BANK OF ISRAEL

BOI

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ARTICLES * INFORMATION * DATA

BOI is published by the Bank of Israel with the object of bringing to the attention of economic decision makers and of the general public articles and summaries of research in the many areas in which the Bank is engaged, as well as others relevant to Israel's economy. It is hoped thereby to enrich public debate of these important topics and broaden general interest in them.

The views expressed in the articles and conclusions drawn from them are those of the authors alone, and do not necessarily reflect the position of the Bank of Israel.

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BANKS' BRANCH STRUCTURE: TRENDS AND POLICY

Hany Perets–Banking Supervision Department

The legal background

The Banking (Licensing) Law, 5741–1981 defines a branch as "any place where a banking corporation accepts money deposits or conducts business with its customers." Since 1996 the definition does not include "an installation by means of which customers can perform activities in their accounts with the banking corporation." Section 28(a) of the Law states that "A banking corporation shall not open, or conduct business at, a branch save under a permit issued by the Governor after consultation with the Licenses Committee."

There is a marked downward trend worldwide in the number of customer visits to traditional bank branches, and a rise in the execution of transactions not within branches using a variety of methods.

Trends and policy

In the 1970s and early 1980s the number of branches of the banking corporations grew steadily, and reached a peak of 1,159 branches in 1983, the year of the bank share crisis in Israel. Against the background of that crisis, the banks, under their own initiative, started reducing the number of branches and reorganizing their branch structure; this policy was encouraged by the Bank of Israel. In 1986 when the process of voluntary contraction ended, the Bank of Israel imposed branch quotas in order to reduce the number of branches, as a result of which their number fell by 120 net in the years 1984 to 1989. In 1989 the Bank of Israel changed its policy: small and medium-sized banks were allowed to increase the number of branches slightly, while for three major banking groups the freeze on the number of branches continued. The thaw regarding the small and medium banks was the result of the need to increase the number of branches of dedicated banks which started to operate as commercial banks, and the aim of intensifying competition in the banking system and reducing the degree of concentration in it. This was followed by further steps which facilitated branch relocation and new branch openings provided their profitability could be proved.

In 1993, when it became apparent that banks were basing decisions about the geographical spread of their branches on purely economic considerations, the Bank relaxed its policy further, and the procedure for authorizing branch openings was simplified. From 1994 to 2000 the total number of branches (net) declined by about thirty, although the number fluctuated from year to year; this was due mainly to a sharp reduction in 1999 and 2000. At the end of 2000 there were 1,032 bank branches. Based on the latest figures for the first half of 2001, there was a net increase of one in the number of branches, which may indicate an end to the trend of branch closures, although it is too early to draw a firm conclusion. Taking into account the rise in the population, the decline in branch numbers means a continuous rise in the average number of customers per branch (see diagram) and in the average number of accounts per branch.

There is a marked downward trend worldwide in the number of customer visits to traditional bank branches, and a rise in the execution of transactions not within branches using a variety of methods, including:

- Electronic means for receiving information, issuing instructions and performing transactions on-line, among them automatic teller machines (ATMs), whose number in Israel has risen by 125 percent during the last ten years to 1,367 at the end of June 2001, although the number of residents per machine is falling (see diagram); call centers; personal computers (PCs); communications via cellular phones; and the internet.

- Permits issued to banks to operate outside the traditional type of branches in four main ways:

1. Opening temporary branches for short periods of time, mainly for marketing purposes, at events such as conferences, exhibitions, and at the start of the academic year in the universities and colleges.
2. Permits to provide services for certain customers at any location in accordance with the terms of the permit. The permit enables bank staff to go to the offices of certain business customers or to the homes of clients considered "sophisticated customers" to provide banking services.
3. Permits for banks to send charge cards by mail or to issue them from temporary locations according to the terms detailed in the permit.
4. Permits for banks to offer credit in certain workplaces via senior staff in those companies, in accordance with the terms of the permit.

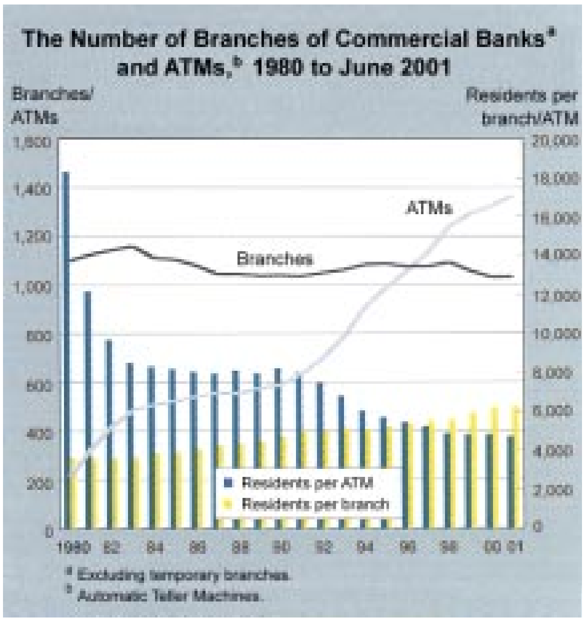
Another trend is branch specialization in particular activities, reflected in the establishment of some and reorganization of others as dedicated branches—business branches, private-banking branches, branches serving foreign customers, etc. This also encompasses branches in shopping malls and large supermarkets. The opening hours of these branches are also generally adapted to the particular needs of their target groups of customers.

Since 1993 the Bank of Israel has pursued a liberal policy towards the opening of new branches. In January 2001, the procedure for obtaining branch permits was simplified further and allows banking corporation activity in different locations, in some cases without a special permit. In this context branches are characterized according to the following five parameters:

Since 1993 the Bank of Israel has pursued a liberal policy towards the opening of new branches. In January 2001, the procedure for obtaining branch permits was simplified further and allows banking corporation activity in different locations, in some cases without a special permit.

- The period in which the branch is intended to operate;
- The type of banking activity it will undertake;
- The branch opening hours;
- Management limitations;
- Types of customer served by the branch.

A regular branch is a permanent one which supplies the full range of banking services, operates on the days and at the times normal for that corporation, is not subordinate, from a management aspect, to another branch, and serves all types of customer. A special branch is one which does not conform with one or more of the above features.



The Number of Branches of Commercial Banks[a] and ATMs,[b] 1980 to June 2001

[a] Excluding temporary branches.
[b] Automatic Teller Machines.

The most significant step towards liberalization taken by the Bank of Israel was with regard to permits for opening temporary branches a bank can apply for permit to open temporary branches to operate for a period of up to three months and to supply a range of services as specified in the permit, without needing to obtain a specific permit for each branch. The number of temporary branches which a bank may have open simultaneously under this arrangement is determined in accordance to its size as measured by the number of its regular branches. These temporary branches serve as marketing instruments which enable the bank to reach potential customers, for instance at the beginning of the academic year in universities and colleges, or special initiatives directed towards other groups of potential customers the bank wishes to focus on.

Data gathered by the Banking Supervision Department suggest that the use of temporary branches is increasing 125 temporary branches were opened in 1999 170 in 2000, and 225 from January to the end of October 2001.

