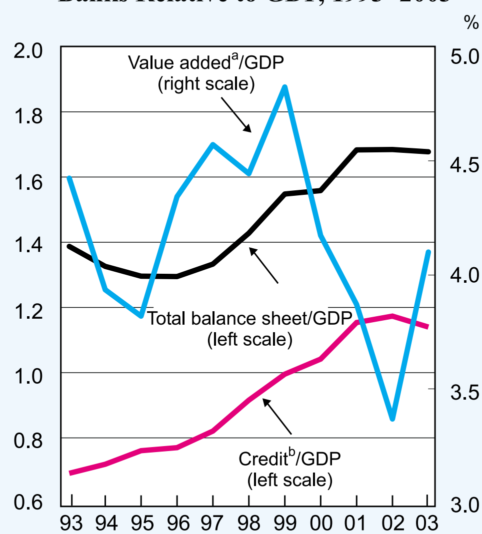
Chapter 3
Main Developments in the Activity and Financial Results of the Banking System

1. PRINCIPAL DEVELOPMENTS IN THE ACTIVITY OF THE COMMERCIAL BANKS[1]

The total balance-sheet assets of the commercial banks operating in Israel increased by a moderate 1 percent in 2003 compared with 2002 and amounted to NIS 689 billion (Table 3.1). The ratio of assets to GDP remained static at a level of 1.67 during the last three years (Figure 3.1). On the liabilities side, relative stability was recorded in 2003 in the raising of deposits of the public (a moderate increase of 0.9 percent). On the assets side, an NIS 13 million (3 percent) decrease was recorded in outstanding credit to the public (which accounted for 60 percent of total assets). Due to the decrease in outstanding bank credit concurrent with the relative stability in deposits of the public, the banks were faced with a surplus of funds. The banks channeled the surpluses into the purchase of bonds—principally *Shahar* and *Gilon*

Figure 3.1
Indices of Activity of the Commercial Banks Relative to GDP, 1993–2003



[a] Value added is the sum of net ordinary before-tax income, salaries and related expenses, general expenses, maintenance and depreciation on buildings and equipment.
[b] Credit to the public, excluding guarantees.

SOURCE: Returns to Supervisor of Banks and Central Bureau of Statistics.

[1] In this item we refer to the activity in Israel of all the commercial banks. From 2002 data are included on the Bank of Jerusalem and on two foreign banks (HSBC and Citibank), while data on the Trade Bank are not included.

Table 3.1
Assets and Liabilities[a] of the Commercial Banks (Israel Offices), by Segment, 2001–2003

(December 2003 prices)

	End-of-year balances (NIS million)			Real change (%)		Annual average balance (NIS million)[b]		Real annual change (%)	Balance-sheet composition (%)	
	2001	2002	2003	2002	2003	2002	2003	2003	2002	2003
Total assets	**690,428**	**681,818**	**688,745**	**–1**	**1**	**681,166**	**675,440**	**–1**	**100**	**100**
Total liabilities	**690,428**	**681,818**	**688,745**	**–1**	**1**	**681,166**	**675,440**	**–1**	**100**	**100**
Unindexed local currency										
Assets	263,292	242,766	260,247	–8	7	242,018	244,653	1	36	36
Liabilities	302,347	271,853	289,420	–10	6	270,722	273,829	1	40	41
Derivatives	31,234	23,651	22,003	–24	–7	23,049	22,786	–1	3	3
Surplus (+)/Deficit(–)	–7,821	–5,436	–7,170	–	–	–5,655	–6,391	–	–	–
CPI-indexed										
Assets	161,501	165,179	157,615	2	–5	165,221	162,374	–2	24	24
Liabilities	137,110	148,329	135,714	8	–9	144,952	146,239	–1	21	21
Derivatives	–3,079	–2,255	–2,796	–	–	–2,118	–2,176	–	–	–
Surplus (+)/Deficit(–)	21,312	14,595	19,105	–32	31	18,151	16,960	–7	3	3
Foreign-currency (indexed and denominated)										
Assets	228,493	233,503	228,094	2	–2	235,966	227,141	–4	35	34
Liabilities	207,224	218,519	216,024	5	–1	221,733	212,690	–4	33	31
Derivatives	–28,154	–21,396	–19,207	–	–	–20,931	–20,610	–	–	–
Surplus (+)/Deficit(–)	–6,885	–6,412	–7,137	–	–	–6,698	–6,160	–	–	–
Buildings, etc.[b]	37,142	40,369	42,788	9	6	37,961	41,272	9	6	6
Equity, etc.[c]	43,747	43,116	47,586	–1	10	43,759	45,681	4	6	7
Surplus (+)/Deficit(–)[d]	–6,605	–2,747	–4,798	–	–	–5,798	–4,409	–	–	–

[a] The tables in this survey are adjusted according to the classification of assets and liabilities in the published financial statements. They do not include activity contingent on collection.
[b] Buildings, equipment, and nonfinancial assets; including investment in subsidiaries and affiliates.
[c] Equity and nonfinancial liabilities (deferred capital notes).
[d] A deficit in the ownership segment denotes positive financial capital.
SOURCE: Returns to Supervisor of Banks.

unindexed government bonds. The banks' investments in these bonds totaled NIS 27 billion, an increase of 52 percent compared with 2002 (Table 3.6). The change in the banks' mix of assets together with the large interest rate cuts in the economy, had the effect of increasing their profits in 2003 and thereby raised the banking system's value added. The ratio of the banks' value added to GDP rose from 3.4 in 2002 to 4.1 in 2003 (Figure 3.1).

A particularly large decrease of 61 percent was recorded in 2003 in total requirement for credit in the economy, including direct bank credit and credit substitutes such as issues in the capital market. The downturn in demand for credit began in 2001 as a result of the recession in the economy. In the record year of 2000, demand for credit in the economy was eight times higher than in 2003 and in 2003, for the first time, the change in the amount of bank credit extended was negative (Table 3.2).

An increase was recorded in the public's asset portfolio, which reached NIS 1,400 billion, its highest level for the past decade (Table 3.5). The growth in the public's asset portfolio resulted mainly from the buoyant level of the capital markets in Israel and abroad, which increased the value of securities.

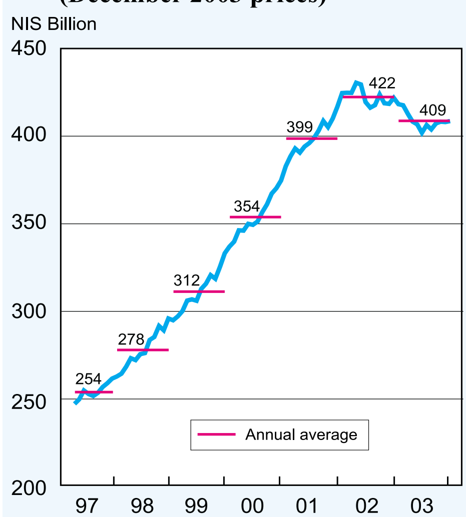
a. Credit to the public

The large growth in bank credit during the last decade (an annual increase of 8 percent) ceased in June 2002 (Figure 3.2). Moreover for the first time in a long period, average outstanding credit at the commercial banks declined by 3 percent (NIS 409 billion) compared with the average balance in 2002 (Table 3.3). The ratio of bank credit to GDP also fell for the first time in a long period. At the end of 2003, this ratio amounted to 1.14 compared with 1.17 at the end of 2002 (Figure 3.1).

The decrease in outstanding credit at equilibrium resulted from the reduced supply of bank credit, which was accompanied by a decline in demand for this credit. The main reasons for the reduced supply of bank credit were:

1) The banks' adoption of a more stringent credit policy, a trend that began in mid-2002 and that continued in 2003. This cautious and conservative policy resulted

Figure 3.2
Changes in Credit to the Public[a] from all the Commercial Banks, March 1997–December 2003 (December 2003 prices)



[a] Including credit in NIS *(plus)* credit in or indexed to foreign currency. From January 2002 includes Bank of Jerusalem.

SOURCE: Monthly returns to the Supervisor of Banks.

Table 3.2
Bank Credit and its Main Substitutes, 1998–2003

(NIS million, December 2003 prices)

	Total credit from banks and substitutes	Bank credit[a]	Credit from alternative sources[b]	*Of which* issue of shares and corporate bonds[c]	*Of which* from institutional investors	*Of which* capital raised abroad[e]
1998	60,820	42,189	18,631	10,444	–2,377	4,562
1999	83,701	46,088	37,613	7,339	3,126	17,802
2000	104,023	50,467	53,555	14,505	4,301	19,267
2001	74,553	49,824	24,729	5,922	2,129	7,322
2002	30,863	8,671	22,193	8,524	555	1,061
2003	12,504	–8,738	21,242	5,941	6,027	3,855

[a] Credit to the public from commercial banks and mortgage banks. It is assumed that the change in outstanding credit reflects new credit given.
[b] Credit from alternative sources includes capital raised via venture capital funds and direct credit from abroad.
[c] From 2001 all share and bond issues that do not constitute alternative sources of credit have been deducted.
[d] Including nontradable bonds issued by institutional investors and credit given by institutional investors and insurance companies.
[e] Capital raised by Israeli companies on stock exchanges abroad via shares and bonds.
SOURCE: Returns to Supervisor of Banks; direct credit from abroad – Reports to the Controller of Foreign Exchange; capital raised in Israel — *This month on the stock exchange* (Hebrew); capital raised abroad – Bank of Israel Foreign Exchange Activity Department.

from the large decline in economic activity, which adversely affected many companies' repayment ability, as well as from the banks' management drawing the appropriate conclusions from their previously lax credit policy.
2) The desire of the banks' management to improve their capital adequacy ratios to the levels common among developed countries, due to the impact of this ratio on the rating of the banks' financial soundness and the banks' increased ability to cope with the potential materialization of risks in the future, as well as from Supervisor of Banks' encouragement in this respect.
3) The preparations taken by the banks' management prior to the implementation of the new directives concerning the increased restrictions on exposure to groups of large borrowers contributed to reducing the supply of bank credit to large borrowers.[2]

The demand side also had the effect of reducing credit. The aggregate demand for credit was affected by the continued recession in the principal industries in the economy, which led to a large drop in investment and as a result, to a decrease in firms' demand for credit. Concurrent with these developments, large and financially sound companies exploited the recovery in the capital market to issue marketable and non-marketable bonds. By serving as a substitute for bank credit, bond issues were a major factor underlying companies' reduced demand for bank credit (Figure 3.3).

[2] See the Appendix to Chapter 5 in this survey for details of the directives.

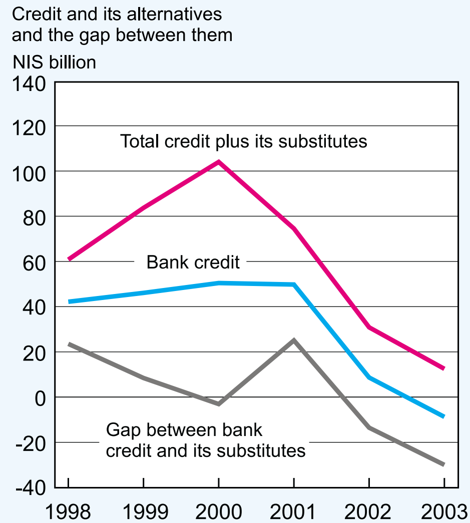
The shifting of demand from the banking system to the capital market was due to:

1) A large decrease in yields to maturity on government and corporate bonds,[3] which reduced the cost of firms' capital and thereby increased the incentive to raise the volume of equity issues. The volume of equity issues raised that served as full substitutes for credit (marketable and non-marketable bonds issued by non-financial companies) rose from NIS 3.5 billion in 2000 to NIS 8.8 billion in 2003 (Table 3.2).

2) The reduced supply of government bonds (principally foreign-currency-indexed bonds) resulting from the reduction in the budget deficit had the effect of increasing investors' demand for corporate bonds. (Private sector capital listed for trading increased by NIS 6.1 billion in 2003.)

3) The desire of business companies to change their mix of financial leverage by reducing bank credit and increasing direct indebtedness to the public (by means of bond issues). The main reason for this change was companies' striving to enhance their image by presenting themselves as less dangerous entities. In addition, large companies' preparations for the implementation of the Supervisor of Banks' new directives concerning the limitation of borrower groups' indebtedness as mentioned above, may have prompted large publicly-traded companies to reduce their volume of bank credit and increase their use of non-banking credit substitutes.

Figure 3.3
Credit and its Substitutes,[a]
1998–2003



[a] The change in commercial and mortgage bank credit to the public serves as an estimate of credit flows from the banking system. Credit substitutes include direct credit from abroad, raising capital in Israel and abroad via shares and corporate bonds, and finance from venture capital funds.

SOURCE: Returns to the Supervisor of Banks, and the Bank of Israel Banking Supervision Research Department.

As a result of these developments, the equilibrium in the credit market, as reflected by total credit requirement[4] in the economy, plummeted by 61 percent in 2003 compared

[3] In the long term, the real yield to maturity on government bonds fell by 1.4 percentage points, from 5.7 percent to 4.3 percent.

[4] Requirement for credit in the economy is measured by the flows of credit from all possible sources of credit (direct bank credit and credit substitutes). Bank credit is calculated as the difference in outstanding credit between the end of the year and the beginning of the year. Credit substitutes, such as issues in the capital market, are also in flow terms.

with 2002. This level of capital flows was considerably less than that recorded in previous years, marking a gradual decrease from NIS 104 billion in 2000 to only NIS 12.5 billion in 2003 (Table 3.2).

The development of credit by indexation segments is indicative of the following changes:

1) A real decrease of 8 percent in average outstanding foreign-currency credit. This decrease largely resulted from the sharp appreciation of the shekel against the dollar. However, outstanding average foreign-currency credit rose by 4 percent. The increase derived from a growth in demand for foreign-currency credit resulting from the decline in the dollar interest rate in the foreign currency segment (which tended to increase the amount requested) concurrent with an increase in the average real interest rate in the unindexed segment from 7.0 percent to 8.5 percent. Credit in the latter segment serves as a close substitute for foreign-currency credit that is usually granted for relatively short periods (Table 3.4). The reduced uncertainty in the foreign-currency segment also contributed to the growth in demand for foreign-currency credit.

2) A 4 percent decrease in average outstanding CPI-indexed credit. This decrease resulted from a drop in both supply and demand for CPI-indexed bank credit. The reduced supply derived from an increase in the risk premium of firms (Figure 1.3), which finance their long-term investments with CPI-indexed credit. The drop in demand for CPI-indexed credit resulted from the increase in large companies' bond issues, which served as a substitute for bank credit.[5] In addition, the lower level of inflationary uncertainty, which increased the demand for unindexed credit as a substitute for CPI-indexed credit, also reduced the demand for the latter form of credit.

3) A moderate 2 percent increase in unindexed credit. Unindexed credit expanded in 2003 due as stated to the decline in the inflation environment and inflationary uncertainty. Compared with the previous two years, the unindexed segment was notable for a stable distribution of the components of unindexed credit (credit lines and overdraft accounted for 27 percent, short-term credit 44 percent, and on-call credit 28 percent).

b. The supply of deposits and the public's asset portfolio

The public's asset portfolio including the supply of deposits and assets from the capital market expanded by 14 percent in real terms during 2003 compared with 2002 (following a decrease of 4.6 percent in 2002 compared with 2001). The public's asset portfolio reached its highest level for the past decade, and amounted to NIS 1,400 billion. This development mainly resulted from the buoyant level of the capital markets in Israel and abroad, which increased the value of securities.

[5] The Growth in corporate bond issues continued in 2003, especially issues of non-marketable securities to institutional investors. Issues of non-marketable bonds to institutional investors are an almost perfect substitute for banking credit. Issues in 2003 totaled NIS 17 billion compared with NIS 13.6 billion in 2002. It can be seen in the case of a number of issues that the margin between the cost of raising capital and the yield to maturity of government bonds was smaller in 2003 than in 2002.

Table 3.3
Distribution of Credit to the Public,[a] 2001–2003

	End-of-year balances (NIS million)			Real change (%)			Annual average balance (NIS million)			Real average annual change (%)		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
Total credit to the public[b]	**416,834**	**421,852**	**408,500**	**11**	**1**	**–3**	**399,003**	**422,541**	**409,010**	**13**	**6**	**–3**
Total local-currency credit	**264,023**	**264,625**	**264,671**	**8**	**0**	**0**	**253,669**	**261,546**	**261,400**	**12**	**3**	**0**
Unindexed	168,525	165,864	170,913	9	–2	3	161,756	160,713	164,685	17	–1	2
Overdraft acccounts and facilities[c]	45,176	45,508	46,922	1	1	3	43,630	42,323	45,177	1	–3	7
Other short-term credit[c]	70,401	75,048	76,262	24	7	2	64,756	73,515	72,701	37	14	–1
On-call credit	52,948	45,308	47,730	–1	–14	5	53,370	44,875	46,807	12	–16	4
CPI-indexed	95,498	98,761	93,758	8	3	–5	91,913	100,833	96,715	3	10	–4
Total foreign-currency credit	**152,810**	**157,228**	**143,829**	**17**	**3**	**–9**	**145,334**	**160,996**	**147,609**	**15**	**11**	**–8**
To residents (total)	131,446	136,644	124,603	13	4	–9	126,246	139,464	128,240	12	10	–8
of which Foreign-currency-indexed	2,780	2,553	2,115	–18	–8	–17	3,021	2,807	2,400	–28	–7	–14
To nonresidents (total)	21,364	20,584	19,226	46	–4	–7	19,088	21,531	19,370	37	13	–10

[a] At December 2003 prices. See note a to Table 3.1. Credit includes credit from earmarked deposits.
[b] From 2004 includes data relatively to Bank Mishkan, which merged with Bank Hapoalim in January 2004. Total credit to the public of Bank Mishkan on 31 December 2003 was NIS 26.7 billion.
[c] Includes only credit at the banks' responsibility; does not include credit to special banking corporations.
SOURCE: Returns to Supervisor of Banks.

Table 3.4

Average Annual Yields on Selected Assets and Liabilities in the Vaious Segments, 2001–2003

(percent)

	In dollar terms							Real yields[a]						
	Annual average			2003				Annual average			2003			
	2001	2002	2003	I	II	III	IV	2001	2002	2003	I	II	III	IV
Unindexed local-currency segment														
Demand deposits[b]	1.6	1.4	1.7	1.9	1.9	1.7	1.5	–0.5	–1.2	–0.2	–1.2	0.3	–0.2	0.3
SRO deposits[b]	5.6	5.8	6.2	7.7	7.1	5.7	4.4	3.4	3.0	4.2	4.4	5.4	3.8	3.2
Resident time deposits[b]	6.2	6.0	6.7	8.0	7.5	6.2	5.0	4.0	3.2	4.6	4.6	5.8	4.3	3.8
Monetary loan	6.6	6.8	7.4	8.9	8.4	6.8	5.4	4.5	4.0	5.3	5.6	6.7	4.9	4.2
Total unindexed sources	**5.8**	**5.7**	**6.3**	**7.5**	**7.1**	**5.9**	**4.7**	**3.7**	**2.9**	**4.3**	**4.2**	**5.4**	**3.9**	**3.5**
Term credit[b]	8.8	8.6	9.5	10.6	10.2	9.2	7.9	6.6	5.8	7.4	7.2	8.5	7.2	6.7
Overdraft accounts and facilities[b]	13.4	13.6	13.7	15.5	14.7	12.8	11.7	11.1	10.6	11.5	11.9	12.9	10.8	10.4
Total unindexed credit	**10.0**	**9.9**	**10.6**	**12.0**	**11.4**	**10.2**	**8.9**	**7.7**	**7.0**	**8.5**	**8.5**	**9.7**	**8.2**	**7.7**
Treasury bills[c]	8.2	5.8	8.5	7.6	10.1	8.9	7.4	6.0	3.1	6.4	4.3	8.4	6.9	6.1
Banks' deposits with Bank of Israel[d]	5.7	5.2	5.3	6.6	6.0	4.8	3.8	3.5	2.5	3.3	3.3	4.4	2.9	2.6
Total unindexed assets	**8.8**	**8.7**	**9.5**	**10.7**	**10.3**	**9.1**	**7.9**	**6.6**	**5.8**	**7.4**	**7.3**	**8.6**	**7.1**	**6.7**
CPI-indexed local-currency segment														
Deposits[e]	–	–	–	–	–	–	–	**4.9**	**4.2**	**4.0**	**4.6**	**4.3**	**3.6**	**3.3**
Bonds[f]	–	–	–	–	–	–	–	4.6	4.8	4.9	5.6	5.2	4.5	4.2
Credit[g]	–	–	–	–	–	–	–	6.1	5.7	6.4	6.4	6.9	6.3	5.9
Mortgages[h]	–	–	–	–	–	–	–	6.4	5.8	6.0	6.6	6.2	5.7	5.4

Table 3.4 (cont.)

