Chapter 4
The Financial System

- The trends in the financial markets remained favorable in 2006 and the financial system maintained its stability despite external and domestic shocks.
- Notable developments in 2006 included continued upturns in the equities market, declining bond yields as real long-term interest fell to a historical low, currency appreciation against the dollar coupled with relative calm in the foreign-currency market, and continued growth in corporate issues, foremost of bonds.
- Auspicious macroeconomic conditions and structural reforms made the market more liquid and tradable amidst increasing involvement of long-term institutional and foreign investors. The dominance of banks in financing the business sector and controlling the public's savings by means of provident funds, mutual funds, and management of deposits decreased gradually but steadily.
- These developments, coupled with a decline in credit risks, supported continued improvement in the resilience of the banking system. However, Israel's banking system has lower capital ratios than corresponding systems in other developed countries. Insurance companies' resilience slipped slightly despite the continued general economic improvement, as capital ratios declined and risk assets increased.
- Given the major changes that the financial system has undergone in recent years, developments and risks must be monitored regularly in order to identity needed adjustments. Concurrently, long-term institutional investors, whose involvement in financing the business sector and managing the public's assets has increased greatly due to the reforms, should be placed under stronger supervision.

1. MAIN DEVELOPMENTS

The trends in the financial markets remained favorable in 2006 and the financial system maintained its stability. Notable developments during the year included continued upturns in equity prices after three years of steep and steady increases; a decline in bond yields relative to the end-of-2005 level, appreciation of the NIS against the dollar and the basket of currencies amidst sound performance of and relative calm in the foreign-currency market, and continued increase in trading turnover and liquidity in the financial markets, amidst continued low levels of asset-risk indicators and improvement in the banks' resilience.

The trends in the financial markets remained favorable in 2006 and the financial system maintained its stability.

The stability in 2006 is noteworthy in view of the external and domestic shocks that occurred during the year, and is a product of the favorable macroeconomic conditions currently in the market.

The stability in 2006 is noteworthy in view of the external and domestic shocks that occurred during the year. The most salient shocks, in the order of their occurrence, were the illness of the prime minister, the victory of Hamas in the Palestinian Authority elections, Israel's own general elections, a shock to the emerging-market economies, and the war in Israel's north. Despite the severity of each of these events, their effect on the markets was short-lived and the markets functioned soundly amidst lively trading during the events themselves. The sound performance of the markets throughout the year, despite the shocks, traces to the supportive effects on financial stability of the positive domestic macroeconomic conditions in recent years. The most important factors in this context include rapid growth of the business sector, the improvement in its financial strength, and macroeconomic policies that aim to reduce uncertainty and enhance stability by maintaining price stability, upholding fiscal discipline, and lowering the government deficit and debt. Additional noteworthy factors are the important structural reforms in recent years, which are helping the domestic markets to become deeper and more efficient, as evidenced in steeply rising turnover and continued improvement in indicators of market depth. The improvement in the environment and strength of the domestic economy were reflected in the decisions of two international rating firms to raise Israel's credit outlook—an indication of foreign investors' confidence in the stability of the domestic economy—and the various risk indicators that the markets broadcast. The latter, after spiking in response to adverse events, returned by year's end to their beginning-of-year level if not lower.

Structural reforms of recent years have transformed the domestic financial system.

The structural reforms in recent years—mainly the Bachar reform, the pension reform, the tax reform, liberalization of regulations pertaining to institutional investors, and the bond-market reform—have transformed the domestic financial system. Pursuant to the reforms, the dominance of the banks in financing the business sector and their control of the public's savings by means of provident funds, mutual funds, and management of deposits has been declining gradually but steadily. The banks responded quickly to the Bachar reform recommendations, transferring the management of all mutual-fund assets to insurance companies, foreign entities, and domestic brokers. Transactions for the transfer of ownership of most provident-fund assets were concluded although not implemented. Long-term institutional entities such as pension funds are becoming increasingly involved in the capital markets, thereby enhancing the markets' stability, liquidity, and tradability. The tax reform has made the public's investment decisions more rational: due to the equalization of tax rates, the public is much less inclined to invest in bank deposits and more strongly attracted to domestic and foreign tradable assets.

Favorable trends provided the background for the continued improvement in the resilience of the banking system, though the resilience of the insurance companies diminished, despite continued improvement in the economic situation.

Foreign involvement in the domestic financial markets has also risen in view of globalization and the aforementioned reforms, which created investment opportunities for nonresidents and enhanced the allure of the domestic financial markets by making them open and competitive.

The favorable trends in the financial system's operating environment provided a background for the continued improvement in the resilience of the banking system, as evidenced in a slight improvement in capital ratios and credit-risk indicators. However,

Table 4.1
Main Stability Indicators of Israel's Financial System 2000–06

(percent)

	2000	2001	20 02	2003	2004	2005	2006
A. The global environment							
Rate of growth of global GDP[a]	4.8	2.6	3.1	4.1	5.3	4.9	5.1
Increase in world trade[a]	12.4	0.2	3.4	5.3	10.6	7.4	8.9
Emerging markets' bond index (EMBI)	774	837	775	562	437	317	200
B. The domestic environment							
Robustness of the business sector (quoted companies)[b]							
Financial leverage (debt/balance-sheet ratio, end-of-year)	59.1	61.1	64.4	61.8	61.1	61.9	61.9
Return on equity	3.0	-8.6	-3.2	5.2	11.6	15.0	11.3
Debt burden (ratio of repayment of principal and interest to operating profit)	103.7	162.3	134.8	103.5	77.6	75.2	79.3
Households' robustness[b]							
Credit burden (credit/disposable income ratio)	78.7	83.8	88.1	81.9	88.5	88.3	85.8
The economy's financial strength (end-of-year)							
Israel's risk premium (the CDS spread)	---	---	190	60	41	30	25.0
Net external debt/GDP ratio[b]	4.7	0.7	-2.2	-5.7	-9.5	-19	-21.0
Government debt/GDP ratio[b]	88	90	97	100	99	95	86.0
C. Value of financial assets							
Risk indices (annual average)							
Probability of exceptional depreciation	---	---	17.2	14.5	1.9	1.1	2.0
Standard deviation of changes in:							
(Implied) exchange rate	---	---	11.9	10.4	6.2	6.3	7.3
General share-price index	21.6	17.0	15.8	16.6	12.9	12.4	13.0
Unindexed bonds	1.6	2.1	6.0	3.3	1.5	1.3	1.2
Prices and returns (in annual terms)							
Depreciation of NIS against the dollar	-2.7	19.3	7.3	-7.6	-1.6	6.8	-8.2
Rise of the general share-price index	2.0	-6.9	-20.2	55.7	17.4	33.1	5.4
Yield to redemption of Shahar 5-year bonds (period average)	8.6	6.9	9.0	8.4	6.6	5.6	6.0
D. Resilience of the financial system							
The banking system[b]							
Risk-weighted capital ratio	9.2	9.4	9.9	10.3	10.8	10.7	11.2
Balance-sheet credit risk/GDP	85	92	96	91	86	84	79.6
Ratio of problem loans to total credit	6.9	8.2	9.9	10.5	10.5	9.5	8.7
of which Nonperforming problem loans			2.4	2.6	2.5	2.3	2.1
Insurance companies[b]							
Capital/assets ratio[c]	4.9	4.4	4.7	5.3	5.3	5.6	5.1
Share of risk assets in total assets	14.4	16.2	17.7	22.1	22.1	35.6	38.9

Table 4.1 (cont.)
Main Stability Indicators of Israel's Financial System 2000–06

(percent)

	2000	2001	2002	2003	2004	2005	2006
Provident funds[b]							
Share of liquid accounts in total liabilities	41.2	40.6	44.1	45.1	47.4	49.9	51.3
Ratio of liquid assets to liquid liabilities	12.1	8.2	7.7	10.9	13.1	23.6	23.3
The funds' share in the government indexed-bonds market	50.3	51.8	46.6	45.7	43.5	39.7	37.7
Share of risk assets in total assets	30.4	30.1	29.2	34.7	38.5	48.4	53.6
Market liquidity							
Rate of change in total daily turnover in the markets	3.3	21.6	31.2	-4.8	9.0	35.6	26.2
Bid-ask spread in NIS/Forex market	0.07	0.08	0.11	0.15	0.10	0.08	0.08
E. Financial activity[b]							
Ratio of credit to business-sector product	114	129	138	133	132	137	134
Rise of nonbank credit to the business sector	5.6	8.4	10.8	9.1	27.1	31.1	19.8
Share of deposits in banks and savings in bank-owned provident funds in total private-sector assets.	56	54	51	49	46	43	41

[a] The data for 2006 are estimates.

[b] The data for 2006 are for January to September.

[c] Including assets held against with-profits schemes, in which the risk is borne by the participant and not by the insurance company.

SOURCE: Based on data of the Capital Markets, Insurance and Savings Division of the Ministry of Finance.

capital ratios in the Israeli banking system are lower than in other developed countries and the credit-risk indicators remain high relative to the pre-recession years. Provident funds enhanced their resilience slightly by improving their rate of coverage of liquid liabilities. The resilience of the insurance companies, however, declined in 2006 after several years of improvement due to a decline in capital ratios and an increase in risk assets (Table 4.1). Beyond the effect of cyclical factors, the solidity of the financial institutions in recent years was influenced by the reforms, which reduced total credit risk and helped to improve credit dispersion among institutions and market liquidity.

During the year the shekel strengthened against the dollar by 8.5 percent, influenced by the weakening of the dollar worldwide, the increase in the current account surplus and continued improvement in underlying economic conditions.

The shekel gained 8.5 percent against the dollar during the year reviewed. The main factors behind the appreciation include the weakening of the dollar around the world, foremost against the currencies of developed countries; a perceptible increase in the current-account surplus to a record level; continued improvement in fundamentals; and the consolidation of confidence in macroeconomic policy. These factors continued to support foreign direct investment in Israeli firms, which attained record levels in 2006. The acceleration of foreign direct investment and the significant increase in the

current-account surplus created underlying appreciation pressure. During most of the year, the effect of these factors on the exchange rate surpassed that of capital exports by residents.

The equities market remained bullish in 2006 after three years of steep and steady price increases. At year's end, shares accounted for 22 percent of the public's portfolio, twice as high as the fraction at the end of 2002. Despite the rising prices, the presence of households in the market, directly or via mutual funds, remains marginal. However, their exposure to shares increased via institutional investors, which raised the proportion of shares in their portfolios, and via the acquisition of exchange traded funds (ETFs). The latter, valued at NIS 13 billion at year's end, have become a popular investment vehicle among institutional investors and the public at large in the past two years.

The equities market remained bullish after three years of steep and steady price increases.

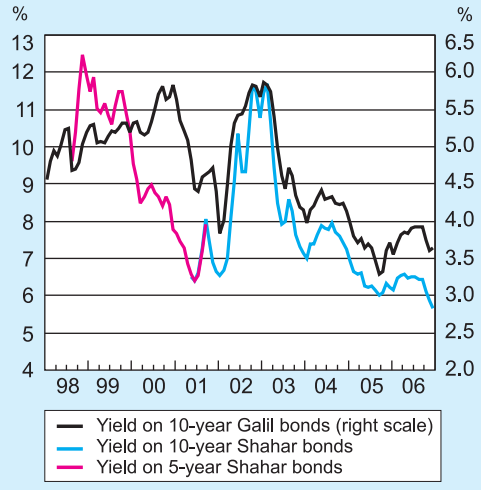
Real long-term domestic interest has been declining since 2003 and fell to a historical low at the end of 2006: 3.6 percent for 20 years (Figure 4.1). The downturn in real interest despite rapid growth is being encouraged by the increase in government saving, which reduces the need to finance the government deficit; the upturn in private saving, which whets demand for financial assets; globalization and capital inflows, which strengthen the relationship between the real domestic interest rate and the lower global rate; the structural reforms; and the decrease in Israel's risk premium.

The real long-term domestic interest rate has been declining since 2003 and fell to a historic low at the end of 2006.

Government-bond yields declined in 2006 relative to their end-of-2005 level but the trend of change in yields was uneven during the year. The main factors that affected yields in 2006 were fiscal credibility, reflected in continued narrowing of the government deficit and debt; continued implementation of structural reforms; the acceleration of growth; the trend in global interest rates; domestic political and security developments; and steep changes in estimates of inflation risks during the year.

Yields of government bonds declined this year relative to their end-of-2005 level though the trend of change in these yields was not consistent throughout the year.

Figure 4.1
Yield to Maturity on Indexed (Galil) And Unindexed (Shahar) Bonds, 1998-2006 (monthly averages)



SOURCE: Bank of Israel.

Implementation of the government-bond market reform began in 2006 as the Ministry of Finance appointed a group of domestic and foreign financial institutions as primary dealers in government bonds. In return for their undertaking to quote prices for bonds, these institutions were awarded an exclusive status in Finance Ministry auctions and were allowed to borrow government bonds from a special facility that the ministry established. Although the implementation of the reform began only in September, its effect on the government-bond

Implementation of the government-bond market reform began this year, as primary market makers in government bonds were appointed.

market was considerable by year's end: in the last third of the year, trading volumes in government bonds increased by around 70 percent and foreign involvement in issuing, trading, and holding of government bonds increased immensely, concurrent with a decline in yields.

Borrowing by the business sector through bonds grew even more in 2006, after accelerating in 2005.

Corporate capital raising continued to expand in 2006, foremost in issues of tradable and nontradable bonds. As in previous years, most issues were made by large companies with ratings higher than A. The increase in issuing activity was facilitated by the cutback in government issues in recent years, which freed resources for the business sector, and by the structural reforms—mainly the pension reform and the easing of regulations governing institutional investment—that stimulated demand for bonds. The auspicious macroeconomic conditions and low interest rates also abetted corporate issuing. The development of the corporate-bond market helped to reduce the banks' dominance in financing the business sector, enhanced competition in the credit industry, and narrowed credit margins.

Although credit continued to expand in the economy, the financial institutions' credit risks did not worsen as the increase in credit was matched by continued improvement in credit quality.

Although outstanding credit continued to expand in 2006, the financial institutions' credit risks did not worsen because the increase in credit was matched by continued improvement in credit quality. The latter development was occasioned by an improvement in the credit-worthiness of borrowers (firms and households) and greater dispersion of risks among creditors due to the accelerated transfer of credit from banks to nonbanking institutions. The changeover caused the proportion of risk assets in the institutions' total assets to climb to a very high 41 percent. This development demands attention in view of the institutions' lack of experience and knowledge in managing credit risks, in contrast to the banking system.

Despite great progress in recent years, additional reforms are still needed, which would be expected to contribute toward the sophistication of the financial markets and their integration with the global markets.

Notwithstanding the many changes that the financial system has undergone in recent years, additional reforms are still in various planning and implementation stages. Once they are implemented, they are expected to give the domestic financial markets another push toward greater efficiency and integration into the global system. Furthermore, measures are needed to enhance competition among banks for the household sector, impose regular monitoring of financial-system stability, and identify adjustments that the system needs.

The implementation of the Bachar reform has created the need for further measures relating to regulators' responsibilities, including:

— Tougher supervision of the stability of nonbanking financial institutions, foremost insurance companies, given the increase in these institutions' exposure to credit risks and the growing role of insurance companies in managing the public's assets.

— Dealing with conflicts of interests among the nonbanking financial institutions, in view of their growing involvement in the financial system as underwriters, creditors, and managers of the public's savings.

— Formalization of coordination among regulatory authorities.

2. CHANGES IN FINANCIAL INFRASTRUCTURE, LEGISLATION, AND REGULATION

The government bond market has undergone important reforms in recent years, which have enhanced both liquidity and tradability.

The structural reforms in recent years—chiefly those relating to the pension industry, the tax system, the liberalization of institutional investors' activities, the bond market, and, recently, the Bachar reform—have transformed the domestic financial system and helped it advance toward greater competitiveness, efficiency, and stability. (The implications for the financial markets of the Bachar reform and other changes in legislation, regulation, and taxation during 2006 are described in subsections a, b, and c below.) The rapid changes that the reforms induced in the financial markets, especially due to the swift implementation of the Bachar reform, entail regular monitoring of the structural equilibration of the financial system in order to pinpoint the adjustments that the system will need.

Although the domestic financial system has made progress, it is still flawed by a large degree of concentration. To mitigate this defect and enhance the financial system's competitiveness and efficiency, progress in additional reforms is needed.

a. Financial-system structure in view of the "Bachar legislation"

In 2006, the financial system underwent a major restructuring due to the capital-market reform that began in 2005—the "Bachar legislation."[1] The main purpose of the reform is to make the financial system **less concentrated** and to reduce **the dominance of the banks**. The changes brought on by the legislation in long-term saving, mutual funds, and financial and pension consultancy are described below.

The swift implementation of the Bachar reform clause that deals with the separation of provident funds has brought rapid and great redistribution of control among the various players in the financial system in the field of long-term savings.

In **long-term saving**, the banking system responded to the Bachar legislation with alacrity. Transactions to implement the section of the reform that deals with banks' divesting themselves of the provident (and mutual) funds were carried out within a few months and most sale transactions were concluded during the second half of 2005.[2] This sequence of events swiftly led to a major redistribution of control of long-term saving in the financial system. The "Bachar legislation" and the pension reform induced a significant decrease in the share of banks in long-term savings management and an impressive increase in the role of insurance companies in this activity (Table 4.2). Thus, the share of the five large banks in long-term savings management plummeted from 52 percent in 2003 to only 19 percent at the end of 2006 and that of the five largest insurance companies climbed from 21 percent to 47 percent. The quick restructuring of the financial system makes it difficult at this stage

[1] The "Bachar legislation" comprises three statutes that were passed into law in July 2005: the Regulation of Financial Services (Provident Arrangements) Law, the Regulation of Financial Services (Engaging in Consultancy and Marketing of Pension Products) Law, and the Enhancement of Competition and Mitigation of Concentration and Conflicts of Interests in the Capital Market Law. The last-mentioned statute included many indirect amendments to other laws, including the Regulation of Insurance Law, the Banking (Licensing) Law, the Banking Ordinance, and the Banking (Customer Service) Law.

