Financial System Development in Poland

2004

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Table of contents

Summary 5
Infrastructure 6
Financial institutions 7
Financial markets 8
Introduction 11
1. The financial system in Poland 13
1.1. Evolution of the size and structure of the financial system in Poland 13
1.2. Measures stimulating financial market development in Poland 16
2. Regulations 18
2.1. Introduction 18
2.2. Regulations affecting the entire financial services sector 18
2.3. Regulations regarding the banking services sector 19
2.4. Regulations regarding non-banking financial institutions 21
2.5. Regulations regarding the capital market 25
2.6. Future amendments to EU law 26
3. System infrastructure 29
3.1. Regulatory and supervisory institutions 29
3.2. Payment system 30
3.2.1. Large-value interbank settlements 30
3.2.2. Retail payment systems 31
3.3. Financial instruments market infrastructure 34
3.4. Market participant protection systems 39
3.5. Institutions that improve information transparency 42
4. Financial institutions 44
4.1. Banks 44
4.1.1. Evolution of the banking sector: size and structure 44
4.1.2. Changes in the structure of bank assets and liabilities 48
4.1.3. Changes in the structure of claims and liabilities to non-financial customers 50
4.1.3.1. Claims on non-financial customers 51
4.1.3.2. Liabilities to non-financial customers 62
4.1.4. Banking sector earnings and performance 67
4.1.5. Consolidation and concentration of the commercial banking sector 70
4.1.6. Changes in banks' product offer 73
4.1.7. Prospects 78
4.2. Credit unions 81
4.3. Non-banking institutions providing financial services 83
4.3.1. Leasing 83
4.3.2. Factoring 88
4.3.3. Loan brokers 90
4.3.4. Financial brokers and consultants 91
4.4. Private equity/venture capital sector 92
4.5. Collective investment institutions 97

4.5.1. Investment funds . . . 97
4.5.2. Pension funds . . . 104
4.5.3. Collective investment institutions and financial markets . . . 110
4.6. Insurance companies . . . 111
4.6.1. Size and evolution of the insurance sector . . . 111
4.6.2. Concentration and competition within the sector . . . 116
4.6.3. Sector earnings . . . 117
4.6.4. Investment portfolio structure . . . 118
4.6.5. Product offer . . . 119
4.6.6. Distribution channels . . . 121
4.6.7. Prospects . . . 121
4.7. Brokerage houses and offices . . . 122
4.7.1. Evolution of the size and structure of the sector of brokerage activity . . . 123
4.7.2. Financial results . . . 124
4.7.3. Brokerage services market . . . 124
4.7.4. Prospects . . . 125

5. Financial markets . . . 127
5.1. Money market . . . 127
5.1.1. Evolution of the money market size and structure . . . 127
5.1.2. Marketable short-term debt securities market . . . 127
5.1.2.1. Treasury bills . . . 127
5.1.2.2. NBP bills . . . 133
5.1.2.3. Short-term commercial bank debt securities . . . 138
5.1.2.4. Short-term corporate bonds . . . 140
5.1.3. Deposit transaction market . . . 147
5.1.3.1. Unsecured deposits . . . 148
5.1.3.2. Secured deposits . . . 152
5.2. Capital market . . . 163
5.2.1. Evolution of the capital market: size and structure . . . 163
5.2.2. Marketable long-term debt securities market . . . 163
5.2.2.1. Treasury bonds . . . 163
5.2.2.2. Corporate bonds . . . 177
5.2.2.3. Municipal bonds . . . 182
5.2.2.4. Long-term commercial bank debt securities . . . 185
5.2.2.5. Mortgage bonds . . . 188
5.2.2.6. NBP bonds . . . 191
5.2.3. Marketable equities market – stocks . . . 191
5.3. Spot FX market . . . 200
5.4. Derivatives market . . . 208
5.4.1. Evolution of the derivatives market: size and structure . . . 208
5.4.2. OTC derivatives . . . 209
5.4.2.1. Interest rate derivatives . . . 210
5.4.2.2. FX derivatives . . . 219
5.4.3. Stock exchange derivatives . . . 228
5.4.3.1. Interest rate derivatives . . . 229
5.4.3.2. FX derivatives . . . 231
5.4.3.3. Stock index and stock derivatives . . . 233

Trends and development prospects of the Polish financial system . . . 241
Abbreviations used in this report . . . **243**

Summary

In 2004, the economic importance of the financial sector continued to increase. The size of this sector measured as the ratio of financial institution assets to GDP reached 82.1%, which was an increase of 3.6 percentage points on the previous year. The assets of all financial institution types grew. The assets of brokerage houses and open pension funds rose most rapidly, but the banking sector, whose share in financial system assets amounted to 74.1% (a decrease of 2.3 percentage points compared to 2003), remained the largest sector. The downward trend in its share continued, however. The increase in the amount of assets at the disposal of non-banking financial institutions opens the way for a rise in demand for financial instruments and the further development of financial markets in Poland.

Assets of financial institutions in Poland (PLN billion)

	Amount			Growth (%)		
	2002	2003	2004	2002	2003	2004
Commercial and cooperative banks	466.5	489.0	538.0	99.3	104.8	110.0
Credit unions	2.5	3.4	4.2	138.9	136.0	123.5
Insurance companies	57.5	65.7	77.5	119.8	114.3	118.0
Investment funds	22.8	33.2	37.7	188.4	145.6	113.6
Open pension funds	31.6	44.8	62.6	162.9	141.8	139.7
Brokerage firms	2.8	3.7	5.5	96.6	132.1	148.6
Total	583.7	639.8	725.5	105.4	109.6	113.4

Sources: NBP, Insurance and Pension Funds Supervisory Commission, Polish Securities and Exchange Commission.

The shape and way of functioning of the Polish financial system will increasingly evolve under the impact of processes related to the creation of a single European financial system. Even before Poland's accession to the EU, a significant part of regulations were adjusted to Community requirements; only a remaining small part of provisions adjusting Polish regulations to the *acquis communautaire* came into force on Poland's accession. The introduction of the single European passport principle is the change whose potential impact on the Polish financial system will be the largest. Its effects can be observed in two respects.

First, it became possible for foreign companies to operate in Poland as branches or through cross-border activity (i.e. without being present in Poland in the legal and organisational sense) upon just a notification to Polish supervisory bodies. In 2004, Polish supervisory authorities received notifications regarding the intent to conduct business on the territory of Poland from 61 credit institutions (of which 50 credit institutions additionally notified their intention to provide investment services), 174 insurance companies (of which 145 are in the field of non-life insurance), 5 investment funds and 90 investment firms. In most cases the companies did not commence cross-border operations on the Polish market despite having undergone the notification procedure. In 2004, two new credit institution branches and three new foreign insurance company branches opened.

Second, companies that wish to raise funds on regulated markets in Poland may do so without the need to undergo the Polish Securities and Exchange Commission admittance procedure, provided that they have been admitted to trading on another European stock exchange. In 2004, only one company was admitted to WSE trading on the basis of the single European passport.

Poland's accession to the EU and the related adoption of new regulations have also facilitated changes in the legal status of foreign financial firms which had already been operating on the Polish market. The transformation of subsidiaries into branches may increase the competitiveness of such

firms, since the capital bases of parent institutions are many times higher than those of the hitherto existing subaidiaries operating in Poland. Among the banks operating in Poland in 2004, two changed their legal status by transforming themselves into credit institution branches. Moreover, three so-called chief branches of foreign insurance companies were transformed into branches.

As a result of these developments, the scope and manner of operation of Polish institutions, which supervise the financial system, are changing and will change further. Supervisory authorities will have to develop much closer contacts with their counterparts in other EU countries. Such measures have been undertaken for several years now. An additional consequence in the case of banks was the abolition of guarantees offered by the Bank Guarantee Fund to the customers of firms which operate as branches (the funds will be guaranteed by appropriate foreign institutions according to the terms in force in the countries where the head offices of parent banks operate).

As a result of Poland's accession to the European Union, competition among the firms which comprise financial market infrastructure (Warsaw Stock Exchange, Central Table of Offers, Warsaw Commodity Exchange, National Depository for Securities) will intensify. The increase in competition will stem from EU measures aiming to establish a single market (e.g. the introduction of the equal conditions of competition principle). Anticipating such trends, domestic firms have taken measures aiming to improve their competitiveness. The WSE has initiated privatisation processes, CeTO has attracted a new, strong industry investor (the MTS Group), and the National Depository for Securities has started work on its long-term development strategy. Moreover, work aiming to enable euro settlements (preparations for the launch of the SORBNET-EURO and EuroELIXIR systems) has started.

Poland's accession to the EU was preceded by the full liberalisation of financial transactions with other countries. Therefore, the only important changes in 2004 were a fundamental change in the turnover structure of the FX market, which meant a surge in the share of the euro in turnover to ca. 70% in the fourth quarter of 2004, and the appearance on the bond market of a group of institutional investors who could not operate on the Polish market before May 1, 2004 due to regulatory restrictions allowing them to invest on EU markets only.

Among other important developments within the Polish financial system in 2004, the following should be listed:

Infrastructure

Payment system. The SYBIR system was decommissioned and a settlement guarantee mechanism was introduced in the ELIXIR system, which enables the system to perform settlement where one or more participants have insufficient funds. In 2004, the introduction of the NRB and IBAN standards was also completed.

WSE. Since May 1, 2004, a new stock exchange market classification has been in force. Moreover, not only brokerage houses and offices, but also other participants (commercial banks, foreign investment firms and other National Depository for Securities participants) were allowed to conclude selected transaction types.

National Depository for Securities. Deposit accounts were opened with European clearing and settlement institutions; dividends were paid out to holders of a foreign issuer's shares for the first time.

MTS-CeTO. CeTO acquired a strategic investor. As a result, the company's name changed and a new market classification was introduced; moreover, an electronic trading platform used by all MTS Group companies was deployed.

Financial institutions

Banks. A significant rise in the share of claims on financial corporations (mainly from abroad) in banks' assets, a significant convergence between the shares of claims on corporates and claims on households in bank assets, an increased role of the retail segment as banks' source of income compared to the role of the corporate sector as well as an increase in loans to households (especially housing loans and credit card lending) were recorded. Credit cards ceased to be instruments targeted at a small group of customers. The share of foreign currency loans to households dropped from 34.1% to 27.7%; as regards loans to corporates, this share fell from 33.9% to 25% (the changes would be smaller if a constant exchange rate were assumed). As a result of high corporate incomes, claims on corporates decreased and the strong growth in deposits from those companies continued. The downward trend in the share of liabilities to the household sector among banks' liabilities continued; at the same time, the role of the corporate sector in this respect increased. For the first time since 2001, the demand of non-financial customers for time deposits grew. In the third quarter of 2004, the downward trend in household deposits observed since 2001 was halted. In 2004, the number of bank mergers and acquisitions was smaller; the sector's concentration as measured by the CR_5 and HHI indices also decreased further. The concentration level remained close to the European average.

Credit unions. The assets of these institutions as well as the number of their members and branches grew. The sector was undergoing concentration, as the number of unions decreased. At the same time, credit unions extended the scope of their operations.

Leasing. The value of assets leased grew by 29%, but the size of the sector remains relatively small (1.8% of GDP). Property leasing recorded rapid growth. The predominance of means of transport among leased assets strengthened. The share of IT leasing remained low.

Factoring. The value of invoices purchased grew by 14.7%, but the importance of the sector remains limited (2% of GDP). The sector is highly concentrated.

Loan intermediaries: The amount of loans extended grew by 16.4%. The range of services on offer was extended and the importance of loan intermediaries as a bank product distribution channel rose, particularly with regard to subprime customers.

Financial product brokers. This form of financial intermediation and consulting developed rapidly in 2004. Products offered by brokers were designed by financial institutions from various market segments.

Private equity/venture capital sector (PE/VC). The amount of funds raised increased considerably, while the amount of investment decreased (a reversal of the 2003 trend). The first foreign VC firm was listed on the WSE. The lack of interest in financing this sector among domestic financial firms is an obstacle to its development.

Collective investment institutions (CII). Investment fund assets grew by 13.5% and the assets of open pension funds by 40%. The rate of growth of investment fund assets decreased considerably despite an increase in the prices of the assets managed. The concentration level in the CII sector decreased and remains lower than in the banking and insurance sectors. The structure of investment fund assets changed mainly due to price trends and investor preferences, while that of open pension fund assets did not change significantly. Open pension funds only used derivatives to a limited extent. The returns achieved by investment funds were worse than in 2003, while those achieved by open pension funds were better. Individual Pension Accounts (IPA) were a new product available in 2004. However, demand for this instrument was limited. An attempt at establishing a fund that would invest in the property market proved successful for the first time (two previous attempts failed due to the lack of demand from institutional investors).

Insurance companies. The rate of premium growth was higher than in 2003 and amounted to 14.1% in the life insurance sector and 9.6% in the non-life insurance sector. Sector assets went up by 15.1%; stronger growth (18%) was recorded in life insurance. Concentration ratios went down, but the concentration level in the sector remained high. The PZU Group continued to be the dominant firm with a 50% share of the non-life market and a 43% share of the life insurance sector. As previously, most assets were invested on the bond market. Most policies were sold by

insurance agents, but the share of sales at banks (bancassurance) as well as via the Internet and over the phone grew.

Brokerage houses and offices. Financial results improved considerably for the second year in succession as a result of the stock bull market. The downward trend in the number of firms operating on the market was reversed, which contributed to halting the concentration process within the sector.

Financial markets

Money market

The outstanding value of all types of short-term debt securities decreased

Outstanding value of individual money market instruments (PLN billion)

	Amount			Growth (%)		
	2002	2003	2004	2002	2003	2004
Treasury bills	42.0	48.1	46.9	119.3	114.5	97.5
NBP bills	7.3	6.0	5.7	51.1	82.2	95.0
Short-term corporate bonds	8.0	7.3	6.5	n/d	91.3	89.0
Short-term commercial bank debt securities	2.8	3.5	2.7	155.6	125.0	77.1
Unsecured deposits (interbank deposits)	23.5	22.3	25.1	94.0	94.9	112.6
Secured deposits (FX swaps and conditional transactions)[1]	n/d	n/d	n/d	n/d	n/d	n/d

[1] It is not possible to determine the values of the banks' positions in FX swaps and conditional transactions on the basis of the bank reporting system

Source: NBP.

Treasury bills. With regard to issue amounts, the Treasury bill market was the largest segment of the short-term debt securities market. Turnover stabilised and the role of Treasury bills in financing the borrowing needs of the central budget decreased – the trends observed in the 1990s reappeared. However, the share of Treasury bills in government debt remained twice as high as in the euro area. In 2004, foreign banks were allowed to become Primary Dealers for the first time.

NBP bills. In 2004, a further decrease in issue amounts was observed, which was related to the smaller excess liquidity of the banking sector.

Short-term bank debt securities (SBDS). The role of SBDS as bank instruments used for raising funds continued to decrease. Due to significant corporate liquidity reserves, the role of enterprises as investors in the SBDS market grew. Legal amendments were also introduced which enabled the maintenance of bank securities deposits outside the issuer bank (e.g. with the National Depository for Securities), which may make it possible to establish a clearing house for such instruments and contribute to market development. This change did not have a significant impact on the market in 2004, however.

Short-term corporate bonds (SCB). The outstanding value of SCBs issued decreased by 11.4%. Considerable corporate liquidity reserves were the main reason. As concerns issuers, the role of leasing companies grew due to the rapid development of leasing; among purchasers, the importance of enterprises increased – they invested available funds in instruments with higher yields than bank deposits or Treasury bills.

Interbank (unsecured) deposits. Interbank deposits were the most important instruments used by banks for liquidity management (they accounted for 85–90% of all transactions conducted for this purpose). Market size, as measured by bank deposits outstanding, remained stable. O/N deposits accounted for 75–80% of turnover. Preparations were in progress for the introduction of the POLONIA reference rate – the equivalent of the euro area EONIA rate, i.e. the average rate of O/N transactions weighted by transaction amounts.

Conditional transactions – repos and SBBs/BSBs. These operations still play a much smaller role in banks' liquidity management than it is the case in the euro area. The conditional transaction market developed slowly. Conditional transactions conducted by Bank Gospodarstwa Krajowego, which consisted of investing liquidity surpluses of the central budget on the interbank market, were a factor which contributed to its development. The conditional transaction market was dominated by operations between banks and non-banking institutions (80% of turnover). In 2004, a zero reserve ratio was introduced for repo transactions concluded with non-banking institutions, which eliminated one potential obstacle to the development of the conditional transaction market.

FX swaps. FX swaps were the most liquid segment of the money market. Turnover grew by about 10%. Thanks to the participation of the NBP in a survey coordinated by the BIS, a comprehensive picture of the zloty FX swap market (both in Poland and abroad) could be obtained for the first time; the survey also covered the FX market as well as OTC derivatives markets. Total daily turnover on the zloty FX swap market amounted to about USD 5.4 billion, making it the largest in the region. Transactions between non-residents (the offshore market) accounted for 30% of total turnover. The share of non-residents in transactions concluded by domestic banks amounted to 90%. USD/PLN exchange operations dominated – 98%. The domestic market exhibits high concentration – three banks account for 50% of turnover. T/N transactions conducted by non-residents in order to finance investments on the Treasury bond market prevail.

Capital market

As opposed to the situation in the money market, the outstanding value of long-term bonds issued by most groups of firms grew. Stock exchange capitalisation increased. The Treasury bond and stock segments accounted for 96.4% of the capital market. Compared to previous years, their share grew. The growth rate of markets in debt securities issued by non-government entities was considerably slower.

Outstanding value of individual capital market instruments (PLN billion)

	Amount			Growth (%)		
	2002	2003	2004	2002	2003	2004
Debt securities	**173.3**	**202.1**	**246.1**	**125.3**	**116.6**	**121.8**
Marketable Treasury bonds	153.9	184.5	226.6	124.6	119.9	122.8
Municipal bonds	2.2	2.7	3.0	137.5	122.7	111.1
Long-term corporate bonds	3.9[1]	5.5[2]	6.9	n/d	141.2	125.0
Long-term commercial bank debt securities	0.09	0.75	0.78	150.0	833.3	104.0
Mortgage bonds	0.2	0.8	1.0	200.0	400.0	125.0
NBP bonds	13.0	7.8	7.8	100.0	60.0	100.0
Equities – stocks[3]	**110.6**	**167.7**	**291.7**	**107.0**	**151.6**	**173.9**

[1] As of end January 2003.

[2] As of end January 2004.

[3] WSE capitalisation.

Sources: Ministry of Finance, NBP and WSE.

Treasury bond market. The gross amount issued grew by 38.4%. The highest growth in outstanding value was recorded in floating-rate bonds (a trend opposite to that observed in previous years). The upward trend in turnover was halted (turnover was 2.2% lower compared to 2003 as a result of a periodic fall in bond prices). The decline in turnover was most pronounced on the MTS electronic trading platform. New instruments included 3- and 7-year floating-rate wholesale bonds, 12-year inflation-indexed bonds and, among savings bonds, new 10-year floating-rate retirement bonds targeted at Individual Pension Account holders. Foreign investor involvement rose considerably – the value of their portfolio went up by 54% and their share in the domestic bond market exceeded 27%.

Corporate bonds. The outstanding value of these instruments rose by 25%, but the market remained small. For the first time, the outstanding value of long-term corporate bonds issued

exceeded the outstanding value of short-term instruments issued. The number of issuers reached 69. The interest of leasing companies in issuing such bonds grew. The first issue of mortgage-backed bonds on the Polish market took place.

Municipal bonds. The outstanding value of municipal bonds issued increased by 12.9%, but the growth rate has been falling for several years, mainly due to the improvement in local governments' financial standing.

Long-term bank debt securities (LBDS). The market developed slowly. The importance of this source of bank financing was low despite the strong expansion of long-term loans. In the euro area, bank bond issues account for 31.8% of all debt securities issued; in Poland, for 0.25%.

Mortgage bonds. Despite the fact that the outstanding value of these instruments grew considerably (by 25.8%), the market remained insignificant. Its underdevelopment is related to the predominance of universal banks in the mortgage loan market. The 2004 computerisation of the land and mortgage register system may contribute to its further development, however.

Stocks. Market capitalisation grew by 74% and the WIG stock exchange index rose 28%, setting an all-time Warsaw Stock Exchange record of 26,636.19 points. In 2004, 36 new companies, including 4 foreign ones, were listed on the stock exchange. PKO BP became the largest company listed on the WSE. The number of companies delisted by foreign investors decreased. In 2004, 9 companies were delisted (versus 19 in 2003). Turnover grew by 65%, setting an all-time high. The share of domestic individual investors in turnover also rose significantly.

FX market. The participation of the NBP in the survey coordinated by the BIS provided a full picture of the FX market for the first time. The average daily turnover on the zloty market recorded in April 2004 was USD 1.6 billion. The value of transactions concluded by domestic institutions continued to decrease. On the other hand, zloty turnover on the offshore market was on the rise. FX market is highly concentrated – four banks account for 60% of turnover.

Derivatives market

The clear dominance of the OTC derivatives market over the stock exchange one is increasing (which is a trend opposite to the global one). The presence of foreign banks is a key factor in the market's development. The credit derivatives market has not yet developed.

OTC derivatives. The interest rate derivatives (FRA, IRS) segment is the most developed. A shift in investor activity from the FRA market (the value of open positions dropped by 40%) to the IRS one (an increase by 50%) was an important change in 2004. A new instrument – Overnight Index Swap (OIS) – emerged. As a result, the Polish Bank Dealer Association (*Polskie Stowarzyszenie Dealerów Bankowych FOREX Polska*) issued a recommendation concerning the standards related to trading in it. The value of transactions on the interest rate options market remained negligible. The interest in such instruments on the part of enterprises and institutional investors was limited. Demand for FX derivatives proved to be much higher. Turnover in outright forward market grew considerably (by around 50%). The increase in turnover on the FX options market, which had been observed in previous years, was halted, since foreign institutions transferred their activities to the offshore market.

Stock exchange derivatives. No new products emerged on the WSE or the WCE. The WIG-20 futures market remained the most developed segment by far, although the number of contracts sold on this market dropped by 15.4% (individual investors migrated to the stock market – a trend opposite to that observed in previous years). The FX futures market still failed to develop. Only its composition changed – investors migrated from the WSE to the WCE. The remaining stock exchange derivatives markets (stock futures and options, warrants) remained underdeveloped.

Introduction

The *Financial System Development in Poland 2004 report fulfils the promise of the Financial System Development in Poland 2002–2003* report concerning the annual publication of a document presenting all financial institutions and markets operating in Poland. Thus, even where a given financial system segment is relatively insignificant, it has been described in the present report.

The authors repeated certain passages or definitions, therefore individual chapters may be read separately; this will be convenient for those who are only interested in selected financial system segments.

According to the plans stated in the previous edition, this edition of the report only covers one year. The changes that occurred in the financial system in 2005 have not been included even where the authors were aware of them while compiling this report. The annual publication of the report will enable readers to analyse the changes occurring in the Polish financial system on an ongoing basis.

Chapter 1 presents the evolution of the size and structure of the Polish financial system, indicating a significant, persistent dominance of banks over other financial institutions.

Chapter 2 describes amendments to legal regulations concerning the financial sector and their potential impact on that sector.

Chapter 3 describes the most important changes in financial system infrastructure.

Chapter 4 presents a comprehensive analysis of the changes that occurred with regard to individual financial institution groups in 2004. To the extent possible, the changes have been presented against the trends observed in other countries of the region and in selected European Union Member States. Banks continue to dominate within the Polish financial system and, therefore, they are analysed first. Changes in commercial bank claims and liabilities as well as concentration and competition indicators for this sector have been described in detail. Subsequent sections analyse quasi-bank institutions and those which distribute the products designed by banks. The next sector analysed is that of collective investment institutions, i.e. investment and pension funds. As part of this analysis of financial institutions, the changes that occurred in the insurance sector as well as with regard to brokerage houses and offices have also been reviewed.

Chapter 5 analyses financial market developments. First, the evolution of the money market and its individual segments (Treasury bill, NBP bill, short-term corporate and bank debt securities as well as deposit transaction markets) has been presented. In the subsequent part of the chapter, the changes which occurred on the Polish capital market have been described. The development of the Treasury bond, municipal bond, NBP bond, mortgage bond as well as long-term bank and corporate debt securities markets have been analysed. A separate section has been devoted to the stock market. Chapter 5 also presents changes occurring on the FX market and describes the evolution of the derivatives market in Poland, which has been divided into the stock exchange and OTC segments.

1
The financial system in Poland

1.1. Evolution of the size and structure of the financial system in Poland

Poland's accession to the European Union was an important event from the standpoint of development prospects for the Polish economy, but did not have a significant impact on the size and structure of the financial system in 2004 because this system has been shaped by long-term processes, including Poland's preparations for participation in the common market.

Like the economies of the other countries in the region, the Polish economy still exhibits a relatively low level of financial intermediation. The ratio of Polish financial system assets to GDP is equivalent to around one third of the average ratio in euro zone countries. However, the trend towards the growing economic significance of the financial system has been quite pronounced (Table 1.1). EU integration should promote an increase in the economic role of the financial system.

In 2004, the assets of all types of financial institutions grew (Table 1.2). In total, asset value increased by 85.7 billion zloty. The highest percentage growth was recorded by brokerage firms and open pension funds. As for investment funds, open pension funds and credit unions (*Spółdzielcze Kasy Oszczędnościowo-Kredytowe – SKOK*), their asset growth rate was lower than in the previous year (Table 1.3).