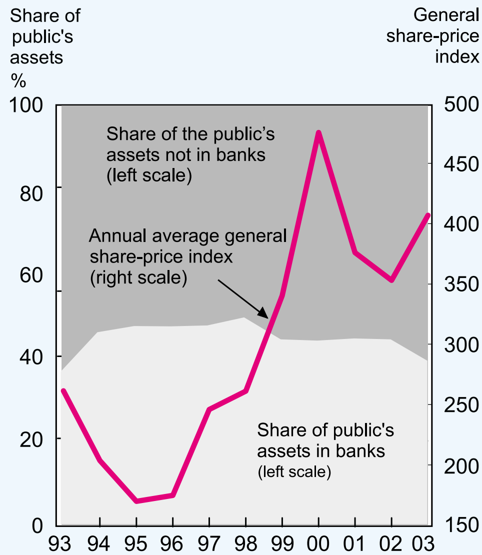
(percent)

	In dollar terms[i]							Real yields[a]						
	Annual average			2003				Annual average			2003			
	2001	2002	2003	I	II	III	IV	2001	2002	2003	I	II	III	IV
Foreign-currency-denominated and indexed segment														
Time deposits	1.1	0.2	0.1	0.4	0.1	0.1	0.0	2.7	9.5	–6.4	0.2	–10.8	–8.0	–6.9
Foreign-currency-denominated deposits[j]	3.3	1.3	0.8	0.9	0.8	0.7	0.7	4.9	10.8	–5.8	0.7	–10.1	–7.5	–6.3
Foreign-currency-indexed credit	5.5	3.5	3.1	3.2	3.2	3.0	3.1	7.2	13.1	–3.6	3.0	–8.0	–5.3	–4.0
Foreign-currency credit to residents	4.9	3.1	2.8	2.9	2.9	2.7	2.8	6.6	12.8	–3.9	2.7	–8.2	–5.6	–4.3
Deposits abroad[k]	3.7	1.7	1.1	1.2	1.1	1.0	1.0	5.3	11.2	–5.5	1.0	–9.8	–7.2	–6.0
Annual rates of change														
CPI	1.4	6.5	–1.9	3.2	–5.0	–3.9	–1.6	–	–	–	–	–	–	–
NIS/$ exchange rate	9.3	7.3	–7.6	–4.2	–28.4	12.5	–5.5	–	–	–	–	–	–	–

[a] Real interest calculated on the basis of the public's inflation expectations, derived from the capital market, and the expected exchange rate, calculated from the rate of actual depreciation over the previous twelve months.
[b] Effective annual yield/cost, as reported by the seven major banking groups.
[c] Yield on Treasury bills (market rate).
[d] Interest on banks' deposits in the framework of the deposit auctions instituted by the Bank of Israel in the last quarter of 1996.
[e] Until 2002 average interest on savings schemes.
[f] Average gross yield to maturity of all CPI-indexed bonds (market rate).
[g] Based on reports of cost of credit extended during the month.
[h] Weighted average interest on nondirected mortgage loans.
[i] The data refer to dollar-denominated credit and deposit items.
[j] Including nonresidents' and residents' restitutions deposits.
[k] 3-month Libor interest rate.
SOURCE: Based on returns to Supervisor of Banks, and data from Monetary Department, Bank of Israel.

The public's asset portfolio is divided into assets deposited at the banks and assets outside of the banking system, principally in the local and foreign money and capital markets. During the last decade, the distribution of the public's assets between banking and non-banking channels was directly affected by developments in the capital markets (Figure 3.4). The recovery in the Israeli capital market during 2003 led to an NIS 160 billion increase in the public's non-bank assets. The latter expanded mainly due to a 55 percent growth in the value of the shares held by the public (in Israel and abroad) and to a 26 percent increase in the public's holdings of marketable (corporate and government) bonds and Treasury bills (Table 3.5). The growth in share holdings mainly derived from the large rise in share prices in Israel and abroad (the price effect). However, the growth in holdings of marketable bonds and Treasury bills mainly resulted from an NIS 46 billion increase in the amount of listed capital (issues), that is the quantity effect.

Figure 3.4
Changes in the Share of the Public's Total Assets held in Banks and not in Banks,[a] and the Annual Average Share-Price Index, 1993–2003



a All the definitions of the public's asset portfolio are in accordance with Table 3.5.

SOURCE: Returns to Supervisor of Banks and reports of Bank of Israel Foreign Exchange Activity Department.

The public's assets deposited in the banks increased by a moderate 0.9 percent in 2003 and as a result, their proportion in the public's asset portfolio fell from 44 percent in 2002 to 39 percent in 2003 (Table 3.5).

The stable level of the public's financial asset portfolio was a function of changes that acted in opposing directions: an overall decrease of 10 percent (NIS 16.5 billion) in indexed deposits and saving plans approved for households contributed to a **decrease in the public's assets at the banks.** The decrease resulted from: (1) a large drop in yields to maturity on bonds, from which the real interest rates on saving plans are derived: (2) the negative inflation that prevailed in 2003 (-1.9 percent), and the decline in inflation expectations during the year (Figure 4.14) reduced the supply of deposits, mainly from households: (3) and the abolition at the beginning of 2003 of the tax exemption on interest from saving plans, which thereby ended the tax advantage of saving in this form of investment. This development also led to a decrease in the supply of indexed deposits.

Contributing to the increase in the public's assets deposited in the banks were:

- A 6 percent (NIS 16.6 billion) growth in the supply of unindexed deposits, which is partly attributed to the increase in investments in the mutual funds. The decline in the

Table 3.5

The Public's Asset Portfolio in Banks and not in Banks,[a] 2000–2003

	End-of-year balances (NIS billion, December 2003 prices)				Composition (%)				Real change (%)
	2000	2001	2002	2003	2000	2001	2002	2002	2002–2003
Unindexed local-currency deposits[b]	255.6	289.9	261.2	277.8	21.7	23.4	22.1	20.6	6.3
Deposits in and indexed to foreign currency	75.7	80.9	86.9	91.7	6.4	6.5	7.4	6.8	5.5
Indexed and earmarked deposits[c]	73.0	66.4	64.8	74.7	6.2	5.4	5.5	5.5	15.4
Savings schemes	103.9	99.1	106.3	80.2	8.8	8.0	9.0	6.0	–24.8
Total in banks[d]	**508.4**	**536.3**	**519.4**	**524.3**	**43.1**	**43.4**	**44.0**	**38.9**	**0.9**
Cash in hands of public	10.4	12.6	12.7	13.4	0.9	1.0	1.1	1.0	5.2
Traded bonds and Treasury bills[e]	166.6	191.7	202.7	255.8	14.1	15.5	17.2	19.0	26.2
Nontraded bonds[f]	160.3	168.3	175.5	187.0	13.6	13.6	14.9	13.9	6.5
Shares[g]	238.0	237.2	169.2	262.0	20.2	19.2	14.3	19.5	54.8
Residents' investments abroad	95.3	90.5	101.5	104.1	8.1	7.3	8.6	7.7	2.6
Total not in banks	**670.6**	**700.3**	**661.7**	**822.2**	**56.9**	**56.6**	**56.0**	**61.1**	**24.3**
Total assets of the public	**1,178.9**	**1,236.5**	**1,181.1**	**1,346.5**	**100.0**	**100.0**	**100.0**	**100.0**	**14.0**
In provident institutions[h]	366.4	384.2	379.5	425.7	31.1	31.1	32.1	31.6	12.2
Of which In provident funds[i]	127.2	129.4	117.5	134.7	10.8	10.5	9.9	10.0	14.6
Total assets of mutual funds	48.6	65.8	45.0	83.2	4.1	5.3	3.8	6.2	84.9
Direct holdings of public[j]	381.1	397.0	360.2	478.8	32.3	32.1	30.5	35.6	32.9

[a] The public does not include the government, the Bank of Israel, the commercial banks, or mortgage banks.
[b] Including earmarked deposits.
[c] Including approved earmarked deposits for credit to related and other companies.
[d] Including commercial and mortgage banks.
[e] Including government bonds (indexed and unindexed) and corporate bonds.
[f] Earmarked government bonds and non-negotiable corporate bonds.
[g] Non-bank shares in the hands of the public and provident funds *less* holdings of nonresidents and the government.
[h] Including provident and severance pay funds, advanced study funds, and pension and life insurance funds in 'Yield-assurance' and 'Profit-sharing' schemes.
[i] Including provident and severance pay funds and advanced study funds.
[j] Including cash in the hands of the public, Treasury bills, unindexed bonds, CPI- and dollar-indexed bonds, shares, and residents' investments abroad.
SOURCE: Returns to Supervisor of Banks, and Monetary Department, Bank of Israel.

inflation environment during the year concurrent with expectations of rises in share prices led to a record growth of NIS 23 billion in the assets of the mutual funds that specialize in shekel investments. As a result, the mutual funds increased their investment in shekel deposits in the banking system. The distribution of shekel deposits between their components shows that their distribution remained largely unchanged during the last three years. The average balances of time deposits and short-term deposits, which are the main component of unindexed deposits (76 percent), rose by a moderate 2 percent compared with 2002. The average balances of demand deposits and SROs (which each account for 8 percent of total unindexed deposits) also remained largely unchanged compared with 2002.

- A moderate 5.5 percent (approximately five billion shekel) growth in foreign-currency-indexed saving plans. The increase can be partly attributed to the fact that the issue of *Gilboa* dollar-indexed government bonds was ended in 2003.[6] Part of the increase was apparent in institutional investors' (mainly mutual funds) deposits at the banks as an alternative for investment in government bonds, for the purpose of maintaining the structure of their investment portfolio as obligated by their prospectuses to the public.

Foreign residents' deposits, which are the main source in the foreign currency segment, remained stable in 2003 following a slight decrease in 2002 (Table 3.8).[7]

However, it can also be assumed that the supply of foreign currency deposits contracted as a result of their reduced attractiveness, which resulted from the fall in interest rates on these deposits (Table 3.4), and from the reform in the taxation of individuals' financial assets. As stated, this reform ended the tax exemption on income from interest with respect to those deposits classified as foreign residents' deposits, and these deposits appear to have been rerouted abroad. The positive developments in the Israeli economy, which were reflected by an increase in the economy's financial strength, seem to have contributed to depositors' increased confidence in the local banking system, and thereby halted the trend of net withdrawals.

c. Interest rates and interest-rate spreads

In analyzing the development of the banks' net interest income before loan-loss provision, a distinction is usually made between the quantity effect and the price effect. In the absence of comparative data over time on the banking system's net interest margins and

[6] The last series of *Gilboa* bonds, amounting to NIS 9 billion, were redeemed in 2003, and the issue of *Rimon* fixed-rate dollar-indexed bonds ceased in previous years.

[7] The long-term trend that began in the 1990s ceased in 2002. Until that year, an increase in foreign currency balances was recorded annually. In 2002, net withdrawals from the balances of these deposits were recorded. The decrease in the local banks' rating concurrent with the large contraction in margins may have led to increased apprehension among part of the depositors, who redirected part of these deposits to Israeli banks' overseas offices (Table 3.8). In addition, the enforcement of the Law for the Prohibition for Money Laundering in 2002 may have led to a redirection of part of the deposits to banks in other countries.

in order to assess the price effect, this year we chose to analyze as an alternative the behavior of the weighted interest spread in total financial intermediation (the overall interest margin) in each of the indexation segments (unindexed, CPI-indexed and foreign currency). As is known, the net interest margin reflects the banks' income from classical financial intermediation (principally the raising of deposits and the extension of credit), the banks' income from their activity in bonds, which includes a revaluation of the bond portfolio and income from the sale of bonds, and the banks' income from activity in derivatives. But the weighted interest spread reflects only the (simple) difference between the interest rate on assets (principally credit) and the interest rate on funds (principally deposits of the public), and therefore ignores the effect of changes in interest rates on the revaluation of the bond portfolio, margins from the sale of bonds, and the contribution of activity in derivative instruments to the banks' financing profit.[8] It should be noted however, that the product of the overall interest spread and the extent of financial intermediation accounted for 60 percent of the banks' net interest income 2003.

An analysis of the development of the interest spread is based on theoretical models that were developed in Israel and abroad, part of which were applied to data relating to the Israeli banking system.[9] According to these models, the interest margin in the Israeli banking system is positively affected by the following factors: the cost of capital funding by the banking firm or alternatively, the interest rate on funds raised in the secondary market for trading in liquidity surpluses/deficits, such as: the interest rate on a monetary loan (the Bank of Israel interest rate) or on an interbank loan, the extent of competitiveness in the banking industry, which is measured by means of the Herfindahl concentration index (the H index); different ratios reflecting credit risk, such as problem loans to total credit, the loan-loss provision to total credit; and the effect of the income factor, which is usually measured by means of GDP growth rates or the combined state of the economy index. However, the interest margin is a negatively affected by the substitutability factor

[8] For example, the equation that we used for calculating the weighted overall interest spread (M*) in the unindexed segment is:

$$M^* = \left[R_L \frac{L}{(L+M+BN)} + R_M \frac{M}{(L+M+BN)} + R_{BN} \frac{BN}{(L+M+BN)} \right] - R_d$$

where:

R_L – the effective interest rate on credit to the public

R_M – the effective interest rate on deposits at the Bank of Israel

R_{BN} – the yield to maturity on unindexed bonds and Treasury bills

L – outstanding unindexed credit to the public

M – the balance of deposits at the Bank of Israel including the reserve requirement

BN – the balance of unindexed bonds and Treasury bills

R_d – the weighted average interest rate on unindexed deposits of the public, which include: time deposits, overnight deposits and short-term deposits.

[9] See for example: "The Risk Premium and Market Power in the Israeli Banking System," Jacob Paroush, David Ruthenberg, Banking Issues No. 16, and "Interest Rates in the Unindexed Shekel Segment – Flexibility and Symmetry, June 1984 to September 1988," David Gheva, David Ruthenberg, Banking Issues No. 8.

(credit substitutes such as issues in the stock market and deposit substitutes such as investments in shares and bonds).[10]

An analysis of the weighted overall interest spread shows that after two years in which the spread declined, it expanded by 0.3 percentage points in 2003 to a level of 2.48 percent. The increase encompassed all three indexation segments (see Table 3.5.1).

We believe that three main factors, which are to large extent interrelated, contributed to the expansion of the weighted overall interest spread in 2003:

(1) The banks' cautious and sophisticated credit policy, particularly in view of the credit failures of the past. This policy was reflected by more stringent criteria for the granting of credit and a credit allocation policy aimed at filtering high-risk customers - customers that are prepared in a situation of a continued slowdown in economic activity and high real interest rates to invest in high-risk projects.

(2) The bank managements' declared policy of improving their capital adequacy.[11] This policy is consistent with the previously mentioned credit allocation policy.

(3) A large increase was recorded in the business risk of companies from the principal industries as a result of the deep recession prevailing in the economy for the past three years. The increase in credit risk is reflected *inter alia* by a rise in the number of companies encountering financial distress (some of them actually went bankrupt), an increase in the financial leverage of a large number of publicly-traded companies, and a large decrease in the companies' profitability.

The economic significance of these developments is a decrease in the supply of credit, an increase in the risk premium charged from credit recipient customers, and an increase in the banks' cost of raising capital.

[10] The equation for calculating the interest spread is:

$$m = R_L - R_D = \left[\frac{1}{1 - \frac{\mathrm{H_L}}{\eta_L}} - \frac{(1-\rho)}{1 + \frac{\mathrm{H_D}}{\theta_D}} \right] \bullet R_M$$

where:

R_D - interest rate on a deposit

R_L - interest rate on credit

η_L - credit demand curve flexibility

θ_D - deposit supply curve flexibility

ρ - rate of reserve requirement on deposits

R_M - cost of raising capital, interest rate on monetary loan or interest rate on interbank loan

H_L - H–index of banking system concentration with respect to credit

H_D - H–index of banking system concentration with respect to deposits

The principal relationships expected between the explanatory variables and the interest sperad are:

$$\left(\frac{\partial m}{\partial \eta}; \frac{\partial m}{\partial \theta} \right) < 0 \ ; \ \frac{\partial m}{\partial R_M} > 0 \quad ; \left(\frac{\partial m}{\partial H_D}, \frac{\partial m}{\partial H_L} \right) > 0$$

[11] For more details see Chapter 4, Section 4—Capital adequacy, in this survey.

Table 3.5.1
Total Interest-Rate Spread and the Spread by Segment, 2000–2003

(percent)

Year	Unindexed[a]	CPI-indexed[b]	Foreign currency[c]	Total[d]
2000	3.36	0.90[a]	1.79	2.37
2001	3.00	1.19	1.69	2.26
2002	3.05	0.80	1.81	2.19
2003	3.29	1.12	2.05	2.48

[a] The interest margin in the unindexed segment was calculated in real terms as the difference between the effective yield on the majority of the segment's components - 95 percent (credit to the public, deposits at the Bank of Israel and unindexed bonds), and the average interest rate on deposits of the public.
[d] The interest margin in the CPI-indexed segment is calculated as the difference between the weighted interest rate on CPI-indexed credit to the public and on deposits at the mortgage banks, and the yield to maturity on five-year Galil CPI-indexed bonds.
[c] The interest margin in the foreign currency segment was calculated as the difference between the dollar interest rate on foreign-currency credit in real shekel terms, and the dollar interest rate on foreign-currency denominated deposits in real shekel terms.
[d] An estimate of the weighted overall interest margin was calculated as the weighting of the interest margin in each individual segment in accordance with each margin's relative share in total uses.
SOURCE: published financial statements and the Bank of Israel Banking Supervision Research Department.

Our assertion in this respect is supported by the increase in the risk premium in all three segments and especially in the CPI-indexed segment (Figure 1.3), the rise in the Bank of Israel's average real interest rate (from an average annual level of 1.5 percent in 2002 to an average annual level of 7.1 percent in 2003) and a concurrent increase in the real interest rate on interbank loans (Figure 3.5). Studies that we conducted on the cost of raising equity based on financing models showed that banking firms' cost of raising capital (the return that investors require on bank shares) also increased during the past year.[12]

Another finding supporting an increase in the overall interest spread is the downtrend that began at the end of the 1990s in the level of competition in the banking industry, especially in the area of bank credit. The decrease in competition is reflected by a rise in the H index and in the banks' marketing power index.[13]

Unlike the factors that positively affected the interest spread as previously mentioned, the recession prevailing in the economy for the past three years (until mid-2003) appears to have led to a clear manifestation of the income effect on the interest spread. The income effect was reflected by a decrease in the demand for credit in the supply of deposits and as a result, led to a contraction in the interest spread. It should be noted

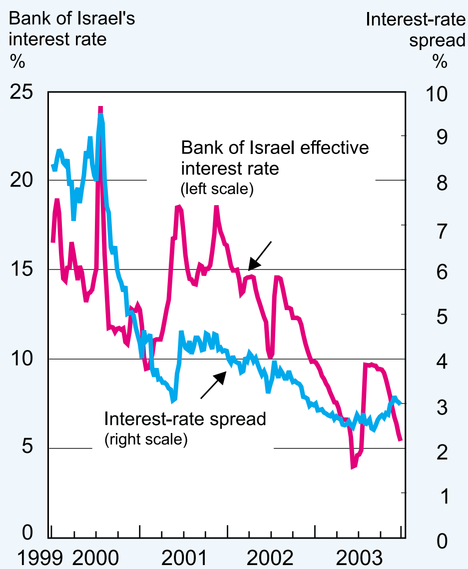
[12] For more details on the calculation of the rate of return required for a bank share by means of the CAPM model, See Ruthenberg and Perl "Market Value as compared to Book Value of Bank Shares in Israel," Discussion Paper, June 2004, Research Unit, Banking Supervision Department.

[13] For more details of the issue of competitiveness in the Israeli banking system and the use made of the different indexes, see Chapter 2 in this survey.

however, that the recovery in the economy that began in the second half of 2003—if it continues—is expected to increase the demand for credit and the supply of deposits, and thereby contribute to expansion in the interest spread. As described in Chapter 2 of this survey, 2003 saw a growth in non-banking credit and deposit substitutes (the substitutability effect), which also contributed to a contraction of the interest spread. As is apparent from the preceding discussion, the interest spread in 2003 was affected by a large number of factors that acted in opposing directions with the previously mentioned positive factors exerting a dominant impact.

An examination of the interest margin by indexation segments (Table 3.5.1) shows that the increase in the overall interest spread in 2003 encompassed each individual segment. Apart from factors common to all the indexation segments, which we mentioned previously, a number of special factors affected the overall interest spread in each individual segment.

Figure 3.5
The Bank of Israel's Effective Interest Rate and the Interest-Rate Spread (between Term Credit and Unindexed Resident Time Deposits) in the Unindexed Local-Currency Segment,
December 1999–December 2003
(percent)

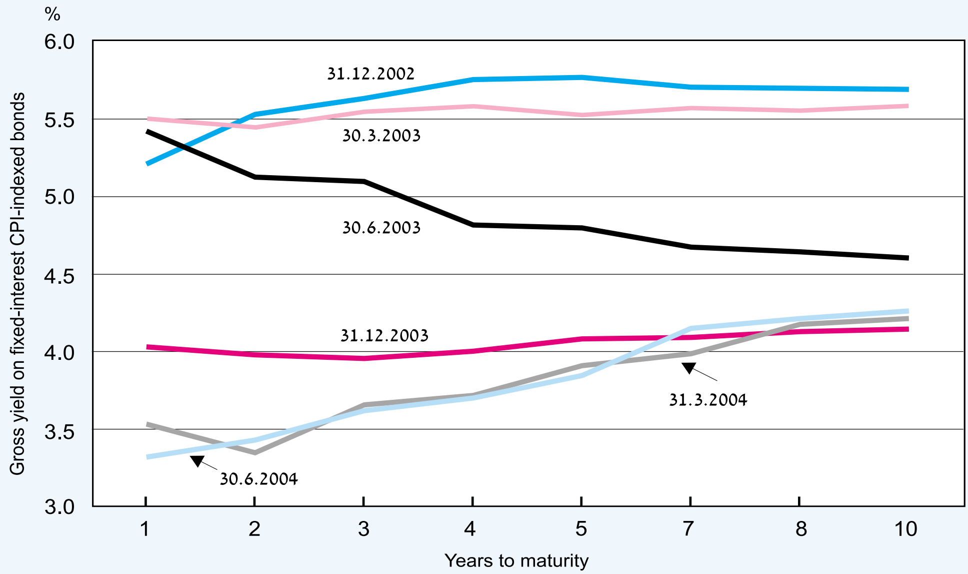


SOURCE: Returns to the Supervisor of Banks, and the Bank of Israel Banking Supervision Research Department.

