid assets in the Bank of Israel would be insufficient to cover their customers' operations undertaken during the current day, and presented at the end of that day for settlement. They thus requested permission, vis-à-vis the operation of the clearing house, to execute operations that would bear a retroactive value of the previous day.

Over the years the use of operations bearing a retroactive value of the previous day expanded beyond the transactions connected to the clearing house, and in recent years these transfers have reached very large sums. In order to conform with the core rules of the BIS, this arrangement will be discontinued.

b. The banking business day

The banking business day starts and ends at 15:00. This means that financial operations undertaken up to 15:00 obtain the "value" of the calendar day on which they are executed, while operations undertaken in the afternoon (after 15:00) obtain the following day's value. Based on experience worldwide, it is expected that most payments in the economy, from the point of view of financial volume, will be done by means of real time gross settlement (RTGS), and in view of the fact that these operations are final, the finality of the banks' balances is also required at the end of each business day. The cessation of the business day at 15:00 necessitates a relatively long interruption in RTGS activity in order to begin the next banking day. In view of the fact that "normal" working hours match the calendar day, and in order to facilitate maximum service, it was decided that the public could also participate in the RTGS in the afternoon and early evening hours, a decision that requires changing the opening and closing times of the banking business day for all the activities of the banking system. This need for change was supported by other needs of the public, which found the artificial division of the calendar day into two business days to be confusing. Following comprehensive examinations and clarifications, it appeared that the banking system would be able to carry out its banking activities even if the bank business day was extended beyond 15:00, and it was thus decided that it would begin and end at 18:30, and on Fridays and the evenings of holidays it would end at 14:00. This change necessitated far-reaching changes in the banks' operating methods: the time available to the banks and the Bank of Israel to take care of checks was reduced, a situation that impacted on the management of the banks' liquidity, especially at the

end of the business day; it is expected that the change will also impact on the opening hours of the bank branches and on the working hours of some of the employees.

In order to facilitate completion of the clearing, which only begins after the end of the business day, it was decided that the check clearing would be electronic, and that the current option of manual or magnetic clearing would be discontinued. In order to facilitate the rapid transfer of information between the banks and between the branches of each bank, it was decided that the banks would also present electronic files to each other that include photographs (imaging) of the checks.

The electronic settlement and the imaging of the checks are an important preliminary step toward introducing “check truncation” in Israel. In check truncation, the banks rely on digital imaging and do not save the original checks. As in other countries, the introduction of check truncation requires a specific law to enable the banks to operate in this manner. In order to avoid a surfeit of reforms and logistic changes in too short a time, it was decided to postpone dealing with this issue to a more advanced stage of executing the reform in the payment and settlement systems.

c. The banks’ clearing house

The banks’ clearing house settles financial transactions carried out by means of paper and by electronic means. The clearing house is divided into two sub-clearing houses – the paper-based Banks’ Clearing House (BCH) in which checks and other paper documents are cleared, and the Automated Clearing House (ACH or Masav, its Hebrew acronym), which clears financial transactions transferred electronically by the banks and their customers.

The banks’ clearing house operates according to an agreement between its members—the commercial banks in Israel, the Post Office Bank, the Bank of Israel, and banks operating in areas held by the Palestinian Authority. The banks’ clearing house is managed by the clearing house committee numbering fourteen members, half from the Bank of Israel and half from the banking system and the Post Office Bank. The banks’ clearing house functions according to “the clearing house’s regulations” determined by the clearing house committee. The committee convenes from time to time as required, and publishes an annual report on its activities.

The Bank of Israel plays an important role in the functioning of the banks’ clearing house. The chairman of the clearing house committee, half the members of the committee, the clearing house’s supervisor and its secretary are Bank of Israel employees; the members of the clearing house committee—the representatives of the Bank of Israel and of the banks—are appointed by the Governor of the Bank, and the BCH is operated by the Bank.