In 2004, 54 banks operated as public limited liability companies (a decrease of four compared to 2003). At the same time, three credit institution branches commenced operations. The number of cooperative banks decreased by four. In the period under analysis, the number of

Table 1.1. Financial system assets as a percentage of GDP in selected Central and Eastern European countries

	2002	2003	2004
Poland	74.8	78.5	82.1
Czech Republic	118.6	114.7	119.5
Hungary	87.7	99.3	106.4

Sources: Poland, the Czech Republic: NCBs. Hungary: *Hungary: Financial System Stability Assessment Update, including a Report on the Observance of Standards and Codes on Insurance Regulation*, International Monetary Fund June 2005.

Table 1.2. Assets of financial institutions in Poland (PLN billion)

	1997	1998	1999	2000	2001	2002	2003	2004
Commercial and cooperative banks	247.7	318.7	363.4	428.5	469.7	466.5	489.0	538.0
Credit unions	0.4	0.6	0.9	1.2	1.8	2.5	3.4	4.2
Insurance companies	13.2	20.7	28.9	37.9	48.0	57.5	65.7	77.5
Investment funds	1.9	1.8	3.1	9.5	12.1	22.8	33.2	37.7
Open pension funds	0	0	2.3	9.9	19.4	31.6	44.8	62.6
Brokerage firms	3.0	3.2	3.6	3.9	2.9	2.8	3.7	5.5
Total	266.2	345	402.2	490.9	553.9	583.7	639.8	725.5

Sources: NBP, Insurance and Pension Funds Supervisory Commission (KNUiFE), Polish Securities and Exchange Commission (KPWiG).

Table 1.3. Growth in assets of financial institutions in Poland (versus the previous year, %)

	2003	2004
Commercial and cooperative banks	4.8	10.0
Credit unions	36.0	23.5
Insurance companies	14.3	18.0
Investment funds	45.6	13.6
Open pension funds	41.8	39.7
Brokerage firms	32.1	48.7

Source: own calculations based on NBP, KNUiFE, KPWiG data.

Table 1.4. Number of financial institutions in Poland

	1997	1998	1999	2000	2001	2002	2003	2004
Commercial banks[1]	81	83	77	73	69	59	58	57[2]
Cooperative banks	1295	1189	781	680	642	605	600	596
Credit unions	198	220	228	146	144	120	109	83
Insurance companies[3]	50	54	56	66	71	72	76	69[4]
Investment companies[5]	10	14	15	21	17	19	16	19
Pension companies	0	0	21	21	17	16	16	15
Brokerage firms	47	46	48	49	42	38	36	39

[1] Banks which conduct operating activities.
[2] Including three credit institution branches.
[3] Entities which conduct operating activities.
[4] Including one chief branch of a foreign insurance company.
[5] Entities which conduct operating activities.
Sources: NBP, KNUiFE, KPWiG.

insurance companies[1] and credit unions also decreased, but the number of investment companies and brokerage firms grew. The data concerning the number of financial institutions operating in Poland are presented in Table 1.4.

In 2004, the institutional structure of the Polish financial system was still largely dominated by the banking sector, which absorbed most of the financial surpluses accumulated by citizens and companies and funded most business projects. However, the ratio of banking sector assets to total financial sector assets has been decreasing steadily (cf. Figure 1.1). In 2004, this ratio amounted to 74.1% (in 2003 – 76.4%, and in 2002 – 79.9%). At the same time, the importance of non-banking financial institutions has been growing steadily. The evolution of the structure of assets in the Polish financial system is presented in Figure 1.1, while the share of assets held by individual financial institutions within the Polish financial system in 2004 is shown in Figure 1.2.

The dominant role of the banking system and the relatively low level of financial intermediation were also typical of other countries in the region. Banking sector development levels in selected Central and Eastern European countries and in the euro zone are shown in Table 1.5.

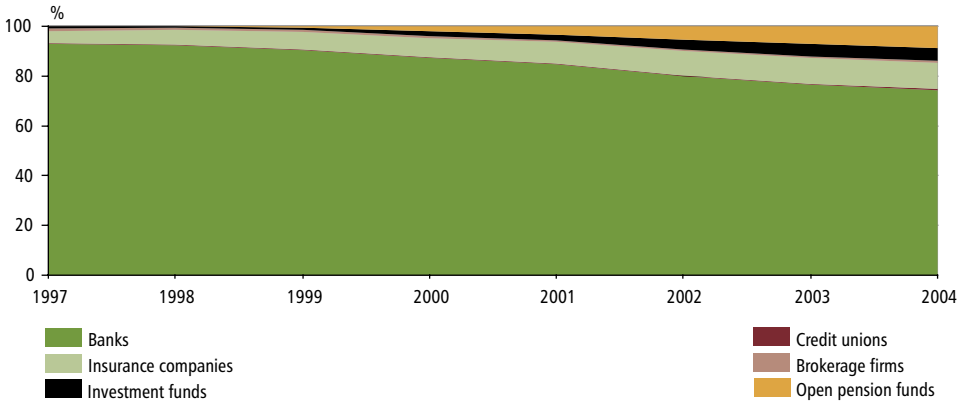
The securities markets in Central and Eastern European countries still do not play an important role as a source of financing for investment projects, either. The capitalisation of stock and bond markets is much lower than in the countries of the euro zone.

In terms of capitalisation and the number of listed companies, however, the Polish stock market remained the largest capital market in Central and Eastern Europe. In 2004, the Polish stock market experienced the highest increase in capitalisation – it rose by 74%, while the Hungarian market grew by 40% and the Czech market increased by 9%. The capitalisation of the stock market

[1] This was the result of the earlier decisions made by foreign investors to withdraw from the market. More on this subject in section 4.4.

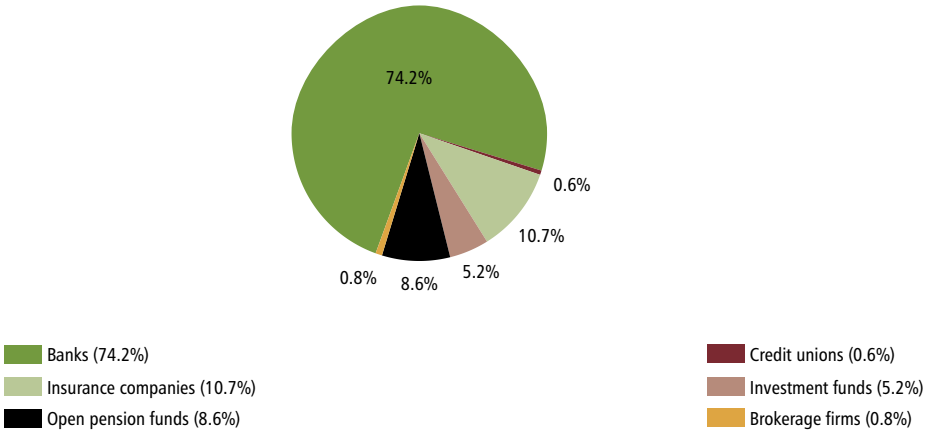
as a percentage of GDP and the number of listed companies also grew considerably. Only in Poland did the number of companies listed on the stock exchange grow. In the Czech Republic and Hungary, the increase in capitalisation was due to a rise in stock prices. Another factor contributing to the increase in market capitalisation in all of the countries analysed was the appreciation of their currencies. Basic indicators related to the degree of development of capital markets in these countries are presented in Table 1.6.

Figure 1.1. Structure of assets of the Polish financial system, 1997–2004



Sources: NBP, KNUiFE, KPWiG.

Figure 1.2. Share of assets held by different financial institutions in the Polish financial system, 2004



Sources: NBP, KNUiFE, KPWiG.

Table 1.5. Banking sector development levels in selected Central and Eastern European countries and in the euro zone, %

Country	Assets/GDP		Loans/GDP		Deposits/GDP	
	2003	2004	2003	2004	2003	2004
Poland	60	61	27	26	36	34
Czech Republic	99	96	32	33	61	58
Hungary	78	83	39	42	40	40
Euro area	**260**	**n/a**	**117**	**n/a**	**97**	**n/a**

Sources: Poland, the Czech Republic, Hungary: NCBs. For the euro area: *Report on EU Banking Structure*, European Central Bank, November 2004.

Table 1.6. Capital markets in 2003 and 2004, selected year-end figures

Country	Stock market capitalisation[1] (billions of euros)		Stock market capitalisation as % of GDP		Number of listed companies[2]	
	2003	2004	2003	2004	2003	2004
Poland	29.8	51.9	16.1	26.6	203	230
Hungary	15.0	21.0	20.5	26.1	49	46
Czech Republic	19.9	21.7	24.8	25.2	65	55

[1] Capitalisation of domestic companies.

[2] Includes domestic and foreign companies.

Sources: FIBV, annual reports from individual stock markets.

1.2. Measures stimulating financial market development in Poland

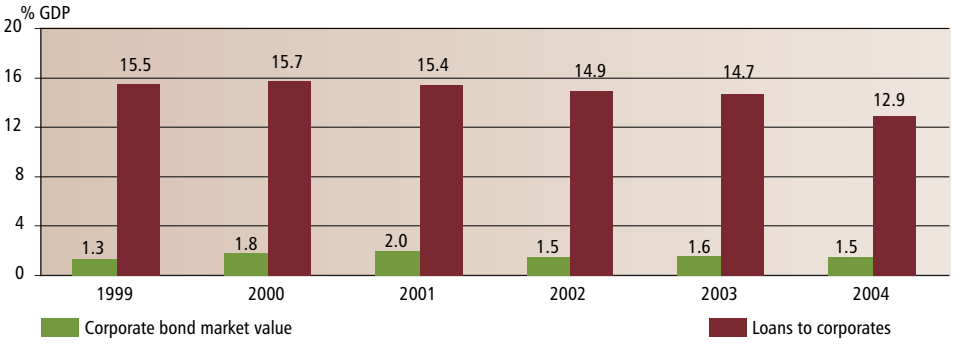
In Poland, the dominance of bank financing over the use of other forms of raising capital can still be observed (Figure 1.3).

The challenges of EU integration as well as the increasing role of global financial markets triggered measures aimed at the development of the Polish capital market. On April 27, 2004, the Council of Ministers adopted the *Warsaw City 2010 Agenda: Capital Market Development Strategy*.[2] Its objective is to create a strong regional capital market. Fundamental goals of the Strategy include:

- increasing capital market size;
- improving capital market efficiency;
- enhancing capital market security.

These goals are to be achieved through legislation, organisational and infrastructural measures, and privatisation. *The Capital Market Development Strategy Implementation Schedule* stipulates detailed actions and measures necessary to achieve the goals set forth, as well as deadlines and the institutions responsible for their implementation.

Figure 1.3. Ratio of loans to corporates[1] and corporate papers market value[2] to GDP



[1] Commercial bank loans.

[2] Data for 1999–2001 include short-term debt securities issued by banks. Data for 1999 also include the value of the bank bond market.

Sources: NBP data, Fitch Polska (data regarding corporate papers market for 1999–2001).

[2] *Strategia rozwoju rynku kapitałowego Agenda Warsaw City 2010*, Warszawa: Ministerstwo Finansów, 2004.

This includes, among other things, amending Polish law to meet European standards, supporting corporate governance, enhancing public awareness of the capital market as well as initiating preparations for changes in the ownership structure of the institutions which constitute the infrastructure of the Polish capital market.[3] The strategy also assumes an increase in the number of public offerings of Treasury companies as well as incentives for private companies to enter the capital market. Moreover, it includes development scenarios for the Warsaw Stock Exchange (WSE), the Central Table of Offers (CeTO)[4] and the National Depository for Securities (*Krajowy Depozyt Papierów Wartościowych – KDPW*).

The strategy was developed in consultation with the Polish Securities and Exchange Commission (*Komisja Papierów Wartościowych i Giełd – KPWiG*), the WSE, CeTO, the National Depository for Securities, the Insurance and Pension Fund Supervisory Commission (*Komisja Nadzoru Ubezpieczeń i Funduszy Emerytalnych – KNUiFE*), and the National Bank of Poland (NBP) as well as financial market participants. The Gdańsk Institute for Market Economics (*Instytut Badań nad Gospodarką Rynkową*) provided scientific consultation for the Agenda. In order to facilitate the implementation of the strategy, the Capital Market Council[5] was established as a consultative and advisory body affiliated with the Ministry of Finance.

The strategy is a programme for the development of the Polish capital market, aiming to increase its role within the financial system as well as in the Polish and EU economies.

[3] More on this subject in Chapter 3.

[4] In September 2004, the name CeTO was changed to MTS-CeTO. More on this subject in Chapter 3.

[5] The Capital Market Council was appointed by the Prime Minister pursuant to Regulation No. 115 on the Capital Market Council of December 20, 2004 (*Monitor Polski* Official Journal of the Republic of Poland No. 54, item 909).

2
Regulations

2.1. Introduction

The need to adjust the Polish legal system to EU law was the main reason for the amendments introduced to Polish financial services sector legislation in 2004. For instance, the coming into force of regulations, which introduced the single license (passport) principle in the financial services sector, was the result of EU laws, and not of domestic legislation. Since May 1, 2004, the Polish financial market has been open to companies, which are authorised to provide financial services in another member state.[6] The most important amendments related to adjustment to EU standards introduced to Polish legislation in 2004 include:

- amendments to the Accounting Act;
- the adoption of the Act on Certain Forms of Financial Collateral;
- amendments to the Banking Act;
- a new package of insurance acts;
- amendments to the Act on Public Trading in Securities;
- the new Act on Investment Funds.

The only sector where Poland's accession to the EU did not cause major changes was the pension fund sector, since the single passport principle does not apply to such funds.

2.2. Regulations affecting the entire financial services sector

Amendments to accounting regulations

The amendments to the Accounting Act[7] resulted from the need to incorporate the provisions of the Regulation of the European Parliament and of the Council and apply International Accounting Standards (IAS) to Polish law.[8] The amendments aim to enable comparisons between the data presented in the financial statements of issuers of listed securities or issuers who apply for the admission of their securities to public trading in one of the regulated markets of European Economic Area countries.[9] The introduction of uniform accounting principles should enhance opportunities for raising funds in the European financial market for domestic issuers.[10] New accounting regulations will be applied for the first time to financial statements for the financial year beginning in 2005. Compared to other laws, the adjustment of accounting regulations to EU standards will entail considerable expense for financial institutions.

[6] Legal actions related to financial services may be performed on the territory of Poland where they are covered by the authorisation granted to a given company by supervisory authorities in its home country.

[7] The Act Amending the Accounting Act and the Act on Certified Auditors and Their Self-Regulatory Body of August 27, 2004 (*Dz.U*. No. 213/2004, item 2155).

[8] Regulations adopted by the EU Council or the European Commission are incorporated directly into the legal systems of member states.

[9] Apart from EU member states, the European Economic Area includes Iceland, Norway and Liechtenstein.

[10] More on the subject: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 27.

Act on Certain Forms of Financial Collateral

The 2002 Act on Certain Forms of Financial Collateral[11] was mainly introduced in order to meet the obligations of adjusting to Community law.[12] The new provisions should also create more favourable conditions for the development of the collateralised transaction market. For companies which conclude such transactions, the legal guarantee that the creditor will be able to recover the funds invested by e.g. using the object pledged to satisfy his claims without the need to initiate court proceedings, is an important issue.

The solutions introduced reduced the formalities and administrative procedures required in order to establish and realise financial collateral as well as provided additional protection for the exercise of rights arising from the collateral established where bankruptcy proceedings are initiated. The new regulations should significantly mitigate credit risk and, therefore, encourage the conclusion of large-value collateralised transactions (including repos and sell-buy-backs) in the financial market.

2.3. Regulations regarding the banking services sector

The amendments introduced to the Banking Act[13] aimed to adjust it to Community regulations[14] as well as regulate such phenomena as outsourcing and securitisation. New provisions concerning access to information, which is subject to bank secrecy and the bank account agreement, have also been introduced.[15]

As a result of the adjustment of the provisions of the Banking Act to Community law, the method for calculating ceilings for individual bank exposure has been extended. When calculating large exposure limits, banks will have to take into account the stocks or shares they hold in individual companies. This amendment may restrict the financing of companies in which banks hold equity interest.[16]

The regulation of the outsourcing of operations related to banking activity to third parties aims to reduce the operating costs of the banking sector. The provisions of the Banking Act ensure that the Commission for Banking Supervision is able to exercise oversight in banks' cooperation with third parties.

The solutions adopted in the Banking Act should also facilitate the development of securitisation arrangements in Poland since they provide for a bank's exemption from bank secrecy obligations when a bank's receivables are assigned to another party.[17] The amendments introduced should result in improved bank capital adequacy, concentration and liquidity ratios.

The introduction of secondary accounting legislation also had an important impact on banking operations. The relevant acts were: the Ordinance of the Minister of Finance on procedures for establishing specific provisions against risks stemming from banking operations of December 10, 2003,[18] and the Ordinance of the Minister of Finance amending the Ordinance on special bank accounting procedures of December 2, 2003.[19]

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[11] The Act on Certain Forms of Financial Collateral of April 2, 2004 (*Dz.U.* No. 91/2004, item 871). The provisions of the Act took effect on May 1, 2004.

[12] Directive 2002/47/EC of the European Parliament and of the Council of June 6, 2002 on financial collateral arrangements.

[13] The Act Amending the Banking Act and Other Acts of April 1, 2004 (*Dz.U.* No. 91/2004, item 870).

[14] Directive 2000/12/EC of the European Parliament and of the Council of March 20, 2000 relating to the taking up and pursuit of the business of credit institutions and Directive 2001/24/EC of the European Parliament and of the Council of April 4, 2001 on the reorganisation and liquidation of credit institutions.

[15] *Nowe regulacje bankowe,* Warszawa: NBP, 2004.

[16] B. Smykla, *Prawo bankowe. Komentarz,* Warszawa: Wydawnictwo C. H. Beck, 2005, p. 274.

[17] A. Jakubiak, *Sekurytyzacja w świetle prawa polskiego,* in: *Nowe regulacje bankowe,* op. cit., p. 46.

[18] *Dz.U.* No. 218/2003, item 2147. The provisions took effect on January 1, 2004.

[19] *Dz.U.* No. 211/2003, item 2061. The provisions took effect on January 1, 2004.

The Ordinance of the Minister of Finance on procedures for establishing specific provisions against risks stemming from banking operations introduced less strict credit exposure classification principles. Therefore, the improvement in the quality of banks' loan portfolio recorded in Poland in 2004 was to a certain extent the result of regulatory changes.[20] Some retail loans, which had earlier been classified as irregular (particularly those from the "substandard" and "doubtful" groups), were reclassified as "satisfactory" due to the reduction in the number of categories for such loans (from four down to two). With regard to claims on debtors other than the Treasury and individuals, the criterion of the debtor's financial standing is still taken into account alongside principal or interest repayment performance. However, the regulations included in the aforementioned Ordinance have made it possible to substitute the assessment of the debtor's economic standing by the assessment of the collateral issuer's standing (during the exposure classification stage and not at the time when specific provisions are established). Additionally, limits on the reduction in the amount of credit exposure have been introduced. This means that as the delinquency period with regard to the payment of principal or interest increases, the value of the security taken into account when calculating the amount of specific provisions decreases.

The fact that banks were allowed to write off loss loans and post them as memo items without the need to surrender them at the same time (provided that the claim had been classified as a loss for at least one year and the amount of specific provisions established in connection with it equalled the outstanding amount of the claim) was another regulatory factor which contributed to the reduction in the irregular loan ratio in Poland in 2004. The legal grounds for this were provided by the Ordinance of the Minister of Finance amending the Ordinance on special bank accounting procedures. However, the Ordinance on procedures for establishing specific provisions against the risk of banking operations had a greater impact on reducing the level of irregular bank claims in 2004 than the Ordinance on special bank accounting procedures. It is estimated that the

Table 2.1. Analysis of the differences in credit exposure classification

Exposure type	Previous legal status[1]		Pursuant to regulations currently in force	
To Treasury	Satisfactory ≤ 1 Y Doubtful 1–2 Y Loss > 2 Y			
Retail (consumer) loans	Satisfactory	≤ 1 M	**Satisfactory**	**≤ 6 M**
	Substandard	1–3 M		
	Doubtful	3–6 M		
	Loss	> 6 M	**Loss**	**> 6 M**
Other exposures to individuals[6]			Satisfactory	≤ 1 M
			Special mention	1–3 M
			Substandard	3–6 M
			Doubtful	6–12 M
			Loss	> 12 M
Other exposures	Satisfactory[2]	≤ 1 M	Satisfactory[2]	≤ 1 M
	Special mention[2]	≤ 1 M	Special mention[2]	1–3 M
	Substandard[3]	1–3 M	Substandard[3]	3–6 M
	Doubtful[4]	3–6 M	Doubtful[4]	6–12 M
	Loss[5]	> 6 M	Loss[5]	> 12 M

[1] Ordinance of the Minister of Finance on procedures for establishing specific provisions against risks stemming from banking operations of December 10, 2001 (*Dz.U.* No. 149/2001, item 1672 as amended).

[2] The debtor's economic and financial standing is not a cause for concern.

[3] The debtor's economic and financial standing may jeopardise timely repayment.

[4] The debtor's economic and financial standing has significantly deteriorated.

[5] The debtor's economic and financial standing has deteriorated in an irreversible manner, making the repayment of the debt impossible.

[6] Housing loans, mortgage loans and loans for the purchase of securities.

M – month, Y – year; the durations refer to the delay in the payment of principal or interest compared to the repayment date (schedule) stipulated at the time when the liability arose.

Source: NBP internal research.

[20] The results of a survey conducted by the General Inspectorate of Banking Supervision indicate that the change in claim classification principles caused the level of doubtful classifications to drop by 50% and that of substandard ones by 25% but had no significant impact on the level of loss classifications. *Summary evaluation of the financial situation of Polish banks in 2004*, Warsaw: NBP, 2005, p. 25.

posting of loss classifications as memo items caused a decrease in the proportion of irregular claims amounting to 0.9 percentage points, while the change in claim classification principles arising from the Ordinance on procedures for establishing specific provisions against the risk of banking operations caused a drop in the proportion of irregular claims of around 3 percentage points.[21]

2.4. Regulations regarding non-banking financial institutions

Insurance companies and insurance intermediaries

The adoption of the package consisting of four acts[22] in 2003 stemmed from the need to adjust Polish law to EU regulations. The single passport (license) principle with regard to insurance activity holds in the single European market. If an insurance company has obtained a licence in the member state where its registered office is located, it may provide services in other member states in a direct manner (cross-border services) or by opening branches. At the moment it is difficult to estimate whether the introduction of the single passport will significantly increase the number of foreign insurance companies in the Polish financial market. The regulations enabling the establishment of foreign branches, which have been in force since January 1, 1999, have rarely been taken advantage of. Only four chief branches were established in two years.[23]

The Business Activity Act allowed insurance companies to invest in derivatives in order to hedge the risk arising from the decrease in the value of assets covering technical provisions. These regulations were not introduced in order to adjust Polish law to EU regulations. It should be stressed that insurance companies are not allowed to use such instruments for speculation purposes.

The separate statutory regulation of insurance intermediation resulted from the fact that this is a type of business activity different from insurance activity. The most important provisions introduced by the new Insurance Intermediation Act include:

- the introduction of the requirement for all insurance intermediaries to register with the Insurance and Pension Funds Supervisory Commission;
- the precise stipulation of the requirements insurance agents must satisfy and their qualifications;
- the stipulation of the principles of an agent's civil liability;
- the introduction of compulsory professional indemnity insurance for so-called multi agents;[24]
- the stipulation of the principles of an insurance broker's liability (regulating the issue of professional indemnity insurance);
- the precise stipulation of the requirements to which brokers are subject;
- the stipulation of the principles for the maintenance of the insurance intermediary register.

The introduction of regulations concerning professional qualifications as well as the registration of persons taking up and pursuing insurance intermediation activities stemmed from the need to adjust to EU requirements.[25] The regulation of the insurance mediation market and the

[21] *Summary evaluation of the financial situation of Polish banks in 2004*, Warsaw: NBP, 2005, p. 25.

[22] The Insurance Business Act of May 22, 2003 (*Dz.U.* No. 124/2003, item 1151 as amended), the Act on Compulsory Insurance, the Insurance Guarantee Fund and the Polish Motor Insurers' Bureau of May 22, 2003 (*Dz.U.* No. 124/2003, item 1152 as amended), the Act on Insurance and Pension Fund Supervision and on the Insurance Ombudsman of May 23, 2003 (*Dz.U.* No. 124/2003, item 1153 as amended), the Insurance Intermediation Act of May 22, 2003 (*Dz.U.* No. 124/2003, item 1154 as amended). The provisions took effect on January 1, 2004.

[23] See section 4.4.

[24] A multi agent is an insurance agent who performs agency services for more than one insurance company with regard to the same type of insurance. In practice, a multi agent's activities are similar to brokerage but multi agents are not subject to rigorous requirements regarding qualifications and professional indemnity insurance.

[25] Directive 2002/92/EC of the European Parliament and of the Council of September 9, 2002 on insurance mediation.

legal guarantee that insurance intermediaries have proper qualifications should improve customer service quality and the competitiveness of Polish intermediaries.