The interest spread **in the unindexed segment** rose from an average level of 3.05 percent in 2002 to an average level of 3.29 percent in 2003, after remaining stable for two years at around the level of 3.0 percent. Apart from the factors common to all the indexation segments, the expansion of the margin in this segment during the last year also appears to have been affected by the decrease in inflationary uncertainty (see Chapter 4 in this survey). The decrease in inflationary uncertainty increased the demand for unindexed credit and the supply of unindexed deposits, and thereby led to an expansion of the interest spread in the segment.

The interest spread in **the CPI-indexed segment** rose from an average level of 0.8 percent in 2002 to an average of 1.12 percent in 2003. We believe that in addition to the previously mentioned factors, the expansion in the interest spread in this segment resulted from the large 1.5 percentage point decrease in the yield to maturity on government

Figure 3.6
Time Structure of the Yield to Maturity on CPI-Indexed Bonds with up to 10 years, December 2002–June 2004 (monthly average)



SOURCE: Based on returns to the Bank of Israel.

bonds during the past year (from 5.7 percent to 4.2 percent) (Figure 3.6).[14] Since the duration gap in the CPI-indexed segment is positive and larger than in all the other segments of intermediation, a decrease in the yield to maturity on government bonds (the discounted interest rate on the flow of assets and liabilities in the segment) is leading to an expansion in the interest spread.[15]

Following three years of relative stability in the real interest spread **in the foreign currency segment** around an average level of 1.75 percent, the spread in this segment expanded to a considerable extent, to a level of 2.05 percent. The expansion of the spread during the year under review appears to have resulted *inter alia* from the decrease in uncertainty in the foreign currency segment. This decrease in uncertainty led to a growth in demand for foreign-currency credit, and thereby also contributed to an expansion of the interest spread in the segment.[16]

[14] The yield to maturity on short-term and long-term bonds fell as a result of the decline in the interest rate in the economy.

[15] For more details see Chapter 4, Section 2- Interest rate risks, in this survey.

[16] At equilibrium a 4 percent increase was recorded in 2003 in average outstanding foreign-currency credit for Israeli residents.

Table 3.6
Unindexed Local-Currency Assets[a] and Liabilities,[b] 2001–2003

	End-of-year balances (NIS million, Dec. 2003 prices)[c]			Real end-of-year change (%)		Annual average balance (NIS million, Dec. 2003 prices)[c]		Real annual change (%)	Balance-sheet composition (%)	
	2001	2002	2003	2002	2003	2002	2003	2003	2002	2003
Assets										
Banknotes and coins	2,381	2,383	2,953	0	24	2,625	2,885	10	1	1
Deposits in Bank of Israel	55,217	42,327	41,250	–23	–3	40,124	36,883	–8	17	15
Deposits in banks	9,513	4,997	4,091	–47	–18	8,955	5,450	–39	4	2
Credit to the public	168,527	165,864	17,913	–2	3	160,713	164,689	2	66	67
of which Overdraft facilities & overdrawn deposits	45,176	45,508	47,868	1	5	42,323	45,256	7	10	11
Treasury bills and unindexed government bonds	22,579	21,067	33,967	–7	61	23,818	27,651	16	10	11
of which Treasury bills	9,238	3,214	6,748	–65	110	8,554	3,436	–60	4	1
Other assets	5,075	6,128	7,071	21	15	5,783	7,234	25	2	3
Total assets	**263,292**	**242,766**	**260,245**	**–8**	**7**	**242,018**	**244,792**	**1**	**100**	**100**
Liabilities										
Monetary loan from Bank of Israel	763	2,875	2,654	–	–8	1,581	2,838	79	1	1
Deposits from banks	6,738	2,789	2,529	–59	–9	6,073	3,340	–45	2	1
Deposits of the government	717	322	528	–55	64	659	377	–43	0	0
Total deposits of the public	287,301	259,107	274,687	–10	6	255,374	259,111	1	94	95
Demand deposits	24,085	22,193	26,353	–8	19	20,317	20,536	1	8	8
SRO deposits	31,415	23,760	30,510	–24	28	23,961	23,078	–4	9	8
Resident time and short-term deposits	226,827	206,004	211,631	–9	3	205,680	208,841	2	76	76
Other deposits	4,976	7,150	6,193	44	–13	5,416	6,655	23	2	2
Other liabilities	6,827	6,760	9,017	–1	33	7,035	8,128	16	3	3
Total liabilities	**302,347**	**271,853**	**289,415**	**–10**	**6**	**270,722**	**273,794**	**1**	**100**	**100**

[a] Assets at the banks' responsibility.
[b] See note a to Table 3.1.
SOURCE: Returns to the Supervisor of Banks.

Table 3.7
Local-Currency CPI-Indexed Assets and Liabilities,[a] 2001–2003

	End-of-year balance (NIS million, Dec. 2003 prices)			Real end-of-year change (%)		Annual average balance (NIS million, Dec. 2003 prices)		Real annual change (%)	Balance-sheet composition (%)	
	2001	2002	2003	2002	2003	2002	2003	2003	2002	2003
Assets										
Credit to the public	95,498	98,761	93,758	3	–5	100,833	96,715	–4	61	60
Bank deposits	46,728	46,226	47,023	–1	2	46,330	45,874	–1	28	28
Credit to the government	5,780	4,432	3,115	–23	–30	5,063	3,762	–26	3	2
Bonds	13,428	14,847	12,973	11	–13	12,727	15,270	20	8	9
Other	67	912	747	–	–18	267	753	182	0	0
Total assets	**161,501**	**165,179**	**157,615**	**2**	**–5**	**165,221**	**162,374**	**–2**	**100**	**100**
Of which Credit from earmarked deposits	5,882	4,306	2,897	–27	–33	5,050	3.608	–29	3	2
Liabilities										
Deposits of the public										
Savings	82,845	92,441	68,641	12	–26	88,579	80,563	–9	61	56
Indexed deposits	23,312	25,278	37,302	8	48	25,372	32,704	29	18	23
Other deposits	4,369	4,177	3,149	–4	–25	4,199	3,715	–12	3	3
Total deposits of the public	110,525	121,896	109,092	10	–11	118,147	116,982	–1	82	82
Deposits from banks	4,465	2,346	2,175	–47	–7	3,691	2,137	–42	3	1
Government deposits	7,319	6,238	5,264	–15	–16	6,757	5,848	–13	5	4
Other liabilities	14,801	17,848	19,183	21	7	16,356	18,272	12	11	13
Total Liabilities	**137,110**	**148,329**	**135,714**	**8**	**–9**	**144,952**	**143,239**	**–1**	**100**	**100**
Of which: earmarked deposits	6,805	5,054	3,608	–26	–29	5,869	4,333	–26	4	3

[a] See note a to Table 3.1.
SOURCE: Returns to the Supervisor of Banks.

Table 3.8
Assets and Liabilities Denominated in and Indexed to Foreign Currency, 2001–2003

	End-of-year balances ($ million)			Real change (%)		Annual average balance ($ million)		Real annual change (%)	Balance-sheet composition (%)	
	2001	2002	2003	2002	2003	2002	2003	2003	2002	2003
Assets										
Notes and coins	348	303	427	–13	41	320	357	12	1	1
Deposits in banks abroad	5,586	5,968	8,273	7	39	5,187	8,368	61	10	16
Deposits in banks in Israel	838	1,216	1,552	45	28	934	1,394	49	2	3
Deposits in Bank of Israel	2,240	2,421	1,491	8	–38	2,392	2,162	–10	5	4
Nondirected credit to residents	27,234	28,617	29,406	5	3	28,597	29,635	4	57	59
Nondirected credit to nonresidents	3,448	4,675	4,429	36	–5	4,347	4,572	5	9	9
Credit to the government	545	629	653	15	4	634	693	9	1	1
Securities[a]	5,499	4,719	4,594	–14	–3	5,017	4,467	–11	10	9
Other assets	1,183	1,495	1,847	26	24	1,305	1,702	30	3	3
Total assets	**48,859**	**49,711**	**50,241**	**2**	**1**	**50,477**	**50,132**	**–1**	**100**	**100**
of which Denominated in foreign currency	45,819	47,388	47,540	3	0	48,014	47,748	–1	95	95

Table 3.8 (continued)

	End-of-year balances ($ million)			Real change (%)		Annual average balance ($ million)		Real annual change (%)	Balance-sheet composition (%)	
	2001	2002	2003	2002	2003	2002	2003	2003	2002	2003
Liabilities										
Deposits from banks abroad	1,215	1,211	2,298	0	90	1,373	2,330	70	3	5
Deposits from banks in Israel	352	539	329	53	–39	403	441	9	1	1
Loans from Bank of Israel	1	1	1	–25	–34	2	1	–48	0	0
Deposits of the government	1,716	1,691	1,653	–1	–2	1,707	1,677	–2	4	4
Nonresidents' deposits	20,464	20,661	20,429	1	–1	20,849	20,512	–2	46	44
Residents' and restitutions deposits	3,831	3,847	4,374	0	14	3,802	4,076	7	8	9
Residents' other deposits	16,167	15,611	15,957	–3	2	15,969	16,144	1	35	34
Other liabilities[b]	892	1,523	1,975	71	30	1,323	1,927	46	3	4
Total liabilities	**44,637**	**45,083**	**47,017**	**1**	**4**	**45,428**	**47,108**	**4**	**100**	**100**
of which Denominated in foreign currency	41,216	41,746	43,730	1	5	42,084	43,625	4	93	93
Derivatives	–5,480	–6,102	–4,183	11	–31	–6,379	–4,411	–31	–14	–9
Surplus of assets over liabilities	-1,258	–1,474	–959	.	.	–1,330	–1,387	.	.	.

[a] Excluding investment in shares in subsidiaries and in affiliated companies.
[b] Including intermediate sums, bonds, and promissory notes recognized as earmarked deposits.
SOURCE: Returns to the Supervisor of Banks.

2. FINANCIAL RESULTS

a. The profit and profitability of the banking groups

Following two difficult years in Israel's banking system (especially 2002), the performance of the five major banking groups improved in 2003. **The total profit**[17] of the large banking groups[18] surged by 200 percent compared with the previous year, and amounted to NIS 3,307 million compared with NIS 1,108 million and NIS 2,211 million in 2002 and 2001 respectively (Table 3.9).

Table 3.9
Adjusted Capital and Profitability of the Five Major Banking Groups, 1999–2003

(NIS million, December 2003 prices)

	1999	2000	2001	2002	2003
1. End-of-year capital[a]	35,464	38,151	39,918	39,726	43,521
2. Capital for calculating ROE[b]	33,511	34,765	37,902	39,970	39,308
3. Ordinary before-tax income	6,452	6,409	4,623	2,299	5,736
4. Tax provision	3,223	3,059	2,281	1,029	2,544
5. Extraordinary net income	168	341	–12	–63	–15
6. Share in profits of unconsolidated subsidiaries	379	399	–187	–105	169
7. Translation adjustments[c]	16	–29	69	6	–39
8. Total profit[d] (3)–(4)+(5)+(6)+(7)	**3,793**	**4,060**	**2,211**	**1,108**	**3,307**
Percent					
9. Ordinary before-tax profitability (3)/(2)	19.3	18.4	12.2	5.8	14.6
10. Return on equity (ROE)(8)/(2)	**11.3**	**11.7**	**5.8**	**2.8**	**8.4**
11. Return on assets[e] (ROA)	0.59	0.58	0.30	0.14	0.42

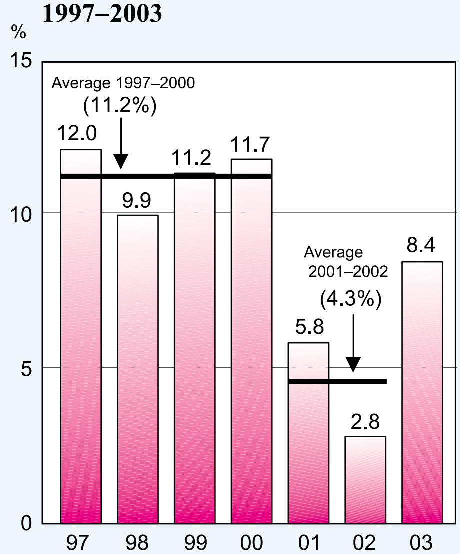
[a] Including minority interests.
[b] Capital at beginning of year *plus* minority interests *plus* issues weighted according to date of issue, *minus* dividends calculated according to dates of payment.
[c] Including the cumulative effect of a change in the method of accounting, –NIS 21 million, in 2003.
[d] Including the share of minority shareholders in consolidated income.
[e] Weighted average of assets and the beginning of the year and at the end of the year.
SOURCE: Published financial statements.

As a result of the improvement in profits, return on equity (ROE) also rose sharply, from 2.8 percent in 2002 to 8.4 percent in 2003 (Figure 3.7). The five banking groups' return on equity was higher than in previous years but similar to the average for the past

[17] Total profit is defined as net income plus minority interest and consolation differentials that were charged to capital.
[18] Hapoalim Group, Leumi Group, Discount Group, Mizrahi Group and First International Group.

decade, which amounted to 8.7 percent. Although each of the banking groups recorded a considerable improvement in return on equity in 2003, non-uniformity in this ratio between the groups was still apparent: 8.6 percent at the Leumi group, 10.4 percent at the Hapoalim group, 4.1 percent at the Bank Discount group, 9.7 percent at the Bank Mizrahi group and 5.4 percent at the First International Bank group (Figure 3.8).

Figure 3.7
After-Tax Return on Equity, the Five Major Banking Groups, 1997–2003



SOURCE: Published financial statements and the Bank of Israel Banking Supervision Research Department.

The equity of the five banking groups (including minority interest) reached NIS 43.5 billion at the end of 2003, compared with NIS 39.7 billion at the end of 2002. The large increase in shareholders' equity mainly resulted from a growth in net income and from accounting adjustments in respect of the presentation of securities available for sale on the basis of fair value. After having reduced shareholders' equity by NIS 0.9 billion in 2002, adjustments in respect of the presentation of securities available for sale contributed to an NIS 1.5 billion growth in shareholders' equity in 2003.[19] It should be realized that the improvement in return on equity largely derived from factors external to the banking system that are of a cyclical nature, such as activity in the capital market and interest rate adjustments.

Unlike the previous two years, when the banking groups refrained from distributing a dividend in accordance with the recommendation of the Supervisor of Banks,[20] in 2003 two banking groups[21] announced the distribution of dividends totaling NIS 0.8 billion.

The main reasons for the growth in profits of the five banking groups in 2003 compared with 2002 were:

(1) An NIS 1.7 billion increase in net interest income before loan-loss provision, following a negligible increase in this item in 2002.

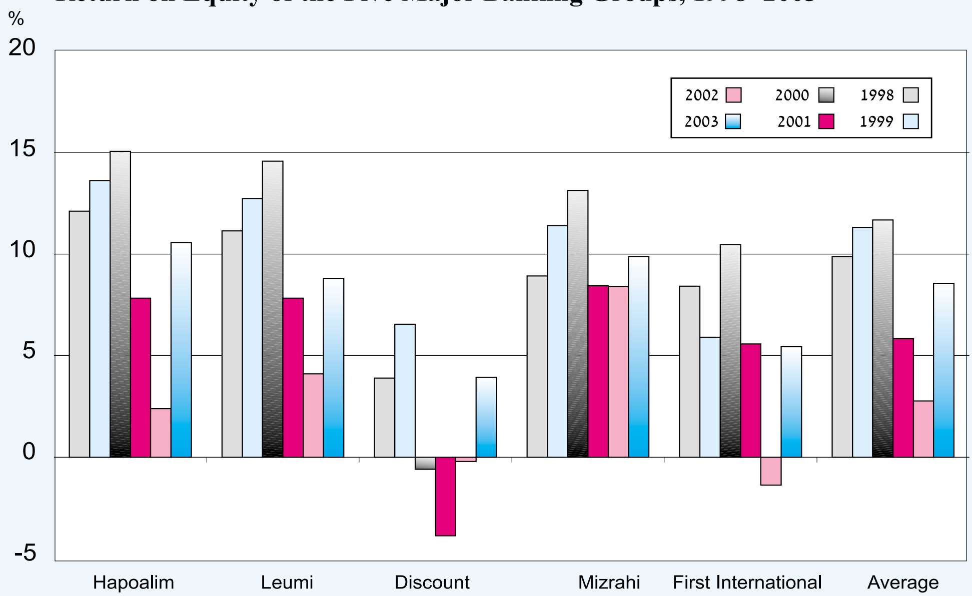
(2) An NIS 1.2 billion decrease in the loan-loss provision, following two consecutive years of unprecedented increases.

[19] After the tax effect.

[20] The non-distribution of dividend resulted from the deterioration in the economic situation, growing uncertainty in the banking system and the decrease in the banks' profits.

[21] The Hapoalim group and the Leumi group.

Figure 3.8
Return on Equity of the Five Major Banking Groups, 1998–2003



SOURCE: Published financial statements.

(3) An NIS 1 billion increase in the banking groups' non-interest income, offset by an NIS 0.5 billion growth in operating expenses, contributed to an NIS 0.5 billion increase in net non-interest income.

These factors, which will be detailed later, contributed to an NIS 3.4 billion growth in ordinary before-tax income. The rate of provision for taxes in 2003 was 44.35 percent of profit before taxes (similar to 2002). But due to the increase in ordinary income, the provision for taxes rose by NIS 1.5 billion compared with 2002.

Concurrent with these developments, the contribution to after-tax profit of companies included under an equity basis was positive in 2003 following two years when losses in this item recorded. The contribution of these companies to profit after taxes amounted to NIS 0.4 billion in 2003.

b. Developments in income and expenditure

Net interest income before loan-loss provision rose at all five banking groups in 2003 and totaled NIS 18.8 billion, an increase of NIS 1.7 billion (10 percent) compared with 2002 (Table 3.10). The banks' NIS 965 million profits deriving from price developments in the bond market compared with their NIS 326 million losses in 2002 were the main factor contributing to the growth in net interest income. Profits/losses from price

Table 3.10
Main Items in Consolidated Profit and Loss Statements, the Five Major Banking Groups, 2002 and 2003

(NIS million, December 2003 prices)

	Leumi		Hapoalim		Discount		Mizrahi		First Intl.		Total		Contri-bution to profit	Rate of change (%)
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003		
Net interest income before loan-loss provision	5,083	6,115	6,511	6,846	2,879	3,033	1,420	1,470	1,220	1,386	17,113	18,850	1,737	10.2
Loan-loss provision	1,907	1,877	3,206	2,346	896	848	309	299	848	610	7,166	5,980	1,186	–16.6
Net interest income after loan-loss provision	3,176	4,238	3,305	4,500	1,983	2,185	1,111	1,171	372	776	9,947	12,870	2,923	29.4
Total non-interest income[a]	2,896	3,167	3,324	3,611	1,740	2,062	844	945	715	791	9,519	10,576	1,057	11.1
of which Fee income	2,432	2,458	2,705	2,889	1,508	1,628	778	841	637	653	8,060	8,469	409	5.1
Total operating expenses	5,252	5,565	5,832	5,921	3,564	3,564	1,355	1,402	1,164	1,258	17,167	17,710	543	3.2
of which Salaries and related expenses	3,476	3,383	3,571	3,515	2,183	2,241	860	878	705	779	10,795	10,796	1	0.0
Ordinary before-tax income	820	1,840	797	2,190	159	683	600	714	–77	309	2,299	5,736	3,437	149.5
Tax provision	262	824	295	861	207	386	298	342	–33	131	1,029	2,544	1,515	147.2
Ordinary after-tax income	558	1,016	502	1,329	–48	297	302	372	–44	178	1,270	3,192	1,922	151.3
Other income[b]	–8	121	–180	76	35	–70	–5	–10	–4	–2	–162	115	277	171.0
Shareholders' net income	422	1,145	350	1,357	–38	168	268	335	–65	156	937	3,161	2,224	237.4
Total income for calculation of return on equity[c]	550	1,137	322	1,405	–13	227	297	362	–48	176	1,108	3,307	2,199	198.5
Equity[d]	13,295	14,471	13,527	14,757	5,513	6,453	3,718	4,158	3,255	3,682	39,308	43,521	4,213	10.7
Ordinary ROE, net (%)	4.2	7.6	3.7	9.8	–8.0	5.4	8.1	10.0	–1.4	5.5	3.2	8.1		
Total ROE (%)[e]	**4.1**	**8.6**	**2.4**	**10.4**	**–0.2**	**4.1**	**8.4**	**9.7**	**–1.4**	**5.4**	**2.8**	**8.4**		
Total return on assets (ROA)(%)	0.2	0.5	0.1	0.6	0.0	0.2	0.4	0.5	–0.1	0.3	0.1	0.4		

[a] Including profit/loss from sale of shares.
[b] Includes the group's share in the profits of companies included on an equity basis, net income from extraordinary activities, the cumulative effect of a change in the method of accounting and also translation adjustments for companies included on an equity basis from the changes in equity.
[c] Total income is defined as net income *plus* the share of minority interests and translation adjustments imputed to equity.
[d] Equity and minority interests at beginning of year *plus* issues according to time of issue *minus* dividends paid, according to time paid.
[e] The calculation was based on net annual income devided by equity (as defined in note d above) at the end of the previous year.
SOURCE: Published financial statements.

developments in the bond market include profits/losses from the realization and sale of bonds for trading and profits/losses from the sale of bonds available for sale and bonds held to maturity. In 2003 therefore, bond price developments contributed to an NIS 1.3 billion increase in net interest income. This increase derived partly from an NIS 0.3 billion growth in net income in respect of the sale of bonds available for sale, and mainly from an NIS 1.0 billion growth in profits from the sale and revaluation of bonds for trading (Figure 1.2). The above analysis shows that the main impact on net interest income derived from interest rate adjustments, which are a factor external to the banking system and that are cyclical in nature. While interest rates in the economy rose in 2002 and thereby contributed to a decrease in the realization price and fair value of the banks' bond portfolio, in 2003 interest rates fell considerably, contributing to a rise in the realization price and fair value of the bond portfolio. (In the short term, the Bank of Israel's interest rate fell by 3.9 percentage points, from 9.1 percent to 5.2 percent, and in the long term, the real yield to maturity on government bonds dropped by 1.4 percentage points, from 5.7 percent to 4.3 percent - Figure 3.6.)