Note that activity in temporary or permanent branches in places which do not normally have a branch is restricted to a specific pre-defined location (a counter or a room), with the appropriate bank signs. The employees in the branch must be employees of the banking corporation, trained appropriately to fulfill their duties. In the case of a temporary branch, customers will be advised of the address of the permanent branch in which their accounts are handled, and to which they can turn to perform transactions or seek clarification. These requirements are intended to ensure that banking activity should not appear akin to peddling. Consistent with this policy, an employee of the bank is not allowed to approach a customer while the latter is shopping; the customer must initiate the contact by entering the branch or by approaching the counter in the supermarket.

BANK CHARGES—THEIR NATURE, STRUCTURE, AND FULL DISCLOSURE

Ettie Levy and Ophira Weiss—Banking Supervision Department

The full schedule of charges

Banking corporations' income comprises two main components—interest and charges (fees, commissions etc.). The increase in the number and types of charges made by the banks and the difficulty in comparing them led to the appointment in 1993 by the Supervisor of Banks of a committee to examine the schedules of bank charges. The committee greatly reduced the number of charges made to households and small business customers, and coordinated a uniform format for a table of charges. This was regularized in Regulation No. 414 in the Proper Conduct of Banking Business, in the Table of Bank Charges. The table contains 125 charges, divided into six categories as follows:

Category	No. of charges according to the Regulation
1. Current accounts (management fees, checks, cash withdrawals, transfers, deposits, etc,)	30
2. Computerized services, information and confirmations	17
3. Credit, guarantees and sureties	16
4. Securities	21
5. Foreign currency	32
6. Magnetic cards	9
Total	**125**

The Regulation determined additional categories, including an appendix to category 6 which deals with special credit-card services and categories related to large business customers for whom no uniform format was determined: category 7—foreign trade; category 8—spot transactions, forward transactions, options, transactions in precious metals, etc; category 9—special services for nonresidents.

The Regulation still serves as a basis for the full tariff of bank charges. It thus enables customers to make comparisons between the charges in different banks relatively easily, although even after the introduction of the standard format the number and complexity of the charges do not allow a simple comparison to be made in every instance.

Over the years changes have taken place in the schedule of charges, mainly due to the introduction of new services, changes in the stock exchange (for example changes in the trading method and the introduction of new financial instruments, legislative changes, and improvements in communications and the internet). Some of the new charges relate to services which were previously provided free of charge. In addition to the division of the charges into various categories, banks set different rates for the same charge in different circumstances: e.g., different charges according to customer (business or household)[a] different charges according to where the transaction takes place, i.e., in the same bank or in another bank, in the same branch or another branch; different charges for transactions in local as opposed to foreign currency etc.

An analysis of the changes in charges in one of the large banks since the standard format was introduced in 1993 until 2000 shows an overall increase of 7 percent in the level of charges, deriving from the changes outlined above. Although the basic schedule set in 1993 included 125 charges, the list in 1994 (excluding the appendix to category 6 and categories 7 to 9) included 162 charges, or 207 charges if the sub-categories are included. In 2000 the same bank's schedule (in the same categories) included 174 and 237 charges respectively.

Only about thirty of these charges apply to household accounts, and these are detailed in the table of charges for the main services, as households tend to use only a small number of the most common banking services. Data relating to the large banks show that most households avail themselves of even fewer services than this with most paying between five and ten different charges.

> Relatively few charges (about 30) apply to household accounts, and these are detailed in the table of charges for the main services, as households tend to use only a small number of the most common banking services.

Supervision of charges

The Supervisor of Banks has no statutory power to supervise bank charges. When he thinks such a step is necessary he makes a recommendation accordingly to the Price Controller in the Ministry of Trade and Industry who has the authority to limit bank charges as well as the prices of other goods and services in the economy.

Currently fifteen charges are supervised by the Price Controller. Any change to a supervised charge must be authorized by the Controller, and any rise is subject to guidelines and is partially indexed to the Consumer Price Index, the Cost of Living increment, and the rise in the average wage in the economy.

The Supervisor of Banks has formulated the principles according to which he intervenes regarding bank charges:

1. In situations in which the customer is 'trapped' by a bank; and with regard to charges related to encouraging inter-bank competition such as improving the process of transferring from one bank to another e.g., charges for transferring securities to another deposit of the same customer,

to create a lien;
2. Regarding charges for the provision of information to a customer to ensure full disclosure;
3. Regarding charges related to the payments system (e.g., commission on monthly repayments of housing loans, direct debits and the price charged for checkbooks (price per check)).

transferring foreign currency to another bank in Israel, cancellation of a direct debit or standing order, and a bank's agreement

The policy of the Supervisor of Banks towards bank charges

In general the policy is that the rates of charges not governed by the Price Controller should be determined by the banks themselves as and when they see fit in accordance with their business policy. Nevertheless, Regulation 415 in the Proper Conduct of Banking Business Rules Regarding Charges, requires a banking corporation to advise the Supervisor of Banks in advance of any change in a charge or imposition of a new charge. The corporation must also send the Supervisor of Banks its abbreviated schedule of charges for the main services, and the full detailed schedule of all charges. If an increase in a charge or the introduction of a new charge seems to the Supervisor of Banks to be illegal or exceptional, the matter is clarified with the bank, which must provide clarification and give its justification for its proposal, with costings. In extreme cases the Supervisor of Banks exerts his influence to get the bank to modify its original proposal.

The policy of the Supervisor of Banks is that the schedule of charges must be clear and accessible to the public, and he therefore determined the ways in which information on charges must be transmitted to the public.

Full disclosure

The policy of the Supervisor of Banks is that the schedule of charges must be clear and accessible to the public, and he therefore determined in the full disclosure rules under the Banking (Service to Customer) Law, 5741–1981 the ways in which information on charges must be transmitted to the public.

Every branch of a banking corporation must have a full table of its charges detailing all the charges it makes, as well as an abbreviated schedule giving the charges for the main services. Every customer is entitled to see the tables.

Banks may charge for handling accounts and for performing various banking activities in accordance with their published rates. They may not charge more than the rates on their schedule nor make charges that do not appear in the schedule.

Abbreviated schedule (table of charges for main services)

As most households use only the more common services offered by banks and do not require all the information in the complete table of charges, a shorter list is available giving about thirty charges covering only the major services which are of interest to households and small businesses. These include account handling fees, and charges for personal checkbooks, cash withdrawals, non-recurring transfers or deposits, return of checks or direct debits cancellation of checks or direct debits, commission on paying bills, computerized information, buying/selling of securities, etc.

The location of the table of charges

The rules of full disclosure set by the Governor of the Bank of Israel under the Banking (Service to Customer) Law, 5741–1981 oblige a banking corporation to display a table of its charges for the main banking services in every one of its branches. The abbreviated table explains where in the branch a customer has access to details of the other charges (i.e., the full schedule of charges), as the rules state that the bank must make available the full list of all its charges in each of its branches to anyone wishing to see it.

Also, an amendment to the Banking (Service to Customer) Law of June 1998 entitles every customer to obtain free information (i.e., without payment) from the bank's computer terminals in the branch on the charges made by the bank for its main services. (This applies to banks which enable their customers to obtain information via the computer.)