Individual Penssion Accounts (IPA)

The Individual Pension Account Act[26] was introduced in order to enable citizens to accumulate additional funds towards their old age pensions. An Individual Pension Account (IPA) is a separate account maintained for the saver by one of the companies authorised to maintain such accounts. Only banks, brokerage houses and offices, investment funds and insurance companies are authorised to maintain IPA. Pursuant to applicable regulations, a person may only have one IPA. IPA deposits made within one year may not exceed 150% of the forecast average monthly salary. This principle was introduced in order to limit the decrease in central budget revenues since income from the funds deposited in Individual Pensionaccounts is exempt from capital gains tax.[27] This exemption will apply only to persons who withdraw the savings after they attain 60 years of age or after they become eligible for old age benefits and attain 55 years of age. Such persons must, however, accumulate savings in their Individual Pension Accounts for at least five (any five) years, or over half of the amount paid into the IPA must be deposited not later than five years before an application for fund withdrawal is submitted.

The exemption of income from funds accumulated in IPA from tax was supposed to encourage the development of the Polish long-term savings sector. It was expected that the supply of long-term capital would open new opportunities for financing investment projects. It was assumed that around 3 billion zloty would be deposited in IPA in the first year, i.e. around one third of December 2000 payments to open pension funds.[28] By the end of 2004, however, only around PLN 200 million were deposited in IPA.[29]

Pension funds

In 2004, changes were introduced in the organisation and operation of the pension fund sector, regarding the assessment of investment activities of open pension funds (the manner of calculating the minimum required rate of return and the opening of so-called premium accounts by pension companies), the fees charged by open pension funds and investment limits for such undertakings.

Since April 1, 2004, regulations[30] have been in force, which introduced a new method for calculating the minimum required rate of return (MRR).[31] Changes consist of the extension of the period for which the rate of return for individual funds, as well as the weighted average rate of return for all funds, is calculated and the publication of these rates twice a year. The method for determining weights when calculating the weighted rate of return for the entire sector has also changed. The funds whose market share exceeds or equals 15% are assigned a weight of 15%, and the shares of the remaining funds are increased in proportion so that the sum total of shares is 100%. The rate calculated in this manner is used to determine the MRR and the potential shortfall in funds. Such a solution may limit the impact of the largest pension funds on the structures of other funds' portfolios.

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[26] The Individual Pension Account Act of April 20, 2004 (*Dz.U.* No. 116/2004, item 1205). The provisions took effect on September 1, 2004.

[27] Pursuant to Art. 21, Para. 1, Subpara. 58a of the Personal Income Tax Act of July 26, 1991 (consolidated text in *Dz.U.* No. 14/2000, item 176 as amended), income from savings in an Individual Pensionaccount obtained through the accumulation and withdrawal of funds by the saver and the withdrawal of funds by persons entitled to such funds after the saver's death is exempt from income tax.

[28] Justification for the draft Individual Pension Account Act (parliament document No. 1942), www.sejm.gov.pl.

[29] More in section 4.3.

[30] The Act Amending the Act on the Organisation and Operation of Pension Funds and Other Acts of August 27, 2003 (*Dz.U.* No. 170/2003, item 651).

[31] The minimum required rate of return (MRR) is equal to 50% of the weighted average rate of return for all funds or four percentage points lower than this rate, whichever is smaller.

The amendment to the Act on the Organisation and Operation of Pension Funds has introduced a principle pursuant to which each open pension fund deposits 0.005% of the net amount of managed assets in a premium account maintained by the open pension fund each month. Where a given open pension fund achieves the highest rate of return in the ranking published by the Insurance and Pension Funds Supervisory Commission, the pension company will receive the amount accumulated in the premium account. Where a fund achieves the lowest rate of return, the funds accumulated in the premium account will remain in the open pension fund. The remaining pension companies may withdraw part of the funds accumulated in the premium account depending on the rate of return achieved during the previous six months. These changes have introduced an additional incentive for open pension fund managers. There are, however, concerns that open pension fund managers will not implement effective long-term investment strategies, but will instead focus on achieving the highest rate of return within a six-month period.

The amendments to the Act on the Organisation and Operation of Pension Funds have limited the amount of charges deducted from open pension fund members' contributions. The maximum distribution fee may not exceed:

– 7% for contributions made between 2004 and 2010;

– 6.125% for contributions made in 2011;

– 5.25% for contributions made in 2012;

– 4.375% for contributions made in 2013;

– 3.5% for contributions made in 2014.

On the other hand, open pension fund asset management fees decrease as assets under management increase. It is expected that these changes will increase the rate of return for open pension fund members.

Due to the fact that open pension funds are now able to invest in mortgage bonds not traded publicly and revenue bonds, new investment limits[32] have been introduced for such instruments.

Table 2.2. Changes in open pension fund investment limits

Security type	Previous legal status[1]	Current legal status[2]
Municipal bonds, traded publicly	up to 15% of assets	up to 40% of assets
Municipal bonds, not traded publicly	up to 5% of assets	up to 20% of assets
Secured corporate bonds, traded publicly	up to 10% of assets	up to 40% of assets
Secured corporate bonds, not traded publicly	up to 5% of assets	up to 10% of assets
Unsecured bonds and other debt securities issued by public companies	up to 5% of assets	up to 10% of assets
Mortgage bonds, traded publicly	up to 30% of assets	up to 40%[3] of assets
Revenue bonds	–	up to 20%
Investment certificates issued by closed-end investment funds	up to 5% of assets	up to 10% of assets

[1] Ordinance of the Council of Ministers on the determination of the maximum percentage of assets of an open pension fund that may be invested in individual investment categories as well as additional restrictions regarding the investment activities of pension funds of May 12, 1998 (*Dz.U.* No. 63/1998, item 407 as amended). The provisions took effect on January 1, 1999.

[2] Ordinance of the Council of Ministers on the determination of the maximum percentage of assets of an open pension fund that may be invested in individual investment categories as well as additional restrictions regarding the investment activities of pension funds of February 3, 2004 (*Dz.U.* No. 32/2004, item 276 as amended). The provisions took effect on March 14, 2005.

[3] Including up to 15% of assets invested in mortgage bonds not traded publicly.

Source: NBP internal research.

[32] Ordinance of the Council of Ministers on the determination of the maximum percentage of assets of an open pension fund that may be invested in individual investment categories as well as additional restrictions regarding the investment activities of pension funds of February 3, 2004 (*Dz.U.* No. 32/2004, item 276 as amended).

Investment limits for bonds issued by territorial local government units and businesses as well as investment certificates issued by closed-end investment funds have also been increased. Changes to open pension fund investment limits are presented in Table 2.2.

It is expected that as a result of these changes, open pension funds will achieve higher rates of return and enhanced investment security compared to investments in hitherto available instruments; it is also hoped that they will attain increased capability for financing business projects.

In 2004, the secondary legislation expected by pension funds, which concerns the use of derivatives by open pension funds and the extension of listed securities loans by pension funds, was not passed. Due to the absence of secondary legislation, open pension funds have been unable to conclude such transactions, and therefore to hedge their ever increasing investment portfolios against the risk of price movements.

Investment funds

Amendments to EU directives regarding undertakings for collective investment in transferable securities (UCITS)[33] necessitated amendments to the Act on Investment Funds. Due to the considerable number of amendments introduced and in order to ensure transparency, a draft for a new Act on Investment Funds was developed; the Act took effect on July 1, 2004.[34]

The new Act changed the division of investment funds into categories. Currently, funds may operate as open, specialised open and closed-end investment funds.[35] The hitherto operating mixed and specialised closed-end investment funds must become closed-end investment funds by the end of June 2005.

The most important new provisions that affect the investment fund market include:

- enabling investment companies to provide asset management services and consulting services with regard to securities trading;[36]
- the separate classification and regulation of money market funds and private equity funds;
- enabling open funds to use a wider range of derivatives, including derivatives traded on the OTC market;[37]
- increasing investment limits for funds whose investment policy mimics the composition of a stock or debt securities index;
- enabling the establishment of funds consisting of separate sub-funds which implement their own investment policies (umbrella funds);
- enabling the establishment of securitisation funds and portfolio funds;
- enabling investment funds to extend securities loans, and in the case of closed-end investment funds – also cash loans as well as endorsements and guarantees;
- enabling the transformation of specialised open investment funds into open funds.

The introduction of solutions which enable investment funds to offer products and services which are already present in the EU should assist domestic companies in their competition with companies from other EU countries.

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[33] Directive 2001/107/EC and Directive 2001/108/EC amending Directive 85/611/EEC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS), with regard to investments of UCITS.

[34] The Act on Investment Funds of May 27, 2004 (*Dz.U.* No. 146/2004, item 1546).

[35] See section 4.3.

[36] In order to provide such services, an investment company must obtain additional authorisation from the Securities and Exchange Commission.

[37] Secondary legislation has been issued in connection with the Act on Investment Funds, which makes it possible for such financial institutions to use derivatives. Ordinance of the Minister of Finance on the conclusion of agreements concerning derivatives, including non-standardised derivatives, by open investment funds of August 26, 2004 (*Dz.U.* No. 197/2004, item 2021).

2.5. Regulations regarding the capital market

Public trading in securities

The amendments introduced to capital market regulations resulted largely from the need to adjust Polish law to EU regulations. On May 1, 2004, the amended Act on Public Trading in Securities[38] came into force. The amendments extended the supervisory and control authority of the Securities and Exchange Commission, giving it the right to institute explanatory proceedings.[39] Such proceedings may precede administrative or criminal proceedings where a suspicion exists that financial instruments have been purchased or sold on the basis of confidential information. The Commission may demand a securities account be blocked when a well-founded suspicion exists that an offence consisting of the manipulation of a financial instrument or the use of confidential information has been committed. The amendments introduced should enhance the effectiveness of capital market supervision and law enforcement.

Within the framework of adjusting Polish law to Community regulations, provisions enabling issuers from EU member states to conduct a parallel offering in Poland have also been introduced. In such cases the introduction of securities into public trading will not require the approval of the Securities and Exchange Commission provided that the issue prospectus has been approved in an EU member state.

The scope of brokerage activities has also been extended in order to adjust the Act to Community law requirements.[40] These amendments enable companies which engage in brokerage activities to fulfil purchase or sale orders regarding financial instruments other than "generic securities",[41] which will extend the scope of services offered by such companies.

An important change, which did not result from the need to adjust Polish law to Community regulations, enabled banks to directly trade in securities issued by the Treasury and the NBP, rights derived from these securities and other debt securities on the Warsaw Stock Exchange on their own accounts. This change was introduced in order to increase the liquidity of stock exchange trading in such instruments.

Taxation of persons with regard to their investment activities

Changes in the taxation of income arising from the transfer of listed securities against payment were not related to the adjustment of Polish law to EU regulations. Until December 31, 2003, such income was exempt from income tax pursuant to the provisions of the Personal Income Tax Act. Since January 1, 2004, such income obtained by persons (who do not engage in business activity) has been taxed at the 19% rate[42] and has not been combined with the income taxed according to general principles. After a given fiscal year has ended, taxpayers who have obtained income from the transfer of securities against payment are required to include this income in their annual tax returns as well as calculate the amount of income tax due and transfer it to the account of the competent tax authority. The changes aimed to make the tax system neutral with regard to all instruments available on the financial market, as in November 2001, amendments to the

[38] The Act Amending the Act on Public Trading in Securities and Other Acts of March 12, 2004 (*Dz.U.* No. 64/2004, item 594). In 2004, the Securities and Exchange Commission also developed a draft for a new act on the organisation of trading in securities. However, the Council of Ministers decided to submit an amendment to the Act currently in force to the Polish Parliament. The decision to amend the old Act was mainly guided by the lengthy legislative process required to pass a new act and the need to introduce regulatory adjustments before Poland's accession to the European Union.

[39] More information on this new concept regarding the securities law: M. Wierzbowski, "Postępowanie wyjaśniające przed Komisją Papierów Wartościowych i Giełd", *Przegląd Prawa Handlowego* No. 4/2005.

[40] Council Directive 1993/22/EEC of May 10, 1993 on investment services in the securities field.

[41] Generic securities include the securities that have been stipulated in applicable statutes, e.g. stocks (Code of Commercial Companies) or bonds (Bonds Act). The amended Act on Public Trading in Securities has introduced a new concept of "financial instruments", which include, among other things, generic securities, financial futures, forward rate agreements, stock swaps, interest rate swaps, FX swaps and various options.

[42] Art. 30b, Para. 1 of the Personal Income Tax Law of July 26, 1991 (consolidated text in *Dz.U.* No. 14/2000, item 176 as amended).

Personal Income Tax Act were adopted, which introduced a tax on savings deposits and funds in bank accounts.

Corporate governance principles

In 2004, the Management Board of the Warsaw Stock Exchange approved the amended Principles of Good Practice[43] developed by the Committee of Good Practices of the Polish Forum of Corporate Governance.[44]

The amendments concerned, among other things, the appointment of the Supervisory Board (the number of independent members was reduced),[45] the choice of certified auditor, the appointment of audit committees and remuneration. They aim to reinforce the independence of the persons who supervise companies and ensure that proper financial audits can be conducted. This was also the main thrust of European Commission recommendations.[46] The deadline for companies to submit their declarations regarding the adherence to the Principles of Good Practice was July 1, 2005, therefore it is difficult to state whether these principles will be fully adhered to by public companies.

2.6. Future amendments to EU law

Poland's accession to the European Union resulted in a change in its position: from a state required to adjust its legislation to the regulations already in force in the European Union pursuant to the Europe Agreement,[47] to being one of the parties which develop Community law. In recent years, EU regulations concerning financial services have changed considerably, which will have to be reflected in Polish law as well. Legislative measures aimed at establishing an integrated financial market within the EU were passed under the Financial Services Action Plan.[48]

In 2004, the following directives related to the capital market were adopted:

– on capital market transparency (Transparency Directive);[49]

– on markets in financial instruments (MiFID).[50]

The markets in financial instruments directive replaced the directive on investment services currently in force.[51] The deadline for the transposition of this directive into member state legislation is October 30, 2006. With regard to the European capital market, the Committee of European

[43] Resolution No. 445/2004 of the Management Board of the Warsaw Stock Exchange on the adoption of corporate governance rules for publicly traded companies which issue shares, convertible bonds or bonds with pre-emptive rights, which are admitted to public trading in the official market as of December 15, 2004 and Resolution No. 446/2004 of the Management Board of the Warsaw Stock Exchange on the adoption of corporate governance rules for publicly traded companies which issue shares, convertible bonds or bonds with pre-emptive rights, which are admitted to public trading in the unofficial market.

[44] More on this subject: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 32.

[45] For companies in which a shareholder holds an equity interest entitling him to over 50% of the total number of votes.

[46] Commission Recommendation No. 2005/162/EC of February 15, 2005 on the role of non-executive or supervisory directors of listed companies and on the committees of the (supervisory) board.

[47] The Act on the ratification of the Europe Agreement establishing an association between the European Communities and their Member States, on the one hand, and the Republic of Poland, on the other hand of July 4, 1992 (*Dz.U.* No. 60/1992, item 302).

[48] The Plan was adopted by the European Council in Lisbon in March 2000. More on the subject: *Financial System Development in Poland 2002–2003*, op.cit., p. 86.

[49] Directive 2004/109/EC of the European Parliament and of the Council of December 15, 2004 on the harmonisation of transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market.

[50] Directive 2004/39/EC of the European Parliament and of the Council of April 21, 2004 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC.

[51] Council Directive 93/22/EEC of May 10, 1993 on investment services in the securities field.

Securities Regulators (CESR)[52] is currently developing secondary legislation related to two directives: on markets in financial instruments and on capital market transparency.

Compared to previous regulations, the scope of investment services that may be provided within the framework of the single passport has been extended to include investment consulting and the organisation of alternative trading systems for trading in financial instruments by investment companies. The provisions of the directive have extended the list of transferable securities and financial instruments to include commodity derivatives, among other things. The solutions adopted by the directive should contribute to the establishment of an integrated European market, which may in turn reduce corporate financing costs.

In order to enhance the protections afforded to individual investors, the MiFID Directive has introduced a distinction between retail and professional investors. Investment companies which provide services to retail investors are required to obtain information from such investors regarding their knowledge of investing in the capital market, their experience concerning such investments and their investment goals. Based on the information obtained, investment companies are required to warn a retail investor that a given transaction may be unsuitable to his or her needs.

The provisions of the Transparency Directive stipulate the rights and obligations of issuers regarding the disclosure of periodic and ongoing information. The deadline for the transposition of this directive into national legislation is January 20, 2007. Periodic information includes annual financial reports, semi-annual financial reports, and interim management statements. On the other hand, ongoing information includes information about major holdings and major proportions of voting rights as well as the place, time and agenda of general meetings. The disclosure of precise, exhaustive and up-to-date information at specified intervals should allow investors to better assess investment risks.

Since annual financial reports are drawn up both for present shareholders and potential investors, companies may be forced to take into account the diverse and potentially incompatible interests of interested parties. This will have an impact on the scope of responsibility of the persons who draw up annual financial reports and certified auditors.

The most important EU regulations regarding the provision of financial services that are currently in the draft stage include:

– the Capital Requirement Directive;[53]

– the directive on the solvency of insurance companies (Solvency 2).[54]

The impact of current amendments to EU regulations and those amendments which are in the draft stage is difficult to estimate since there is no secondary legislation related to those regulations nor are there final interpretations issued as part of the so-called Level 3 of the Lamfalussy process[55] (see Box 2.1).

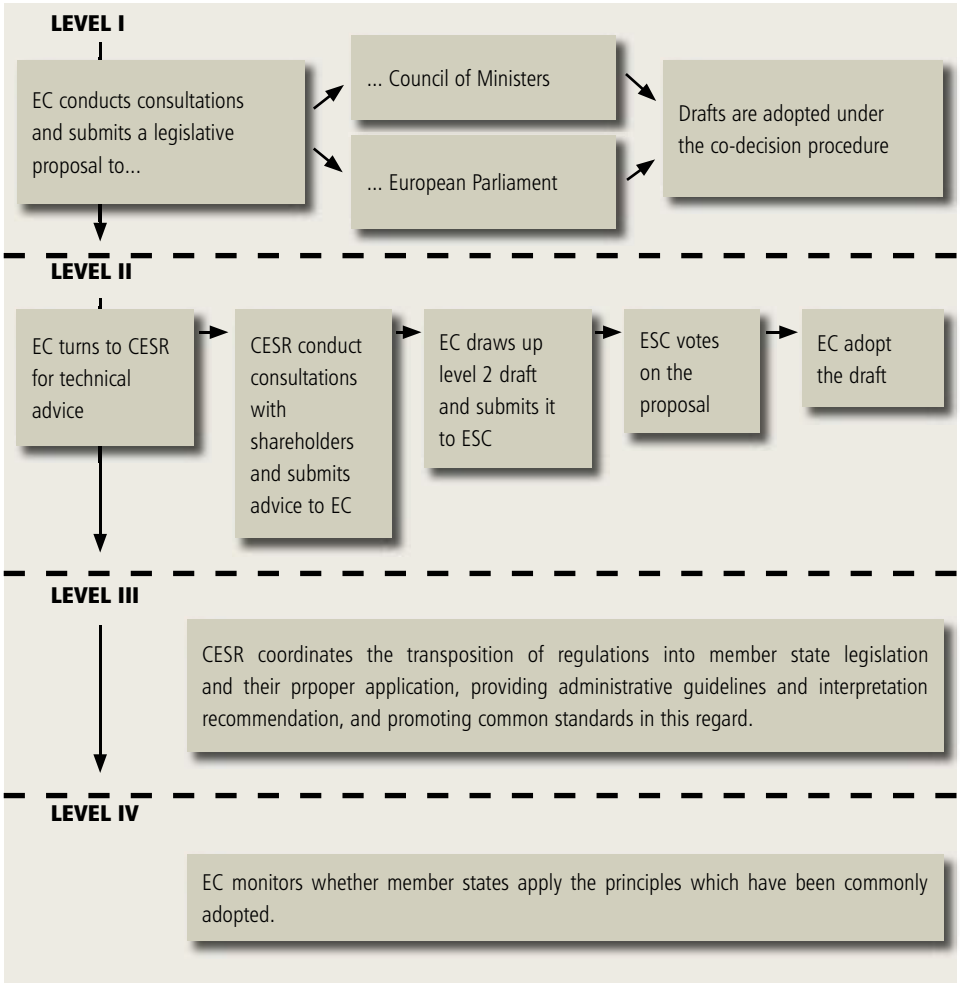
[52] CESR (Committee of European Securities Regulators) is an advisory committee of the European Commission (EC) as well as a consultative body of the European Securities Committee. CESR members are the directors of bodies which supervise securities markets in individual EU member states. CESR tasks include providing guidelines for Level II implementing measures to the EC as well as coordinating the transposition of EU regulations into member state law. See Box 2.1.

[53] The draft Capital Requirement Directive (CAD 3), amending the Consolidated Banking Directive 2000/12/EC, and the Capital Adequacy Directive 93/6/EEC, was presented by the European Commission on July 14, 2004. It is expected that the Directive will be adopted by the European Parliament in September 2005.

[54] The draft Directive will be presented by the European Commission in October 2006.

[55] In 2001, a four-level regulatory process was introduced.

Box 2.1. Lamfalussy process with regard to the capital market



Note: CESR is an advisory committee of the European Commission (EC) as well as a consultative body of the European Securities Committee. The European Securities Committee (ESC) is an advisory committee of the European Commission with regard to legislative initiatives concerning the capital market.

Source: NBP calculations based on the Final Report of the Committee of Wise Men on the Regulation of European Securities Markets, Brussels 2001, http://europa.eu.int/comm/internal_market/securities/docs/lamfalussy/wisemen/final-report-wise men_en.pdf.

3
System infrastructure

The financial system infrastructure consists of technical infrastructure, regulatory and supervisory bodies, systems that protect market participants, and institutions that improve information transparency.

The technical infrastructure of the financial system includes institutions and systems that enable the execution of payments by market participants, organise trade in financial instruments, and enable the settlement of concluded transactions. The bodies that regulate and supervise the operation of the financial system play a significant role. Systems that guarantee the protection of market participants, and institutions that improve information transparency are also important.

The individual entities and systems comprising the financial system infrastructure as well as their functions were described in detail in the previous report.[56] Therefore only the most important changes in financial market infrastructure introduced in 2004, and developments in this area related to the integration with the European financial market will be presented in this edition.

3.1. Regulatory and supervisory institutions

The institutions which regulate and supervise the operation of the financial system include the Ministry of Finance, NBP, Commission for Banking Supervision (*Komisja Nadzoru Bankowego – KNB*), Securities and Exchange Commission (*Komisja Papierów Wartościowych i Giełd – KPWiG*), and Insurance and Pension Funds Supervisory Commission (*Komisja Nadzoru Ubezpieczeń i Funduszy Emerytalnych – KNUiFE*).[57]

Pursuant to the Act on Public Trading in Securities, supervision over the securities settlement system (SSS), which is operated by the National Depository for Securities (*Krajowy Depozyt Papierów Wartościowych – KDPW*), is exercised by the Securities and Exchange Commission. Due to its responsibilities in payment system oversight,[58] the National Bank of Poland is interested in the operation of the SSS. The need for central banks to participate in the oversight of securities settlement systems has been stressed by international bodies[59] as well as the European Central Bank (ECB), which assessed the Polish clearing and settlement infrastructure in September 2002 and indicated that the collaboration between the NBP and the Securities and Exchange Commission in this area should become closer.

The agreement regarding the principles and procedure of mutual exchange of information, including opinions, concerning the oversight of securities settlement systems, which was concluded on October 1, 2004 between the NBP and the Polish Securities and Exchange Commission, aims to make the collaboration closer and more formal.[60] The goal of this collaboration is to ensure the proper performance of responsibilities regarding the oversight of securities settlement systems by

[56] *Financial system development in Poland 2002–2003*, Warsaw: NBP, December 2004, Chapter 4.

[57] More on this subject in: *Financial system development in Poland 2002–2003,* Warsaw: NBP, 2004, Chapter 4.

[58] The Act on the National Bank of Poland of August 29, 1997 (*Dz.U.* No. 1/2005, item 2), and the Act on Settlement Finality in Payment and Securities Settlement Systems, and on the Principles for Supervision of those Systems of August 24, 2001 (*Dz.U.* No. 123/2001, item 1351).

[59] Financial Stability Forum, Committee for Payment and Settlement Systems (BIS), International Organisation of Securities Commissions.

[60] Polish Securities and Exchange Commission January 1, 2004 press release: *Porozumienie NBP i KPWiG w sprawie wymiany informacji*, http://www.kpwig.gov.pl/d2004.htm.

the NBP and the Securities and Exchange Commission as well as the proper course of administrative or criminal proceedings in cases related to the exercise of this oversight.

3.2. Payment system

The measures implemented in 2004 with regard to the payment system aimed to increase the efficiency and security of its operations and adjust it to EU requirements as well as achieve closer integration between the Polish payment system and those operating in euro area countries.

Important developments in 2004 included the decommissioning of the SYBIR system and introducing the settlement guarantee mechanism in the ELIXIR system. The NRB[61] and IBAN[62] standards were also fully implemented in the Polish banking sector. Moreover, the important process of developing two euro-based payment systems (SORBNET-EURO and EuroELIXIR) was put in motion in 2004.

3.2.1. Large-value interbank settlements

In 2004, the most important work related to large-value interbank settlements concerned the launch of the SORBNET-EURO system.

In 2003, the Management Board of the NBP adopted the SORBNET system development strategy, which assumed the continued operation and development of this system until Poland joins the euro area as well as the development of the SORBNET-EURO system on its basis, which will be used for large-value euro payment settlements – both domestic and cross-border ones.