Profits deriving from developments in the capital market[22] accounted for 17.5 percent (NIS 1 billion) of ordinary before-tax income in 2003.[23] The estimate of the before-tax ROE[24] of the five banking groups, excluding profits deriving from the capital market, was 2.6 percentage points lower than before-tax ROE including these profits (12 percent compared with 14.6 percent). In 2002, which was notable for a slump in the equity market and consistent interest rate hikes in the economy, the estimate of ROE excluding losses deriving from the capital market and the interest rate effect was 1.3 percentage points higher than the before-tax ROE including these losses (7.1 percent compared with 5.8 percent).

The residual NIS 0.4 billion growth in net interest income is attributed to the increase in the banks' income from classical financial intermediation and from their activity in derivative instruments.[25] This income totaled NIS 0.9 billion and was offset by an NIS 0.5 billion decrease in other financing income.

An examination of the five banking groups' net interest income by indexation segments shows that the main contribution to the growth in net interest income derived from the

[22] Profits derived from the capital market and classified as net interest income before loan-loss provision. These profits include: profits from the revaluation and sale of bonds for trading, and profits from the sale of bonds available for sale and bonds held to maturity.

[23] Another item is profits in respect of the presentation of securities available for sale on the basis of fair value that were charged to capital fund. In 2003, NIS 2.2 billion of before-tax profits in respect of the revaluation of bonds available to sale were charged to capital fund, while in 2002 NIS 1.2 billion of losses were charged.

[24] The calculation of return on equity does not include income from alternative investment that the banks would have obtained had they directed the sources used for bond investments (income in respect of which we excluded, as stated) to another form of investment or to the extension of credit.

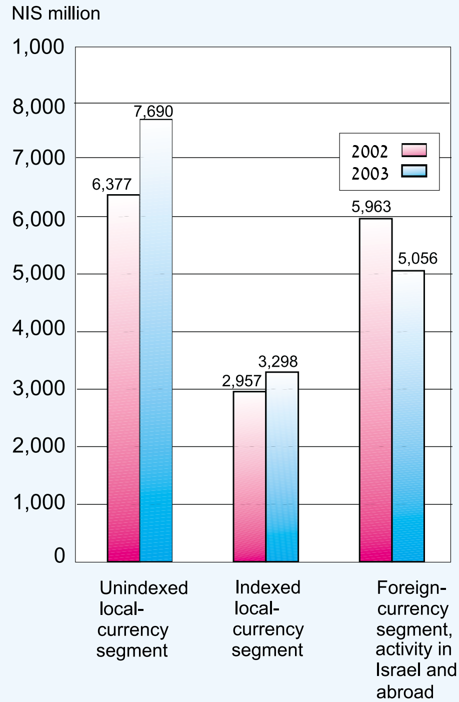
[25] As a result of the implementation of the Supervisor of Banks' directives concerning derivative instruments with effect from January 1, 2003, the data for 2003 and 2002 cannot be compared. This means that income in respect of derivative instruments separately and income in respect of classical activity separately cannot be compared.

unindexed local currency segment. Income from classical financial intermediation and from derivative instruments in the unindexed local currency segment totaled NIS 7.7 billion, an increase of NIS 1.3 billion compared with 2002. The same income items derived from the CPI-indexed segment totaled NIS 3.3 billion, an increase of NIS 0.3 billion compared with 2002. In the foreign currency segment - local activity and activity abroad—the banks' income from classical financial intermediation and activity in derivative instruments fell in 2003. This income in the foreign currency segment totaled NIS 5.0 billion, a decrease of NIS 0.9 billion compared with 2002 (Figure 3.9).

Loan-loss provisions fell by NIS 1.2 billion (17 percent) in 2003 compared with 2002, and totaled NIS 6 billion. This amount was equivalent to 32 percent of net interest income before loan-loss provision, compared with 42 percent and 27 percent in 2002 and 2001 respectively (Figure 3.10).

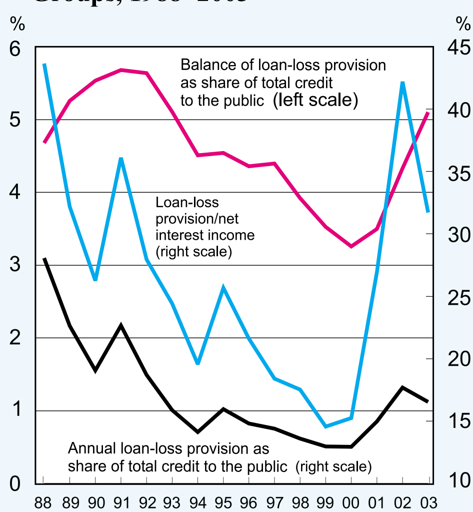
Despite the considerable decrease in the loan-loss provision, which as stated contributed to a growth in profitability, its level is still exceptionally high. The ratio of the annual loan-loss provision to outstanding credit to the public fell slightly in 2003, to 1.1 percent compared with 1.3 percent and 0.85 percent in 2002 and 2001 respectively (Figure 3.10). These high rates of provision reflect the low quality of the credit portfolio in the Israeli banking system during the last three years that resulted from

Figure 3.9
Income from Classic Financial Intermediation and from Derivative Instruments in the Five Major Banking Groups, by Activity Segment, 2002 and 2003



SOURCE: Published financial statements

Figure 3.10
Loan-Loss Provision in the Banking Groups, 1988–2003



SOURCE: Published financial statements.

the deep recession in the economy (for details of the quality of the credit portfolio, see Chapter 4, Section 1 in this survey).

Loan-loss provisions started to rise in 2001 and rose more in 2002, due to the deterioration that began in 2001 in the economic situation in Israel and abroad. These developments adversely affected many companies in different sectors of the economy. As a result, the repayment ability of borrowers in the business sector deteriorated, and the value of the collateral that borrowers provided was eroded. The large provisions during those years were the main reason for the decrease in the banking groups' profit.

In 2003 the banks recorded lower loan-loss provisions for certain industries in the business sector in respect of which very large provisions were recorded in the previous years. An example was the decrease in the provision for firms in the telecommunications and computer service industry, the hotels and accommodation services industry, and the manufacturing sector. In the household sector however, which had previously been notable for low provisions, the loan-loss provision rose by 42 percent to NIS 830 million.[26] Repayment ability in the household sector declined in 2003 due to the recession in the economy, which had led to a growth of the unemployment rate and to a decrease in households' income levels. The growth in the bank's loan-loss provisions recorded in respect of the deterioration in the household sector's repayment ability was recorded with a lag compared with other sectors of the economy.

The growth in the five banking groups' balance of loan-loss provisions continued in 2003. The outstanding loan-loss provision amounted to NIS 27.3 billion at the end of the year, reflecting a coverage ratio of 5.1 percent of total credit to the public compared with 4.3 percent in 2002 and (Figure 3.10). The growth in the coverage ratio derived from an increase in the balance of the loan-loss provision and from a decrease in credit to the public. In 2003 as well, the growth in provisions mainly derived from an increase in the specific provision (Table 3.11) that the banks' management determined in accordance with borrowers' repayment ability and the quality of their collateral. At the same time, the additional loan-loss provision, as specified in the Supervisor of Banks' directives and based on the risk characteristics of the bank's total credit portfolio, rose slightly. The growth in the additional provision is attributed *inter alia* to the continued rise in the proportion of problem loans to total credit, to 10.5 percent in 2003. This increase resulted from the continued impairment in the repayment ability of firms in the economy. A further rise in the proportion of problem loans to total credit will lead to relatively high loan-loss provisions in 2004.

Non-interest and other income of the five large banking groups rose by 11 percent (NIS 1 billion) in 2003 compared with 2002. The increase derived from three factors:
(1) A 5 percent growth in income from operating commissions, and principally an NIS 300 million increase in the banks' income from commissions on customers' activity in securities,[27] which was favorably affected by the buoyant level of activity in the capital

[26] See Table 4.3 in the section on risks in this survey.

[27] Including income from customers' securities activity, income from financial instruments, custody fees, and securities underwriting and distribution.

Table 3.11

The Components of Loan-Loss Provision in the Five Major Banking Groups, 2001–2003

(NIS million, December 2003 prices)

	2001			2002			2003		
	Specific provision	General & additional provision	Total	Specific provision	General & additional provision	Total	Specific provision	General & additional provision	Total
Balance of provision at beginning of year	**12,751**	**3,017**	**15,768**	**15,447**	**3,133**	**18,580**	**20,309**	**3,281**	**23,590**
Provision in accounting year	5,350	376	5,726	7,857	453	8,310	6,944	229	7,173
Reduction of provision	–832	–260	–1,092	–775	–316	–1,091	–979	–152	–1,131
Collection of debts written off in previous years	–80	0	–80	–53	0	–53	–62	0	–62
Amount recorded in Profit and Loss Statements	**4,438**	**116**	**4,544**	**7,029**	**137**	**7,166**	**5,903**	**77**	**5,980**
Write-offs	–1,607	0	–1,607	–1,392	0	–1,392	–2,440	0	–2,440
Erosion and adjustment of balances	–135	0	–135	–868	0	–868	144	0	144
Balance of provision at end of year	**15,447**	**3,133**	**18,580**	**20,216**	**3,270**	**23,486**	**23,916**	**3,358**	**27,274**

Note: The difference between the balances of the provisions at the end of 2002 to those at the beginning of 2003 derive from the increase in the provisions in Bank Hapoalim due to the merger of companies.

SOURCE: Published financial statements.

Table 3.12
Non-Interest Income and Operating Expenses, the Five Major Banking Groups, 2001–2003

	Amount (NIS million, Dec. 2003 prices)			Distribution (%)			Year-on-year change (%)	
	2001	2002	2003	2001	2002	2003	2002	2003
1. Non-interest income								
Fees and commissions from:								
Ledger fees	1,325	1,400	1,436	13.9	14.7	13.6	5.7	2.6
Payment services	1,728	1,858	1,809	18.2	19.5	17.1	7.5	–2.6
Credit cards	1,562	1,572	1,699	16.4	16.5	16.1	0.6	8.1
Credit services and contracts	644	665	727	6.8	7.0	6.9	3.3	9.3
Computerized services	301	283	211	3.2	3.0	2.0	–6.0	–25.4
Foreign trade and special services	315	323	348	3.3	3.4	3.3	2.5	7.7
Securities services[a]	972	1,057	1,340	10.2	11.1	12.7	8.7	26.8
Other commissions[b]	963	902	899	10.1	9.5	8.5	–6.3	–0.3
Total fees and commissions income	**7,810**	**8,060**	**8,469**	**82.1**	**84.7**	**80.1**	**3.2**	**5.1**
Other income from:								
Provident and mutual fund fees	1,418	1,421	1,419	14.9	14.9	13.4	0.2	–0.1
Of which Provident fund fees	889	821	862	9.3	8.6	8.2	–7.6	5.0
Mutal fund fees	529	600	557	5.6	6.3	5.3	13.4	–7.2
Profits from severance pay funds	150	–	447	1.6	0.0	4.2	–100.0	–
Other[c]	190	206	196	2.0	2.2	1.9	8.4	–4.9
Total other income	**1,758**	**1,627**	**2,062**	**18.5**	**17.1**	**19.5**	**–7.5**	**26.7**
Income from sale of shares	**–53**	**–168**	**45**	**–0.6**	**–1.8**	**0.4**	**217.0**	**126.8**
Total non-interest income	**9,515**	**9,519**	**10,576**	**100.0**	**100.0**	**100.0**	**0.0**	**11.1**

Table 3.12 (continued)

	Amount (NIS million, Dec. 2003 prices)			Distribution (%)			Year-on-year change (%)	
	2001	2002	2003	2001	2002	2003	2002	2003
2. Operating expenses								
Salaries and related expenses[d] and depreciation	10,791	10,795	10,796	61.9	62.9	61.0	0.0	0.0
Maintenance of buildings and equipment	2,962	3,136	3,300	17.0	18.3	18.6	5.9	5.2
Other expenses	3,677	3,236	3,614	21.1	18.9	20.4	–12.0	11.7
Marketing and advertising	600	497	533	3.4	2.9	3.0	–17.2	7.2
Computer expenses	574	561	584	3.3	3.3	3.3	–2.3	4.1
Communications	508	477	489	2.9	2.8	2.8	–6.1	2.5
Insurance	104	172	211	0.6	1.0	1.2	65.4	22.7
Office	231	220	231	1.3	1.3	1.3	–4.8	5.0
Professional services	425	435	504	2.4	2.5	2.8	2.4	15.9
Total operating expenses	**17,430**	**17,167**	**17,710**	**100.0**	**100.0**	**100.0**	**–1.5**	**3.2**
Operating coverage ratio[e]	**55**	**55**	**60**					

[a] Including income from derivatives and custody fees.
[b] Mainly margin and collection fees received from the Treasury on credit, income from managing estates, and rent on safe-deposit boxes.
[c] Including profit on realization of assets received in settlement of credit.
[d] Including payroll taxes, severance pay, benefits, pensions, and national insurance.
[e] Ratio of total non-interest and other income to total operating expenses (percent).
SOURCE: Returns to Supervisor of Banks and published financial statements.

market (Table 3.12). A large growth in income from credit card activity was also apparent in 2003. The growth in this income item is mainly attributed to a 5 percent increase compared with 2002 in credit card transactions in Israel, which totaled NIS 89.5 billion. (2) The profits that most of the banking groups recorded from investments in shares, as compared to the losses that were recorded in respect of these investments in 2002. The contribution to the growth in non-interest income amounted to NIS 230 million and derived mainly from reduced losses from the sale of shares available for sale and dividend from shares available for sale and trading (Figure 1.2).

(3) Profits of NIS 447 million from severance pay funds that three banking groups recorded (the main contribution to profit was from the Leumi and Discount groups), compared with losses from severance pay funds in 2002.[28] The profits from severance pay funds derived from the decline in the interest rate, which led to a rise in the prices of the bonds that the funds hold in order to cover their liabilities (Table 3.12).

The five banking groups' income from provident fund and mutual fund management fees remained unchanged and totaled NIS 1.4 billion.

Table 3.13
Expenditure on Employees in the Five Major Banking Groups, 1997–2003

(December 2003 prices)

	Average no. of employee posts[a]	Salaries		Related expenses[b]		Salaries and related expenses	
		Total (NIS million)	Per post (NIS'000)	Total (NIS million)	Per post (NIS'000)	Total (NIS million)	Per post (NIS '000)
1997	35,957	6,294	175	2,888	80	9,182	255
1998	36,047	6,341	176	2,955	82	9,296	258
1999	36,051	6,607	183	3,063	85	9,669	268
2000	36,996	7,220	195	3,557	96	10,777	291
2001	37,310	7,231	194	3,560	95	10,791	289
2002	36,838	6,794	184	4,001	109	10,795	293
2003	35,714	7,201	202	3,595	101	10,796	302
Year-on-year change (*percent*)							
1998	0.3	0.7	0.5	2.3	2.1	1.2	1.0
1999	0.01	4.2	4.2	3.6	3.6	4.0	4.0
2000	2.6	9.3	6.5	16.1	13.2	11.5	8.6
2001	0.8	0.1	–0.7	0.1	–0.7	0.1	–0.7
2002	–1.3	–6.0	–4.8	12.4	13.8	0.04	1.3
2003	–3.1	6.0	9.3	–10.1	–7.3	0.01	3.2

[a] Including translation of the cost of overtime and budget for external personal required to regulate current staffing levels and to handle projects.
[b] Consisting mainly of national insurance, pension, vacation, severance pay, and voluntary (early) retirement payments.
SOURCE: Published financial statements and Returns to Supervisor of Banks.

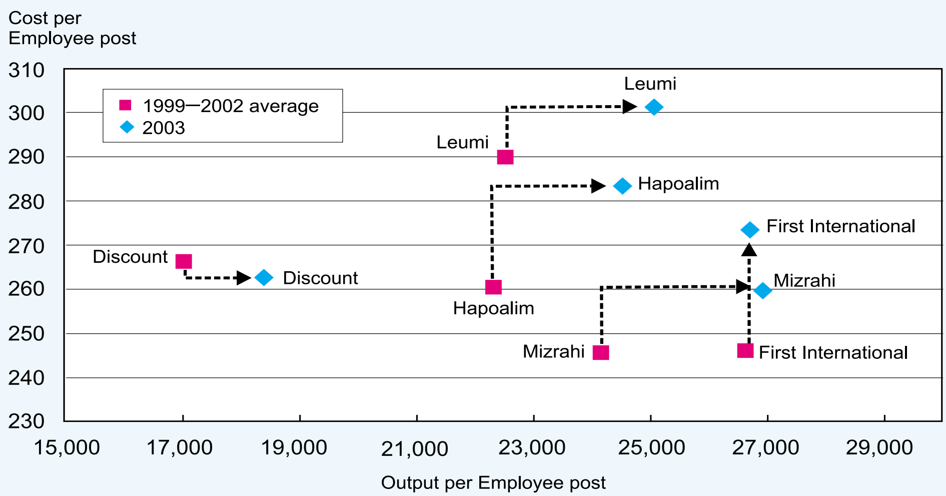
[28] Losses in respect of severance pay funds are recorded in the statement of income in the supplementing of reserves in respect of related expenses item due to salary changes in the accounting year (changes in salaries and related expenses). This item fell by NIS 184 million in 2003 compared with 2002.

Although **operating expenses** also rose in 2003, by 3 percent, this was less than the rate of increase in non-interest income. Salaries and related expenses remained stable and accounted for 61 percent of total operating expenses (Table 3.12). This stability resulted from two developments that offset each other: a growth in salaries and related expenses, which mainly derived from an NIS 400 million (6 percent) increase in direct salary expenses and an NIS 255 million increase in national insurance expenses, employers tax and payroll tax.

On the other hand, there was a reduction of NIS 570 million in expenses related to early retirement from their level in 2002, when they were exceptionally high at NIS 950 million, and this decline made the major contribution to offsetting the above rise in salaries and related expenses.

Three years ago, the banks began to take measures in order to increase operating efficiency by saving production expenses. The saving included wage cuts, the encouragement of early retirement, and employee dismissals. As stated, a large one-time growth in retirement expenses (mainly at the two largest banks) was reflected in financial statements for 2002, and accounted for 9 percent of total salaries and related expenses. Retirement expenses fell in 2003, when they accounted for 3.5 percent of total salaries and related expenses, and were lower than in 2001, when they accounted for 4 percent of

Figure 3.11
Cost[a] and Output[b] Per Employee Post in the Five Major Banking Groups, 1999–2002 (average) and 2003 (NIS '000, at December 2003 prices)



[a] Salaries and related expenses divided by number of employee posts including those in subsidiaries abroad; includes a translation of the cost of overtime and a budget for staff from manpower companies.
[b] Total balance-sheet assets of the banking group plus balance-sheet value of off-balance-sheet assets.

SOURCE: Published financial statements and the Bank of Israel Banking Supervision Research Department.

total salaries and related expenses. The encouragement of early retirement and employee dismissals resulted in a reduction of 1,135 employee posts in 2003 compared with 2002 (Table 3.13). But despite this decrease, direct salary expenses increased at each of the banking groups except for the Discount group (most of the increase derived from the Hapoalim group and the Leumi group), and totaled NIS 7.2 billion, similar to the amount recorded in 2001. As a result of these developments, salary expenses per post rose by 9 percent in 2003, from NIS 172,000 in 2002 to NIS 188,000 in 2003 following a 6 percent decrease in this expenditure in 2002 (Table 3.13). The decrease in the number of posts concurrent with a slight increase/stability in output[29] led to a growth in output per employee post at each of the banking groups apart from the First International group (Figure 3.11).

