Chapter 4
The Financial System

- In 2005 the positive trends evident in 2003 and 2004 in the markets and the financial institutions continued, and the financial system showed stability.
- Against the background of the improvement in the domestic and global economic environment in which the financial system operates, the share market was buoyant, the bond and foreign currency markets were relatively calm, and borrowing by businesses increased.
- The banking system became more resilient, due to its improved capital adequacy and the reduction in credit risks. Insurance companies showed unchanged capital ratios, but concurrently the rise in credit accelerated.
- The Bachar and other reforms implemented in the last few years are expected to boost the resilience of the financial market in the long run, as they promote the reduction in the banks' dominant position and the continued development of the long-term-savings markets and nonbank credit.
- In the transition period of the reforms, systemic financial risks are expected to increase, and in particular credit risk among institutional investors, which make it necessary to take steps in the areas of structure, organization, enforcement, and information available to the public.

1. MAIN DEVELOPMENTS

The positive trends prevailing in the financial markets and financial institutions during the previous two years continued in 2005, and the financial system was stable. Notable developments during the year were: the continued bullish activity in the equities market; the fall in yields-to-maturity in the fixed-income market to an all-time low; the smooth functioning of the foreign-currency market and the relative calm in the market concurrent with a depreciation of the NIS against the dollar; increased capital raising by business companies, mainly via the issue of bonds; an improvement in the profitability and resilience of the financial institutions, especially the banks; a decrease in the banks' dominance in the supply of credit to the business sector and in long-term saving, together with increased competition and foreign investors' growing interest in the markets.

These trends were supported by a continued improvement in the background economic environment in which the financial system in Israel operates: growth in the business sector, which was reflected by a further improvement in its financial strength;

and macroeconomic policy that had the effect of reducing uncertainty in the economy, principally via another decrease in the budget deficit, a decrease in the debt-GDP ratio and a rise in inflation rates to within the range determined by the government. Other background factors that favorably affected the financial system were the relatively calm security situation, global growth and calm in world financial markets, within which the local markets' integration is increasing continually. The improvement in background economic conditions led to an improvement in the economy's financial strength, which was reflected inter alia by a decrease in Israel's risk premium.

Nonresidents' investments in shares traded in the local stock market increased to an unprecedented volume during the first half of the year in line with worldwide investors' preference for emerging markets. For most of the period, the inflow of foreign investment to Israeli companies together with the current account surplus moderated the effect on the exchange rate of Israeli residents' capital exports. These capital exports were supported by the contraction in the differential between interest rates in Israel and the US and by the tax reform.

The continued improvement in the global and the domestic environment in which the financial system operates was very evident, and the resilience of the financial institutions, headed by the banks, and of the financial markets, rose.

The improvement in the background economic conditions in which the financial system in Israel operates reflects inter alia the present position of the global economy and the Israeli economy in the rising part of the non-financial business cycle. As was to be expected, this improvement was accompanied by bullish activity in the financial markets and by an increase in financial institutions' profitability. Against this background, the resilience of the banking system increased, as reflected by the rise in its capital adequacy and by the fall in the credit risk inherent in its activity. The insurance companies maintained their capital ratios even though this was current with a rapid expansion in credit.

The reforms carried out in the financial system in recent years are generating revolutionary changes in the markets. The most prominent of these is the declining dominance of the banks in long-term savings and credit to the business sector.

Financial policy again had the effect of further increasing the resilience of the financial infrastructure by means of a series of reforms and structural changes. Major changes are already apparent in the financial system as a result of the reforms implemented during recent years: a gradual decrease in the dominance of the banks in the supply of credit to the business sector and in long-term saving, concurrent with a growth in competition in the markets and the markets' ability to attract new players, including foreign investors; the redirection of the public's savings from non-tradable assets to tradable assets and investors, particularly institutional investors' increased holdings of assets abroad following the removal of the restrictions imposed in this respect in the investment regulations. Due to the reforms and to the decrease in government borrowing, business companies' issues in the capital market increased during the year – mainly issues of bonds that were purchased by institutional investors and which served as a viable substitute for bank credit. The 'Bachar reform' that the government adopted and which was embodied in legislation in 2005 has already led to the sale of the bank-owned provident funds and mutual funds, most of them to the insurance groups, and part of them to foreign investors with extensive expertise and experience in international markets. The implementation of the reform is expected to speed up the decrease in the dominance of the banks, and to further contribute to the development of the long-term saving and non-bank credit markets.

The reforms are expected to increase the competition and liquidity of the markets, to attract nonresident investors and to increase the diversification of the public's asset portfolio, as well as its sources of financing.

The positive trends in the financial system present major challenges to the supervisory authorities, primarily the need to cope with the growth in systemic risks during the transition period of the reforms, mainly credit risk among institutional investors. These challenges must be surpassed if the desired results of the reforms are to be achieved in the long term. The authorities must therefore take appropriate action in the areas of infrastructure, regulatory coverage, enforcement and information to the public and particularly, in the area of both capital adequacy and credit risk management of institutional investors. The authorities must also reinforce the supervisory mechanisms, especially the supervision of institutional investors, and increase the coordination and cooperation between them.

2. PRINCIPAL CHANGES IN THE FINANCIAL INFRASTRUCTURE IN 2005

As in recent years a major structural reform in the financial system—the reform of the capital market (according to the recommendations of the Bachar Committee)—was implemented this year. A number of changes was made in regulation and taxation of financial activity in general, and in the activities and supervision of institutional investors in particular. The reforms and changes in the structure, regulatory coverage and taxation of financial institutions and financial activity during recent years are leading to revolutionary changes in the financial system. These are clearly reflected by the decrease in the banks' dominance in numerous areas of financial activity, although they have retained their dominance in at least part of these activities. The reduced dominance of the banks is particularly apparent in the areas of long-term saving and credit to the business sector: A private long-term saving industry separate from the banking industry is emerging, and a sophisticated non-bank credit market for the business sector has developed. These trends are expected to increase the competition and tradability in the markets while blurring the differences between long-term institutional saving entities, attract foreign investors, and lead to greater diversification in the public's asset portfolio and to diversify their sources of investment. The reform and the changes in regulatory coverage and taxation in 2005 are expected to speed up developments in the structure of the financial system and in financial activity, and to affect the system's stability (see section 6 below.)

The reform and changes in structure and taxes in 2005 are expected to accelerate the process of change in the financial system.

The Bachar legislation (following the Bachar Committee's recommendations) concerning the reform in the capital market was completed in July 2005.[1] The main elements of this legislation are a reduction in concentration and minimization of

[1] The Bachar legislation comprises three laws that were enacted in July 2005: The Law for the Supervision of Financial Services (Provident), the Law for the Supervision of Financial Services (Employment in Consultancy and the Marketing of Financial Products), and the Law for Increasing Competition and Reducing Concentration and Conflicts of Interest in the Capital Market in Israel. Also included in the Bachar legislation are numerous indirect amendments to other laws, such as the Insurance Supervision Law, The Banking (Licensing) Law, the Banking Order and the Banking (Customer Service) Law.

conflicts of interest among the entities operating in the capital market. These objectives are to be achieved mainly via the gradual sale of the banks' holdings in provident funds and mutual funds, by restricting a single corporation's rate of holding in entities engaged in long-term saving and in mutual fund activity, and by determining rules for employment in financial consultancy and marketing, including regulations covering the payment of remuneration to entities engaged in such activities.

Although the law permits bank-owned entities to be sold gradually over a number of years, the banks initiated a rapid process of selling their assets and most of them had already been sold by the end of 2005. During the last four months of 2005, shortly after the legislation in question was completed, the banks sold assets to the amount of NIS 150 billion to the insurance groups and to other financial investors, mainly foreign investment funds which until then had kept away from the industry.[2]

Table 1 presents an estimate of the rapid and drastic changes that occurred in the distribution of the control of long-term saving during the last two years as a result of the pension reform, the sale of the new pension funds to the insurance groups in 2004, and the Bachar legislation and its rapid implementation in 2005. The most notable phenomena are: the removal of the majority of long-term saving activity from the banks to the insurance companies; a reduction of the concentration among the financial groups – reflected mainly by a reduction in the differentials between the five largest insurance groups in terms of the asset volume that they control and manage; and the strengthening of other financial institutions, including foreign investors.[3]

The new structure considerably reduces the banks' dominance and especially that of the largest banks in financial activity as a whole and among institutional saving entities in particular. It is therefore expected that the competition among the insurance groups and between them and other financial entities for long-term saving (sources) and investments (uses) will increase, together with their competition with the banking groups – mainly for credit. The implications of these structural changes for financial activity and for financial stability are discussed in Section 6.d below.

Apart from the separation between the banks and the provident funds and mutual funds, the Bachar legislation stipulates a separation between advice on finance assets and their marketing, and has tightened up the supervision of financial institutions and financial services. This is by means of extensive legislative amendments that include the enactment of two new laws—the Law for the Supervision of Financial Services (Provident) and the Law for the Supervision of Financial Services (Employment in Consultancy and the Marketing of Financial Products)—and by amendments to insurance and banking related legislation. A number of important changes were also made in regulatory coverage and taxation in 2005. These changes are intended to increase the sophistication of the markets, their efficiency and the competition between players in them. The most notable changes were in the revaluation of assets,

[2] The completion of the transactions requires confirmation by the authorities.

[3] An examination of the changes in the control structure when the mutual funds are added to long-term saving entities shows a similar picture: The banks' market segment contracted to the benefit mainly of the insurance companies as well as to the benefit of other local and foreign financial entities.

Table 4.1
Estimate of the Changes in Control of Long-Term[a] Savings Resulting from the Pensions Reform and Adoption of the Bachar Committee Proposals, 2003–05

		Banks						Insurance companies						
	Total long-term savings	Hapoalim	Leumi	Discount	Beinleumi	Mizrahi-Tefahot	Total of largest five banks	Migdal	Clal	Phoenix	Menorah	Harel	Total of largest five insurance companies	Other financial institutions[b]
						(NIS million)								
December 2003	260	59	37	24	7	8	136	19	14	9	5	7	54	69
December 2004	293	64	39	26	7	11	147	27	19	11	18	9	83	62
November 2005	338	45	10	11	8	0	73	32	40	22	22	27	143	122[c]
						(percent)								
December 2003	100	23	14	9	3	3	52	7	5	3	2	3	21	27
December 2004	100	22	13	9	3	4	50	9	6	4	6	3	28	21
November 2005	100	13	3	3	2	0	22	9	12	7	6	8	42	36[c]

[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] Including banks not among the largest five.

[c] Of which NIS 36 million (11 percent) is owned by Solomon-Markstone.

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

the regulations governing long-term saving, the taxation of foreign securities and in the regulations concerning market makers in the stock market (see section 6 below for more details of these subjects).

3. DEVELOPMENTS IN THE DOMESTIC FINANCIAL MARKETS

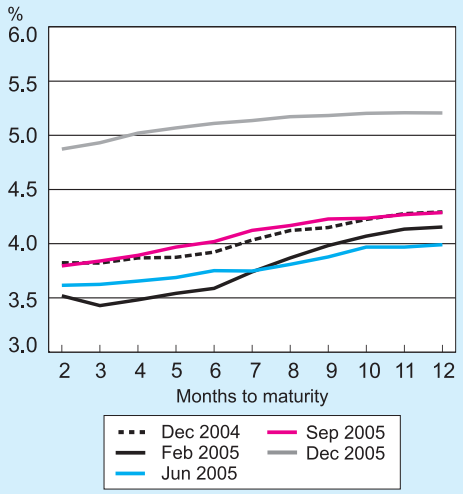
a. The Treasury bill and government bond markets[4]

During 2005, the yield curves for nominal and real redemptions decreased for all periods and reached their lowest levels ever. During the year, the decrease in said returns was offset.

During 2005, the yield curves for nominal and real redemptions decreased for all periods and reached their lowest levels ever (Figures 4.1, 4.2, and 4.3). This, against the background of creditable macroeconomic policies and advancements in structural reforms of the financial markets, which supported the stability and refinement of the financial markets. During the year, the decrease in said returns was offset mainly against the background of increasing political uncertainty and the increase in Bank of Israel interest rates—and the returns for all the terms increased: the short term and mid term returns advanced to higher rates than those at the beginning of the year; and the long term returns increased less—developments that were reflected in a moderation of the positive slope of the curves.

The decrease in returns for the **short and medium terms** during the period under review was influenced mainly by the decrease in monetary interest rates during December 2004, January and February 2005 and by the stable and relatively low level of monetary interest rates from March. This development was supported by relatively low inflation rates and it reflected a moderate increase in inflationary expectations (as derived from the difference between the nominal return and the real return) while stabilizing in the middle of the target range. As a result, the returns for those periods approached their lowest levels during the year. This setting reflected the creditability of the macroeconomic

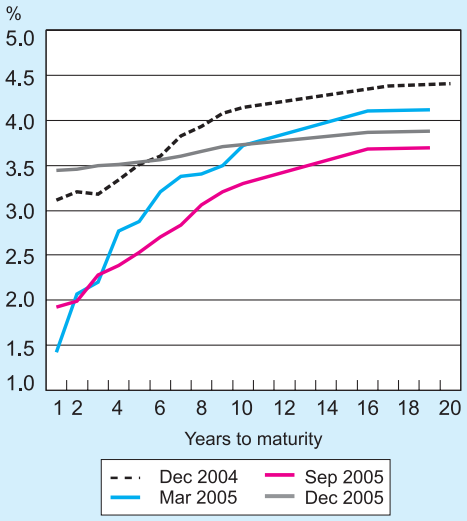
Figure 4.1
Treasury Bill Yield Curve, December 2004–December 2005 (monthly averages)



SOURCE: Bank of Israel.

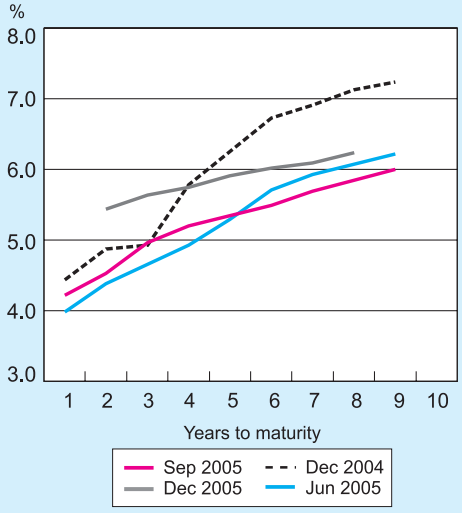
[4] A *Makam* treasury bill is an unindexed bond, does not bear interest, is issued and traded at a discount, and has a redemption period of up to one year. The *Shahar* is a government bond, unindexed, which bears an annual fixed interest rate, and is issued for the relatively medium and long terms: five and ten years until redemption. The Ministry of Finance intends to issue bonds for longer periods, and the Bank of Israel supports this plan; the *Galil* is a government bond indexed to the CPI, bearing an annual fixed interest rate, and is issued for relatively longer periods.

Figure 4.3
Unindexed Bond Yield Curve, December 2004–December 2005 (monthly averages)



SOURCE: Bank of Israel.

Figure 4.2
Unindexed Bond Yield Curve, December 2004–December 2005 (monthly averages)



SOURCE: Bank of Israel.

policy and the relatively low level of uncertainty. The trend of decreases in returns stopped in July, and started to increase, against the background of the approaching implementation of the disengagement and the uncertainty that surrounded it. The increase in returns reflected an increase in expected inflation, expectations of exhausting the course of reducing monetary interest rates and expectations of further increases. During the last quarter of the year, together with the increase in the monetary interest rates, this after eight months without change—the increase in returns started to accelerate, notwithstanding the return of inflationary expectations to the center of the target (see Chapter 3).

The decrease in returns **for the medium and long terms** during the year reflected, inter alia, the relatively low level of uncertainty—which was affected by a number of steady factors, mainly continuation of the fiscal policy, under which government expenditures increased only slightly, the deficit was low, and local capital issues were reduced, even more than planned. This, inter alia, because of the privatization program, which reduced the need for capital issues. The decrease in returns reflected the trust that the public attributed to the government's efforts to reduce its deficit and debt vis-à-vis output. The decrease in returns also reflected the decrease in returns in the United States, mainly during the second quarter of the year, the improvement in the Israel risk premium, its credit ranking and in the expectations regarding same, and the excess demand for government bonds, which resulted from a reduction in issues and large redemptions. During the last quarter of the year, the trend changed: with the increasing political uncertainty, the increases in the Bank of Israel interest rates and the increase in long-term returns in the United States—the long-term returns in Israel started to

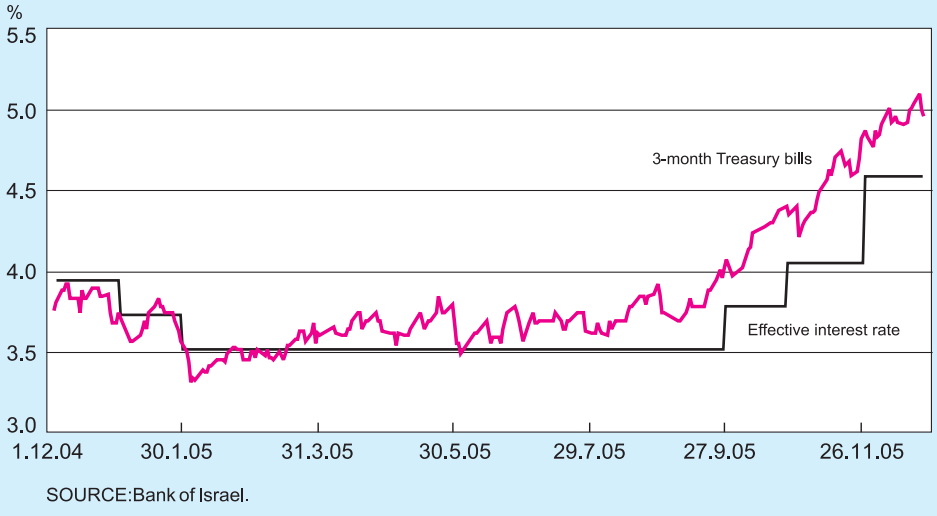
rise, yet at a somewhat lower rate relative to the other terms. The increase in returns, notwithstanding the decrease in inflationary expectations, reflected, apparently, an increase in the risk premium, which increases, as long as the period until redemption increases, because of the uncertainty surrounding the approaching elections.

The form that characterized the Treasury bill yield curve at the beginning of the year, similar to the form of the last two years, reflected expectations of a decrease in interest rates in the short term, and for the three months up to one-year term, the slope was positive and reflected expectations of interest rate increases. This form changed during the second half of the year: the slope for the short term no longer reflected any expectations of interest rate decreases but rather expectations of increases—this because of expectations of approaching increases in monetary interest rates by the Bank of Israel, from October. This issue was reflected also in the gap between the returns on three-month Treasury bills and the Bank of Israel interest rate, which turned positive in the second half of the year onwards (Figure 4.4). **The positive slopes of the Shahar and Galil curves** were moderate, on an overall basis, reflecting an increase in returns in the short term and a decrease in the long term. This form of return curves reflects expectations for ongoing expansion in the economy and higher interest rates in the long term.

During the year, trading volumes in the Treasury and government bonds markets approached all time highs.

The development of returns in the Treasury and government bond markets during 2005 was accompanied by a continuing expansion of **average daily trading** volume on the Tel Aviv Stock Exchange, which during the year even approached all time highs (Table 4.2) This development reflects increasing activities by investors, this against the background of fewer government bond issues—both tradable and non-

Figure 4.4
Bank of Israel's Effective Interest Rate and Yield on Three-Month Treasury Bills (Makam)
(Daily data)



SOURCE:Bank of Israel.

Table 4.2
Average Daily Turnover in Treasury Bills, Government Bonds and Shares, 2001–05
(NIS million, current prices)

	Treasury bills	*Shahar*	CPI-indexed	Total Treasury bills, and *Shahar* and *Galil* bonds	Shares
2001	177	169	85	431	240
2002	328	264	199	791	219
2003	455	295	196	946	335
2004	592	445	249	1286	596
2005	637	559	352	1548	895

SOURCE: Based on data from TASE.

tradable, and excess demand, mainly for CPI-indexed bonds[5]. Trading volumes in the local markets, notwithstanding the accelerated growth, are still relatively less vis-à-vis the world. The shallow market depth, relatively, is reflected also in the interest rate derivatives market[6], in which, in 2005 as in previous years, there were no transactions in short-term shekel interest rates future contracts derivatives traded on the Tel Aviv Stock Exchange . A combination of market makers and full adoption of the reforms in the capital markets are geared to increasing market trading. (See section 1). A developed and liquid market is a necessary base for efficient trading and attracting foreign and other investors. The entry of foreign investors to the Israel bond markets nonetheless doubled in 2005, but they still hold only 1.3 percent of total capital registered for trading.

A combination of market makers and full adoption of reforms in the capital markets are geared to increasing market trading.

The entry of foreign investors to the Israel government bond markets doubled in 2005.

b. The private-sector securities markets

i. The private-sector bond market and structured financial instruments

During year 2005, the expansion, which had originally started in 2003, of corporate capital issues to finance non-financial operations of the business sector accelerated, and thus the share of non-bank credit in total credit increased. In year 2005, capital issues volume totaled NIS 53 billion, compared with NIS 24 billion in year 2004. (Table 4.3). The acceleration resulted from an improvement in real activities, from the profitability of many companies in the various principal industries during the year, and

[5] The rate of increase in the trading volume of *Galil* bonds was especially high at 40 percent. The rate of growth in unindexed securities, especially Treasury Bills, was lower.

[6] As part of the effort to develop the interest rate derivatives market, in April 2006 the stock exchange will inaugurate trading in futures contracts on Shahar bonds. The base asset for these contracts will be implicit bonds having fixed maturity terms and interest rates. The clearinghouse will be the physical clearinghouse, which is intended to contribute to trading liquidity in the base asset. In order to prevent the possibility of manipulation of the base asset, it was decided that the base asset would be a basket of bonds. Accordingly, under this method, the party, which delivers the bond, can deliver the cheapest bond from the basket.