Some banks publish the table of their charges on their internet websites. With the increased use of the internet, the Supervisor of Banks asked the five major banking corporations to publish their schedules of charges on their sites. Two of the banks already do so with the others due to follow suit during 2002.

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Maintaining the right the have a bank account

The law entitles every citizen to have a bank account. The policy of the Supervisor of Banks is that every citizen is entitled to run a bank account at a reasonable cost; high management charges would make a sham of the law.

The bank makes a profit from interest and charges on the one hand, while on the other it incurs current expenses in managing customers' accounts. According to data received from the banks, in the case of customers with low incomes and a low level of banking activity the charges they pay do not cover the costs of handling their accounts. Some of the banks are not interested in holding on to such customers, and sometimes they impose relatively high charges on them. The Banking Supervision Department adopts various methods to counter such steps. Thus, some years ago when supervision was extended to bank charges, the Supervision Department proposed—and the proposal was implemented—that certain groups in the population, including those with low income, should be exempt from paying fixed account handling charges.

Improving information

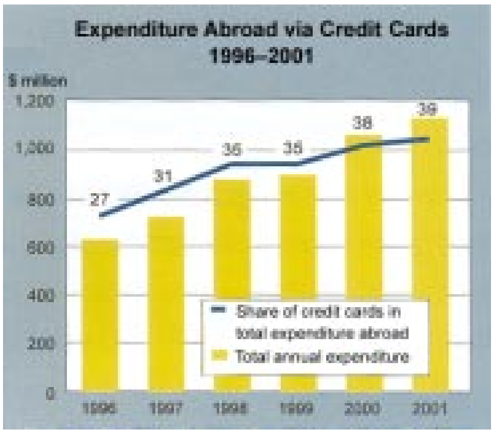
The Supervisor of Banks draws conclusions from complaints and information he receives, and updates the rules of full disclosure accordingly. For example, in the latest round of amendments, the full disclosure requirement is extended to incorporate the effective cost of a loan (i.e., to include in addition to the interest payable also all the other costs involved in the loan); this requirement will apply to all loans up to NIS 250,000, and to housing loans of up to NIS 500,000, compared to the current limit of NIS 60,000. Another amendment currently under review is a requirement to advise customers of the charges before they perform transactions.

ISRAELIS' FOREIGN-CURRENCY ACTIVITY VIA CREDIT CARDS

Shalom Hershko—Foreign Exchange Control Department

Introduction

Reports on activity vis-à-vis abroad or in foreign currency are submitted to the Controller of Foreign Exchange by financial intermediaries, corporations and individuals, etc., and also by credit card companies operating in Israel. These constantly updated reports are used to monitor capital flows to and from Israel and other developments in the NIS/foreign-currency market. The credit card companies' reports give monthly aggregates relating to transactions between residents and abroad and foreign-currency transactions



between residents in Israel. Businesses abroad are classified according to a Merchant Category Code (MCC), and the information on Israelis' transactions abroad is therefore categorized by type of business. In addition reports are also classified according to the size of the transactions. Credit card companies in Israel are very closely identified with banks, as the latter established the companies and own them, wholly or in part. Currently three groups operate in the credit card market in Israel incorporating seven companies.

> Credit-card transactions abroad by Israelis to purchase tourist services and to cover current expenses almost doubled from 1996 to 2001, from about $ 600 million to some $ 1,100 million, a rise of about 10 percent a year.

This review describes the development over the last six years of the use of credit cards in making payments in foreign currency, and the advantages and disadvantages of this use.

The use of credit cards to make foreign-currency payments, 1996–2001

- The growth in the use of credit cards for making foreign-currency payments abroad is part of a worldwide trend of a constant rise in the use of credit cards by tourists at the expense of travelers' checks and cash.
- Credit card transactions abroad by Israelis to purchase tourist services and to cover current expenses almost doubled from 1996 to 2001, from about $ 600 million to some $ 1,100 million, a rise of about 10 percent a year.
- Data on foreign-currency expenditure by Israeli tourists abroad show that the share of the total which was paid by credit card rose steadily from 27 percent in 1996 to 39 percent in 2001.
- Average expenditure by credit card per trip also increased, from $ 248 in 1996 to $ 315 in 2001, a 27 percent rise.
- As a result of the liberalization in the control of foreign exchange, foreign-currency credit card payments in Israel have also risen to some extent.
- In the three years from 1999 to 2001 the share of the total number of transactions performed abroad by credit card remained constant at 6 percent.
- Most (i.e., about 80 percent) of the rise in total expenditure of Israelis abroad in the last six years is accounted for by the increased use of credit cards.

Table 1

Total Expenditure Abroad by Israeli Tourists, 1996–2001

($ million)

	1996	1997	1998	1999	2000	2001
Total expenditure abroad by Israeli tourists ($ million)	2,278	2,283	2,473	2,566	2,804	2,898
Of which: by credit card ($ million)	621	714	870	888	1,052	1,123
(Percent)	27	31	35	35	38	39
Number of trips ('000)	2,503	2,755	2,983	3,203	3,529	3,561
Average expenditure by credit card per trip ($)	**248**	**259**	**292**	**277**	**298**	**315**

SOURCE: Based on Central Bureau of Statistics data and reports from credit card companies.

The composition of credit card use abroad

According to data received from the credit card companies, 39 percent of total tourist expenditure abroad by Israelis was paid by credit card, and the largest part of this, 52 percent, was payment for accommodation. Credit card expenditure on gambling rose from $ 17 million in 2000 to $ 27 million in 2001. Payment by credit card for goods purchased rose from $ 351 million in 2000 to $ 381 million in 2001, attributable among other things to the fact that it is cheaper to make such purchases by credit card than to pay in cash.

Almost all purchases (99 percent) of tourist services, goods and cash withdrawals are in amounts of up to $ 5,000.

The use of credit cards has become so widespread that customers pay with them for a cup of coffee, cinema ticket, or even a cab ride.

The advantages of using a credit card abroad

- It obviates the need to calculate how much of a particular currency to buy—which becomes really troublesome when one is traveling to several countries.

Table 2

The Use of Credit Cards Abroad by Israelis, by Type of Transactions, 1998–2001

	1998	1999	2000	2001	1998	1999	2000	2001
Type of transaction	$ million				Percent			
Total expenditure	**804**	**888**	**1,052**	**1,123**	**100**	**100**	**100**	**100**
1. Tourist services	**299**	**345**	**403**	**439**	**37**	**39**	**38**	**39**
Of which:								
Hotels	170	186	222	227	21	21	21	20
Flight and ground services	38	40	48	54	5	5	5	5
Transportation	32	33	42	48	4	4	4	4
Telephone and communications	6	8	9	9	1	1	1	1
Food and restaurants	30	33	38	42	4	3	3	4
Casinos and gambling	3	23	17	27	-	2	2	2
Other	20	22	27	32	2	3	2	3
2. Cash withdrawals	**186**	**200**	**221**	**228**	**23**	**23**	**21**	**20**
3. Goods	**269**	**286**	**351**	**381**	**33**	**32**	**43**	**43**
4. Other	**50**	**57**	**77**	**75**	**7**	**6**	**7**	**7**

SOURCE: Based on reports of credit card companies to the Controller of Foreign Exchange.