At the end of 2004 the banks’ clearing house had 41 members, 18 of which are banks operating in areas held by the Palestinian Authority and represented on the clearing house by Israeli banking corporations. Most banks, including Israeli banks, do not operate directly in the banks’ clearing house, and in practice the clearing is conducted by 13 Israeli banking corporations.

*(1) The paper-based banks' clearing house (checks)—BCH***The current situation**

This clearing house deals with payments based on paper documents (“receivables”): checks, various credits and debits, and promissory notes. Most of the activity of this clearing house concerns checks presented for collection or returned checks. The quantity of paper documents other than checks handled by this clearing house is negligible (only about 0.5 percent of all the receivables).

The physical receivables are transferred from bank to bank at the end of the business day in which they were deposited in the bank, and the financial settlement (payment transfer between the banks) is recorded in the books of the Bank of Israel on the following business day, with a retroactive value of the day they were deposited.

The banking business day ends at 15:00, and the transfer of the documents takes place 5-6 hours later, between 20:00 and 21:00 from Sunday to Thursday (the Friday receivables are transferred on Saturday nights.)

The financial results of the settlement of receivables presented in the BCH are transferred from the banks to the Bank of Israel at 10:00 on the day following the settlement day and are recorded net, in line with the clearing house's regulations, and with the previous day's value date. The processing of the Bank of Israel's accounting is carried out on the night following the recording day, and the banks are notified about their balances on the business day following this mechanized processing, i.e. two business days after the day of deposit.

Most of the BCH's activity concerns the presentation of receivables, and a small part deals with the return of receivables. The returns are meant to be carried out, according to the regulations of the clearing house, on the day following the settlement day, with the previous day's value (value of the day of settlement).

Table 1
Daily Activity in the Paper-Based Clearing House

	Value (NIS million)	Quantity (‘000)	Average value per check (NIS)
Checks and other debits	2,502	605	4,137
Other credits	181	2	91,960
Returns	141	18	7,820
Total	2,824	625	4,518

SOURCE: Bank of Israel.

Changes in the paper-based clearing house (checks)—BCH

In the period of the large inflation of the end of the 1970s and the first half of the 1980s, the “value days” of the financial transactions had great financial significance. At the time it was decided that checks would receive the value of the day of deposit. The small size of the country meant that it was possible to transport checks from all parts of the country to the BCH on the same day, in view of the fact that the banking business day ended (and began) at 15:00. The banks built a well-functioning logistic system, and the checks were settled on the date determined by the regulations.

Table 2
Checks Settled in the Paper-Based Clearing House

	Credits	Debits	Returns	(NIS million) Total
2003—total	251,768	629,171	21,064	902,003
2004—total	79,001	644,906	21,121	745,028
January	6,875	52,711	1,677	61,263
February	6,421	53,150	1,678	61,249
March	5,825	55,804	1,777	63,406
April	7,758	48,396	1,757	57,911
May	4,534	53,147	1,779	59,460
June	6,623	53,461	1,699	61,783
July	5,482	53,216	1,715	60,413
August	7,144	56,898	1,827	65,869
September	5,063	51,307	1,619	57,989
October	8,017	54,403	1,979	64,399
November	6,286	54,434	1,725	62,445
December	8,973	57,979	1,889	68,841

SOURCE: Banking Supervision Department.

The change in the starting and ending time of the banking business day reduces the time the banks have available to handle checks, and this necessitates logistic changes. Following discussions with the banks, it appeared that the banks would be able to deal with these changes on condition that the settlement of all the checks would be electronic and that check imaging would be instituted. It was thus decided not to change the existing procedure, that is to say, the value date of the check settlement would be the deposit date.

It should be stressed that the change in the starting and ending time of the banking business day, and the change in the settlement method and the imaging would come into force prior to the inauguration of the real time gross settlement (RTGS) system; this would enable all the banks to prepare themselves for the new conditions to be introduced.