Table 4.3
Issue of Shares and Bonds in the Private Sector, 2003–05
(current prices)

	2003	2004	2005	2003	2004	2005
	NIS billion			Percent of total business-sector financing		
(1) Shares and convertible stock[a]	3.6	22.9	27.4			
(2) *Of which* ETFs	1.0	16.9	16.4			
Shares and convertibles for financing business-sector activity	2.6	6.0	11.0	15	25	21
(3) Ordinary bonds	3.5	10.2	25.0			
(4) *Of which* Issues to subsidiaries, for sale to the public		3.9	4.0			
Negotiable bonds for financing business-sector activity (3)–(4)	3.5	6.3	20.9	20	26	39
(5) Structured bonds, certificates of deposit, ETFs	2.7	11.1	19.7			
(6) Non-negotiable bonds[b]	11.6	11.8	21.5	65	49	40
(7) Total capital raised (1)+(3)+(5)+(6)	21.4	56.0	93.5			
Of which issues for financing business-sector activity	17.7	24.1	53.4	100	100	100
(8) Other securities[c] (2)+(4)+(5)	3.7	31.9	40.1			

[a] Not including issues abroad, non-negotiable convertible bonds and State of Israel offers of sale.
[b] Estimate, including those traded on Retsef Mossadiim, an institutional trading framework launched in May 2004.
[c] ETFs, certificates of deposit, structured bonds and issues to subsidiaries.
SOURCE: Based on Tel Aviv Stock Exchange data.

Further to the improvement in real activities, the profitability of subsidiary companies and the expectations of further growth, capital issues by businesses to finance the non-financial activities of the business sector were greatly accelerated.

the expectations of further growth. The acceleration of capital issues was supported by the interest rate environment—their low levels for all terms—against the background of a responsible macroeconomic policy. This environment matched by the boom in the stock market increased the merit on the part of borrowers, to contract debt issues. Another major factor which enabled the expansion of capital issues by the private sector, was the availability of capital sources held by institutions—thanks to ending the issue of designated bonds, a reduction in issues by the government in the local market, following a decrease in the deficit, and an increase in investment possibilities for these institutions.

Capital issues serve as alternative sources of capital to bank credits.

These sources of capital to finance non-financial activities of the business sector provide alternatives to bank credit, which has significantly been reduced, after many years where it was the dominant source of financing for the economy (see section 6). This must be seen against the background of a reduction in supply of bank credit due to few sources of capital for the middle and long terms, together with the increase in demand for credit in these terms in light of growth. The share of non-bank credit in the total of credit to the business sector doubled, and during the last three years, reached

20 percent, and possibly even more, as this is an underestimation[7]. Credit provided by foreign residents for these activities remained almost without change. This phenomenon was guided by the structural reforms of the capital market, which supports reducing the dominant position of the banks in the financial systems, expanding tradability and increasing competition in the financial markets, while directing sources of capital from the government sector to the business sector.

As in previous years, the main issues to finance non-financial activities of the business sector in year 2005—80 percent—were of tradable and non-tradable bonds. Other issues—of shares and convertible bonds—grew somewhat, but their overall volume remained relatively slight vis-à-vis the issue of regular bonds.[8] Contrary to that of the last two years, when most issued bonds were non-tradable, in year 2005 the share of these bonds as part of total financing for business activity was similar to the share of tradable bonds. A directive, which came into force during April 2005, to value assets at their fair value and not at their inflation-adjusted cost, contributed to this moderation. This change in valuation method allowed institutional investors who had held non-tradable bonds to record temporary capital gains because of the relatively low interest rates—but exposed them to other fluctuations. Consequently, the incentives that institutions had to invest in non-traded assets was reduced —and this could increase the margins vis-à-vis government bonds of similar features. The directive on valuing non-traded assets at market value eliminates the distortion that discriminated against traded assets and promotes the development of new structured financial mediums. These instruments enable making non-traded assets more liquid, and replacing them with traded securities. In addition, because of the tradability of these assets, which up to now were not tradable, new investors, such as mutual funds could start trading in them.

As in previous years, almost all issued bonds were indexed to the CPI, even if inflationary expectations for all terms were within the inflationary targets. This, perhaps because of the fact that most investors who are active in these issues—institutional investors—are looking for substitutes close, in nature, to designated bonds and because of the few unindexed capital sources available to finance credits over the long term. Despite the fact that the largest share of non bank capital issues was undertaken by highly ranked large companies, the number of companies wanting to finance their activities through the capital market increased significantly during year 2005. This also because the process of issuing prospectuses for tradable bonds became easier, as disclosure requirements in the financial statements of companies was anyhow expanded because of the "Barnea Report." The number of unranked tradable bond issues increased during the year. The share of relatively high quality issues increased, while the range of rankings stayed constant, between A- and AAA.

[7] Non-traded bonds, which are bought by independent investors, who are not institutional contractual investors, are not included in this estimate.

[8] And even less after deducting convertible bonds, which showed an acceleration in issues during the year.

The **refinement of the private-sector bond market** can contribute to a refinement of the capital market—supporting the development of the market for securities issues by private companies, and thus continue to supply alternatives to bank credit. During year 2005, the value of the secondary market of private bonds doubled, and today represents 25 percent of the total traded bond market, compared with 14 percent in year 2004. This is seen against the background of the macroeconomic policy and structural reforms, which support the development of these markets. (See section 5). Average trading volumes grew during the year threefold and totaled NIS 217 million, yet they were less than the trading volume in the government bond market—which totaled more than NIS 1 billion. The index of private-sector bonds during the year continued to increase, and stood at 6.2 percent at year end. Against this background, the development of the market, which began in year 2003, gained strength, along with the development of new financial tools. However, the volume of the market and the trading depth are still low when compared with other developed countries.

Together with the expansion of issues to finance activities in the business sector, the volume of **structured financial instrument issues** of various types—such as structured bonds, deposit certificates, and securities issued to subsidiary companies and designated for future sale to the public—grew. In year 2005, the volume of these issues totaled NIS 40 billion, compared with NIS 32 billion in year 2004. Funds from these instruments are not alternatives to bank credits for financing non-financial activities of business corporations, but are geared for re-investment in the money and capital markets, and contribute to increasing the tradability of all securities.

The development of the financial markets against the background of reforms is reflected, inter alia, in the development of new structured financial instruments. These include **structured bonds and deposit certificates**. Funds from these issues are deposited generally with banks in Israel and abroad, as guarantees for their repayment. In year 2005, most of these issues were CPI-indexed, like regular bonds. Another financial instrument, which was developed for the bond and stock markets, was **exchange traded funds** (ETFs). These certificates are traded continuously and enable the small investor to be exposed to world capital markets, to important indices, to the major currencies, and to other assets such as gold bullion, oil and agricultural commodities. This for relatively low management and holding commissions, as a result of automatic operation, which does not require professional intervention. Managers of ETFs are required to invest in a certain asset without any freedom of action (unlike mutual fund managers). Thus, during periods when fluctuations increase, the automatic linkage could be a drawback for fundholders who do not follow current developments. The tradability of ETFs in the market is high, as the managers are obligated to be market makers.

Other instruments which have recently been developed include: **commercial paper and asset-backed bonds**. Commercial paper serves corporations as sources of funds for the short term and are characterized by high tradability. In December 2005, the definition of commercial paper was expanded to include non-traded securities

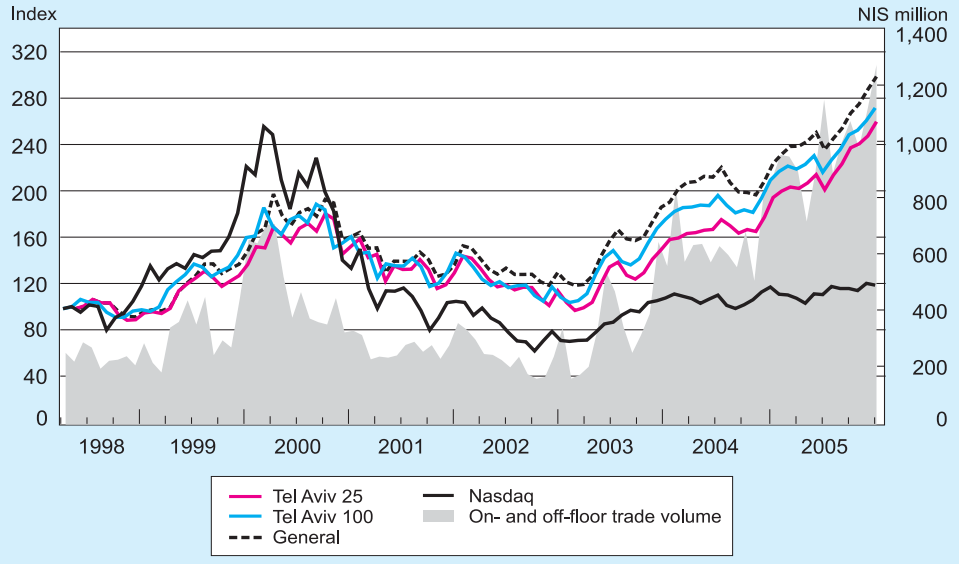
and legislation permitting the issue of commercial securities by way of a "fast track" procedure—by the use of a shelf prospectus which is valid for up to one year—was passed; asset-backed bonds are for the short or long terms and their redemption (principal and interest) is guaranteed by cash flows designated in advance, and which are expected to be generated from an asset or group of designated assets. The legislation required to set up this asset-backed market has not yet been enacted, and there are still significant hurdles to be overcome. However, it appears that the market is ready for this securitization, as a number of transactions under this format have been signed or are expected to be signed shortly.

ii. The stock market

In 2005, the boom in the stock market became stronger and the shares indices recorded significant increases—greater than the increases of year 2004 but more moderate than those of year 2003—and reached their highs, together with the record trading turnover. This after decreases in share prices and light trading which characterized years 2001 and 2002 (Figure 4.5). The stock market boom was matched by high company profitability and expectations for continued economic growth, and accordingly it appears that its characteristics are different from those of the year 2000 boom, which was in retrospect a "bubble" market. (See section 5). The boom was matched by continuous capital issues through shares, which encompassed all sectors of the economy. (See section A). The continuing trend of increasing prices, except for

In 2005, the boom in the stock market became stronger. This boom was matched by high company profitability and expectations for continued economic growth, and accordingly it appears that its characteristics are different from those of the year 2000 boom, which was in retrospect a “bubble” market.

Figure 4.5
Indices of General Shares, Tel Aviv 100, Tel Aviv 25 and Nasdaq (end of month, March 1998=100) and Average Daily Turnover (monthly data, NIS million)



SOURCE: TASE.

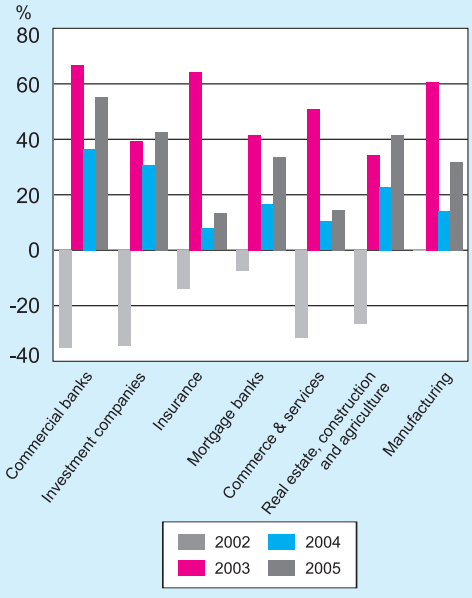
June—despite the political and security events and the significant structural reforms, which could have sent strong shock waves and increasing volatility—testity to the stability of growth in the economy and of the corporate financial results.

In summary, in year 2005 the principal share indices[9] recorded strong price increases, continuing the increases of the last quarter of year 2004. During the first five months of the year, on the average, prices increased by 11 percent. In June, with the increasing uncertainty, which was reflected also in temporary dollar holdings, share prices decreased by an average of 6 percent. The approaching date for the disengagement and uncertainty which enveloped its implications contributed to this decrease. This development was accompanied by record turnover. During the second half of the year, share indices increased by an average of 26 percent—notwithstanding the local political uncertainty towards the end of the year—and accordingly completed an average annual increase of 30 percent. The quick completion of the disengagement, the publication of positive macro data, recommendations by foreign investment houses and optimistic forecasts for continued growth contributed to these increases.

The increases in the main sector indices were aided especially by the commercial banking sector, this against the background of the "Bachar Committee" recommendations, which supported the accelerated sale of institutional bodies which were under their ownership, and the expectation of continued high profitability in the sector.

Israeli stock indices increased notwithstanding the moderate increases in US stock prices—a development which accentuated the weakening of the strong link between the Maof and NASDAQ Indices. The increase in stock prices resulted, apparently, from local forces that supported the boom based on improvements in the profitability of companies, which also included the those in traditional industries, and the low interest rate environment. The increase in indices was aided especially by the commercial banking sector, which showed the highest increases of all major sectors—55 percent—an increase which gained strength during the year. This, apparently, against the background of the Bachar Committee recommendations, which supported the accelerated sale of institutional bodies which were under their ownership, and the expectation of continued high profitability in the sector (Figure 4.6).

Figure 4.6
Prices of Shares and Convertibles, Selected Industries, 2002–2005
(rates of change)



SOURCE: TASE.

While most developed countries recorded moderate stock price increases, relative to Israel, most developing countries, against a background of accelerated growth, recorded increases in stock prices, which were considerably greater than

[9] General Share Index, Tel Aviv 100 Index and the Maof Index.

those of Israel. It is possible that the boom in the Israel stock market is also supported by a world trend—relatively attractive increases by developing countries, with high rates of growth.

The positive trends in the local stock market were reflected also by the decrease of Israel's risk premium and the increasing involvement by foreign investors. In year 2005, their share holdings totaled 12.5 percent, an all time high. In addition, the share of the government in authorized capital continued to decrease in year 2005, and totaled only 2 percent, in part because of the continued privatization of companies. During the year, holdings by interested parties of total capital registered for trading continued their declines, and totaled 43 percent, effectively reflecting a decrease of twenty percentage points over the last four years. This also contributed to increased tradability in the stock market. (Table 4.2). Another expression of increased tradability in the stock market is the accelerated trend of increases in trading volume in options on the Tel Aviv 25 Index. However trading in options on the Tel Aviv Bank Index is still relatively light.

4. THE NIS–FOREX MARKET[10]

a. Exchange rate, level of risk, and interest spread

i. Exchange-rate developments

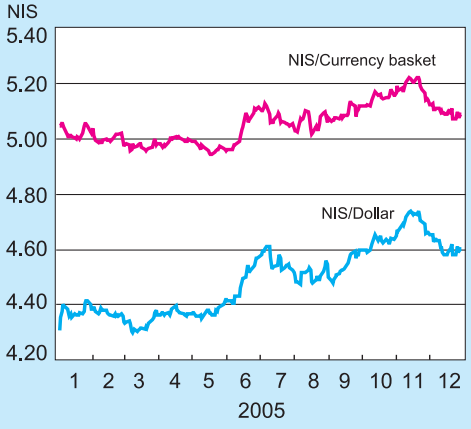
In 2005, the NIS depreciated by 6.9 percent against the dollar and 1.7 percent against the five-currency basket. The NIS dollar exchange rate behaved unevenly during the year, as did the factors behind the changes (Figure 4.7). In January–May, the NIS was traded without a trend and fluctuated within a narrow range. The relative stability that was typical of the forex market during this time was the result of the balance between the forces that affect the exchange rate. Pro-depreciation domestic factors were countered by domestic and global factors that prodded the currency toward appreciation. The main pro-depreciation domestic factors included the continued narrowing of the interest spread, which had its main effect on the continuation of the process of portfolio adjustment by the business sector, and the tax reform, which prompted

The relative stability that was typical of the forex market during this time was the result of the balance between the forces that affect the exchange rate. Pro-depreciation domestic factors were countered by domestic and global factors that prodded the currency toward appreciation.

[10] The following analysis of activity in the NIS–forex market measures only activity that is relevant in determining the exchange rate. Unlike the framework of the balance-of-payments analysis, composed solely of Israel's economic activities vis-a-vis the rest of the world in NIS and forex, here we also include forex activity among domestic sectors, such as forex credit and deposits of the public with domestic banks and NIS–forex forward transactions, and activity indexed to foreign-currency exchange rates. Excluded are several components of the balance of payments, e.g., direct nonresident payments to the government in foreign currency, which do not affect the exchange rate because activity in these respects does not take place via the market. Importantly, activity in the market is measured not technically—as a cash conversion of NIS into forex and vice versa—but rather from the material standpoint of the currency of the asset being acquired/sold by means of the purchase/sale of assets/liabilities in forex/NIS by the various sectors. This method of measurement creates a linkage between the net amounts of forex that each sector sold or bought and the change in the sector's exchange-rate exposure.

institutional investors to invest a larger share of their portfolio in foreign assets as part of a long-term strategy of international diversification. The pro-appreciation domestic factors included the current-account surplus and a series of developments with long-term implications that promoted larger foreign direct investments in Israeli firms, including the expansion of real activity. These developments included the increase in real economic activity, reflected by, among other things improvements in firms' profits; the improvement in the state of security; and greater confidence in the management of macroeconomic policy in view of the government's continuing resolve to maintain a falling deficit trajectory and to carry out reforms and structural changes in the capital market, coupled with the credibility of monetary policy. An additional development was the external debt-asset surplus and the stable composition of these assets. Direct investment also increased due to the acceleration of privatization, as the government sold its holdings in Bezeq and two domestic banks to nonresidents.

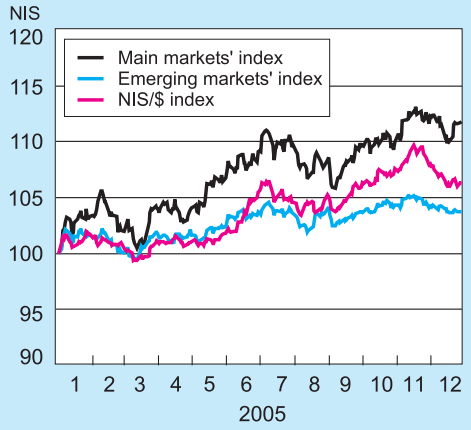
Figure 4.7
NIS Exchange Rate Against Dollar and Currency Basket, 2005



SOURCE: Bank of Israel representative exchange rates.

Concurrently, the economy benefited from a push factor that encouraged foreign investment: the increase in the international investment flow to equities traded in emerging-market economies, reflecting the investors' belief that they can earn a higher return there than in main economies. The trend was manifested in an unprecedented increase in nonresident portfolio investment. The upturns in foreign investment—direct and portfolio—coupled with the current-account surplus, had a moderating effect on processes that encouraged capital outflow. Consequently, the NIS depreciation was gentle even though residents generated a rather strong capital outflow during this time.

Figure 4.8
The Dollar Exchange-Rate Index World Wide, and that of the NIS/$ Exchange Rate, December 2004 to December 2005 (December 31, 2004 = 100)



SOURCE: Bank of Israel.

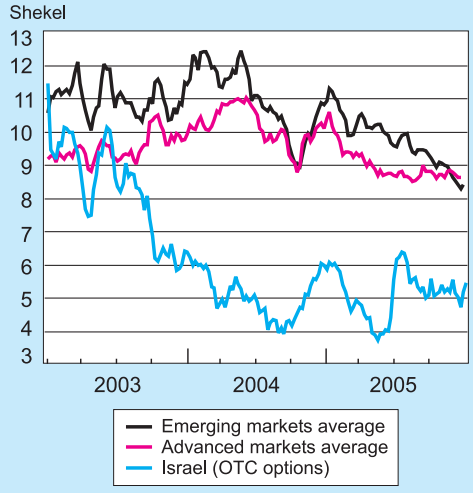
In June–December, the behavior of the NIS/dollar exchange rate was influenced mainly by global exchange-rate trends (Figure 4.9). Apart from changes in the cross-currency exchange rate of the dollar, the NIS rate was affected during this time by short-term domestic uncertainty factors. For example, the dollar appreciation against the NIS gathered strength in May and June as the deadline for the disengagement approached, in view of the uncertainty that surrounded the prospects of success in this move. By the second half of July, it was increasingly believed that the disengagement would be completed successfully; for this reason, coupled with the depreciation of the dollar abroad, the NIS again appreciated against the US currency.

In June–December, the behavior of the NIS–dollar exchange rate was influenced mainly by global exchange-rate trends.

The NIS depreciation in September–November was abetted by a slowdown in inflows by international investors to emerging-market economies. This led to a perceptible decline in the pace of nonresident portfolio investments and to some realizations. The deceleration of nonresident portfolio investments intensified the relative influence on the exchange rate of capital flows that were prompted by short-term considerations, particularly the narrowing of the interest spread and the global exchange-rate trends.

ii. Developments in exchange-rate risk

Figure 4.9
International Comparison of Implied Standard Deviation in Dollar Exchange Rates, 2003–2005



SOURCE: Bank of Israel.

In January–May, against the background of relative stability in the forex market, the exchange-risk—defined by the implicit standard deviation in NIS/dollar options—declined from 6 percent to 4 percent, a low level in historical terms and by international standards (Figure 4.9). Exchange-rate risk surged again as the deadline for the disengagement neared, in response to an upturn in uncertainty about the successful implementation of the plan and concern about its economic and geopolitical implications. The increase in risk was typical of all domestic financial markets but manifested itself mainly in short-term contracts, indicating that market players considered the uncertainty a short-term factor. However, data on exchange-rate expectations to thirty days ahead—derived from data on NIS/dollar options traded on the Stock Exchange[11]—show that the market did not

In January–May, against the background of relative stability in the forex market, the exchange-rate risk sank to a level that was low both in historical terms and by international standards.

[11] For a broad description of the methodology used to derive the expected distribution of the NIS–dollar exchange rate, see Box 4.2 in the Monetary Department section of the Bank of Israel Annual Report for 2004.

expect aberrant exchange-rate changes despite the upturn in uncertainty during this time. After the uncertainty abated, the exchange-rate risk receded at a moderate pace and eventually leveled off at 5.5 percent on average.