- The traveler is granted free travel insurance (health and luggage) as part of the conditions applicable to credit card users.
- The cost of cash withdrawals from an ATM abroad by means of a credit card is cheaper than purchasing cash in other ways.
- There is no need to travel with relatively large amounts of foreign currency in cash, with the attendant risks of loss or theft. (Furthermore, travelers' checks can be purchased in Israel only in certain currencies.)

Almost all purchases (99 percent) of tourist services, goods and cash withdrawals are in amounts of up to $ 5,000.

The use of credit cards has become so widespread that customers pay with them for a cup of coffee, cinema ticket, or even a cab ride.

The use of credit cards in Israel for foreign-currency payments

Until May 1998 Foreign Exchange Control restrictions prevented foreign currency payments between Israelis. Following the liberalization of the foreign currency market the practice grew of making payments in foreign currency (by bank transfer, cash, or credit card) in cases where prices are quoted in foreign currency, such as services provided by travel agents, hotel accommodation, or diamond purchases. The use of a credit card saves the payer the commission on converting from NIS into foreign currency. Even someone who does not have an income in foreign currency saves some of the charges, as the suppliers of these goods or services generally base their calculations on the exchange rate for banknotes (i.e., cash), whereas when suppliers charge a credit card account they do so at the rate for transfers and checks which is lower.

Foreign currency payments by credit card in Israel in 2001 totaled $ 50 million, compared with only $ 10 million in 2000 and 1999.

THE PARTICIPATION OF THE PRIVATE SECTOR IN THE ECONOMIC INFRASTRUCTURE

Adi Brender and Arieh Marom—Research Department

In discussions on the budget for 2002, various proposals for increasing the participation of the private sector in infrastructure construction were put forward. Some degree of participation already exists, and increasing it is likely to enable infrastructure investment to rise with relatively little immediate government expenditure. In the light of the significant shortage of infrastructures from which the economy is suffering, enlisting the private sector to join in their construction appears a correct step to take, despite certain drawbacks that it entails.

Over the years the prevailing economic view has changed: the emphasis has switched from the importance of state ownership and management of the infrastructures to that of the market mechanism. In many countries communication services have been privatized, with increased private-sector involvement in investment in and the operation of roads, fast rail systems, suburban transport systems, tunnels, bridges, and air and sea ports. Nevertheless, the share of private enterprises in infrastructure investment worldwide is still low.

Enterprises in which cooperation with the private sector is appropriate are those in which knowledge, innovation, and business flexibility in planning, setting up and maintaining projects and providing service constitute the most important aspects, while the share of finance required from the private sector is relatively small.

The advantages of private-sector participation

Experience has shown that the private sector can carry out infrastructure investments (and sometimes even participate in planning them) far faster and more innovatively, flexibly and efficiently than the public sector, and this applies also to the maintenance and management of the completed enterprise and to the service it provides. Implementation of projects via the private sector is less vulnerable to government budget cuts, which tend to favor activities which enjoy the backing of powerful political pressure groups, and provide immediate benefits, and to reduce infrastructure investments—which yield advantages in the longer term—to below the optimum.

The disadvantages of private-sector participation

Financing a private project is more costly than financing a public one, because the risk attributed to the entrepreneur is higher than that attributed to the government.[1] Also, if the use of a private project incurs a charge, while the use of the equivalent public facility is free, this would divert users to the public enterprise, and the private one would be under-utilized.[2] This effect would be avoided if the government assumed responsibility for the payment to the private entity, for example the payment for vehicles using a private road.[3] Another drawback is that ex-budgetary government support for projects (the provision of land, waiving concession fees, easing of regulations,

Methods of cooperating with the private sector

Cooperation with the private sector in infrastructure enterprises can take place at all stages: planning, financing, construction and operation. Various concepts are mentioned in this context, and they are not always clearly defined. Two of the many possible formats are : BOT (Build–Operate–Transfer), where a private entity builds and operates the project for a pre-defined period, after which ownership is transferred to the public sector, and PFI (Private Finance Initiative)—where projects are built by a private entrepreneur, based on a public-sector obligation to buy its services.

There are several alternatives regarding the nature and timing of private involvement, and it can cover a variety of circumstances, such as: the transfer of a government corporation to private management for a specified period; the erection and operation of a new project, with the private entity participating in the investment risk; the erection and operation of a project jointly by the government and a private entity, planned either by the government or by the private partner; and the sale of a share of the equity of a public corporation to a private entity.

The return to the private entity can come from a charge paid by the users, or from a “shadow” charge which the government pays for the use of the infrastructure, with the payment either a fixed amount determined in advance or based on usage. There are many possible formats for such cooperation in addition to those mentioned, and they are known by names which reflect the terms of the contracts e.g., DBFO (Design-Build-Finance-Operate).

[1] Government financing is problematic, too, as the taxes from which it is derived cause distortion, and have an adverse effect on economic efficiency.

[2] For example, the return to the economy on the investment in the Cross Israel Highway as a toll road is estimated at 29 percent, and as a toll-free road, at 34 percent.

[3] In the example relating to the UK referred to in Reference no. 3 at the end of this article, the toll collected on each journey depends on the quality of the service and the volume of traffic. The risk of too light a traffic load is thereby divided between the government and the concessionaire. Determining that the toll will rise with increased volume of use would induce the concessionaire to improve service.

and investment in support infrastructure) is not always transparent, making the choice more difficult.

The government's role

The government must regularize the macroeconomic, legal, and administrative contexts of the private enterprises, and its advantage in dealing with statutory processes and making land available is very evident. It must contribute to the attraction of the projects, for instance by means of their links with the complementary networks and by reducing the risks the projects entail for the private concessionaire. As the financial return of the enterprises is generally lower than the social return, the private sector, without government support, would invest less than the social optimum. Examples from Hungary and Poland show the importance of support from the public sector: the development of an entirely private project encountered difficulties, while a project supported by an appropriate public-sector contribution was successful.

In the light of the significant shortage of infrastructures from which the economy is suffering, enlisting the private sector to join in their construction appears a correct step to take, despite certain drawbacks that it entails.

Lessons to be learned from European projects

The best way of carrying out a project is to via an administration which would operate similarly to a private-sector organization and would be responsible to the owners for advancing the project and carrying it through.

The terms of the contracts are of prime importance. They must be flexible and must give prominence to trouble-shooting mechanisms for dealing with detailed problems that may arise. The emphasis should be on output rather than input, and benchmarks for output should be set in advance; this would allow the private investors to be flexible and innovative in order to meet the output requirements of the public sector. As the enterprise is long term, the contract must specify when and how clauses in it may be altered to reduce risks. There must be genuine mutual understanding between the entrepreneur and the government. The details regarding the division of risks and responsibilities must be determined at the outset according to the principle that the risk should be borne by the party best able to shoulder it. The level of the charge must be related to the advantage which the user derives from the enterprise.

Experience has shown that the private sector can carry out infrastructure investments far faster and more innovatively, flexibly and efficiently than the public sector.