In 2004, work on the launch of the SORBNET-EURO system and interfacing it with the TARGET system[63] continued. It included, among other things:

- design and development work – developing the assumptions behind the system, developing a new application on the basis of the SORBNET system that will service bank accounts in euro and execute payment orders in euro, work related to accessing the intraday credit facility in euro and the repayment of intraday credit,[64] servicing orders placed by NBP customers, domestic and cross-border session settlements arising from the exchange of payment orders in the EuroELIXIR system, including STEP2[65] clearing and settlements with EBA;[66]
- internal and external testing – with domestic banks, the National Clearing House, the National Depository for Securities, the ECB, the Bank of Italy and other TARGET system participants;
- legal arrangements – e.g. with the ECB with regard to stipulating the conditions for the participation of the NBP in the TARGET system according to option 4,[67] with the Bank of Italy

[61] NRB – Bank Account Number.

[62] IBAN – International Bank Account Number.

[63] Trans-European Automated Real Time Gross Settlement Express Transfer System – the TARGET system consists of 15 national RTGS systems and the ECB payment mechanism.

[64] In order to ensure the liquidity of settlements in the SORBNET-EURO system, the National Bank of Poland will make an intraday credit facility in euro available to system participants.

[65] More information on the EuroELIXIR and STEP2 systems can be found later in this section.

[66] EBA Clearing Company is the operator of the STEP2 system.

[67] In November 2002, the ECB stipulated five options for the connection between a country acceding to the EU and the TARGET system, of which two involve direct connection (options 1 and 2), and three – indirect ones:

– option 1 – direct connection between the country's own RTGS (euro-based) system and the TARGET system;

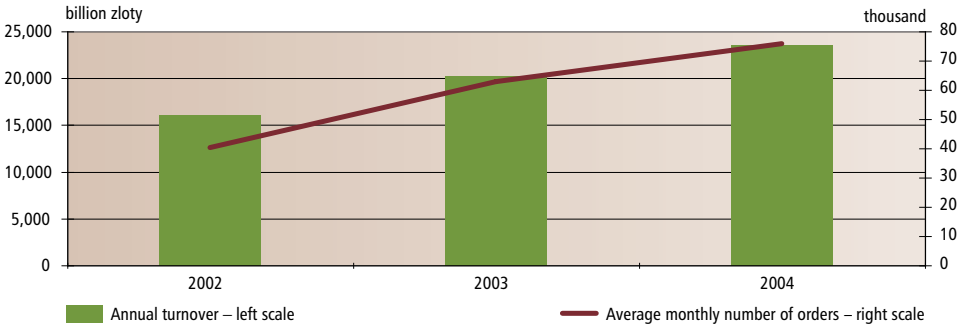
– option 2 – direct connection using a modified version of an RTGS system which already participates in the TARGET system;

– option 3 – connection via central bank and commercial bank accounts maintained with one of the central banks from the euro area;

– option 4 – connection via an account of the central bank of the acceding country maintained with a selected central bank from the euro area;

– option 5 – connection via central bank and commercial bank accounts maintained with a selected commercial bank from the euro area.

Figure 3.1. Annual turnover and the average monthly number of orders processed by the SORBNET system, 2002–2004



Source: NBP.

concerning the opening of a correspondent account for the NBP with the Bank of Italy and stipulating the principles according to which the Bank of Italy will enable the NBP to access the TARGET system[68] as well as work concerning the drawing up and negotiation of agreements with banks, the National Clearing House, and the National Depository for Securities stipulating the conditions pursuant to which these undertakings will participate in the SORBNET-EURO system.

It is expected that the SORBNET-EURO system will be launched and connected to the European TARGET settlement system in 2005.[69] Major advantages which should result from the commissioning of the new system include faster interbank settlement, lower settlement costs and highly secure payment procedures.

In 2004, 54 banks, the National Depository for Securities, and the National Clearing House (*Krajowa Izba Rozliczeniowa – KIR*) participated in the SORBNET system, which performs zloty payment settlements.[70] In 2004, both the turnover and the average monthly number of orders in the SORBNET system increased (Figure 3.1).

3.2.2. Retail payment systems

The most important developments related to retail payment systems in 2004 were the decommissioning of the SYBIR system and introducing the settlement guarantee mechanism in the ELIXIR system.[71] Preparations for the launch of the EuroELIXIR system were underway, and the implementation of NRB and IBAN standards was completed.

Pursuant to the decision made in 2003, the SYBIR system was decommissioned on June 30, 2004.[72] Banks prepared for this development well in advance – from July 2003, they steadily limited the number of payment orders submitted to this system. Since July 1, 2004, all interbank settlements performed via the National Clearing House have been executed in the ELIXIR system.

In parallel with the work on the launch of the SORBNET-EURO system, work on the development of the EuroELIXIR system (an interbank settlement system for retail payments in euro operated by the National Clearing House) was also initiated in September 2003. The system will enable:

– the performance of domestic settlements in euro;

[68] The SORBNET-EURO system will be connected to the TARGET system via the Italian central bank and the Italian BIREL RTGS system.

[69] The launch of the SORBNET-EURO system is planned for March 2005.

[70] As at year-end.

[71] More on this subject in section 3.4.

[72] SYBIR (*System Bankowych Izb Rozliczeniowych*) is a traditional clearing house system developed to support net interbank settlements performed on the basis of hard copy documents. ELIXIR is an electronic clearing house system. All information needed for the correct entry of the customer's payment order is transformed into electronic records and forwarded to the bank which maintains the account of the order's recipient. ELIXIR is also a net settlement system. More on this subject in: *Financial system development in Poland 2002–2003*, Warsaw: NBP, 2004, Chapter 4.

Box 3.1

THE STEP2 PAN-EUROPEAN CLEARING HOUSE SYSTEM

The STEP2 system was launched on March 18, 2003. It is one of the three settlement systems[1] operating under EBA[2] auspices. It is a settlement system for retail payments (up to 12,500 euro). It is also the first payment system which has obtained the status of a pan-European clearing house (PE-ACH) from the European Payment Council (EPC[3]). Thus STEP2 is an important stage in the development of the Single Euro Payment Area (SEPA).

The system currently has 86 direct and over 1,500 indirect participants. It is operated by the Italian clearing house SIA.[4] The system's primary cycle allows orders to be submitted until 10 pm Central European Time. Settlement is performed on the next day at 7.30 a.m. in the EURO1 system.

Banks may participate in the STEP2 system as direct or indirect participants. Indirect participants gain access to the system pursuant to agreements with direct participants. It is also possible to deliver payments to companies which are not participants by using so-called entry points. Direct system participants which distribute payment orders received from abroad via domestic payment systems may play the role of entry points.

[1] The remaining two are the EURO1 large-value payment system and the STEP1 retail payment system.

[2] EBA (Euro Banking Association) is an association founded in 1985, which groups over 190 banks from Europe, the United States, Switzerland, Norway, Japan, Australia and China. Formally, all three systems are operated by EBA Clearing Company – a company established in 1998.

[3] The European Payment Council was established in June 2002 in order to represent banks with regard to payment issues on the transnational level. The responsibilities of the Council include developing a common position among banks regarding basic payment services, stipulating good practices as well as supporting and monitoring the implementation of the decisions that have been made. The EPC has also declared its support for the creation of the Single Euro Payment Area. Among other things, the EPC decided to adopt a retail settlement model based on a pan-European clearing house, which will initially include cross-border settlements, and ultimately also local ones.

[4] Societa Interbancaria per l'Automazione.

Sources: EBA, National Clearing House.

– the submission of payments to the STEP2 pan-European clearing house system for retail payments (this system is described in Box 3.1);

– the distribution of payments received from the STEP2 system;

– the settlement of other payments transferred to the euro area or received from the euro area between participants analogously to domestic settlements.[73]

Compared to correspondent banking, the EuroELIXIR[74] system has several advantages: it shortens the settlement cycle, reduces costs and enables the netting of domestic payment orders.

The National Bank of Poland will play the principal role in the operation of the EuroELIXIR system by assuming the responsibilities of:

– the settlement bank – to this end, the NBP will use the SORBNET-EURO system, where current accounts of direct participants in the EuroELIXIR system will be maintained; as the settlement bank, the NBP must also participate in the EURO1 system;[75]

[73] The latter situation may occur where a bank from the euro area (Bank A) wishes to transfer a payment to a Polish bank (Bank C), which is not its correspondent bank, using correspondent banking services. Bank A transfers the payment to its correspondent bank (Bank B), which then settles the payment with Bank C using the EuroELIXIR system.

[74] The EuroELIXIR system for domestic payments was launched in March 2005; cross-border payments have been serviced since May 2005.

[75] EURO1 is a large-value payment system developed to settle domestic and cross-border payments in euro between banks operating in the euro area. It is operated by EBA Clearing Company.

– an intermediary in submitting orders to the STEP2 system – this function will consist of providing intermediary services with regard to the exchange of orders between the EuroELIXIR and STEP2 systems; therefore the NBP will have the status of a direct participant of the STEP2 system (the NBP will be the only entry point to the STEP2 system on the Polish market).

In 2004, the introduction of the NRB and IBAN standards in the Polish banking sector was completed (Box 3.2). Banks were required to assign NRB account numbers to all bank accounts used for domestic settlements and IBAN numbers to all accounts used for cross-border settlements by December 31, 2003.[76] Since July 1, 2004, only new bank account numbers have been used.

As at year-end 2004, 55 banks participated directly in the exchange of payment orders via the National Clearing House.[77] During the period under review, the total number of transactions settled via the National Clearing House grew by 17%. Turnover rose by 8.5%.

Figure 3.2 presents the average monthly turnover at the National Clearing House and the share of SYBIR system settlements in National Clearing House turnover between 1999 and 2004.

Box 3.2

NRB AND IBAN BANK ACCOUNT NUMBERING STANDARDS

Two bank account numbering standards are currently used in Poland. They are the NRB, which has been in force since July 1, 2004, and is used for domestic transactions, and the IBAN, which is used for cross-border transactions. The introduction of the national bank account numbering standard meant that Poland implemented Regulation No. 2560 of the European Parliament and of the Council of December 19, 2001 on cross-border payments in euro. The NRB is a string of 26 digits, which signify:

- 2 first digits – so-called check digits, which are generated on the basis of the remaining 24 digits according to the algorithm stipulated in the PN ISO 13616 standard, using Poland's letter code. The check digits enable the bank to detect possible errors already at the stage when the order is submitted.
- 8 subsequent digits – the settlement number of a bank's organisational unit assigned by the National Bank of Poland. It includes the so-called bank identifier, the identifier of a given unit and a check digit. Therefore it states at which branch or sub-branch a given account is maintained.
- 16 final digits – the bank account number of the bank customer. It is assigned according to the principles adopted by the bank.

The IBAN account number can be obtained by prefixing the NRB account number by the characters denoting the country code (PL for Poland).

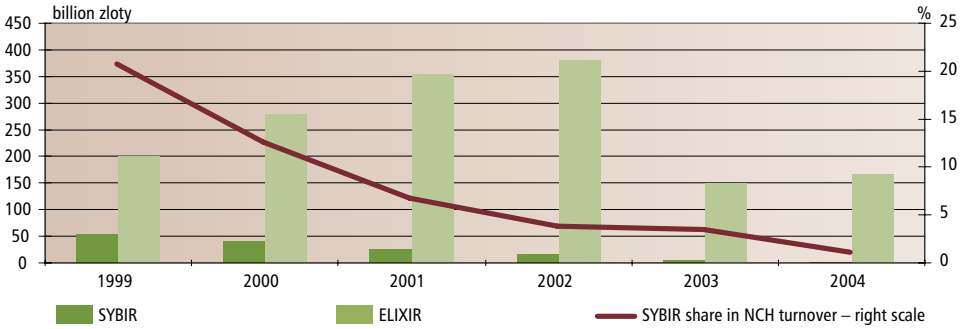
The introduction of the uniform NRB standard in Poland has certain advantages – among other things, streamlined payment settlement due to the elimination of manual processing as well as enhancing the efficiency and quality of settlements.

Source: NBP calculations based on the document Karta wdrożenia standardu numeru rachunku bankowego developed by the Bank Account Numbering Standard Implementation Team affiliated with the Payment System Committee of the Polish Bank.

[76] Pursuant to Resolution No. 5/2002 of the President of the National Bank of Poland on the method of numbering bank accounts maintained by banks of May 6, 2002 (Dz.Urz. NBP No. 8, Warsaw, May 29, 2002), and Resolution No. 10/2003 of the President of the National Bank of Poland amending the Resolution on the method of numbering bank accounts maintained by banks of May 27, 2003 (Dz.Urz. NBP No. 10, Warsaw, May 29, 2003).

[77] Including the National Bank of Poland.

Figure 3.2. Average monthly National Clearing House turnover and SYBIR share in National Clearing House turnover, 1999–2004 (gross)



Note: The decrease in average monthly National Clearing House turnover in 2003 was caused by the fact that from January 1, 2003, large-value customers' orders were routed directly to the SORBNET system.
Source: NBP.

Financial intermediation agencies

Financial intermediation agencies that service mass payments have also increased the scale of their operations in the Polish financial services market. They operate cash desks where customers can pay their rent or electricity, gas and phone bills.

It is estimated that in 2004, cash desk networks already had a share of around 10% in the Polish mass payment market.[78] Between 1,300 and 1,400 cash desks operated where four to five million transactions were conducted each month, amounting to around PLN 600 million in total.[79]

Financial intermediation agencies compete with banks, post offices, and, recently, also store chains, with regard to mass payment services. Intermediaries offer lower transfer fees and try to reach customers in the most convenient places, e.g. at shopping malls.[80]

Apart from setting up their own offices, some intermediaries who service small payments also operate as franchises. Their operations are not supervised by any institution. After instances in which certain companies went bankrupt or misappropriated funds, intermediaries in the mass payment market decided to establish a Commercial Chamber of Financial Enterprises (*Izba Gospodarcza Przedsiębiorstw Finansowych*).[81] The Chamber is to oversee the proper operation of financial intermediaries as well as develop standards to which the companies operating in this market should adhere.

3.3. Financial instruments market infrastructure

The infrastructure of the securities market comprises institutions that organise trading in securities and companies that settle transactions. In Poland, the following institutions operate: the Securities Register (*Rejestr Papierów Wartościowych – RPW*, including the SKARBNET and SEBOP systems), which services Treasury bill and money market bill transactions, the National Depository for Securities system, which services the market in Treasury bonds and financial instruments available on the markets organised by the Warsaw Stock Exchange and the Central Table of Offers, as well as the Clearing House of the Warsaw Commodity Exchange (*Izba Rozliczeniowa Warszawskiej Giełdy Towarowej*), which settles forward transactions concluded on this exchange.

[78] Dom Inwestycyjny BRE Banku SA, *Przegląd Miesięczny*, April 7, 2005.

[79] "Pośrednicy się zrzeszają", *Rzeczpospolita*, April 25, 2005.

[80] Some banks also try to attract customers by creating their own cash desk networks (e.g. the Unikasa network established by Bank Handlowy w Warszawie SA).

[81] Commercial Chamber of Financial Enterprises was established in April 2005.

Securities Register

In 2004, 53 participants[82] held Treasury bill deposit accounts with the Securities Register, while 49 banks and the Bank Guarantee Fund took part in money market bill trading. Table 3.1 presents the data concerning the number and value of Treasury bill and money market bill transactions processed by the Securities Register.

Table 3.1. Number and value of Treasury bill and money market bill transactions registered at the Securities Register in 2003 and 2004

	Number of transactions ('000)		Transaction value (PLN billion)	
	2003	2004	2003	2004
Treasury bills	100.6	107.1	1,890	1,871.7
Money market bills	3.7	2.5	477.3	350.4

Source: NBP.

National Depository for Securities

The National Depository for Securities settles securities transactions concluded in public trading. The organisationally separate Derivatives Clearing House (*Izba Rozrachunkowa Instrumentów Pochodnych – IRIP*), which operates within the National Depository for Securities, settles transactions concerning derivative rights.

The most important changes introduced to the Polish depository and settlement system in 2004 concerned foreign issuers' stock, which can now be listed on two markets – in Poland and abroad. In view of the consolidation of depository and settlement institutions, which is underway in the European market, work on determining possible development directions for the National Depository for Securities was also initiated.

In 2004, stocks issued by foreign issuers were admitted to the National Depository for Securities:[83] shares in the Hungarian companies Borsodchem Rt and MOL Rt, the German company bmp AG, and the U. S. company IVAX Co. Thus the National Depository for Securities was required to open deposit accounts with European depository and settlement institutions as well as develop procedures for transferring securities between them. Three new links were established:

– with the Hungarian KELER system for Borsodchem and MOL shares;

– with the British CrestCo system for IVAX shares;

– with the Clearstream Banking Luxembourg system in Luxembourg for bmp AG shares.

In 2004, a dividend was paid for the first time to shareholders holding a foreign issuer's (Bank Austria Creditanstalt) shares.

The adoption of the *Agenda Warsaw City 2010 Capital Market Development Strategy*[84] by the Government was an important event from the point of view of the further development of securities settlement systems in Poland.

In 2004, the number of direct participants registered with the National Depository for Securities[85] amounted to 61, compared to 60 in 2003. Direct participants included 18 brokerage offices, 39 banks, one investment company and three other financial institutions. In 2004, the number of issuers registered with the National Depository for Securities also grew. As at year-end 2004, there were 308 issuers (284 at year-end 2003). In 2004, the number of transactions

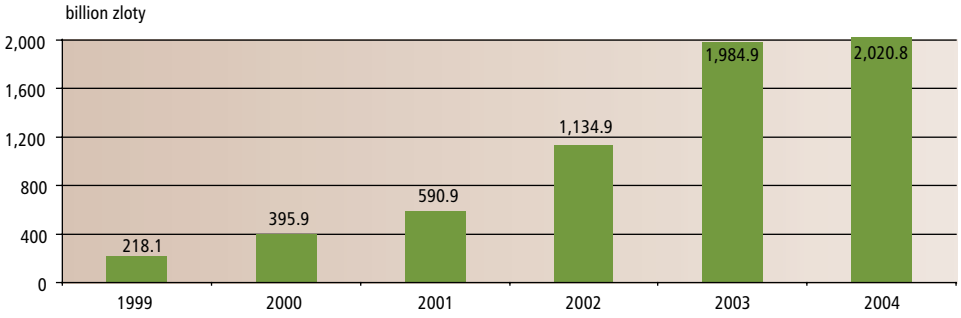
[82] As at year-end.

[83] In October 2003, shares of Bank Austria Creditanstalt, the first foreign company listed on the Warsaw Stock Exchange, were admitted to the National Depository for Securities. It entailed the opening of the first deposit account of the National Depository for Securities with a foreign depository and settlement institution, the Austrian OeKB.

[84] More on this subject in Chapter 1.

[85] National Depository for Securities participants include direct participants and issuers. Direct participants (unlike issuers) are companies authorised to maintain securities accounts, companies that do not maintain securities accounts but are authorised to perform brokerage activities, and other financial institutions which invest funds in the securities market on their own account.

Figure 3.3. Value of trades registered at the National Depository for Securities



Source: KDPW.

settled at the National Depository for Securities continued to rise (from 4.64 million in 2003 to 5.57 million). On the other hand, the growth in the volume of trades registered at the National Depository for Securities was limited (Figure 3.3).

Warsaw Commodity Exchange Clearing House

The Clearing House is an organisationally separate unit of the Warsaw Commodity Exchange. It performs tasks related to the settlement of forward transactions concluded on the Warsaw Commodity Exchange. Warsaw Commodity Exchange shareholders who are authorised to participate in settlements may play the role of clearing members (there were seven of them in 2004).

Warsaw Stock Exchange

As with the National Depository for Securities, the measures and changes introduced at the WSE resulted from the need to develop a strategy for integration with European structures, including plans for ownership changes.

Since May 1, 2004, a new classification of stock exchange markets has been in force.[86] Instead of the hitherto existing markets (main, parallel and free), trading has been conducted in two markets: the official and unofficial one. This division results from the adjustment of Polish law to European Union directives. The former set of rules regarding the stock exchange market has been replaced by two new sets. On February 24, 2004, the Supervisory Board of the WSE adopted the Rules of the Official Stock Exchange Market,[87] while on March 3, 2004, the Rules of the Unofficial Stock Exchange Market[88] were adopted. Diagram 3.1 presents the new stock exchange market division.

The criteria for admission to the official (main) market were stipulated by the Ordinance of the Council of Ministers of July 17, 2001.[89] Securities admitted to public trading, which satisfy applicable share dispersion criteria,[90] and with a minimum capitalisation of one million euro, may be listed on this market. Within the official market, the Plus segment for large companies that satisfy additional requirements and adhere to all corporate governance rules has been established.

[86] The regulated market was divided into the official and unofficial markets in 2001 pursuant to the Act Amending the Act on Public Trading in Securities of December 8, 2000 (*Dz.U.* No. 122/2000, item 1315). In the light of the aforementioned Act, the stock exchange operated as an unofficial market until May 1, 2004.

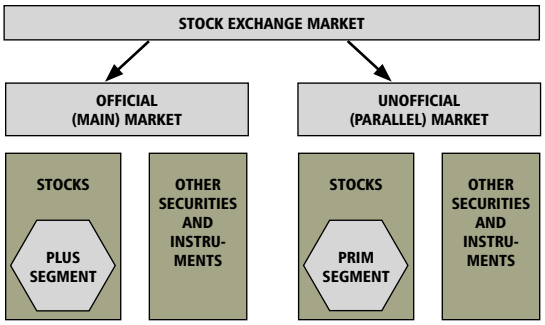
[87] Resolution No. 6/1024/2004 of the Supervisory Board of the Warsaw Stock Exchange.

[88] Resolution No. 10/1028/2004 of the Supervisory Board of the Warsaw Stock Exchange.

[89] Ordinance of the Council of Ministers on the determination of conditions that must be satisfied by official stock exchange markets and the issuers of securities admitted to trading in such markets of July 17, 2001 (*Dz.U.* No. 86/2001, item 939).

[90] Shares are deemed to be dispersed where: (1) the shares covered by the application held by the shareholders, each holding no more than 5% of the overall number of votes at the general meeting, account for at least 25% of all shares in the company; or (2) the shareholders, each holding no more than 5% of the overall number of votes at the general meeting, hold at least 500,000 company shares with the total value of at least the equivalent in zloty of EUR 17 million.

Diagram 3.1. New stock exchange market division



Source: WSE.

The criteria for the admission of securities to trading in the unofficial (parallel) market have been stipulated by the By-laws of the Warsaw Stock Exchange. No minimum value requirements have been stipulated for this market. Securities admitted to public trading may be traded on this market. Within the unofficial market, the Prim segment has been distinguished where stock in small companies that accept stricter transparency requirements may be listed.

The need for the privatisation of the WSE has been discussed in the following documents: *Harmonogram rozwoju rynku kapitałowego w Polsce do roku 2001* ("Schedule for the Development of the Polish Capital Market until 2001") developed by the Polish Securities and Exchange Commission and adopted by the Economic Committee of the Council of Ministers in 1998, and *Zarys strategii rozwoju rynku kapitałowego* ("Outline of the Capital Market Development Strategy") adopted by the Council of Ministers on March 26, 2002. The *Agenda Warsaw City 2010 Capital Market Development Strategy*[91] also deals with ownership changes concerning the WSE. In August 2004, pursuant to long-standing plans, the process of selecting a consultant assisting in the privatisation of the WSE began. On September 20, 2004, the deadline for application submission expired.[92]

Markets organised by the MTS-CeTO company

The most important change in the operation of the markets organised by CeTO (Central Table of Offers), which resulted from integration processes occurring on the European market, was the conclusion of a strategic alliance with the MTS Group (Box 3.3 contains information on the MTS Group).

CeTO entered the alliance with the MTS group in May 2004. MTS took up 25% of CeTO equity. As a consequence, the name of the company was changed to MTS-CeTO SA in September 2004. As a result of cooperation with MTS, in November 2004 the trading platform operating to date, which serviced the Electronic Treasury Securities Market (*Elektroniczny Rynek Skarbowych Papierów Wartościowych – ERSPW*), was replaced by a new solution – the Telematico electronic trading platform.[93] All markets operating within the MTS Group use this platform. The changes introduced affected market organisation within CeTO. Currently the following markets operate within MTS-CeTO:

– the MTS Poland market, which is part of the Treasury Securities Dealer System;

– CeTO Securities Market (CeTO-RPW, regulated OTC securities market), where stocks and corporate, municipal and Treasury bonds as well as mortgage bonds and investment certificates are traded.

[91] *Strategia rozwoju rynku kapitałowego Agenda Warsaw City 2010,* Warszawa: Ministerstwo Finansów, 2004. More on this subject in Chapter 1.

[92] In March 2005, the Ministry of the Treasury selected the syndicate established by McKinsey & Company Poland Sp. z o.o., CDM Pekao SA and Ernst & Young Audit Sp. z o.o. as the consultancy assisting in the privatisation of the Warsaw Stock Exchange.

[93] More on this subject in section 5.1.

Box 3.3

THE MTS GROUP AND ITS ACTIVITIES IN POLAND

MTS Group

MTS S.p.A. is a company which engages in organising and linking European regulated bond markets. MTS markets are established according to uniform principles. MTS provides a uniform trading platform, which operates according to the rules in force in a given market. The system includes over 500 links within Europe. The company is owned by major international financial institutions.