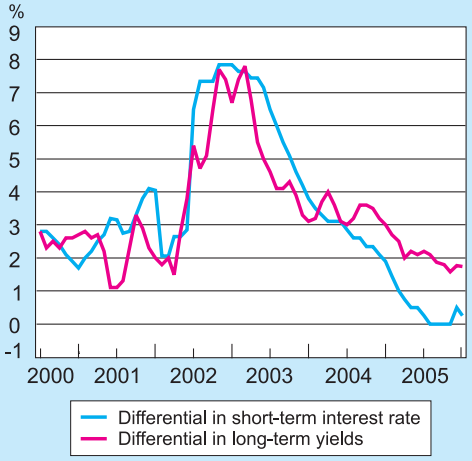
The downward trend in NIS exchange-rate risk in the first few months of 2005 corresponded to the trend of currency risk in other emerging-market economies, whereas the behavior of this parameter later in the year—especially the spike in June and July—diverged from this trend, which continued in most such economies. Even so, the NIS exchange-rate risk was still lower than that of other currencies, a fact that stands out in view of structural changes that Israel's forex market has undergone in recent years—foremost the loosening of the exchange-rate regime and the completion of the liberalization process[12]—that are conducive to an increase in risk and its convergence to levels typically found in developed countries.

iii. Developments in interest-rate and long-term-yield spreads

The NIS/dollar interest spread narrowed in January–July by 1.65 percentage points and fell to zero, pursuant to the trend that began in early 2003. Between January 2003 and July 2005, the spread narrowed by about 8 percentage points due to a 5.6 percentage-point cumulative rate cut by the Bank of Israel and monetary restraint by the Fed that raised the US rate by 2.25 percentage points in cumulative terms (Figure 4.10). In August–November, the interest spread was zero and, for short periods, negative. In December, the spread turned positive again after the Bank of Israel raised its rate by half a percentage point.

The long-term yield spread[13] also narrowed during the year, although more gently than the NIS/dollar spread. During the entire review period, this spread fluctuated within a positive range of more than 1.5 percent. This narrowing traced mainly to a decrease in domestic bond yields and, during part of the period, an increase in yields on American bonds.

Figure 4.10
Developments of the Interest Rate and Long-term Yield Differentials of the NIS against the Dollar, June 2000 to December 2005



SOURCE: Bank of Israel.

[12] Empirical studies showed that a more flexible exchange-rate regime and greater financial openness make the exchange rate more volatile. See, for example, Golan, Benita, and Beni Lauterbach, "The Factors that Affect Exchange-Rate Volatility: Panel Data and Israeli Data," Bank of Israel, Issues in Foreign Currency, 2003 (Hebrew).

[13] Defined as the difference in yields between ten-year Israel Government bonds and similar US government instruments.

The current-account surplus and the perseverance of nonresident investment in Israeli firms mitigated the effect on the exchange rate of the process of the decline in the interest spread that started in 2003.

As the interest spread continued to narrow, the question of whether the continuation of the trend was consistent with the maintenance of price and financial stability resurfaced. The main concern in this context was that if the interest spread became too small, a heightened capital outflow would ensue and the resulting accelerated currency depreciation would undermine price and financial stability. This concern did not eventuate because domestic risk factors declined while the interest spread contracted. The decrease in risk factors reflected a relative improvement in the geopolitical situation that, coupled with the improvement in the macroeconomic policy mix and its credibility, enhanced real activity, price stability, and the financial strength of the business sector. Consequently, the Israeli economy became less risky in the eyes of foreign investors. This, combined with an upturn in US risk factors (prompted by increases in the American fiscal and trade deficits), caused Israel's risk premium to decline steeply. These developments, against the background of a global economic recovery that included high-tech sector, led to a perceptible increase in foreign investment in Israeli firms. The perseverance of investment throughout the process, together with the current-account surplus, had a pro-appreciation effect and mitigated the effect of the capital outflow on the exchange rate for most of the period at issue.

b. Sectoral analysis of activity in the forex market

Activity in the forex market is analyzed on the basis of segmentation of market players in accordance with their past patterns of activity and the considerations that are believed to inform their decision-making. Thus, each sector is relatively homogeneous in terms of its pattern of activity and the various sectors' patterns are materially different from each other. Nonresidents who manage global investment portfolios, for example, presumably respond to global financial developments more quickly than residents do. Our analysis also distinguishes between activity in capital instruments[14] and activity in debt instruments.[15] Experience shows that the intensity and direction of the sectors' activity in debt instruments is more sensitive to interest-spread changes and estimations about expected developments in the exchange rate and the level of exchange-rate risk. This analytical framework helps us to estimate the forces that affected the exchange rate and to understand the way the exchange rate developed. Table 4.4 provides a condensed presentation of the sectors' activity in capital and debt instruments.

The sectors were more active in the forex market in 2005 than in previous years. Trading increased substantially, from $0.6 billion on daily average in 2003 and 2004 to about $1 billion in 2005. Activity in forex derivatives also expanded considerably relative to 2004; the 43 percent volume increase in forward and swap transactions stood out in particular. Resident activity, especially that of the business sector, focused on short-term debt instruments whereas nonresident activity centered

[14] Investments in shares, directly or for the portfolio.
[15] Forex deposits and credit, bonds, and forex derivatives.

Table 4.4
Activity in the Foreign Currency Market, by Segment and Instrument,[a] 2004–05
(Sales (+) and purchase (-), $ million)

	2004	2005	2005	
			First half	Second half
1. Total activity in capital instruments	4.2	7.4	4.8	2.4
Nonresidents	5.2	9.5	5.3	4.2
Residents	-3.0	-2.1	-0.3	-1.8
Of which Households	0.0	-0.4	-0.3	-0.1
The business sector	-2.4	-0.4	0.4	-0.8
Institutional investors	-0.6	-1.3	-0.4	-0.9
2 Total activity in debt instruments (2.1 + 2.2)	-2.7	-11.7	-6.1	-5.6
2.1 Excluding banks	-4.2	-15	-8.7	-6.3
Nonresidents	-0.6	-2.8	-1.7	-1.1
Residents	-3.6	-12.2	-7.0	-5.2
Of which Households	-1.1	-1.8	-1.1	-0.7
The business sector	-1.8	-9.0	-5.0	-4.0
Institutional investors	-0.7	-1.4	-0.9	-0.5
2.2 The banks	1.5	3.3	2.6	0.7
3. The current account and the capital account	0.5	3.6	1.8	1.9

[a] The data in this table are estimates, as described in footnote 10 in this Chapter.
SOURCE: Bank of Israel.

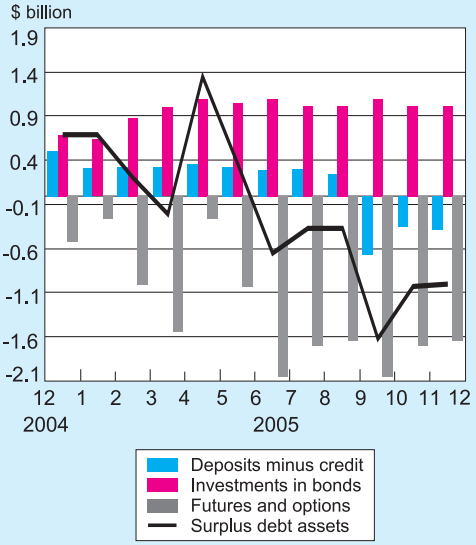
on capital instruments. In a departure from previous years, nonresidents refrained from establishing a significant position in unindexed debt instruments. Consequently, their aggregate exposure in these instruments, which is susceptible to rapid changes, fluctuated at low levels in the vicinity of zero (Figure 4.11). This helped to buttress financial stability in the forex market, since in past years the nonresident position in these instruments (for and against the NIS) had threatened its stability due to concern that a rapid closing of the position in response to extreme events would cause severe exchange-rate volatility.

Resident activity in the forex market in 2005 was influenced by three main domestic factors: the narrowing of the interest spread, the tax reform, and short-term uncertainty factors, foremost the uncertainty related to the disengagement plan.

The contraction of the interest spread affected the business sector in the main. During the process, the business sector increased its forex assets surplus significantly, chiefly by repaying credit and accumulating forex deposits.

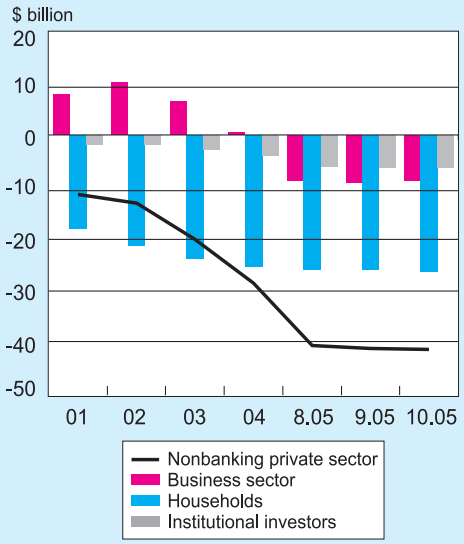
The contraction of the interest spread, which began in 2003, affected the business sector in the main. During the process, the business sector built up its forex assets surplus significantly, chiefly by repaying credit and accumulating forex deposits. As the business sector adjusted its portfolio—motivated mainly by the narrowing of the interest spread—its balance of assets/liabilities in forex, reflecting its aggregate exposure to exchange-rate changes, crossed from a $10 billion liabilities surplus at the beginning of 2003 to a $9 billion assets surplus at the end of 2005 (Figure 4.12). Importantly, however, despite the transition to an aggregate appreciation exposure, the business sector remains seriously exposed in both directions. This heterogeneity contributes to stability in the forex market by mitigating concern about excess supply of demand in extreme scenarios.

Figure 4.11
Balance of Nonresidents' Surplus NIS Debt Assets, December 2004 to December 2005 ($ billion)



SOURCE: Bank of Israel.

Figure 4.12
Nonbanking Private Sector's Balance of Liabilities Surplus (+) in Forex, December 2001 to December 2005



SOURCE: Bank of Israel.

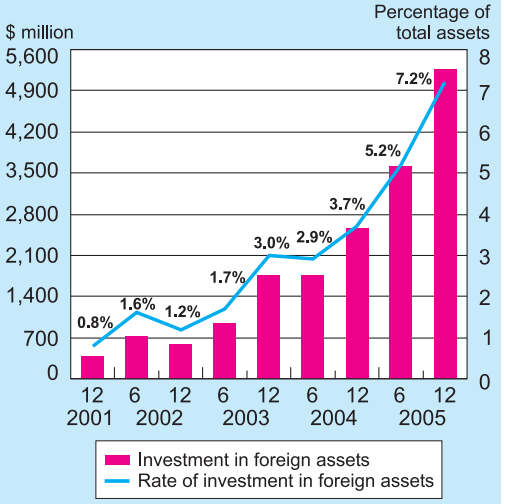
Due to the tax reform, institutional investors boosted the share of foreign assets in their total investments by 3.5 percentage points during the year.

At the beginning of the year, the terms of taxation on domestic and foreign investments of private investors (households and mutual funds) and some institutional investors (provident and pension funds) were equalized. This had an effect mainly on institutional investors, which increased the share of foreign assets in their total investments by 3.5 percentage points during the year (Figure 4.13). However, the proportion of foreign assets in these institutions' investment portfolios at the end of 2005, at 7 percent, was still smaller than the norm in developed countries, indicating the potential distance that their portfolio-adjustment process can still cover in the future.

The pace of institutional investment abroad was influenced by a series of factors, including the relative attractiveness of the domestic capital market vis-à-vis foreign markets, estimates of exchange-rate developments, and progress in practical preparations for investment abroad—a matter that entails a learning process in order to become familiar with the foreign markets. In the first half of 2005, the pace of institutional investment abroad was mild at about $150 million on monthly average. The moderate pace of the portfolio adjustment during this time may be explained by the poor attractiveness of the foreign capital markets relative to the domestic market and, in the main, to uncertainties about the US capital market due to its long-term yields and expectations of continued rate hikes. Furthermore, some institutional investors have not yet completed their preparations for large-scale investment abroad. The pace of investment abroad accelerated in the second half of the year due to the enlistment of small institutional players in the process, expectations of a slowdown in price increases in the domestic capital market, and the belief that the dollar was about to appreciate against the NIS in view of the behavior of the dollar against other currencies.

Notably, institutional investors, notwithstanding their nature as long-term investors, sometimes employ short-term investment considerations because (among other reasons) they have to report frequently to the public about the value and performance of their assets.

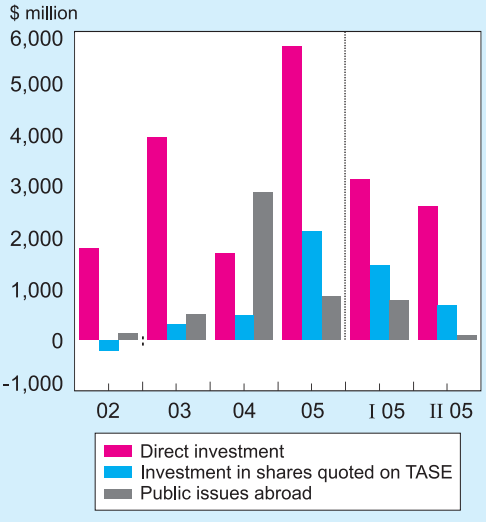
Figure 4.13
Investments and Rate of Investment of Institutional Investors in Foreign Assets, December 2001 to December 2005



SOURCE: Bank of Israel.

The response of households to the tax reform and the narrowing of the interest spread was moderate in the first few months of 2005 as the exchange rate remained stable and the domestic capital market was more attractive than foreign markets. In June–December, household purchases of forex accelerated. The motives for the purchases changed during this time, as evidenced by the instruments that the households used. In June, they amassed forex mainly by accrual in forex deposits and mutual funds that specialize in hedging exchange-rate risk, evidently mirroring the uncertainty that surrounded the disengagement plan and the belief that the dollar appreciation abroad would cause the NIS to depreciate. The apparent motive behind their behavior was to diversify their portfolio internationally in view of the tax reform, which made investment in foreign securities relatively more profitable.

Figure 4.14
Nonresidents' Investments in Israeli Shares by Components, 2005



SOURCE: Bank of Israel.

Nonresident investment—direct and portfolio—came to an unprecedented $9.5 billion.

Nonresident activity in 2005 centered on capital instruments; activity in debt instruments was less intensive than in previous years. Nonresident investment—direct and portfolio—came to an unprecedented $9.5 billion. Portfolio investment focused on domestically traded shares, whereas issues by Israeli firms abroad were moderate in 2005 after having accounted for the bulk of these investments in 2004.

The development path of the components of foreign investment

was uneven (Figure 4.14). Direct investment was spread across the entire year and added up to an unprecedented $5.7 billion, despite several large realizations. The upturn in direct investment was abetted by improved fundamentals and accelerated privatization, in which the government sold its holdings in Bezeq and two domestic banks to nonresidents. In contrast, nonresident investment on the domestic stock exchange was bumpy across the year, influenced mainly by the trend of international institutional investment in emerging-market economies, as described above. Israeli firms raised a modest $0.8 billion in issues abroad in 2005 as against $2.8 billion in 2004. The moderate extent of such issues in 2005 traces to a slowdown in issuing activity on the NASDAQ exchange and the strong attractiveness of the domestic capital market relative to markets in other countries.

Forex activity of the banking system

The outstanding aggregate exposure of the banking system to changes in the NIS exchange rate was a $0.3 billion forex liabilities surplus at the end of 2005, i.e., an exposure to depreciation. The outstanding sum is the result of the banks' balance-sheet activities and off-balance-sheet activities, i.e., forward transactions and NIS/forex options.

Throughout 2005, as in the past, the banks maintained a small liabilities surplus relative to the value of their forex assets. As in previous years, the average outstanding exposure in 2005 was only $0.3 billion. Importantly, in managing their forex-market activities the banks control their total exchange-rate exposure and avoid protracted deviations from the quantitative exposure level that their managements set, even though they have a structural assets surplus originating in $2 billion in investments in banking subsidiaries abroad. The banks operate in the forex market as market makers—providing demand and absorbing supply in the course of their nostro activity amidst changes in the NIS exchange rate. Therefore, their forex operations largely reflect the motives of the other sectors in regard to changes in exposure. At times when large changes occur in the forex market, however, the banks deliberately establish positions—within the range that their managements allow them—that reflect their estimate of the direction of exchange-rate developments.

5. THE PUBLIC'S FINANCIAL ASSET PORTFOLIO[16]

The development of the public's asset portfolio has great importance for the management of monetary policy, which follows developments in public expectations. (See chapter 3). An analysis of the changes therein and

[16] An investor who invests his funds directly and through institutional investors: non-contracted institutional savings organizations (mutual funds), and contracted organizations (provident funds, severance pay funds, advanced study funds, pension funds and insurance companies). For detailed definitions of institutional savings, see Box 2 of Chapter 5 in the 2003 report issued by the Monetary Department.

Table 4.5
The Financial Asset Portfolio of the Public, by Indexation, 2002–05

	Balance (NIS billion)				Composition (percent)			
	2002	2003	2004	2005	2002	2003	2004	2005
Total assets	**1,216.7**	**1,367.7**	**1,516.1**	**1,815.7**	**100.0**	**100.0**	**100.0**	**100.0**
Unindexed assets	385.4	432.2	475.1	505.6	31.7	31.6	31.3	27.8
CPI-indexed assets	446.0	455.2	456.0	521.4	36.7	33.3	30.1	28.7
Assets in or indexed to foreign currency	196.0	187.3	201.5	248.5	16.1	13.7	13.3	13.7
Shares in Israel	170.6	263.0	341.3	483.2	14.0	19.2	22.5	26.6
Shares abroad	18.7	30.0	42.3	57.0	1.5	2.2	2.8	3.1
Total assets excluding shares in Israel and abroad	**1,027.4**	**1,074.7**	**1,132.6**	**1,275.5**	**100.0**	**100.0**	**100.0**	**100.0**
Unindexed assets	385.4	432.2	475.1	505.6	37.5	40.2	41.9	39.6
CPI-indexed assets	446.0	455.2	456.0	521.4	43.4	42.4	40.3	40.9
Assets in or indexed to foreign currency	196.0	187.3	201.5	248.5	19.1	17.4	17.8	19.5

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

A follow up on the rate of adjustment of the public's asset portfolio, and the strength of changes therein, can help monetary policy decision-makers in examining changes in public expectations. This notwithstanding the limitations of an analysis of portfolio changes.

conclusions regarding preferences of the public is limited for a number of reasons: The accumulation in the portfolio can result from a change in policy or reflect the public expectations regarding policy; the change in the portfolio can result from a change in the price of an asset or its accumulation; a change in the composition of accumulation in the portfolio can reflect a process of risk spread, or reflect different priorities by the public as a response to changes in risk. However, a follow up on the rate of adjustment of the portfolio, and the strength of changes therein, together with culling information from other indicators, can help in examining the changes in public expectations.

The year 2005 saw significant changes in the makeup and composition of the public's asset portfolio, mainly as a result of various structural reforms.

The year 2005 saw changes in the makeup and composition of the public's asset portfolio. This against the background of positive macro economic developments and the finalization of legislation concerning significant structural reforms of the financial markets. The main changes were: significant increase in volume of investments abroad, a decrease in the weighting of unindexed Sheqel assets in the portfolio; an increase in the share of private issue bonds at the expense of the share of government bonds; shift of funds from non-tradable assets to tradable assets; a decrease in dominance of the banking system over credit sources and a decrease in its centrality in the management of the public's asset portfolio.

Some of the changes in the portfolio are new phenomena that are expected to become stronger—the results of new arrangements (see section 6) which support the transition from tradable assets and a broader spread of assets, and which consist principally of: reforms in pension savings; reforms in provident funds; a reform in the capital markets following recommendations of the Bachar Committee; reforms in

Table 4.6
Institutional Investors: Main Developments, 2002–05
(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	41.8	432.6
2003	83.2	134.3	54.7	120.6	18.7	43.8	52.4	507.8
2004	101.1	147.0	61.9	124.4	23.8	43.6	58.2	560.0
2005	124.6	163.7	71.8	142.5	44.7	47.3	71.1	665.7
				Percent of total institutional investors' savings[c]				
2002	10.6	27.6	10.8	27.7	3.3	10.3	9.7	100.0
2003	16.4	26.5	10.8	23.8	3.7	8.6	10.3	100.0
2004	18.1	26.2	11.0	22.2	4.3	7.8	10.4	100.0
2005	18.7	24.6	10.8	21.4	6.7	7.1	10.7	100.0
				Percent of public's asset portfolio				
2002	3.8	9.8	3.9	9.8	1.2	3.7	3.4	35.6
2003	6.1	9.8	4.0	8.8	1.4	3.2	3.8	37.1
2004	6.7	9.7	4.1	8.2	1.6	2.9	3.8	36.9
2005	6.9	9.0	4.0	7.8	2.5	2.6	3.9	36.7
				Net accrual (NIS billion, current prices)				
2002	-14.9	-3.2	-0.8	-3.2	3.1			-19.0
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			34.9
				Real yield (percent)[d]				
2002	-6.6	-6.9	-6.4					
2003	15.5	19.1	17.8					
2004	4.3	8.2	7.8					
2005	4.9	10.6	9.7					

[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 which were 6.7 percent in 2001, 7.0 percent in 2002, 18.8 percent in 2003, 7.7 percent in 2004. and 9.6 percent in 2005.

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.

income tax following recommendations of the Rabinovitch Committee; a reform in the market makers field; and changes in accounting reporting principles.