The private sector's involvement in the infrastructure in Israel[4]

Recently there was a breakthrough in this area when the construction of the Cross Israel Highway was granted as a BOT concession, and it is progressing rapidly. Two other transport projects are proceeding under a similar format—the light railway in Jerusalem, and the Carmel tunnels project (delayed due to legal complications). Progress has also been made recently regarding the desalination of sea water. A step towards easing traffic congestion in the Tel Aviv conurbation was taken in August 2000 when the government decided to

[4] Note that the Israel Airports Authority Ben Gurion 2000 Project is not a BOT project: it consists of a public administration together with a private management company with great experience in similar projects.

Examples of private-sector involvement

The following examples of projects in communications, water, energy, and transport are just a few of the many that could be quoted: roads in Hungary; roads in Britain (with shadow tolls); a planned toll road in Poland; roads in France; the Vasco da Gama Bridge in Lisbon, Portugal; the Øresund Fixed Link (bridge and tunnel) between Sweden and Denmark; the Channel tunnel (between Britain and France); the TGV train in Belgium; the suburban train in Buenos Aires, Argentina; the underground in Rio de Janeiro, Brazil; airports in Greece and in Warsaw, Poland; the port in Gioia Tauro, Italy; and port services in Chile.

present a planning scheme for a light railway/underground in Tel Aviv as a BOT project. For the Tel Aviv to Kfar Sava track it was decided that the fixed stock would be financed by the government, while the rolling stock would be purchased and operated by a private entity. Sewage treatment projects are also being dealt with in a BOT framework, and it is planned to extend the number of these projects and their use. Renting of schools from private entrepreneurs is under consideration, but it is doubtful whether the participation of the private sector is of advantage, as the entrepreneur's main contribution would be in financing, in which the private sector suffers from a relative disadvantage.

Attempts to privatize infrastructures which were thwarted by workers' opposition include the implementation of the government decision to split Petroleum and Energy Infrastructures Ltd. into a transport company and a storage company, and the operation of the Jubilee Port (next to Ashdod Port) in competition with the Ports Authority. It is also unclear whether there is a future to the proposed construction of a competing port next to the Port of Haifa.

It appears that the government's desire to increase the extent of the business sector's cooperation in infrastructure projects does not derive solely from the fact that the private sector is better able to implement them, but also reflects an attempt to bypass the weakness of the political system in setting priorities in the budget—a weakness that reduces infrastructure investment.

The fiscal aspects of dependence on BOT and PFI in Israel

It is difficult to accept the argument put forward that there are no spare sources available in the budget for investment in the infrastructure, as expenditure on the infrastructure is low by comparison with that in developed countries, whereas total public expenditure in Israel is very high, and its share of GDP is decreasing very slowly.

It appears that the government's desire to increase the extent of the business sector's cooperation in infrastructure projects does not derive solely from the fact that the private sector is better able to implement them, but also reflects an attempt to bypass the weakness of the political system in setting priorities in the budget—a weakness that reduces infrastructure investment. The best way to reduce the deficiency in infrastructures is to prioritize correctly in the budget after using transparent budgeting to examine the investment projects thoroughly, and among the alternatives, to also examine the involvement of the private sector.

Since it appears that in the situation prevailing in Israel progress in infrastructure investment will be considerably delayed without the involvement of the private sector, such involvement is advisable as a "second best" strategy. As the severe shortage in the infrastructures greatly boosts their yields, it is to be expected that the additional utility of projects carried out in partnership with the private sector will outweigh the distortions that its participation may cause.

The appropriate choice and planning of projects are critical to the success of the involvement of the private sector. In addition, clear accounting procedures should be adopted for recording future expenses and liabilities related to projects in the budget, and the objectives which it is hoped will be achieved should be determined. It is most important that quantitative targets for budgetary infrastructure investment be set, so that the system of cooperation between the public sector and the private sector does not replace this investment, but augments it.

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VOLATILITY IN ISRAEL'S FOREIGN-CURRENCY MARKET

Francoise Ben-Zur–Foreign Exchange Department

What is volatility?

Prices of financial assets traded in the capital markets fluctuate in the course of the trading day. The investor is therefore faced with uncertainty regarding the expected profit (or loss) on the investment. The greater the uncertainty, the higher the risk the financial asset is considered to bear.

To estimate this uncertainty, and thereby the risk inherent in the asset, investors calculate volatility. Volatility is defined as the standard deviation of the distribution of profits yielded by the asset. The profits (or losses) are measured over a specified period of time—a day, or week, etc.—and are expressed as a percentage of the total investment in the asset. The standard deviation is chosen as a measure of the uncertainty because it expresses the extent of the spread of the distribution around the mean. Under certain assumptions regarding the shape of the distribution, the standard deviation also provides an estimate of the characteristic range of changes in the asset's price. The higher the standard deviation, the more widely the price is likely to fluctuate and the more risky the asset.

It is the accepted practice in financial markets to monitor the volatility of asset prices. Special attention is paid to the volatility of the exchange rate, as it is an essential parameter in the management of currency risk in multi-currency investment portfolios, pricing options, managing currency positions, etc.

How is exchange-rate volatility measured?

There are essentially two ways of calculating exchange-rate volatility:

1. Volatility can be estimated using the prices of exchange-rate options traded on the market ("implied volatility"). The value of the expected volatility inherent in the options' prices can be derived using a simple formula (the Black & Scholes formula).
2. It can be estimated from a historical series of exchange rates ("realized volatility").

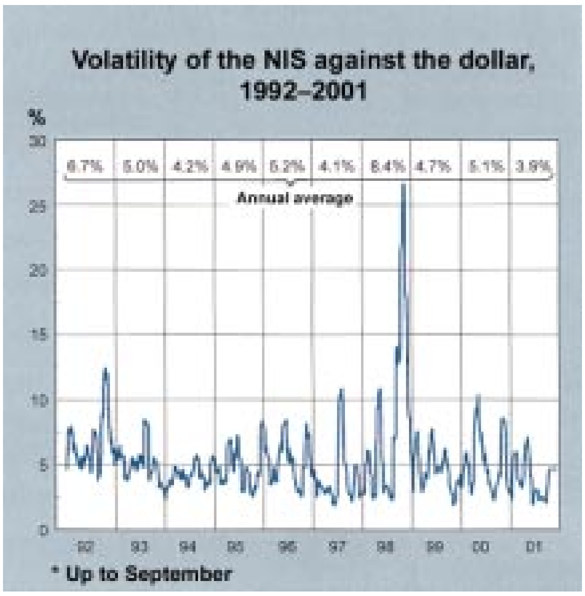
The Foreign Currency Department of the Bank of Israel employs the second method. The daily volatility of the exchange rate is calculated as the standard deviation of the daily changes during the previous month (approximately twenty trading days). This calculation is performed every day, so that a series of daily volatilities is obtained. This method is also used by analysts in the domestic and international options markets.

> Since 1992 the volatility of the NIS against the dollar has been lower than that of other currencies. Thus, from January to September 2001 the volatility of the NIS/$ rate was 3.9 percent, while that of the euro against the dollar was 10.7 percent.

A one month period is chosen for the estimation of daily volatility as the value obtained by this method gives a balanced view of market developments. A longer period, say three months, gives a very stable series, as new daily market data affects it very slightly, and a shorter period of say ten days has extremely high volatility, as the weight of the new daily information is relatively high.