MTS started operations in 1988 on the initiative of the Italian Treasury and the Bank of Italy in order to ensure the liquidity and transparency of the government bond market. In 1997, it was privatised and launched similar markets all over Europe. In 1998, MTS together with major financial institutions established EuroMTS – a pan-European benchmark bond platform. In November 2003, the NewEuroMTS market, where euro Treasury bonds issued by the states that acceded to the European Union in May 2004 are listed, was launched. Polish and Hungarian bonds were the first to meet the conditions for admission to NewEuroMTS listing. In March 2004, the Treasury bill segment was launched within the framework of EuroMTS, where issues amounting to at least one billion euros were listed. Initially, French, German, Italian and Spanish securities were offered.

Currently, the MTS Group includes the following markets: EuroMTS, EuroCredit MTS, NewEuroMTS, MTS Quasi-Government Market, EuroBenchmark Treasury Bills Market, MTS Amsterdam, MTS Austrian Market, MTS Belgium, MTS Denmark, MTS Spain, MTS Finland, MTS France, MTS Germany, MTS Ireland, MTS S.p.A (MTS Italy), MTS Greece, MTS Portugal and MTS Poland. The company plans to launch MTS markets in Hungary and in Israel soon. The Group also includes BondVision – a regulated Internet-based market, and MTSNext – the company which oversees the publication of the EuroMTS Index (EMTX) based on the prices of government bonds listed in MTS Group markets.

MTS-CeTO SA

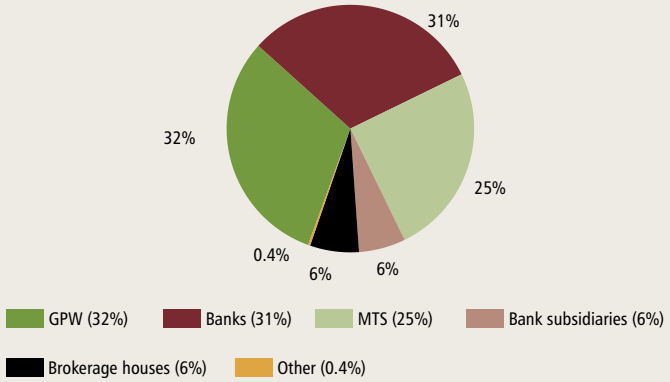
The MTS-CeTO SA company organises and conducts public and non-public trading in securities and property rights. The authorised capital of the company amounts to PLN 10 million and comprises 10 million ordinary registered shares. The company conducts its activities in two major areas:

– the MTS Poland market operating within the Treasury Securities Dealer System; this market is based on the Telematico technology used by electronic MTS platforms in other countries;
– CeTO Securities Market (a regulated OTC securities market).

MTS Poland is a market for wholesale trading in Treasury bonds and bills. Securities holdings with a minimum nominal value of PLN 5 million or PLN 10 million (depending on the instrument) may be traded there. Banks which have the status of Treasury Securities Dealers as well as other banks and institutional investors who obtain the approval of the Ministry of Finance for their participation in the market, may take part in the MTS Poland market. Currently, 11 banks with the status of Treasury Securities Dealers operate in the market.

Until now, only domestic banks have participated in trading in the Electronic Treasury Securities Market. When MTS Poland was established, this market was included in the MTS trading system, which enables access to bond trading in any market operated by MTS.

Figure 3.4. MTS-CeTO SA shareholders



Source: own calculations based on MTS-CeTO SA materials: http://www.mtsgroup.org.

Thanks to its capital links to the strategic partner, MTS-CeTO has gained access to the technology used in all markets operating within the MTS Group as well as to the services related to the operation of the platform. Moreover, the use of a uniform trading system makes it possible to accept foreign companies as market participants. In this manner, MTS Poland has become part of the European bond trading platform system, which may contribute to increased liquidity of the Polish Treasury securities market.

3.4. Market participant protection systems

The changes in the operation of the Bank Guarantee Fund as well as those related to the introduction of the settlement guarantee mechanism in the ELIXIR system are discussed below. Compared to 2003, the principles of operation of capital market participant protection systems,[94] the Insurance Guarantee Fund, the Pension Guarantee Fund and the Credit Unions' Savings Protection Scheme have remained unchanged.

Bank Guarantee Fund

In 2004, no significant legal changes were introduced with respect to the operation of the Bank Guarantee Fund (*Bankowy Fundusz Gwarancyjny*). On the other hand, the range of undertakings covered by the Polish mandatory guarantee scheme has changed. Since Poland's accession to the European Union, it has become possible to transform banks, which operate pursuant to national legislation, into credit institution branches as well as for new credit institution branches to take up business on the territory of Poland.[95] Such branches are subject to supervision in the home country and therefore the deposits accumulated by them are not subject to the Polish mandatory guarantee scheme.[96]

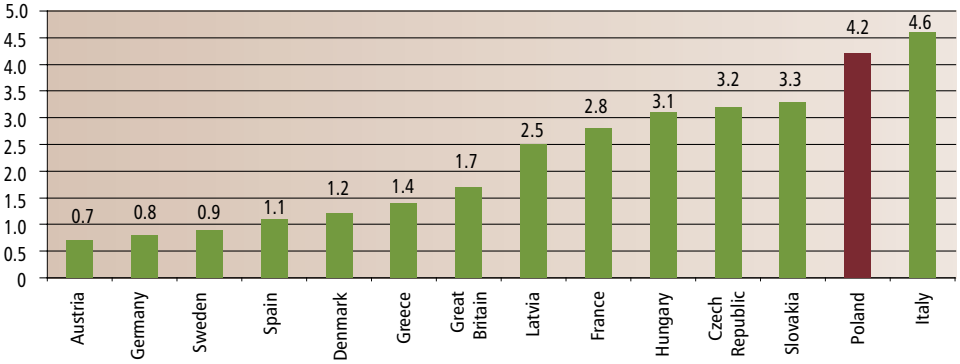
If large banks operating in accordance with Polish law were transformed into branches, the amount of funds available to the BGF from premiums payable by banks would decrease (simultaneously, the scope of responsibility of the Polish supervisory authority would also become smaller). In theory, a situation where banks use guarantees offered by the guarantee scheme of another country in order to gain competitive advantage in Poland is also conceivable.

[94] According to earlier agreements, on the 1st of January 2004 the high limit for obligatory guarantees of NDS (National Depository for Securities) was increased to the equivalent of EUR 7,000.

[95] As of year-end 2004, three credit institution branches operated in Poland. More on this subject in section 4.1.

[96] Credit institution branches may participate in the Polish deposit guarantee scheme insofar as it offers additional protection compared to the home country system.

Figure 3.5. Ratio of guarantee scheme payout limits to GDP *per capita* in selected EU countries



Source: A. Pawlikowski, "The Polish deposit guarantee scheme compared to solutions adopted in other EU countries", *Materiały i Studia* No. 193, Warszawa: NBP, 2005.

In 2004, no bank bankruptcies were recorded. Therefore no payments were made from the guaranteed deposit protection fund except for payments related to two banks which had gone bankrupt in previous years. On the other hand, the BGF granted a loan (amounting to PLN 450 million) from the assistance fund to one bank which was implementing a rehabilitation programme. The BGF also extends financial assistance to cooperative banks which are not threatened with insolvency (from the cooperative bank restructuring fund) in order to cover the costs of mergers and related investments.[97] In 2004, resolutions were adopted to grant 60 loans, amounting to PLN 70.2 million in total.

In 2004, preparations with the aim of introducing changes in the Polish deposit guarantee scheme were initiated. The extension of the range of assistance instruments available to the BGF as well as changes in the manner in which the BGF accumulates funds are being considered.

Bank Guarantee Fund guarantees cover the following amounts of funds held in accounts:

– up to the amount of the zloty equivalent of 1,000 euros – 100% of value;

– exceeding the equivalent of 1,000 euros up to the equivalent of 22,500 euro – 90% of value.

Thus 20,350 euros is the maximum amount of compensation that can be paid in Poland. The nominal guaranteed amount is slightly higher than the minimum required for European Union Member States.[98] On the other hand, the amount of guarantees currently offered by the BGF measured as the ratio of the payout limit to GDP per capita is among the highest in the European Union (Figure 3.5).

The settlement guarantee mechanism in the ELIXIR system

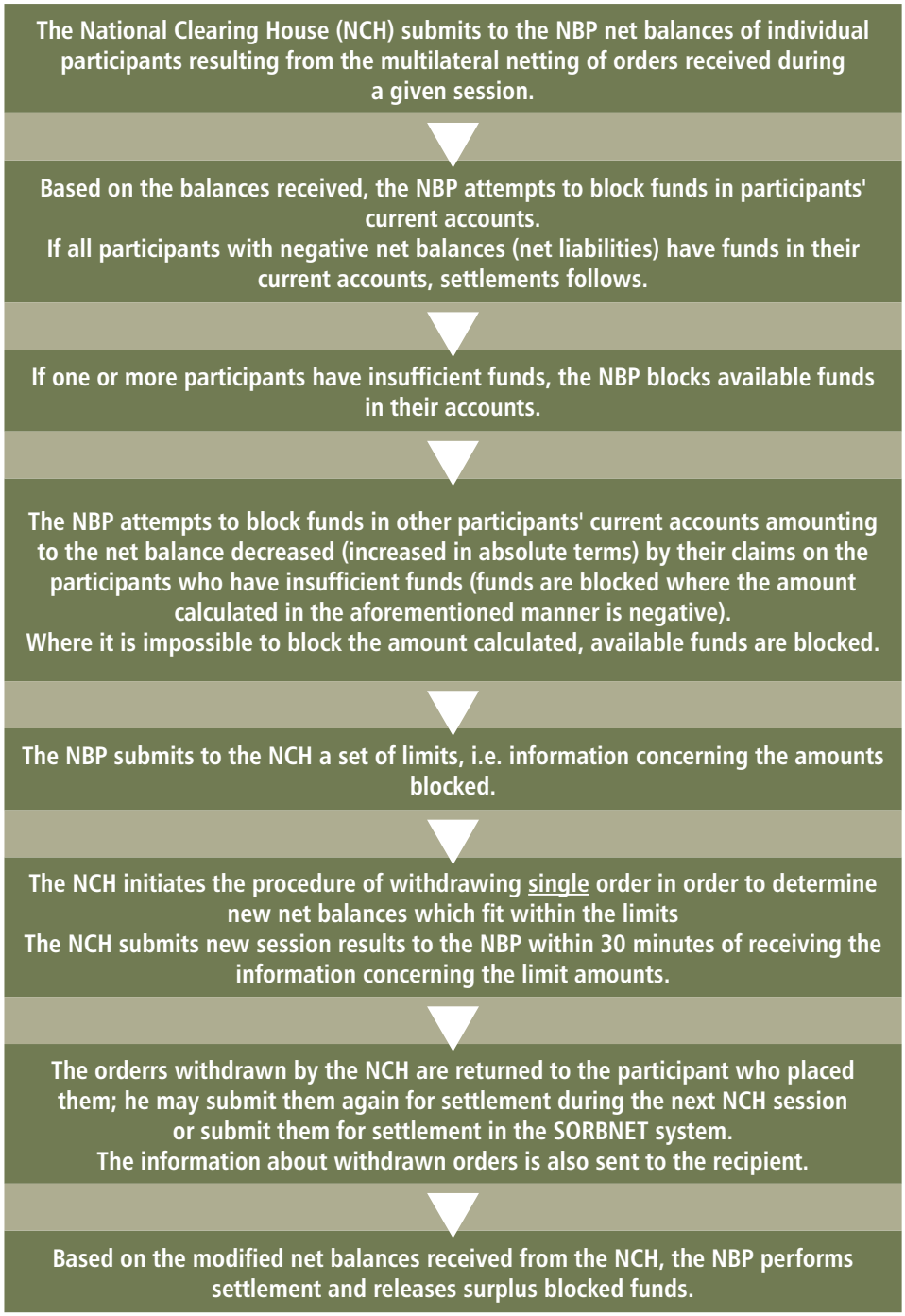
On November 2, 2004, the National Clearing House introduced a settlement guarantee mechanism in the ELIXIR system, which enables the system to perform settlements when one or more participants have insufficient funds. The aim was to increase the security and ensure the timely completion of daily settlements within the system.

The settlement guarantee mechanism involved no changes to the process of submitting orders for a given session. Banks still submit transactions which are subject to netting to the National Clearing House, and after the session has been closed, the results of netting (net balances) are submitted to the NBP. The differences only apply to actions taken where at least one settlement

[97] The uniformisation of computer software and hardware, banking technologies, financial and accounting procedures and the range of banking products and services on offer as well as the purchase of shares in the affiliated bank.

[98] Directive 94/19/EC of the European Parliament and of the Council of May 30, 1994 pertains to deposit-guarantee schemes for bank deposits. It stipulates that depositors' funds up to the amount of at least EUR 20,000 should be covered by guarantees. MS could limit the guarantees for deposits to percentage rate but if the guaranteed amount is less than EUR 20,000, the percentage rate has to be at least 90%.

Diagram 3.2. ELIXIR system settlement procedure pursuant to new principles



Source: NBP calculations based on KIR information.

participant did not ensure sufficient funds in the current account held with the NBP in order to perform settlement within the ELIXIR system. Such a participant is not excluded from settlement,[99] and the payments, which are covered by the funds in his account held with the NBP, are settled. The key assumption of the settlement guarantee mechanism is to withdraw the smallest number of orders possible. Diagram 3.2 presents the settlement procedure within the ELIXIR system pursuant to new principles.

The introduction of the settlement guarantee mechanism in the ELIXIR system constituted the implementation of a recommendation issued by the National Bank of Poland in 2002 concerning the adjustment of the system to the principles stipulated by the Bank for International Settlements (BIS) for systemically important payment systems.[100] Principle No. 5 included in the report *Core Principles for Systemically Important Payment Systems* stipulates that a system in which netting takes place should, as a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single settlement obligation. The principle of excluding insolvent participants from settlement applied to date was a source of systemic risk, stemming from the fact that an inability to settle by one participant could cause other participants to become unable to meet their liabilities (the so-called domino effect). The new mechanism limits this risk.

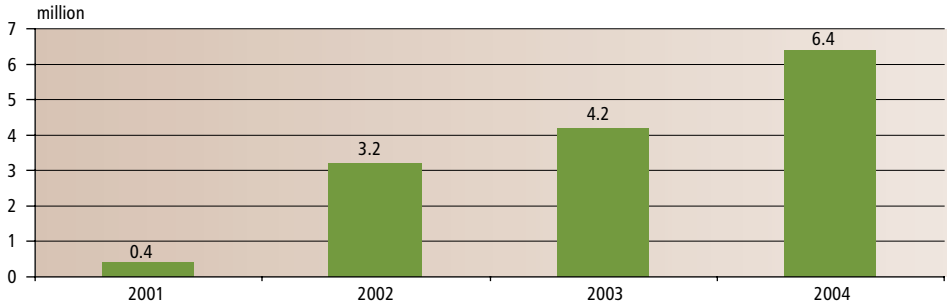
3.5. Institutions that improve information transparency

Credit Information Bureau

The Credit Information Bureau (*Biuro Informacji Kredytowej – BIK*), which has operated in the Polish market for four years, collects, processes and distributes data regarding individual bank customers' credit histories in the form of credit reports. The number of credit reports made available by the Bureau is steadily rising (Figure 3.6).

In 2004, the Bureau introduced a new service – scoring, i.e. a customer's assessment stating the probability that he or she will repay the loan. Currently, around 15% of credit reports sold in Poland include scoring (in Western Europe, all reports include scoring).[101]

Figure 3.6. The number of credit reports made available by BIK SA



Source: Polish Banking Association.

[99] Until now, such a participant was excluded from settlement. Where a participant's account contained insufficient funds, all his payments were excluded from settlement. The claims and liabilities of system participants were then calculated again.

[100] *Core Principles for Systemically Important Payment Systems*, Basel: Bank for International Settlements, January 2001.

[101] M. Pokojska, "Certyfikat wiarygodności", *Gazeta Bankowa*, December 13, 2004.

As of now, BIK only offers information on individual customers, but in 2004 work was underway on a corporate information system. This is the Bureau's most important new project, which is to be launched at the end of 2005.

In 2004, the Inspector General for the Protection of Personal Data (*Generalny Inspektor Ochrony Danych Osobowych – GIODO*) issued a decision concerning the data stored by BIK. According to the Inspector General, the Bureau should not process information about bank customers who have already repaid their debt because this is prohibited by the applicable law.

As a result of that, in 2004 the Polish Banking Association undertook work on a proposal for an amendment to the Banking Act, which would adjust it to personal data protection standards and stipulate the period during which the data may be stored by BIK. This would make it possible to process and disclose information about customers who have already repaid their debt. Such information would facilitate the making of loan decisions by banks.

Business Information Offices

On April 26, 2003, the Commercial Information Disclosure Act[102] took effect. It stipulates the principles of establishing Business Information Offices (*Biura Informacji Gospodarczej – BIG*), which provide intermediation services with regard to the disclosure of information concerning the liabilities of consumers and entrepreneurs.[103] In 2003, only one business information office was in operation (Krajowy Rejestr Długów BIG, which commenced activity in August 2003). During the first year of operation of Krajowy Rejestr Długów BIG, around 14,000 customers took advantage of its services.[104] In 2004, three more business information offices were established (Table 3.2).

The emergence of new institutions that may increase the security of business transactions testifies to the gradual development of the Polish commercial information market.

Table 3.2. Business information offices on the Polish market

Business Information Office	By-laws approved on[1]
Krajowy Rejestr Długów BIG	July 31, 2003
KSV BIG	January 26, 2004
InFoScore BIG	March 2, 2004
InfoMonitor BIG	June 29, 2004

[1] The fact that by-laws have been approved does not necessarily mean that an office begins to operate immediately (InfoMonitor will commence activity in 2005).

Source: B. Mayer, „BIG-i zdobywają rynek", *Parkiet*, August 5, 2004.

Rating agencies

In 2004, the Fitch Polska S.A. rating agency continued its operations on the Polish market. It assigned international ratings to three Polish cities, while three other cities were assigned national ratings. One leasing company was assigned an international rating.

[102] The Commercial Information Disclosure Act of February 14, 2003 (*Dz.U.* No. 50/2003, item 424).

[103] More on this subject in: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, Chapter 4.

[104] B. Mayer, "BIG-i zdobywają rynek", *Parkiet*, August 5, 2004.

4
Financial institutions

4.1. Banks[105]

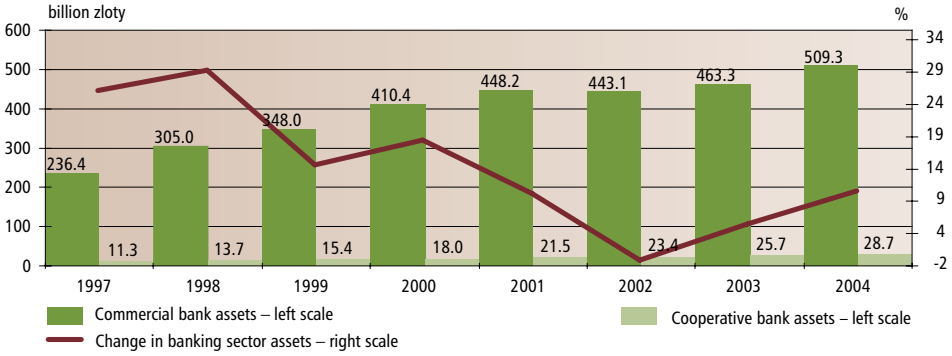
4.1.1. Evolution of the banking sector: size and structure

The banking sector in Poland, like in other countries of Central and Eastern Europe (CEE), is the key component of the financial system. Polish banking sector assets consist of commercial bank[106] and cooperative bank assets. As of year-end 2004, the share of banking sector assets in financial sector assets amounted to 74% (a decrease of 2.3 percentage points compared to 2003).[107] In 2004, the assets of the banking sector grew more rapidly than in 2003, and amounted to 538 billion zloty (Figure 4.1.1). As in 2003, retail banks[108] recorded a larger increase in assets than the entire sector. The significant growth in mortgage bank assets was particularly remarkable – from 2.6 billion zloty in 2003 to 3.6 billion zloty in 2004.

Since 2000, cooperative bank assets have grown faster than those of commercial banks. This trend, although less pronounced, was sustained in 2004. The share of cooperative bank assets in total banking sector assets amounted to 5.3% (Table 4.1.1).

At the end of 2004, 54 commercial banks conducted operating activity – a decrease of four on the previous year. The decrease in the number of banks was caused by:

Figure 4.1.1. Banking sector assets and their changes



Source: NBP.

[105] Unless otherwise indicated, data on the banking sector in 2004 have been obtained from the database of bank reports on January 24, 2005 (any revised data submitted by banks after this date will be presented in the next edition of this report). Data for earlier years may differ from those presented in the previous edition since they include revisions submitted by banks.

[106] Including the assets of credit institution branches.

[107] Banking sector assets do not include the assets of banks which do not conduct operating activity.

[108] Mortgage banks are a special type of commercial banks that can only perform activities provided for in the Act on mortgage bonds and mortgage banks dated 29th August 1997 (*Dz.U.* No. 140, item 940). Main activities of mortgage banks are: granting credits collateralized by mortgage, buying claims of other banks collateralized by mortgage, issuing mortgage bonds.

Table 4.1.1. Number of banks and banking sector ownership structure

	Number of banks							
	1997	1998	1999	2000	2001	2002	2003	2004
1. Banks which conduct operating activity	81	83	77	73	69	59	58	57
1.1. Commercial banks	81	83	77	73	69	59	58	54
1.1.1. With majority public-sector ownership	15	13	7	7	7	7	6	5
1.1.2. With majority private-sector ownership:	68	70	70	66	62	52	52	49
– Polish equity	39	39	31	20	16	7	6	8
– foreign equity	29	31	39	46	46	45	46	41
1.2. Credit institution branches								3
3. Banks conducting no operating activity	2			1	2	3	2	6
of which: credit institution branches								2
3. Cooperative banks	1295	1189	781	680	642	605	600	596
4. Total banking sector	1378	1272	858	754	713	667	660	659
	Share of banking sector assets, %							
	1997	1998	1999	2000	2001	2002	2003	2004
1. Banks which conduct operating activity (including credit institution branches)	95.5	95.7	95.8	95.8	95.4	95.0	94.8	94.7
1.1. With majority public-sector ownership	49.3	45.9	23.9	22.9	23.5	25.1	24.4	20.5
1.2. With majority private-sector ownership:	46.2	49.8	71.8	72.9	71.9	69.9	70.4	74.2
– Polish equity	30.9	33.2	24.6	3.4	3.2	2.5	2.6	6.6
– foreign equity (including credit institution branches)	15.3	16.6	47.2	69.5	68.7	67.4	67.8	67.6
2. Cooperative banks	4.5	4.3	4.2	4.2	4.6	5.0	5.2	5.3

Source: *Summary Evaluation of the Financial Situation of Polish Banks – 2004*, Warsaw: NBP, 2005.

– the initiation of liquidation proceedings with regard to one bank;[109]

– two acquisition transactions, as a result of which two banks ceased to be juridical entities;[110]

– the transformation of one bank into a credit institution branch.

In 2004, the Commission for Banking Supervision approved the establishment of two banks with majority foreign (French) equity interest. Both plan to commence operating activity in 2005.

Since the accession to the European Union, a single definition of a bank, i.e. a credit institution,[111] as well as the principle of mutual recognition of licences for conducting lending activities (the so-called single passport principle) have been in force in Poland. Pursuant to this principle, a credit institution that has obtained a banking licence in any EU country may take up and pursue its activity on the territory of another member state without the need to undergo the licensing procedure again. It is only required to notify the supervisory authorities in the host state of its intention to commence activity on its territory. Activity pursuant to the single passport may be pursued in two ways: through the establishment of a branch or directly as cross-border activity, without any physical presence in the host state.[112] The supervision over the activity of a credit institution which operates on the territory of Poland through a branch or within the framework of cross-border activity is exercised by the competent supervisory authorities of the home country. The Commission for Banking Supervision exercises supervision over credit institution branches with regard to the maintenance of liquidity corresponding to the scale and types of activity conducted, in a manner which ensures that all cash obligations are fulfilled according to their maturity dates.[113]

[109] On March 1, 2004, liquidation proceedings were initiated with regard to Bankgesellschaft Berlin (Polska) SA.

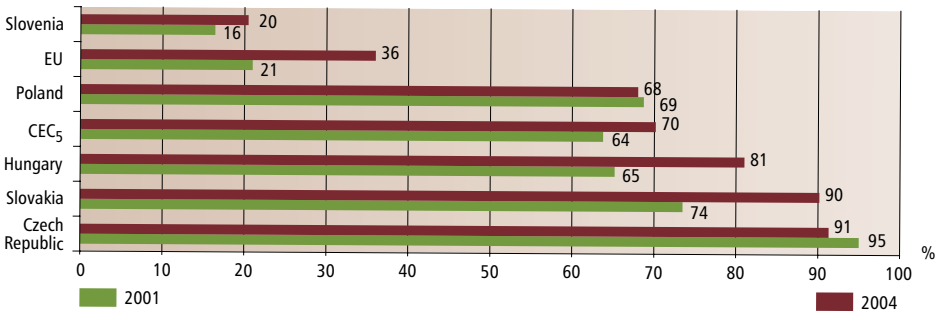
[110] See Table 4.1.36.

[111] A definition of a credit institution in line with Art. 1 of Directive 2000/12/EC relating to the taking up and pursuit of the business of credit institutions was presented in: *Financial System Development in* Poland *2002–2003*, Warsaw: NBP, 2004, p. 129.