[2] Most of the transactions are awaiting approval from the Ministry of Finance.

Table 4.2
Estimate of the Changes in Control of Long-Term Savings[a] and Mutual Funds Resulting from the Pensions Funds Reform and the Adoption of the Bachar Committee Proposals, 2003–2006[b]

(percent)

	Total assets (NIS billion)	The largest five banking groups						The largest five insurance groups						Other financial institutions	
		Total	Hapoalim	Leumi	Discount	Beinleumi	Mizrahi-Tefahot	Total	Migdal	Clal	Phoenix	Menorah	Harel	Total	of which: Foreigners
Total long-term savings[a]															
December 2003	260	52	22	14	10	3	4	21	7	5	3	2	3	27	0
December 2004	293	50	21	13	9	3	4	28	9	6	4	6	3	22	0
December 2005	355	45	19	12	9	2	3	29	9	7	4	6	3	26	0
December 2006[b]	386	19	13	1	2	2	0	47	13	12	8	7	8	35	7
Mutual funds															
December 2004	101	84	34	29	13	4	5	2	1	1	0	0	0	13	0
December 2005	125	77	30	27	12	4	4	3	1	2	0	0	0	21	0
December 2006[b]	111	1	0	0	0	1	0	41	8	14	2	4	12	58	33

[a] As in the definition usd by the Bachar Committee, long-term savings include with-profit life insurance schemes, the new and general pension funds, and all the provident funds and advanced study funds.

[b] Although only some of the provident funds and mutual funds were actually sold in 2006, the distribution of long-term savings and mutual funds among the different types of financial institution was calculated for 2006 on the assumption that the sales will take place.

SOURCE: Based on data of the Capital Markets, Insurance and Savings Division of the Ministry of Finance and reports on new transactions.

to determine whether the main goals of the reform, intended among other things to reduce concentration and make the system more competitive, have been attained. The banks' dominance in long-term savings management has contracted significantly, a welcome development that helps to enhance competition and mitigate conflicts of interest in the financial system. However, insurance companies' control of the long-term savings industry has intensified greatly. Thus, rapid action is needed to toughen the regulation of these companies and adjust it to standards that are conventional vis-à-vis the banking system.

The banking system, which controlled about 80 percent of the mutual fund market, sold most of its funds so that by the end of the year, its market share verged on zero.

The mutual-fund market underwent a revolution shortly after the Bachar legislation passed. The banking system, which had controlled some 80 percent of the mutual-fund market, responded to the legislation swiftly in this setting, too, by selling off most of the funds that it had held so that its share in the market verged on zero by year's end. Some 40 percent of asset value sold was acquired by insurance companies; the remainder was acquired by other institutions (including foreign entities). The sale of Lahak Mutual Funds Management by Bank Hapoalim was concluded in December 2006. The transaction made the buyer, the Prisma group, controlled by the Markstone Fund—a private entity owned by foreign investors—the largest player on Israel's mutual-fund scene, holding a 19 percent aggregate market share and managing NIS 21 billion in assets. This rapid change—the transfer of a major portion of control of the mutual-fund industry from banks to other private entities, including foreign ones—had a mitigating effect on concentration and conflicts of interest in the capital market. In regard to the mutual-fund market, too, however, it is difficult to analyze the results of the reform as long as the structure of the system has not yet stabilized. Indeed, in the first post-reform year, the share of money managed by mutual funds decreased significantly due to withdrawals of NIS 20 billion. (For an expanded discussion, see the Assets Portfolio section.) The magnitude of money flows in the public's portfolio of financial assets underscores the need to strengthen the financial consultancy system so that customers may obtain objective advice as the law requires.

Even though the unexpectedly fast sale of assets by the banks indicates that the reform has succeeded, several developments are diminishing its impact: the rapid outflow of a large share of the public's assets from the mutual funds; changes in the provident-fund industry that reduced potential contributions to such funds; the rapid development of structured-deposit activity in the banking system; and an upturn in the extent of portfolio management by bank-controlled companies.

As for **financial and pension consulting and marketing**, the Regulation of Financial Services (Engaging in Consultancy and Marketing of Pension Products) Law—part of the Bachar legislation—aims to avert conflicts of interests by forcing entities in the capital market to choose between marketing and consulting. Since the Bachar legislation passed, the Ministry of Finance has approved many applications from individuals for pension-product marketing licenses but has approved only a few applications for pension-consultant licenses. In regard to the banking system, it was determined that a bank that sells off the provident funds that it managed may serve as

a pension consultant (but not, for the time being, as an insurance consultant). Since the banks quickly sold off their provident funds and met the terms of the law, most of them moved quickly to make preparations for entry into the pension consulting industry. Thus far, only one medium-sized bank has received a license to serve as a pension consultant (for the self-employed).

For the time being, there is much uncertainty about how the pension marketing/consulting market will settle in terms of its players and, in the main, the possibility that the banks will also become insurance consultants. There is also no certainty about the success of the attempt to erect a wall between the consulting and marketing functions and about whether financial companies can serve as consultants when the fees are paid only by customers and not by producers.

b. Main changes in legislation, regulation, and taxation in 2006

In March 2006 the Financial Contracts Law, 5766-2006, dealing with repo contracts and netting, was passed.

The Financial Contracts Law, 5766-2006, dealing with repo contracts and netting, was passed in March 2006.[3] The purpose of the statute is to provide the legal and business certainty that Israel's financial market needs in order to function soundly and to facilitate activity in the international financial arena by adjusting the framework of transactions to international norms. The kinds of certainty that are needed relate to the classification of securities repo contracts and the validity of frame contracts—provisions that allow the parties to complete all transactions within the frame agreement in the event of certain occurrences and to offset the value of all transactions between the parties, so that in the final reckoning only one party has to pay the other a certain sum under the contract (netting). The agreement is to apply to transactions in derivatives and securities repo contracts. Legal certainty about the classification of the transaction solves one of the problems in developing the repo market in Israel, a form of money market that is one of the largest, most liquid, and most important in the world.

The tax reform established a uniform tax rate of 20 percent on **capital gains, interest, and dividends** as of the beginning of 2006. The new measure allows the withholding of tax from gains and permits the offsetting of losses on securities transactions from gains on other securities, interest, or dividends received.

Preparations for the activation of an intra-day clearing system continued.

Preparations for the activation of an RTGS[4] system, to be known as Zahav, continued in 2006. The system, scheduled for activation by the middle of 2007, will permit final same-day clearing by all clearinghouses in Israel and will process all large payments and other urgent payments that will be transferred to it directly, i.e., not via existing clearinghouses. To prepare for the transition to Zahav, the settlement process was reformed and the banking business day was extended. In 2005, the possibility of retroactive recording in accounts with banks and the Bank of Israel was abolished

[3] In netting, the exposure of a party to a contract to the counterparty is expressed in net terms after the offset of all transactions within the frame agreement.

[4] RTGS—Real Time Gross Settlement.

and electronic clearing of checks became universal. From February 2006, the banking business day was extended to 18:30 instead of 15:00.

Securities clearing, performed mainly by the Stock Exchange, underwent many changes recently in order to adjust it to accepted international standards. The importance of the payment and settlement system for the sound performance of the financial system and the economy, and the changes that have been introduced in this system, underscore the need for a specific statute that would regulate the operations and supervision of clearinghouses.

Regulations for applying the Underwriting Law were passed.

The Knesset passed the **Underwriting Law** in 2005 and the regulations needed to apply it were enacted in February 2007. The goals of the underwriting reform are to bring Israel closer to international standards and to improve market efficiency and competition. The main changes are the following: institutional investors may be given an allocation of securities within the framework of a public offer with no need for bidding (similar to the conventional American method) and discretion about price and quantity resides with the underwriters. The requirement of advertising bidding prices in prospectuses was abolished; it became possible to offer (but not to sell) securities to the public after the road show (the submission of a draft prospectus to the Securities Authority). A new player in the issues market—the distributor—was established. Criteria as to the identity and requirements of an underwriter were set forth. A limit was imposed on the size of a sale by an underwriter to related institutional investors in the event that the underwriter is given discretion in the allocation of the securities. Rules were eased in order to allow foreign underwriters to operate in Israel.

In June 2006, the Israel Accounting Standards Board decided to adopt the International Financial Reporting Standards (IFRS) from Q1-2008 onward. Since 2005, the IFRS have been adopted by more than ninety countries, including the EU members and Australia. Although standards in the U.S. are set in accordance with a local mechanism (the FASB), the U.S. has decided to adopt the international standards at some future time—in 2011, according to the current assessment.

In June 2006, the Israel Accounting Standards Board decided to adopt the International Financial Reporting Standards (IFRS) from the first quarter of 2008.

The IFRS establishes less reliance on objective indicators and greater reliance on valuation estimates, worth assessments, and board estimates. The advantages are the following: globalization in the capital market (a single accounting language), greater transparency vis-à-vis investors by disclosing different and new aspects of company activity, greater efficiency in investing in foreign companies, facilitation of corporate mergers, use of international standards in listing securities for trading abroad, and lower cost of issuing abroad. Israel is adopting the international standards in a three-phase process: beginning of 2006, beginning of 2007, and 2008.

c. Main requisites for the continued strengthening of the financial infrastructure

Several important actions are needed for the **continued development of market infrastructure**: (a) continued development of the repo market. Now that the Financial Contracts Law has passed (in March 2006), regulations are needed in regard to frame

The major steps required for the continued development of market infrastructure are: development of the repo market; activation of an intra-day clearing system; adoption of the international financial reporting standards; and the implementation of Basel 2 by the banking system.

contracts and the clearing, accounting, and taxation of transactions, and other barriers to the development of this important market have to be eliminated; (b) continued preparations for activation of the RTGS system in 2007; (c) adoption of the IFRS from 2008 onward; and (d) preparations for the implementation of Basel 2 by the banking system. These changes are expected to enhance the efficiency and the global integration of the domestic financial markets.

Concurrently, in view of the many changes that the financial system has been undergoing in recent years, several measures related to **regulators' responsibilities** for the reinforcement of the financial infrastructure and the maintenance of system stability are needed. The main measures follow: (a) to assure the success of the Bachar reform, the new entities that are claiming a significantly growing share in the management of the public's assets, especially insurance companies, need to be placed under tougher supervision. For this purpose, the Commissioner of Insurance should be given greater independence and stronger enforcement and control powers vis-à-vis these companies by being declared a separate authority. (b) It is necessary to tackle conflicts of interest among the nonbanking financial institutions in view of their growing involvement in the financial system as underwriters, creditors, and managers of the public's savings. (c) The need for adjustments in regard to financial and pension consulting and marketing should be considered. (d) Measures to enhance competition among the banks for the household sector are needed. (e) Coordination among the three supervisory authorities should be formalized in a memorandum of understanding. (f) The wall between banks and the insurance industry should be reinforced by not allowing insurance companies to issue defined-return savings schemes. (g) Legislation to regulate various aspects of operations and supervision of all types of payments and settlement systems is needed. (h) The public needs additional "financial education" and should be made more aware of the risks in its portfolio of assets; it also needs information and data that will enable it to monitor not only returns and fees but also risks.

To reinforce the financial infrastructure and to maintain stability of the system, several steps must be taken regarding regulators' responsibilities.

There should be greater regulation of financial institutions.

Practical supervision of financial institutions should be toughened in the following ways, among others: (a) encouraging banks and insurance groups to adopt a countercyclical policy, using the upward period in the business cycle and their strong earnings to continue improving their capital adequacy; (b) applying tougher enforcement of sound credit-risk management by the insurance groups, auditing credit-portfolio quality with greater stringency (notwithstanding the considerable improvement that has been made in supervising insurance companies' activities), and supervising the insurance companies' liquidity-risk management and compliance with capital-adequacy requirements.

3. THE FINANCIAL MARKETS

a. The bond market

(1) Government bonds

In recent years, the government bond market has undergone important reforms, which have enhanced liquidity and tradability in the market.

Tradable government bonds on the Tel Aviv Stock Exchange were worth NIS 265 billion at the end of 2006, almost unchanged from the end of 2005. The total was composed of CPI-indexed government bonds (43 percent), fixed-interest shekel bonds (39 percent), and floating-interest bonds (18 percent) (Table 4.3).

The government-bond market has undergone important structural reforms in recent years in order to eliminate distortions that impaired its development. For example, tax reforms did away with distortions among different kinds of bonds and the government made much less use of nontradable bond issues as a way of financing its debt. Furthermore, fewer tradable series were issued and the financial value of each series was increased.

The credibility of the macroeconomic policy in recent years, coupled with price stability, has made it possible gradually to increase the share of unindexed bonds in issued debt and to issue both indexed and unindexed debt to longer terms. Thirty-year CPI-indexed government bonds and twenty-year unindexed bonds were issued for the first time in 2006—an important development that will eventually allow the

Table 4.3
Total Market Value of Securities Traded on the Tel Aviv Stock Exchange, 2002–06

	2002	2003	2004	2005	2006
	(NIS billion, at current prices)				
Total	460.8	619.0	752.1	963.5	1093.9
As share of GDP	89.0	118.1	137.0	165.5	175.3
Shares and convertibles	201.3	306.0	375.1	519.1	594.6
Government bonds	197.1	232.7	252.9	261.4	265.1
Makam	45.3	56.1	75.4	87.2	96.9
Private bonds	16.0	22.2	42.2	87.5	122.7
ETF[a]	0.3	1.2	5.1	7.0	12.9
Futures contracts	0.7	1.0	1.4	1.4	1.7
	Composition of government bonds by indexation base, percent				
CPI indexed	49.7	46.4	44.6	42.0	42.6
Foreign currency indexed	7.7	2.5	0.1	0.1	0.1
Unindexed fixed interest Shahar	23.6	30.5	32.7	36.0	38.9
Unindexed fixed interest Gilon	18.9	20.7	22.6	22.0	18.4
	Composition of private bonds by indexation base, percent				
CPI indexed	85.0	72.0	59.8	70.5	71.2
Foreign currency indexed	8.1	20.0	32.8	24.4	22.8
Unindexed	6.9	8.0	7.5	5.1	6.0

[a] Exchange traded funds.
SOURCE: Based on Tel Aviv Stock Exchange data.

private sector to issue bonds to corresponding terms. These issues were well received in the market and there was no need to offer a significant extra yield on account of the lengthier term. Notably, the establishment of a yield curve of risk-free bonds to a wide range of terms creates an infrastructure for the development of nonbanking financing alternatives for the business sector by establishing a handy benchmark for the determination of credit cost to issuers and investors in business firms.

Unindexed bond issues are accepted in capital markets around the world. The upturn in the share of such issues in the domestic market, coupled with globalization, is an important way to step up foreign involvement in the domestic market.

The aforementioned developments enhanced the depth of the government bond market; average daily trading turnover climbed from NIS 0.7 billion in 2002 to NIS 1.2 billion in 2006 (through August). The market-maker reform that began in September (Box 4.1) caused average daily turnover in the last third of the year to advance another rung, to NIS 2.1 billion including NIS 0.3 billion in the MTS system (Table 4.4).

The increase in trading volume was accompanied by a decline in the relative-yield curves as against the end of 2005, although the trend of change in yields was uneven during the year.

The increase in turnover was evident both unindexed bonds and CPI-indexed bonds, even though the latter were not traded in the MTS system. Despite the acceleration of their turnover, however, indexed bonds are much less tradable than unindexed bonds (Figure 4.2). This is because many indexed bond series are of low market value; most (almost 70 percent of market value) are held by long-term institutional investors and

Table 4.4
Average Daily Turnover[a] in Makam, Government Bonds, Shares and Foreign Currency, 2002–06

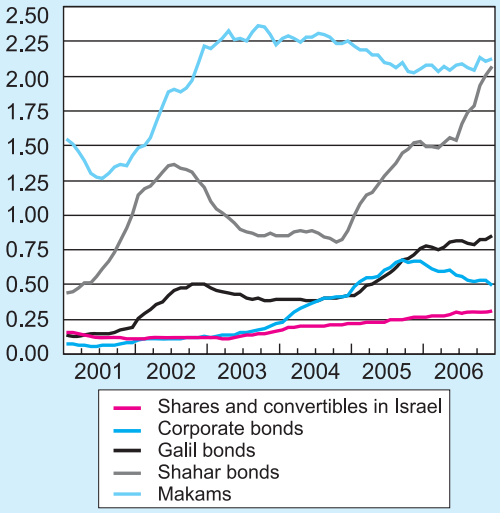
	Makam	*Shahar*	*of which* in MTS	*Gilon*	*Galil*	Total government bonds	Private bonds	Shares	Foreign currency[b]
	NIS million, at current prices								$ million
2002	371	301		116	234	651	9	242	1,525
2003	489	315		127	214	656	25	369	1,677
2004	622	468		140	262	870	68	625	1,648
2005	675	586		173	363	1,122	216	1,002	2,340
2006	801	1,111	255	165	388	1,664	273	1,452	3,029
2006									
Jan–Jun	755	649		156	370	1,175	252	1,489	2,813
July	804	975		152	308	1,435	239	1,534	3,516
August	636	921		119	283	1,323	216	1,118	2,868
September	812	1,313	136	119	409	1,841	268	1,246	2,846
October	982	1,643	342	242	464	2,349	285	1,437	3,042
November	735	1,276	360	191	422	1,889	326	1,720	3,839
Decfember	1,111	1,401	175	217	547	2,165	439	1,422	3,577

[a] In and outside the stock exchange.

[b] Volume of foreign currency turnover, including swaps, of foreign financial institutions, other customers and domestic banks.