Development of the volatility of the NIS/$ exchange rate in the last ten years

The following are the salient features of the development of volatility over the last few year



1. Since 1992 (when the regime of the exchange-rate band was introduced), the volatility of the NIS against the dollar has been lower than that of other currencies against the dollar (Table 1), with no pronounced trend. Thus, from January to September 2001 the volatility of the NIS/$ rate was 3.9 percent, while that of the euro against the dollar was 10.7 percent. This occurred despite the transfer to bilateral trading in Israel in July 1994, and despite the Bank of Israel's policy since mid-1997 of non-intervention in the foreign-currency market, both of which increased the market's flexibility and were likely to have increased the volatility of the exchange rate.
2. There were certain short periods of heightened volatility due to particular market developments:

   i. Expectations that the exchange-rate band would be widened, and its actual widening in June 1997, raised the level of uncertainty in the foreign-currency market. At that time volatility rose to 10.9 percent.

   ii. In April 1998, when the final stages of the liberalization of the foreign-currency market were about to be implemented, volatility rose to 10.9 percent (unrelated to the volatility in *i* above).

   iii. From August to November 1998, as a result of the crisis in Russia and the collapse of the American hedge fund LTCM, average volatility rose, reaching a record 26.6 percent at the beginning of November.
3. In certain short periods when the exchange rate of the NIS against the currency basket was close to the lower limit of the band, the NIS/$ exchange rate became less

Table 1
The Volatility of the Exchange Rates of Various Currencies Against the Dollar

(period averages of intra-day volatility, percent)

		1998				2001
	1997	January-July	August-December	1999	2000	January-September
NIS/$	4.1	4.8	13.4	4.7	5.1	3.9
South African rand	4.7	10.5	21.7	9.3	9.8	10.0
Swedish krona	10.1	9.6	13.5	9.4	12.4	11.8
Norwegian krone	11.8	9.3	13.7	9.4	11.0	11.5
Greek drachma	9.2	14.2	11.3	9.7	12.0	10.9
Czech koruna	16.8	12.8	14.5	10.5	11.9	13.2
New Zealand dollar	8.4	13.5	13.2	10.6	13.3	12.9
Japanese yen	10.9	14.3	19.4	13.4	7.7	13.3
Canadian dollar	4.2	4.5	8.0	6.0	5.4	5.6
German mark/euro	9.7	7.9	11.0	9.7	13.8	10.7
Pound sterling	8.3	7.0	7.9	7.3	8.8	8.7

volatile. Thus, there were times in 1997 when the volatility of the NIS/$ rate dropped to 1.8 percent.

The volatility of the NIS/$ exchange rate compared to those of other currencies against the dollar.

During periods of calm in the financial markets the volatility of the NIS/$ exchange rate is lower that of the rate against the dollar of other currencies comparable to the NIS[1] (Table 1—the Czech koruna, Greek drachma, New Zealand dollar, Norwegian krona, South African rand and Swedish krona). The period from August to December 1998, after the crisis in Russia and the collapse of the LTCM hedge fund, was exceptional, however, and the volatility of the NIS/$ exchange rate rose to an average of 13.4 percent, higher than that of the Greek drachma and of the New Zealand dollar. The volatility of the NIS/$ exchange rate rose by more than did the volatility of any of the other currencies shown in Table 1.

From August to November 1998, as a result of the crisis in Russia and the collapse of the American hedge fund LTCM, average volatility rose, reaching a record 26.6 percent at the beginning of November.

Although no satisfactory explanation has been found yet for the relatively low volatility of the NIS/$ exchange rate, several possible reasons may be suggested:

1. The high concentration in Israel's banking system—meaning that there is a small number of players in the foreign-currency market—apparently lowers volatility.
2. The absence of speculators in Israel's foreign-currency market leads to lower volatility. In this context cause can become effect (and vice versa). Low volatility deters speculators.
3. The exchange-rate band limits the range in which the rate can fluctuate. The absence of exchange-rate bands in the other countries may therefore provide an explanation for the lower volatility of the NIS/$ exchange rate. Note that a policy of central bank intervention in a country's foreign-currency market also

[1] Currencies of countries whose foreign-currency markets are about as developed as Israel's.

affects volatility: the higher the degree of intervention undertaken by a central bank to protect the currency, the lower the volatility of the exchange rate. Nevertheless, the volatility of the NIS/$ exchange rate is still lower than that of the currencies of countries whose central banks do intervene in the foreign-currency market, such as the Czech Republic and South Africa.

4. Foreign investors have entered Israel's capital market slowly, as it is relatively small, and not well developed. Various asset markets that have developed rapidly in the last few years throughout the world, such as those for interest-rate futures, repurchase agreements (Repos) and corporate bonds, do not yet exist in Israel.

PREVENTING MONEY LAUNDERING IN ISRAEL

Orna Vago—General Counsel's Department
David Zaken—Banking Supervision Department

The background

Money laundering is a process undertaken to cover up the source of money which derives from criminal activity, usually from criminal offences connected with organized crime and other capital-intensive felonies related to drug trafficking, the illegal arms trade, terrorism, prostitution, corruption, gambling, smuggling, theft, fraud, and tax evasion. It does so by severing the link between the money and the criminal activity, so that it can be used legally. As part of the overall anti-crime campaign, the law-enforcement authorities in many countries have also directed their activities into the fight against money laundering, pursuing two courses of action. One is reducing crime by creating difficulties for criminals when they try to realize the fruits of their evil-doing; the other is arresting them and putting them on trial when they come to that stage.

The international body leading the struggle against money laundering is the Financial Action Task Force (FATF), a voluntary organization with 29 member countries. The FATF examines the degree of countries' participation in the international struggle against money laundering based on forty criteria it has set. In June 2000 it published a list of non-cooperative countries which do not participate in the fight against money laundering, known as the blacklist; the list included Israel.

The literature on money laundering lists three main stages in the process: 1) *placement*, i.e., changing the location or the form of ill-gotten gains, for example by converting or depositing cash; 2) *layering*, i.e., performing numerous transactions with the property to obscure or hide its origins, for example international financial transfers; and 3) *integration*, i.e., converting the property into a source of finance for legitimate activities.

These stages may be performed either concurrently or separately, and in different geographic locations.

There is no single uniform method for laundering money. It can be carried out via a variety of activities: dividing a large amount of cash among many people who are paid a commission to deposit it in banks (the old-fashioned way); using legitimate cash-based businesses (shops, garages, etc) to mix clean money with dirty money ("Trojan horse" businesses); setting up fictitious businesses to channel money gained from criminal activity into bank accounts (front businesses); and physically smuggling cash into countries which do not have systems of supervision or regulation in this matter.

Money laundering is mainly identified with banking transactions such as making deposits, international transfers, credit and guarantees, but there are other financial channels which can be used for this purpose: investment houses, other financial intermediaries, accountants and lawyers, casinos, antique dealers, car dealers, etc. Those engaged in money laundering generally operate in areas where there is little or no supervision.

Due to the possibilities of reaping easy profit from crime¨ money laundering carries with it the danger of increased criminal activity¨ as well as making it difficult to gather evidence about the original activity which yielded the illegal profit. More generally, in the long term it destroys systems, and thereby can undermine the stability of a democratic regime.