Table 4.7
Share of Institutional Investors' Asset Portfolios Invested Abroad and in Shares and Tradable Private and Government Bonds, 2003–05
(percent)

	Investments abroad[a]			Shares			Private bonds			Government bonds			Other assets		
	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005
Provident and severance pay funds	2.8	3.0	7.0	15.2	17.9	18.1	4.6	5.6	9.1	41.8	37.9	30.3	35.6	35.6	35.5
Advanced study funds	2.3	2.2	6.7	13.8	16.8	16.6	4.9	5.6	10.0	41.8	40.0	31.9	37.2	35.4	34.8
Established pension funds	0.0	0.0	0.7	0.4	1.4	3.2	0.5	0.7	1.6	1.7	6.4	7.9	97.4	91.5	86.6
New pension funds[b]	0.3	0.6	3.5	3.6	6.5	6.9	4.4	4.3	5.5	12.9	19.5	32.2	78.8	69.1	51.9
Mutual funds	12.6	13.0	16.3	8.9	11.3	10.7	1.5	3.9	8.9	38.9	27.8	33.3	38.1	44.0	30.8
Guaranteed-yield insurance plans[c]	0.7	1.2	1.7	0.4	0.4	0.6	1.4	1.5	2.4	2.2	2.2	2.5	95.3	94.7	92.8
Profit-sharing insurance plans[c]	9.8	10.0	15.0	14.7	14.9	17.6	4.6	4.7	7.9	36.1	35.3	22.7	34.8	35.1	36.8
All institutional investors	4.1	4.5	7.6	8.8	10.7	11.3	2.9	3.8	6.7	26.7	25.5	23.0	57.5	55.5	51.4
Institutional investors excluding mutual funds	2.4	2.7	5.6	8.7	10.6	11.4	3.1	3.7	6.2	24.4	25.0	21.3	61.4	58.0	55.2

[a] Mainly shares, bonds, convertibles, mutual funds and deposits.

[b] Including the Central Pension Provident Fund.

[c] 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 Minsitry of Finance, and returns from the mutual funds to the Bank of Israel.

During 2005 the value of the monetary asset portfolio held by the public increased by 19.8 percent, in nominal terms, and totaled NIS 1,815.7 billion, after an increase of 11 percent in year 2004 (Table 4.6). The value of assets held by institutional investors increased by 19.1 percent, in nominal terms, and totaled NIS 666 billion compared with NIS 560 billion at the end of last year (Table 4.6). The change in the value of the portfolio results from the change in asset prices in the portfolio and from an increase in actual assets. The increase in the value of the portfolio was aided during the year especially by the increase in share prices in Israel that resulted from the ongoing economic growth, the relative security calm and the expectations for continued growth. The increase in the value of portfolios was aided, somewhat less, by the increase in the value of other investment mediums, including bond prices—an increase that was affected, inter alia, by monetary and fiscal policies which supported a decrease in the interest rate environment and a devaluation of the NIS/$ exchange rate, especially following its strengthening in the world (see section 4). The increase in assets, notwithstanding the decrease in the supply of government bonds, was aided especially by the sharp increase in the volume of private issues of bonds.

The increase in the value of the portfolio was aided during the year especially by the increase in share prices in Israel that resulted from the ongoing economic growth, the relative security calm and the expectations for continued growth. Also aiding were the increases in bond prices and the devaluation of the exchange rate of the Shekel against the Dollar.

During the year, the portion of Israeli shares in the public's asset portfolio grew significantly, because of the boom in the Tel Aviv Stock Exchange. This component is characterized by strong fluctuations, and accordingly an examination of the makeup of the portfolio without shares could pinpoint the reasons for changes in the public's preferences. The following is an analysis of the main changes which reflected the development of the public's monetary asset portfolio according to investment channel, indexation, tradability and according to the structure of management companies in year 2005.

The responsible macroeconomic policy, which supported the decrease in the interest rate environment for all terms, supported the positive developments in the markets.

Significant increase in the volume of foreign investments—mainly by contract based institutional savings bodies, as part of a change in their investment patterns (Table 4.7); this against the background of closing the interest rate gap between Israel and abroad, equalization of tax rates on capital gains on investments in foreign and local tradable securities, including full exemption from tax for provident funds on their investments abroad, from 2005. These changes enabled investors to spread their assets. Unlike contract based institutional savings bodies, the public that invests its funds directly and through mutual funds tends to invest in Israel because of a home bias, and accordingly the increase in foreign investments is more moderate. For example, mutual funds which specialize in foreign asset investments recorded high net positive accumulations compared to the past, and this under the policy to spread risk. However, activities are still slight.

Against the background of a closing interest rate gap between Israel and abroad, and the equalization of tax rates on capital gains on investments in foreign and local tradable securities, the volume of foreign investments increased significantly.

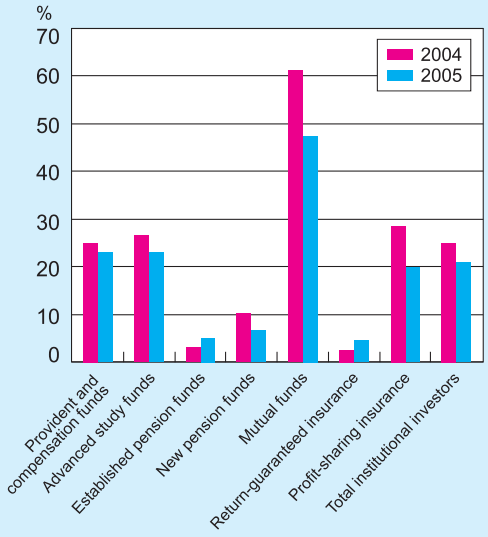
The share of **unindexed NIS assets** in the portfolio decreased, contrary to trends of the recent past (Table 4.5). This against the background of investor expectations of a decrease in the relative return expected on unindexed assets, according to their expectations for a future increase in inflation, and a continuing decrease in interest rates in the economy to the lowest levels ever, while exhausting the inherent potential for capital gains. The pattern of reducing the share of unindexed assets in the asset

portfolio is especially seen in the public's investments, directly and through mutual funds (Figure 4.15), and in profit-sharing insurance plans. On the other hand, established pension funds and insurance plans of the "guaranteed yield" type increased their weightings slightly in unindexed assets. This tendency, which differs from the public's tendency for direct investment, expressed, inter alia, the increased distribution of their assets, which was allowed, because of the new investment principles for institutional investors.

Through mutual funds, the public directed funds to **CPI-indexed assets.**[17] This in contrast to other investors, who even slightly reduced the weighting of this investment in their portfolios and diverted funds to other channels (which will be detailed below). The main activity in mutual funds was in funds specializing in bonds and government bonds whose declared policy is to invest mainly in CPI-indexed assets, and less in unindexed assets. On the other hand, NIS mutual funds recorded a net negative accumulation during the year (Figure 4.16). The massive increase in investment funds directed to funds specializing in bonds and government bonds[18] reflects, inter alia, a search for alternative investments having relatively less risk, during a period of low interest rates on deposits and bank savings plans and expectations

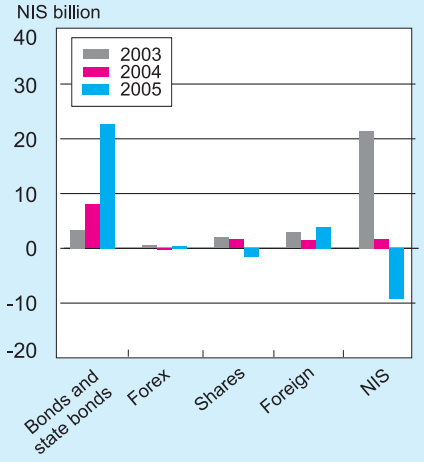
The main activity in mutual funds was in funds specializing in government bonds whose declared policy is to invest mainly in CPI-indexed assets, and less in unindexed assets.

Figure 4.15
Share of Unindexed Assets in Institutional Investors' Portfolios, 2004 and 2005



SOURCE: Based on Bank of Israel data.

Figure 4.16
Accumulation of Mutual Funds by Specialization, 2003–05



Source: Based on Bank of Israel data.

[17] An analysis of a portfolio without shares shows that the share of indexed assets in the portfolio increased. However, without the deduction, the share decreased.

[18] During November and December there was a negative accumulation in these funds—apparently, because of the increase in the monetary interest rate by the Bank of Israel, which reduced the relative returns expected on bonds.

of significant capital gains. Some of the increase in CPI-indexed assets in the asset portfolio of the public is also the result of moves by factors on the supply side of assets, including the increase in the number of private issues of bonds, most of which were CPI-indexed.

In 2005 the weight of private bonds in the institutional investors portfolios increased on account of the weight of government bonds - a direct result of the reduction in the issue of government bonds, mainly CPI-indexed, and an increase in the issue of the private bonds.

The increased volume of private bonds issues also reflects the switch in the breakdown of the public's asset portfolio **between private assets and government assets** (Table 4.7). In year 2005 the weight of private bonds in the institutional investors' portfolios increased at the expense of the weight of government bonds in the portfolio of institutional investors; this during a period where the gap between the returns on the two types of bonds was relatively slight. This change in the composition of the portfolio is inter alia, a direct result of the reduction in the supply of assets, following a significant decrease mainly in CPI-indexed government bonds, and an increase in the issue of the private bonds. The background to the change in the portfolio is the environment of relatively low interest rates which encourages institutional investors to look for more attractive alternatives which involve greater risks. Thus, the proportion of shares—whose prices went up due to the boom on the Tel Aviv Stock Exchange––in the portfolio rose sharply. Despite the rise in the shares market, the funds that specialize in shares showed a negative accumulation of NIS 1.5 billion.[19] It is possible that those of the public who invest in mutual funds have still has not recovered from their losses following the burst of the year 2000 bubble, and it is possible that the increase in the public's indirect investments in shares through other savings bodies and through ETFs was sufficient.

A significant change in the makeup of the public's asset portfolio was the switch, which started in year 2003, of funds **from non-tradable assets to tradable assets**. Since then, the weighting of tradable assets increased by 20 percentage points and totaled 52.4 percent. This change was most noticed at institutional investors, and especially at the pension funds—both the new and the established funds—in provident funds and in advanced study funds. Thus, for example, the institutional bodies increased their holdings in private issue bonds and shares, mostly in significant amounts (Table 4.7). The background to these changes were the reforms in the financial markets and mainly: end to the issue of designated bonds, embedding new principals of investments for institutional investors, which increase investment flexibility; change in the method of valuation of non-traded assets, which as a result, holders of these assets are exposed in any case, to the market fluctuations and higher risks. The change in the portfolio makeup according to tradability is reflected also in the decrease in the weighting of deposits and savings plans, a change which was supported also by a cancellation of the tax advantage that they had in 2003.

The reduction of control by the government over the sources of long-term ceradit, following an end to the issue of designated bonds, together with further reduction in issues of tradable government bonds, implied the possibility of a significant increase

[19] Against this background, the accumulated real rate of returns of mutual funds was relatively less than returns on investments through other mediums—5 percent.

in sources of capital for the business sector, this step is essential to create alternative sources of capital to bank credit, and to increase negotiability in the financial markets. It nonetheless exposes investors to market fluctuations, as already stated, but allows them to diversify their portfolios and to spread risks, while increasing the potential expected return. Exposure of the public to higher risks can bring about the development and expansion of the derivatives market, which offers an insurance backup against exceptional changes in the prices of the base assets. All these factors increase the level of tradability of assets in the financial markets and contribute to increased efficiency, while reducing the cost of investment.

The managerial makeup of institutional savings is marked by high concentration —mainly because of high barriers to entry, the result of old institutional arrangements. The concentration is reflected by the control by the two large bank groups of financial transactions and in the domination of financial banking brokerage. These factors brought about a significant reduction of credit sources available to the public, and delayed the development of the non-bank credit market, while preventing a cost markdown in credit because of the lack of competition. Against the background of the Bachar Committee recommendations, the concentration of all institutional savings bodies is expected to be lessened: such, for example, the share of private brokers in managing mutual funds has already increased, and provident funds and study funds accelerated the transfer of monies from the various funds under control of banks to those under control of private entities. This route is supported by high returns that the private funds have earned in the last few years, relative to the returns by bank funds. A decrease in control of the banking system's control over sources of credit is reflected also in the decrease in bank financial assets, such as deposits and savings plans.

6. FINANCIAL STABILITY[20]

a. Overview

The main risk to financial stability is currently the credit risk among institutional investors which should be given attention both by the institutions themselves and the regulatory authorities.

The positive trends in the stability of the financial system in Israel continued in 2005 following a considerable improvement in the previous two years: an ongoing improvement in the global and local environment in which the system operates was clearly apparent within the system itself, and the resilience of the financial institutions, primarily the banks, and of the financial markets increased. Nevertheless, risks are inevitably implied in developments in financial stability. The main risks derive from the reforms that were implemented in the financial system during recent years. While these reforms are helping to increase the resilience of the system in the long term, in the transition period they are also increasing systemic risks. This applies particularly to

[20] In view of the data available on the financial system, this sub-section is based largely on figures for the first nine months of 2005. However, the review of developments in the financial markets in Israel is based on data till January 2006.

credit risks among institutional investors and makes adjustments necessary, principally on the part of the institutions themselves and the authorities.

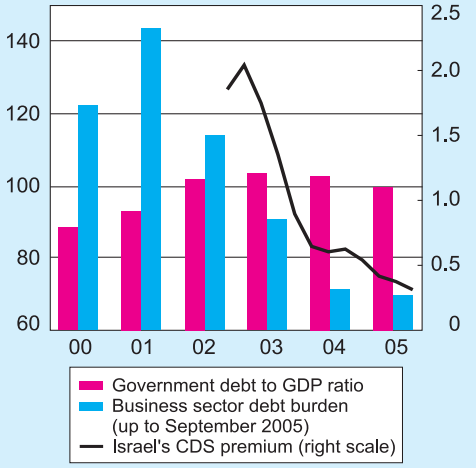
The favorable economic environment has led to increased financial stability, primarily through the reinforcement of the business sector's financial solidity and the financial resilience of the economy.

The financial system benefited from **favorable background conditions** in 2005: world GDP and trade continued to expand and world financial markets were notable for their calm. The recovery in the Israeli economy (see Chapter 2) was sustained due to the upturn in the global economy and the continued improvement in the mix of macroeconomic policy measures, which led to a major reduction in the budget deficit (see Chapter 6) and to a particularly low real interest rate while price stability was maintained (see Chapter 3). The improvement in the security situation contributed to the positive trends.

All these factors had the effect of enhancing two main parameters of financial stability. One such parameter was the increase in the financial strength of the business sector, which has an appreciable impact on the financial system. The other parameter was the increase in the economy's financial robustness due to the growth in capital imports to Israel concurrent with a decrease in the risk premium and improvement in the external debt indices and the government debt (Figure 4.17).

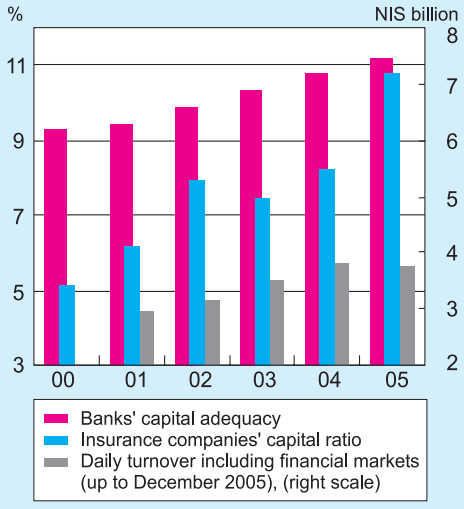
The continued improvement in background conditions and as a result, in the business sector's financial strength and the economy's financial robustness, reflects the current location of the global economy and the Israeli economy in the ascending part of the business cycle in Israel. As was to be expected, these conditions favorably affected the financial system and in 2005 were apparent from the retention of actual stability: The financial markets remained calm concurrent with a rise in securities prices and a stabilization of the market risk indices at the relatively low level of the

Figure 4.17
Operating Environment of the Financial System, 2000–2005
(Percent)



SOURCE: Based on Central Bureau of Statistics and Peureg data.

Figure 4.18
Financial System's Resilience 2000 to September 2005



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

end of 2004. The positive developments in background conditions and in the financial markets together contributed to a growth in the profitability of the banks and insurance companies, an increase in their capital and a rise in the provident funds' yields.

There has been an additional improvement in the capital adequacy of the banking system and credit risk has been reduced.

In 2005 as in the previous two years, f**inancial institutions' and the financial markets' resilience** increased (Figure 4.18). A further improvement was recorded in the banking system's capital adequacy, and credit risks decreased. The insurance companies maintained their capital ratios even though this was current with a rapid expansion in credit. Developments in the risks inherent in the activity of the provident funds were not uniform. The financial markets' resilience continued to grow in 2005. Liquidity increased and developments in share prices appear to have conformed to developments in background conditions.

It appears that the developments in share prices were consistent with those in the economic environment.

Contributing to the increased resilience of the financial system as a whole during 2005 was a series of **reforms and changes in the financial infrastructure** that were implemented in the course of the previous year. One of the most notable developments in the financial system during recent years was the gradual and persistent decrease in the dominance of the banks in financial activity, principally in the areas of credit and the management of the public's financial assets. This development reflected the revolutionary change that occurred in the financial system in recent years. During this time a competitive and sophisticated credit market for the business sector emerged. In addition, a private long-term saving industry separate from the banking system was created.

A competitive and efficient market to provide credit to the business sector is taking form, as well as a private non-banking system for long-term savings.

Following the reforms and changes applied previously, another reform of major importance was implemented in 2005: the embodiment in legislation of the Bachar Committee's recommendations concerning the reform of the capital market and the rapid implementation of these recommendations. Also introduced was a series of changes in regulatory coverage, particularly in respect of long-term saving. The sale of the banks' provident funds and mutual funds to insurance groups and to foreign investors very soon after the Bachar legislation was approved clearly reflects the additional impetus that the reform is providing for the revolutionary changes in the structure of the financial system and in financial activity. The principal change in this respect is the banks' reduced dominance in the areas of credit and long-term saving.

The selling of the provident funds and the mutual funds by the banks to the insurance groups and nonresident investors is a clear expression of the revolutionary changes in the structure of the financial system and its operations.

The far-reaching changes in financial activity are expected to increase the **resilience of the financial system in the long term** after its new structure has been formulated and the public, the financial institutions and the authorities internalize the new rules of the game. In these conditions, the systemic risks will decrease, and the financial markets will become increasingly sophisticated and competitive. However, these changes also involve an increase in risks, principally in the area of credit, as well as from the aspect of the volatility in the public's asset portfolio, the conflicts of interest inherent in financial institutions' activity and the liquidity of the provident funds. During the transition period—until the processes of adaptation on the part of financial institutions, the supervisory authorities and the public that are necessary in order to cope with these risks are completed—systemic risks are increasing and are

The changes in financial activity are expected to increase the long-run resilience of the financial system once its new structure takes form and the new rules of the game are internalized.

leading to fears of an adverse impact on financial stability. This is particularly in view of the cumulative effect of the reforms and the numerous changes in the regulatory coverage of the financial system, and as a result of the rapidity with which the changes have occurred.

Looking ahead, the chances of continued financial stability in the near future are good. Supporting this assumption are forecasts that the positive trends in the global and local environment will continue due to the effective functioning of financial institutions and the financial markets, even in periods when background conditions have been less favorable, and the fact that the resilience of the financial system in Israel increased during recent years. Nevertheless, the need to maintain the stability of the financial system in the future presents major changes to the supervisory authorities. The main challenge will be the need to cope with growing systemic risks among institutional investors during the transition period of the reforms. Success in dealing with this challenge is essential if the desired results of the reforms are to be achieved in the long term. The authorities therefore need to promote and adopt measures in the area of infrastructure, regulatory coverage in the areas of enforcement and information to the public which are principally: an improvement in the management of the insurance groups' growing credit risks and an increase in capital adequacy against these risks; increasing the public's awareness of risks in the financial asset portfolio and the distribution of information and data that will enable the public to monitor these risks, in addition to monitoring yields and commissions; regulatory coverage in respect of the conflicts of interest inherent in the emerging ownership structure of the financial system; and regulation of provident funds' liquidity risk management. If these major challenges are indeed to be met, it will be necessary to strengthen supervisory mechanisms and especially the supervision of institutional investors, and to increase coordination between the authorities and cooperation among them.

Systemic risks are increasing during the transition period and there is concern that financial stability will be threatened.

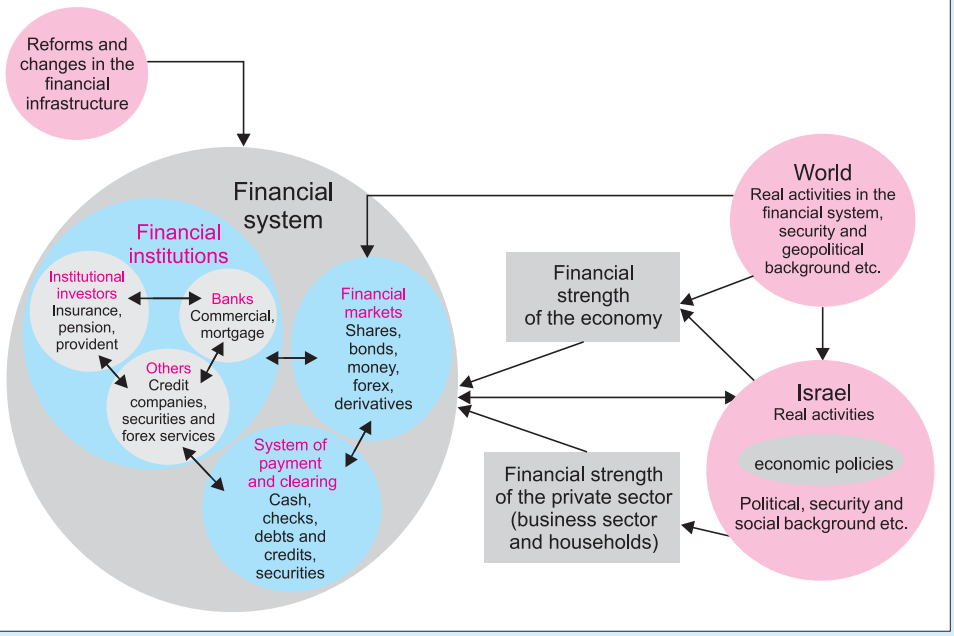
In order to meet the challenges, the regulatory authorities need to promptly take measures in the areas of infrastructure, organizational structure, enforcement and the availability of information to the public.