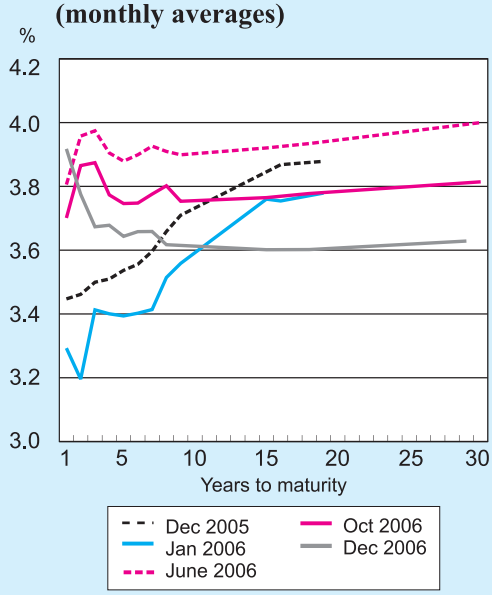
SOURCE: Based on Tel Aviv Stock Exchange data.

Figure 4.2
Velocity of Turnover in Securities Traded on the Tel Aviv Stock Exchange over Past 12 Months, 2001-06



SOURCE: Bank of Israel.

Figure 4.3
Yield Curve for CPI-Indexed Bond, December 2005 to December 2006 (monthly averages)



SOURCE: Based on Bank of Israel data.

nonresidents are hardly involved in them.

The increase in turnover in 2006 was accompanied by a further decline in the relative-yield curves as against the end of 2005, although the trend of change in yields was uneven during the year (Figures 4.3 and 4.4). The main factors that affected yield behavior in 2006 were fiscal credibility, reflected in continued narrowing of the deficit and the contraction in government issues; continued application of the reforms, the upturn in growth; the trend in global interest rates; domestic political and security developments; and abrupt changes in the estimations of inflation risks during the year.

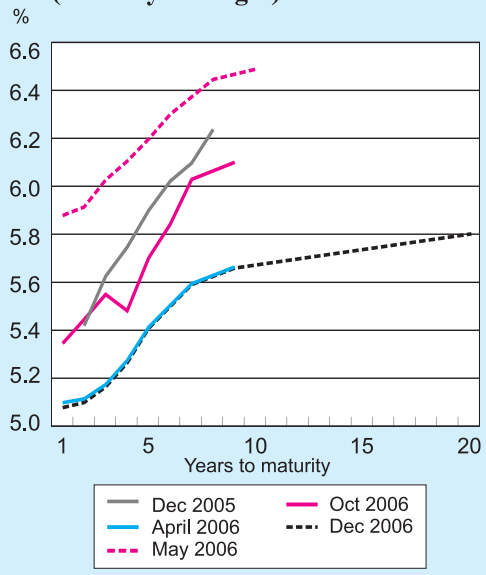
Thus, nominal yields drifted upward in the first few months of the year, propelled by expectations of an upturn in the actual inflation rate under the influence of the shekel depreciation against the dollar that began in 2005, the increase in prices of goods, and the acceleration of growth. The upturn in yields was abetted by an increase in domestic uncertainty—influenced by the Hamas victory in the Palestinian Authority elections and Israel's own election campaign—and rising yields abroad. Because the increase in yields abroad surpassed that in the domestic market, the nominal yield spreads in the financial markets narrowed to a mere 1.3 percentage point in May.

In the first few months of the year, nominal yields drifted upward, propelled by expectations of an upturn in the inflation rate and an increase in defense uncertainties.

Subsequently, domestic yields leveled off at a relatively high level

Further on in the year, yields leveled off at a high plateau.

Figure 4.4
Yield Curve for Unindexed Fixed-Rate Government Bond, December 2005 to December 2006 (monthly averages)



SOURCE: Based on Bank of Israel data.

In the fourth quarter it was recognized that the inflation environment was considerably lower than had been estimated, a development that supported a fall in nominal yields.

despite a steep decrease in yields abroad, foremost in the United States. As a result, the yield spread between Israel and abroad widened, evidently in response to the upturn in defense uncertainty upon the escalation of hostilities in the Gaza Strip and the war in the north.

In Q4, in view of currency appreciation coupled with a steep decline in prices of goods, it was increasingly realized that the inflation environment was much lower than had been estimated. Thus, expectations of a nominal rate cut gathered strength and yield curves fell steeply. This trend was supported by continued downturns in global interest rates and a stepwise increase in nonresident activity in the domestic bond market (see below). The interest spreads versus the rest of the world narrowed again in Q4, to levels even lower than those in May.

The nominal yield decrease in 2006 was evident across the full length of the yield curve. Yields at the short end of the curve were also affected by changes in the Bank of Israel interest rate, which climbed by 1 percentage point up to August and fell back by half a percentage point later in the year.

Real yields pursued a similar trend during the year until December, when only long-term yields declined and short-term yields rose precipitously due to a steep decrease in inflation estimates, making the slope of the curve negative.

Nonresidents became increasingly involved in the domestic bond market in 2006, mainly in Shahar bonds, in which market-making began in September.

Foreign involvement in the domestic bond market advanced powerfully in 2006 as net foreign investment in bonds climbed to $2.1 billion as against $0.5 billion in 2005. Most investment was in Shahar bonds, in which market-making began in September. The spread between unindexed shekel bonds and ten-year US Treasury bonds narrowed perceptibly in Q1 and Q4, the very times when net foreign investment increased greatly. Although nonresidents were more active in government bonds, their share of holdings in government bonds remains low relative to other emerging-market economies—1.2 percent in CPI-indexed instruments and 8.5 percent in unindexed fixed-interest bonds, as against 10–30 percent in other emerging-market economies.

Box 4.1
The government bond-market reform

In January 2005, the Knesset plenum passed Amendment 14 to the State Loans Law, creating the statutory basis for a comprehensive bond-market reform that got under way in 2006. The reform included changes in the primary market, in which government bonds are issued, and in the secondary market, where they are traded.

The primary-market reform: Before the reform, government bonds were issued in auctions that the Bank of Israel performed by means of a special auctioning system ("Shva"). The auctions were open to banking corporations, members of the Tel Aviv Stock Exchange, and additional entities such as mutual funds, insurance companies, and benefit- or pension-type provident funds. In June 2006, the auction system was replaced by an international system devised by Bloomberg and auction management was handed over to the Ministry of Finance. Concurrently, the Ministry of Finance appointed principal market makers for government bonds and ruled that, in Phase 1, 80 percent of unindexed fixed-interest bonds would be issued in separate auctions exclusively for principal market makers—eight international entities and ten domestic ones—that meet the Finance Ministry's threshold conditions. In return for this exclusivity, the market makers are required to purchase in the auctions a minimum quantity and to quote prices for the bonds in the secondary market, as explained in detail below.

Concurrently, issues of CPI-indexed bonds and the remaining 20 percent of unindexed bonds were made available to the entities that were entitled to participate in the auctions before the reform, as well as the market makers that Ministry of Finance appointed.

The secondary-market reform: Before the reform, most trading in government bonds took place on the Tel Aviv Stock Exchange, using the Retsef system. In Retsef, members of the Stock Exchange place buy and sell orders and the transactions are cleared using the Stock Exchange's clearinghouse. In September 2006, an additional arena for trading in the government bonds began to operate: an MTS international system. In MTS, only principal market makers are allowed to transact and they must furnish price quotes for the bonds on a regular basis. Each principal market maker must quote buy and sell prices at a minimum quantity and a maximum margin, as determined under conditions that the Ministry of Finance sets forth. In Phase 1, only unindexed government bonds that satisfy these conditions are traded in MTS: those whose par value is more than NIS 4 billion, or those that are issued on a current basis and have more than one year left to maturity. Bonds listed for trading in MTS are concurrently listed for trading on

the Stock Exchange. Clearing of all transactions, including those in MTS, will be performed by the Stock Exchange clearinghouse, at least in Phase 1.

By undertaking to quote prices for the bonds, the market makers expose themselves to a risk when the market is short on liquidity. For this reason, and since Israel does not yet have an active bond-borrowing market, the Ministry of Finance activated in September a pool from which market makers may borrow not only bonds for which they are required to quote prices but also CPI-indexed bonds that meet the liquidity conditions that were set forth. Although the borrowing transactions are time-unlimited, the balance borrowed by each market maker at any point in time is limited to NIS 0.5 billion.

Expected effects of the reform: The appointment of international financial players as market makers in government bonds, coupled with the transfer of trading in and issue of bonds to globally recognized international electronic systems and the adoption of international trading and clearing standards, is expected to allow the domestic capital market to integrate more effectively into the international markets. This, in turn, is expected to enhance foreign involvement in investing and help to make the domestic capital market more robust and liquid. The entry of large international players is expected to mitigate concentration in the domestic capital market. Finally, the development of new financial instruments, foremost in derivatives, is foreseen; this may also help to increase tradability and liquidity.

Although it is premature to gauge the full impact of the reform, data on trading in and auctions of government bonds in 2006 already point to a significant increase in foreign involvement in bond auctions and trading in the secondary market, both in MTS and on the Stock Exchange. In the last third of 2006, For example, the average share of nonresidents in "winnings" in government-bond auctions climbed from only 9 percent of the total quantity offered in January–September, immediately preceding the reform, to 40 percent in the last third of the year. Average daily turnover in Shahar bonds, which are also traded in MTS, also increased perceptibly: from NIS 0.7 billion before the reform to NIS 1.4 billion in the last third of the year.

Although the reform created a trading arena that competes with the Stock Exchange, it is not expected to harm the exchange. Trading volumes on the exchange are expected to increase in tandem with the growth of MTS trading, since the exchange is the only arena of trading between principal market makers and other investors in bonds and among the other investors themselves. The effect of the reform on the exchange may already be seen today via the market makers that the exchange appointed for activity in government bonds, and via the foreign banks that are joining the exchange as members. Furthermore, the transactions in MTS are being cleared through the Stock Exchange clearinghouse and the borrowing pool that the Ministry of Finance established has been activated by means of the exchange.

(2) Makam

Makam is a short-term tradable bond (up to one year) that the Bank of Israel issues and uses for the management of monetary policy. The total market value of outstanding *makam* at year's end was NIS 97 billion, 10 percent greater than a year earlier. Since the end of 2001, when the limit on *makam* issues was abolished, the outstanding balance of these instruments has climbed by 170 percent and the average daily turnover rose by 300 percent and came to NIS 800 million in 2006. However, since a great deal of trading in *makam* (50 percent on average in 2006) takes place in only two series—one-year and one-month—the liquidity of series to medium ranges is rather low, whereas the one-year and one-month series are among the most liquid and tradable in the market and serve the market as a benchmark for short-term interest rates.

Makams are among the most tradable and liquid of securities, and serve the market as a benchmark for short-term interest rates.

In 2006, pursuant to the large redemptions of mutual funds and the decrease in the *makam* holdings of banks and long-term institutional investors, the public's direct holdings of *makam* increased swiftly to 61 percent of total issued quantity as against 34 percent at the end of 2005. This may indicate that the public now sees *makam* as a substitute investment vehicle for bank deposits. Foreign holdings in *makam* were scanty, at only 1.1 percent of the *makam* market value at the end of 2006.

(3) Corporate bonds

The market value of tradable corporate bonds was NIS 120 billion at the end of 2006, 40 percent greater than the year-earlier level and 450 percent higher than at the end of 2003 (Table 4.3). The accelerated development of the corporate-bond market in recent years, coupled with the decrease in government issues, elevated the proportion of tradable corporate bonds in the tradable domestic bond market to 32 percent at the end of 2006 as against only 9 percent at the end of 2003.

The share of corporate bonds in the domestic bond market continued to rise, reaching 32 percent at the end of 2006.

Most tradable corporate debt, unlike tradable government debt, is still indexed to the CPI (71 percent). The remainder is indexed to exchange rates (23 percent) and unindexed (6 percent). One reason for the different indexations of government and corporate debt is that private-sector issues strive to meet the market's needs. Thus, when the government issues less CPI-indexed debt and stops issuing debt that is indexed to exchange rates, the private sector increases these issues in order to meet demand. Furthermore, even today medium- and long-term institutional investors are dominant in holding tradable corporate debt; at the end of 2006 about 44 percent of such debt was held by provident funds, pension funds, and insurance companies. These investors, whose investment horizon is usually long, prefer to keep much of their portfolio in CPI-indexed assets.

Most corporate debt is CPI-indexed, unlike government debt.

Despite the considerable increase in the market value of corporate bonds, trading turnover in this market is still small and its pace of increase is slower than that of market value, meaning that the velocity of turnover in corporate bonds has decreased (Figure 4.2). Thus, daily average turnover in 2006 rose by 26 percent and came to NIS 273 million on daily average—perceptibly smaller than the turnover in

Trading volumes in the corporate bond market are still low compared to the government market and in developed countries.

government bonds, NIS 1.7 billion in 2006—and far below the norm in developed countries. One explanation for the small turnover is the large number of issued series of relatively small financial value, a practice that reduces market depth and prevents large institutional investors from trading in these bonds. At the end of 2006, for example, the average market value of a series of corporate bonds was NIS 380 million as against NIS 5.1 billion in government bonds. For this reason, nonresidents, most of whom are institutional investors that manage assets in large quantities, refrain almost totally from investing in corporate bonds: their rate of holdings in such instruments came to only 0.4 percent of the existing inventory at the end of 2006, roughly unchanged from the end of 2005.

Along with the development of the tradable corporate-bond market, a market of nontradable corporate bonds has developed in recent years. Its value at the end of 2006 was estimated at NIS 75 billion, 20 percent greater than the estimated balance at the end of 2005 and 136 percent greater than at the end of 2003.[5] More than 90 percent of nontradable bonds are CPI-indexed, because they, too, are held largely by long-term institutional investors that have an interest in keeping CPI-indexed assets in their portfolios.

b. The equities market

Share prices continued to rise in 2006, further to three years of consistently steep price rises.

Share indices advanced at a 13 percent pace in 2006 after three years of steep increases that added up to 147 percent in cumulative terms (Figure 4.5). The behavior of prices in 2006 was affected by clashing trends that made the market more volatile than in recent years. Prices continued rising until the middle of May, influenced by continued rapid economic growth and expectations that the growth would persist. From May to mid-July, prices plunged under the influence of adverse trends in emerging-market economies. The downward trend gathered strength during the first few days of warfare in northern Israel. Later on, even though the fighting continued until the middle of August, prices rose—albeit in a much more volatile manner than in the earlier period of growth because of the upturn in defense uncertainty. In the middle of September, price increases gathered momentum and volatility eased, corresponding to auspicious trends in foreign capital markets including the resumption of rising prices in emerging-market economies. Toward year's end, the upturns were also influenced by slowing of the domestic inflation rate and the growing belief that the upward trend of domestic interest rates during the last months of the year had played itself out.

Volatility in prices increased this year, though the market's reaction to shocks was relatively modest, and similar to that of developed markets.

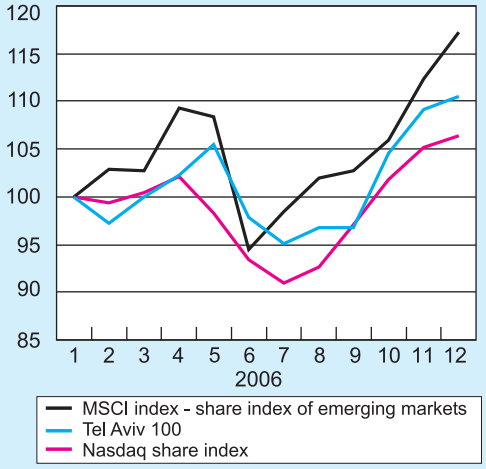
Despite the increase in volatility, the reaction of the equity market to the shocks was short-lived. Even the volatility in May–June was much weaker in Israel than in other emerging-market economies and corresponded more closely with the intensity of response in developed markets. The resilience of the market despite the events was supported by the continuation of strong economic growth, as also reflected in

[5] This is an underestimate based on reports from provident funds, pension funds, and insurance companies only.

the performance of firms and the perceptible increases in trading turnover and the variety of active investors in the market.

Thus, average daily turnover in equities advanced fivefold since 2002 and by 45 percent in 2006 alone, ending the year at NIS 1.5 billion on as against NIS 1 billion in 2005 (Table 4.4). The upturn was abetted by structural reforms, globalization, and accelerated privatization. The appointment of market makers for low-tradability shares (of about 150 firms) during 2005 and, in greater part, in 2006, may have helped to improve liquidity in these shares as well. Despite the hefty increase in equities turnover, velocity remains very low because more than half of the market capitalization of listed equities is held by interested parties (Figure 4.2).

Figure 4.5
Share Indices in Israel and Abroad, 2006 (monthly average, January 2006=100)



SOURCE: Bank of Israel.

Volumes in the share market grew significantly due to structural reform, globalization and accelerated privatization.