[112] W. Kwaśniak, "Obecne i przyszłe zmiany roli polskiego banku centralnego w zakresie nadzoru bankowego", *Zeszyty BRE Bank-CASE* No. 76/2005, p. 18.

[113] Art. 141c and Art. 8 of the Banking Act of August 29, 1997 (consolidated text in *Dz.U.* No. 72/2002, item 665).

Figure 4.1.2. Asset share of banks controlled by foreign investors in banking sector assets in CEC_5 and EU countries



Note: CEC_5 includes the Czech Republic, Poland, Slovakia, Slovenia, and Hungary. 2001 EU data include 15 countries, while 2004 data include 25 countries. The increase in the share of foreign capital in EU countries in 2004 resulted from the accession of new member states.

Source: *Banking Structures in the New EU Member States*, ECB, January 2005, p. 32 and 34. The publication can be found at: http://www.ecb.int/pub/pdf/other/bankingstructuresnewmemberstatesen.pdf. *Report on EU Banking Structures*, ECB, October 2005, p. 35–40. The publication can be found at: http://www.ecb.int/pub/pdf/other/eubankingstructure102005en.pdf.

Several banks were interested in conducting banking activity in Poland through own branches. Société Générale SA Oddział w Polsce, which had conducted its activities as a foreign bank branch since 1992, became, by law, a credit institution branch on May 1, 2004. The first credit institution which decided to open a branch in Poland, and then transfer all of its activity (which it had hitherto conducted as a public limited company) to that branch, was a Swedish bank which opened the Svenska Handelsbanken AB SA Oddział w Polsce branch.[114] As of year-end 2004, five credit institution branches existed in Poland, of which two did not conduct operating activity yet.[115] Transformations of banks into credit institution branches may intensify competition in the banking market (a branch may take advantage of the capital base of the parent bank as well as reduce financing costs by taking advantage of its credit rating).

The partial privatisation of PKO Bank Polski SA was an important development for the capital market. Its shares were first listed on the WSE on November 10, 2004. While the Treasury still has a majority stake, 385 million shares corresponding to 38.5% of equity were sold.[116]

No major changes occurred in the ownership structure of commercial banks. In terms of assets, banks with majority foreign equity interest dominate in the Polish banking sector; most foreign investors are based in European Union countries. The asset share of banks with majority foreign equity interest in entire banking sector assets has been steady since 2000 (Table 4.1.1). In 2004, foreign investors controlled 41 commercial banks whose share in banking sector assets (including credit institution branches) amounted to 67.6%. Banks with majority foreign equity interest held 62.7% of deposits from non-financial customers and granted 66.8% of net loans.[117] The share of banks controlled by foreign investors in commercial bank assets in Poland was much higher than in most EU countries, but lower than in other new European Union member states, e.g. the Czech Republic and Hungary (Figure 4.1.2). Intensified consolidation in the Czech and Hungarian banking sectors has recently led to an increase in the share of foreign capital in those

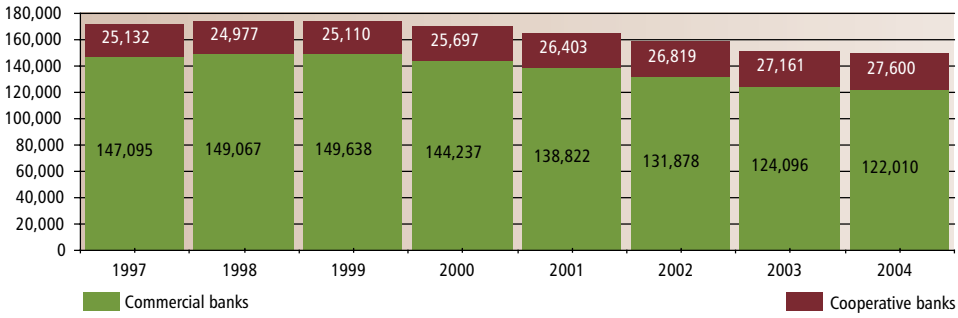
[114] The branch was entered into the commercial register on October 6, 2004, and commenced its operating activity on November 22, 2004. Until the Commission for Banking Supervision granted the permission for the equity of the public limited company to be transferred to the newly established branch, operating activity had been conducted both by the credit institution branch Svenska Handelsbanken AB SA Oddział w Polsce and by the banking enterprise Bank Svenska Handelsbanken (Polska) SA.

[115] Apart from the two aforementioned branches, Sygma Banque Societe Anonyme (SA) Oddział w Polsce commenced operating activity in 2004. Moreover, Banque PSA Finance SA Oddział w Polsce and Jyske Bank A/S SA Oddział w Polsce were entered into the commercial register in 2004 but had not commenced operating activity by the end of the year.

[116] More on this subject in section 5.2.

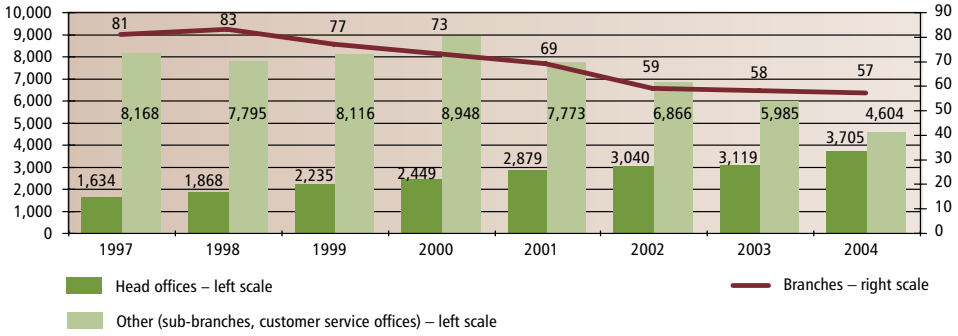
[117] Loans less specific provisions.

Figure 4.1.3. Bank employees (excluding foreign field branches)



Source: NBP.

Figure 4.1.4. Number of commercial bank branches and domestic field branches, 1997–2004



Note: Data on branches for the year 2004 include three credit institution branches.
Source: NBP.

sectors. In 2004, the share of foreign capital in Czech banking sector assets exceeded 90%, and in the Hungarian banking sector it was over 80%.

At the end of 2004, the number of private banks with majority Polish equity interest increased from six to eight (the two banks were Getin Bank SA and Bank Gospodarki Żywnościowej SA[118]). Their share in banking sector assets also grew, but this was not a permanent development.

In 2004, the number of cooperative banks decreased. As in previous years, this was the result of mergers undertaken in order to satisfy the statutory requirement for cooperative banks to reach the minimum level of regulatory capital, i.e. the equivalent of 500,000 euros by the end of 2005 (by the end of 2010, these banks are required to increase their regulatory capital to at least 1 million euros).

In 2004, the employment level in the Polish banking sector decreased.[119] As in 2003, mergers and acquisitions, the introduction of advanced technologies (e.g. the development of electronic banking), and the banks' actions aimed at reducing their general expense and amortisation were the main reasons for the drop in employment. The banking sector had the highest number of employees in 1999. In subsequent years, employment at commercial banks decreased steadily, along with a slight increase in employment in the cooperative banking sector.

[118] As of end-December 2003, 69.7% of BGŻ shares were held by the Treasury, i.e. the bank was one with majority public-sector ownership. As of end-December 2004, BGŻ was classified as a bank with majority Polish private-sector interest, since the Treasury only held 49% of its shares. Beginning January 3, 2005, after cooperative banks had finally sold their shares to Rabobank, BGŻ has been classified as a bank with majority foreign equity ownership.

[119] As equivalent of full-time posts.

In 2004, 40 commercial banks in Poland operated through 3,705 branches and a total of 4,604 field branches, i.e. sub-branches and customer service offices. The remaining banks were (14) branchless subsidiaries of foreign banks providing services solely through their head offices.

It should be noted that whereas the number of commercial bank head offices decreased, the number of branches steadily grew. In 2004, the downward trend in the total number of domestic commercial bank field branches (which includes sub-branches and customer service offices) was sustained (Figure 4.1.4).

4.1.2. Changes in the structure of bank assets and liabilities

Asset structure

In 2004, claims on non-financial customers[120] were the most important item in banking sector assets, but their share in commercial bank assets dropped to 41.1% as of year-end 2004 after a period of steady growth in previous years (it amounted to 44.5% in 2003). The chief reason for the decrease in the share of commercial bank claims on non-financial customers in total assets at the end of 2004 was their slow growth rate (amounting to 3.5%) caused by a decrease in the amount of loans to corporates. Exchange rate movements also significantly affected the amount of loans.[121]

Securities were the second most important item among commercial bank assets; their share – due to slight changes in portfolio value – decreased to 22.4%. The commercial bank portfolio structure was similar to the one in 2003. Treasury securities formed a considerable part of this portfolio, while other securities were less significant.

The share of commercial bank claims on financial corporations, which amounted to 19.5% at the end of 2004, rose significantly. Rising claims of Polish banks on non-residents accounted for around 95% of the growth in claims on financial corporations. The considerable increase in this regard was caused by an inflow of foreign capital to Poland. Non-residents purchased domestic currency and domestic banks had to invest the foreign exchange obtained in this manner, so they deposited it with foreign banks.

This phenomenon is confirmed by an analysis of the balance of payments, where the item "other investments by Polish monetary institutions abroad" grew by 38.6 billion zloty. The increase in investment by Polish banks abroad resulted, among other things, from the inflow of direct investment totalling 45.6 billion zloty, portfolio capital totalling 39.9 billion zloty, and other investments (by banks and other financial institutions) totalling 3.9 billion zloty. These inflows not only covered the current account deficit, but also caused a surplus of available foreign exchange at Polish banks. The Treasury bond market was among the financial market segments which experienced the largest inflow of foreign capital. The involvement of non-residents in this market grew by 21.2 billion zloty in 2004.

Commercial bank claims on the general government increased by 3.9% compared to year-end 2003. The growth rate of such claims was significantly lower than in the previous year when it amounted to 34.5%. The chief reasons were the decrease in the debt of social security funds and the increased use of sources of financing other than loans (municipal bond issues) by local government authorities. As a result, the share of commercial bank claims on general government in total assets decreased slightly.

In 2004, changes in the asset structure of cooperative banks differed from those for commercial banks. At cooperative banks, net claims on non-financial customers continued to rise rapidly (an increase of 12.9% to 16.6 billion zloty); corporate debt grew faster than household debt (26.8% and 9.8%, respectively).

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[120] Non-financial customers – entities which mainly engage in the manufacturing and trading of goods or the provision of non-financial services, companies performing non-financial functions and persons.

[121] This issue is analysed later in this chapter.

Table 4.1.2. Structure of commercial bank assets, %

	2001	2002	2003	2004
Cash & due from central bank	6.3	4.7	4.0	3.8
Claims on non-financial customers	41.6	42.6	43.7	41.1
Claims on financial corporations	18.9	16.0	15.2	19.5
Claims on general government	2.5	3.2	4.1	3.9
Share of securities in total assets, of which:	21.1	23.5	24.1	22.4
– Treasury bonds[1]	8.0	9.8	13.0	12.8
– Treasury bills	5.1	5.1	4.8	4.3
– money market bills	1.5	1.5	1.2	1.1
Other assets[2]	9.6	10.0	8.9	9.3

[1] Except for restruc ims arising from securities purchased under repurchase agreements, and other assets.

[2] Fixed assets, claims arising from securities purchased under repurchase agreements, and other assets

Source: NBP.

Table 4.1.3. Selected assets of commercial banks, PLN billion

	2001	2002	2003	2004
Claims on non-financial customers	186.6	188.8	202.4	209.4
Claims on financial corporations	84.5	70.7	70.6	99.2
Claims on general government	11.0	14.2	19.1	19.8
Securities	94.7	103.9	111.5	114.1

Source: NBP.

Table 4.1.4. Selected assets of cooperative banks, PLN billion

	2001	2002	2003	2004
Claims on non-financial customers	11.2	12.6	14.7	16.6
Claims on financial corporations	6.9	7.1	6.3	7.6
Claims on general government	0.2	0.4	0.5	0.8
Securities	1.0	1.3	1.9	1.2

Source: NBP.

Claims on the local government sector also grew. This was caused by lending for local government investments, which are partly refinanced after their completion from EU structural funds and the central budget.

Liability structure

Liabilities to non-financial customers remained the primary item among banking sector liabilities, but their growth was slower than that of total assets. This caused a decrease in their share in commercial bank liabilities (Table 4.1.5). Deposits constituted the largest item among liabilities to non-financial customers. In 2004, the increase in deposits in this sector was largely caused by an increase in the value of corporate deposits (which are discussed later in this chapter).

Liabilities to financial corporations were the second largest item in terms of share in commercial bank liabilities. The increase in the amount of such liabilities in 2004 was largely caused by the fact that one domestic bank took out a loan from its foreign investor and while another issued new securities.

At cooperative banks, deposits from non-financial customers also constituted the primary source of financing in 2004. Their share in total liabilities amounted to 74%. The increase in deposits from non-financial customers was largely due to growth in demand deposits from farmers, chiefly related to direct farming subsidy payments initiated by the Agency for Restructuring and Modernisation of Agriculture. In 2004, farmers also benefited from the operation of the SAPARD pre-accession fund and the payments from structural funds, which started in the last months of the year.

Table 4.1.5. Structure of commercial bank liabilities, %

	2001	2002	2003	2004
Due to central bank	1.0	0.6	0.5	0.4
Due to non-financial customers	61.7	57.8	59.8	56.7
Due to financial corporations	14.7	13.4	15.5	15.4
Due to general government	3.4	4.1	3.9	4.4
Securities issued & outstanding	0.6	0.8	1.1	1.4
Capital and subordinated debt	9.1	9.8	10.1	11.1
Other liabilities	9.4	9.3	9.2	10.6

Source: NBP.

Table 4.1.6. Selected liabilities of commercial banks, PLN billion

	2001	2002	2003	2004
Due to non-financial customers	276.7	268.1	276.7	288.8
Due to financial corporations	66	62.1	71.8	78.5
Due to general government	15.4	18.4	17.9	22.5
Securities issued & outstanding	2.7	3.7	5.2	6.5
Capital and subordinated debt	41.1	45.3	46.9	49.6

Source: NBP.

Table 4.1.7. Selected liabilities of cooperative banks, PLN billion

	2001	2002	2003	2004
Due to non-financial customers	16.3	17.5	19.2	21.4
Due to financial corporations	0.3	0.4	0.4	0.4
Due to general government	1.6	1.9	2.2	2.5
Securities issued & outstanding	0	0	0	0
Capital and subordinated debt	1.9	2.2	2.6	2.8

Source: NBP.

4.1.3. Changes in the structure of claims and liabilities to non-financial customers[122]

The manner in which data are presented in this section differs slightly from that used in the previous report.[123] While analysing the changes in the structure of bank claims and liabilities to non-financial customers, the "corporates" category has been used instead of the "business entities"

Table 4.1.8. Division of the economy into sectors in NBP reporting – non-financial sector

Corporates	State-owned enterprises and companies
	Private enterprises and cooperatives
Households	Sole proprietors
	Individuals
	Farmers
Non-profit institutions serving households	

Source: NBP.

[122] The data in this section refer to the entire banking sector unless otherwise indicated.

[123] *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004.

Table 4.1.9. Selected commercial bank assets and liabilities to the non-financial sector (NFS) in Poland, 2004

Commercial bank assets (assets = 100)	Commercial bank liabilities (liabilities = 100)
• Claims on the NFS constitute 41.1% of assets, of which: ▪ 97.1% of claims on the NFS are loans to non-financial customers, of which: – 54.1% of loans to the NFS are loans to corporates; – 45.6% of loans to the NFS are loans to households; – 0.3% of loans to the NFS are loans to non-profit institutions serving households.	• Liabilities to the NFS constitute 56.7% of liabilities, of which: ▪ 97.5% of liabilities to the NFS are deposits from non-financial customers, of which: – 29.6% of NFS deposits are corporate deposits; – 67.4% of NFS deposits are household deposits; – 3% of NFS deposits are deposits from non-profit institutions serving households.

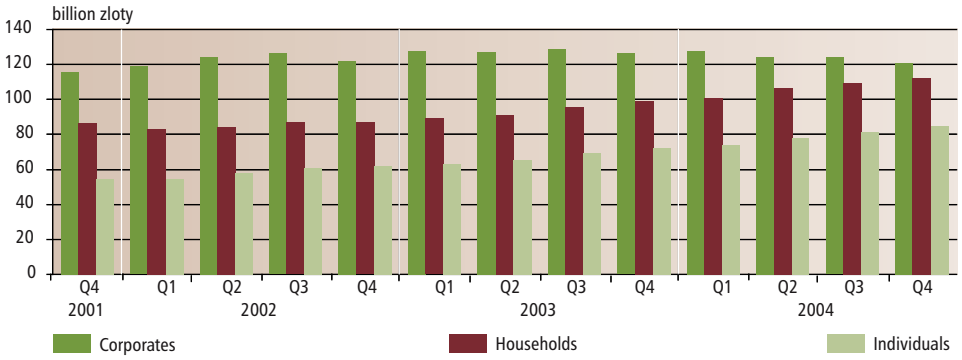
Source: NBP Claims and liabilities balance sheet items regarding the non-financial sector are listed in: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, Box 5.1.2, p. 85.

one, which included corporates as well as non-profit organisations serving households.[124] This is the result of changes in the definitions of monetary aggregates and the division of companies into sectors related to the implementation of European Central Bank monetary statistics standards by the National Bank of Poland.[125] The "households" category has not changed and includes individuals, sole proprietors and farmers as subcategories.

4.1.3.1. Claims on non-financial customers

As in 2003, the amount of claims on households continued to grow, mainly due to the still rapidly growing claims on individuals. On the other hand, the amount of claims on corporates, which had grown slightly in 2002 and 2003, decreased. This affected the structure of claims on non-financial customers. At year-end 2004, the shares of claims on corporates and claims on households in banking sector assets became similar, which reflects significant changes in the Polish banking sector. The role of the retail segment as a source of income for banks has been steadily growing compared to the role of the corporate segment. A similar situation can be observed in new EU member states, where a significant increase in demand for consumer and mortgage loans as well as credit card lending has been recorded.[126] It is expected that income in the retail segment

Figure 4.1.5. Claims on non-financial customers



Note: The category of households includes sole proprietors, individuals and farmers (Table 4.1.8).
Source: NBP.

[124] The share of bank claims and liabilities to non-profit organisations serving households in total claims and liabilities to non-financial customers was small. At year-end 2004, they constituted 0.3% of claims and 3.0% of liabilities, respectively.

[125] More information on changes in monetary aggregate definitions in NBP materials at: www.nbp.pl.

[126] H. Simonian, "Retail Banking Catching up with Corporate Business", *Financial Times*, July 14, 2005.

Table 4.1.10. Claims on non-financial customers, %

	2002	2003	2004
Households	41.3	43.6	47.9
– of which individuals	29.3	32.0	36.2
– of which sole proprietors	11.5	7.5	6.9
Corporates	57.9	55.7	51.6
Non-profit institutions serving households	0.5	0.4	0.3
Others	0.3	0.3	0.2
Total	100.0	100.0	100.0

Source: NBP .

Table 4.1.11. Changes in claims on non-financial customers, %

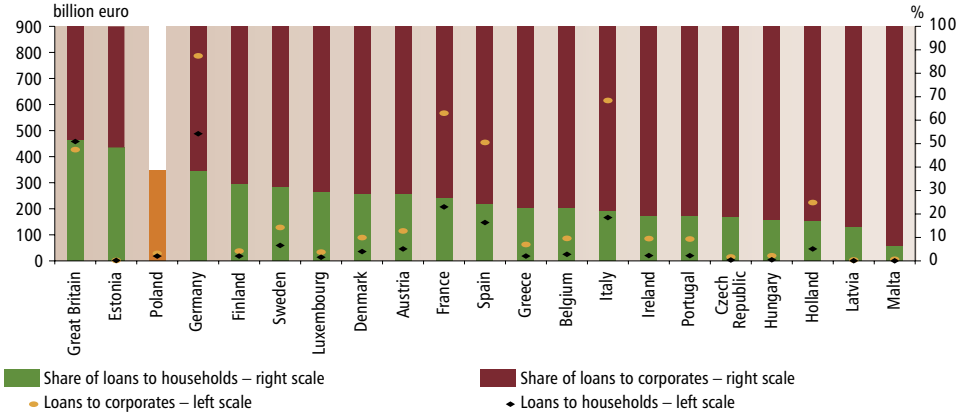
	2002	2003	2004
Households	0.6	13.8	13.5
– of which individuals	13.5	17.4	16.8
– of which sole proprietors	-33.1	0.4	2.5
Corporates	5.4	3.5	-4.4
Non-profit institutions serving households	-10.2	-22.6	-14.3
Total	3.2	7.6	3.2

Source: NBP.

in Central and Eastern European countries will grow by 14% per annum.[127] The development potential of retail banking services in EU-15 countries is much more limited.[128]

The bank debt of Polish households remains low. At year-end 2004, the ratio of total household debt to GDP was 12.4%, while in Germany it was 22.1%, in Austria 19.5% and in Spain – 17.6%.[129] As a percentage of annual gross disposable income, household debt in Poland amounted to 19.5% at the end of 2004, while in the United States, Japan, Great Britain or Germany

Figure 4.1.6. Structure of loans to non-financial customers in selected European Union countries, 2004



Source: NBP calculations based on *Report on EU Banking Structures*, ECB, October 2005. The publication can be found at: http://www.ecb.int/pub/pdf/other/eubankingstructure102005en.pdf.

[127] F. Di Maggio, P. Romanowski, "Eastern European Banking Matures", *The McKinsey Quarterly* No. 2/2003.

[128] For more information on this subject, see M. Beaujean, D. Reiche, Ch. Roxburgh, "How Europe's Banks Can Win in Tougher Times," *The McKinsey Quarterly*, June 2005.

[129] Based on *Report on EU Banking Structures*, ECB, October 2005, Tables 4, 5 and 14, the publication can be found at: http://www.ecb.int/pub/pdf/other/eubankingstructure102005en.pdf.

it exceeded 100%.[130] The ratio of total loans to non-financial customers to GDP is also low in Poland. As of year-end 2004, it was 26%, while the average for euro area countries w as around 60%.[131]

Figure 4.1.6 presents the structure of loans to non-financial customers in selected EU countries.[132]

At year-end 2004, loans constituted 97.1% of commercial bank claims on non-financial customers. The remaining claim items were purchased debt, realised guarantees and endorsements, and interest. Due to the dominant share of loans, they are discussed in greater detail in the remainder of this section.

Loans to non-financial customers

In 2004, the increase in loans to households (11.9%) was again much higher than in loans to corporates (–4.1%). The growth rate of loans to non-financial customers (2.9%) was lower than in 2003 (7.5%) and 2002 (3.5%). The shares of individual loan types also changed. Table 4.1.12 presents basic categories of loans to non-financial customers.

In 2002 and 2003, investment loans accounted for almost one quarter of the total loan amount. In 2004, the weak upward trend with regard to these loans was reversed and their amount decreased (Figure 4.1.7). A gradual decrease in the amount of loans to non-financial customers was also observed with regard to operating loans. An improvement in enterprise liquidity ratios was an important factor contributing to a decrease in interest of operating loans (the the first degree liquidity ratio grew from 23.6% in 2003 to 30.3% in 2004, while the second degree liquidity ratio grew from 84.3% to 94.4%).[133]

Table 4.1.12. Basic categories of loans to non-financial customers in NBP reporting

Loan category	C	H			NPI
		SP	P	F	
Authorised overdraft					
Export loans			X		
Operating loans			X		
Investment loans			X		
Property loans					
Credit card lending					
Loans for the purchase of securities					
Loans financing instalment purchases	X	X		X	X
In the above categories, the following types of loans are distinguished:					
Retail loans	X	X		X	X
Agricultural loans			X		
Secured mortgage loans					

Note:

1. Yellow fields with the X sign denote loan categories that are not included in NBP reports for applicable borrower groups.

2. C – corporates; H – households; SP – sole proprietors; P – individuals; F – farmers; NPI – non-profit institutions serving households.

3. There is no housing loan category for farmers.

4. The property loan category includes housing loans and other property loans.

Source: NBP.

[130] *Zadłużenie konsumentów w bankach i instytucjach kredytowych*, Gdańsk: Instytut Badań nad Gospodarką Rynkową, April 2005, p. 20.

[131] Based on *Report on EU Banking Structures*, ECB, October 2005, the publication can be found at: http://www.ecb.int/pub/pdf/other/eubankingstructure102005en.pdf.

[132] Ibid.

[133] *Wyniki finansowe przedsiębiorstw niefinansowych w 2004 r.*, Główny Urząd Statystyczny, www.gus.pl.

Box 4.1.1

MAJOR CORPORATE LOAN CATEGORIES

Overdraft facility – the amount of payables covered by the bank in accordance with an agreement and the borrower's instructions.

Export loans – loans for financing exports, i.e. for the performance of export contracts for the supply of goods or the provision of services to a domestic supplier, as well as loans to foreign purchasers granted in order to finance an export agreement. These also include loans to domestic suppliers for refinancing loans granted by them to foreign purchasers.

Operating loans – loans financing the core activities of a company, used to finance liabilities to suppliers at their maturity, payrolls, current expenditure, interest and principal instalments on loans, i.e. all payments that have to be made in order to conduct day-to-day operations. In reporting, loans for financing the company's day-to-day operations other than overdrafts are listed as working capital loans.