Other risks to financial stability actually derive from the growth in this stability during the last three years. Since this improvement resulted to a considerable extent from an improvement in the global and local environment, adverse developments in the environment could harm financial stability. This is particularly relevant in view of the fears of a rapid adjustment in the international financial markets and a deterioration in Israel's strategic security situation.

Box 4.1
Financial stability – principal concepts

Financial stability is an economic issue that mainly concerns the conditions contributing to the proper functioning of the financial system as a whole and those that generate financial crises; conditions that relate to the components of the system, the environment in which it operates, and the interrelationships between these components themselves and the components and the environment.

Figure 4.19
The Financial System and its Operating Environment



The financial system has three main components (Figure 4.19); (1) **The financial institutions**– the banking system, institutional investors (the pension funds, the insurance companies and the provident funds) and other financial entities (such as investment companies, credit companies, mutual funds, portfolio managers, underwriters and advisors); (2) **The financial markets** – the money, foreign-currency and securities markets; (3) **The payments and settlement system** – the systems for the transfer of cash and the settlement of payments between the banks and other financial institutions themselves and between them and the central bank.

Financial stability is not a simple addition of the stability of each of the system's components. No less important are the relationships between these components, since the mutual dependence between them as well as between individual financial institutions affect the functioning of the entire system. This mutual dependence is reflected in **systemic risks**, that is, the possibility of damage to a number of financial institutions together, in an entire financial sector or simultaneously in the different components of the financial system. This results *inter alia* from an uncontrollable chain reaction between institutions and the different components in the system—contagion—the danger of which increases, the closer the relationships between the institutions and the system's components. Systemic risk and contagion are notable in the **banking system** because of the structural criteria of its activity: high liquidity of the banks'

liabilities (extensive deposits of the public) and the guaranteed yield on them against which, for reasons of structure, there are inadequate liquid assets with a guaranteed yield. Accordingly, liquidity difficulties at one of the banks or a major loss of part of its capital due for example to the materialization of embezzlement and fraud risks or credit risks—and sometimes mere rumors that this could occur—can lead to a run on other banks as well. Systemic risks exist in other components of the financial system, and their materialization is likely to affect the banks as well: Systemic risk in the **financial markets** can derive from structural problems in the markets (asset price bubbles and herd-like behavior by investors) that impair the functioning of the foreign-currency market or the securities markets, from contagion deriving from instability in world financial markets, a risk that has increased greatly with the development of globalization and liberalization processes. Systemic risks common to the **insurance companies and the provident funds** derive *inter alia* from their high degree of dependency as institutional investors on the financial markets. As a result, a large decrease in the value of the financial assets in the markets could lead to a sharp drop in their profitability and to an erosion in the insurance companies' capital, and thereby damage members' credibility in the institutions in question. These circumstances could evoke a severe negative reaction by the members, such as the cessation of deposits and the actual withdrawal of their deposits, especially in the case of liquid deposits in the provident funds. This in turn could severely disturb the functioning of the funds and of the economy. Damage to the public's confidence in institutional investors, for whatever reason, could result in the materialization of another systemic risk—the risk of contagion from institutional investors to the banks and the markets—if these investors feel compelled to suddenly create extensive liquidity by rapidly realizing large amounts of securities, or by means of large-scale withdrawals of their deposits at the banks. The large-scale materialization of systemic risks of these types could lead to **financial crises**, such as the collapse of banks and currency and balance-of-payments crises that will harm the economy.

The central position of the financial system in any economy is reflected by the strong inter-relationships with the **environment** in which it operates. Firstly, the system is intimately connected with non-financial activity in the economy since it is heavily affected by the **financial strength of the private sector** (the business sector and households), which it itself affects. Secondly, the system is affected by macroeconomic policy and constitutes a two-directional pass-through channel between policy and the public, via which information essential for decision-making purposes is transferred. Thirdly, close relationships exist between the local financial system and the international financial system.

Two types of factors determine the extent of the financial system's stability. One factor is changes in the **global and local economic environment** in which it operates. Examples are the probability and intensity of shocks in the

international financial markets or a negative turnaround in the non-financial business cycle. The other factor is the extent of the system's **resilience.** The extent of this resilience reflects the ability of financial institutions, the financial markets and the payments and settlement system to continue functioning properly in the event of shocks or disruptions of differing intensity in the environment or within the system. The extent of financial institutions' resilience is mainly dependent on the level of their exposure to risks, especially systemic risks, and on the capital adequacy maintained against these risks (the volume of capital and its future growth potential). The financial markets' resilience is dependent on the level of their sophistication and liquidity, which reflect the extent of adjustment between the prices of financial assets and the underlying economic forces in the economy, and therefore also on the intensity of the change in them under different conditions. The resilience of the payments and settlement system is also dependent on the level of its sophistication and liquidity. In addition, the resilience of the entire system is dependent on the nature of the **financial infrastructure,** which is affected by numerous factors such as the structure of the financial institutions system, the nature of legislation and regulatory coverage in respect of the financial system, the quality of the supervision of the system and the incentives structure for all the players in the system. Since financial stability is therefore a multi-dimensional concept, there is no single index that reflects this stability.[1]

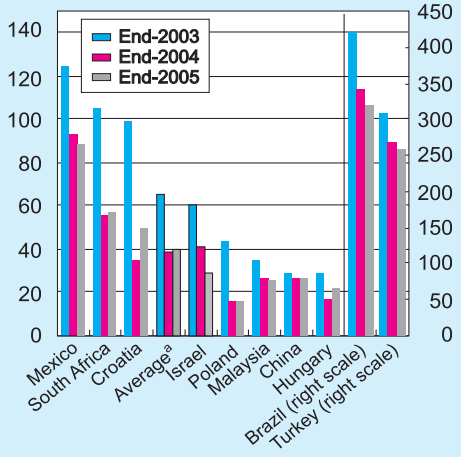
[1] See the appendix to the Stability Report for 2003 for a more extensive explanation of the concepts relating to financial stability, as well as of authorities' function in maintaining the stability of the financial system and the changes in it during recent years.

b. Developments in background conditions and their impact on the financial system

There has been significant improvement in global economic conditions, both real and financial.

The improvement in background conditions that began in early 2003 continued in 2005. The improvement in the **global economic environment** was apparent in both non-financial and financial activity. The global economy expanded in line with forecasts during 2005 despite the continued upsurge in oil prices. World product rose by an estimated 4.3 percent in 2005, although this growth was distributed unevenly. China and the US continued to lead global growth, while growth in Europe was much lower. World trade expanded by 6.6 percent, a good rate of growth but less than in 2004 (see Chapter 6). The increase in the consumer price indices in most of the world's economies that resulted from the sharp rise in energy prices did not lead to a rise in the inflation environment in those economies. This was due to the determination of the central banks, most notably that in the US, to prevent an upsurge in inflation. As in 2004, the value of assets rose in most of the world's financial markets and the level of volatility in the markets remained low. The growth in capital inflows to the

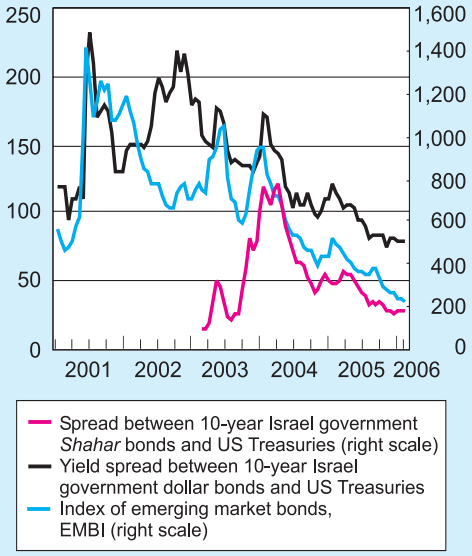
Figure 4.20
CDS Premium of Emerging Markets,[a] December 2003, December 2004 and December 2005 (basis points)



[a] Brazil and Turkey, which recently experienced crises, are shown separately (are not included in the average), because their risk level is still high.

SOURCE: Bank of Israel.

Figure 4.21
Israel's Country Risk Premium and those of Emerging-Market Economies, 2001–06 (basis points)



SOURCE: Bloomberg

emerging economies continued, and the risk premiums of those economies continue to fall (Table 4.8, and Figures 4.20 and 4.21). This development resulted from the liquidity surpluses and the low and still declining level of yields in the developed countries concurrent with an improvement in the economic situation of the emerging economies, where public sector and current account deficits contracted while their debt structure improved.

The growth in capital flows to emerging economies continued this year and their risk premiums continued to fall.

The improvement in local background conditions was reflected mainly by the continued expansion of economic activity in Israel during the period reviewed, at a pace similar to that in 2004 (see Chapter 2). This resulted from the continued improvement in macroeconomic policy, which led to a further large decrease in the budget deficit and to a particularly low real interest rate while maintaining price stability and keeping the Bank of Israel's interest rate at a historically low level. The continued improvement in Israel's geopolitical situation and security situation also contributed to the improvement in background conditions.

These positive developments in the environment were clearly reflected by the economy's financial robustness, and thereby contributed to increased financial stability (Table 4.8). In 2005 a notable improvement was recorded in the ratio of the net external debt (liquidity surplus) to GDP together with a further increase in the level of its liquidity. The ratio of the government debt to GDP fell as well, maintaining the favorable trend that emerged in 2004, and the CDS premium for Israel for 5 years dropped to a very low level by international standards (Figure 4.20).

The positive developments in the economic environment left their mark on the economy's financial resilience and thus contributed to the strengthening of financial stability.

The increased financial solidity of the business sector is a clear sign of the positive developments in the economic environment.

The increase during 2005 of the financial strength of the business sector, the financial sector's principal borrower, is another striking example of the positive developments in background conditions, most notably the consolidation of economic activity. All

Table 4.8
Main Stability Indicators of Israel's Financial System 2000–05
(percent)

	2000	2001	2002	2003	2004	2005
A. The global environment						
Rate of growth of global GDP[a]	4.6	2.5	3	4	5.1	4.3
Increase in world trade[a]	12.4	0.2	3.3	5.3	10.3	6.8
Emerging markets' bond index (EMBI)	774	804	775	431	365	243
B. The domestic environmnet						
Robustness of the business sector (quoted companies)[b]						
Financial leverage (debt/balance-sheet ratio, end-of-year)	57.6	59.4	62.0	61.9	60.7	60.3
Return on equity	4.0	-8.0	-3.1	5.2	10.9	12.4
Debt burden (ratio of repayment of principal and interest to operating profit)	88.7	128.7	117.9	96.0	73.2	69.9
Households' robustness						
Credit burden (credit/disposable income ratio)	59.6	64.1	69.6	66.3	73.5	73.6
The economy's financial strength (end-of-year)						
Israel's risk premium (the CDS spread)			190	60	41	29
External debt/GDP ratio	3	0	-2	-5	-9	-19
Government debt/GDP ratio	88	93	102	104	103	100
C. Value of financial assets						
Risk indices (annual average)						
Probability of exceptional depreciation	---	---	17.0	14.5	1.9	1.1
Standard deviation of changes in:						
(Implied) exchange rate			11.9	10.4	6.2	6.3
General share-price index	21.6	17.0	15.8	16.6	12.6	12.9
Unindexed bonds	1.6	2.1	6.0	3.3	1.5	1.5
Prices and returns (in annual terms)						
Depreciation of NIS against the dollar	-2.7	9.3	7.3	-7.6	-1.6	6.9
Rise of the general share-price index	2.0	-6.9	-20.2	55.7	17.4	33.2
Yield to redemption of Shahar 5-year bonds (period average)	8.7	7.0	9.0	8.4	6.6	5.6
D. Resilience of the financial system						
The banking system[2]						
Risk-weighted capital ratio	9.2	9.4	9.9	10.3	10.8	11.1
Balance-sheet credit risk/GDP	96	104	108	104	97	93
Ratio of problem loans to total credit	6.9	8.2	9.8	10.5	10.5	9.6
Insurance companies[b]						
Capital/assets ratio	4.9	4.4	4.7	5.3	5.7	5.6
Share of risk assets in total assets	9.5	12.7	14.0	19.1	22.8	30.9

Table 4.8 (cont.)
Main Stability Indicators of Israel's Financial System 2000—05
(percent)

	2000	2001	2002	2003	2004	2005
Provident funds						
Share of liquid accounts in total liabilities	41.2	40.6	44.2	45.1	47.4	48.9
Ratio of liquid assets to liquid liabilities	12.1	8.2	7.7	11.1	13.1	20.4
The funds' share in the government indexed-bonds market	50.3	51.8	46.6	45.7	43.5	39.6
Share of risk assets[c] in total assets	29.7	29.6	28.6	34.2	37.9	46.1
Market liquidity						
Total daily turnover in the markets	31	21	29	-6	10	31
Bid-ask spread in NIS/Forex market		7	11	15	10	8
E. Financial activity[b]						
Ratio of credit to business-sector product	117	134	145	139	137	142
Rise of nonbank credit to the business sector	3.5	15.5	12.7	12.4	21.3	34.7
Share of deposits in banks and savings in bank-owned provident funds in total private-sector assets.	56	54	51	49	47	44

[a] The data for 2005 are estimates.
[b] The data for 2005 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.

indicators of the sector's financial strength showed an improvement, continuing the trend from the beginning of 2003 although more slowly.[21]

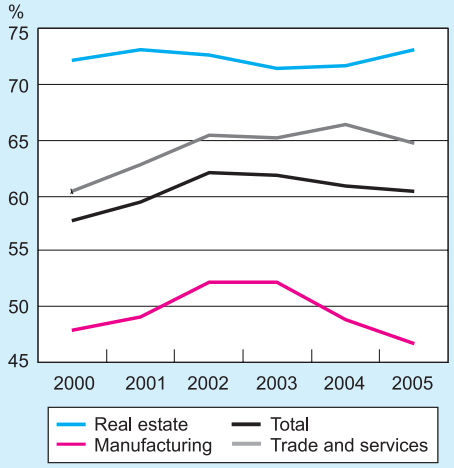
Business-sector activity as reflected by sales data continued to expand in 2005 although more slowly than in 2004. Return on capital rose by 12.4 percent in 2005, compared with 10.9 percent in 2004 and 9 percent in 1999, the year preceding the slowdown in economic activity (Table 4.8). Gross profit and operating profit rose by rates similar to the growth in activity, as compared to rates that were considerably higher than the latter during 2002-2004. The change could be indicative of end to the process of growth in efficiency. Financial leverage declined, continuing the turnaround that began in 2004. Although a further improvement was recorded in the debt-balance ratio, its level remained high (Table 4.8 and Figure 4.22). The debt burden continued to decline, mainly due to the credit burden, which fell concurrent with the growth in profitability, while the interest burden remained stable (Figure 4.23). In 2005 a

[21] The analysis of the business sector's financial strength is based on the data of publicly-traded companies from the manufacturing, commerce and services, and construction industries. These data are not necessarily representative of the entire sector, and of small companies in particular. However, publicly-traded companies are the principal and relevant population for the analysis of the strength of the business sector with reference to financial stability, and the conclusions of the analysis appear to conform to the conclusions of the analysis of non-financial activity in the economy. For more details, see Appendix 2.1 in the Financial Stability Report for 2004, pages 40-41.

considerable improvement was also recorded in business-sector liquidity, continuing the positive trend apparent since the second half of 2003. The current ratio, which reflects working capital, continued to rise (Figure 4.24). A major improvement was also recorded in the level of immediate liquidity, which is defined as the ratio between assets (excluding customers and inventory) and liabilities of up to one year. The continued upturn was particularly apparent in manufacturing and in the commerce and services industry. Although activity in the construction industry improved to some extent, the principal indicators of the industry's financial strength showed either a deterioration (level of leverage and interest burden) or a high degree of vulnerability (the current ratio).

The continuing recovery in the business sector was particularly noticeable in the manufacturing and commerce and service sectors.

Figure 4.22
Business-Sector Debt/Balance-Sheet Ratio (quoted companies), 2000 to September 2005 (by industry groups, annual average)



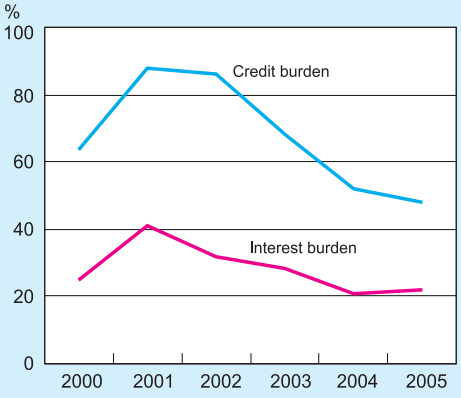
SOURCE: Based on Bank of Israel and quoted companies' data.

There was somewhat of an improvement in the construction industry although its main indicators of financial solidity still point to a worsening situation and a high level of vulnerability.

The deterioration in the financial strength of households ceased in 2005, a development that was reflected by an end to the multi-year growth in the credit burden although the burden remained higher than in the last decade. The stabilization in the level of the credit burden in 2005 implied a real increase of 3.2 percent in bank credit[22] to individuals and in disposable income (Figure 4.25). The end of the deterioration in the credit burden followed an increase in per-capita disposable income during the previous three years, concurrent with a continued growth in private consumption and a stable rate of private saving (see Chapter 2).

The negative trend in the financial solidity of households has abated.

Figure 4.23
The Business Sector's Credit Burden and Interest Burden (quoted companies), 2000 to Sep. 2005 (annual average)

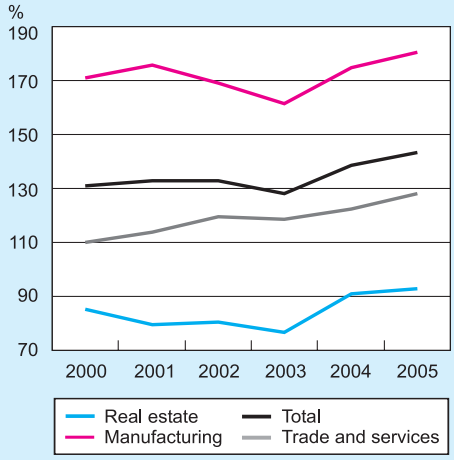


SOURCE: Based on Bank of Israel data.

The continued improvement in background conditions and as a result, in the financial robustness of the economy and the financial strength of the private sector, reflect the present position of the global economy and the Israeli economy

[22] This credit does not include off-balance-sheet bank credit—credit and other cards—customers' credit and credit from other financial institutions.

Figure 4.24
The Business-Sector's Current Ratio (quoted companies), 2000 to Sep. 2005 (seasonally adjusted, annual average)



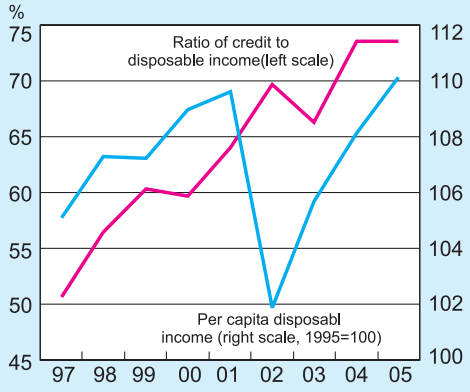
SOURCE: Based on Bank of Israel data.

The current positions of the local and world economies in the boom stage of the real business cycle had a positive effect on the financial system this year, as expected.

in the ascendant part of the non-financial business cycle. As expected, these circumstances favorably affected the financial system in 2005. More than anything else, this development was apparent from the continued calm in the **financial markets:** The value of the assets traded in the financial markets rose amidst low volatility and unexceptional changes (in both directions) in the value of all financial assets (Figure 4.26). As a result, the General Share Index rose by 33 percent during the year, and government-bond yields gradually fell to a historical low level (Table 4.8). Although the NIS depreciated against the dollar by 6.9 percent, the implied volatility in options and the probability of an exceptional depreciation remained low. The dollar traded at a rate of between NIS 4.3-4.74, a narrow band compared with the previous two years.

Due to the increase in local and global uncertainty, the calm in the markets was temporarily disturbed in June. The NIS depreciated, share prices fell, government bond yields rose and the volatility in asset prices increased. Although here too developments in the markets conformed to developments in background conditions, no excessive volatility was recorded in financial asset prices compared with the previous years and calm was soon restored to the markets. It should be noted that the spread in the NIS/foreign-currency market in that period was less than that typical of the period of unrest two years previously. At the beginning of 2006, as a result of the increased uncertainty in the local economic environment, asset prices fell to some extent. However, it is still too early to estimate whether this indicates an end to the period of calm in the financial markets.

Figure 4.25
Households Per Capita Disposable Income (at constant prices) and Ratio of Credit to Disposable Income, 1997–2005 (annual figures)



SOURCE: Central Bureau of Statistics and Bank of Israel.

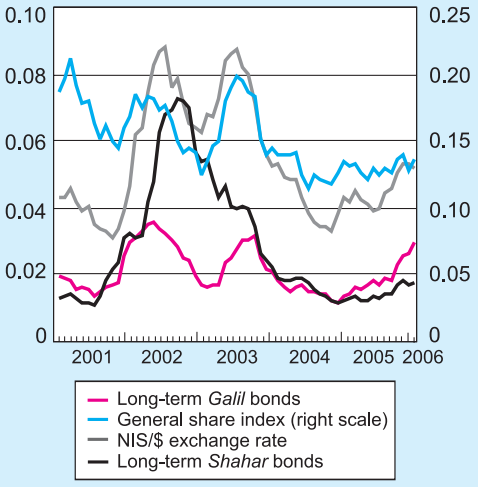
Due to the continued expansion in economic activity and the rise in the value of tradable assets, the growth in the financial aggregates in the

Growth accelerated in the economy's financial aggregates, including the size of the financial industry's balance sheet, the public's total financial assets and the total credit in the economy.

economy—the total assets of the financial sector, the total assets of the private sector (the public) and total credit in the economy—increased as well after their expansion had slowed in 2004 (Table 4.9). The average growth since the beginning of 2003 in the financial aggregates and credit in particular appears to be in keeping with financial stability (see Box 2).