The main reasons for the growth in direct salary expenses in 2003 were: (1) an increase in real wages due to the negative impact of inflation on the cost of nominal work agreements, compared with a wage erosion in 2002 that resulted from relatively high inflation; (2) an increase in the size of the grants that were paid to employees due to the improvement in profitability; (3) the payment of a cost-of-living increment due to the erosion of wages in the previous year. The benefit of the efficiency-drives at the banks during the last three years may only become apparent in the years to come.

c. Analysis of performance by areas of activity

The banking groups' activity is conducted in a number of principal areas, each of which constitutes a profit center, a division that the banks' management use in analyzing financial results and in making decisions in accordance with these results. Under Bank of Israel directives,[30] an area of activity must fulfill three conditions: it must reflect business activity from which the bank is likely to earn income and incur expenses; the results of activity are examined regularly by the management and the board of directors for the purpose of making decisions concerning the allocation of resources to the area and assessing its performance; and separate financial information regarding the area of activity must exist. The division into areas of activity is based on the types of products and services, or on the types of customers (see Box 3.1 for details of the areas of activity).

The models used for the measurement and management of ALM and for analyzing financial results in profit centers differ from bank to bank. In order to compare between the different models, we had to make a number of initial assumptions.[31] For the purpose

[29] Output is defined as a balance-sheet assets and the value equivalent of off-balance-sheet assets.

[30] Directives for reporting to the public– Paragraph 79: Principal areas of activity (from December 2001).

[31] In order to compare the reports of profit centers at the different banks, we amalgamated the data from the business, commercial and real estate segments, and defined them as the business segment. We also amalgamated the data from the retail area and private customer (including international) activity segment into a single segment, which we defined as the retail segment. In part of the analyses, we amalgamated the data from the retail segment with the data from the mortgage segment, thereby creating a new segment, called the household segment.

Box 3.1
The Banking Groups' Principal Areas of Activity

The main areas of activity are shown below:
Business banking—the entire range of banking and financial services for large companies operating in different sectors in Israel and abroad. The principal activity in the area is the extension of credit.
Middle-market banking—the entire range of banking and financial services for medium-sized companies. In this area as well, the principal activity is the extension of credit but at smaller amounts.
Retail banking—comprehensive banking services to private customers, households and small businesses. This area mainly offers its customers investment products (deposits, saving plans), as well as credit products adapted to customers' special requirements.
Private banking—local and global banking services and financial solutions for affluent Israeli and nonresident private customers. This area offers traditional investment products as well as sophisticated financial instruments for hedging purposes. Customers are also offered credit and advanced services in the field of investment banking.
Construction and real estate—banking and financial services to building contractors and for large projects in the field of construction and real estate—mainly the extension of business credit for building and housing construction, and credit for the purchase of land and income-earning properties.
Mortgages—the extension of loans to private customers for the purchase of housing and the extension of loans for any purpose in different tracks—loans secured by the mortgage of residential apartments.
Capital market[1] —banking and financial services in the field of off-balance-sheet investment, principally the management of mutual funds, provident funds, advanced study funds, portfolio management, and other activity in the field of investment and underwriting.
Other activity and adjustments—includes all of a bank's income and expenditures that do not derive from customer transactions. This activity mainly includes a bank's nostro portfolio management (such as securities, deposits at banks, bond issues and transactions in derivative financial instruments) as well as positions management, investment banking, and operations in the capital market and in the credit card market that are not assigned to the other areas.

[1] This area forms part of the other areas' activity – principally the retail banking area.

Table 3.14
The Continuation of Different Areas of Activity in the Two Major Banking Groups,[a] 2002 and 2003

(NIS million, December 2003 prices)

	Household sector[b]			Business sector[c]			Other activities and adjustments[d]			Total		
	2002	2003	Change (%)	2002	2003	Change (%)	2002	2003	Change (%)	2002	2003	Change (%)
Average balance of assets	106,530	113,457	7	298,753	289,268	–3	87,768	92,881	6	493,051	495,606	1
Net interest income before loan-loss provision	5,729	6,078	6	4,830	4,965	3	1,035	1,918	85	11,594	12,961	12
Loan-loss provision	690	800	16	4,404	3,438	–22	19	–15	–179	5,113	4,223	–17
Income after loan-loss provision	5,039	5,278	5	426	1,527	258	1,016	1,933	90	6,481	8,738	35
Non-interest and other income	4,170	4,312	3	1,037	1,128	9	1,013	1,338	32	6,220	6,778	9
Operational and other expenses	6,341	7,280	15	2,445	2,528	3	2,298	1,678	–27	11,084	11,486	4
Ordinary before-tax profet/loss	2,868	2,310	–19	–982	127		–269	1,593		1,617	4,030	149

[a] Hapoalim and Leumi banking groups.
[b] The household sector incorporates the rerail and the mortgage sector. Data of the former includes data on the retail and private (including international) activity.
[c] The business sector includes data on commerce and real estate.
[d] Including all other activities of the banking group, none of which is covered by the reporting requirement, and also adjustment relating to inter-sector transactions.
SOURCE: Published financial statements.

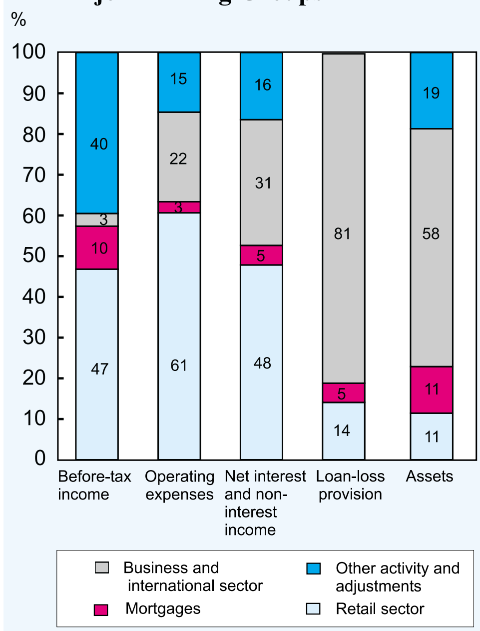
of analyzing customers with similar criteria, we chose to focus on the two largest banking groups that report on areas of activity, **Hapoalim** and **Leumi**.

The recession prevailing in the economy during the last two years adversely affected firms' repayment ability. In 2002 the corporate area's contribution to before-tax profit was negative (mainly due to large loan-losses provisions). Losses were also recorded in the other activity and adjustments area, with the result that before-tax profits in the household area covered the losses deriving from these two areas (Table 3.14).

The banks continued to adopt a stringent credit policy in 2003, and took measures to reduce the risks inherent in activity with commercial and business customers. Concurrently, the banks continued their large-scale efforts at recruiting private customers in order to exploit these customers' substantial and stable contribution to the banks' profits. If this trend increases in the future, it is expected to lead to more competition between banks in the household sector and to an improvement in consumer benefit.

The banks are still exploiting the relatively low level of competition in the retail area, a situation that arises due to the lack of non-banking system substitutes in the extension of credit and the raising of deposits. This is reflected by households' large contribution to interest and non-interest income (NIS 10.4 billion, which constitutes 53 percent of total non-interest and interest income), as compared to the limited contribution of business customers (NIS 6.1 billion, constituting 31 percent) (Figure 3.12). This situation is apparent at all large banks and is becoming even more apparent due to the low proportion of assets attributed to the household segment (22 percent of total assets). The ratio of non-interest and interest income to total assets in the household sector thereby averaged 9.4 percent compared with only 2.1 percent in the corporate segment (Table 3.15). The household segment's substantial contribution to the banks' results derives partly from

Figure 3.12
The Contribution of Different Areas of Activity to Selected Items in the Financial Statement of the Two Major Banking Groups[a]



[a] Hapoalim and Leumi.
SOURCE: Published financial statements and the Bank of Israel Banking Supervision Research Department.

Table 3.15
Performance Indicators in the Two Major Banking Groups,[a] by Sector, 2003

	Households	*Of which* mortgages	Business and international sector	Other activity & adjustments[b]	Total
Shares (percent of total)					
Total assets	23	11	58	19	100
Loan-loss provision	19	5	81	0	100
Total income[c]	53	5	31	16	100
Operating expenses	63	3	22	15	100
Before-tax profit	57	10	3	40	100
Ratios					
Loan-loss provision/total assets	0.71		1.19	–0.02	0.85
Total income[c]/total assets	9.16		2.11	3.51	3.98
Operating expenses/total assets	6.42		0.87	1.81	2.32
Before-tax profit per NIS of assets	2.04		0.04	1.72	0.81

[a] Hapoalim and Leumi banking groups.
[b] Including all other activities of the banking group, none of which is large enough to be covered by the reporting requirement, and also adjustment relating to inter-sector transactions.
[c] Non-interest income and profit from financing transactions before loan-loss provision.
SOURCE: published financial statements and the Bank of Israel Banking Supervision Research Department.

the large profits derived from this segment and from the numerous commissions that are charged from customers in the segment (relative to those charged in the business segment). As an example, the effective cost of extending credit[32] in the unindexed local currency segment in respect of households' activity is considerably higher than that incurred by business customers. In 2003 the average effective cost at the large banks[33] was five percentage points higher in the household segment than in the corporate segment (Figure 3.13). An analysis of the effective cost at the two largest banks and at the medium-sized banks[34] shows relatively large differences in the effective cost between the two size groups in the household segment, while the differences in the business segment are marginal. Another finding, which is also indicative of the relatively low level of competition in the retail segment, is the development of the commissions index. The commissions index rose by a slight 1.5 percent in real terms during 2003, mainly due to the decline in the consumer price index. This marked a continuation of a multi-year trend apparent since December 1996, whereby the index rose by 10 percentage points in real terms (Figure 3.14). The index represents the average weighted fee-scale of the most

[32] Calculated as monthly income from interest and commissions (from credit and securities activity) divided by average monthly outstanding credit in annual terms.
[33] Including Bank Hapoalim and Bank Leumi.
[34] Including the First International Bank and Bank Mizrahi.

common banking services for private and small business customers at the five largest banks.

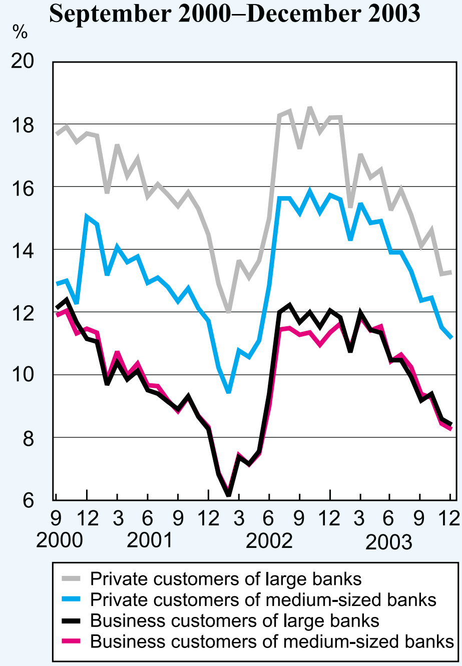
The banks recorded a particularly large decrease in loan-loss provisions in 2003. An analysis of loan-loss provisions by areas of activity at the two largest banks shows that the decrease derived from a 22 percent (NIS 1 billion) drop in loan-loss provisions in respect of the business segment. As a result, a similar increase (NIS 1.1 billion) in net interest income after loan-loss provision was recorded in respect of the business segment (Table 3.14).

In the household segment however, the loan-loss provision rose by 16 percent, from NIS 690 million in 2002 to NIS 800 million in 2003, due to the continued deterioration in repayment ability in the household sector resulting from the recession in the economy, which led to a growth in the banks' provisions for that segment with a lag.

Despite these developments, activity in the household segment is still notable for a relatively low level of risk, which is reflected by that segment's small share in loan-loss provisions (19 percent of total provisions), as compared to the corporate segment's high proportion (81 percent of total provisions) (Figure 3.12).

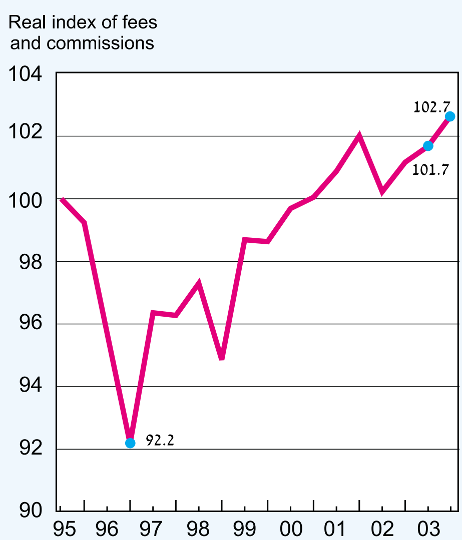
Operating expenses are particularly high in the retail segment, as reflected by its 61 percent share in total operating expenses. The high operating expenses for this segment result from the large expenditures

Figure 3.13
Effective Cost of Unindexed Local-Currency Credit to Households and to Businesses in the Large and Medium-Sized Banks, September 2000–December 2003



SOURCE: Returns to the Supervisor of Banks.

Figure 3.14
Real Index of Banks' Fees and Commissions, 1995-2003
(June 1995 = 100)



SOURCE: Tariffs of the five major banks .

on the human and physical resources that are involved in operating an extensive network of branches, in which the majority of retail activity is conducted. In the corporate segment by contrast, activity is conducted at a limited number of business centers, with the result that its share in total operating expenses is relatively modest at 22 percent of total expenses (Figure 3.12).

The other activity and adjustments segment was notable for its large contribution to before-tax profit in 2003—40 percent—compared with its negative contribution to profit in 2002 (Table 3.14, Figure 3.12). The large growth in this segment's profitability in 2003 appears to have derived partly from the favorable impact on the banks' profitability of the price rises in the bond market (as detailed in Section b above: Developments in income and expenditure).

The remaining 60 percent of before-tax profit is mainly attributed to the household segment, whose share in total before-tax profit amounted to 57 percent compared with only 3 percent in the corporate segment (Figure 3.12). The household segment's contribution to before-tax profit at the two largest banks totaled NIS 2.3 billion, a decrease of 18 percent compared with 2002 (Table 3.14).

To conclude, an examination of the performance of the two largest banking groups by areas of activity shows that despite the large expenses incurred in managing activity with households, this area still provides the main contribution to the banks' profits (57 percent of total before-tax profits). The household segment's high contribution results from its relatively high proportion in non-interest and interest income (53 percent) together with relatively low loan-loss provisions, whose proportion to total provisions amounts to only 19 percent. However, loan-loss provisions in respect of the corporate segment, 81 percent of total provisions, are the main reason for that segment's low (actually negative) contribution to the banks' profits (Figure 3.12). A deciding factor in the household segments' relatively large contribution to the banks before-tax profits was the relatively high risk inherent in the banks' activity with firms, together with the high income recorded from households' activity.

d. The operating and income efficiency indices of the commercial banks

The operating coverage ratio, defined as the rate of coverage of operating expenses by non-interest income, rose from 49.1 percent in 2002 to 53.8 percent at the large commercial banks. The increase resulted from a growth in non-interest income concurrent with a modest rise in operating expenses. The operating coverage ratio rose at all of the large banks in 2003 except the Union Bank, and its relative value at most of the banks was similar to the average (except for the First International Bank, where a higher than average coverage ratio of 61 percent was recorded, and the Union Bank, where a lower than average ratio of 42 percent was recorded). Among the small banks, a high coverage ratio was notable at those belonging to a banking group, where operating expenditure is relatively low, due *inter alia* to the use that those banks make of the parent bank's operating services (Table 3.16).

Table 3.16
Coverage and Efficiency Ratios, 2002–2003

	2002		2003	
	Coverage ratio[a]	Efficiency ratio[b]	Coverage ratio[a]	Efficiency ratio[b]
Hapoalim	0.51	1.75	0.54	1.69
Leumi	0.48	1.36	0.53	1.72
Discount	0.43	1.16	0.54	1.42
Mizrahi	0.49	1.40	0.53	1.45
First International	0.60	1.48	0.61	1.60
Union	0.46	1.44	0.42	1.27
Mercantile-Discount	0.51	1.46	0.54	1.53
Seven largest banks	0.49	1.47	0.54	1.61
Small independent banks[c]	0.38	1.13	0.50	1.21
Small banks that belong to banking groups	0.62	1.46	0.61	1.57
Total small banks	0.54	1.34	0.58	1.48

[a] The coverage ratio is calculated as the ratio of non-interest and other income to total operating and other expenses.
[b] The efficiency ratio is calculated as the ratio of total non-interest income and net interest income to total operating expenses. It is sometimes calculated as the ratio of total operating and other expenses to total income.
[c] The Industrial Development Bank and the Maritine Bank are included in 2002 only. The ratios for 2002 excluding these two banks are: coverage ratio – 0.52, efficiency ratio – 1.72.
SOURCE: Published financial statements.

The income efficiency ratio, defined as total (interest and non-interest income) to total operating expenses, also rose in 2003 compared with 2002. An improvement in this ratio indicates that a bank is utilizing more efficiently the factors of production available to it for the purpose of increasing its income. The growth in non-interest and interest income, concurrent with a much lower rate of growth in operating expenses, led to a rise in the income efficiency ratio from 1.47 in 2002 to 1.61 in 2003 at the seven largest banks, and from 1.34 to 1.48 respectively at the small banks (Table 3.16). It should be noted that part of the improvement in this ratio, which as stated is also affected by net interest income, derived from the banks' profits from price developments in the bond market.

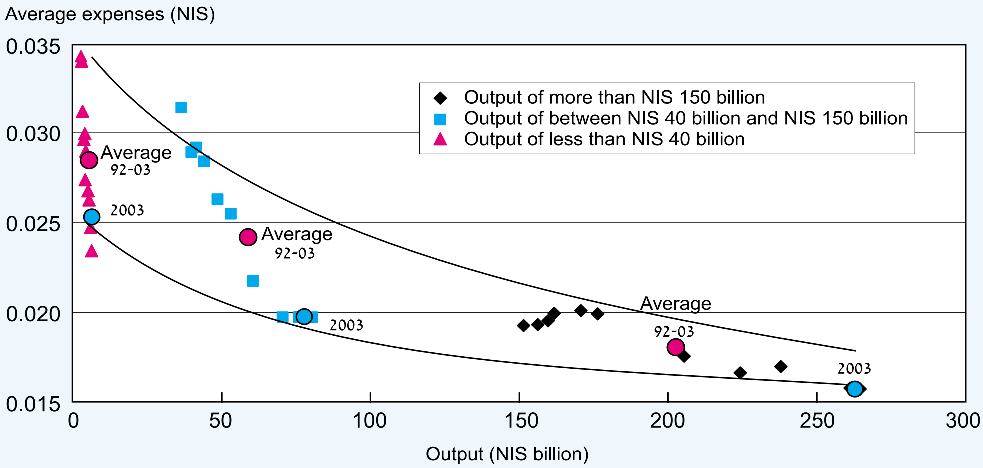
Apart from these two efficiency indexes, we also examined two components of operating efficiency:

(1) Efficiency derived from changes in the banks' size, as reflected by **production economies of scale.**

(2) Efficiency derived from a reduction in a bank's operating expenses without a change in its size (in its output), known as X-efficiency. The latter is expressed by the ability of the bank's management to reduce expenses on factors of production without changing the bank's output (that is, it reflects the quality of the bank's management).

Differences in operating efficiency can be discerned from a comparison of operating expenditure per unit (NIS) of output between similar sized banks. We therefore divided

Figure 3.15
Operating Expenses per Unit of Output[a] in the Banking System,[b] 1992–2003



[a] Output: book balance of balance-sheet assets and value of off-balance-sheet assets.
[b] Hapoalim, Leumi, Discount, Mizrahi, First International, Union, Mercantile Discount, Otsar Hahayal, Yahav, Arab Israel, Massad, Pekao, Israel Continental, Industrial Development (till 2002), Jerusalem (from 1997), Investec (Israel), Maritime (till 2002), Euro-Trade, and Trade (till 2001).

SOURCE: Published financial statements and the Bank of Israel Banking Supervision Research Department.

the banks into three size groups (reference groups): large banks - banks whose output exceeds NIS 150 billion; medium-sized banks - output of between NIS 40-150 billion; and small banks - output of up to NIS 40 billion. We chose total assets—equivalent to the book balance of balance-sheet assets and the credit value of off-balance-sheet assets—as an index of banking output.

A long-term analysis of returns of scale shows that economies of scale exist in the Israeli banking system. These advantages reflect a decrease in average expenditure in the transition between the group of small, medium-size and large banks. During the period 1992-2003 average expenditure per NIS of output amounted to NIS 0.0285 at the small banks, NIS 0.0239 at the medium-sized banks and NIS 0.0181 at the large banks. Data for 2003 show that greater economies of scale exist in the transition between the small banks and the medium-sized banks than in the transition between the medium-sized banks and the large banks. The differences in economies of scale are reflected by a larger decrease in average expenditure in the transition between the small and the medium-banks, and a more moderate decrease in the transition between medium-sized and large banks (Figure 3.15, Table 3.17).

Table 3.17
Ratio of Operating Expenses to Units of Output[a] and Operation Efficiency (X-Efficiency), by Size of Banking Group, 1992–2003

	Output (NIS billion)		
	Up to 40	40 to 150	More than 150
	Average output[b]		
1992–2003	0.0285	0.0239	0.0181
2003	0.0253	0.0188	0.0158
	Maximum X-efficiency[c]		
1992–2003	0.38	0.71	0.84
2003	0.26	0.72	0.92

[a] Output is calculated as total balance-sheet assets and the value of off-balance-sheet assets.
[b] The averages over time reflect structural changes in the banking system, such as banks entering or leaving the system, mergers, etc.
[c] Calculated as the minimum average expenses *divided* by the average maximum expenses in groups of each size (AC min/AC max). Thus 1 *minus* this ratio reflects the maximum potential saving in production expenses in a group of any size.
SOURCE: Returns to the Supervisor of Banks and the Bank of Israel Banking Supervision Research Department.