The fight against money laundering

The fight against money laundering has recently taken on the utmost importance in the advanced countries, including Israel. The international body leading the struggle is the Financial Action Task Force (FATF), a voluntary organization with 29 member countries. The FATF examines the degree of countries' participation in the international struggle against money laundering based on forty criteria it has set. In June 2000 it published a list of non-cooperative countries which do not participate in the fight against money laundering, known as the blacklist; the list included Israel. Israel promptly introduced several significant measures to intensify the fight against money laundering which are prerequisites for inclusion in the community of nations involved in that fight, and thus for removal from the blacklist. The steps taken included the passing of a law against money laundering (the Prohibition of Money Laundering Law, 5761–2000), and the Governor of the Bank of Israel published an Order imposing obligations on banking institutions regarding identification of customers, reporting on transactions, and managing records; these will be described below,

As a result of the action taken, the FATF, in February 2001, included Israel as one of seven countries on the blacklist that had introduced legislation to step up the fight against money laundering. The organization noted, however, that passing anti-laundering legislation does not in itself provide sufficient grounds for removing a country from the blacklist; countries will be judged by the implementation and enforcement of the law. Thereafter, in June 2002, following implementation of anti-money-laundering legislation in Israel, the FATF removed Israel from the blacklist.

> In June 2002, following the implementation of anti-money-laundering, the FATF removed Israel from the blacklist.

The Prohibition of Money Laundering Law, 5761–2000

The law was passed by the Knesset (parliament) in August 2000, and will be fully effective no later than February 2002. The main points in the law are:

- It states that money laundering is a criminal offence (from August 2000), and knowingly performing a transaction involving property gained via an offence—trafficking in drugs, the illegal arms trade, gambling, prostitution, robbery, etc—is also a crime (from December 2000). The penalty for money laundering is up to ten years' imprisonment and a fine of up to NIS 3 million.

- It imposes an obligation on anyone providing financial services—banking corporations, stock exchange members, portfolio managers, insurers and insurance agents, provident funds, moneychangers, and the Post Office Bank— to identify customers, report on transactions, and manage records. Corporations to which these obligations apply must appoint someone to be responsible for compliance with them, to supervise that the obligations are met, and to train staff accordingly.
- A mechanism was set for imposing monetary fines on anyone providing financial services who fails to perform any of these obligations (identification, reporting, managing records, and the appointment of someone to be responsible). The fine can be up to NIS 1.5 million for failure to fulfill any of the first three of these, and up to NIS 150,000 for failing to appoint someone to be responsible.
- Anyone bringing into Israel or taking out of Israel a sum greater than the equivalent of NIS 80,000 (or NIS 1¨000,000 for new immigrants on their first arrival) is obliged to report it. The criminal penalty for non-compliance is up to six months' imprisonment or a fine of up to ten times the sum not reported. An alternative civil mechanism exists for imposing a fine of up to five times the sum not reported.
- A Prohibition of Money Laundering Authority will be established which will receive the corporations' reports, manage the data base, and pass relevant information on to those responsible for enforcement (the police or the security services), and to the equivalent authorities abroad. Information will be forwarded either at the specific request of the enforcement agencies or at the Authority's initiative.

Prohibition on Money Laundering (The Banking Corporations' Requirement regarding Identification, Reporting, and Record-Keeping) Order

The Prohibition of Money Laundering Law vested power in the governor of the Bank of Israel and the government minister to whom the reporting entities are responsible to issue orders applicable to these entities which will specify their obligation to identify customers, report to the competent authority, and manage records.

The Order applying to the banking corporations issued by the Governor on 25 January 2001 was the first order issued, and therefore plotted the path for other orders which are currently at different stages of implementation. The main points of the Order are:

- It imposes obligations to identify any recipient of service from a banking corporation, with the intention of preventing activity by customers without the banking corporation knowing the identity of the person directing the activity. The obligations include identification, recording and verifying the identification particulars of the account holders and the authorized signatories, as well as recording the beneficiaries in a trust account and

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holders of controlling interests in a corporation's account, according to a customers' declaration.

- It imposes an obligation to retain the identification documents from the opening of an account for a period of at least seven years from the date of its closure, and an obligation to retain the document attesting to the instruction to the banking corporation to carry out a transaction whose value is equivalent to at least NIS 50,000.
- It imposes an obligation to maintain a computerized database of account numbers, identification particulars of account holders, authorized signatories, beneficiaries and holders of controlling interests.
- It determines that a banking corporation shall identify an account holder and authorized signatory face-to-face.
- It imposes an obligation to report to the Prohibition of Money Laundering Authority in the Ministry of Justice. There are two types of report:

  1. A report on transactions; this is a report which must automatically be submitted for all transactions of certain types and size (above a certain threshold), for example:
  - The exchange and/or conversion of cash in amounts equivalent to at least NIS 50,000.
  - The deposit of cash in an account or withdrawal of cash from it, the transfer of cash abroad or the receipt of cash from abroad, the issue of a bank check, or the purchase of travelers' checks, any of these in amounts equivalent to at least NIS 200,000.
  - The deposit of foreign-currency checks or international transfers in amounts equivalent to at least NIS 1,000,000.

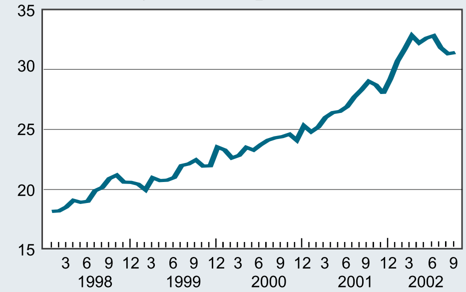
  2. A discretionary report on activities perceived by the banking corporation as being extraordinary, such as:
  - activity in an account which appears to have been performed in order to circumvent the transaction reporting requirement above;
  - the operation of an account on behalf of someone else, without the appropriate declaration having been made;
  - a transaction in an account performed by someone with power of attorney who is not registered in the account as an authorized signatory.
  - transactions in an account in which monies and securities are withdrawn close to the time they are deposited, other than in the ordinary course of business;
  - a transaction which is atypical because of its size or the type of transaction;
  - transfers to or from abroad without identification of the counterparty.

The banking corporation is forbidden from revealing the existence of such a report.

The order imposes obligations on the banking corporations which require them to prepare themselves in the computer field, (protecting the information, expanding records, the interface or existing software), training, and drawing up forms and procedures. It will therefore come into effect at the earliest a year from the date of its publication in Reshumot (the Official Gazette), about the beginning of 2002. The Order also sets an additional period for the completion of identification particulars regarding accounts already existing.