The positive developments in background conditions and in the financial markets contributed to the growth in the banks' and the insurance companies' profitability and capital expansion. The provident funds' yields rose as well, concurrent with a further decline in their standard deviation. All these developments facilitated the implementation of the Bachar reform, which will speed up the major changes occurring in the financial system (See Section d below).

Figure 4.26
Monthly Standard Deviation on Daily Movements in Financial Asset Prices 2001 to January 2006 (Percent, moving six-monthly average, in annual terms)



SOURCE: Bank of Israel.

Table 4.9
Financial Activity, 2001 to September 2005

	September 2005 balance	Real change					Ratio of aggregate to GDP[a]		
		2001	2002	2003	2004	09/ 2005	2001	2004	09/ 2005
Financial aggregates (NIS billion)	(NIS billion, at current prices)	(percent, in annual terms)					(percent)		
Total balance sheet (gross) of financial sector	1,397	6.3	-1.3	4.3	2.3	8.3	243	247	257
Total private-sector assets	1,460	8.4	1.7	8.3	5.5	12.6	223	250	268
Total credit	1,324	8.3	2.2	3.8	2.2	5.8	227	238	243
Total credit to business sector	549	12.2	2.7	1.0	2.6	9.0	134	137	142

[a] Annual GDP or GDP in the last four quarters. In the case of credit to the business sector, the ratio is to business-sector product.

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

c. Developments in the resilience of the financial system[23]

i. Resilience of the financial system

The continued improvement in the resilience of the banking system in 2005 was reflected by an improvement in its capital adequacy and by a decrease in the credit risks inherent in its activity.

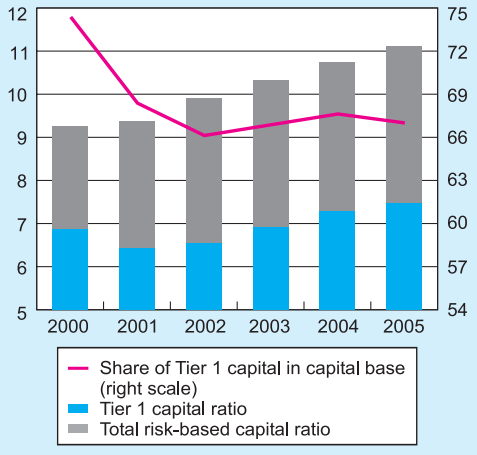
The improvement in the banks' capital adequacy was evident in both of its components—the capital ratios and the potential for capital accumulation.

The growth in capital adequacy was apparent in all of its components—the capital ratios and the capital accrual potential (Table 4.8 and Figure 4.27). **The ratio of capital to risk assets** rose to 11.1 percent at the end of the third quarter of 2005 compared with 10.8 percent at the end of 2004. This increase reflected an 8.8 percent annualized increase in capital and a 4.8 percent growth in risk assets. The increase in capital derived from the accrual of profits and from the raising of Tier 2 capital, which was partly offset by the distribution of dividends to an amount equivalent to a quarter of the banking system's net profit. The system's **capital accrual potential** also saw an improvement in 2005 although to a lesser extent than the system's ROE. During the first nine months of 2005 ROE rose to 14.8 percent compared with 11.4 percent in the same period of 2004. The increase in 2005 resulted from the favorable development in the composition of the system's income. Most of the income growth derived from the banks' core activity, which is not subject to volatility in the capital market. This was in contrast to 2004 when their income growth largely derived from components related to capital market activity. The growth in income from the banks' core activity in 2005 was a development that was to be expected when the economy was in the midst of an upturn in the business cycle, following the recession that had prevailed in the economy during previous years. Accordingly, this income growth does not in itself presage a potential for growth in capital in the future, particularly in view of the fact that this development has been accompanied by a decrease in the rate of loan-loss provision to levels typical of the period preceding the recession. Moreover, two developments at the banks in 2005 were, for the short term at least, indicative of reduced capital accrual potential—the raising of Tier 2 capital as previously mentioned after two years of stability concurrent with proximity to the

The main increase in the income of the banks in 2005 was a result of their core activities rather than the components related to the capital market.

The raising of secondary capital and a limited movement from a net reduction in employees to a net increase indicates a decline in the banks' potential for accumulating capital.

Figure 4.27
Capital Adequacy of the Five Largest Banking Groups, December 2000 to September 2005 (percent)



SOURCE: Based on Bank of Israel data.

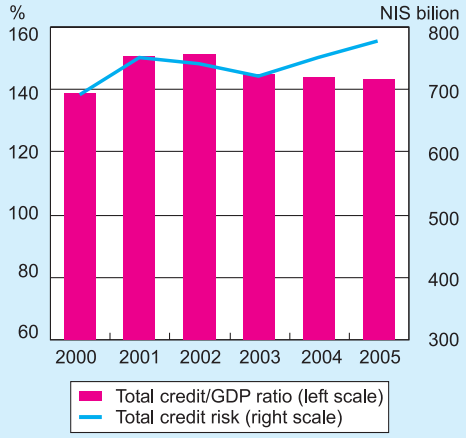
[23] The analysis of the banking system and the insurance companies is based on data for the first nine months of 2005.

supervisory restriction on that capital, and the shift from a net reduction to a net absorption of employees concurrent with a 5.3 percent rise in wages per employee post. The latter development suggests that the process of efficiency growth and its positive effect on the banks has been fully exploited.

The decrease in credit risk in the banking system resulted from similar developments in its two principal components: a slight decrease in relative exposure and an improvement in credit quality. **The relative exposure to credit risk** fell slightly, as reflected by the continued slight decrease in the ratio of total exposure to bank credit risk to product (Table 4.1 and Figure 4.28). This development shows that the increase in overall exposure to credit risk was less than the rate of growth in product. The 4.9 percent increase in aggregate exposure to credit risk during the year reflects inter alia a 2.3 percent decrease in balance-sheet credit to the business sector, to which the majority of bank credit is directed, and an increase in off-balance-sheet credit risk deriving from increased activity in derivative financial instruments. The reduction in credit to the business sector in 2005 reflected a drop in demand for credit from the banks on the part of large borrowers in the economy that endeavored to diversify their sources of finance by means of early repayment of credit to the banks, mainly by issuing bonds to the provident funds and insurance companies. The latter development resulted from the wider range of sources available to these entities following the numerous reforms that encouraged the creation of a non-bank credit market (see Section d), and from the bullish activity in the capital market and the relatively low costs of raising capital in that market. The increased proportion of business-sector debt financed from non-bank credit suggests that some of the banks exploited the changes in the credit market to reduce the risks in their credit portfolios

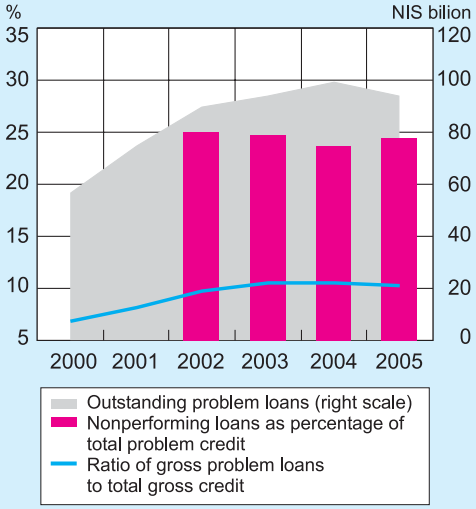
The decline in bank credit to the business sector this year primarily reflects a drop in demand among large borrowers in the economy.

Figure 4.28
Ratio of Bank Credit to GDP, December 2000 to September 2005



SOURCE: Bank of Israel.

Figure 4.29
Ratio of Problem Loans to Total Bank Credit, December 2000 to September 2005



SOURCE: Bank of Israel.

by decreasing the concentration in them, and by expanding credit to households at the expense of credit to the business sector. Concurrent with the decrease in balance-sheet credit to the business sector, credit to private individuals did indeed increase, although by a moderate 4 percent in annual terms.

Developments in the **quality of credit** during the year were also favorable. A decrease was recorded in the volume of problem loans for the first time since 2003. However there was no tangible improvement in the mix of this credit. Despite an improvement in the financial strength of the business sector and a decrease in the amount of nonperforming debt—the most problematic component of credit—the proportion of these loans to total credit remained unchanged (Figure 4.29). This was mainly due to poor repayment ability of certain borrowers, notwithstanding the general trend of improvement. However, loan-loss provision adequacy, calculated as the ratio of the balance of the loan-loss provision to total problem loans (gross), continued to rise, a development indicative of the banks' increased ability to withstand the materialization of the credit risks inherent in problem loans.

For the first time since 2003, there was a reduction in total problematic credit although there was no real improvement in its composition.

All these developments reveal a continued improvement in the banks' resilience but at the same time highlight: (1) the considerable time that they need in order to completely recover from the recession, mainly due to their still high level of credit risks as reflected in the still high 9.6 percent of problem loans to total credit and the growing competition in the system; (2) the need to maintain suitable capital adequacy, especially by exploiting the buoyant period in the present business cycle in order to achieve a further improvement in capital adequacy and provisions, as a means of ensuring that in a period of recession or slowdown in economic activity the banks will be able to cope with the materialization of risks without any appreciable adverse effect on their resilience and functioning. (See Box 2 for details of relationship between business cycles, credit, financial stability and the functioning of the supervisory authorities in this respect.)

Box 4.2
Business cycles, credit and financial stability

The world's economies are notable for cyclicality in real activity and in credit, together with various degrees of instability in the financial system. Credit is affected by business cycles and affects the intensity of these cycles. The literature makes a distinction between two types of factors that affect credit: (1) factors that expand or contract credit at a normal rate, which matches the development of GDP and aggregate demand, and is defined as part of the ordinary business cycle; (2) factors that develop within the business cycle (Fuerst, 1995; Oviedo, 2004).[1] These increase the cyclicality of credit, adversely affect the functioning

[1] T. Fuerst (1995). "Monetary and Financial Interactions in the Business Cycle", Journal of Money, Credit and Banking, Vol. 27 (November), pp. 1321-38. P. Oviedo (2004)."Intermediation of Capital Inflows: The Macroeconomics Implications of Neoclassical Banks and Working Capital", (unpublished; Ames, Iowa: Iowa State University).

of the entire economy by increasing the intensity and length of the business cycle, and thereby pose a threat to the financial system.[2]

A common mechanism for identifying the development of credit at exceptional rates is the financial accelerator,[3] one of the main channels of which is the balance-sheet channel: expectations regarding future profits that develop in a period of economic prosperity have the effect of increasing the prices of assets, increase the value of the assets in the balance sheets of firms holding them, and thereby enable them to take more credit. However, when it transpires that these firms' actual performance is less than expected, the process is interrupted and the financial accelerator reverses; Borrowers' financial leverage increases, the cost of raising credit rises, and the ability to service the debt and take new credit —which under these conditions is essential for continued proper functioning —decreases.[4]

Another channel in which the financial accelerator acts is the bank credit channel: Changes in the banks' capital over the business cycle require the banks to adjust their supply of credit to borrowers, which results in fluctuations in the supply of credit from them. The banks' response in the bank credit channel is dependent on the nature of the supervisory framework that stipulates how the banks are to cover themselves against credit risks by means of capital adequacy requirements. The Basle II guidelines on this subject appear to be pro-cyclical, meaning that they accentuate the structured cyclicality of the supply of credit in the business cycle, because they compel the banks to increase their capital when they detect an increase in credit risk. Such a risk arises for the most part in

[2] For details of the relationship between the structured cyclicality of the financial system and financial stability and its implications for policy, see the comprehensive review of Borio, C., Furfine C. and Lowe, P., 2001, "Procyclicality of the Financial System and Financial Stability: Issues and Policy Options", BIS Paper, No. 1, March.

[3] Fisher (1993) and Keynes (1932) proposed two examples for a financial accelerator. Later, Bernanke and Gertler (1995), Bernanke, Gertler and Gilchrist (1996), and Kiyotaki and Moore (1997) developed advanced versions of financial accelerator analysis.

I. Fisher (1933). "The Debt-Deflation. Theory of Great Depressions", Econometrica, 1. (October), pp. 337-57. J. M. Keynes (1932)."The Consequences to the Banks of the Collapse of Money Value", Chapter 7 in Essays in Persuasion, (New-York: Harcourt, Brace and Company.

B. Bernanke and M. Gertler (1995). "Inside the Black Box: The Credit Channel of Monetary Transmission", Journal of Economic Perspectives, Vol. 9 (Fall), pp. 27-48. B. Bernanke, M. Gertler and S. Gilchrist (1996). "The Financial Accelerator and the Flight to Quality", Review of Economics and Statistics, Vol. 78 (February), pp. 1-15. N. Kiyotaki and J. Moore (1997). "Credit Cycles", Journal of Political Economy, Vol. 105 (April), pp. 211-248.

[4] The financial accelerator derives inefficiency in the financial system that is caused by informational asymmetry between borrowers and lenders, as a result of which lenders encounter a credit bottleneck in varying degrees. See for example:

M. Allen, C. Rosenberg, C. Keller, B. Setser and N. Roubini (2002), "A Balance Sheet Approach to Financial Crisis", IMF Working Paper 02/210. E. G. Mendoza (2003), "Credit Prices and Crashes: Business Cycles with Sudden Stop", in Preventing Currency Crises in Emerging Markets, ed. By J. Frankel and E. Sebastian, Chicago, University of Chicago.

a period of recession, and a reduction in bank credit has the effect of increasing the recession.[5]

The high proportion of short-term factors in the banks' credit allocation considerations is also emphasized in the literature as an important variable that increases the volatility of credit in parallel with business cycles. This involves "fashionable concurrence" in the extension of credit due to excessive optimism, meaning that credit is granted while underestimating the risk inherent in the extension of this credit. Credit cycles have an important function in explaining other phenomena characteristic of fluctuations in the business cycle. For example, credit cycles explain why small and medium-sized firms tend to reduce their activity in recession periods much more than large companies, and why the most significant reduction is at companies that are more dependent on external finance.

Empirical studies during recent years provide evidence of the close relationship between lending booms, business cycles and financial crises.[6] The credit cycles inherent in business cycles affect the stability of the financial system. Business cycles are also reflected during periods of deterioration in the position of financial institutions, if the upsurge in credit during the boom period is excessive and maintained over time.[7] Experience shows that the credit risk in the system actually emerges in the ascendant part of the business cycle when financial institutions still appear to be strong, and materializes during the descendant part of the cycle.[8] The volume of problem loans increases, profits contract and capital is eroded. Financial institutions are actually weak at the second stage, when the economy has passed the low point and is facing a new business cycle, and their volume of sources is adequate for supplying the requirements of only limited economic growth. The process highlights the major importance of intervention by the supervisory authorities during the ascendant part of the business cycle, in order to ensure that the banks will be able to fulfill their function of supporting an expansion of activity over the long term.

[5] See for example: Kashyap, K. and Stein, J., 2004, "Cyclical Implications of the Basle II Capital Standards", Economic Perspectives, 1st Q, Federal Reserve Bank of Chicago.

[6] Gourinchas, Valdes and Landerreche (2001) examined credit "explosion" episodes in 91 countries over 40 years. In World Economic Outlook (IMF, 2004), episodes were examined in 28 emerging market economies from 1970 to 2002. Chile (1982), Argentina (1979), Mexico (1994) and Thailand (1997) were among the most prominent countries that experienced financial crises due to credit "explosion".

O. Gourinchas, R. Valdes and O. Landerretche (2001)."Lending Booms: Latin America and the World", Economia Vol. 1 (spring), pp. 47-99.

[7] According to Gourinchas, Valdes and Landerreche (2001), a credit cycle with an exceptional upsurge lasts for three and a half years. Its ascendant part lasts for an average of two years in the emerging countries and its descendant part, for a year and a half (See footnote 6).

[8] The expansion of product and investment peak together with the peak in the expansion of credit, while consumption peaks a year beforehand.

The empirical results of the research on emerging countries show that periods of exceptional upsurge in credit were accompanied by a large increase in share prices in real terms, followed by a price slide. These credit surges did not exert appreciable upward pressure on inflation, and the banks greatly increased their supply of credit to the business sector from sources abroad.

The close relationship between the robustness of the financial system and the economy, principally over the business and credit cycle, highlights the need for focusing the efforts of the supervisory authorities in many countries on reducing financial institutions' dependence on business and credit cycles for their stability in order to reduce the risk of financial distress. Accordingly, the central banks and the BIS, which are concerned inter alia with financial stability, instruct the supervisory authorities to direct their efforts at three areas: the close monitoring of borrowers at the various stages of the business cycle; a deeper understanding of the ways in which credit risk develops in the economy depending on the economy's location within the business cycle; and most particularly, prescribing the policy response that is necessary in order to minimize the risk of undermining financial stability and its real price—adjustment of capital adequacy requirements for example, or a dynamic anti-cyclical provision for loan losses.

During the last three years the Israeli economy has been in the process of emerging from the recession and moving to a peak in the business cycle. To date, no evidence of an upsurge in credit is apparent. However, the rate of growth in **credit to the business sector** in 2005 reached 9 percent, considerably more than the 1-3 percent increase during the previous three years and also higher than the business-sector product growth rate of 6.6 percent in 2005. Yet the economy recovered throughout the entire period, from mid-2003 to the end of 2005, and the 6.4 percent annual average expansion of credit to the business sector has matched the business-sector growth rate of 5.9 percent. This is in contrast to the recession period, from the beginning of 2001 to mid-2003, when although credit to the business sector increased by the low rate of 4.3 percent, business-sector product itself contracted by 1.6 percent. Moreover, most of the growth in credit during the recovery period has derived from non-bank sources (principally institutional investors) unlike in the recession period, when most of the expansion came from banking sources. It should be remembered however that the economy is currently located in the ascendant part of the business cycle. The authorities must ensure that credit does not develop at an exceptional rate that will increase the risk of financial crises during the coming years, when the economy is located in the descendant part of the business cycle.[9]

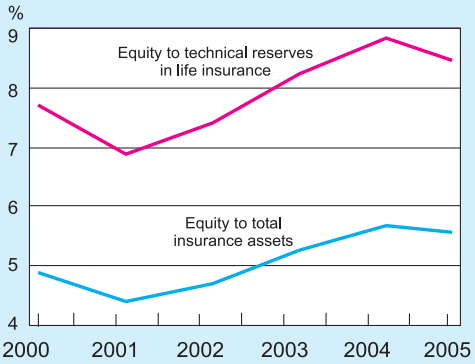
[9] See also B. Zilberfarb, M. Kraus and A. Shanir (2005), "Optimism and the Business Cycle: The Credit Track in Israel's Economy, 1997–2004," Banking Review 17, November (Hebrew). The empirical results of this research regarding bank credit to the construction industry show that at times of optimism companies are granted credit with greater risks.

ii. Institutional investors' resilience[24]

Despite the improvement in the economic environment this year, there was no real change in the solidity of the insurance companies.

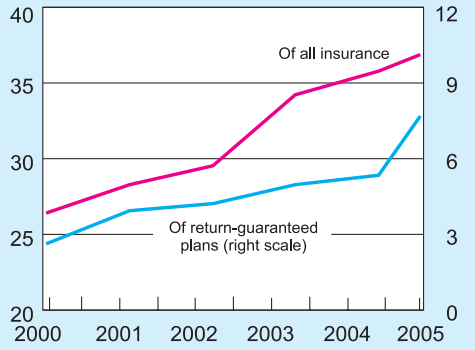
The **insurance companies**: Despite the improvement in background conditions in 2005, no real change in the insurance companies' resilience occurred, and the changes in capital adequacy and the systemic risks inherent in their activity were not appreciable.

Figure 4.30
Capital Ratios in Insurance
2000 to September 2005



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

Figure 4.31
Share of Tradable Assets in Insurance Plans and in Return-Guaranteed Life Insurance, 2000 to September 2005 (percent)



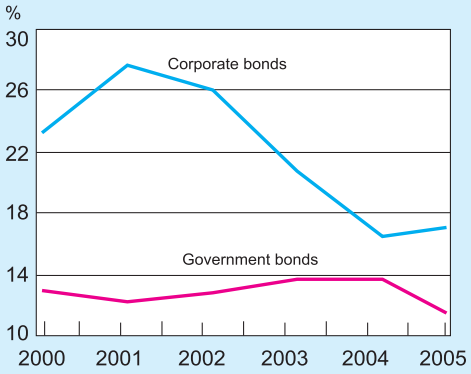
SOURCE: Based on data from the Bank of Israel and the Capital Market, Insurance and Savings Division of the Ministry of Finance.

Although the insurance companies' ROE rose to 38 percent in 2005, their capital ratios fell slightly, in contrast to the consistent upturn in these ratios since the recession of 2001 (Table 4.8 and Figure 4.30). The ratio of shareholders' equity to total assets and to life insurance technical reserves fell to 5.6 percent and 8.5 percent respectively. The decrease in the capital ratios reflects the rapid growth in total assets resulting from the rise in the value of the assets in the financial markets, concurrent with the distribution of dividends (like the banking system, which slowed its accrual of capital despite the high profits during the period).