An analysis of X-efficiency (Table 3.17) reveals that the potential for improvement in operating efficiency is greater among the group of small banks, and lower at the group of medium-sized and large banks. The improvement potential indicates that in the group of small banks, the bank with the highest average operating expenditure in 2003 can save up to 74 percent of its expenditure to emulate the most efficient bank in that size group. In the group of medium-sized banks the potential saving amounts to 28 percent, and in the group of large banks, 8 percent.

3. THE CONTRIBUTION OF COMPANIES IN WHICH THE BANKS HAVE A HOLDING

a. General

The contribution of companies in which the five major banks have a holding to the profits of the banks heading the banking groups was considerable in 2003. The contribution to net income from investments in these companies increased by 41 percent to approximately two billion shekels (Table 3.18). The increase was due mainly to a sharp rise in the contribution from the profit of companies included under an equity basis (generally companies that do not engage in financial activity; hereinafter non-financial companies), which recorded a profit of NIS 388 million in 2003 following a loss of NIS 146 million in 2002.

Table 3.18
Investment and Contribution to Net Income of Companies in which The Five Major Banks Have a Holding, and of the Parent Bank, 2002–2003

	Book value (NIS mill., end-year)			Contribution to net income[a] (NIS mill.)			Composition of investments(%)	Return (%)		Return 1995–2003(%)			
	2002	2003	Rate of change(%)	2002	2003	Year-on-year change(%)	2003	2002	2003	Mean	S.D	Mean/ S.D.[b]	Sharp index[c]
Main unconsolidated subsidiaries													
Commercial banks	2,049	2,825	37.9	107	273	155.1	9.3	5.2	13.3	9.0	2.4	3.8	1.766
Mortgage banks	5,938	5,945	0.1	493	430	–12.8	19.5	9.3	7.2	11.4	2.5	4.5	2.610
Holdings, investments, and others[d]	5,381	6,538	21.5	–4	519	13.0	21.5	–0.1	9.6	5.9	3.4	1.8	0.323
Subsidiaries and financial companies abroad	8,324	8,707	4.6	973	286	–70.6	28.6	13.7	3.4	7.4	7.6	1.0	0.340
Capital market (underwriting and management)	844	816	–3.3	–60	–30	50.0	2.7	–7.7	–3.6	1.8	5.6	0.3	–0.538
Credit cards	753	893	18.6	74	131	77.0	2.9	14.2	17.4	12.9	11.8	1.1	0.682
Leasing	206	212	2.9	8	5	–37.5	0.7	4.0	2.4	4.6	8.3	0.6	–0.023
Total	23,495	25,936	10.4	1,591	1,614	1.4	85.1	7.5	6.9	7.8	2.5	3.1	1.179
Main companies included under an equity method													
Commercial banks[e]	850	746	–12.2	–17	43	352.9	2.4	5.6	5.1	6.3	3.4	1.9	0.434
Nonfinancial and insurance companies[f]	1,473	1,081	–26.6	–60	280	269.2	3.5	–9.6	19.0	7.7	8.8	0.9	0.326
Holdings, investments, and others (including abroad)[g]	804	7.5	–12.3	–69	65	194.2	2.3	–7.2	8.1	2.3	6.2	0.4	–0.415
Total	3,127	2,532	–19.0	–146	388	366.3	8.3	–4.0	12.4	6.2	6.4	1.0	0.213

Table 3.18 (Continued)

	Book value (NIS mill., end-year)			Contribution to net income[a] (NIS mill.)			Composition of investments(%)	Return (%)		Return 1995–2003(%)			
	2002	2003	Rate of change(%)	2002	2003	Year-on-year change(%)	2003	2002	2003	Mean	S.D	Mean/ S.D.[b]	Sharp index[c]
Total main companies in which banks have a holding	26,622	28,468	6.9	1,445	2,002	38.5	93.4	5.8	7.5	7.6	2.1	3.6	1.300
Other companies[h]	3,586	2,001	–44.2	–27	4	114.8	6.6	0.0	0.1	–	–	–	–
Total companies in which banks have a holding	30,208	30,469	0.9	1,418	2,006	41.4	100.0	5.7	6.6	6.6	2.9	2.3	0.620
Parent bank[i]	7,751	11,341	46.3	–591	1,193	301.9	–	4.5	15.4	10.0	6.9	1.4	0.744

[a] Only ordinary and extraordinary income is included in income, while dividends and proceeds from the sale of excess holdings are not.
[b] Mean return *divided by* the standard deviation measures the risk-adjusted return on investment.
[c] Calculated for the period 1995–2003; the risk-free interest rate used to calculate the index was 4.84 percent, obtained as the average yield to maturity on 10-year (*Galil*) indexed government bonds.
[d] 'Holdings, investments, and others' comprises merchant banks, investment finance banks and other holding and financial companies, most of them belonging to Bank Hapoalim.
[e] Holdings of Discount Bank in First International Bank have not been deducted from total investments or from contribution to net income.
[f] The return on investments in these companies is biased downwards because the investment in nonbanking institutions does not require a minimum capital ratio, and hence all the capital invested in them may be used for profitable banking activity, which is not taken into account in this return.
[g] Includes merchant banks and investment finance banks. It also includes the investment of United Mizrahi Bank in Bank Adanim, as it is a company included under an equity method. The net income from this investment in 2001 was NIS 6 million.
[h] Subsidiaries not specified as main in note number 6 of the financial statement.
[i] The investment in the parent bank is derived by deducting investment in subsidiaries, at its balance-sheet value, from total equity, and differs from the definition of equity for the purposes of calculating section 23a in the Banking (Licensing) Law. The contribution to the parent bank's net income is calculated as net ordinary after-tax income, plus extraordinary income, on a bank basis. This constitutes a bank's net ordinary and extraordinary after-tax income *less* its net share in the total income of all its subsidiaries.

SOURCE: Published financial statements.

Investments in the principal consolidated and non-consolidated companies in Israel and abroad totaled NIS 30.5 billion in 2003, similar to the amount recorded in 2002.[35] Implied in the stable balance of the principal investments is a growth in investment (by means of acquisitions) at small local banks (a growth of 40 percent or NIS 0.8 billion), and the expansion of investments in international banking activity (a growth of NIS 0.4 billion). This growth was offset by a decrease in investment in non-financial companies (a trend that became apparent several years ago).

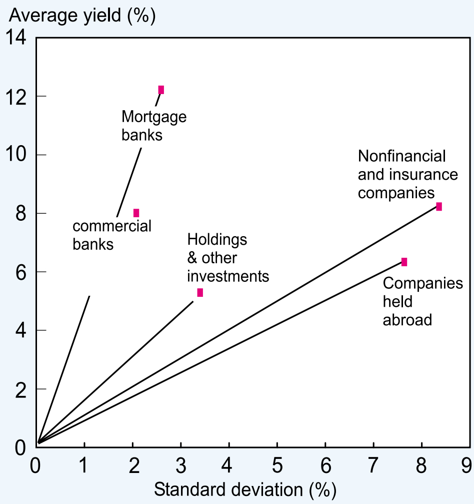
The main local investments are made in commercial banks (usually small banks that specialize in specific sectors), mortgage banks and other specialized banks that provide facilities for long-term commercial activity. The banks have holdings in companies engaged in similar areas of activity or activities that complement banking intermediation activity, for example in financial leasing companies, credit card issuing, clearing and marketing companies, and companies that operate in the capital market. The banks also maintain holdings in companies that are not connected with their financial activity, including non-financial companies. The latter usually include large publicly-traded companies that are mostly classified as holding companies (for example, the Israel Corporation. Migdal Insurance Holdings, and Africa Israel Investments Ltd. and Clal Insurance). In addition, the banks have holdings in companies that operate abroad, mainly local commercial banks and other financial companies. The range of holdings in non-bank financial companies enables the large banks to engage in universal banking, which encompasses the majority of financial activities, and thereby exploit economies of scale. Alongside financial intermediation activity, via consolidated and non-consolidated companies the banks are able to engage in capital market activity, brokerage, securities custody, portfolio management, mutual fund management, underwriting and investment banking.

Overseas offices provide additional activity diversification and sources of profit for the banks.

During recent years the banks have expanded their activity at overseas offices, principally in the area of private banking, through the branches of the local banks. At the same time, overseas consolidated and non-consolidated companies have expanded their activity in the area of private banking by means of new subsidiaries (which were established for this purpose) and existing companies. This activity enables the banks to

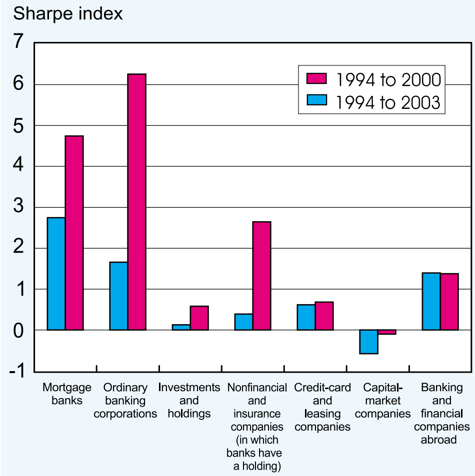
[35] The analysis in this section is centered on the holdings in the principal consolidated and non-consolidated companies of the five largest banks alone. The data for the following items are taken from financial statements to the public and the notes thereto that detail the banks' principal holdings. The value of the investment and the return derived from it is calculated on the basis of these reports, without reference to the market value of companies that are publicly-traded on the Tel Aviv Stock Exchange. Accordingly, part of the returns that are calculated and the indexes that are based on these calculations can be defined as accounting rather than economic returns. The averages, standard deviations and Sharp indexes also take into account the banks' holding in companies that were included in the past (and part of which are no longer-held) in accordance with the investment and the holding ratios by timing.

Figure 3.16
Average Yield vis-à-vis Standard Deviation in Main Companies Held by Banks, 1994–2003



SOURCE: Based on published financial statements.

Figure 3.17
Sharpe Index of Main Kinds of Investment of the Five Major Banks, Based on Yields, 1994–2000 and 1994–2002



SOURCE: Published financial statements.

diversify their sources of profit at times when profit from local activity is declining, as happened in the last two years. (See Figure 3.16, which presents return on equity and the standard deviation from this return and Figure 3.17, which presents the risk-adjusted return on the banks' principal activities, a return that is measured by the Sharp index.)

b. Contribution to profit

As stated, the profit from consolidated and non-consolidated companies totaled approximately two billion shekels in 2003, an increase of 41 percent compared with 2002. The increase was not uniform among the entire range of the banks' investments, and encompassed changes in opposing directions. An increase was recorded in profits deriving from investments in commercial banks (a combination of increased investment in equity, a quantitative change, the price effect and a growth in profit deriving from their activity). Concurrent with this development, a large increase in profits from local holding companies was recorded, mainly due to the buoyant level of the equities market.[36] However, a large decrease was recorded in profits deriving from the activity of banks

[36] Most of the increase is attributed to the Tarshish company (belonging to Bank Hapoalim), which has holdings in marketable investments. Net income rose by NIS 300 million in 2003 because Hapoalim Assets (Shares) recorded an increase of NIS 100 million.

Table 3.19

Investment in Companies in which Banks have a Holding, and their Contribution to Net Income,[a] the Five Major Banks, 2003

	Bank Leumi				Bank Hapoalim			
	NIS million		Percent		NIS million		Percent	
	Book value of investment at beginning of year	Contribution to net income	Return on investment	Investment/ equity	Book value of investment at beginning of year	Contribution to net income	Return on investment	Investment/ equity
In commercial banks[b]	396	69	17	3	659	99	–4	5
In mortgage banks	1,693	110	6	13	1,516	97	6	12
In nonfinancial, investment, and insurance companies, and others[c]	2,429	216	9	18	5,675	660	12	43
In banking and financial companies abroad	3,399	178	5	26	1,546	70	5	12
Total in main subsidiaries and affiliates	**7,917**	**573**	**7**	**60**	**9,396**	**926**	**10**	**72**
Not in main investments[d]	1,039	9	1	8	2,396	–14	–1	18
In parent bank[e]	4,191	563	13	32	1,273	593	47	10
Balance of equity; total net income[e]	13,147	1,145	9	100	13,065	1,357	10	100
	Discount Bank				**Mizrahi Bank**			
In commercial banks[b]	1,699	129	8	34	-	-	-	-
In mortgage banks	549	18	3	11	1,664	166	10	48
In nonfinancial, investment, and insurance companies, and others[c]	872	78	9	17	318	4	1	9
In banking and financial companies abroad	2,652	–30	–1	52	205	12	6	6
Total in main subsidiaries and affiliates	**3,399**	**178**	**5**	**26**	**2,187**	**182**	**8**	**63**
Not in main investments[d]	82	11	13	2	5	–2	–40	0
In parent bank[e]	**–790**	**–38**	**5**	**–16**	**1,253**	**155**	**12**	**36**
Balance of equity; total net income[e]	5,064	168	3	100	3,445	335	10	100

Table 3.19 (continued)

	First International				Total			
	NIS million		Percent		NIS million		Percent	
	Book value of investment at beginning of year	Contribution to net income	Return on investment	Investment/ equity	Book value of investment at beginning of year	Contribution to net income	Return on investment	Investment/ equity
In commercial banks[b]	145	19	13	4	2,899	316	11	8
In mortgage banks	516	39	8	16	5,938	430	7	16
In nonfinancial, investment, and insurance companies, and others[c]	167	12	7	5	9,461	970	10	25
In banking and financial companies abroad	522	56	11	16	8,324	286	3	22
Total in main subsidiaries and affiliates	**1,350**	**126**	**9**	**42**	**26,622**	**2,002**	**8**	**70**
Not in main investments[d]	64	–	–	2	3,586	4	0	9
In parent bank[e]	**1,824**	**30**	**2**	**56**	**7,751**	**1,303**	**17**	**20**
Balance of equity; total net income[e]	3,238	156	5	100	37,959	3,161	8	100

[a] Only ordinary and extraordinary income is included in income, while dividends and proceeds from the sale of excess holdings are not.
[b] Holdings of Discount Bank in First International Bank have not been deducted from total investments or from contribution to net income.
[c] Comparing merchant banks, investment finance banks and other holding and financial companies, most of them belonging to Bank Hapoalim.
[d] Subsidiaries not specified as main in note number 6 of the financial statement.
[e] The investment in the parent bank is derived by deducting investment in subsidiaries, at its balance-sheet value, from total equity, and differs from the definition of equity for the purposes of calculating section 23a in the Banking (Licensing) Law. The contribution to the parent bank's net income is calculated as net ordinary after-tax income, plus extraordinary income, on a bank basis. This constitutes a bank's net ordinary and extraordinary after-tax income *less* its net share in the total income of all its subsidiaries.

SOURCE: Published financial statements.

abroad, together with a slight decrease in the contribution of the mortgage banks.[37] The large decrease in the contribution of subsidiaries abroad resulted from exchange rate differentials deriving from the real appreciation of the shekel against the dollar as compared to a real depreciation against all currencies in 2002, concurrent with stability in nominal foreign-currency denominated profit (see below).

The banks' investments in the principal consolidated and non-consolidated companies yielded an average return of 7.5 percent in 2003, more than in recent years, and a rate of return that was almost identical to the multi-year level (Table 3.18). In relative terms, the principal consolidated and non-consolidated companies contributed 63 percent of net income, while their proportion in the five largest banks' shareholders' equity amounted to 75 percent.

Below is a brief review of the development of the shekel contribution of the two main groups of profit centers: the mortgage banks group and the overseas offices group. These centers account for 50 percent of the total investment in consolidated and non-consolidated companies, and their impact on total profit deriving from investments in such companies is considerable.[38]

c. Overseas offices' NIS contribution to profit

Overseas offices' contribution to profit plummeted by 70 percent in 2003.[39] Their contribution totaled NIS 286 million compared with NIS 973 million in 2002. The main reason for the large decrease in contribution to profit was the appreciation in real terms of the shekel against the dollar (Figure 3.18). In addition, a slight decrease was recorded in the nominal net income of subsidiaries operating abroad (see analysis below). Overseas offices' contribution to the parent banks' shekel profit in Israel consists of their nominal net income expressed in NIS terms, and from income or expenditure from exchange rate differentials on the investment. Although the banks conduct hedging operations in respect of investment abroad, which produces income or expenditures, these operations are not presented in the contribution of consolidated and non-consolidated companies, and are charged to the net interest income before loan-loss provision item in the profit and loss statement (of the parent bank).[40] The nominal profitability of overseas offices (excluding the profits of the banks' branches that operate abroad) totaled \$113 million in 2003 compared with \$130 million in 2002 (Figure 3.18).

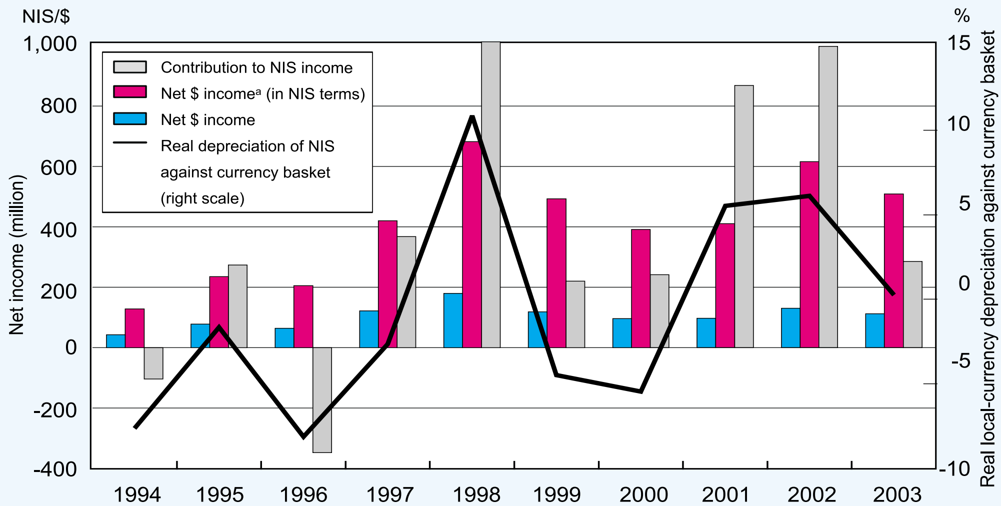
[37] For the first time in a long period, the mortgage banks' contribution to the profits of the five largest banks decreased, by NIS 63 million. Although this profit center is likely to contract in the future, these investments still constitute very stable and important profit centers for the parent banks. For details, see Section 5.

[38] In 2003 these investments yielded NIS 714 million out of NIS 2,000 million, 36 percent, compared with NIS 1,466 million in 2002, when this ratio amounted to 103 percent.

[39] This profit is after conversions and adjustments to shekels, excluding income or expenditure in respect of the hedging of the banks' investments abroad (even when the banks did undertake such hedging) against exposure to exchange rate fluctuations.

[40] For more details, see the management review in Bank Discount's financial report for 2003 (page 58).

Figure 3.18
Net Income of Overseas Subsidiaries, and their Contribution to Groups' NIS Income, 1994–2003



[a] Net dollar income in NIS terms is obtained by *multiplying* net dollar income by the NIS/$ exchange rate (annual average).

SOURCE: Published financial reports and returns to Supervisor of Banks.

In 2003 this investment category constituted the largest investment relative to the banks' shareholders' equity (NIS 8.7 billion or 29 percent of total investments as of December 31, 2003). The level of investment in this category increased by NIS 0.4 billion in net terms (disregarding the appreciation of the shekel, which reduces the size of the investment). A subsidiary of Bank Hapoalim, Signature Bank, was successfully floated in the first quarter of 2003, and this company's shares are currently traded on the NASDAQ. Signature Bank is the first Israeli-owned bank to issue shares to the public in the US.

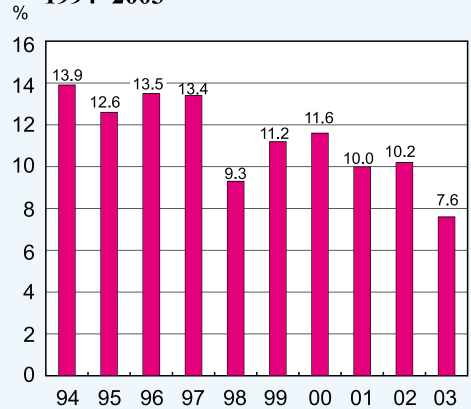
4. THE MORTGAGE BANKS' CONTRIBUTION

For the first time in a long period, the mortgage banks' contribution to net income decreased in 2003, and amounted to NIS 430 million compared with NIS 493 million in 2002. The return on equity in the mortgage bank industry in 2003 was the lowest for the last decade. The ROE amounted to 7.6 percent in 2003 compared with a long-term average of 11.7 percent. However, this was still a relatively high ROE (Figure 3.19).

The decrease in the mortgage banks' profits in 2003 resulted from a number of factors: (1) A large drop in the mortgage banks' activity (net new loans *less* loan repayments decreased by 20 percent in comparison with previous years).