The settlement of checks on the day of their deposit is exceptional; in other countries the settlement is made on the day following the deposit, or even a few days later. Because the Israeli economy has achieved price stability, that real time gross settlement will be instituted in the future, and that check truncation is also planned, the Bank of Israel will reexamine in the future whether it is necessary for checks to receive the “value” of the day they are deposited.

In line with the clearing house regulations, the return of a check is supposed to be done on the day following the deposit, and the check receives, both in the customer’s account and in the administrating bank’s account in the Bank of Israel, the value of the day of deposit. As part of the reform that is being implemented in the payment and settlement systems, it was decided that financial transactions would not receive a retroactive value date. It is expected, therefore, that the recording of transactions connected to the return of checks with a retroactive value date in the Bank of Israel’s books will cease in the future.

The receivables in the BCH totaled approximately NIS 750 billion in 2004, about NIS 150 billion less than in 2003. The change is totally the result of a decline in the amount of manual credits, which were largely transferred to the Automated Clearing House - ACH (Masav), while the amount of checks even grew slightly (by 1.5 percent).

(2) Automated Clearing House - ACH (Masav)

The current situation

ACH settles transactions that are not based on paper documents, such as authorizations to debit accounts (“standing orders”) and various credits (salary payments, tax rebates). The clearing is done according to electronic files transferred to ACH by the banks or by various bodies authorized by the banks to send files directly to ACH. The files sent by customers of the banks are the responsibility of the sending bank; ACH only executes the different payment instructions and is not responsible for the correctness of the details accompanying each order—the payees, the debtors, and the amount of the order.

ACH receives instructions from customers (banks and other bodies) in the course of the day according to the procedures it has determined—procedures that ensure the uniformity of the structure of the files and the security of the information. In the early evening, ACH amalgamates all the files it received and transfers details of the debits and credits to each bank. The overall net financial results are transferred to the Bank of Israel, and in this way the interbank settlement is organized. The net transaction affects the balance of the banks’ account—credit or debit—in the Bank of Israel.

The overall financial results are transferred to the Bank of Israel on the day the instruction is given—usually between 20:00 and 22:00. ACH is entitled to send the results, similar to the paper-based banks’ clearing house, until 10:00 on the day following the day the financial instruction was given, at a retroactive value—a privilege it generally only uses in the rarest cases of technical faults.

Debit or credit instructions can be returned to the provider of the instruction for various reasons enumerated in the regulations of the clearing house (insufficient coverage, etc.). Debit orders given through the ACH can be returned up to five business days of the instruction being given, with a value date of only one day previously.

Returns of transactions cleared in ACH, similar to those cleared in BCH, are recorded in the customer’s account at the deposit day value. In future, the interbank clearing will not be executed with retroactive value, but rather at the value of the day of return.

ACH has developed a system to enable instructions to be given for executing large payments: the payer instructs ACH to transfer a certain amount of money to some beneficiary; ACH contacts the payer’s bank and requests payment authorization (that is to say, authorization that the payer has sufficient funds in his account or a sufficient credit line); when the authorization from the payer’s bank is received, ACH notifies the beneficiary’s bank; these actions are included in ACH’s (net) multilateral

clearing which is executed at the value of the day the payment instruction is given; as aforementioned, the processing results of that business day are sent to the Bank of Israel.

Despite the authorization given by the bank of the initiator of the payment, the finality of the transaction is not legally guaranteed, in that circumstances could arise whereby ACH does not execute the clearing for technical reasons, or that one of the participating banks in the transaction does not meet its obligations, and/or the transaction is not executed.

Changes in ACH

The expected impact of the change in the opening and closing times of the ACH will be less than that on the paper-based banks' clearing house. Admittedly, the "time window" for executing the various calculations will be narrowed, but the fact that all ACH's transactions are computerized will enable it to cope with the tighter time schedule.

It has been determined that ACH's interfacing with the real time gross settlement system (RTGS) will take place at the end of the day, although additional interfacings might take place during the day.