The changes in systemic risks during 2005 were not uniform and were generally insignificant. A notable development however, was the persistent increase in the insurance companies' **exposure to the financial markets.** This exposure reflects the companies' great dependency for their profitability on these markets, due to the high proportion of tradable assets in their total assets (Figure 4.31). The increased exposure to the markets derived from the expansion in tradable assets and the application in April 2005 of the new regulations concerning revaluation of non-tradable assets in profit-sharing life insurance portfolios. Under the new regulations, revaluation is in accordance with fair value, a change that increases their exposure to fluctuations in the capital market (see Section 4 below). However, **the risk of contagion from the**

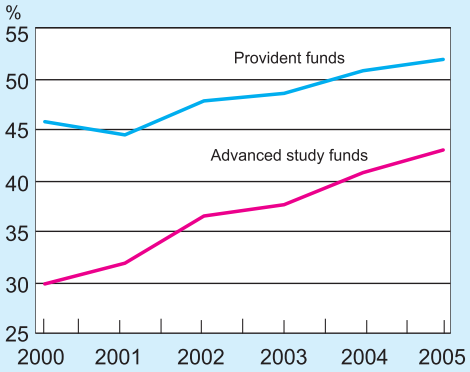
[24] The risks reviewed below are the principal systemic risks inherent in institutional investors' activity. The significance of these systemic risks for financial stability as well as other systemic risks are analyzed extensively in the Financial Stability Reports for 2003 and 2004.

Figure 4.32
Insurance Companies' Share in Israel's Bond Market, 2000 to September 2005



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

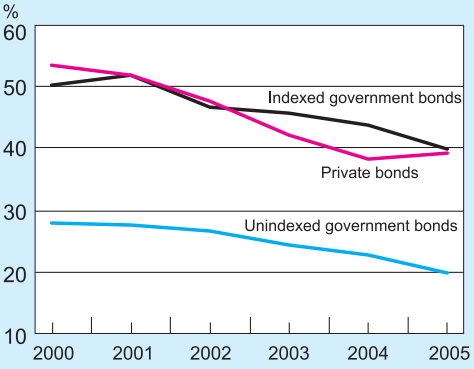
Figure 4.33
Share of Liquid Accounts in Total Liabilities of Provident and Advanced Study Funds, 2000 to Sep. 2005



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

insurance companies to the financial markets declined slightly: The insurance companies' rate of holding in the government bond market—the largest component of the securities market in Israel—fell by 2.2 percentage points to 11.5 percent during the period. At the same time, the proportion of the insurance companies' holdings of corporate bonds, shares and Treasury bills remained largely unchanged (Figure 4.32).

Figure 4.34
Provident Funds' Weighting in Israeli Securities Markets, 2000 to June 2005



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

The **provident funds**: Developments in the systemic risks inherent in the provident funds' activity were not uniform during the year, principally in systemic liquidity risk: The proportion of liquid accounts to total liabilities continued to increase in 2005, both at the provident funds themselves and at the advanced study funds (Figure 4.33). However, a large increase was recorded in the rate of coverage of liquid liabilities by liquid assets. Due to the changes in regulatory coverage, it is feared that liquidity risk will increase in the future (see section 4). A positive development was apparent with respect to the provident funds' dependency on the financial markets: The continued downtrend in the moving standard deviation of the yield in the last ten quarters noted since the beginning of 2004. But as is the case with the insurance companies, the funds' exposure to fluctuations in the financial

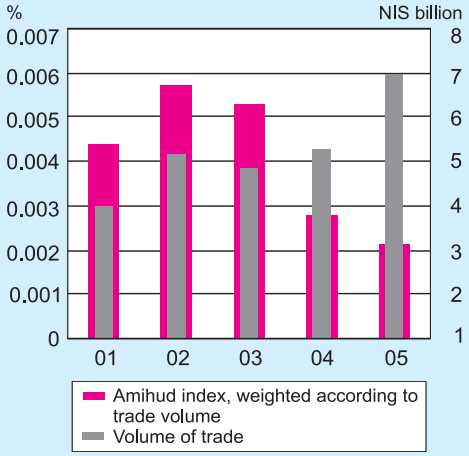
markets is expected to increase due to the move to revaluating non-tradable assets according to their market value. **The risk of contagion to the markets** decreased overall during the year as the provident funds' share of the government bond market continued to decline. However, the provident funds' share of the corporate bond market increased slightly (Figure 4.34).

The exposure of the funds to fluctuations in the financial markets is expected to increase as a result of the shift to valuing non-tradable assets according to their market value.

iii. Resilience of the financial markets

The resilience of the financial markets continued to increase in 2005 due to the growing liquidity in the markets (Figure 4.35). The market depth indices show an improvement, and turnover in all of the markets—foreign-currency, fixed-income and equities—rose sharply during the year, by 30 percent on aggregate (Table 4.8). **In the foreign-currency market,** the depth of the market increased, turnover rose considerably and the bid-ask margin remained largely unchanged—although not at the time of the exceptional depreciation in June 2005—an indication of the market's high resilience. The market depth in the equities market also increased concurrent with a large rise in turnover. A similar trend was recorded in the bonds market where the volume of issues rose considerably, over and above the volume of government bond issues. Foreign investors' share of trading increased in all the markets.

Figure 4.35
Total Daily Volumes of Trade in Financial Markets (NIS billion) and Index of Overall Market Depth, 2000–2005
(In annual terms)



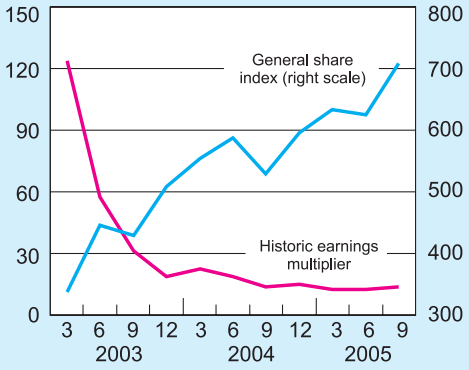
SOURCE: Based on Bank of Israel data.

The large cumulative rise in share prices—33 percent in 2005 and 145 percent from March 2003—leads to the question of whether a financial bubble is developing in the equities market, ie. is there a high probability of a share price slide in the near future even without the accompaniment of an unexpected event that would have a major adverse effect on the economy? In other words, is there a low resilience of the equities market? Apart from the large cumulative rise in share prices, supporting the generation of a bubble in the equities market are the liquidity surplus and also apparently the search for a high yield (involving a high risk) by institutional investors in Israel—supported by the reforms and cuts in interest rate to its lowest level—as well as by foreign investors. Acting against the creation of a bubble is the sophistication of the financial markets in Israel and especially the present high degree of financial openness. This has provided the opportunity for foreign investors to enter Israel and for Israeli investors to enter foreign markets, without any restrictions and discriminatory taxation—an opportunity that was actually exploited to a considerable extent.

The indicators do not point to an overvaluation of shares up to the end of 2005.

Against this background and because of the importance of the question of the bubble in analyzing financial resilience, this issue needs to be discussed. It is difficult to rationalize any particular level of prices in the equities market and therefore adopt a clear position on this issue. The partial indications available to us and that are presented below do not point to the development of a bubble in the equities market till the end of 2005: (1) The rise in share prices can be attributed to the continued improvement in background conditions in Israel and abroad. The business sector is continuing to increase its efficiency while achieving a high ROE. (2) The public's direct participation in equities market trading **decreased** in 2005. This was in contrast to the public's increased role during the development of market bubbles in the past. (3) The level of the P/E ratio, that is, the ratio between share prices and companies' profits (based on the profits of the 25 largest companies during the previous four quarters) in the third quarter of 2005 was similar to that in 2004/III:14 (Figure 4.36). (4) In 2005 the upturn in share prices was notable for a differential increase among the market sectors. For example, while the banks' shares rose by 55 percent in 2005, the insurance companies' shares went up by 11 percent (share prices also rose in the real estate sector during the year). This is in contrast to the situation typical of the emergence of a bubble, when the market barely distinguishes between the different sectors. (5) The rise in share prices did not come in the wake of a rapid growth in credit. (6) The upturn in share prices in 2005 considerably exceeded that in the developed countries but was similar to the increase in the emerging markets. A longer-term perspective shows a similar pattern of development. (7) The amount of capital raised by means of share issues was less than in the previous two years, in absolute terms and certainly relative to the amount raised via the issue of bonds and structured financial instruments. This means that interested parties in firms did not face the scenario of high share prices.

Figure 4.36
Historic Earnings Multiplier[a] Compared to General Share Index, March 2003 to September 2005 (Quarterly)



[a] Market capitalization of the Tel Aviv-25 companies at quarter end divided by earnings in preceding 12 months.

SOURCE: Based on Bank of Israel and Stock Exchange data.

d. Implications of the changes in the financial infrastructure for financial activity and stability

i. Principal changes in legislation, regulatory coverage and taxation in 2005

The principal change made in the financial infrastructure during 2005 was the Bachar legislation, which has already led to a change in the institutional structure of the

financial system as described in section 1 above. The Bachar legislation also includes important changes in the legislation concerning the supervisory authorities. Presented below are the other main changes contained in the Bachar legislation, as well as a number of important changes in regulatory coverage and taxation that are intended to increase the sophistication and the efficiency of the markets, encourage competition between the players and to increase the supervision of financial institutions and financial services. This is to be done by removing the obstacles to the development of the capital market, expanding the authorities of the supervisory entities and making the supervisory format for the institutions under their authority more uniform.

The main change in the financial infrastructure this year—the Bachar legislation—has already led to change in the institutional structure of the financial system.

Changes in legislation concerning the supervisory authorities

• The Law for the Supervision of Financial Services (Employment in Pension Consultancy and Pension Marketing)

This law is intended to regulate consultancy in pension products[25] and employment in the marketing of these products as two separate activities, with reference being made to the definition of the competence required for engaging in these activities without fear of a structured conflict of interests, and to the regulatory provisions and supervision applying to each of them.[26] The enactment of this law is a major stage in the creation of a private and free pension market for providing the general public with access to objective advice in the choice of pension products—a choice that is complex and highly important for the individual and the economy.

Important changes in structure and taxation were aimed at increasing the efficiency of the markets, improving competition among the players and tightening the regulation of financial institutions and services.

The law stipulates that insurance agents who choose to remain dependent for their income on insurers will be able to engage in marketing only and not consultancy, that the banks will be able to engage in consultancy alone, and that the "suppliers" of pension products (insurance companies, provident funds and pension funds) will be only be able to engage in marketing. The provisions of the law include a licensing requirement for pension consultants and marketers and the conditions for obtaining a license, including authorization; due disclosure, restrictions and prohibitions concerning potential conflicts of interest; a requirement for protecting customers' interests, including the adaptation of the service to the customer's requirements, a requirement for confidence and caution and the provision of advice in writing; a separation between the commissions that the customer pays to the advisor and to the marketer without a relationship of dependence between them and the pension products to which the pension advice relates; reporting and due disclosure directives; supervision of license-holders, increasing the ability to carry out enforcement by means of monetary sanctions, fines and punishments. The licensing and supervisory authorities in this matter are in the hands of the Commissioner of the Capital Market,

[25] A pension product is a provident fund for annuity, for capital accrual, and personal for severance payments and life insurance plans, an advanced study fund and any other type as defined by the Finance Minister.

[26] At the same time, the Bachar-related legislation provided for a separation between consultancy on securities, including mutual funds, and the marketing of securities.

Insurance and Saving at the Ministry of Finance, who is subordinate to the Minister of Finance.

• The Law for the Supervision of Financial Services (Provident)

A special law was enacted for providing regulatory coverage of the activity of the different types of provident funds and their supervision within the framework of main legislation. Before this legislation, the regulatory coverage of the provident funds was based on amendments to the Income Tax Ordinance, which defines the provident funds with respect to the tax benefits for those saving in them. The new legislation covers the activity of the provident funds and their legal structure, creating a legal separation between the assets of the managing entity and the savers' assets in order to reduce potential conflicts of interest; provides regulatory coverage for the activity of the entities in the managing company, including the board of directors, the investment committee, the actuary, the risk manager and the external auditors; imposes on the provident funds a due disclosure requirement, including disclosure of their articles of association; provides the regulator with the authority to intervene in the appointment of office-holders and in determining their competence; provides regulatory coverage for the status of the member while increasing his independence in the selection of a fund; and expands and regulates the rules for the supervision of the provident funds and enforcement over them, including the civilian and criminal sanctions in the event of a violation of the provisions of the law and the regulator's directives. Regulatory authority over the provident funds is in the hands of the Commissioner of the Capital Market, Insurance and Saving at the Ministry of Finance, who is also the Controller of Insurance and is subordinate to the Minister of Finance.

• The Law for the Supervision of Financial Services (Insurance)

The legislative change is intended to broaden regulatory and supervisory authorities, to create uniformity in the level of supervision among the different entities and institutions, and to form a connection between this law and the two new laws previously mentioned —the Provident Fund Supervision Law and the Pension Consultancy and Marketing Law —by means of mutual referrals. Under the new framework, the Commissioner of the Capital Market, Insurance and Saving at the Ministry of Finance is also the Controller of Insurance. This means that the Controller remains an employee of the Finance Ministry who is appointed by the Finance Minister and is subordinate to him, and his independence has not been increased. The function of the Controller of Insurance is defined in the law, and this is to "ensure the proper management and protection of the interests of the insured and of the customers, in order to prevent an adverse effect on the insurer's ability to discharge his liabilities".

The main changes in the supervision of insurance activity are: the embodiment in the law of the Controller's authority to issue directives; the determination of the considerations to be applied when granting a license to insurance agents; regulatory coverage of the insurance agent's cash management; regulation of the control in the

insurer and the agent by broadening the Controller's authorities and applying the directives determined in this matter in the Banking (Licensing) Law; increasing the efficiency and the stringency of management and control by means of rules governing entities and office-holders in a publicly-traded company, and the appointment of an actuary for the entire insurance industry and of a risk manager for each insurer and separate investment committees for nostro funds and for savers' funds; directives concerning profit-sharing plans in which the members share investment risks, as in the provident funds; expanding the directives concerning financial reports to the Controller and to the public and prohibition of the publication of misleading details; the determination of a secrecy requirement for the Controller and his employees, together with the opportunity for transferring information to the Supervisor of Banks, the Securities Authority and enforcement entities abroad; and the conferral of enforcement authorities by means of a civil fine and criminal punishment.

• Legislation relating to the Supervisor of Banks

Under the Bachar legislation, the Supervisor of Banks' authorities have been augmented by a series of changes in the legislation relating to the banking system. The main changes are: embodiment in legislation of the Supervisor's authority to issue Proper Banking Management Directives—the Supervisor of Banks' main means of regulation; increasing enforcement ability by means of monetary sanctions and fines in the event of a violation of the Proper Banking Management Directives, non-remedying of deficiencies discovered as the result of complaints by the public in accordance with the Supervisor's directives, lack of due disclosure to customers, and determination of methods and times of accounting with customers that violate the Governor's directives.

Changes in regulatory coverage and taxation

• Revaluation of assets

One of the main changes implemented in April 2005 is a change in the method of revaluating the non-tradable assets held by institutional investors (deposits, loans and non-tradable bonds) from revaluation on the basis of adjusted cost to revaluation on the basis of the assets' fair value. This change assures members a more accurate calculation of their rights, and ends the distortions that existed in the calculation of yields in the course of the month such as non-uniformity in remuneration to different members and insured, the lack of a suitable basis for comparing between the institutional entities, the preference for investment in non-tradable bonds over investment in tradable bonds for accounting presentation reasons and the requirement for a premium for investments in return for tradability. All these adversely affected the markets' sophistication, efficiency and the competition within them. In addition, the provident funds were required to revaluate their assets daily as compared to once a month previously.

The change in the system for valuing non-tradable assets in the hands of institutional investors from accounting value to economic value promises to provide their clients with a more accurate assessment of their rights.

• Changes in the regulations governing long-term saving

Another important change made in the course of the year was the shortening of the time between the notification of a cash withdrawal from the provident funds and the actual withdrawal from 30 days to only 5 days. From the beginning of 2006 it will be possible for investors to move between provident funds and from provident funds to insurance plans.

A number of changes have been initiated in the conditions of savings plans with the goal of increasing pension and long-term savings.

A number of changes were also made in saving conditions for the purpose of increasing long-term pension saving. These changes included: postponement of independent members' entitlement to withdraw cash deposited from January 2006 until the age of 60, instead of after 15 years; a reduction in the income ceiling on which a tax credit is granted; and the determination of conditions for independent members, from whom a minimum deposit for an annuity is required ("the first layer") before they can deposit money in a capital accrual track (Provident Funds).

• Equalization of the rate of tax on foreign securities to the rate applying to Israeli securities

The equalization of tax rates on foreign and local securities is expected to lead to an increase in foreign investment by residents.

In line with the recommendations of the Rabinowitz Committee and the unification of the rates of tax on the different financial instruments in the capital market, at the beginning of 2005 the rate of tax on earnings from the realization of foreign securities was reduced and equalized with the 15 percent rate of tax applying to Israeli securities. This change is expected to increase Israelis' investments abroad and lead to greater diversification in the public's asset holdings. The growth in investments abroad concurrent with foreign investors' entry to the capital market—due inter alia to the reform—are part of the process of Israel's integration into world markets.

• Supervision and regulatory coverage of non-bank credit

During 2005 and at the beginning of 2006, a number of preliminary measures were taken concerning the regulatory coverage and supervision of credit from institutional investors to the business sector. At the beginning of 2005 the Controller of Insurance published a position paper on the management of credit risks, which was aimed at regulating the insurance companies activity in this matter from various aspects, including operation, reporting and control, risk management, and capital requirements. At the beginning of 2006 the Controller of Insurance issued a circular requiring the insurance companies to expand the information provided in financial reports, as part of the initial implementation of the international standard on the subject of insurance contracts. The directives increase the disclosure requirements for insurance companies concerning the presentation of information on credit risk and the company's policy regarding the transfer of insurance risks to re-insurers in Israel and abroad, and the principal methods and guidelines that the company adopts in its insurance (actuarial) liabilities.

The market makers reform

In 2006, the trading in the liquid Shahar bond series will be carried out through market makers.

Trading in liquid series of *Shahar* bonds via market makers appointed by the Ministry of Finance is scheduled to begin in 2006. This trading will be managed in an MTS international trading system. A change in the regulations in government bond tenders is expected at the beginning of 2006. The tenders will be held via the Bloomberg system, and the market markers will be given exclusive access to tenders on 80 percent of the amount issued. The market makers will also be granted the right to borrow bonds from a special lending bank that will managed by the stock exchange. The management of the bond issues will be transferred from the Bank of Israel to the Ministry of Finance, together with the management of loan instruments. The reform is expected to greatly increase the tradability in the markets and to contribute to increased competition in them. At the same time, the reform will encourage new players, including foreign investors, to expand their activity in the markets. This is due to the price quotation requirement imposed on the market makers.

ii. Implications for financial activity from a long-term perspective

The recent changes in financial infrastructure are expected to accelerate and to reinforce the decline in the dominance of the banks in financial activity.

The latest changes in the financial infrastructure are expected to speed up the long-term trend whereby the banks' dominance in financial activity has been declining to the benefit of other players, concurrent with a growth in competition between them and a decrease in the concentration among the financial groups. This trend developed against the background of the liberalization processes and reforms that were implemented during recent years, principally the liberalization of the foreign-currency market, the roll-over of the government debt, the reform in capital market taxation, the pension reform, the increased flexibility of the regulations applying to institutional investors, and the increased sophistication of the Treasury bill and bond market.[27] Part of the reforms and changes in 2005, which are presented extensively in the first section of this chapter, have already been reflected in financial activity, in some cases earlier than expected, and part of them will be apparent during the coming years.

The most notable features of financial activity in 2005 as regards their significance from the aspect of financial stability were a continuation of long-term trends: (1) a shift in business-sector credit from the banks to non-bank sources, mainly to institutional investors; (2) a decrease in the banks' share within the private sector's financial asset portfolio, which is a more prominent manifestation of a more general phenomenon: the growth in the proportion of the tradable component of the public's financial asset portfolio; (3) a decrease in the banks' and the provident funds' share of the financial sector's total assets. Details of these developments are as follows:

[27] For a detailed review of the reforms that affected the composition of financial activity, see the Financial Stability Report for 2004, page 79.

The decrease in the banks' share of the credit market

The expansion of credit to the business sector during the last three years has concealed the real drop in bank credit which was accompanied by the rapid expansion of non-bank credit.

As in the previous two years, credit to the business sector expanded rapidly in 2005 (Table 4.9). The overall growth in credit to the business sector during the last three years was accompanied by a large decrease in bank credit concurrent with a rapid expansion in non-bank credit (Table 4.10 and Figure 4.37). This process occurred against the background of the liberalization processes and reforms in the financial system during recent years, as well as the tightening of the Supervisor of Banks' restrictions on the extension of credit to large borrowers, which compelled these borrowers to seek alternative sources of finance (See Section 3).

Non-bank credit expanded by the very high rate of 35 percent in 2005, far more than in the previous three years. As a result, the share of the banks (including the provident funds owned by them) in credit to the business sector gradually declined from 83 percent at the beginning of the decade to 71 percent at the end of September 2005 (Table 4.10). Excluding credit from provident funds owned by them, the banks' share of this credit at the end of September 2005 amounted to 64 percent. The difference between the banks' share of credit to the business sector including the provident funds owned by them (71 percent) and their share excluding the provident funds (64 percent) represents the full initial potential impact of the separation of the provident funds from the banks following the Bachar legislation.[28] Although most of the impact actually became apparent at the end of 2005 when the bank provident funds were sold, the decline in the bank's share of credit to the business sector is expected to continue.

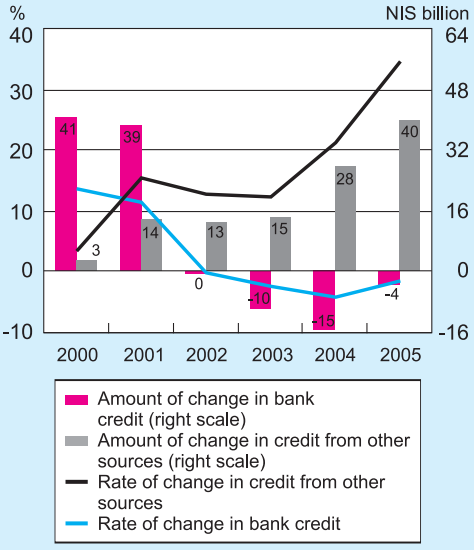
Table 4.10
The Share of the Banks in Financial Activity, 2000 to September 2005

	2000	2001	2002	2003	2004	9/2005
Total assets (NIS billion)	(NIS billion, at September 2005 prices)					
Banks	758	808	796	796	789	810
Banks and provident funds managed by them	893	946	921	938	940	969
Bank's share of:	(percent)					
Total credit to the business sector	79	78	76	74	69	64
Total credit to the private sector	43	42	40	38	35	33
Total assets of the financial sector (gross)	64	65	64	62	60	58
Share of banks and provident funds owned by them (percent) in						
Total credit to the business sector	83	82	80	78	74	71
Total credit to the private sector	56	54	51	49	47	44
Total assets of the financial sector (gross)	76	76	75	73	71	69

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

[28] This is assuming that apart from the sale of the bank provident funds, no change occurred that could have changed the banks' share of total credit to the business sector between September 2005 and the end of the year.