Share prices are meant to reflect the current value of the expected future flow of dividends. However, given the continuation of steeply spiraling prices in the equities market (150 percent since 2003), the question is whether the market is showing signs of extreme over-pricing, i.e., the creation of a bubble, a misalignment between the fundamentals of the firms and the market prices of their equities. There is no simple answer to that question, but by examining various indicators it appears that although prices of equities did continue to rise until late 2006, it does not seem that this was a case of extreme overpricing. Several pieces of evidence back this statement: (1) according to the companies' statements for Q3, the rise in equities prices in 2006 paralleled the upward trend in their revenues and earnings and the historical P/E ratio for the past four quarters fell from 16.8 in December 2005 to 15.8 in September 2006 (Figure 4.6),[6] a level not significantly different from the levels that prevailed in the past and in other countries today,[7] reflecting a return[8] that still surpasses the yield to maturity of a one-year *makam*. The capital ratio (2.1 in Q3), too, did not deviate from the level in recent years. (2) In contrast to previous bubbles, the public's participation in equities trading did not increase perceptibly during this time. As evidence, accrual in equities-based mutual funds was approximately zero in 2006, even when the rapid development of the equities basket-certificate industry is taken into account. (3) The

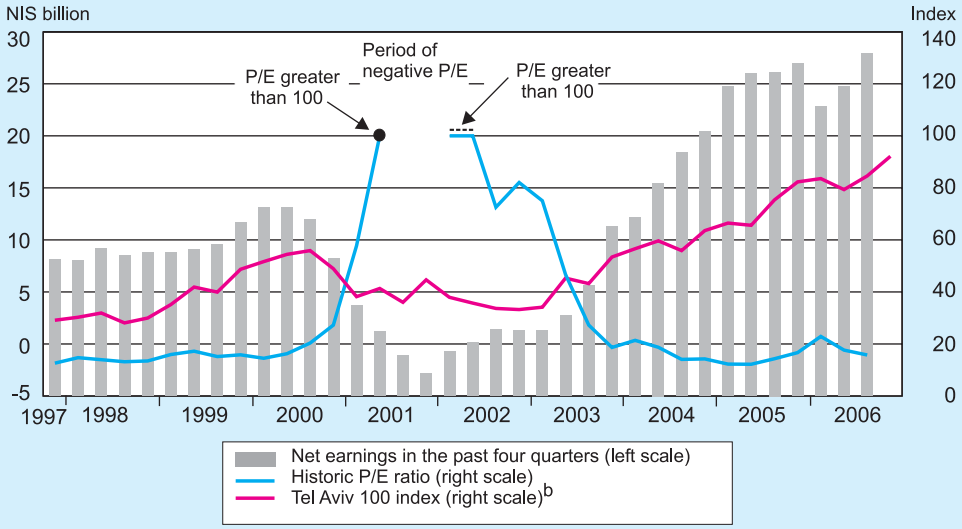
Despite sharply rising prices up to the end of 2006, the market has not developed signs of extreme over-pricing.

[6] P/E ratio: total market capitalization divided by total net earnings in the past four quarters.

[7] The Goldman Sachs investment bank, for example, estimates the expected P/E of S&P 500 companies in 2007 at 16.4.

[8] E/P.

Figure 4.6
Historic Price/Earnings Ratio[a] and Net Earnings of Tel Aviv 100 Companies, And Tel Aviv 100 Index,[b] 1997-2006



[a] Calculated as the market capitalization of the Tel Aviv 100 companies at quarter end divided by their earnings in the past four quarters.
[b] The Tel Aviv 100 Index scaled down by 10 for purposes of comparison with the P/E ratio.
SOURCE: Bank of Israel.

increase in share prices during the year was not continuous; periods of significant decreases were followed by resumption of the upward march. (4) When a bubble forms, the market hardly distinguishes among industries. The performance of the various industrial indices in 2006, in contrast, reflected selectivity and variance. Bank and insurance shares, for example, rose by only 6–12 percent, whereas real-estate, construction, and agriculture shares increased by 67 percent (Figure 4.7). (5) Corporate-bond issues surpassed equity issues by a significant margin, as one would not expect in the presence of a bubble process. (6) The economic fundamentals (growth, debt, inflation, deficit) are good. (7) The globalization of the financial markets and the upturn in trading turnovers and liquidity in the domestic equities market are easing the transition of domestic investors (including institutions) and foreign investors from the domestic market to foreign markets.

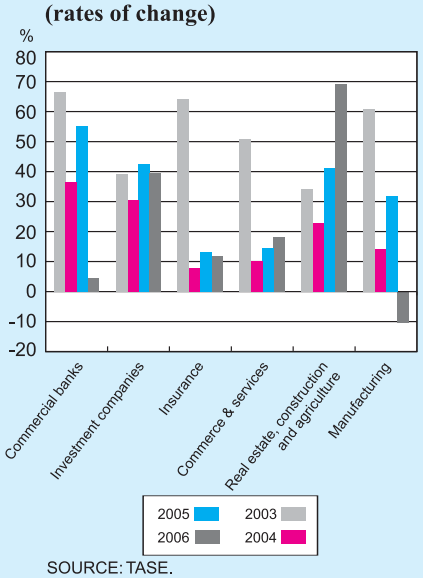
The reforms that have been carried out—especially the liberalization of institutional-investment rules and the enhancement of transparency and competition in long-term saving—have enhanced the involvement of long-term institutional investors in the equities market, an important development that helps to ease the acute volatility that the equities market experiences at times of crisis and rapid realizations (Table 4.5).

Nonresidents were among the dominant players in the equities market during 2006. Their investment flow during the year was uneven, affected mainly by investment trends in other emerging-market economies. Thus, in Q1, amidst the global upward

trend in the component of investment in such economies, nonresidents built up their investments in the domestic equities market—both for the portfolio investors and as interested parties—to a peak in recent years of 18.3 percent of equities and negotiable securities traded in Tel Aviv. Their investments declined later in the year; by year's end their proportion in holdings of equities negotiable securities in Tel Aviv fell to 16.4 percent, not far from the end-of-2005 level, as portfolio investors drew down their holdings and interested parties increased theirs.

Nonresidents were among the dominant players in the equities market during 2006.

Figure 4.7
Prices of Shares and Convertibles, Selected Industries, 2003-06 (rates of change)



SOURCE: TASE.

The best-performing equities in 2006 were those of real-estate companies, on the heels of strong upturns dating back to 2003. The upward trend was occasioned by strong earnings of real-estate companies on their foreign investments and expectations of a real-estate recovery in Israel as well, after several years of rapid economic growth. The Yeter index shares also stood out for their strong performance in 2006; they exhibited faster growth and less volatility than the Maof index shares.

c. The primary market—corporate issues of shares, negotiable securities, and bonds

The nonbanking private sector raised a record NIS 100.6 billion in 2006, in Israel and abroad, by issuing shares, negotiable securities, and tradable and nontradable bonds—all of which as against NIS 61 billion in 2005 (Table 4.6).

The nonbanking private sector raised a record sum in Israel and abroad this year of NIS 100 billion.

A total of NIS 38 billion was raised abroad, mainly in one issue by a pharmaceutical company (96 percent of the sum raised). Capital raising abroad by other companies, in contrast, slowed considerably in 2006, mirroring the global downturn in activity of this kind.

Domestic capital raising continued to increase in 2006 after accelerating in 2005, and ended the year at a record NIS 62.8 billion as against NIS 54.3 billion the previous year. Some 89 percent of capital raised in Israel in 2006 was earmarked for business activity; the rest was carried out by means of financial instruments and was meant for financial activity.

The expansion in raising funds is a product of the favorable macroeconomic conditions in the market as well as fiscal discipline, which has freed up resources for the business sector.

The increase in capital-raising since 2003 traces to the auspicious domestic macroeconomic conditions, reflected in rapid growth rates, strong corporate profitability, and expectations of continued growth. These conditions give firms an incentive to marshal additional sources of finance for the expansion of activity and

Table 4.5
Share of Institutional Investors' Asset Portfolios Invested Abroad, in Shares and in Tradable Private and Government Bonds, 2004–06

(percent)

	Investments abroad[a]			Shares[b]			Private bonds[b]			Government bonds[b]			Other assets[c]		
	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006	2004	2005	2006
Provident and severance pay funds	3.0	7.0	8.9	16.6	17.3	18.6	17.5	23.9	27.6	41.3	33.4	29.2	21.6	18.4	15.7
Advanced study funds	2.2	7.6	9.8	14.8	15.8	17.8	17.5	23.4	27.8	40.0	31.9	25.7	25.5	21.3	18.9
Established pension funds	0.0	0.7	3.1	2.0	3.3	3.5	3.9	6.5	8.3	89.9	84.6	79.0	4.2	4.9	6.1
New (general) pension funds	1.1	4.6	6.5	14.8	13.6	17.0	14.7	26.2	28.5	50.7	35.9	28.4	18.7	19.7	19.6
New (comprehensive) pension funds[d]	0.6	3.5	7.9	6.6	6.0	7.2	11.3	15.6	17.8	73.2	61.6	52.8	8.3	13.3	14.3
Mutual funds	13.0	16.3	17.9	11.3	10.7	14.2	3.9	8.9	13.6	27.8	33.3	29.9	44.0	30.8	24.4
Guaranteed-yield insurance plans[e]	1.2	1.7	1.7	0.4	0.6	1.4	4.4	6.7	7.2	69.6	66.3	67.7	24.4	24.7	22.0
Profit-sharing insurance plans[e]	10.0	15.0	17.2	14.9	17.6	19.8	16.1	22.5	23.1	36.6	23.9	19.2	22.4	21.0	20.7
All institutional investors	4.5	7.7	9.6	10.3	11.0	12.7	17.0	11.0	18.7	52.6	47.3	42.7	22.0	18.6	16.3

[a] Including investments in Israeli securities traded abroad, foreign securities, deposits abroad and mutual funds. Does not include investments in ETFs traded in Tel Aviv that track indexes abroad.

[b] Tradable and non-tradable assets.

[c] Makams, indexed and unindexed deposits, loans, mutual fund units, property rights, futures, mortgage portfolios and other assets.

[d] Including the Central Pension Provident Fund.

[e] Investment assets for life-insurance schemes.

SOURCE: Based on returns of insurance companies, provident, advanced study and pension funds to the Capital Market, Insurance and Savings Division of the Ministry of Finance, and returns from the mutual funds to the Bank of Israel.

Table 4.6
Security Issues by the Nonbanking Private Sector in Israel and Abroad, by Type of Security,[a] Gross, 2003–06

	NIS million, at current prices				Raising of capital in Israel, composition			
	2003	2004	2005	2006	2003	2004	2005	2006
A. Raising of capital in Israel	18,234	29,776	54,286	62,832	100	100	100	100
of which via tradable securities	8,091	18,847	31,955	38,229	44	63	59	61
1. Working capital	14,664	23,214	49,733	55,849	80	78	92	89
Shares and convertibles	2,825	6,656	12,237	11,873	15	22	23	19
Tradable bonds	1,695	5,629	15,165	19,373	9	19	28	31
Nontradable bonds[b]	10,144	10,929	22,331	24,603	56	37	41	39
2. Financial instruments	3,571	6,562	4,553	6,983	20	22	8	11
ETFs for shares	933	3,495	711	4,719	5	12	1	8
ETFs for bonds, structured bonds and CDs	2,638	3,067	3,842	2,264	14	10	7	4
B. Capital raised abroad[c]	4,497	18,740	6,767	38,078				
Shares and convertibles	4,497	18,133	6,296	32,958				
Tradable bonds			471	5,120				
Nontradable bonds		607						
C. Total capital raised in Israel and abroad	22,731	48,516	61,053	100,910				

[a] Issues by banking corporations were deducted from data of capital raised.

[b] Including bond issues by municipalities totaling NIS 140 million in 2005 and NIS 330 million in 2006.

[c] Ninety-six percent of the capital raised in 2006 relates to one particular transaction by a pharmaceutical company.

SOURCE: Tel Aviv Stock Exchange and direct reports to the Bank of Israel.

boost investors' willingness to invest in corporate issues, by reducing the estimated risk that is intrinsic to such investment.

Most borrowing was through bond issues, while raising funds through shares and convertible stocks constituted only 20 percent of total security issues.

The growth in corporate issues was abetted by the fiscal discipline in recent years, which reduced the government's capital-raising needs and freed sources for additional capital issues by the business sector, and the structural reforms, which enhanced the extent of and the demand for such issues.

In 2006, as in the preceding two years, most raising of sources of finance for activity was performed through bond issues (tradable and nontradable); issues of shares and negotiable securities accounted for only 20 percent on average. The dominance of bond issues in raising capital was supported by an environment of low interest rates to all terms, which made firms more willing to take on further liabilities to expand their activity, and by the firms' strong profitability. The concurrence of taking on larger debt and the increase in earnings allowed firms to utilize the tax advantages of debt issuance without incurring a commensurate increase in the debt burden, the level of leveraging, and the cost of capital to the firm. Furthermore, some of the debt created by the issues replaced bank credit.

More than 90 percent of issues were rated and the ratings they received were A or better.

A sample of bond issues in 2006[9] shows that some 30 percent of the total was performed by real-estate companies and that the proportions of investment and holding companies were similar. As for the riskiness of the issuing companies, more than 90 percent of the issues were rated and the ratings that they received were A or better. The extent of issues of unrated or poorly rated bonds is much smaller in Israel than the norm in international markets and came to 15 percent of total issues in 2006. Israel's aberrant situation may be affected by the investment regulations pertaining to long-term institutional investors, which, for example, prohibit almost any investment by old pension funds in bonds rated under A and limit the share of provident funds' investments in poorly rated nontradable bonds. Another factor is the tendency of Israel's institutional investors to examine investments almost solely on the basis of ratings, due to their inexperience in activity on the credit market. This suggests that Israel's non-banking credit market is a relatively early stage of development, since the ability of many firms, including those of lesser quality, to diversify their sources of financing abets greater competition in the credit industry for additional sectors and allows the investing public to enjoy investment assets that deliver a higher return for a controlled increase in risk.

The companies that issued bonds this year were large and strong, and could have obtained credit from banks too.

The companies that made bond issues were relatively large and strong firms[10] that can obtain bank credit as well. Their use of the bond market is consistent with the wish of large firms to diversify their sources of finance and ease their dependency on the banking system for reasons including the single-borrower and group-of-borrower limits that the banking system must abide. Even though few issuing firms reached the

[9] From a sample of the eighty largest issues (tradable and nontradable), which accounted for 86 percent of total issues during the year.

[10] About two-thirds of issues were carried out by companies that had an average balance sheet of NIS 19 billion.

limit, their issuing activity distances them from the limit and improves their ability to use the banking system in the future, when the capital market may be less available.

From the standpoint of the banks, the level of risk pricing in the bond market evidently creates a disincentive to compete for this credit—a factor that may suggest that the institutional investors assign a lower price to the risk than the banking system does. In any event, it is more natural for banks to grant credit that is shorter in duration than the norm in the bond market,[11] because short-term credit corresponds more closely with the duration of bank sources—especially since the decline in the attractiveness of savings plans has caused long-term sources of funding in the banking system to dry up.

About 60 percent of bond issues in the past two years were non-tradable, a surprising percentage in light of recent steps taken to encourage a more liquid bond market.

Some 60 percent of bond issues in the past two years were of nontradable instruments. This high level is surprising in view of various actions in recent years to stimulate the tradable-bond market, including the easing of prospectus requirements (with the possibility of issuing by means of a shelf prospectus starting in 2005) and the adoption of market-price valuation of nontradable bonds in institutional investors' portfolios. The fact that mutual funds are not allowed to invest in nontradable bonds also creates an incentive for the issue of tradable debt, absent other incentives. The evident explanation for the diversion of bond issues to the nontradable market is that a distortion still exists in the valuation rules that allow institutional investors to record accounting-related capital gains (sometimes large ones) at point of issue.

In the bond market, several issues by local authorities stood out this year.

Among the nontradable bond issues, several municipal issues (NIS 230 million in cumulative terms) stood out in 2006 pursuant to an initial issue in 2005. These issues became possible after the ministries of Finance and the Interior decided in principle to adopt the practice in many developed countries of allowing municipal authorities to finance their activities by means of the capital market in addition to other channels, provided they meet certain conditions. Municipal recourse to the capital market allows these authorities to co-opt the private sector into the financing of their activities, makes them less dependent on government budgets and/or the banking system, and may help to lower their financing costs. Since a municipal bond issue, like the acceptance of bank credit, requires prior approval, there is no concern that this new source will be exploited to increase deficits.

Most municipal issues were made by corporations established separately from the authorities, and specific cash flows were encumbered to assure payback. If payback depended on the authority's ongoing behavior, investors in the capital market would be exposed to risks that hinge on the authority's conduct—a possibly problematic situation in view of the public's belief that the central government is liable for the conduct of municipal authorities.

The amount of capital raised by issues of equities and negotiable securities was almost unchanged in 2006 from 2005, at NIS 11.9 billion as against NIS 12.2 billion, respectively. Most of the capital raised in 2006 was for the real-estate industry.

[11] The average duration in the corporate-bond market is 5–6 years.

In addition to issues for financing activities, there was an increase this year too in issues of structured financial instruments of various kinds.

In addition to issues earmarked the financing of business activity, issues of structured financial instruments such as ETFs, CDs, and structured bonds has increased in recent years and came to NIS 6.9 billion in 2006 as against NIS 4.6 billion in 2005. Most of this activity was performed by means of ETFs—an investment instrument that has developed strongly in recent years in other countries as well. (See Box 4.2.) The money raised by means of financial instruments is not used to finance real activity; instead, it is reinvested in the money and capital markets, where it helps to enhance the tradability of securities at large.

Box 4.2
Exchange traded funds

An exchange traded fund (ETF) is a security traded on the Tel Aviv Stock Exchange on the basis of a certain index; it assures its holder the value of the index or of the underlying securities, those of which the index is composed. Thus, the investor may attain by acquiring a single security a return that closely approximates that of a basket of securities.

The issuing company acquires the underlying assets of the index which the ETF tracks or its derivative assets, thereby assuring its ability to meet its liability to the purchasers. The price of the ETF is set by the market in view of its supply and demand but it is influenced by the prices of the underlying assets. This is due to the existence of a conversion mechanism through which the holder of the ETF may demand, under certain conditions, that the issuing company redeem the ETF and give the holder the underlying securities instead.

Exchange traded funds were first traded in Israel in 2000 and have become a popular investment vehicle in the past two years. At the end of 2006, 116 ETFs were being traded in Tel Aviv at a total market value of NIS 13 billion, up 80 percent from the end of 2005 (excluding market value held by subsidiaries of the fund issuers). Forty-one funds tracked domestic indices; their value in December was 60 percent of the total market value of ETFs traded in Tel Aviv. The remainder were based on overseas markets, mainly in the U.S., eastern Asia, and Europe. Even though the market value of ETFs was less than 3 percent of the total market capitalization of equities traded in Tel Aviv in December 2006, they accounted for 20 percent of the average trading turnover in equities and became an important investment vehicle. Most of the turnover—some 70 percent—focused on ETFs tracking domestic indices: of which 50 percent were in regular ETFs and 20 percent in "short" ETFs.