Table 3
Automated Clearing House, Annual Data, 2001–04

	Debits		Credits		Total Movements	
	Value etc. (NIS billion)	Number (million)	Value etc. (NIS billion)	Number (million)	Value etc. (NIS billion)	Number (million)
2001	128.5	121.9	1,938.30	74.7	2,066.80	196.5
2002	154	126.9	2,666.90	79.1	2,820.90	206
2003	165.5	128.8	2,800.90	81	2,966.40	209.8
2004	177.9	131.4	3,072.60	82.6	3,250.50	214

SOURCE: Automated Clearing House.

d. The TASE clearing house

The current situation

The banks and other non-banking members of the stock exchange give instructions to the stock exchange to execute transactions in securities, and the payments are made through the banks. The stock exchange processes these instructions in two parallel channels: securities are transferred from the seller to the buyer, conditionally, on the day of the transaction, and the payment is made the following day. The banks credit the customer's securities account and debit his current account on the day the transaction is executed (t) and absorb the differentials between the bank's clearing date and the customer's clearing date. On the other hand, the brokers who are not banks credit the customer on the day of the final settling of the security, i.e the day following the transaction (t + 1).

The settlements are executed in four different processing modes according to the type of transaction—MAOF (options and derivatives), securities, payments, and funds. They are transmitted to the Bank of Israel which debits and credits the banks according to the TASE's instructions (and according to the authorizations to debit an account given by the banks).

An arrangement exists for preventing settlement failures in transactions in which the stock exchange is the “central counter party” (CCP), while with regard to transactions between other participants, for example with mutual funds, an arrangement exists of canceling the settlement in the case of a failure by one of the participants (reversal).

Changes in the TASE clearing house

The TASE is currently engaged in updating the settlement procedure so that the payment will be executed together with the transfer of the security (Delivery Versus Payment—DVP). As a result, execution will be on day $t + 1$, similar to the date of the financial clearing.

Thanks to the updating of the settlement procedure, there will be no time gap between transferring the security and receiving the payment, which will reduce the possibility of clearing failures due to one of the parties not meeting his obligations. The DVP procedure will prevent the need for correcting the clearing of securities in the case of failure.

The multilateral settlements of the TASE clearing house will be transmitted to the real time gross settlement (RTGS) system a number of times each day in which there is trading on the stock exchange, for each of the four types of settlement. Bilateral settlement will be sent to the RTGS any time a transaction is concluded that meets the definition of a bilateral transaction.

The real-time credit the Bank of Israel will give to participants in the clearing for conducting their activities in the RTGS will be backed by collateral. The collateral will be government securities traded on the TASE and the banks' deposits in the Bank of Israel.

The TASE will transfer to the Bank of Israel's account (in the TASE) the quantities and types of security according to needs of each bank, as submitted by the bank to the TASE.

e. Interbank NIS/US\$ trade

Since July 1994 interbank trade in foreign currency in Israel has been conducted with a system of continuous bilateral trading, the norm in advanced markets throughout the world. To allow the market to develop, and specifically to overcome banks' concern over exposure to the high credit risk involved in entering into interbank transactions, in 1994 the Bank of Israel introduced a NIS/US\$ trading system conducted on a Payment Versus Payment (PVP) system. It was possible to locate this system in the Bank of Israel because the banks hold both foreign currency and NIS accounts in the Bank, so that settlement is performed by transferring from one account to another in the Bank of Israel.

Table 4
Turnover in Securities, 2000–04 (NIS billion)

	Shares and convertibles	Bonds			Treasury bills	Total
		Government	Other	Total		
2000	121.6	76.9	1.6	78.5	50.7	329.3
2001	69.4	139.4	1.8	141.2	53.4	405.2
2002	59.9	184.9	2.6	187.5	91.5	526.4
2003	89.2	168.5	6.7	175.2	118.4	558
2004	159.4	215.8	16.3	232.1	152.1	775.7
Rate of increase (percent)	79	28	143	32	28	39

SOURCE: Tel Aviv Stock Exchange.