Investment loans – loans to finance new or extend the existing manufacturing capacities of the borrower as well as other projects in the form of joint and accompanying investments, granted to finance projects aimed at replacing, modernising or increasing fixed assets, excluding property loans (which are indicated separately).

Housing loans – loans granted for the construction, adaptation, renovation or modernisation of residential buildings or for the purchase of a construction plot, where the aforementioned activities are related to the business activities of a given corporate.

Other property loans – loans for the purchase, construction or reconstruction of a building and the purchase of land for property development or the right of perpetual usufruct of land for property development.

Securities loans – zloty loans for investment account holders granted for the purchase of listed securities, both in the primary and secondary markets.

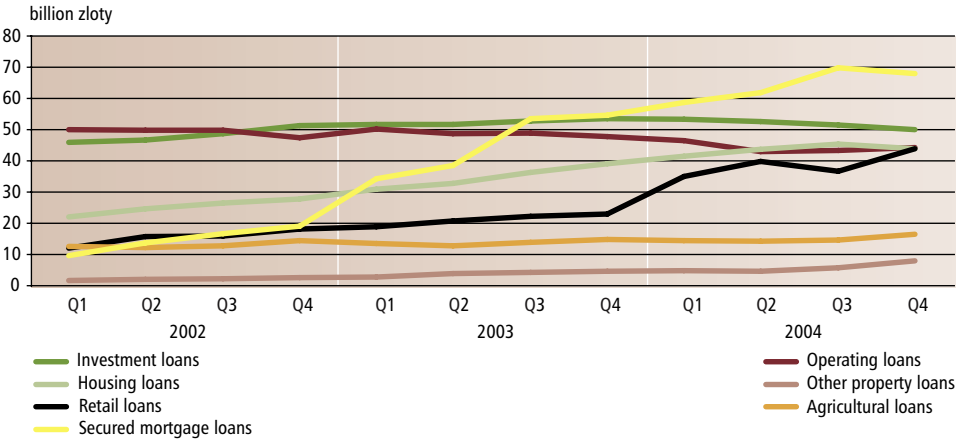
From the point of view of the type of collateral, **secured mortgage loans** – secured with an already established mortgage – should be mentioned. In mortgage loan reporting, only the amount of the bank loan which is secured by mortgage is indicated.

Source: Monetary and supervisory statistics reporting. Instruction for banks of April 14, 2004 regarding the completion of WEBIS forms, ECB forms and transaction statistics, available on the NBP web site.

An analysis of changes in the amount of mortgage loans in subsequent quarters from 2002 to 2004 indicates that this amount decreased for the first time in the fourth quarter of 2004. It should be noted, however, that the amount of secured mortgage loans at the end of 2004 was over 350% higher than at the end of 2002. From 2002 to 2004, the value of property loans grew rapidly, but, at the end of this period, the growth rate of housing loans decreased, which was largely the result of zloty appreciation since most of them were foreign currency denominated loans or exchange-rate indexed loans. In 2004, the appreciation of the zloty brought down the value of foreign currency loans expressed in zloty by 17.3%[134] (more on the impact of exchange rate movements on the value of loans and deposits by individual bank customer groups later in this chapter).

[134] *Summary Evaluation of the Financial Situation of Polish Banks – 2004*, Warsaw: NBP, May 2005, p. 16.

Figure 4.1.7. Selected types of loans to non-financial customers



Note: On March 31, 2004, a change of definition was introduced in NBP reporting – the label "consumer loans" was replaced by "retail loans". According to the definition stipulated in the Ordinance of the Minister of Finance on procedures for establishing specific provisions against risks stemming from banking operations of December 10, 2003 (*Dz.U.* No. 218/2003, item 2147), retail loans are credit exposures to persons granted for purposes unrelated to business activity or farming, except for housing loans, mortgage loans and off balance sheet commitments. In NBP reporting, the "retail loans" category includes authorised overdrafts, credit card lending and other loans (particularly loans financing instalment purchases). The "retail loans" category is broader than the one used before since there is no amount limit, while consumer loans were defined as loans ranging from PLN 500 to PLN 80,000.

Source: NBP.

In 2004, the value of retail loans grew rapidly. This was the result of an improvement in household income; particularly in the first half of the year, households purchased more consumer goods, partly due to concerns regarding price increases after Poland's accession to the European Union. The value of agricultural loans rose by 12% and their share in total loans was 7%.

Table 4.1.13. Selected types of loans to non-financial customers, %

	2002	2003	2004
Authorised overdrafts	16.6	15.2	15.7
Operating loans	22.9	21.5	19.4
Investment loans	24.9	24.1	21.9
Property loans, of which:	14.6	19.6	22.7
– housing loans	13.5	17.6	19.2
Securities loans	0.2	0.3	0.3
Credit card lending	0.9	1.0	1.4
Other loans	18.6	17.4	18.1
Export loans	0.7	0.5	0.2
Discount loans	0.6	0.4	0.4
Of all loan types (do not add up to other items):			
Retail loans[1]	8.8	10.3	19.2
Secured mortgage loans	9.2	24.7	29.8
Agricultural loans	6.9	6.6	7.2

[1] See explanation for Figure 4.1.7.

Source: NBP.

Table 4.1.14. Changes in selected types of loans to non-financial customers, %

	2002[1]	2003	2004
Investment loans	11.7	4.1	-6.5
Property loans, of which:	28.7	44.3	19.0
– housing loans	27.0	40.7	12.4
Total loans	3.5	7.5	2.9
Of all loan types (do not add up to other items):			
Retail loans[2]	53.1	26.4	92.1
Agricultural loans	14.6	2.9	11.7
Secured mortgage loans	99.5	187.9	24.5

[1] Change from March to December.

[2] See explanation for Figure 4.1.7.

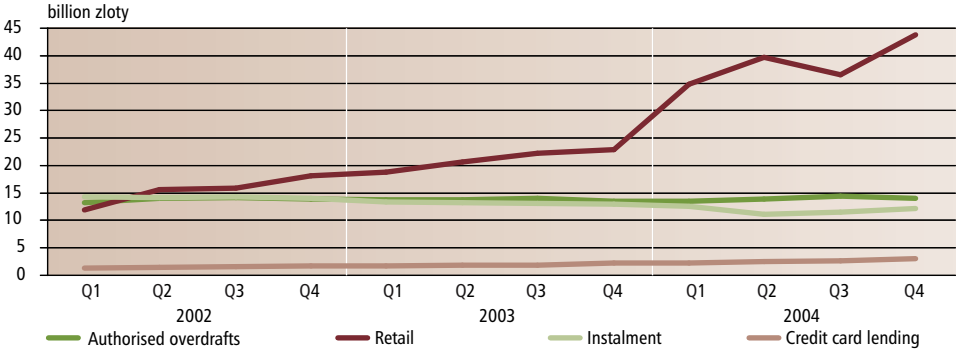
Source: NBP.

Loans to households

Among loans to households, consumer loans and loans for other purposes (e.g. housing loans) may be distinguished.

Figure 4.1.8. Loans to households

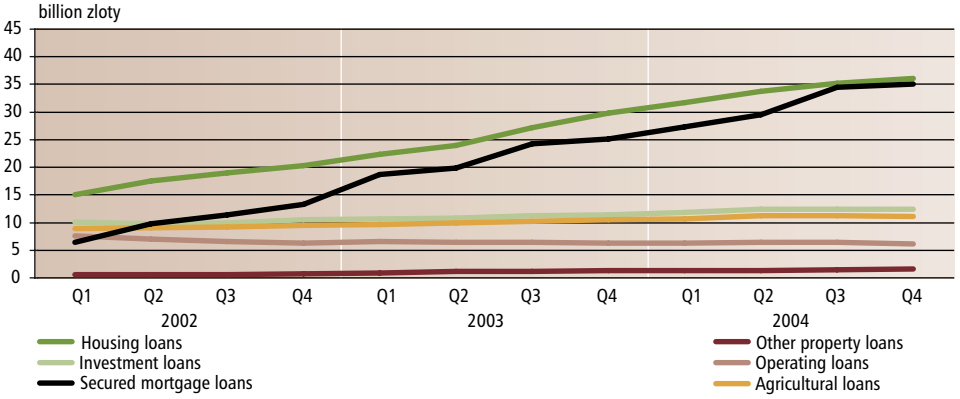
A. Consumer loans



Note: In NBP reporting, the "retail loans" category includes authorised overdrafts, credit card lending and other loans (including loans financing instalment purchases). Therefore the amounts of loans indicated in the figure should not be added up.

Source: NBP.

B. Loans for other purposes



Note: The "secured mortgage loans" category should not be added up to other categories.

Source: NBP.

Table 4.1.15. Selected types of loans to households, %

	2002	2003	2004
Housing loans	23.3	30.2	32.7
Authorised overdrafts	16.0	13.7	12.7
Credit card lending	1.9	2.1	2.7
Other loans, of which:	39.1	35.0	34.1
– loans financing instalment purchases	16.1	13.0	11.0
Investment loans	12.0	11.5	11.2
Operating loans	7.1	6.3	5.4
Of all loan types (do not add up to other items):			
Retail loans[1]	20.9	23.2	39.8
Agricultural loans	10.8	10.6	10.0
Secured mortgage loans	15.3	25.5	31.8

[1] See explanation for Figure 4.1.7.

Source: NBP.

In 2004, rapid growth in loans to households continued (by 12%), mainly in the categories of housing loans and retail loans (used to finance the purchase of consumer goods) (Figure 4.1.8).

In 2004 – another year of rapid growth in the amount of housing loans to households – individuals were the dominant group of borrowers. Their share in the total amount of housing loans granted to households was over 99%. Compared to previous years, the growth rate for this loan category decreased (a drop from around 40% to 20% on an annual basis in the second half of the year), which was related to exchange rate movements (a large part of such loans are exchange-rate indexed ones) and the higher base effect.

In 2004, the growth of non-residential property loans also slowed down considerably. Sole proprietors were the largest group among bank customers who took out such loans. As of year-end 2004, their share in the amount of non-residential property loans granted to households was 51%. Other groups were farmers (40%) and individuals (9%).

"Other loans" were the largest category among the loans granted to households. In this category, loans financing instalment purchases are distinguished, which constituted around 33% of the amount of loans in the "other loans" category at the end of 2004. Both the share of loans in the "other" category and the share of instalment loans in loans to households decreased gradually.

The significant increase in the amount of retail loans, which occurred between December 2003 and March 2004, was the result of a strong demand impulse accompanying Poland's accession to the European Union. The impulse was linked to concerns regarding an increase in indirect tax rates, and thus also prices. In the first half of 2004, households exhibited increased financing needs for the purchase of consumer durables, and the easing of credit standards as well as loan terms and conditions for consumer loans by banks additionally contributed to rising demand for such loans.[135] Moreover, the rapid growth in retail loans in 2004 was partly related to a change of definition in NBP reporting, which resulted in the extension of the "consumer loans" category used to date and the renaming of this category to "retail loans."

In 2004, credit card lending grew at the fastest rate among all types of loans to households. The rate of growth for such loans was 41.1%, while the amount of all transactions executed with payment (debit, charge and credit) cards rose by 20%. With regard to the number of payment cards issued and the amount of transactions executed, debit cards still prevailed in Poland. As of year-end 2004, their share in the total number of cards issued was 84.5%. However, credit cards exhibited the fastest growth – both with regard to transaction value (by 33%) and the number of cards issued (by 70%). This was related to a change in bank policies concerning the issue of cards, the growing

[135] *Senior Loan Officer Survey on the Loan Market Condition* (2nd quarter 2004), Warsaw: NBP, May 2004, p. 6.

Table 4.1.16. Changes in selected types of loans to households, %

	2002[1]	2003	2004
Housing loans	35.1	47.7	21.1
Authorised overdrafts	4.7	-2.5	4.0
Credit card lending	31.7	27.8	41.1
Other loans, of which:	-4.8	2.2	8.8
– loans financing instalment purchases	-2.3	-7.6	-5.8
Investment loans	3.2	9.7	8.3
Operating loans	-17.2	0.8	-3.6
Total loans	4.6	14.0	11.9
Of all loan types (do not add up to other items):			
Retail loans[2]	53.1	26.4	92.1
Agricultural loans	7.3	11.3	5.6
Secured mortgage loans	111.4	89.7	39.7

[1] Change from March to December.

[2] See explanation for Figure 4.1.7.

Source: NBP.

demand on the part of customers, and the rising number of points of sale accepting cards. Credit cards have ceased to be financial instruments targeted at a limited number of bank customers.

The increase in the value of transactions executed with debit cards in 2004 was the same as in the previous year, and their number – after a 12% drop in 2003 – grew only slightly (by 7%).

In the future, banks will become more active in seeking additional sources of income, and the extension of the credit card range on offer may be such a source. The banks' income from credit cards is higher than from debit cards, therefore the banks' preference for issuing them will

Table 4.1.17. Number of payment cards issued

		2001	2002	2003	2004
Debit cards	thousands	12,740.6	15,080.3	13,315.8	14,282.9
	%	88.5	89.1	88.0	84.5
Charge cards	thousands	1,047.1	1,028.6	641.7	632.2
	%	7.3	6.1	4.2	3.7
Credit cards	thousands	601.1	807.5	1,172.6	1,996.3
	%	4.2	4.8	7.8	11.8
Total	thousands	14,388.8	16,916.4	15,130.1	16,911.4
	%	100.0	100.0	100.0	100.0

Source: NBP.

Table 4.1.18. Value of transactions executed with payment cards

		2001	2002	2003	2004
Debit cards	PLN million	76,608.4	96,456.9	116,523.9	141,268.2
	%	86.6	88.2	89.6	90.2
Charge cards	PLN million	8,445.7	8,363.7	7,506.6	7,351.9
	%	9.5	7.7	5.8	4.7
Credit cards	PLN million	3,440.8	4,486.2	6,036.9	8,048.2
	%	3.9	4.1	4.6	5.1
Total	PLN million	88,494.9	109,306.7	130,067.4	156,668.2
	%	100.0	100.0	100.0	100.0

Source: NBP.

Table 4.1.19. Currency structure of selected categories of loans to households, %

	2002		2003		2004	
	zloty	foreign currencies	zloty	foreign currencies	zloty	foreign currencies
Authorised overdrafts	98.7	1.3	98.9	1.1	99.8	0.2
Operating loans	80.2	19.8	82.1	17.9	87.9	12.1
Investment loans	75.7	24.3	75.6	24.4	87.2	12.8
Property loans, of which:	40.4	59.6	36.3	63.7	42.7	57.3
– housing loans	40.1	59.9	35.4	64.6	41.9	58.1
Export loans	5.3	94.7	12.8	87.2	23.9	76.1
Mortgage loans[1]	28.9	71.1	39.0	61.0	49.5	50.5
Total loans to households	73.2	26.8	65.9	34.1	72.3	27.7

[1] Of total loans (do not add up to other items).

Note: Data on commercial bank loans.

Source: NBP.

continue. If the rapid growth in the number of credit cards is sustained in coming years, this may limit the domination of debit cards in Poland.

With regard to investment loans, the amount of loans granted to farmers grew rapidly (by 14%); the share of loans to farmers in investment loans to households also surged in 2004. This was related to transfers of European Union funds. On the other hand, the growth rate of investment loans granted to sole proprietors was much lower and amounted to 2.4%. As a result, at year-end 2004, investment loans granted to farmers constituted 52.3% of the total amount of investment loans granted to households. An opposite trend was observed with regard to operating loans – loans granted to sole proprietors prevailed here.

At year-end 2004, 61.2% of the amount of housing loans to households was secured by mortgages (56.6% in 2003). Apart from housing loans, other types of loans were also secured by mortgages. In general, the growth of secured mortgage loans slowed down in 2004 compared to the previous year. It remained rapid, however, and exceeded the growth in the amount of property loans. This indicates the growing role of mortgages in the securing of loans taken out by households.

In 2004, the share of zloty loans in the currency structure of loans to households grew, which resulted, among other things, from the appreciation of the domestic currency. This applied particularly to investment loans, export loans and mortgage loans (Table 4.1.19).

The share of foreign currency loans in total loans to households dropped from 34.1% at year-end 2003 to 27.7% at year-end 2004. In terms of constant 2003 exchange rates, the growth rate of foreign currency housing loans decreased to 25.9% in 2004 (from 41.3% in 2003).[136] In 2004, the share of foreign currency loans did not grow in any of the categories of loans to households.

Loans to corporates

After a period of moderate growth in 2002 and 2003, in 2004 the total amount of loans to corporates decreased (by 4% compared to 2003). The amount of both operating and investment loans fell in 2004.

The drop in the amount of loans taken out by enterprises was largely the outcome of their good financial standing, which enabled them to repay their liabilities and resort to internal financing. This was a continuation of the trends already present in 2003.

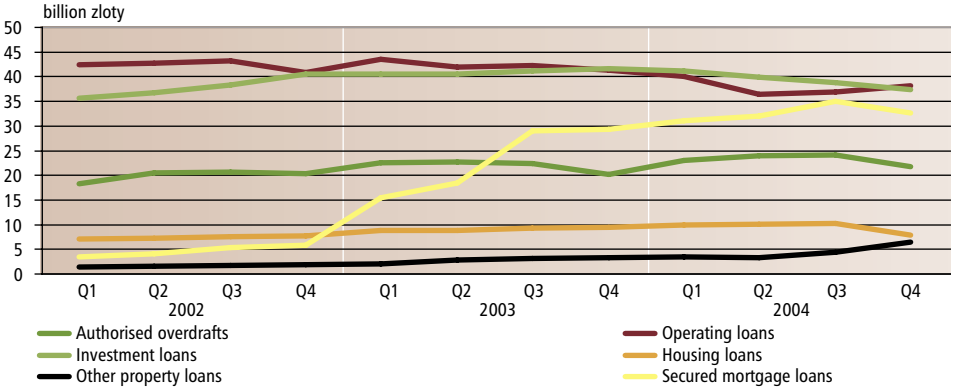
Possible reasons for the decrease in the amount of investment loans included postponing investment decisions, resulting among other things from the accumulation of funds for investments co-financed from EU structural funds, as well as non-banking financing, e.g. the rapid growth in stock

[136] *Summary Evaluation of the Financial Situation of Polish Banks – 2004*, Warsaw: NBP, May 2005, p. 16.

exchange financing[137] related to favourable stock market trends, and an increase in the amount of leased assets.[138] Moreover, diverse rates of growth for individual types of loans to corporates may also be explained by exchange rate movements (more on this subject later in this chapter).

In some quarters of 2004, the amounts of certain loan types grew. In the first three quarter the amount of housing loans and authorised overdrafts rose, while in the third and fourth quarter the amount of operating loans increased. In general, banks recorded a rise in demand for loans to corporates in the first and second quarters of 2004, which was linked to an increase in needs for financing inventories and working capital, while in the third quarter the rising trend in demand for credit disappeared.[139]

Figure 4.1.9. Loans to corporates



Note: The "mortgage loans" category should not be added up to the remaining categories.
Source: NBP.

Table 4.1.20. Selected types of loans to corporates, %

	2002	2003	2004
Authorised overdrafts	17.0	16.5	18.6
Operating loans	34.4	33.8	32.6
Investment loans	34.2	34.1	31.8
Housing loans	6.4	7.6	6.7
Securities loans	0.0	0.2	0.1
Credit card lending	0.1	0.1	0.1
Other loans	4.3	3.7	3.6
Export loans	1.2	0.8	0.4
Discount loans	0.8	0.6	0.7
Of all loan types (do not add up to other items):			
Secured mortgage loans	4.8	23.9	27.9
Agricultural loans	4.1	3.4	4.5

Source: NBP.

[137] The amount of public offerings grew from PLN 6.86 billion in 2003 to PLN 13.73 billion in 2004. The ratio of the amount of public offerings to the amount of investment loans to non-financial customers in 2004 was 27.6% (compared to 13% in 2003). The IPO amount grew over ninefold and reached PLN 9.2 billion. Source: Polish Securities and Exchange Commission 2004 report and own calculations. More on this subject in section 5.2.

[138] More in section 4.3.

[139] *Senior Loan Officer Survey on the Loan Market Condition* (2nd, 3rd and 4th quarter 2004), Warsaw: NBP, 2004–2005.

Table 4.1.21. Changes in selected types of loans to corporates, %

	2002[1]	2003	2004
Authorised overdrafts	11.7	-0.6	8.1
Operating loans	-3.6	1.3	-7.6
Investment loans	13.8	2.8	-10.4
Housing loans	9.6	22.4	-15.9
Securities loans	-73.7	1388.5	-51.6
Credit card lending	82.6	-2.8	7.8
Export loans	-45.6	-33.5	-53.7
Discount loans	-27.2	-19.5	0.5
Other loans	-31.8	-12.4	-5.9
Total loans	2.4	3.0	-4.1
Of all loan types (do not add up to other items):			
Secured mortgage loans	76.3	409.0	11.7
Agricultural loans	31.7	-13.2	26.7

[1] Change from March to December.

Source: NBP.

Table 4.1.22. Changes in selected loans to corporates, assuming constant exchange rates, %

	2002[1]	2003	2004[2]
Authorised overdrafts	10.8	-2.0	9.5
Operating loans	-5.4	-3.3	-4.3
Investment loans	15.1	-3.9	-5.3
Property loans, of which:	13.5	27.8	19.6
– housing loans	8.7	18.9	-15.9
Export loans	-50.5	-41.7	-47.1
Mortgage loans[3]	69.1	398.7	14.0
Total loans	0.8	-1.8	-0.2

[1] In March 2002, the definition of businesses changed in NBP reporting, making any comparisons between 2001 and 2002 data difficult. Therefore the data regarding the growth of loans to corporates in 2002 have been recalculated with reference to the first quarter of 2002 instead of the fourth quarter of 2001. 2002 and 2003 data include non-profit institutions serving households.

[2] 2004 data include only commercial bank loans and do not include loans to non-profit institutions serving households.

[3] Of total loans.

Note: The amount of foreign currency loans expressed in zloty was first converted to foreign currencies according to exchange rates at year-end 2002, 2003, and 2004, and then the currency units obtained were converted into zloty according to exchange rates at year-end 2001, 2002, and 2003.

Source: NBP.

At year-end 2004, foreign currency loans constituted around 25% of loans granted to corporates. Significant changes in the zloty exchange rate against the currencies in which most such loans were denominated in 2004 (68.2% in EUR, 23.9% in USD)[140] had an important impact on the structure of loans to corporates (Table 4.1.22).

In terms of current exchange rates, the amount of loans to corporates decreased by 4.1%, while assuming a constant zloty exchange rate (2003), the change was less pronounced and the volume of loans fell only by 0.2%. Data regarding the currency structure of particular loan categories are presented in Table 4.1.23.

[140] The estimate is based on the assumption that the remaining foreign currency loans were denominated in CHF (7.9% of foreign currency loans to corporates). In 2002–2003, the currency structure of such loans was as follows: 60% EUR, 28% USD, 12% CHF. An identical FX basket was used for calculations of each loan category.

Table 4.1.23. Currency structure of selected categories of loans to corporates, %

	2002		2003		2004	
	zloty	foreign currencies	zloty	foreign currencies	zloty	foreign currencies
Authorised overdrafts	89.7	10.3	86.5	13.5	93.0	7.0
Operating loans	71.6	28.4	68.1	31.9	79.5	20.5
Investment loans	59.1	40.9	55.2	44.8	63.2	36.8
Property loans, of which:	76.6	23.4	66.6	33.4	67.7	32.3
– housing loans	89.1	10.9	78.9	21.1	63.2	36.8
Export loans	20.2	79.8	9.7	90.3	19.9	80.1
Mortgage loans[1]	61.5	38.5	58.1	41.9	72.8	27.2
Total loans to corporates	70.0	30.0	66.1	33.9	75.0	25.0

[1] Of total loans, do not add up to other items.

Note: Data for commercial bank loans.

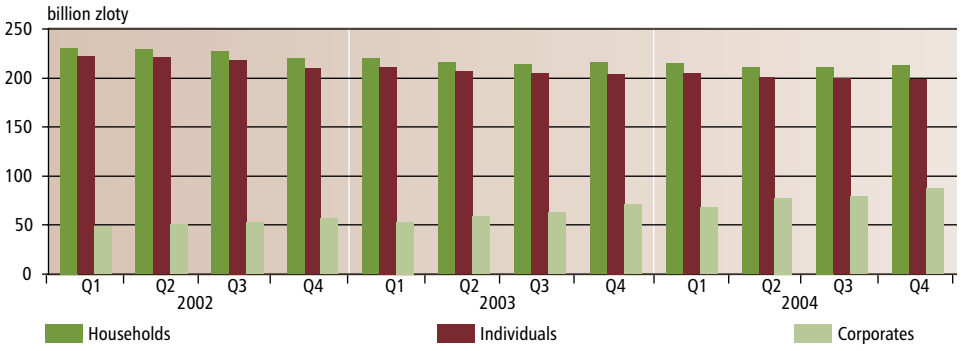
Source: NBP.

The increase in the share of zloty loans in the currency structure of loans to corporates in 2004 resulted from the appreciation of the zloty and the repayment of foreign currency debt by enterprises as well as from its conversion to zloty debt.