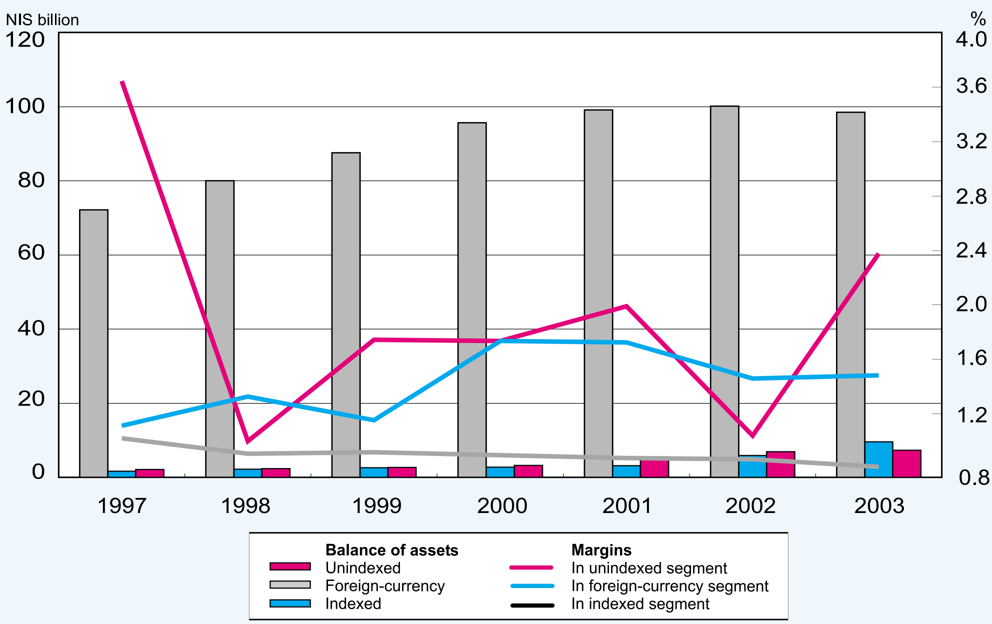
(2) The persistence of credit risk among households (a large increase in the low-loss provision, which rose from NIS 290 million in 2002 to NIS 447 million in 2003).
(3) A gradual decrease (which began several years ago) in income from the management of Treasury funds (a decrease of NIS 336 million in 2000 to NIS 300 million in 2003).
(4) Growing competition with the insurance companies for apartment insurance and life insurance transactions, which, albeit slowly, is reducing the mortgage banks' segment of the insurance market in this respect.[41] The decrease in non-interest income was partly offset by a

Figure 3.19
Return on Equity in Mortgage Banks, 1994–2003



SOURCE: Published financial statements.

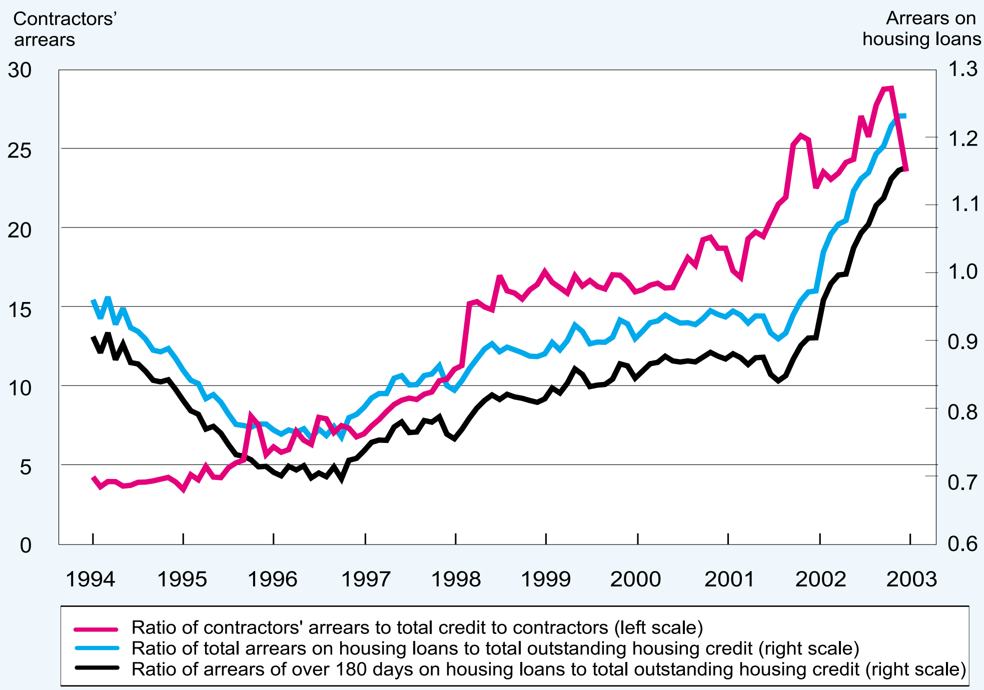
Figure 3.20
Balance of Mortgage Banks' Assets and Margins, 1997–2003



SOURCE: Returns to Supervisor of Banks.

[41] We do not have access to data on the proportion of customers who take out life insurance on their property via the mortgage banks. However, a rough and indirect estimate can be derived from the ratio of total commissions from insurance transactions divided by outstanding credit to the public at the mortgage banks. This ratio (in percent) amounted to 0.2 in 2003 compared with 0.3 in 2000.

Figure 3.21
Ratio of Arrears on Housing Loans to Outstanding Housing Credit, and Contractors' Arrears on Credit Repayment, 1994–2003 (percent)



SOUIRCE: Returns to the Supervisor of Banks.

large growth in net cut interest income before a loan-loss provision. Financing profit increased due to the redirection of activity to indexation segments that are not CPI-indexed and to the foreign currency segment. The move to these segments began in previous years, and accelerated considerably in 2003. The advantages of activity in these segments were greater margins and a more flexible supply of sources (Figure 3.20 and Table 3.20).[42]

Unlike in previous years, the mortgage banks also marketed credit in these segments to new customers and to customers repaying old loans from the CPI-indexed segment, principally floating-rate loans. As a result, financial income-yielding CPI-indexed assets decreased by one and a half billion shekels on average, compared with an increase of four billion shekels in the other segments (Table 3.20).

The risk exposure inherent in the mortgage banks' business environment has increased due to the continued recession in the economy, and to the slump in the construction and

[42] The growth in the supply of sources in the unindexed segment is attributed to the large decline in the inflation environment, as well as to the surplus of unindexed shekels sources in the banking system. In the foreign currency segment, it can be assumed that foreign-currency denominated interest rates provide a single bank with a completely flexible supply of sources.

Table 3.20

Interest Margins in the Mortgage Banks, 1997–2003

(cumulative end-period data, NIS million, December 2003 prices)

	1997	1998	1999	2000	2001	2002	2003
CPI-indexed segment							
Average assets balance	72,163	79,967	87,552	95,624	99,126	100,141	98,473
Interest income	4,980	3,878	4,844	5,611	5,887	5,898	5,734
Income ratio (*percent*)	6.90	5.85	5.53	5.87	5.94	5.89	5.82
Expenditure on sources	4,119	3,106	3,984	4,697	4,954	4,963	4,869
Average margin per unit of credit (*percent*)	1.08	0.97	0.98	0.96	0.94	0.93	0.88
Foreign-currency segment							
Average balance of assets	1,624	2,238	2,623	2,782	3,139	5,895	9,563
Net income	20.9	30.9	31.8	49.5	55.7	88.8	146.4
Average margin per unit of credit (*percent*)	1.17	1.38	1.21	1.78	1.77	1.51	1.53
Unindexed segment							
Balance	2,151	2,348	2,649	3,201	5,495	6,946	7,319
Net income	81.2	23.4	44.6	53.6	111.8	76.0	176.4
Average margin per unit of credit *(percent)*	3.65	1.06	1.79	1.78	2.03	1.10	2.41

SOURCE: Returns to Supervisor of Banks.

Table 3.21
Mortgage Banks' Assets and Liabilities, 2000–2003

	End-year balances				Real year-on-year change (%)			Distribution of balances in balance sheet (%)		
	2000	2001	2002	2003	2001	2002	2003	2001	2002	2003
	(NIS million, at December 2003 prices)									
Cash and deposits in banks	603	1,578	683	923	161.7	–56.7	35.1	1.4	0.6	0.8
Loans to government	20	4	4	2	–80.5	0.0	–48.8	0.0	0.0	0.0
Nondirected loans (to home-buyers)	87,376	91,591	95,975	97,269	4.8	4.8	1.3	81.6	82.9	83.0
Loans to constructors and construction companies	3,609	3,829	3,450	3,385	6.1	–9.9	–1.9	3.4	3.0	2.9
Other loans and assets	15,116	15,307	15,645	15,660	1.3	2.2	0.1	13.6	13.5	13.4
Total assets	**106,723**	**112,309**	**115,757**	**117,239**	**5.2**	**3.1**	**1.3**	**100**	**100**	**100.0**
Deposits of the public	48,518	48,779	49,033	59,565	0.5	0.5	–1.0	43.4	42.4	41.4
Deposits of banks	46,061	51,263	53,835	55,821	11.3	5.0	3.7	45.6	46.5	47.6
Government deposits	1,945	1,605	1,701	1,708	–17.5	6.0	0.4	1.4	1.5	1.5
Other liabilities	4,490	4,532	4,436	4,257	0.9	–2.1	–4.0	4.0	3.8	3.6
Total liabilities	**101,013**	**106,179**	**109,005**	**110,351**	**5.1**	**2.7**	**1.2**	**94.5**	**94.2**	**94.1**
Equity	**5,710**	**6,130**	**6,752**	**6,889**	**7.4**	**10.1**	**2.0**	**5.5**	**5.8**	**5.9**
Total liabilities and equity	**106,723**	**112,309**	**115,757**	**119,329**	**5.2**	**3.1**	**1.4**	**100.0**	**100.0**	**100.0**
Balance of directed credit	**44,215**	**43,864**	**43,580**	**43,597**	**–0.8**	**–0.6**	**0.0**	**39.1**	**39.1**	**37.6**
Directed mortgages	80,739	89,056	93,352	97,820	4.8	4.8				

SOURCE: Returns to Supervisor of Banks.

Table 3.22
Characteristics of the Construction Industry, 1997–2003

	1997	1998	1999	2000	2001	2002	2003	Real change (%) 2003
Total area under construction (*mill. sq. m.*)	19.2	17.5	16.6	16.8	15.2	14.5	13.1	–9.8
of which Residential	13.0	12.1	11.5	11.9	10.9	10.1	9.5	–6.1
Housing units under construction	93,711	86,291	75,979	77,517	69,729	63,016	58,810	–6.7
of which Government-initiated	34,627	27,348	20,279	24,276	22,584	19,752	18,193	–7.9
Building starts: housing units	53,779	44,384	38,318	45,809	31,796	32,426	29,672	–8.5
Total completions	67,676	53,849	46,287	43,578	39,257	38,644	33,498	–13.3
of which Government-initiated	22,326	17,648	16,649	10,585	8,938	10,399	8,572	–17.6
Sales of new units	–	14,537	14,302	13,999	14,535	14,483	10,383	–28.3
Sale of land for construction[a]	41,370	31,390	33,544	24,537	14,083	14,375	15,205	5.8
Total cement sales (*mill. tons*)	5.519	5.087	4.841	1.502	4.382	4.379	3.931	–10.2
Construction investment/GDP (%)	13.9	12.6	11.0	9.6	9.1	8.7	8.4	–4.0
Construction employment/ total employment (%)	11.3	10.8	10.0	9.4	8.7	8.1	7.9	–2.7
Change in adjusted housing index[b] (%)	0.19	–0.74	–3.16	–2.90	4.14	1.50	–5.20	–
No. of real-estate transactions	96,643	88,674	101,452	95,676	95,898	91,962	93,655	–9.0
Transactions by eligible persons/total transactions (%)	47	47	40	40	38	35	36	3.1
Housing loans taken								
Total by eligible persons	45,578	41,062	40,241	38,518	36,527	32,111	30,118	–6.2
of which New immigrants	14,802	9,987	9,772	9,004	8,126	6,757	6,028	–10.8
Young couples	25,455	26,101	23,619	21,937	21,549	20,093	20,031	–0.3
Total no. of new immigrants	66,221	56,726	76,766	60,192	43,580	33,565	20,521	–38.9

[a] In terms of housing units. The data refer to land for construction sold by the Ministry of Construction and Housing and the Israel Lands Administration at public auctions and in other frameworks authorized by the Israel Lands Administration.
[b] Change in housing price index deflated by CPI. As of January 1999 the price index of owner-occupied housing is calculated by a new method, the owner-occupied housing services index, based on the opportunity cost of rent.
SOURCE: Ministry of Construction and Housing, *Monthly Information*, January 2003.

Table 3.23
Main Items in the Profit and Loss Statement and Financial Ratios of the Mortgage Banks, 1999–2003

	Cumulative results to end December *(NIS million, at December 2003 prices)*[a]					Real change (%)		
	1999	2000	2001	2002	2003	2001	2002	2003
Net interest income before loan-loss provision	1,151	1,211	1,276	1,312	1,415	5.3	2.9	7.8
Loan-loss provision	229	207	305	301	461	47.5	–1.3	53.2
Total non-interest income	927	938	929	922	864	–0.9	–0.8	–6.2
of which Fee income	891	907	904	901	838	–0.3	–0.3	–7.0
Total operating expenses	849	839	837	817	865	–0.3	–2.4	5.9
of which Salaries and related expenses	467	457	454	442	484	–0.8	–2.5	9.5
Ordinary before-tax income	1,000	1,103	1,063	1,116	953	–3.6	5.0	–14.7
Provision for taxes	450	493	505	494	439	2.4	–2.1	–11.2
Net income	**546**	**606**	**556**	**621**	**511**	**–8.7**	**11.7**	**–17.7**
ROE[a]	11.2	11.6	10.0	7.6	–	–	–	–
Risk weighted capital ratio[b]	10.6	10.1	10.1	10.4	10.2	–	–	–
Ratio of authorized Tier 2 capital to Tier 1 capital[c]	42.2	37.6	37.8	33.2	30.9	–	–	–

[a] The ratio of net income to equity at the beginning of the year plus new issues according to time of issue.
[b] Reclassified and recalculated.
[c] Maximum 50 percent.
SOURCE: Published financial statements.

real-estate market that has prevailed for several years now (Table 3.22). These developments are reflected by the growing phenomenon of arrears in housing loan repayments (Figure 3.21 and Figure 3.22). The proportion to outstanding credit of repayment arrears by home-buyers and contractors rose in 2003, leading to a large increase in current expenditure on loan-loss provisions in respect of them (Table 3.23 and Table 3.24). The downtrend in commissions on the extension of directed credit, concurrent with the fall in the banks' income from insurance fees, adversely affected the banks' profitability and reduced the banking groups' returns on investment from this profit center. The expectation that these trends will continue in the future may be a factor prompting the large banks to merge mortgage activity with their commercial activity (Bank Mishkan was merged within Bank Hapoalim in 2003, while Bank Leumi and Bank Mizrahi recently completed purchase offers for minority interest). The parent banks (Leumi and Mizrahi) currently hold 100 percent of the issued capital of Leumi Mortgage Bank and Bank

Table 3.24
Arrears on Housing Loans[a] and Related Loan-Loss Provision, by Depth of Arrears, 1995–2003

(NIS million, at December 2003 prices)

	3–6 months	6–15 months	15–33 months	Over 33 months	**Total**
			2000		
Amount in arrears	45	84	103	362	594
Outstanding loan-loss provision, by arrears	–	130	244	292	667
Outstanding loans in arrears *less* provision for loan-loss and interest	1,014	825	295	122	2,255
Average amount in arrears	202	884	2,465	13,044	16,594
Average amount of loan	4,561	8,659	7,082	4,389	24,691
Weights	0.01	0.05	0.15	0.79	1.00
Average arrears on loan in arrears (months)					27.94
Average arrears on outstanding loan (months)					10.95
			2001		
Amount in arrears	50	95	111	388	643
Outstanding loan-loss provision, by arrears	–	150	278	344	772
Outstanding loans in arrears *less* provision for loan-loss and interest	1,112	884	320	145	2,642
Average amount in arrears	224	994	2,668	13,959	17,845
Average amount of loan	5,004	9,285	7,691	5,225	27,205
Weights	0.01	0.06	0.15	0.78	1.00
Average arrears on loan in arrears (months)					27.278
Average arrears on outstanding loan (months)					11.05
			2002		
Amount in arrears	56	110	148	413	726
Outstanding loan-loss provision, by arrears	–	174	350	399	922
Outstanding loans in arrears *less* provision for loan-loss and interest	1,293	1,023	400	152	2,869
Average amount in arrears	251	1,154	3,5551	14,860	19,816
Average amount of loan	5,819	10,745	9,593	5,489	31,646
Weights	0.01	0.06	0.18	0.75	1.00
Average arrears on loan in arrears (months)					27,278
Average arrears on outstanding loan (months)					11.03
			2003		
Amount in arrears	61	136	181	488	865
Outstanding loan-loss provision, by arrears	–	209	432	509	1,150
Outstanding loans in arrears *less* provision for loan-loss and interest	1,388	1,296	500	196	3,380
Average amount in arrears	274	1,424	4,337	17,575	23,610
Average amount of loan	6,247	13,603	12,005	7,056	38,911
Weights	0.01	0.06	0.18	0.74	1.00
Average arrears on loan in arrears (months)					27.282
Average arrears on outstanding loan (months)					11.51

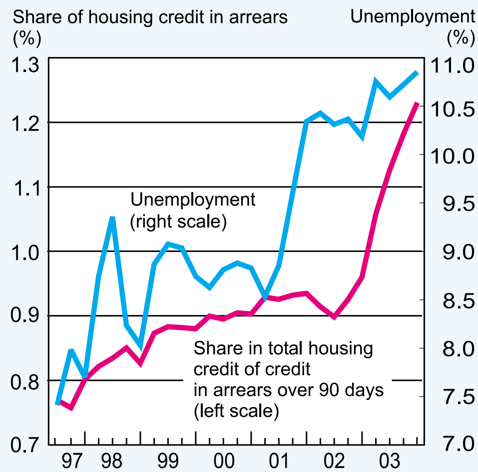
Table 3.24 (continued)

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Borrowers' cumulative outstanding arrears at bank's responsibility	471	570	520	589	697	789	856	934	1,198
of which More than 180 days in arrears	446	526	478	538	645	738	799	868	1,124
Total arrears *divided by* total outstanding credit (%)	1.47	1.46	1.32	1.42	1.58	1.61	1.77	1.83	2.10
of which To home-buyers	0.77	0.74	0.80	0.83	0.88	0.90	0.93	0.97	1.23
To constructors and construction companies	3.44	6.43	6.95	11.04	17.20	15.93	18.69	22.49	23.54
Other	4.14	3.71	2.32	2.16	2.21	2.35	2.60	2.58	2.91
Total arrears as share of capital, at end of period[a]	22.2	23.7	22.2	24.9	29.0	29.6	31.7	30.8	35.08

[a] Not including arrears in directed credit.
SOURCE: Published financial statements.

Tefahot respectively.[43] We believe that these mergers between mortgage banks and commercial banks will lead to a saving in operating expenses due to the amalgamation of the mortgage banks' administrative units with those of the commercial banks. Mergers of this type are expected to create economies of scale and diversification for the banks, and to increase the merging banks' market segment in the retail segment.

Figure 3.22
Share of Arrears of more than 90 days in Housing Credit vis-à-vis the Unemployment Rate, June 1997–December 2003 (percent)



SOURCE: Returns to the Supervisor of Banks.

5. OVERSEAS OFFICES

a. Activity and profitability

The assets of overseas offices (subsidiaries, branches and agencies) totaled $31.0 billion at the end of 2003, an increase of 5.2 percent compared with 2002 (Table 3.25). Overseas offices' assets account for 17.2 percent of the assets of the five largest banking groups. The offices' activity is conducted mainly in the US (73

[43] In the case of Bank Tefahot and Bank Mizrahi, on 8.8.04 the boards of directors of both banks approved the merger that was announced in the purchase offer of June 2004. The merger is conditional on approval from the Governor of the Bank of Israel.