In using this method of settling transactions, banks incur no credit risks, as they are debited dollars only if they are credited with NIS, and vice versa. If the transaction is not performed, however, the banks are exposed to credit risk (mainly exchange-rate risk). The Bank of Israel is also exposed to risks, among others because the balance in the banks' local currency accounts is not final on the value date, but only at a later date.

Over the years inter-currency trading consolidated itself, and the settling of the dollar part was done partly by means of correspondent banks abroad, and only partly by the Bank of Israel through the dollar accounts that the banks are entitled to hold in the Bank. The reduction of the liquidity obligation in foreign currency led to a decrease of the foreign-exchange accounts of the banks in the Bank of Israel, while at the same time the volume of trade grew. These factors, together with the maturity of trading in Israel and the desire to reduce the Bank of Israel's risks, motivated the Bank, toward the end of 2004, to cease settling the dollar side of these transactions.

3. THE DEVELOPMENT OF REAL TIME GROSS SETTLEMENT (RTGS)

RTGS executes immediate and final settlement of interbank payments. A bank that wishes to execute payment (for a customer or on its own behalf) gives an instruction to debit its RTGS account, indicating all the relevant details (details of the payer, the beneficiary, the sum). The RTGS examines the payment instructions according to their time of arrival (FIFO), as well as examining whether the sending bank has sufficient funds in the Bank of Israel, and whether the payment instruction followed the regulations. If the payment instruction meets these tests, it is executed immediately: the account of the paying bank is debited, and that of beneficiary bank credited with the sum of the instruction. Notifications are sent simultaneously to the two banks involved in the transaction, and the receiving bank can instantly credit the customer, seeing that the instruction is final and cannot be rescinded.

The execution of payment instructions is conditional, as aforementioned, upon an appropriate balance in the settlement account of the commercial bank in the RTGS in the Bank of Israel. The settlement account includes the current balance in the NIS

current account of the commercial bank, and a balance of credit to be provided by the Bank of Israel for the ongoing operation of the RTGS. This credit is in real time and is meant to be paid up toward the end of the RTGS's activities on each business day. The real time credit will be provided against collateral (government securities that will be deposited in favor of the Bank of Israel on the TASE, and other deposits of the banks in the Bank of Israel).

The RTGS will be the "clearing house of the clearing houses"—in which the BCH, the ACH, and the TASE clearing houses will clear their final results. The financial actions that will be conveyed to the RTGS by the clearing houses are different from regular payment instructions, the reason being that the transactions in the clearing houses are multilateral, and these clearing houses will thus send complex orders containing instructions for simultaneously debiting and crediting a number of banks.

Payment instructions will be settled, as aforementioned, in the bank's account according to their time of arrival. In the absence of a sufficient balance in the bank's settlement account, the transactions will be kept in line until a sufficient balance is accumulated. Each payment instruction will have a level of urgency, to be determined by the payer. The execution of payment instructions and the line itself will be managed according to these preferences. In order to minimize the average waiting time of the payment instruction, the system will operate various tools for the optimal management of the instruction line.

Current information from the RTGS will be available to users throughout the day in real time. The information will include the balances on the participants' accounts, information on transactions that have been settled and others that are waiting in line, as well as any other operational information required by the participants for current management of their activities in the RTGS.

The bodies that will be permitted to participate directly in the RTGS will be the commercial banks, the clearing houses, the Post Office Bank and the Bank of Israel. Banks not participating directly in the system will be able to use the services offered to them by the other commercial banks, and the government will settle payment instructions through the Bank of Israel.