The growth of ETFs in Israel belongs to a global trend of expansion of investment in index-based instruments at the expense of active investment management. The trend gathered strength in the aftermath of many studies showing that it is difficult to attain a long-term return that surpasses that of a well dispersed index. Even if investment managers manage to "beat the index" for some time, this says nothing about their chances of continuing to do so.

Until ETFs were developed, mutual funds were the only investment vehicles that allowed ordinary investors, who are not well versed in the ways of the financial markets, to attain greater dispersion in the management of their investments. ETFs were meant for the same purpose but have the advantage of charging lower management fees. One reason for this is that the funds managers do not need to invest in investment research and management; after all, they are linked to their benchmark index and need not attempt to beat it. Furthermore, since ETFs are traded on the stock exchange, one may buy and sell them during all trading hours and respond to developments in real time; the price of a mutual fund, in contrast, is set only once a day. This difference gives the ETFs another advantage: unlike net redemption of units in a mutual fund, which forces fund managers to realize assets in the market, an ETF is sold on the market to another fund buyer and need not be accompanied by the realization of underlying assets. This advantage is especially evident during a period of large redemptions, in which mutual-fund managers must realize assets in a falling market, thereby, intensifying the negative market trends.

It should be borne in mind, however, that while in a mutual fund the market value of the assets managed is absolutely identical to the prices of the units, the price of an ETF is set by the market. It is true that the conversion mechanism, which allows the holder of a fund to ask to have it converted into the underlying assets of the index, usually keeps the fund's price very close to the value of the benchmark index. Sometimes, however, a discrepancy may take shape between the market price of the fund and the value of the assets actually held by the fund manager. This may happen due to deliberate exposure of the company's assets to the index (in an attempt by the fund managers to make themselves a profit) or due to operational mismanagement of the investments. To mitigate these risks, the investor in an ETF has to examine the past performance and the reputation of the issuing company and make sure that the company has undertaken in its prospectus to adhere to the benchmark index. One of the tools that allow investors to gauge the level of fund risk is the rating instrument, from which some ETFs benefit.

Additional factors that may create a discrepancy between the fund price and the benchmark index are the fund issuer's dividend policy and exchange-rate

changes that create a gap between the value of a fund traded in Israel and the value of the index abroad.

Another risk that investors in ETFs face is lack of tradability. The investment of many ETFs in one index may result in poor tradability in any type of fund and make it difficult to realize funds in the market. It was found, for example, that fifteen ETFs traded in Tel Aviv account for more than 60 percent of trading turnover and that twenty-seven others account for less than 1 percent, possibly indicating poor tradability of the latter funds. Since the mechanism that allows a fund to be converted into its underlying asset usually depends on the maintenance of a rather large financial stake in the fund, it cannot answer the needs of ordinary investors who hold the less-liquid funds.

4. THE NIS–FOREX MARKET

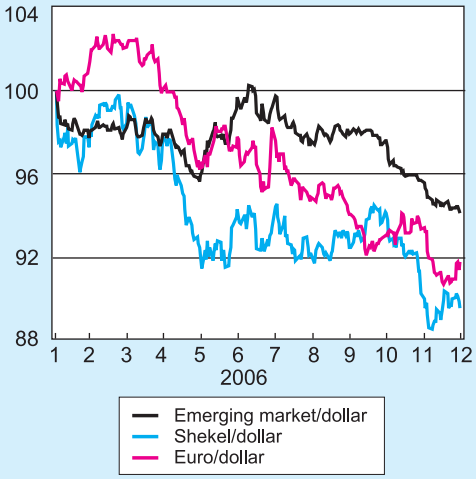
a. The path followed by the exchange rate, its level of risk and the interest rate spread

i. The exchange rate

Over the year reviewed, the shekel appreciated against the dollar by 8.5 percent.

The shekel appreciated against the dollar by a rate of 8.5 percent in 2006. The changes in the shekel/dollar exchange rate were not uniform during the period and for most of the year were correlated with changes in the euro/dollar exchange rate (Figure 4.8): during the months of January and February, there was a continuation of the depreciation in the shekel, which began in May of last year, followed by the strengthening of the shekel accompanied by fluctuations in both directions. During the period March to December, the shekel appreciated by a rate of about 10 percent against the dollar and the exchange rate reached its lowest level in the last five years. The shekel strengthened to a large

Figure 4.8
Shekel/Dollar, Euro/Dollar and Emerging Market[a]/Dollar Exchange Rate Indices, 2006 (January 1, 2006=100)



[a] The index comprises a sample of currencies of emerging market economies.
SOURCE: Bank of Israel.

degree also against the currency basket, which is calculated according to the weights of Israel's foreign trade (the effective exchange rate),[12] though at a more moderate rate than against the dollar.

The factors that contributed to the strengthening of the shekel included: 1) The weakening of the dollar worldwide, primarily against the currencies of the developing countries; 2) The substantial increase in the current account surplus, which is expected to reach a record level of some $7 billion this year;[13] 3) The continuing improvement in the fundamental conditions of the economy and the increased confidence in macroeconomic policy, which continued to encourage direct investment by foreign residents in Israeli companies (and which totaled an unprecedented $13 billion this year). The acceleration of direct investment by foreign residents and the substantial increase in the current account surplus created fundamental pressure for the appreciation of the shekel, and during most of the year, their influence on the exchange rate dominated that of the export of capital by Israeli residents. Also contributing to the strengthening of the shekel during the final months of the year was the implementation of the market makers reform in September that led to the increased involvement of foreign financial bodies in the government bond market.

A quantitative analysis of the relative influence of global factors on the strengthening of the shekel against the dollar shows that the lion's share of the appreciation (some 70 percent) was the result of these global factors. This quantitative analysis rests on the assumption that from the standpoint of international capital movements, the Israeli economy is counted among the emerging economies. Therefore, one can expect that developments in the shekel exchange rate will be similar to those in the exchange rates of the emerging markets, unless there are local factors at work that bring about a deviation from the behavior of this reference group.[14]

A quantitative analysis of the relative influence of global factors on the shekel's strengthening against the dollar shows that most of this appreciation was affected by these factors.

The strengthening of the shekel during 2006 was particularly noticeable against the background of a number of influential geopolitical events that increased the level of uncertainty in the economy. First among them were the second Lebanon war, the worsening of the security situation in the Gaza Strip and the coming to power of Hamas. In general, the influence of events such as these on the shekel's real exchange rate has declined during the last two years relative to the influence of macroeconomic variables. This is in contrast to previous years in which events of similar magnitude led to sharp depreciations in the shekel and even to instability in the foreign exchange market.

The shekel's strengthening in the year reviewed is all the more noticeable in light of the many significant geopolitical events that increased uncertainty in the economy.

Alongside geopolitical events that increased the uncertainty in the foreign exchange market, there were domestic and global factors that worked to weaken the shekel. These included: 1) The continuing process of adjustment in the portfolios of Israeli residents as a result of the tax reform (Box 4.3), which increased the relative

[12] See Y. Soffer (2005), Measures of the Real Exchange Rate in Israel and its Influence on Exports and Imports, Issues in Foreign Currency, Bank of Israel.

[13] According to estimates of the Foreign Exchange Activity Department.

[14] For further details on the method of analysis, see: Bank of Israel. Annual Report for 2004, publication of the Foreign Exchange Activity Department.

attractiveness of investment in foreign assets, and the stabilization of the interest rate spread at a low level which even became negative during the final months of the year; 2) The trend of capital outflow from the emerging markets in May and June which led to the selling-off of investments by foreign residents on the local securities exchange. Nonetheless, it should be mentioned that the trend of capital export from the emerging economies, which was accompanied by a fall in prices on the share exchanges, also encouraged the return of capital to Israel by households. This followed the sharp rise in households' investment in these markets at the beginning of the year, a process that

Box 4.3

The tax reform and its effects on the portfolios of households and institutional investors

Since the implementation of the tax reform (the Rabinovitch Committee) at the beginning of 2003, we have been witness to a process of portfolio adjustment by institutional investors and households. This has mainly involved an increase in the liquidity of the asset portfolios and increased international diversification of risk. The tax reform focused on expanding the tax base of income from capital and the equalization of tax rates that apply to it, alongside the reduction of the direct tax burden on labor income.

The first step of the reform, which went into effect at the beginning of 2003, created uniform tax rates on capital income from investments in Israel and essentially cancelled the tax advantages of investment channels that had previously been exempt from tax, such as saving plans. The reaction of households was quick to follow and during the period 2003–5, they redeemed about NIS 80 billion from savings plans, the majority of which was channeled to mutual funds with most of the rest going to shekel-denominated deposits. This process, which primarily involved an increase in the liquidity of the asset portfolio, had positive implications both for the management of portfolios and the efficiency of financial markets. First, the expanded proportion of investment in tradable assets increased the flexibility of households in the transition between the various investment channels and thus improved their ability to manage the portfolio. Second, the increased direct and indirect involvement of households in the financial markets enhanced competition in the markets and contributed to their increased efficiency.

As part of the second step of the reform, which went into effect at the beginning of 2005, the tax rates on capital gains, dividend income and interest from foreign securities (which stood at 35 percent prior to the reform) were equalized to those on investment in Israeli securities. For the pension funds, the study funds and the provident funds, the equalization of tax rates meant

an exemption from taxes on the profits from foreign securities. This step, which increased the relative attractiveness of investment in foreign securities, affected institutional investors and households to differing degrees. Since the cancellation of the tax discrimination, long- and medium-term[1] institutional investors have increased their investment in foreign assets from a proportion of 2.6 percent at the end of 2004 to 8.2 percent at the end of 2006[2] (Figure 4.11). Nonetheless, the proportion of their investment in foreign assets is still lower than in similar countries, where it is about 25 percent on average (Table 1). Therefore, it can be assumed that the process of portfolio adjustment by institutional investors is not yet complete and can be expected to continue in coming years. This assumption is also supported by the results of research carried out by the Bank of Israel which estimated the potential effect of the tax reform on the composition of the public's asset portfolio through an empirical analysis of the investment patterns of investors in Israel.[3] The research showed that in the long term, the rate of investment by institutional investors abroad is expected to reach about 30 percent of their total tradable assets.

International diversification of the asset portfolio requires a process of learning and the creation of the appropriate infrastructure for investment abroad. Most of the institutional bodies are currently in the advanced stages of the process and therefore it can be assumed that the pace of portfolio adjustment will accelerate in coming years. However, the pace is also dependent on the trend in relative prices in local and foreign financial markets and on changes in the shekel's foreign exchange rate. This is because institutional investors, though they are long-term investors, sometimes adopt short-term investment considerations.

The reaction of households to the elimination of tax discrimination was more moderate and was manifested primarily in the increased investment in foreign shares and bonds along with a slowdown in savings in deposits indexed to foreign currency. The change in the composition of household's foreign investments provides an indication of the motives for investing in foreign assets. Thus, saving in deposits linked to foreign currency is primarily motivated by considerations of hedging or creating a currency exposure, while investment in foreign shares and bonds is in general motivated by considerations of portfolio diversification. An additional factor contributing to the increase in investment by households in foreign shares is the development of trading in ETFs, which are linked to the indices of foreign share markets in the local stock exchange.

[1] Study funds, provident funds, pension funds and insurance plans.

[2] Including investment in ETFs linked to foreign share exchanges and not including investment in Israeli shares traded abroad.

[3] G. Benita and H. Levi, "The Potential Effect of the Elimination of Tax Discrimination between Israeli and Foreign Securities on the Composition of the Public's Portfolio of Financial Assets", *The Economic Quarterly*, volume 3, September 2006.

This development has significantly improved households' accessibility to investment in foreign financial markets.

In conclusion, the equalization of tax rates on the various investment channels has initiated a process in which households are increasing the liquidity of their asset portfolio while both households and institutional investors are increasing the international diversification of their investment portfolios. This process has contributed to the increased efficiency of the financial markets and the substantial improvement in the ability to manage investment portfolios efficiently and with greater diversification.

Table 1
Share of Investment in Foreign Securities by Institutional Investors in Selected Countries, 2001

(percent of total assets)

	Life insurance companies	Pension funds
Norway	34	16
Sweden	32	-
Australia	17	15
The Netherlands	28	64
Finland	62	44
Canada	2	21
Austria	22	1
Belgium	50	42
Spain	16	34
UK	16	23
Italy	21	-
Japan	10	15
Israel[a]	18.1	3.8

[a] Bank of Israel data to December 2006.

SOURCE: Institutional Investors Statistical Yearbook (1992-2001), OECD.

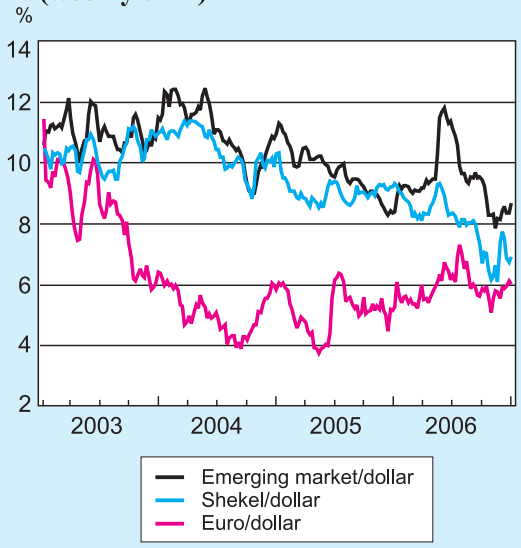
offset the influence of the capital outflow that resulted from the selling by foreign residents on the local securities exchange.

ii. Exchange rate risk and Israel's risk premium

The changes in foreign exchange rate risk, which is measured by the implicit standard deviation of shekel/dollar options, were not uniform over the course of the year and were affected by the uncertainty in the foreign exchange market (Figure 4.9): during the months January to May, foreign exchange rate risk remained stable within a narrow range of 5–6 percent. During the months May to August, it rose sharply to about 7.5

percent as a result of two events which increased uncertainty in the foreign exchange market: the appearance of a trend towards capital outflow from emerging economies in May-June, which was manifested in selling by foreign residents on the local securities exchange, and the second Lebanon war. The level of risk was much lower, however, than that which characterized events of similar magnitude in the past, such as the Gulf War and the Grapes of Wrath operation, during which the level of risk fluctuated between 10 and 12 percent.

Figure 4.9
Implied Standard Deviation in Dollar Exchange Rates vis-à-vis Shekel, Euro And Emerging Markets,[a] 2003-06 (weekly data)



[a] The index comprises a sample of currencies of emerging market economies.
SOURCE: Bank of Israel.

With the implementation of the ceasefire agreement, the level of foreign exchange rate risk gradually returned to its level at the beginning of the year. The decrease during the final months of the year was not unique to Israel and was also observed in the exchange rates of both developed and emerging economies. In general, we have been witness in recent years to a continuing downward trend in the level of volatility in the financial and currency markets of most countries in the world. The main explanation for this trend is the increase in the level of liquidity and the structural reforms that have led to increased efficiency in the markets.[15]

During the Second Lebanon War, Israel's risk premium rose only moderately.

During the fighting in the North, Israel's risk premium, as measured by the premiums on CDS contracts on government of Israel bonds traded in the US, rose only moderately which is in contrast to similar periods in the past during which the premium rose sharply.

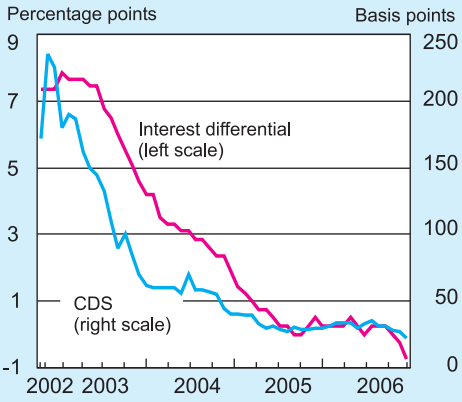
iii. The interest rate spread

The spread between the shekel and dollar interest rates has narrowed during the last four years by about 8 percentage points (Figure 4.10). The gap has narrowed almost continuously from a level of about 7.8 percent in December 2002 to zero in August 2005. Since then it has fluctuated around zero following a number of increases in the Bank of Israel interest rate in parallel to increases by the Fed. In November of this

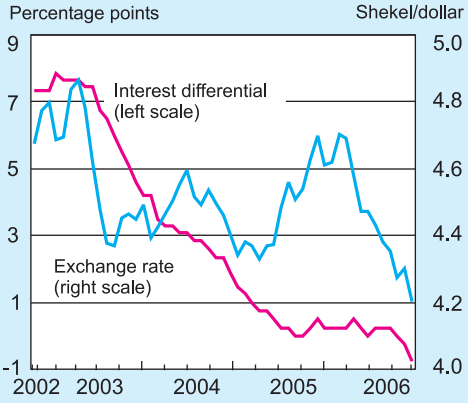
[15] See: *The Recent Behavior of Financial Market Volatility, Working Paper, BIS, 2006*

Figure 4.10
Interest Rate Differential between Bank of Israel and US Fed, CDS Risk Premium, And Shekel/Dollar Exchange Rate, August 2002 to December 2006

a. Interest Rate Differential and CDS Risk Premium



b. Interest Rate Differential and Shekel/Dollar Exchange Rate



SOURCE: Bank of Israel.

year, it became negative.

As the interest rate spread narrowed, there were fears that it would bring about an expansion of capital outflow from the economy and as a result accelerated depreciation in the exchange rate that would undermine price stability and the economy's financial stability. However, this did not in fact come to pass. On the contrary, during this period, the import of capital increased continuously and the shekel strengthened against the dollar by a rate of about 9 percent.