Figure 4.37
Business-Sector Credit from Banks vis-à-vis Credit from Other Sources, 2000 to September 2005[a]



[a] Rates of change are in annual terms.

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

In recent years, there has been an increase in non-bank sources of credit to the business sector, primarily from institutional investors.

The additional sources of non-bank credit for the business sector during recent years have derived mainly from institutional investors (provident funds, the insurance companies and the pension funds), in the form of tradable and non-tradable bonds, and the contribution of direct credit from nonresidents and households has decreased. As a result, the proportion of institutional investors (those owned by the banks and those not owned by the banks) in outstanding credit to the business sector caught up with the proportion of nonresidents in this credit: 16 percent.

The decrease in the banks' share of the private sector's (the public's) financial asset portfolio

The banks' share within the private sector's (the public's) financial asset portfolio continued to fall during the year. The proportion of deposits with the banks and savings with the provident funds owned by them to total private-sector assets, which fell consistently in recent years, reached 45 percent at the end of September 2005 compared with 56 percent at the beginning of the decade (Table 4.10). Excluding the provident funds owned by them, the banks' share of the public's asset portfolio fell to only 34 percent, a quite low level. The differential of 11 percentage points represents the full initial potential impact of the separation of the provident funds from the banks as a result of the Bachar legislation. Until the last two years, the decline in the bank's share was to the benefit of the public sector and abroad. In the last two years, the decrease was mainly to the benefit of the insurance companies and at the end of 2005 as a result of the Bachar reform, to other players as well, mainly nonresidents.

There has been an increase in the share of assets whose value is not guaranteed but is dependent on market prices within the private sector's portfolio of financial assets.

This development was a key element in a more widespread phenomenon characteristic of the private sector's financial activity: the increase in the proportion in the private sector's financial asset portfolio of assets whose value is not guaranteed but dependent on market prices. The increase in this proportion was reflected by the growth in the tradable component that the public hold directly as well as indirectly, due to the increased proportion of assets that are valued according to market prices by institutional investors that manage the public's savings. This phenomenon resulted from the continued roll-over of the government debt following the pension reform and the move to new pension funds and profit-sharing life insurance plans. Complementing

this process in 2005 was the large increase in corporate bond issues and the application of the regulations for the revaluation of non-tradable assets in institutional investors' asset portfolios on the basis of market value. Another accompanying process was the growth in competition from non-bank entities that manage the public's assets. All of the private sector's financial assets, except for its deposits with banks in Israel and abroad and its loans to nonresidents, are currently assets whose value is dependent on market prices. The proportion of these assets in the private sector's asset portfolio reached 56 percent at the end of September 2005 compared with only 27 percent at the beginning of the decade.

The decrease in the banks' share of the financial sector's total assets

These major changes in the credit market and the composition of the private sector's assets were clearly reflected in a broader aggregate as well: the banks' share of the total assets of the financial sector. The proportion of assets managed by the banks and the provident funds owned by them to the financial sector's total assets fell persistently, from 76 percent at the beginning of the decade to 69 percent at the end of September 2005. Excluding the provident funds owned by them, the banks' share fell to 58 percent. The latter figure shows that even after the full implementation of the reforms in the financial system in accordance with the Bachar Committee's recommendations, the banks still control a dominant part of the financial sector.

iii. The implications of the cumulative changes in the financial infrastructure for financial stability[29]

Long-term implications

The reforms and changes in structure in recent years are expected to increase the solidity of the financial system in the long run once its new structure has taken form and the new rules of the game have been internalized.

The series of reforms and changes in regulatory coverage during recent years and the changes in activity that have occurred as a result of them are expected to increase the financial system's resilience in the long term. This will be after a new structure is completed and the new rules of the game have been internalized by the public, the financial institutions and the authorities. In these circumstances, systemic risks will decline and the sophistication of the markets and the competition within them will increase.[30] The reform and regulatory changes in 2005 will help to further increase this resilience, by speeding up the positive changes that are currently occurring in the system.

[29] This section is based on a comprehensive analysis of the implications for financial stability of the recent reforms, including the Bachar Reform. The analysis is presented in the Financial Stability Report for 2004, page 114.

[30] For details of the relationship between competition and financial stability, see Box 1 in the Financial Stability Report for 2004.

The development of alternatives to the banks in the credit and long-term savings markets will reduce the systemic risk in the financial system.

The consistent decrease in the banks' share of financial activity and the creation of substitute channels for them in the credit market and the long-term saving market will reduce the systemic **risks in the financial system**. This is because the banks are the largest source of systemic risk in the entire financial system, due to their centrality in the economy and the fact that the banking industry contains large amounts of both guaranteed liabilities and liquid liabilities, which create the risk of contagion from different components of the financial system to the banks and between the banks. The shift of a considerable proportion of financial activity that is not classical banking activity from the banking sector to other institutions, and the breaking of the ownership relationships between the banks and the provident funds will therefore reduce the **risks of contagion** from these financial institutions to the banks. The process will thereby increase the resilience of the financial system as a whole. The contagion risks derive from the possibility that the public's confidence in the banks—a confidence on which their very existence depends—will be shaken due to adverse developments at financial institutions related to them, and principally at the provident funds.

Another major result of the changes reviewed is **the increased sophistication of the markets and the competition within them.** This too will contribute to financial stability in the long term by reducing its dependence on a single main channel: the banks. The development of the capital market will also contribute to stability, due to the entry of major new players, and the wider range of financing and investment opportunities that will enable foreign investors to become more closely acquainted with the markets and the financial instruments that are commonly used worldwide.

The rapid expansion of non-bank credit concurrent with the decrease in bank credit, which will gather momentum following the implementation of the Bachar Committee's recommendations, is contributing to financial stability due to the impetus it has given to the development of the credit market, rolling-over the debt, the pricing of credit risks, the diversification of firms' sources of finance and reducing their dependence on bank credit, and to reducing the banks' exposure to the largest borrowers in the economy.

The decrease in the proportion of deposits with the banks and the increase in the proportion of tradable instruments that are dependent on market yields reflect the move to more extensive activity in the markets, are enhancing financial stability by leading to increased transparency and fair pricing, which help to strengthen market mechanisms as stabilizing means of control.

The changes in financial activity also imply an increase in risk, particularly credit risk, fluctuations in the public's portfolio of assets, conflicts of interest and the liquidity of the provident funds.

These changes do indeed imply an increase in risks with respect to credit, volatility in the public's asset portfolio, conflicts of interest and the provident funds' liquidity. However, if the implementation of the reforms and the changes are accompanied by the adaptation required on the part of the financial institutions, the supervisory authorities and the public for ensuring that risks are managed, monitored and internalized in a sophisticated manner, their impact on the resilience of the financial system in the long term will be less intense than the previously mentioned positive effects . Nevertheless, considerable risks are inevitably inherent in the processes of change during the transition period.

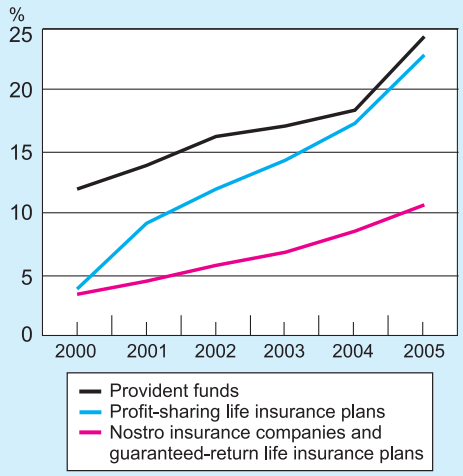
Implications during the transition period

Systemic risks will increase until a new structure for the financial system is formulated and the public, the financial institutions and the authorities internalize the new rules of the game. An increase in a number of such risks is already apparent:

Increase in credit risks: Institutional investors' risk assets increased considerably during the year, especially credit to the business sector. The annual rate of growth in the insurance companies' and the provident funds' outstanding credit to the business sector rose by 60 percent in 2005, more than double the growth rate of the previous two years. As a result of this trend, the proportion of risk assets as a whole, and credit to the business sector in particular, to total assets held against the insurance companies' profit-sharing plans and the provident funds' assets greatly increased: The proportion of risk assets in profit-sharing life insurance plans and in the provident funds is over half, and the proportion of credit to the business sector to these entities' total assets is already nearly a quarter (Figure 4.38). However, the quality of the credit extended to date appears to be satisfactory. Much of it has been granted in the form of tradable and non-tradable bonds issued by large companies in the economy, mostly rated companies. The insurance companies' acquisition of the provident funds at the end of the year and the continued growth in institutional investors' loanable funds will increase the insurance groups' exposure to credit risks.

The share of credit to the business sector within the assets of the insurance companies and the provident funds has risen to a significant level. However, it appears that the quality of the credit given up to this point has been satisfactory.

Figure 4.38
Credit to Business Sector as Share of Total Provident Funds' and Insurance Companies' Assets, 2000–2005



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

Apparently, the increase in risk does not affect institutional investors' stability because it is their members who will suffer as the result of a decrease in the value of assets and loan losses. Nevertheless, an increase in the risk to members and its future materialization without a change in their saving habits could harm the stability of institutional investors and long-term saving in the economy.

Increased volatility in the public's asset portfolio and its effect on the public's confidence: The changes in the composition of the assets held by institutional investors, in the method of revaluating these assets and in the frequency of this revaluation are increasing the proportion of the public's financial asset portfolio component that is dependent on market yields. The public are thereby more exposed than in the past to volatility in the value of their financial assets. Since the public have yet to internalize the fact that the value of their financial assets, including pension rights, could actually fall, a large drop in the prices of tradable securities in the future that leads to a large

drop in the value of the public's financial assets could result in a loss of confidence in the financial institutions and harm the system's stability.

Conflicts of interest: The separation of the banks from the provident funds and the mutual funds owned by them, the greater distinction between marketing consultancy and the implementation of the restrictions on underwriting have considerably reduced the conflicts of interest inherent in the banks' activity. At the same time however, the structured conflicts of interest within the insurance groups, between nostro portfolio management (such as capital, general insurance and guaranteed-yield life insurance plans) and the management of yield-dependent investment portfolios have increased. This was mainly due to the entry of institutional investors, including the provident funds, to the credit market concurrent with the growth in their activity as portfolio managers and underwriters.

The structural conflicts of interest within the insurance groups have increased while those related to the activity of the banks have not completely disappeared.

Although conflicts of interest are perceived mainly as a problem of fairness and consumerism, when they are exploited in a manner that harms the general public, this could undermine their confidence in the financial system with all the resulting damage to the economy and to investors.

Despite the banks' separation from the provident funds and the mutual funds, some conflicts of interest connected with the banks' activity are still extant: The banks will continue to supply operational and other services to the insurance groups, especially for the provident funds and the mutual funds that were sold, and will charge distribution fees and operating commissions from them. The banks also sell structured deposits, which can serve as a substitute for the purchase of mutual funds. The banks are allowed to provide consultancy in certain areas of financial saving—pension funds and provident funds—but not for life insurance. The application of the distinction between marketing/distribution advice in their activity is still unclear. All these factors create a structure of incentives that could enable the banks to provide biased advice to customers in the areas of securities activity and pension activity.

Increased systemic liquidity risk: The regulatory change introduced in 2005 that shortens the time between the withdrawal of money from the provident funds from 30 days from the date of the withdrawal notification to only 5 days, implies an immediate increase in systemic liquidity risk—the risk of a rapid mass withdrawal of savings from the provident funds. The potential intensity of this risk is related to the structural liquidity risk characteristic of the provident fund industry, since the ratio of the provident funds' liquid liabilities (savings that the public can withdraw) to their total liabilities is relatively high, and has been rising in recent years (see section 3).

During the transition period, the system's liquidity risk has increased, primarily as a result of the expected increase in the fluctuations of the public's asset portfolio.

In the long term systemic liquidity risk can be expected to decline due to a decrease in the accrual of liquid money in the provident funds. This will result from the adverse effect on the capital accrual track caused by the deterioration in its conditions relative to the annuity track, and from the structural change in the capital accrual tracks whereby money that independent members deposit from January 2006 will only be liquid when they reach the age of 60. During the transition period however, systemic liquidity risk has increased because of the increase that is expected in the volatility of the public's asset portfolio.

The authorities are faced with the complex challenge of coping with the simultaneous and rapid increase in the risks mentioned above (see Section 5).

e. Opportunities, risks and challenges

Expectations for 2006 are of a continuation of the positive trends of the last three years in the financial system's background conditions, in the global economy and in the Israeli economy. World product and trade are set to expand at rates similar to those in 2005. Continued low inflation worldwide is expected, firms' financial strength will increase and the influx of capital to the emerging economies will be maintained. The stability of the international financial system was preserved in 2005, as reflected by the calm in the financial markets and the performance of the financial institutions. Looking ahead, no threat to worldwide financial stability in the short term is apparent, and forecast developments remain positive. This is due to buoyant global growth against the background of lower inflation, and to the increased resilience of the financial institutions and the convenient conditions in the financial markets. The convenient financing conditions prevailing for several years now have enabled the emerging countries, including Israel, to attract long-term investments, improve their debt position and increase their resilience.

Forecasts for the Israeli economy[31] are also of continued growth in 2006 although at a slightly lower rate than in 2005. This is concurrent with a further decrease in the budget deficit and the ratio of the public debt to GDP, and the retention of inflation within the targeted range. Due to the exceptionally high debt-GDP ratio in Israel, it is essential to maintain a policy that will bring it down to the level common in the developed countries (60 percent) in order to increase the financial robustness of the economy.

In view of the continued positive developments expected in background conditions and as a result of the increased resilience of the financial system in Israel during recent years, the chances for maintaining financial stability are good. Increased resilience of the financial system implies a greater ability to absorb shocks, but not complete immunity against them. Although these factors apply universally, they are of particular importance given the special circumstances in which the financial system in Israel operated during 2005, circumstances that present considerable challenges for the authorities.

The main challenge facing the regulatory authorities is to deal with the increase in system risk during the transition period of the reforms.

i. Challenges during the transition period

The liberalization processes and reforms in the financial system during recent years have led to welcome changes, such as the creation of more sophisticated and competitive markets for non-bank credit and long-term saving. The major challenge facing the authorities **during the transition period of the liberalization processes**

[31] Based on Research Department forecasts. See Recent Economic Developments, 111, April to September 2005.

and reforms is the increase in systemic risks as detailed above: The adjustment processes are inadequate and are not matched to the new rules of the game on the part of the institutional investors and the public. This applies particularly to the management of credit risks at long-term saving institutions, the public's internalization of the increased risks in the asset portfolio and the provident funds' liquidity risks. At the same time, the emergence of conflicts of interest in the financial institutions' activity could harm the public's savings, undermine their confidence in the financial system and erode its robustness.[32]

The regulatory authorities must promptly take measures to improve infrastructure, organizational structure, enforcement and the availability of information to the public.

In order to cope with this complex challenge successfully, the supervisory authorities must promote and adopt measures to improve infrastructure, regulatory coverage, enforcement and information to the public in the following areas: (1) enforcement of the proper management of credit risks at the insurance groups, and the regulation and augmentation of their capital adequacy; (2) increasing the public's awareness of the risks in the asset portfolio, and the distribution of information and data that will enable the public to monitor risks as well as yields and commission fees; (3) improving the management of liquidity at the provident funds; (4) dealing with conflicts of interest within the insurance groups by, for example, imposing a more complete separation between activity in profit-sharing plans and other activities, as well as by enforcing the separation in the matter of consultancy and marketing.

Cooperation between the regulatory authorities is one of the main components of any regulatory structure that takes shape in the future.

In order to enable the supervisory authorities to cope with this challenge, given the increased integration between the components of the financial system and the growing complexity of financial activity, the following measures are necessary: (1) greater independence in the supervision of the insurance groups and the supervisory entity's ability to enforce its authority and monitor these groups; (2) increasing and institutionalizing the coordination and cooperation between the supervisory authorities, the Ministry of Finance and the Bank of Israel in all matters relating to the regulatory coverage and supervision of the financial system. This cooperation should be a key element of any structure for the supervisory authorities that is formulated, and a precondition for increasing the effectiveness of the supervision of the financial system

ii. Risks from the international financial system[33]

Despite expectations that stability would be maintained in the international financial system, international institutions and the central banks of the world's leading economies, and that the two main risks to the stability of the international financial system that emerged in recent years—the possibility of a sudden and abrupt closure of the global imbalance and a sharp rise in the pricing of credit and market risks—would decline in 2005, these risks actually increased. Since developments in Israel's financial

[32] The manner in which the insurance companies financed their recent major acquisitions is currently unclear. In certain conditions, the manner of financing could detract from the resilience of the insurance companies and the financial system.

[33] Based on the most recent reports of the IMF, the ECB and the central banks of the UK, Sweden and Holland, which are concerned inter alia with the stability of the international financial system.

markets, as in any open country, are dependent on the behavior of nonresidents, the country's financial stability is exposed to the materialization of these external threats. The materialization of such risks will be reflected inter alia by a decrease in capital movements to the emerging economies, including Israel, an increase in the cost of raising capital and disruptions in the markets.

The developments in international financial markets in 2005 point to increasing global imbalance.

As regards the global imbalance, developments in the international financial markets during 2005 show that the situation in this respect has become more serious: (1) Despite a continuous growth in the current account deficit in the US, the dollar strengthened after the center of attention in the markets shifted to the expansion of the interest rate differentials and growth, which tended to benefit the US economy. This shift was reflected by an upsurge in capital movements to the US; (2) Despite the gradual and on a cumulative basis, significant rise in the Fed's monetary interest rate during the last year, long-term yields-to-maturity in US markets remained low as the result of the capital inflows to the US, and the continued demand for dollar assets from investors in the private sector and central banks in the Far East.

A sudden closure of the global imbalance in the medium term could be reflected by a large depreciation of the dollar and a sharp rise in bond yields in the US, with implications that will lead to an economic slowdown worldwide and in Israel in two tracks: (1) The fall in the value of the dollar will reduce domestic demand in the US, which will also lead to a slowdown in other countries, and will increase the incidence of financial distress.[34] (2) A rapid rise in yields will increase the cost of raising capital for the emerging countries, including Israel, in a manner that will exacerbate the global slowdown and further weaken the resilience of the world's financial system.

Global developments in risk pricing in 2005 indicate that the situation has become more serious.

Developments in risk pricing during 2005 also indicate that the situation has become more serious. The search for a high yield and the under-pricing of credit and market risks are continuing, as reflected by a further contraction of risk margins. This has led to an increased risk to financial stability due to the fear of a development that could suddenly increase investors' assessment of the risk to investment in emerging markets as well as in certain assets in developed countries.[35] Such a development could materialize as the result of a slide in asset prices and a large rise in yields, leading to financial distress and bankruptcies among large borrowers and lenders.[36]

[34] A major weakening of the dollar that is reflected by the strengthening of Far East currencies will reduce the cost of imports to local consumers in the Far East and will support a growth in activity. However, a major strengthening of the Far East currencies could actually exacerbate a slowdown in activity because of the resulting damage to Far East exports to the US.

[35] The yield margins between the bonds of emerging countries and US bonds continued to contract in 2005. At the same time, the flow of sources to hedge funds increased; demand for credit derivatives and other structured assets noted for high financial leverage rose; and the volume of credit that financial institutions extend to households—mainly mortgages—remained high, despite high real estate prices in the US.

[36] The deterioration in mid-2005 in the assessment of credit risk by companies in the automobile industry in the US and its limited impact as expressed by problems in the balance sheet of a number of financial institutions highlight the robustness of the markets: their ability to withstand shocks of this type. But the episode also serves as an important example of the channels in which contagion could rapidly spread as the result of a re-assessment of risk in one sector to other sectors and weaken financial intermediaries.

The materialization of a scenario in which the price of risk rises rapidly could also harm emerging markets where basic conditions have not improved adequately and which suffer from a high public debt and large balance-of-payments current account deficits.

The high price of oil in 2005 was a central factor in international institutions' and central banks' assessment of worldwide financial stability. The markets expect oil prices to remain high in the medium term. There is a risk that these prices will lead to other price increases and to an upsurge in inflation, in a manner that will make it necessary for the monetary authorities to react by means of a large interest rate hike. The high level of oil prices could also lead to a sudden increase in the pricing of risks in the markets, which will adversely affect financial stability.

iii. Other risks

Other risks to financial stability derive from the factors that actually led to the consolidation of this stability during the last three years. Since stability is dependent to a large extent on global and local background conditions, unexpected changes for the worse in these conditions could undermine it. Apart from the two type of risk mentioned above, another risk derives from the increased strategic threats to Israel's security resulting from the recent changes in the Palestinian Authority and in the Iranian leadership and its nuclear policy. A growth in these threats could harm the stability of the financial system by inter alia reducing the chances of growth in the economy, which will make it difficult to maintain the downturn in the budget deficit and in the debt-GDP ratio.

The risk of the optimum growth forecast failing to materialize for various reasons presents the Supervisor of Banks with the challenge of encouraging the banks to exploit the buoyant period in the business cycle and their high profitability in order to further improve their capital adequacy. This is particularly appropriate in view of the still high rate of problem loans on the one hand, and the banks' large income from the sale of the provident funds and the mutual funds owned by them on the other hand.