Any participant interested in operating in the RTGS will have to arrange appropriate tools for transmitting and deciphering messages, for sending payment instructions, for receiving messages (execution authorizations), as well as for monitoring the balance on its account and the state of the various payment instructions it sent to the RTGS. These tools will have to meet the required standards and will be uniform for all participants in the system. It has been decided that participants in the RTGS will use the "SWIFT" communications system.

The Bank of Israel will be involved in the RTGS system in the following ways:

- The Bank will operate the RTGS and will supervise its activities.
- The Bank will provide the commercial banks with real-time credit against collateral. This credit will be returned at the end of the day by the participants in the clearing.

- The Bank will work toward directly linking to the new system all of its various departments that initiate transactions with the banks' local currency accounts. Contact will take place at fixed times during the working day. One of the departmental systems—the monetary auctions system—will only be linked to the RTGS at the end of the working day.
- The Bank of Israel will also function as a regular user of the system, and will transmit instructions directly to it—instructions initiated by itself or by the government.

Planned schedule for operating the RTGS

In July 2004 the business model of the RTGS was published, including a detailed analysis of all parts of the system and the various interfaces that are supposed to be linked to it.

An international tender will be published at the start of the second quarter of 2005 for selecting the system supplier, and the supplier is expected to be chosen by the end of 2005. After the supplier is chosen, it will be possible to complete the adaptation of the various systems in the commercial banks and the Bank of Israel to the system to be purchased.

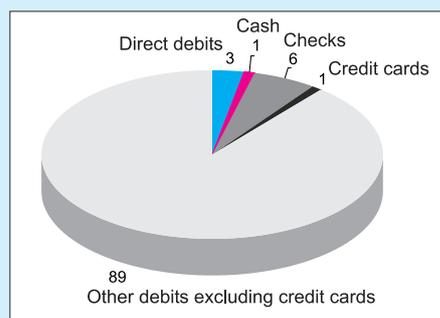
Based on the information at our disposal, the assimilation period of a system of this kind is about a year, so that the RTGS will be activated toward the end of 2006—on condition that all the bodies will have completed their preparations by that date, and that a specific law will be legislated to ensure the finality of the clearing.

4. MEANS OF EXECUTING PAYMENTS

In 2004 the public's debits on current accounts totaled NIS 12,480 billion, a slightly lower amount than that of the debits in the previous year (about 12,600 billion).

These debits include the drawing of checks deposited in the withdrawing bank or in other banks, the withdrawal of cash from the bank tellers and the ATMs, the authorized debits, including various payments, especially to the authorities and to some of the credit-card companies, and other debits. The other debits include one-time instructions or standing orders given by the customer to transfer money to a third party or to the bank, including some of the debits to credit cards. The data presented

Figure 3
Debits in the Public's Current Accounts (percent)



relates to the public's total debits on current accounts whose source is in the monthly balance sheets of the commercial banks.

a. Drawing checks

The amount of money drawn throughout 2004 by means of checks totaled NIS 790 billion, which is 6.3 percent of all the public's debits.¹ Most checks (77 percent) were transferred by means of the clearing house to other banks, and a small percentage was deposited in the bank of the drawer of the check. During the year, the clearing house transferred checks to other banks (except for manual crediting) to the value of NIS 645 million.

The sum of the checks that passed through the clearing house in 2004 was slightly higher than in 2003, even though the proportion of the check-related debits has declined since December 2000. In December 2000 the check debits totaled 8.3 percent of the public's total debits (including debits to the bank in which the customer's account is conducted), and by December 2004 the use of checks declined to 5.8 percent.

The declining trend in recent years in the number of checks continued, falling from 15.8 million checks in December 2000 (approximately 600 thousand checks a day) to 14.3 million in December 2004 (approximately 530 thousand checks a day). The following table details the proportion of checks in relation to the public's total debits from 2000 to 2004.