The explanation of why these concerns were in the end unfounded lies in the parallel reduction in the risk factors of the Israeli economy, which was manifested in, among other things, the ongoing decline in the country's risk premium as a result of the recovery in the world economy, and the improvement in the mix of macroeconomic policy and the confidence in that policy. These factors led to an expansion of real economic activity, price stability and increased financial resilience in the business sector. These developments contributed to the acceleration of foreign investment in Israeli companies and were manifested in a substantial increase of the current account deficit. The acceleration of foreign investment in the economy alongside the large surplus in the currency account created ongoing fundamental pressure for an appreciation of the shekel and during most of the period moderated the influence of the capital outflow on the foreign exchange rate, which was the result of, among other things, the narrowing of the interest rate spread.

The process of a contracting interest rate gap with the US is not unique to Israel and since mid-2004 has been seen in many developed and developing countries.

The narrowing of the interest rate spread with the US was not unique to Israel. Since mid-2004, the beginning of the process of monetary restraint in the US, this process has been observed in many of the developed and developing countries. Some of these countries even had a negative interest rate spread and in the majority of them

the narrowing of the interest rate spread was accompanied by the strengthening of the local currency against the dollar as a result of the global weakening of the dollar. An international comparison shows that the influence of the interest rate spread with the US on various foreign exchange rates against the dollar was smaller than the global and domestic factors that worked to strengthen them.

b. Analysis of the activity of the various sectors in the foreign exchange market

The analysis of the activity in the foreign exchange market is based on the breakdown of market participants into various sectors according to their past pattern of behavior and the investment considerations that can be attributed to them. Each sector's pattern of behavior is characterized by a relatively high degree of homogeneity while there are significant differences between the various sectors. Thus, for example, foreign residents who manage global investment portfolios react to global developments more rapidly and with greater intensity than do Israeli residents. The four main sectors active in the foreign exchange market are foreign residents and three local sectors: households, the business sector and institutional investors. In this analysis, we differentiate between activity in equity instruments[16] and activity in debt instruments.[17] This differentiation shows that the intensity and direction of the activity of each sector in debt instruments is more sensitive to changes in the interest rate spread and in the level of preparedness for expected changes in the foreign exchange rate and its level of risk. This analytical framework is useful in the assessment of the various forces influencing the foreign exchange rate and in the understanding of its trends. Table 4.7 summarizes the activity of the various sectors in equity and debt instruments.[18]

The activity of **Israeli residents** in the foreign exchange market during the year was influenced by three main factors: the stabilization of the interest rate spread at a low level (which even became negative during the final months of the year), the tax reform (which came into effect at the beginning of 2005) and price trends in global financial markets, which affected the relative attractiveness of local markets. Unlike in the past, Israeli residents reacted calmly to geopolitical events that occurred during the year.

[16] Investment in shares of various types, both directly and through portfolios of traded securities.

[17] Deposits and credit in foreign currency, bonds and financial derivatives in foreign currency.

[18] The data presented in the table were estimated as part of a model of the NIS-FOREX market which was developed by the Foreign Exchange Activity Department. In the analysis of the activity in that market, we measure only the activity relevant to the determination of the exchange rate. In contrast to the balance of payments framework, which includes only the foreign activity of the economy in shekels and in foreign currency, we also include activity n foreign currency among the various sectors within the economy. On the other hand, we do not include some of the components of the balance of payments, such as payments in foreign currency by foreign residents directly to the government, which do not influence the foreign exchange rate. For a description of the model, see Bank of Israel, *Annual Report for 2005*, Footnote 10 in Chapter 4.

Table 4.7
Summary of Activity in the Foreign Currency Market, by Sector and Instrument,[a] 2005–06

sales (+) and purchases (−), $ million

	2005			2006		
	Debt instruments	Capital instruments	Total	Debt instruments	Capital instruments	Total
Nonresidents	-2.4	9.3	6.9	3.3	16.3	19.6
Residents	-9.3	-5.6	-14.9	-12.9	-13.5	-26.4
Households	-2.1	-1.4	-3.5	-1.4	-1.2	-2.6
Business sector	-5.7	-2.8	-8.5	-11.4	-9.1	-20.5
Financial institutions	-1.4	-1.5	-2.9	-0.1	-3.2	-3.3
Banks	4.6		4.6	-1.9		-1.9
Total debt instruments	-7.1			-11.5		
Total capital instruments		3.7			2.8	
Current account and capital account		4.3			5.1	

[a] The data in the table were estimated using a shekel/foreign currency market model developed in the Foreign Exchange Activity Department of the Bank of Israel (see footnote 18 to the text).

SOURCE: Data of the Foreign Exchange Activity Department of the Bank of Israel.

The narrowing of the interest rate spread, which began in 2003, primarily influenced the business sector which substantially increased its surplus of assets denominated in foreign currency through, among other things, the redemption of credit and saving in foreign currency deposits. During the year, the business sector slowed its redemption of credit denominated in foreign currency, apparently as a result of the slowdown in the narrowing of the interest rate spread. Total redemption totaled about $1.5 billion this year as compared to $3.5 billion last year.

At the beginning of 2005, the tax rates on local and foreign investment were equalized for households, mutual funds and some of the institutional investors (provident funds and pension funds). This step, which increased the relative attractiveness of investment in foreign assets, drove the process of portfolio adjustment by households and institutional investors.

Since the start of the tax reform, long-term institutional investors have increased the rate of investment in foreign assets by 5.6 percentage points.

Since the implementation of the tax reform, long- and medium-term institutional investors[19] have increased their foreign investment by about 5.6 percentage points (Figure 4.11). However, the proportion of their investments abroad stood at only 8 percent at the end of 2006[20] which was still lower than the proportion characteristic of similar countries, which is about 25 percent on average. This situation points to the potential for the continuation of portfolio adjustment in the future.

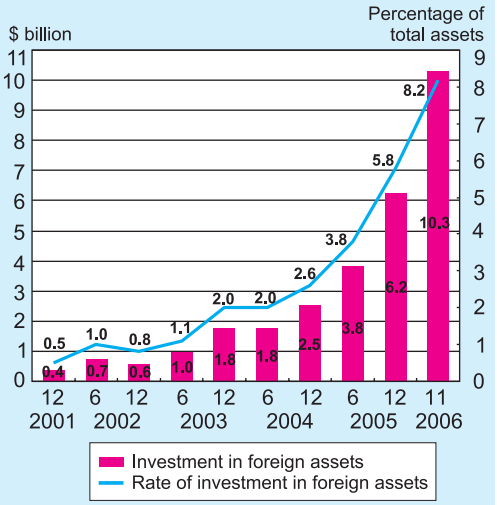
[19] Study funds, provident funds, pension funds and insurance plans.

[20] Including investment in ETFs tracking foreign share indices and not including investment in Israeli shares traded abroad.

Households diversify their investments abroad primarily through mutual funds that specialize in foreign shares. From the institution of the tax reform until just prior to the worldwide fall in share prices in May 2006, households accumulated a significant portion of their investment in these funds, particularly those that specialize in emerging economies. The fall in prices on exchanges abroad and the strengthening of the shekel against most of the world currencies resulted in substantial losses to households and encouraged redemptions from the mutual funds, which continued until the end of the year. This pattern of activity indicates that the acceleration of investment by households in foreign shares in 2005 and the beginning of 2006 was driven in part by short-term considerations rather than by the long-term consideration of international diversification. Nonetheless, total investment by households in foreign shares, both directly and indirectly, still remained higher than prior to the tax reform.

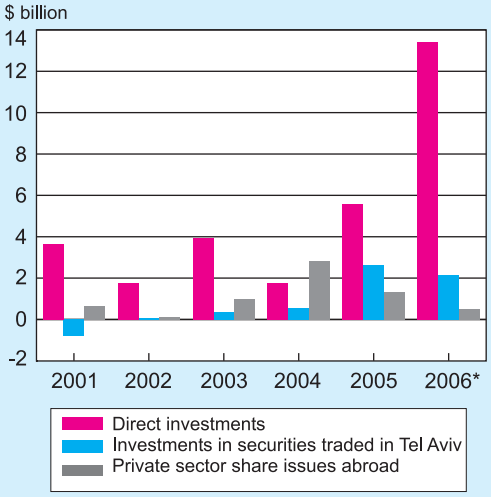
The activity of **foreign residents** focused this year on equity instruments while their activity in debt instruments was more modest than in previous years. Investment by foreign residents in the shares of Israeli companies totaled a record of approximately $16 billion during 2006. The vast majority was through direct investment while their investment in the local securities exchange, which last year reached a record level, was negative this year. During the year, activity was dominated by a number of large deals, some of which had a significant

Figure 4.11
Investments and Rate of Investment of Institutional Investors in Foreign Assets, December 2001 to December 2006



SOURCE: Bank of Israel.

Figure 4.12
Nonresidents' Investments in Israel, By Type, 2001-06



* Excluding Teva's acquisition of Ivax.
SOURCE: Bank of Israel.

influence on the foreign exchange market. As in 2005, the raising of funds by Israeli companies abroad, which in recent years, and in particular during the period of the "bubble", had been a main component in the investment by foreign residents in the economy, totaled only a modest amount this year. The modest amount of capital raised by Israeli companies abroad[21] during the last two years is explained by the reduced volume of issues on the NASDAQ exchange, which is the main destination for the issues of Israeli companies, and by the increased attractiveness of the local capital market relative to markets abroad.

Nonresident investments in shares of Israeli companies this year totaled a record $16 billion.

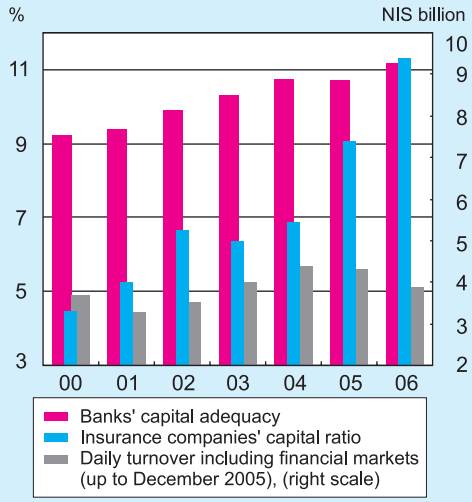
The changes in the composition of investment by foreign residents were not uniform over the course of the year (Figure 4.12). Direct investment by foreign residents was distributed throughout the year and totaled a record $13 billion. The expansion of direct investment in recent years, which has been concentrated primarily in the high-tech industries, was an expression of the confidence of foreign investors in the Israeli economy and its technological advantages. In contrast, the investment by foreign residents in the local securities exchange was not distributed throughout the year and was primarily influenced by the trends in investment in emerging economies by international investors. Nonetheless, the inflow of investment to the local securities exchange at the beginning of the year and the outflow that followed were modest in size relative to the capital flows in emerging economies.

5. THE FINANCIAL INSTITUTIONS

a. The banks

During the first three quarters of 2006, the improvement in the performance of the Israeli banking system continued. This was manifested primarily in the increase in their profits from extraordinary activity. These profits were the result of the sale of the banks' provident and mutual funds, as part of the implementation of the recommendations of the Bachar Committee. The return on equity of the five banking groups during the first three quarters stood at 17.9 percent (which is reduced to 10.3 percent if the profits from extraordinary activity are excluded).

Figure 4.13
Financial System's Resilience, 2000-2006



SOURCE: Based on Ministry of Finance and Bank of Israel data.

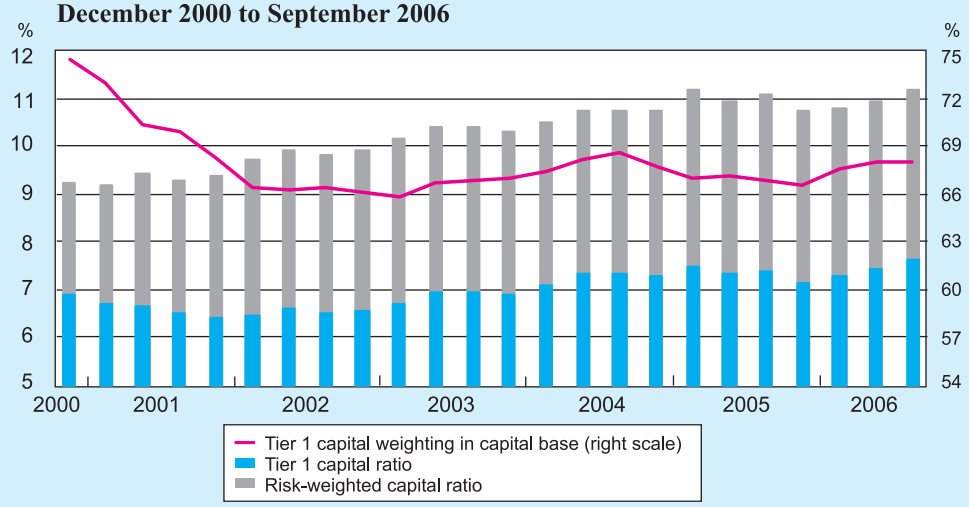
[21] Excluding the Teva-IVAX deal.

The resilience of the banking system increased during the period reviewed, due to improved capital adequacy and further improvements in credit risk indices. However, capital adequacy in the Israeli banking system is lower than in developed countries.

During the year, the resilience of the banking system increased due to the improvement in capital adequacy (Figure 4.13) and the continuing improvement in the indices of credit risk, particularly the continuing decline in the indices of problematic credit. The improvement in capital adequacy was reflected in the capital ratios and the positive indicators of capital accrual potential. The regulatory capital ratio reached 11.2 percent, which was higher than its level at the end of 2004 and of 2005, and was accompanied by an improvement in the Tier I capital ratio (from 7.1 percent to 7.6 percent) and an increase in the proportion of Tier I capital in the capital base (to 68 percent). This was the result of the capital base accrual due to the increase in profits (Figure 4.14). The increase in Tier I capital also worked to improve the capital accrual potential, which is reflected in the decline in the ratio of deferred notes to Tier I capital and a move away from the regulatory boundaries of the ratio.[22] Nonetheless, the capital ratios of the Israeli banking system remained lower than in the developed countries.

The high return was primarily the result of one-time profits from extraordinary activity[23] although improvement continued in the components of revenues from banking activities not directly related to the capital market (which was the result of the expansion of financial activity and the improvement in the situation of borrowers).

Figure 4.14
Capital Adequacy in the Five Major Banking Groups, December 2000 to September 2006



SOURCE: Based on Bank of Israel data.

[22] Directive for Proper Bank Management No. 311: Minimal Capital Ratios.

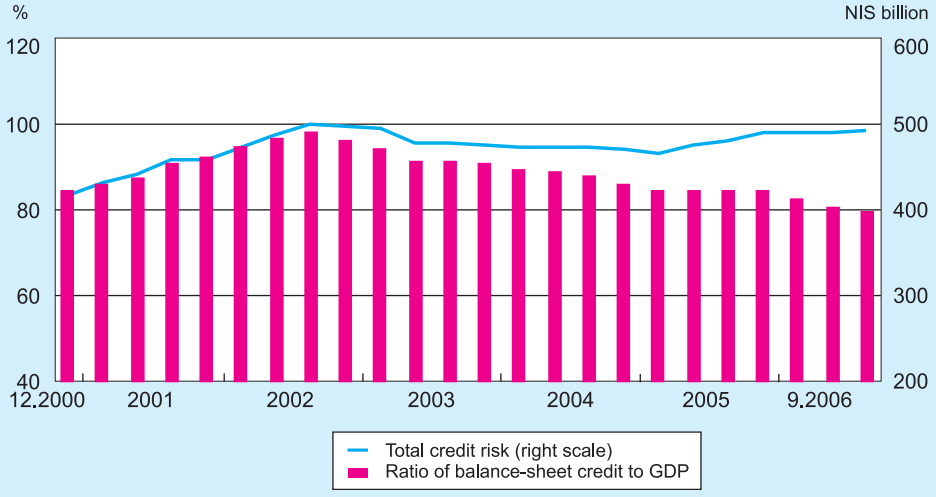
[23] The profits from extraordinary activity constituted 41.9 percent of total net profit (as compared to an average of about 10 percent in previous years) as a result of regulatory changes, the most significant of which was the sale of the mutual fund management companies. The effects of the reform are expected to continue until the completion of the sale of the provident funds.

In 2006 the improvement in the indices of credit risk continued in its two main components: the increase in the indices of credit quality and the decrease in the relative exposure to credit risk.

However, the declared policy of expanding the distribution of dividends reduces capital accrual potential.

During the year, the improvement in the indices of credit risk continued due to the improvement in its two main components: the increase in the indices of credit quality and the decrease in the relative exposure to credit risk. The extent of the exposure declined both relative to output and to equity capital following the continued reduction in bank credit to the business sector (Figure 4.15). In addition, the decline in the proportion of problematic credit within total credit continued for the second year running (to 8.7 percent) as a result of the continuing improvement in the situation of borrowers[24] and there was even a partial collection of problem debts (Figure 4.16 and Box 4.4). All of the aforementioned, together with the continuing improvement in the adequacy of the provision for doubtful debt,[25] point to a reduction in the banking system's credit risk. Nonetheless, its level remains high relative to the years prior to the recession and there has been no appreciable improvement in the composition of problem debts. Thus, the proportion of problem debts remained high at 21.3 percent

Figure 4.15
Ratio of Balance-Sheet Credit to GDP in the Five Major Banking Groups, December 2000 to September 2006



SOURCE: Based on Bank of Israel data.

[24] The debt burden (ratio of redemption of principal and interest to operational profit) of public companies continued to decline. In addition, the extent of the companies' leverage has not increased despite the increase in issues following the substitution for bank credit and increased profits. In addition, the ratio of households' credit to disposable income has declined (Table 4.1).

[25] Despite the decline in the periodic expenditure for doubtful debt. The adequacy of the provision for doubtful debt is calculated as the ratio of the balance of the provision for doubtful debt to total problematic credit.