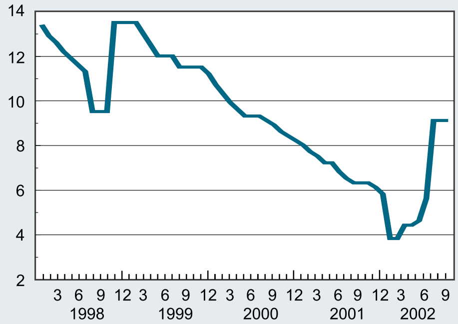
*CURRENT DATA**

Money Supply-M1[a] January 1998–September 2002

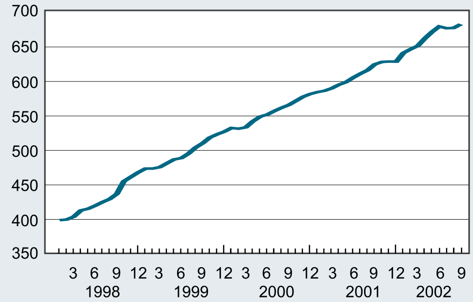


[a] Cash held by the public and demand deposits.

Bank of Israel "Headline" Interest Rate, January 1998–September 2002

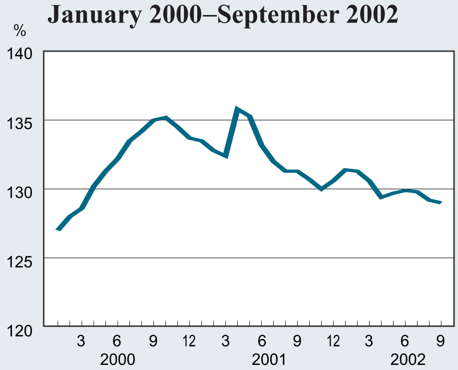


Total Credit–C3,[a] January 1998–September 2002

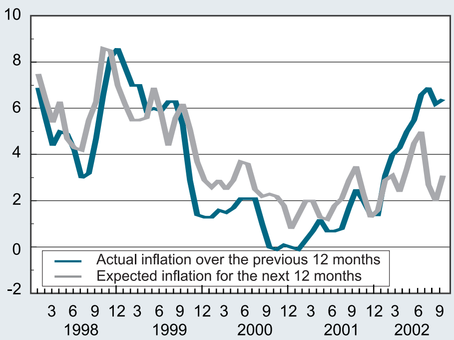


[a] Indexed and unindexed local-currency credit, and credit in or indexed to foreign currency.

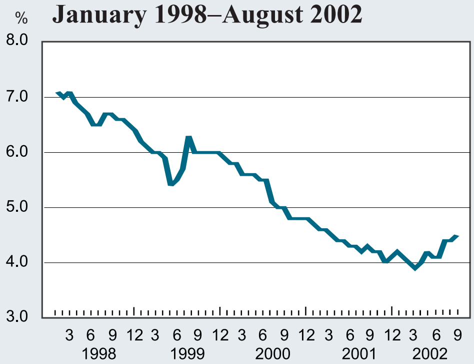
State-of-the-Economy Index, January 2000–September 2002



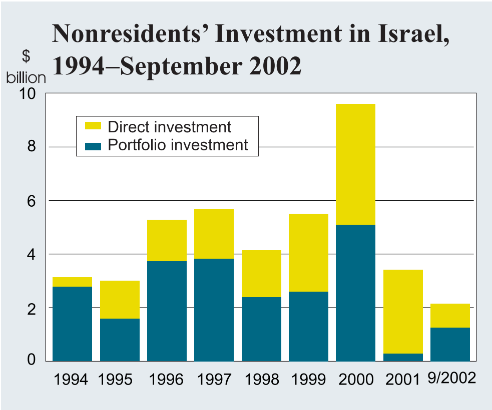
Inflation: Expectations and Actual, January 1998–September 2002



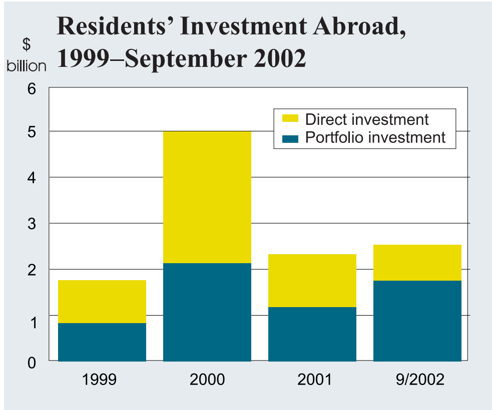
Banks' Interest-Rate Margins, January 1998–August 2002



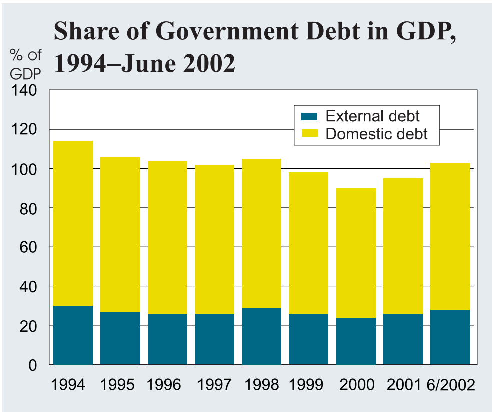
* Bank of Israel data.



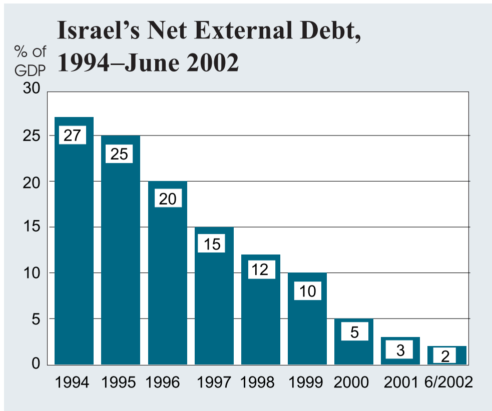
Nonresidents' Investment in Israel, 1994–September 2002



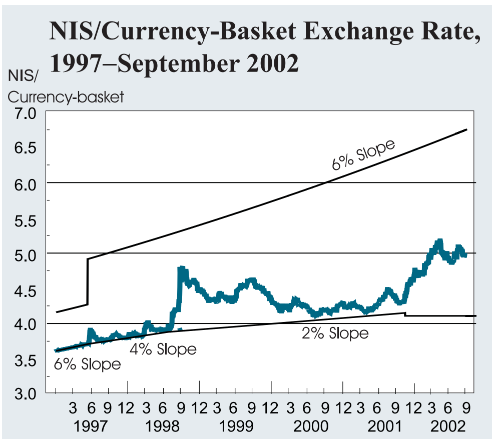
Residents' Investment Abroad, 1999–September 2002



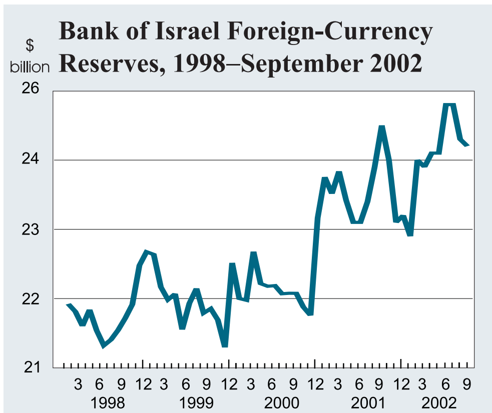
Share of Government Debt in GDP, 1994–June 2002



Israel's Net External Debt, 1994–June 2002



NIS/Currency-Basket Exchange Rate, 1997–September 2002



Bank of Israel Foreign-Currency Reserves, 1998–September 2002