Table 5
Debits in the Public's Current Accounts, December 2000–December 2004
(monthly data)

	Checks		Total debits		Rate of use of checks	
	Value (NIS billion)	Number (million)	Value (NIS billion)	Number (million)	Value (percent)	Number
12/00	71.7	15.8	863.2	59.2	8.3	26.6
12/01	69.2	15.5	1,045.10	61.5	6.6	25.2
12/02	75.9	16.1	1,085.80	65.3	7	24.6
12/03	67.3	14.7	1,065.00	62.3	6.3	23.6
12/04	71.3	14.3	1,220.10	61.1	5.8	23.4

SOURCE: Banking Supervision Department.

b. Cash withdrawal

During the year about NIS 113 billion was withdrawn in cash—slightly higher (by 3.5 percent) than the previous year.

In December 2004, NIS 11.3 billion (per month) was withdrawn in cash from the bank tellers and the ATMs, while in December 2003, NIS 9.5 billion was withdrawn (an increase of 19 percent).

¹ In the 2003 report, the proportion of checks was presented as part of the public's debits, and not all the debits.

Of the overall amount of cash withdrawn during the year, about a third was withdrawn from the ATMs, and the remainder—from the bank tellers. A similar percentage of cash was withdrawn from the ATMs in the previous year (about 35 percent). The cash is only a small percentage of the public’s total debits: from 2000 to 2004 cash withdrawals constituted less than one percent of all the public’s debits.

Banknotes and coins in circulation at the end of the year totaled NIS 20.8 billion, as opposed to NIS 19.1 billion at the end of 2003. The average circulation during 2004 was approximately NIS 20 billion, and the total cash withdrawal during the year was NIS 113 billion, that is to say, the velocity of circulation was 5.65, or 2.1 monthly.²

c. Debits based on authorization and other debits

Debits based on authorization and other debits are the major debits in the public’s current accounts (more than 90 percent in 2004). These debits include transfers to third parties according to standing orders or one-time instructions, as well as debits arising from business activity between the customer and the bank—interest, commissions on the purchase of securities etc. These debits also include credit-card transactions and payment instructions by means of the Internet.

Table 6
Cash Withdrawals by the Public, December 2000–December 2004
(NIS million)

Period	Over the counter	From ATMs	Total		Cash as share of all debits (percent)
			Cash	Debits	
12/00	6,388	2,849	9,238	863,181	1.07
12/01	6,395	3,118	9,514	1,045,147	0.91
12/02	7,079	3,363	10,442	1,085,814	0.96
12/03	6,082	3,419	9,501	1,064,981	0.89
12/04	7,676	3,627	11,302	1,220,121	0.93

SOURCE: Banking Supervision Department.

Table 7
Total Use of Credit Cards, 2003 and 2004

	Transactions	Amounts	Average amount per transaction
	(million)	(NIS million)	(NIS)
2003	396	96,284	243
2004	437	105,362	241
I	104	24,791	238
II	107	25,259	236
III	112	27,874	248
IV	113	27,438	242

SOURCE: Banking Supervision Department.

² 113:20 = 5.65

The amount of credit card debits increased in 2004 by about 9.5 percent from the previous year, totaling NIS 105 billion. In 2003 the rate of growth (relative to 2002) was lower (7.5 percent).

The use of credit cards (number of transactions) also grew rapidly in recent years, reaching a level of about 440 million transactions in 2004, in comparison with 396 million in 2003. The number of credit-card transactions (withdrawals) was 2.5 times greater than the number of checks in 2004 (440 as opposed to 166 million), while the amount of credit card debits in this year was only about 13 percent of the amount of debits by means of checks (NIS 105 billion as opposed to 790 billion). This fact is expressed in the amount of the average credit-card transaction, which is less than the average check withdrawal (NIS 240 versus NIS 4,100, respectively).

The sum of credit-card withdrawals consists of local withdrawals and withdrawals abroad which are debited to the public's current accounts and converted into foreign currency. The percentage of credit-card withdrawals overseas (or at Ben-Gurion Airport) is about 5 percent of total credit-card withdrawals, a rate that has remained almost constant in recent years.