(Table 4.1) due to the fact that the recovery among problematic borrowers has been particularly slow. Apart from this, the construction and real estate industry is still a focus of vulnerability as reflected both in the high proportion of credit to the industry

Box 4.4
Problem debts in the banks' credit portfolio

The proportion of problem debts in Israel's banking system[1] has been declining since 2004; however, it is still higher than prior to the latest recession (Figure 4.16). Its proportion in 2006 (8.7 percent) was substantially higher than comparable banks world wide, as could be seen from the reports of the international rating agencies and of the IMF.

However, a comparison to international data is not simple due to substantial differences in definitions. In Israel, the concept of "problem debts" is utilized while the concepts of NPLs (Non-Performing Loans) and Impaired Loans[2] used abroad are defined differently in different countries.

In Israel, Directive for Proper Bank Management No. 314 defines the rating of problem debts (Table 1). The rating begins with debt that does not produce revenue, which together with debt that is in temporary arrears, is closer to the definitions of NPLs and Impaired Loans. The main difference between Israel and other countries in this regard is the inclusion of indebtedness under special supervision within the definition of problem debts in Israel. This debt, which accounts for about 60 percent of the total balance-sheet problem debt in Israel, basically does not match the criteria for NPLs and Impaired Loans.

Table 1

Balance-Sheet Problem Debts of the Largest Five Banks, September 2006

	Balance of problem debt (NIS billion)	Share in total problem debt (percent)	Cumulative share of total credit to the public (percent)
Non revenue producing	11.8	23.7	2.1
In temporary arrears	3.6	7.3	0.7
Restructured	3.9	7.8	0.7
To be restructured	1.3	2.5	0.2
Under special supervision	29.3	58.7	5.2
Total problem debt	50	100	8.9

[1] Average for the five largest banking groups.

[2] The accounting standards FASB 114 and 118 in the US define Impaired Loans. The practice of the FDIC (the regulatory body that insures the bank deposits of the public in the US) regarding problem debts follows these accounting rules.

The relatively high proportion of problem debt in total credit to the public derives from two main causes:

(a) Israel does not have a secondary market for the sale of problem debts, as the tradable-debt market is undeveloped, and little use is made of innovative financial instruments to transfer credit risk. To prepare the infrastructure which can serve as the foundations on which the securitization market can develop requires work in the areas of legislation, accounting standardization and taxation. Asset-backed securitization is a prime instrument for the reduction of credit risk, and securitization, under certain circumstances, results in securitized loans being removed from the balance sheet. The lack of a secondary market for the sale of problem debts means that these debts remain in the banks' credit portfolio for a long time, and increases the proportion of problem debt in total credit to the public.

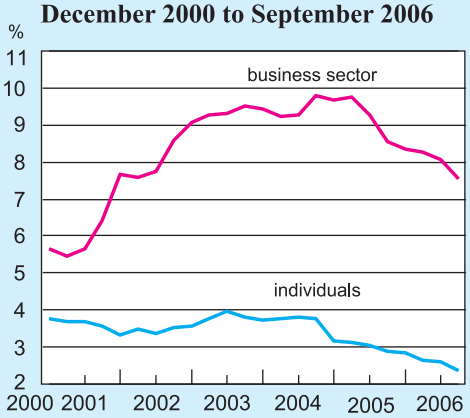
(b) Israel's accounting standards result in problem debts remaining on the balance sheet for a long time (while specific loan loss provision are made, so that the specific loan loss provision too is higher than the norm in other countries). For example, debts the collection of which requires special long-term efforts, and debts the balance of which is greater than the fair value of the securities pledged against their repayment are usually left on the balance sheet. This policy leads to a high proportion of problem debt appearing in the balance sheet.

Throughout 2006, as in the past, the banks maintained a small surplus of liabilities relative to their assets in foreign currency.

and the insufficient improvement in the indices of the industry's problem debts (which constitutes 13.25 percent of the total credit to the industry).

The aggregate exposure of the banking system to changes in the foreign exchange rate totaled $0.7 billion of surplus liabilities in foreign currency, which implies an exposure to a depreciation of the shekel. This balance is the combined result of the banks' balance-sheet and off-balance-sheet activity (transactions in futures and shekel-foreign currency options). During the course of 2006, as in past years, the banks maintained a low surplus of liabilities relative to their

Figure 4.16
Problem Loans as a Proportion of Credit by Sector in the Five Major Banking Groups, December 2000 to September 2006



SOURCE: Based on Bank of Israel data.

assets in foreign currency. As in past years, the average balance of exposure in 2006 stood at only about $0.3 billion. It is important to emphasize that as part of the banks' management of their activity in the foreign exchange market, they monitor their overall exposure to exchange rate risk and avoid deviating for any length of time from the level of exposure specified by the bank's board of directors.

b. Institutional investors[26]

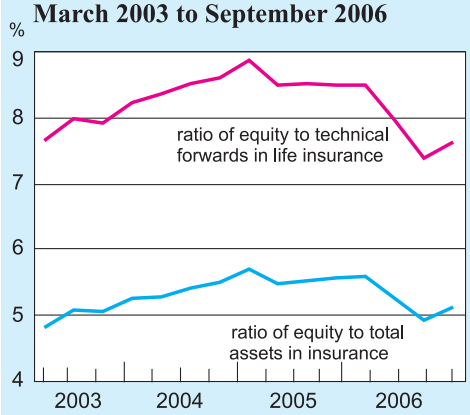
i. Insurance companies

The assets of the life insurance industry totaled NIS132 billion at the end of 2006 which represented 7.2 percent of the public's asset portfolio (Table 4.8). About 63 percent of the assets of the industry are concentrated in profit-sharing life insurance policies and their proportion of total life insurance assets has been gradually increasing since 1992, when the guaranteed-yield policies were closed to new policyholders. The profit-sharing insurance policies have grown at an average annual rate of about 15 percent in recent years and their influence in financial markets is growing. This development has provided support for the stability of the markets and has increased their liquidity. The involvement of the insurance companies in the share market has increased significantly in recent years and about 20 percent of their assets are now invested in shares. The insurance companies also invest a high proportion of their assets abroad (18 percent in 2006). The insurance industry suffers from a high degree of concentration with the five largest insurance groups controlling more than 95 percent of the industry's assets.

The resilience of insurance companies fell in 2006, with capital adequacy continuing to fall.

The resilience of the insurance companies diminished this year. Thus, although there were positive developments in systemic risk, capital ratios dropped and profitability was lower than in the previous three years. In addition, the return on equity fell from 30 percent in 2004 and 2005 to 20 percent in 2006 (in annual terms). The capital ratios, which began to decline somewhat in the previous year following a long upward trend, dropped sharply in 2006 following the continuing rapid growth in assets and the distribution of dividends. Thus, the ratio of equity capital to total assets reached 5.1 percent as compared to 5.7 percent at the end of

Figure 4.17
Capital Ratios in Insurance, March 2003 to September 2006



SOURCE: Based on data from Ministry of Finance Capital Market Division.

The drop in capital adequacy stands out against a background of improved economic activity.

[26] The analysis of provident funds and insurance companies relates to the situation prior to the actual sale of the banks' provident funds to the insurance companies since they had not yet been completed.

Table 4.8
Institutional Investors: Main Developments, 2002–06

(NIS billion, current prices)

	Mutual funds	Provident and severance pay funds	Advanced study funds	Pension funds		Life insurance schemes[a]		Total
				Established	New	Guaranteed yield	Profit sharing	
				Balance[b] (NIS billion, current prices)				
2002	45.8	119.5	46.9	119.7	14.4	44.5	41.7	432.5
2003	83.2	134.3	54.4	120.6	18.9	43.8	52.3	507.6
2004	101.1	146.8	61.9	124.4	23.8	43.6	58.1	559.6
2005	124.6	165.3	71.9	142.5	44.7	47.3	70.9	667.2
2006	110.8	0.0	0.0	0.0	0.0	0.0	0.0	110.8
				Percent of total institutional investors' savings[c]				
2002	10.6	27.6	10.9	27.7	3.3	10.3	9.6	100.0
2003	16.4	26.5	10.7	23.8	3.7	8.6	10.3	100.0
2004	18.1	26.2	11.1	22.2	4.3	7.8	10.4	100.0
2005	18.7	24.8	10.8	21.4	6.7	7.1	10.6	100.0
2006	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
				Percent of public's asset portfolio				
2002	3.9	10.1	4.0	10.1	1.2	3.8	3.5	36.6
2003	6.3	10.2	4.1	9.2	1.4	3.3	4.0	38.7
2004	7.0	10.1	4.3	8.6	1.6	3.0	4.0	38.5
2005	7.5	9.9	4.3	8.5	2.7	2.8	4.3	40.0
2006	7.1	0.0	0.0	0.0	0.0	0.0	0.0	7.1
				Net accrual (NIS billion, current prices)				
2002	-14.9	-3.0	-0.7	-3.2	3.1			-18.7
2003	30.7	-2.7	0.9	-4.3	3.5			28.1
2004	13.9	1.1	2.7	-4.2	3.8			17.2
2005	16.0	2.4	2.7	-3.8	17.6			35.0
2006	-19.2	-2.1	1.7	-3.9	5.3			-18.2
				Real yield (percent)[d]				
2002	-6.6	-6.9	-6.4					
2003	15.5	19.1	17.8					
2004	4.2	8.2	7.8					
2005	4.9	9.8	9.1					
2006	6.6							

[a] Asset balances of life insurance plans do not include fixed assets, receivables and deferred purchasing expenses.

[b] All institutional investor assets are net of mutual fund investments.

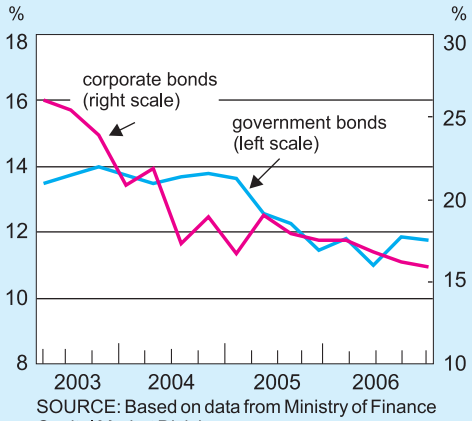
[c] Includes: Mutual and training funds defined as short- to medium-term investments, and provident funds, pension funds and life insurance plans defined as institutional and contractual long-term savings.

[d] The real yield of the provident and severance pay funds does not include the yield of the central severance pay funds and funds for other purposes.

SOURCE: Based on mutual funds' returns to the Bank of Israel and data of the Capital Market, Insurance and Savings Division of the Ministry of Finance.

2004 (Figure 4.17). This decline was particularly noticeable in view of the improvement in economic activity which should have been exploited in order to improve capital adequacy. Although the equity capital-to-assets ratio does not differentiate between the various types of risk in the portfolio of assets and liabilities, it is easy to calculate and therefore facilitates international comparison. Although there are still no agreed-upon international criteria in the area of insurance for the required capital ratio (such as the Basel rules in banking), the ratio in Israel is considered low in international terms.[27] Furthermore, in most countries, as opposed to Israel, differentiation is made between the equity capital of life insurance companies and that of general insurance companies. At the same time, the rapid increase in risk assets continued, particularly credit to the business sector.[28] In contrast, there were some positive developments in the systemic risk implicit in the activity of the insurance companies. Thus, the risk of infection from insurance companies to the markets and to the banks continued to decline as could be seen in the decrease of their market share. In the opposite direction as well, i.e. the exposure of the insurance companies to the markets, there was a small improvement. Thus, although the proportion of tradable assets within total assets increased somewhat again this year, the upward trend in the proportion of foreign assets continued (though it is still lower than abroad), which has improved the diversification of the asset portfolio (Figure 4.18).

Figure 4.18
Insurance Companies' Share of Israel's Bond Market, March 2003 to September 2006



SOURCE: Based on data from Ministry of Finance Capital Market Division.

Risk assets, particularly business sector credit, continued to rise rapidly.

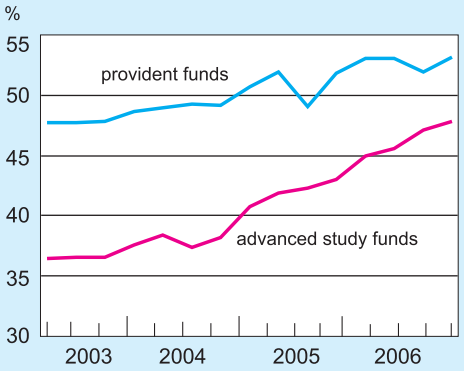
ii. Provident funds

The assets of the provident fund and compensation fund industry totaled NIS 176 billion at the end of 2006 which represents an increase of 6.2 percent relative to the end of 2005. This growth was the result of the increase in prices rather than accrual in the industry which was negative and totaled NIS 0.8 billion in 2006. The reason for the negative accrual is apparently related to the new regulation that went into effect at the beginning of 2006, according to which the eligibility for tax benefits on deposits

[27] See, Weitzman, Nagar, *The Insurance Industry and Financial Stability – International Perspectives and an Assessment of the Situation in Israel*, Issues in Financial Stability, July 2005.

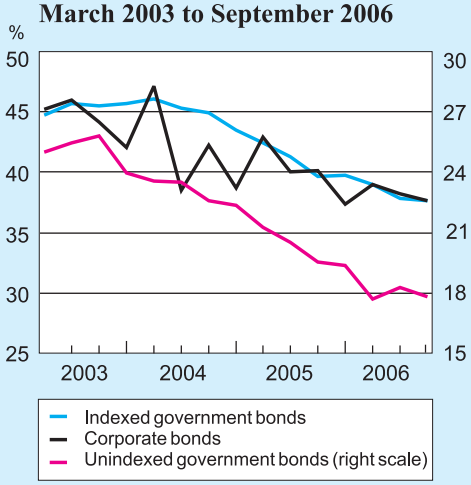
[28] Due to a lack of sufficiently detailed data, it is impossible to differentiate between the risks of insurance companies and those of its policyholders in a risk analysis. The assets in the nostro portfolio of the insurance companies constitute about 60 percent of their total assets but the proportion of risk assets within them is higher than for the profit-sharing policies.

Figure 4.19
Liquid Accounts as Share of Total Liabilities of Provident Funds and Advanced Study Funds, March 2003 to September 2006



SOURCE: Based on data from Ministry of Finance Capital Market, Insurance and Savings Division and the Bank of Israel.

Figure 4.20
Pension Funds' Share of Israel's Securities Market, March 2003 to September 2006



SOURCE: Based on data from Ministry of Finance Capital Market, Insurance and Savings Division and the Bank of Israel.

in provident funds is conditional on prior deposits in a pension fund.[29] Also according to the new regulation, funds deposited from the beginning of 2006 in a provident fund can only be withdrawn at the age of 60, rather than after 15 years as previously. The goal of the change was to encourage saving for retirement only and to avoid the granting of tax benefits for shorter-term saving. As a result of the change, the accrual in the industry is expected to decline significantly since provident funds are now less attractive.

There was no appreciable change in the resilience of provident funds in 2006; on the one hand, systemic liquidity risk continued to increase to some extent but on the other hand there were positive developments in systemic risks.

There was no appreciable change in the resilience of the provident funds in 2006. On the one hand, systemic liquidity risk continued to increase to some extent but on the other hand there were positive developments in systemic risks. Although systemic liquidity risk increased somewhat this year as a result of the continuing upward trend in the proportion of liquid accounts in the provident funds, primarily in the study funds (Figures 4.19 and 4.20), the rate of coverage of liquid liabilities, which had risen sharply in the last two years, remained unchanged. However, the coverage ability of the funds in liquid assets improved in general, thanks to an improvement in the depth and liquidity of the Israeli markets in recent years. In general, there were positive developments in the area of systemic risk: the continuing decline in the risk of infection to the banks and the government bond markets and the reduced dependence of provident funds on financial markets in Israel.

[29] For members born since 1961.

iii. Pension funds

The assets of the pension industry totaled about NIS 201 billion at the end of 2006 which represents an increase of 8 percent relative to the end of 2005. About NIS 55 billion worth of the industry's assets are held by the new pension funds with the rest in the veteran funds. The assets of the veteran funds have grown moderately during recent years due to their yields since new members have not been allowed to join the funds since 1995 and the accrual in the industry has been negative. In contrast, the new funds grew this year by 22 percent and the accrual in them totaled NIS 7.1 billion.

Until the reform in 2003, the industry was controlled by the Histadrut National Labor Union and benefited from a "captive audience" of workers who joined a specific fund according to the decision of the employer and the encouragement of the union. The industry has become more competitive both due to the diversification of control in the industry and the almost-complete cessation of the issue of designated bonds to the funds.[30] As a result, the funds are gradually entering the capital markets and are being judged by the yields they achieve. In addition, the greater ease in switching between funds, increased transparency and the improved reporting of performance have increased the competitiveness of the market.

As a result of the reform in the industry, a number of mergers were carried out among the new pension funds and as a result their total number has declined. Currently, there are 13 comprehensive funds and 10 general funds which are controlled by six insurance companies and a small number of private brokers. However, in spite of the reform, there is still a high degree of concentration in the industry. Thus, the two largest funds control more than 60 percent of the assets.