Table 3.25
Assets and Liabilities of the Overseas Offices,[a] 2002–2003

($ million)

	US					Western Europe					Total overseas offices[b]				
				Change (%)					Change (%)					Change (%)	
	2001	2002	2003	2002	2003	2001	2002	2003	2002	2003	2001	2002	2003	2002	2003
Credit to the public	7,063	7,163	7,426	1.4	3.7	3,115	3,532	4,353	13.4	23.2	10,313	10,788	11,874	4.6	10.1
Cash and bank deposits	4,025	4,431	4,806	10.1	8.5	1,694	1,947	1,746	14.9	–10.3	5,788	6,405	6,586	10.7	2.8
Of which: in related bank	1,209	1,935	1,762	60.0	–8.9	565	1,017	798	80.2	–21.5	1,826	2,968	2,583	62.6	–13.0
Securities	7,563	9,056	9,547	19.7	5.4	2,118	2,325	1,996	9.8	–14.2	9,684	11,384	11,545	17.5	1.4
Total Assets	**19,134**	**21,241**	**22,501**	**11.0**	**5.9**	**7,168**	**8,057**	**8,329**	**12.4**	**3.4**	**26,516**	**29,425**	**30,967**	**11.0**	**5.2**
Deposits from the public	13,997	15,828	16,018	13.1	1.2	3,672	3,777	4,160	2.8	10.2	17,832	19,697	20,275	10.5	2.9
Deposits from banks	2,340	1,771	2,151	–24.3	21.5	2,284	2,834	2,490	24.1	–12.2	4,663	4,629	4,669	–0.7	0.9
Of which: from related banks	1,714	1,410	1,566	–17.7	11.1	1,510	2,039	1,491	35.0	–26.9	3,260	3,473	3,080	6.5	–11.3
Total liabilities	**18,131**	**20,147**	**21,400**	**11.1**	**6.2**	**6,635**	**7,376**	**7,551**	**11.2**	**2.4**	**24,971**	**27,643**	**29,079**	**10.7**	**5.2**
Equity	1,003	1,094	1,101	9.1	0.6	533	681	778	27.7	14.3	1,545	1,782	1,888	15.3	5.9
Off-balance-sheet credit risk[c]	6,022	5,723	6,299	–5.0	10.1	1,272	1,408	1,681	10.7	19.4	7,314	7,141	7,992	–2.4	11.9
Activity in derivatives[d]	8,425	9,911	9,308	17.6	–6.1	6,896	7,913	8,734	14.7	10.4	15,324	17,825	18,043	16.3	1.2

[a] Selected items.
[b] Including additional offices not included under the US (including The Cayman Islands) or Europe, and mainly overseas offices in South America.
[c] Before applying the conversion and inveighting coefficients.
[d] Nominal value.
SOURCE: Returns to Supervisor of Banks.

percent of the offices' activity), in the UK and Switzerland. While activity in the US and Switzerland expanded (the rate of growth in total assets reached 5.9 percent in the US in dollar terms and 9.5 percent in Switzerland in Swiss franc terms), activity at offices in the UK decreased by 13.5 percent (in pound sterling terms). The profitability of Israeli subsidiaries abroad, which is measured in terms of return on equity (ROE), fell by 6.3 percent in 2003 compared with 8.4 percent in 2002 (Table 3.30). The profitability of the Israeli banks' branches abroad, which is measured in terms of return on assets (ROA), rose from 0.37 percent in 2002 to 0.54 percent in 2003.

i. Activity and profitability in the US

a. The assets of banking offices in the US (which mainly include the three Israeli subsidiaries mentioned in **Section b** below and a branch of Bank Hapoalim) totaled $22.5 billion at the end of 2003, an increase of 5.9 percent compared with 2002 (Table 3.25). The banking offices in the US engage in businesses that have a wholesale orientation, and part of them provide financial services (investment services and private and international banking) to relatively affluent populations. This activity is reflected by a relatively high proportion of investments in bonds (debentures) (42 percent of total assets at the end of 2003), and a relatively low proportion of credit to the public (approximately a third of total assets at the end of 2003).

Due to the recession prevailing in the American economy in recent years, the banking offices adopted a more selective and cautious credit policy. As a result, total credit to the public rose by only 3.7 percent and concurrently, the banking offices increased their investment in US Treasury notes and in the issues of mortgage bonds backed by Federal bodies (FNMA and FHLMC), which are credit-risk free assets. The nostro portfolio of banking offices in the US expanded by a further half a billion dollars in 2003, an increase of 5.4 percent compared with 2002. Banking offices in the US elected to finance the growth in activity (credit and securities) mainly by means of deposits from banks and REPOs. Deposits of banks rose by 21.5 percent compared with 2002, while deposits of the public increased by only 1.2 percent.

The credit risk exposure of Israeli banking offices in the US in off-balance-sheet activity (which includes LCs and various types of guarantees, liabilities for the extension of credit, and credit derivatives) is relatively high and amounted to $6.3 billion or 85 percent of the total balance-sheet credit of those offices in the US. This activity is continuing to expand and the exposure to it increased by 10.1 percent in 2003.

b. The three largest banking groups operate subsidiaries in the US, which are located in New York (IDB New York, Bank Leumi U.S.A. and Signature Bank). Signature Bank, which is owned by Bank Hapoalim was established in 2001 and already began to make profits in 2003. On March 22, 2004, Signature Bank issued shares to the public on the NASDAQ, to an amount equivalent of 21.3 percent of the bank's share capital after the issue.

c. The net income of the above subsidiaries in the US totaled $77.5 million in 2003 compared with $72.6 million in 2002, an increase of 6.7 percent. ROE of these subsidiaries amounted to 7.1%, similar to that in 2002 (Table 3.30 and Table 3.31). ROA of the subsidiaries reached 0.51 percent in 2003, slightly less than the 0.56 percent recorded in 2002. Notwithstanding the profit and loss components of these subsidiaries that exhibit a decrease in net interest income before loan-loss provision, the growth in net income was derived from a decrease in tax expenses. Net interest income before loan-loss provision fell by 3.8 percent, due *inter alia* to a decrease in the interest rate margin on credit at these subsidiaries in the US (which is calculated as the difference between the rate of income in respect of credit to the public and the rate of expenditure in respect of deposits of the public) from 3.42 percent to 3.03 percent. Income from operating commissions rose by 17.6 percent, but this effect was partly offset by an increase in operating expenses. Concurrent with the increase in loan-loss provisions, these developments led to a 15.3 percent decrease in before-tax ordinary income. As a result, the growth in net income resulted as stated from a decrease in tax disbursements—the effective tax rate fell considerably at the subsidiaries, from 34.7 percent in 2002 to 17.8 percent in 2003, a decrease that was apparent mainly at IDB New York due to nonrecurring items.

d. A comparison of the performance of the Israeli banking subsidiaries in New York with a peer group shows that the ROE of the peer group was lower—5.6 percent compared with 7.1 percent for the Israeli subsidiaries in New York (Table 3.31).[44] The peer group's lower ROE partly derived from the effective tax rate, which was lower at the subsidiaries (31.7 percent) in 2003 compared with a high rate of 57.2 percent at the banks in the peer group. The difference also derived from the larger capital surpluses of the banks in the peer group. The ratio of the Israeli subsidiaries' weighted capital to risk assets amounted to 14.3 percent compared with 17.6 percent for the banks in the peer group, and the ratio of equity to total assets amounted to 7.0 percent at the subsidiaries compared with 12.2 percent at the banks in the peer group. This phenomenon had the effect of reducing the ROE of the banks in the peer group as compared to that of the subsidiaries. However, it should be noted that the ratio of weighted capital to risk assets at the subsidiaries is still considerably higher than the minimum required by the supervisory authorities in the US.

The banks in the peer group differ from the Israeli banks in their range of activities, and engage in financial services that are commission oriented and in retail activity. This is reflected in their higher non-interest interest income and net interest margins, although their operating expenses are also higher, a fact that reduces the profitability differential between the two groups. In addition, part of the efficiency indexes (the income efficiency ratio and total assets per employee post) reveal higher operating efficiency at the Israeli subsidiaries than at the banks in the peer groups. This can be attributed to the fact that

[44] The peer group includes a group of nine commercial banks, whose total assets range between $1-10 billion and that operate in the greater New York City area. Since the data on the peer group are FDIC data, the data on the Israeli subsidiaries in this sub-section derive from the FDIC, which operates in accordance with US reporting regulations that differ from the offices' reporting regulations as imposed by the Banking Supervision Department in Israel.

Table 3.26
Assets and Liabilities of the Main Overseas Offices in Western Europe,[a] 2002–2003

(in original currencies)

	UK (£ million)			Switzerland (SFr million)		
	2002	2003	Change (%)	2002	2003	Change (%)
Credit to the public	1,363	1,358	–0.4	1,585	2,101	35.6
Cash and bank deposits	390	387	–0.8	884	754	–14.7
Securities	1,082	672	–37.9	619	669	8.1
Total assets	**2,889**	**2,498**	**–13.5**	**3,307**	**3,622**	**9.5**
Deposits of the public	1,175	1,152	–2.0	1,702	1,883	10.6
Deposits from banks	1,239	830	–33.0	768	903	17.6
Total liabilities	**2,748**	**2,357**	**–14.2**	**2,762**	**3,049**	**10.4**
Equity	**141**	**144**	**2.1**	**545**	**573**	**5.1**
Off-balance-sheet credit risk[b]	567	613	8.1	425	595	40.0
Activity in derivatives[c]	2,861	3,261	14.0	4,541	3,543	–22.0

[a] Selected items.
[b] Before applying the conversion and weighting coefficients.
[c] Nominal value.
SOURCE: Returns to Supervisor of Banks.

their activity is oriented towards wholesale banking and securities activity, activities that require a relatively smaller amount of labor inputs.

ii. Activity and profitability in the UK

a. The Israeli banking offices in the UK operate in the corporate-wholesale area. A third of the offices are branches. The assets of the UK offices totaled £2,498 million at the end of 2003, 13.5 percent less in pound sterling terms than at the end of 2002, due to a large 38 percent pound sterling decrease in their securities investments (Table 3.26). The decrease derived from transactions in the securities portfolio at certain branches in the UK were attributed to certain engagements that were performed outside these branches' normal course of business. As a result, the proportion of the securities portfolio to total assets fell from 37.5 percent at the end of 2002 to 27 percent at the end of 2003. Credit to the public also contracted, although by a moderate 0.4 percent, and accounted for 54.5 percent of the total assets of offices in the UK. Deposit raising from banks in the UK fell by 33.0 percent in 2003. Off-balance-sheet credit risk increased by 8.1 percent in 2003, but the relative volume was lower than that of Israeli banking offices in the US (45 percent of total balance-sheet credit compared with 85 percent at the banking offices in the US).

b. The net income of the offices in the UK totaled £16.8 million in 2003 compared with £23.2 million in 2002, a decrease of 27.6 percent (Table 3.28). The profit and loss statement shows an increase in net interest income, which favorably affected net income (the interest margin on credit remained stable in 2003 at 2.33 percent), but was offset by a large rise in the annual expenditure on the loan-loss provision which had the adverse effect of reducing net income considerably.

Table 3.27
Main Items in the Profit and Loss Statements of the Overseas Offices,[a] 2002–2003

($ million)

	US			Western Europe			Total overseas offices[b]		
	2002	2003	Change (%)	2002	2003	Change (%)	2002	2003	Change (%)
Net interest income before loan-loss provision	380.7	367.6	–3.4	122.0	134.9	10.6	507.3	506.1	–0.2
Loan-loss provision	30.4	23.7	–22.0	0.8	18.5	–	32.2	42.7	32.6
Operating fees	51.1	63.7	14.5	60.2	83.3	38.4	113.2	149.0	31.6
Other income	21.8	18.9	–13.5	64.1	11.2	–82.6	86.8	30.9	–64.4
Total non-interest and other income	**75.6**	**83.3**	**10.2**	**131.0**	**114.5**	**–12.6**	**209.4**	**200.7**	**–4.2**
Salaries and related expenses	152.8	159.5	4.4	66.7	84.2	26.3	222.5	247.7	11.3
Other expenses	84.7	67.9	–19.9	73.7	60.9	–17.3	162.0	131.6	–18.8
Total operating and other expenses	**285.2**	**280.3**	**–1.7**	**159.8**	**169.9**	**6.3**	**451.4**	**455.6**	**0.9**
Ordinary before-tax income	140.6	147.0	4.6	92.4	60.9	–34.1	233.1	208.5	–10.6
Provision for taxes	46.6	22.1	–52.6	13.2	18.2	37.9	60.2	40.8	–32.2
Net income	**94.0**	**124.9**	**32.9**	**79.2**	**42.7**	**–46.1**	**172.9**	**167.7**	**–3.0**

[a] Selected items.
[b] Including overseas offices not included in the US (i.e., The Cayman Islands) or Europe, and mainly overseas offices in South America.
SOURCE: Returns to Supervisor of Banks.

Table 3.28
Main Items in the Profit and Loss Statements of the Main Overseas Offices in Western Europe,[a] 2002–2003

(in original currencies)

	UK (£ million)			Switzerland (SFr million)		
	2002	2003	Change (%)	2002	2003	Change (%)
Net interest income before loan-loss provision	49.9	51.6	3.4	44.9	43.7	–2.7
Loan-loss provision	1.1	10.6	863.6	0.01	0.32	–
Operating fees	4.8	5.1	6.8	64.9	82.8	27.7
Other income	0.4	0.2	–41.0	87.3	13.0	–85..2
Total non-interest and other income	**5.8**	**10.3**	**77.6**	**160.0**	**110**	**–31.5**
Salaries and related expenses	14.9	15.5	4.1	48.7	50	2.0
Other expenses	6.5	7.4	13.2	80.6	50.1	–37.9
Total operating and other expenses	**26.1**	**28.1**	**7.7**	**143.3**	**116.0**	**–19.1**
Ordinary before-tax income	28.6	23.1	–19.2	61.5	36.9	–40.0
Provision for taxes	5.3	6.3	18.9	4.3	7.3	69.8
Net income	**23.2**	**16.8**	**–27.6**	**57.2**	**29.6**	**–48.3**

[a] Selected items.

SOURCE: Returns to Supervisor of Banks.

iii. Activity and profitability in Switzerland

a. Activity in Switzerland, which is conducted via subsidiaries, is characterized by financial services recorded off the balance sheet, principally international private banking and trust activities. By their very nature, these activities expose the banks to operational risks, including legal risks, rather than credit risks.

b. The assets of the offices in Switzerland totaled 3,622 million Swiss francs at the end of 2003, an increase of 9.5 percent compared with 2002 (Table 3.26). Credit is granted mostly for financing private banking and for margins collateralizing customers' investments in the securities portfolio that is managed "at discretion" (in trust, at the bank's discretion,) part of which is covered by liquid collateral—deposits and/or securities. Total credit to the public rose by a steep rate of 32.6 percent in Swiss franc terms during 2003, and its proportion to total assets reached 58 percent compared with 48 percent at the end of 2002. This increase reflects *inter alia* the flow of money for the management of assets "at discretion", and off-balance-sheet financial services at the offices in Switzerland. However, balance-sheet credit risk exposure is low at the offices in Switzerland, and accounts for only 28 percent of the credit on the balance sheet.

c. The net income of the subsidiaries in Switzerland totaled 29.6 million Swiss francs in 2003, a decrease to approximately half the net income achieved in 2002 (Table 3.28). The profitability of subsidiaries in Switzerland also fell heavily, to 6.1 percent in 2003 compared with 14.3 percent in 2002. The decrease resulted from nonrecurring income recorded at Bank Leumi Switzerland as stated above, which was mainly charged in 2002. Deducting this nonrecurring item, the profitability of the subsidiaries in Switzerland

Table 3.29
Credit Risks in Overseas Offices, 2002–2003

(percent)

	North America		Western Europe		Total	
	2002	2003	2002	2003	2002	2003
Quantity of credit						
Credit to public/total assets	33.7	33.0	43.8	52.3	36.7	38.3
Quality of credit						
Annual loan-loss provision/total credit	0.4	0.3	0.0	0.4	0.3	0.4
Problem debts/total credit	3.4	5.1	1.8	1.7	2.9	3.9
Charge-offs/total credit	0.4	0.5	0.1	0.3	0.3	0.4
Concentration of credit						
Share of credit to single borrowers ($ 8 mill. or more each)	61.3	59.7	49.6	52.4	57.8	57.2
H-Index of by-industry credit concentration	0.16	0.18	0.15	0.16	0.15	0.16

SOURCE: Returns to Supervisor of Banks.

would actually have been negative in 2002, mainly due to the impact of the misappropriation of funds at Bank Leumi Switzerland.

d. The main contribution to the net income of the subsidiaries in Switzerland in 2003 was derived from a large growth in non-interest income in that year after the deduction of the nonrecurring item in 2002 in Bank Leumi Switzerland. (The data presented in Table 3.28 are not exclusive of this nonrecurring item.) The growth in private banking activity and portfolio management “at discretion” led to a rise in a non-interest income. The financial coverage ratio, which reflects the rate of coverage of operating expenses by financial profit, (net interest income) reached only 0.38 at the Israeli subsidiaries in Switzerland compared with 1.84 at the Israeli banking offices in the UK, reflecting the dominance in the subsidiaries’ operations in private banking and off-balance-sheet activity. This is in a situation where financial activity results are induced from off-balance-sheet activity (the interest margin on credit reached only 0.56 percent compared with 2.33 percent at the offices in the UK).

b. Risks at the overseas offices

The following indices showed an increase in the risk exposure at the Israeli overseas offices:

a. Total problem loans at banking offices in the US increased sharply, by 55.2 percent to $385 million at the end of 2003 (compared with $248 million at the end of 2002), or 5.1 percent of total credit at the responsibility of these offices in the US (compared with 3.4 percent in 2002) (Table 3.29). This increase was not accompanied by a growth in the rate

Table 3.30
Efficiency and Profitability Indices in Overseas Offices, 2002–2003

	US		Western Europe		Total overseas offices	
	2002	2003	2002	2003	2002	2003
			$ million			
Interest-rate spread between credit (balance sheet at risk) and deposits of the public	2.42	1.59	1.6	1.56	2.2	1.51
Net interest margin on total active assets and liabilities (including off-balance-sheet, percent)	1.57	0.89	1.22	1.34	1.48	1.02
Annual wage per employee post (*$'000s*)	87	89	102	129	90	99
Financing coverage ratio[a]	1.33	1.31	0.76	0.79	1.12	1.11
Operating coverage ratio[b]	0.27	0.30	0.82	0.67	0.46	0.44
Efficiency ratio[c]	1.6	1.61	1.58	1.47	1.59	1.55
Percent						
Loan-loss provision/ total net interest income	8.0	6.4	0.7	13.7	6.3	8.4
Return on assets[d] (ROA)	0.44	0.56	0.98	0.51	0.59	0.54
Return on equity[e] (ROE)	7.2	7.1	10.9	5.2	8.4	6.3

[a] Ratio of net interest income before loan-loss provision to total operating and other expenses.
[b] Ratio of non-interest and other income to total operating and other expenses.
[c] Ratio of total non-interest and net interest income to total operating and other expenses.
[d] Net income (incl. imputed tax and extraordinary income) *divided by* assets at beginning of year.
[e] Net income divided by equity at beginning of year (ROA of subsidiaries only).
SOURCE: Returns to Supervisor of Banks.

of loan-loss provision to total credit (which fell from 0.4 percent in 2002 to 0.3 percent in 2003). At Israeli banking offices operating in Western Europe, no major change was recorded in the proportion of problem loans to total credit, although the annual rate of loan-loss provision to total credit at the responsibility of these offices rose from 0 percent in 2002 to 0.4 percent in 2003.

b. The growth in private banking and trust activity at the overseas offices as a whole and in Switzerland in particular is increasing these offices' exposure to operational risks, which in turn is enhancing the need for a more stringent control infrastructure, compliance and technological management in order to mitigate exposure to these risks. In addition, supervisory developments with respect to the prevention of money laundering and terrorism-related financing that occurred in the countries where the Israeli banking offices operate, require stricter supervisory and control mechanisms and the scrutinization of procedures pertaining to these issues at the Israeli banking offices.

Table 3.31
US Subsidiaries of Israeli Banks vis-à-vis Similar US Banks in New York, 2002–2003

	2003				2002			
	IDB New York	Bank Leumi USA	Hapoalim Signature	US peer group[a]	IDB New York	Bank Leumi USA	Hapoalim Signature	US peer group[a]
				($ million)				
Total assets	7,708	5,348	1,933	35,687	7,079	4,814	1,079	33,336
Credit to the public	2,214	2,163	502	18,112	1,845	1,833	297	16,308
Deposit of the public and from banks	4,588	4,072	1,573	22,313	4,385	3,833	890	21,294
Equity	518	373	152	4,352	547	394	92	4,183
				(Percent)				
Credit/assets	28.7	40.4	26.0	50.8	26.1	38.1	27.5	48.9
Securities/assets	59.6	46.7	67.0	27.3	63.4	50.9	60.7	30.4
Deposits (of public and from banks)/assets	59.5	76.1	81.4	62.5	61.9	79.6	82.5	63.9
Equity/assets	6.7	7.0	7.8	12.2	7.7	8.2	8.5	12.5
Annual loan-loss provision/credit	0.4	0.3	0.5	0.1	0.0	0.5	0.8	1.0
Charge-offs/credit	0.4	0.6	0.0	0.4	0.3	0.6	0.0	1.1
Problem credit[b]/total credit	0.2	0.5	1.0	1.0	0.6	1.2	–	2.0
Capital adequacy	13.4	13.9	22.0	17.6	15.1	13.2	20.5	18.3
Average ROE	8.0	8.0	3.4	5.6	10.4	9.2	–12.0	2.4
Average ROA	0.6	0.6	0.3	0.7	0.8	0.8	–1.3	0.3
Net interest spread[c]	1.5	1.9	2.8	2.9	2.3	2.3	3.1	3.2
Efficiency ratio[d]	1.4	1.6	1.1	1.4	1.6	1.8	0.7	1.2
Number of employees	769	450	232	5,195	740	447	204	5,292
Annual wage per employee post ($ ‘000s)	77.5	95.1	91.2	125.7	79.0	88.0	93.0	156.0
Assets per employee ($ million)	10.0	11.9	8.3	6.9	9.6	10.8	5.3	6.3

[a] This group includes the following nine banks in New York insured by the FDIC whose total assets are between $1 billion and $10 billion: Amalgamated Bank, Atlantic Bank of New York, Sterlinng National Bank, Bank of Tokyo Mitsubishi Trust Company, Fiduciary Trust Company, International, Mizuho Corporate Bank (USA), Safra National Bank of New York, United States Trust Company of N.Y, Banco Popular North America. The data are the average of the banks in the group.
[b] Includes credit in arrears and non-performing credit according to the usual definitions used in the US.
[c] Net interest income/average active assets.
[d] Ratio of total non-interest and net interest income to total operating and other expenses.
SOURCE: Data on insured commercial banks published on internet site of the Federal Deposit Insurance Corporation.