Despite the reform, the pension industry still shows a high degree of concentration; the two largest funds hold more than 60 percent of total assets.

iv. The credit risk of the financial institutions

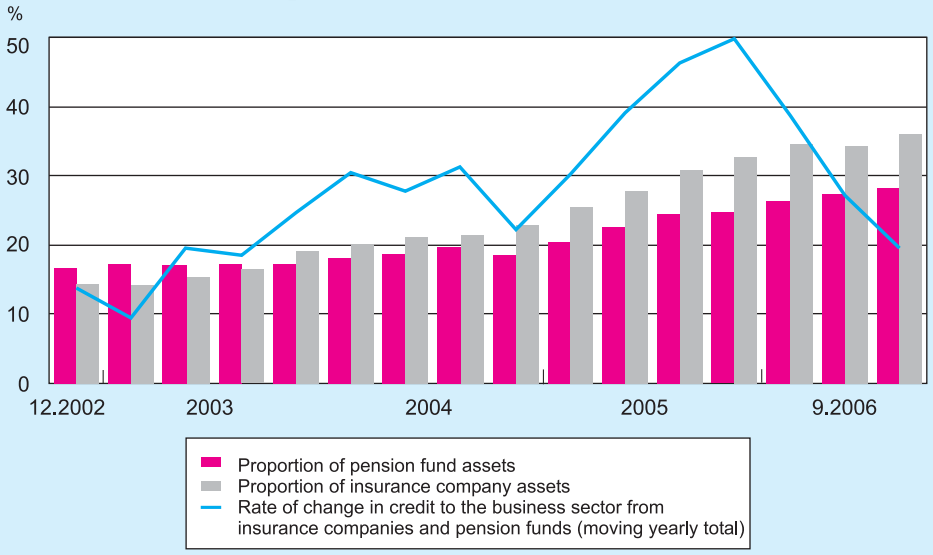
There has been almost no change in the combined credit risk of financial institutions[31] ("systemic credit risk") as a result of the small increase in the exposure of financial institutions to credit risk and the improvement in the quality of risk. The exposure of the financial institutions to credit risk rose somewhat in 2006 relative to the previous year. This can be seen in the growth of their credit to the business sector by 5.0 percent in 2006 which was, however, slower than the 8.4 percent increase in 2005. The significant improvement in the quality of credit was the result of several factors: 1) the continuing improvement in the economic situation and in the situation of borrowers; 2) the increased dispersion of credit risk among financial institutions, particularly the shift from the banks to institutional investors; and 3) the channeling of credit to the business sector by the institutional investors, primarily to large borrowers, the vast majority of whom are rated.

There has been almost no change in the combined credit risk of financial institutions ("systemic credit risk") as a result of the small increase in the exposure of financial institutions to credit risk and the improvement in the quality of risk.

[30] The issue of designated bonds to each fund will begin again when its proportion of designated bonds in total assets falls below 30 percent.

[31] Credit extended by the banks and institutional bodies.

Figure 4.21
Credit to the Business Sector as a Share of Pension Funds' and Insurance Companies' Total Assets, and Rate of Change of Credit, December 2002 to September 2006



SOURCE: Based on Bank of Israel data.

Simultaneous with the improvement in the risk indices of bank credit, the rapid increase continued in the proportion of credit to the business sector within the asset portfolio of institutional investors. Nonetheless, the rate of increase dropped from 57 percent in 2005 to about 19 percent. The proportion of risk assets in the total assets of the provident funds and the insurance companies has already reached a high 47 percent. This accelerated increase has worked to increase the credit risk of institutional investors, especially in view of their lack of experience and knowledge in managing credit risk in comparison to the banking system (Figure 4.21). Nonetheless, there are various indicators that the quality of credit is still adequate. Thus, most of the credit is in the form of bonds issued by large firms with a high rating (A or above) or the credit is backed by collateral.

6. THE PUBLIC'S PORTFOLIO OF FINANCIAL ASSETS AND CREDIT TO THE PRIVATE SECTOR

The value of the public's asset portfolio rose in 2006 by 11.6 percent and reached NIS 1.9 trillion in December.

The value of the public's asset portfolio increased by 11.6 percent in 2006 and reached NIS 1.9 trillion in December (Table 4.9). The increase encompassed all the components of the portfolio though it was primarily the result of the increase in the value of the public's holding of shares in Israel and aboard, which increased by 27 percent since the beginning of the year, and the 32 percent increase in the value of holdings of bonds issued by the private sector.

The changes in the asset portfolio in recent years were influenced primarily by the positive macroeconomic developments, including rapid growth and expectations of its continuation, the stabilization of inflation at very low levels and the stability of financial markets. In addition, the composition of the portfolio has been influenced by the structural reforms carried out, including the tax reform, the pension reform, the Bachar reform, the liberalization of restrictions on investment by institutional investors and the changes in the rules of financial reporting that apply to institutional investors.

The proportion of shares in Israel in the portfolio increased this year, as it has done since 2003.

There was a noticeable increase in the proportion of Israeli shares in the public's asset portfolio which represented a continuation of the trend that began in 2003 with the acceleration in economic growth and the expectation of its continuation. The proportion of shares in the asset portfolio has doubled since the end of 2002 and reached 22.4 percent by the end of 2006. This is a record level that had not been observed since the beginning of the decade (Figure 4.22). The increase in the proportion of shares this year was primarily the result of the sharp price increases on the local securities exchange alongside the issues in the primary market. Added to this was the transfer of shares from foreign residents and the government to local residents as a result of the net sales by foreign residents and the sale of shares by the government as part of the privatization process.[32]

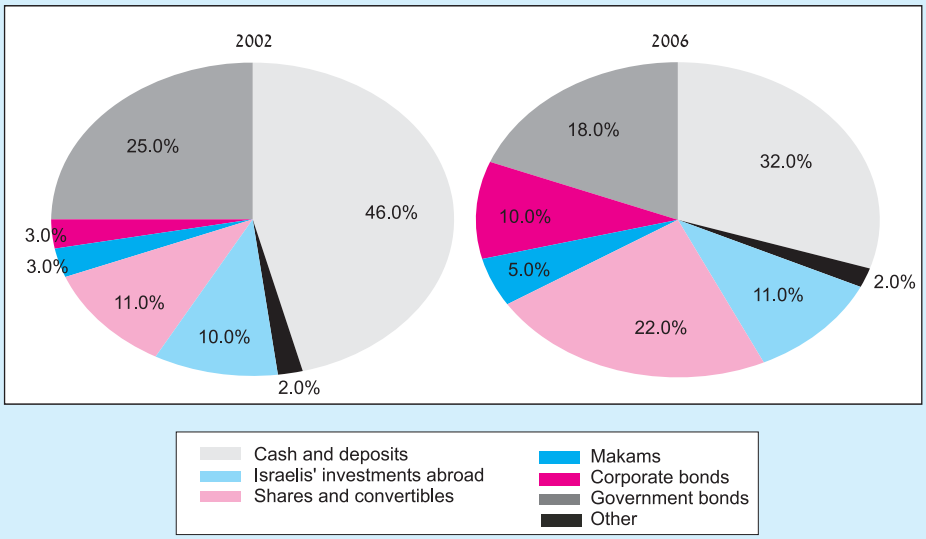
Table 4.9
The Financial Asset Portfolio of the Public, by Indexation, 2003–06

	Balance (NIS billion)				Composition (percent)			
	2003	2004	2005	2006	2003	2004	2005	2006
Total assets	**1,312.5**	**1,454.6**	**1,667.7**	**1,860.8**	**100.0**	**100.0**	**100.0**	**100.0**
Nominal change on previous year (%)	10.8	10.8	14.7	11.6				
Assets by Indexation								
Unindexed assets	432.2	474.7	503.1	542.7	32.9	32.6	30.2	29.2
CPI-indexed assets	455.2	456.0	520.9	550.6	34.7	31.3	31.2	29.6
Assets in or indexed to foreign currency	198.0	223.7	259.7	278.6	15.1	15.4	15.6	15.0
Shares in Israel	201.2	249.1	330.0	416.9	15.3	17.1	19.8	22.4
Shares abroad	25.9	51.1	54.0	72.0	2.0	3.5	3.2	3.9
Total assets excluding shares in Israel and abroad	**1,085.5**	**1,154.4**	**1,283.7**	**1,358.9**	**100.0**	**100.0**	**100.0**	**100.0**
Unindexed assets	432.2	474.7	503.1	533.6	39.8	41.1	39.2	39.3
CPI-indexed assets	455.2	456.0	520.9	547.5	41.9	39.5	40.6	40.3
Assets in or indexed to foreign currency	198.0	223.7	259.7	277.8	18.2	19.4	20.2	20.4

SOURCE: Based on banks' financial statements, and data from the Tel Aviv Stock Exchange and the Ministry of Finance.

[32] The public's asset portfolio does not include the assets of the government, foreign residents or the banks and therefore the transfer of shares from these to other sectors increases the value of the public's holdings.

Figure 4.22
Portfolio Distribution by Type of Asset, 2002 and 2006



SOURCE: Bank of Israel.

Despite the sharp and prolonged increase in share prices, households have made little entry into the share market, either directly or through mutual funds.

Despite the sharp and prolonged increase in prices in the share market since 2003, the entry of households into the share market, either directly or through mutual funds, has been on a small scale. Thus, for example, the accrual in the funds specializing in shares has been only NIS 1.8 billion since 2003 and in 2006 it was even negative. Nonetheless, the public increased its exposure in the local share market through the purchase of ETFs that invest in shares included in the Tel Aviv Exchange indices. The value of these funds reached NIS 6.7 billion at the end of 2006 as compared to NIS 3.7 billion at the end of 2005. In addition, the exposure of households in the share market also grew through medium- and long-term institutional investors who continued to increase the proportion of shares in their portfolios in 2006 in an effort to achieve higher yields.

The value of the public's holdings in corporate bonds increased.

Simultaneous with the increase in the proportion of shares in the public's asset portfolio, the value of the public's holdings of private bonds also rose. This increase was the result of the continuing acceleration in issues by the private sector and the increase in bond prices. This was made possible by the growth in the supply of bonds and the demand for them as described in Section 3.3 above. This development led to a decline in the proportion of government bonds in the public's asset portfolio simultaneous with the increase in the proportion of private-sector bonds.

The tax reform also had a substantial influence on the composition of the public's asset portfolio through, among other things, its contribution to the increase in the proportion of tradable assets in the portfolio and the increase in the component of foreign investment (see Box 4.3).

Also contributing to the increase in the component of foreign investment were the narrowing of the interest rate spread between Israel and abroad and the increased transparency and competitiveness in the long-term saving industry. This led institutional investors to increase the diversification of their investments in an effort to achieve higher yields. There was an increase in investment abroad this year both by long-term institutional investors and directly by the public, while investment abroad through mutual funds declined as a result of withdrawals by the public. Despite the increase in long-term foreign investment by institutional investors, their rate of investment abroad is still low by international standards and due to their size, they are even more exposed than other investors to fluctuations in yields in the local market.

One of the reasons for the relatively low rates of investment abroad is home-bias which characterizes investors in all parts of the world and leads them to allocate their investments primarily to the local market. The growth in index instruments, such as ETFs and index funds, has made it easier to invest aboard and is expected to continue in the future.

The tax reform contributed to a rise in the share of tradable assets in the portfolio and in a rise in the component of investments abroad.

The increase in the proportion of tradable assets in the portfolio was the result of additional reforms, including the pension reform, the change in the method of valuing non-tradable assets owned by the provident funds and the cancellation of the ceiling on *makams*. As a result of these reforms, the tradable portion of the portfolio reached 51.2 percent in December as compared to only 40.2 percent at the end of 2003. This development has contributed to the deepening and increased efficiency of the local capital market and to the decrease in the involvement of the banks in the management of the public's assets.

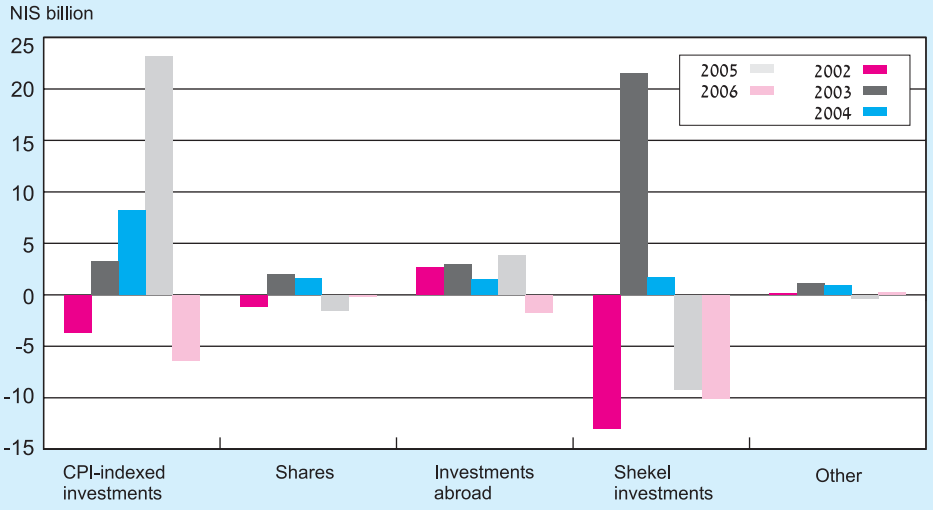
The share of shekel unindexed assets in the portfolio remained almost unchanged, while the share of CPI-indexed assets fell.

An examination of the portfolio's breakdown according to indexation (without shares) shows that in 2006 the proportion of non-indexed shekel-denominated assets remained almost unchanged, while the proportion of CPI-indexed assets declined (in contrast to 2005). The decline in the proportion of CPI-indexed assets is the result of the low inflation this year, which reduced the risk of inflation and the attractiveness of CPI-indexed assets.

A total of NIS 18.3 billion was withdrawn from mutual funds this year, after some NIS 60 billion was invested in them in 2003-2005.

Mutual funds are one of the most popular investment channels among households. This year NIS 18.3 billion were withdrawn from the mutual funds as compared to the period 2003–5 during which NIS 60 billion was accrued (Figure 4.23). There were withdrawals from all the types of mutual funds though the withdrawals from government bond funds and shekel funds were particularly large. The main withdrawals were from mutual funds managed by the banks, both from funds still under their management and those that had been transferred during the course of the year to other managers (as a result of their sale in accordance with the recommendations of the Bachar reform). Therefore, the question arises as to whether the withdrawals were a result intended by the banks. In other words, the banks may have referred their clients to alternative investment channels that produce higher revenues for them, such as structured deposits. It should be remembered that the withdrawals from the funds began prior to the transfer of ownership from the banks and therefore had an effect on the price at which some of the sales were made. Furthermore, the withdrawals were

Figure 4.23
Total Sources of Mutual Fund Activities by Specialization, 2002-06



SOURCE: Bank of Israel.

not concentrated only in funds whose ownership had been transferred but also in funds that were still controlled by the banks. An analysis of the changes in the asset portfolio during the course of the year does not indicate any shift of funds to deposits. In fact, the proportion of deposits in the asset portfolio even declined this year, reaching 31.7 percent as compared to 34.2 percent at the end of 2005. This is consistent with the trend that began in 2003 when tax rates on deposits were made equal to those on other investments. It appears that part of the money withdrawn from the mutual funds this year was channeled to ETFs (about NIS 5 billion), as well as to *makams* and foreign investments, whose contribution to the banks' profitability is not necessarily higher than that of the mutual funds.

Money withdrawn from mutual funds was directly mainly toward exchange traded funds, makams and abroad, while the share of deposits in the asset portfolio declined further this year.

The changes that began in recent years in the composition of the portfolio as a result of the reforms and of macroeconomic policy contributed to increased efficiency in the local capital market through increased tradability and liquidity and to the development of new financial instruments. These trends are expected to continue in coming years as a result of the continuing adjustment of the portfolio to the structural changes that have been implemented.

Total credit to the private sector increased this year by 3.8 percent, primarily due to the rapid expansion of non-bank credit and a decline in bank credit.

Credit to the private sector—The total credit to the private sector increased in 2006 by 3.8 percent to NIS 838 billion of which NIS 611 billion consisted of credit to the business sector (Table 4.10). The increase in total credit was primarily the result of the expansion of non-bank credit to the business sector which grew by 20 percent while total bank credit declined by 2.3 percent. Non-bank credit currently accounts for a significant proportion of total credit to the business sector, which this year reached a level of 43 percent as compared to 23 percent in 2001. Among the largest providers

of non-bank credit are foreign residents (43 percent) followed by provident funds (26 percent) and insurance companies (13 percent).

The developments in the non-bank credit markets, which are similar to those in most developed countries during the last decade, are a result of the reforms carried out in recent years. This process is expected to intensify as a result of the changes in the structure of the system according to the "Bachar legislation". The sale of the banks' provident and mutual funds has diminished the dominance of the banks in the main activities of the financial system, including the provision of credit to the business sector, and therefore should support the continuation of this trend. The diversification of the sources of credit in the economy among the various types of financial institutions contributes to stability during periods of crisis; however, it is expected to worsen the situation of firms that get into difficulty in the future since renegotiating the conditions of a loan is more easily done with the banks.

Table 4.10
Changes in Credit to the Private Sector and the Business Sector,[a] 2001 to September 2006

	2001	2002	2003	2004	2005	Sept 2006
	Balances (NIS billion, at September 2006 prices)					
Total credit to the private sector[b]	709	724	726	751	808	838
of which: To the business sector	497	509	512	533	584	611
Bank credit to the business sector	384	384	375	359	356	350
Non-bank credit to the business sector	113	125	137	174	228	261
	Distribution of credit to the business sector (%)					
Bank credit	77	75	73	67	61	57
Non-bank credit	23	25	27	33	39	43
of which: Institutional investors	7	8	10	13	18	20
	Annual change in credit to the business sector (%)					
Total credit to the business sector	10.6	2.4	0.5	4.1	9.5	6.2
of which: Tradable bonds	20.2	6.5	9.4	33.7	44.2	46.0
By source:						
Bank credit	11.3	-0.1	-2.3	-4.3	-0.9	-2.3
Non-bank credit	8.4	10.8	9.1	27.1	31.1	19.8
of which: From institutional investors	30.6	14.9	30.8	28.0	57.5	21.8
From nonresidents	1.1	8.1	-4.7	20.6	7.5	13.3

[a] Credit to the business sector includes loans and tradable and nontradable bonds made available to the sector by the banks, institutional investors (insurance companies, provident funds and pension funds), nonresidents, and households (via mutual funds).

[b] The private sector consists of the business sector and households.

SOURCE: Based on Bank of Israel data and data from the Capital Market, Insurance and Savings Division of the Ministry of Finance.