4.1.3.2. Liabilities to non-financial customers

As in previous years, the amount of liabilities to households gradually decreased while the amount of liabilities to corporates grew rapidly. Deposits taken from non-financial customers constituted 97.5% of commercial bank liabilities to this sector; 29.6% of deposits were funds taken from corporates, and 67.4% – those taken from households.[141] The increase in deposits from corporates resulted from an improvement in their financial standing in 2004. On the other hand, the increase in household consumption was faster than the rate of growth in real wages in the household segment. Due to the limited propensity to save, increasing competition from non-banking financial institutions (e.g. investment and pension funds) as well as other factors (interest rate and exchange rate movements), banks were unable to reverse the downward trend in the amount of household deposits by extending their range of deposits on offer.

Figure 4.1.10. Liabilities to non-financial customers



Note: The category of households includes sole proprietors, individuals and farmers (Table 4.1.8).

Source: NBP.

[141] The remaining commercial bank liabilities to this sector were claims arising from cash collateral, interest, loans from corporates, and other liabilities which had been temporarily recorded before they were credited to appropriate accounts.

Table 4.1.24. Liabilities to non-financial customers, %

	2002	2003	2004
Households	77.0	72.8	68.5
– of which individuals	73.4	69.0	63.9
Corporates	19.8	23.9	28.2
Non-profit institutions serving households	3.0	3.0	3.0
Others	0.2	0.3	0.3
Total	100.0	100.0	100.0

Source: NBP.

Table 4.1.25. Changes in liabilities to non-financial customers, %

	2002	2003	2004
Households	-3.5	-2.0	-1.4
– of which individuals	-3.4	-2.6	-2.8
Corporates	4.1	24.9	23.7
Total	-2.5	3.6	4.8

Note: Due to the negligible share of liabilities to non-profit organisations serving households in total liabilities to non-financial customers, these institutions have not been included in the table.

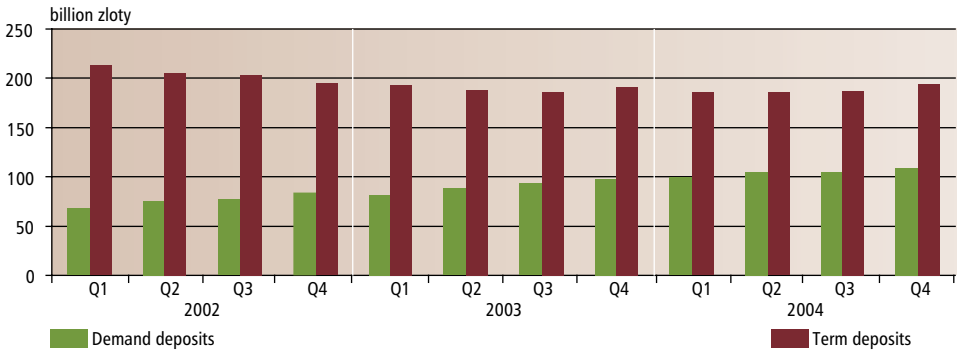
Source: NBP.

Deposits taken from non-financial customers

From 2002 to 2004, the ratio of demand deposits to term deposits taken from non-financial customers was changing. At the beginning of 2002, the ratio of demand deposits to term deposits was 0.32, but it rose to 0.56 as of year-end 2004. The share of zloty deposits in the currency structure grew. The slight increase in the share of foreign currency deposits in corporate deposits in 2004 could have been partly related to an increase in exports to EU countries after May 1, 2004.

In 2004, the amount of deposits taken from non-financial customers was higher than in previous years (it grew by PLN 13.9 billion in absolute terms compared to an increase of PLN 10.5 billion in 2003). In 2004, the rate of change in the amount of corporate deposits (25%) and household deposits (–1.5%) was the same as in 2003. As a result of the rapid growth in corporate deposits, which had been sustained for two years, the structure of deposits from non-financial customers changed. At the end of 2002, the share of enterprises in deposits from non-financial customers amounted to 19.7%, while at the end of 2004 it was 28.1%. During the last two years, the amount of corporate deposits rose by over 50%. This stemmed from a significant improvement in the enterprises' earnings (which was particularly noticeable in 2004), and therefore also their financial liquidity.

Figure 4.1.11. Deposits taken from non-financial customers



Source: NBP.

Table 4.1.26. Deposits taken from non-financial customers, %

Maturity structure	2002	2003	2004
Demand deposits	30.1	33.9	36.1
Term deposits	69.9	66.1	63.9
Currency structure			
Zloty deposits	82.4	82.7	84.6
Foreign currency deposits	17.6	17.3	15.4

Source: *Summary Evaluation of the Financial Situation of Polish Banks*, Warsaw: NBP, 2001–2004.

Table 4.1.27. Changes in deposits taken from non-financial customers, %

Maturity structure	2002	2003	2004
Demand deposits	32.1	16.8	11.5
Term deposits	-9.8	-1.8	1.4
Currency structure			
Zloty deposits	-2.0	4.2	6.9
Foreign currency deposits	-7.4	2.0	-5.4
Total deposits	-3.0	3.8	4.8

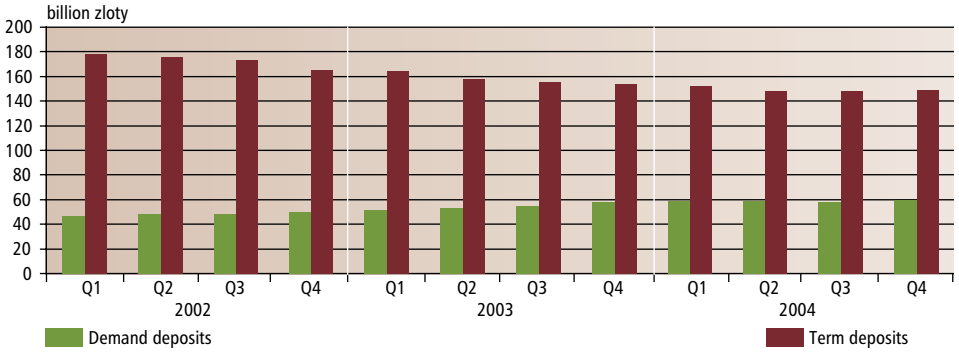
Source: *Summary Evaluation of the Financial Situation of Polish Banks*, Warsaw: NBP, 2001–2004.

Household deposits

The decrease in the amount of household deposits observed recently ended in the third quarter of 2004, and an increase in the amount of both demand and term deposits in this group followed. In annual terms, however, negative dynamics was recorded. In the second half of 2004, the amount of term deposits from households started to rise for the first time since the end of 2001. This was largely the result of higher household income as well as higher interest on deposits offered by banks. In annual terms, the decrease in the amount of term deposits (which was slower than in previous years) was accompanied by a definitely less rapid growth in the amount of demand deposits than in the period 2002–2003.

Different trends emerged with regard to deposit currency structure. While the amount of foreign currency deposits continued to decrease (which was also the result of the appreciation of the zloty),[142] the amount of zloty deposits at year-end 2004 grew for the first time since December 2003.

Figure 4.1.12. Household deposits



Source: NBP.

[142] More on the impact of movements in the zloty exchange rate on the growth in the amount of corporate and household deposits later in this chapter.

Table 4.1.28. Household deposits, %

Maturity structure	2002	2003	2004
Demand deposits	23.5	27.4	28.6
Term deposits	76.6	72.6	71.4
Currency structure			
Zloty deposits	82.1	82.3	84.8
Foreign currency deposits	17.9	17.8	15.2

Source: NBP.

Table 4.1.29. Changes in household deposits, %

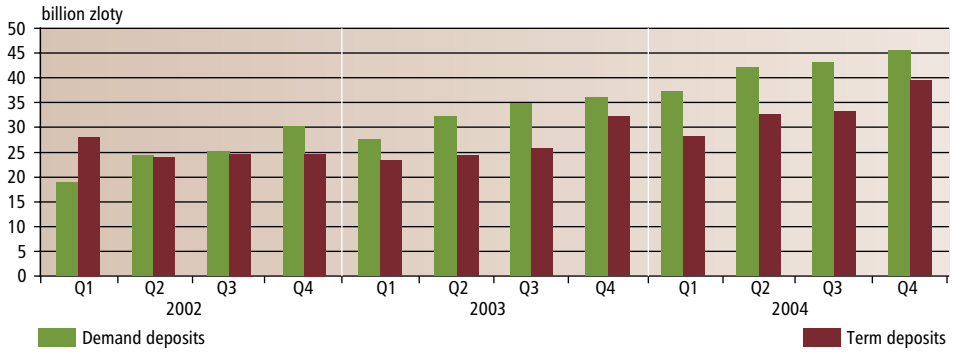
Maturity structure	2002	2003	2004
Demand deposits	11.6	15.0	2.7
Term deposits	-7.3	-6.4	-3.1
Currency structure			
Zloty deposits	-3.5	-1.5	1.6
Foreign currency deposits	2.1	-1.4	-15.7
Total	-1.8	-2.4	-1.5

Source: NBP.

Corporate deposits

In 2004, the trends observed with regard to corporate deposits in the previous period continued. The amount of corporate deposits still grew at a fast rate. Only the maturity and currency structures changed slightly (the share of demand deposits rose and the share of zloty deposits decreased respectively).

Figure 4.1.13. Corporate deposits



Source: NBP.

Table 4.1.30. Corporate deposits, %

Maturity structure	2002	2003	2004
Demand deposits	55.0	52.9	53.6
Term deposits	45.0	47.1	46.4
Currency structure			
Zloty deposits	82.1	82.9	82.5
Foreign currency deposits	17.9	17.1	17.5

Source: NBP.

Table 4.1.31. Changes in corporate deposits, %

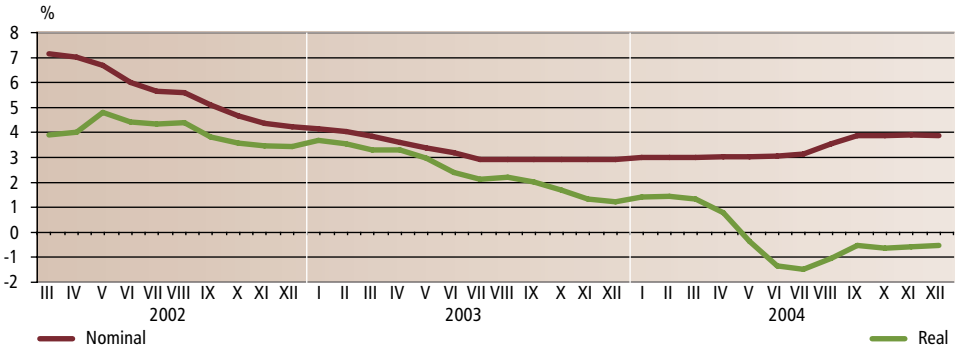
Maturity structure	2002	2003	2004
Demand deposits	67.3	19.8	26.2
Term deposits	-32.1	30.5	22.5
Currency structure			
Zloty deposits	6.9	25.9	23.7
Foreign currency deposits	-20.0	18.8	27.7
Total	0.9	24.6	24.5

Source: NBP.

Impact of exchange rate movements on growth of corporate and household deposits

At year-end 2004, foreign currency deposits constituted 17.5% of corporate deposits and 15% of household deposits.[143] Significant changes in the zloty exchange rate against the currencies in which most such deposits were denominated in 2004 had an impact on changes in both corporate and household deposits and their structure (Table 4.1.32).

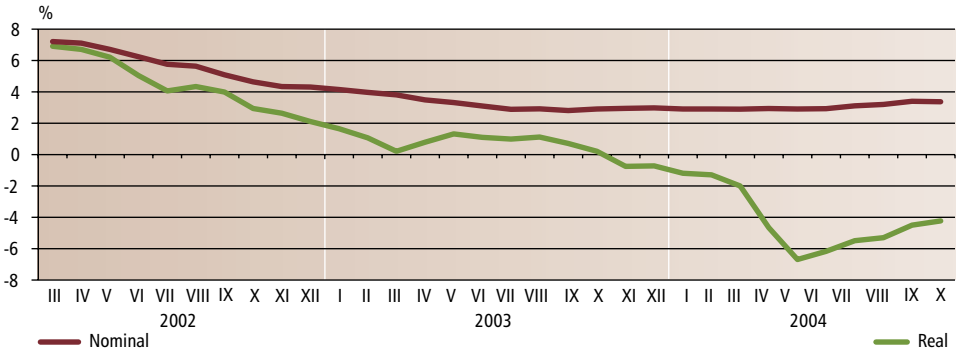
Figure 4.1.14. Average interest rates on household time deposits



Note: The current CPI (Consumer Price Index) has been used to calculate real interest rates on time deposits taken from households.

Source: NBP.

Figure 4.1.15. Average interest rates on corporate time deposits



Note: The current PPI (Producer Price Index) has been used to calculate real interest rates on time deposits taken from corporates.

Source: NBP.

[143] The currency structure of foreign currency household deposits in 2004 was as follows: EUR 39.4%, USD 52.0%, other currencies 8.6%. The structure for corporate deposits was as follows: EUR 64.1%, USD 27.5%, other currencies 8.4%. The estimate is based on the assumption that the remaining deposits (other than in EUR and USD) were denominated in CHF.

Table 4.1.32. Changes in corporate and household deposits, 2004, %

	Current exchange rate	Constant exchange rate
Corporate deposits	24.5	28.3
Household deposits[1]	-1.5	1.5

[1] Including non-profit institutions serving households.

Source: NBP estimates.

On a comparable basis (i.e. at a constant exchange rate), the total zloty value of foreign currency deposits for both groups rose by 12%, while nominal changes (i.e. at the current exchange rate) indicate a decrease by 6.5% in such deposits. Assuming a constant exchange rate, the zloty value of household deposits rose by 1.5%, while at the current exchange rate it fell by 1.5%. Corporate deposits would grow by comparable extent regardless of the exchange rate assumed. Differences in the currency structure of deposits in the two groups analysed are the chief reason for this.

During the period under review, the increase in the amount of deposits, given their negative real interest rates, was an interesting phenomenon. Slowly rising bank interest rates did not compensate for the surge in the consumer and producer price indices in the second quarter of 2004. The trend was reversed in the second half of the year, when inflation indices stabilised and interest rates on deposits grew in a more pronounced manner. The more rapid growth in deposits given their negative real interest rates may point to the occurrence of nominal illusion – customers were mostly guided by the nominal interest on deposited funds. As regards enterprises, the rise in deposits was primarily caused by their significantly better financial standing and postponed decisions regarding the use of the funds.

It should also be noted that due to the use of the PPI as a deflator, an index which may be affected by significant price movements, e.g. in raw materials markets, is used for the analysis of real interest rates on all corporate deposits.

4.1.4. Banking sector earnings and performance

In 2004, the banking sector recorded a significant rise in pre-tax and net earnings, which was mainly caused by an increase in commercial bank earnings. Pre-tax earnings of commercial banks amounted to PLN 7,465 million, which was an increase of 82% over 2003 (the growth rate in 2003 had been 21.5%). Net earnings amounted to PLN 6,816.2 million, i.e. over 230% more than in the year before (in 2003, it had increased by 7.4%). The very good performance of commercial banks resulted from lower net charges to specific provisions, higher interest and fee income, and gains on Treasury debt securities transactions as well as good performance of the banks' subordinate companies. Moreover, the 2004 reduction of the CIT rate to 19% significantly reduced the income tax burden on earnings.[144]

Among the reasons for the improvement in commercial bank earnings, the improvement in net interest income (by 10.3%) and net fee income (by 10.9%) should be noted. The reduction in the net movement of specific provisions and valuation allowances by 43.6% also contributed to enhanced performance.

Most profitability and performance indicators of the banking sector significantly improved in 2004 (Table 4.1.33). Performance indicators had already improved in 2003 after a considerable drop in 2002.

In 2004, the downward trend in NIM (net interest margin) was reversed – net interest income grew faster than assets. The increase in net interest margin could have been related to the increase in NBP interest rates. It may be supposed that the increase of this indicator was a temporary one.

[144] The reduction in the corporate income tax rate caused the income tax burden rate on earnings to drop by 22.6 percentage points to 20.5%. Source: *Summary Evaluation of the Financial Situation of Polish Banks – 2004*, Warsaw: NBP, 2005.

Table 4.1.33. Selected banking sector profitability and performance indicators, %

	2001	2002	2003	2004
Return on Assets (ROA)[1]	1.0	0.5	0.5	1.5
Return on Equity (ROE)[2]	13.1	5.8	5.8	17.6
Operating expense[3]/assets	4.0	4.0	3.9	3.7
Net Interest Margin (NIM)[4]	3.7	3.4	3.2	3.3
Non-interest income[5]/assets	3.1	2.7	2.5	2.5
Irregular claims[6]/gross claims	17.9	21.1	21.2	14.8

[1] ROA (Return on Assets) is the ratio of net earnings to average asset value.

[2] ROE (Return on Equity) is the ratio of net earnings to average core capital.

[3] General expense and amortisation.

[4] NIM (Net Interest Margin) is the ratio of interest income less interest expense to asset value.

[5] I.a. net fee income, earnings from equities and other variable-income financial instruments, net gains/losses on financial operations, net FX gains/losses.

[6] Irregular loans (so-called low-quality loans, for which specific provisions are established) include substandard, doubtful, and loss loans. The amount of claims on non-financial customers has been used in order to calculate this ratio. Since January 2004, new principles of claim classification and the establishment of specific provisions have been in force, therefore 2004 data cannot be compared to those for previous years.

Source: NBP.

Table 4.1.34. Selected profitability and performance indicators for commercial banks, %

	2001	2002	2003	2004
Return on Assets (ROA)	1.0	0.5	0.5	1.4
Return on Equity (ROE)	12.8	5.2	5.4	17.6
Net interest income/assets (NIM)	3.5	3.3	3.1	3.2
Irregular claims/gross claims	18.6	22.0	22.2	15.5

Note: See explanation for Table 4.1.33.

Source: NBP.

Growing competition in the banking services market contributes to a reduction in net interest margin. Therefore this margin may be expected to drop again in coming years.

In 2004, the share of irregular claims in gross claims at commercial banks dropped considerably. This decrease resulted from the better economic and financial standing of borrowers due to an improvement in the economic climate, better credit risk management and the introduction of new principles for establishing specific provisions and securing them.[145]

Despite the fact that trends in profitability and performance indicators at cooperative banks were similar to those in the commercial bank sector, the values of these indicators were better at cooperative banks. The same situation existed in 2003. The higher profitability of cooperative ba nks in previous years stemmed from the fact that they focused on providing services to the local market and were not heavily involved in financing enterprises, which had problems with the repayment of their liabilities during the period of economic slowdown.

Table 4.1.35. Selected profitability and performance indicators for cooperative banks, %

	2001	2002	2003	2004
Return on Assets (ROA)	1.6	1.6	1.2	1.8
Return on Equity (ROE)	19.4	18.2	12.2	18.3
Net interest income/assets (NIM)	8.0	6.7	5.6	5.9
Irregular claims/gross claims	6.2	7.3	7.2	5.5

Note: See explanation for Table 4.1.33.

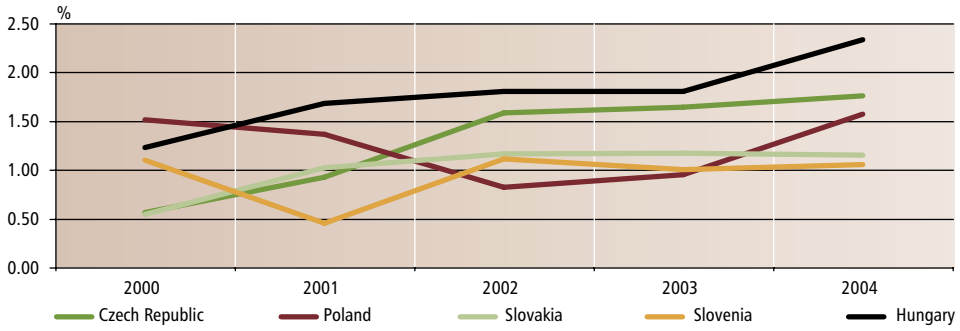
Source: NBP.

[145] See section 2.3.

An upward trend in performance indicators has also been recorded outside Poland. In 2004, the profitability of banks operating in other CEC5 countries[146] also improved (Figures 4.1.16 and 4.1.17).

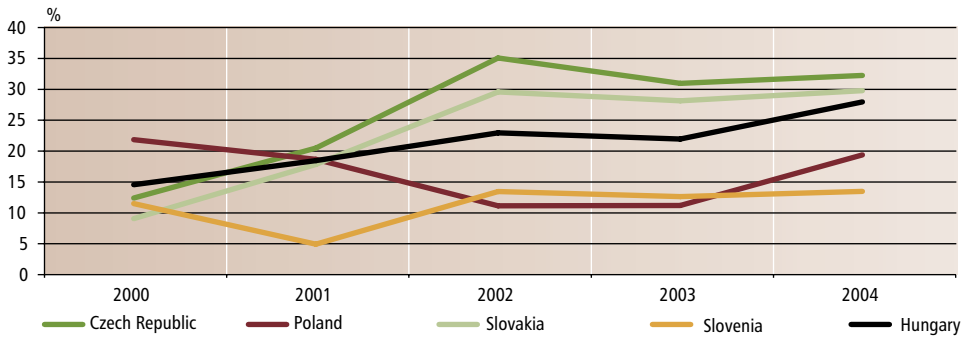
In 2004, the downward trend in net interest margin[147] in the Czech Republic and Hungary reversed, just as in Poland (Figure 4.1.18). As has already been indicated, this is a temporary phenomenon since banks in the region will attempt to be competitive versus banks in EU-15 countries where the value of this ratio is much lower.[148]

Figure 4.1.16. Return on assets (ROA) of banking sectors in CEC5 countries



Note: The ROA for CEC5 countries has been calculated as the ratio of pre-tax earnings to average asset value.
Sources: NBP data, central banks of the Czech Republic, Hungary, Slovakia and Slovenia.

Figure 4.1.17. Return on equity (ROE) of banking sectors in CEC5 countries



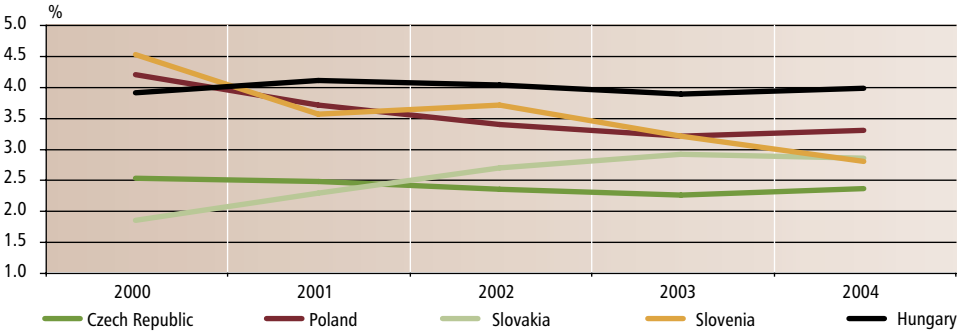
Note: The ROE for CEC5 countries has been calculated as the ratio of pre-tax earnings to average core capital.
Sources: NBP data, central banks of the Czech Republic, Hungary, Slovakia and Slovenia.

[146] In recent years, the profitability of banks in EU-15 countries has been lower than that of banks in CEC5 countries (the Czech Republic, Poland, Slovakia, Slovenia and Hungary). In 2003, the average (net) ROE for the CEC5 was 14.0, while for the EU-15 it was 12.8. (Net) ROA for the CEC5 was 1.0, while for the EU-15 it was 0.6. *Banking Structures in the New EU Member States*, ECB, January 2005, p. 24. The publication can be found at: http://www.ecb.int/pub/pdf/other/bankingstructuresnewmemberstatesen.pdf.

[147] The net interest margin is the ratio of interest income less interest expense to assets.

[148] In 2003, the net interest margin (NIM) in EU-15 countries was 1.4, while in EU-10 countries it amounted to 2.7. *Banking Structures in the New EU Member States*, ECB, January 2005, p. 24. The publication can be found at: http://www.ecb.int/pub/pdf/other/bankingstructuresnewmemberstatesen.pdf.

Figure 4.1.18. Net interest margin (NIM) of banking sectors in CEC5 countries



Sources: NBP data, central banks of the Czech Republic, Hungary, Slovakia and Slovenia.

4.1.5. Consolidation and concentration of the commercial banking sector

Consolidation

In 2004, two mergers occurred in the Polish banking sector. Due to the size of the banks involved, they did not have a significant impact on the shape of the banking sector or on its concentration. The trend towards consolidation in the Polish banking sector was at its strongest between 1999 and 2002. In the period 2003–2004, the process slowed down considerably, which was a direct result of the reduced pace of global consolidation between major financial groups. Mergers and acquisitions in 2004 are presented in Table 4.1.36.

Table 4.1.36. Bank mergers in 2004

Date	Name of acquired bank	Name of acquiring bank	Name of bank after acquisition
December 27, 2004	Bank Przemysłowy SA	Getin Bank SA	Getin Bank SA
December 30, 2004	GE Bank Mieszkaniowy SA	GE Capital Bank SA	GE Money Bank SA

Source: NBP.

The objective of the first transaction was the acquisition and restructuring of a bank in bad financial condition (Bank Przemysłowy SA). In the second case, the decision concerning the acquisition resulted from the implementation of the global strategy of the General Electric corporation, which involved merging companies operating in the same market area and having similar business profiles.

Concentration

In 2004, despite the decrease in the number of banks, concentration as measured by the Herfindahl-Hirschman Index[149] as well as the CR_5, CR_{10} and CR_{15} (Figure 4.1.19 and 4.1.20) indices continued to drop.[150] This was caused by the slower development of large banks, and faster development of small and medium-sized ones.

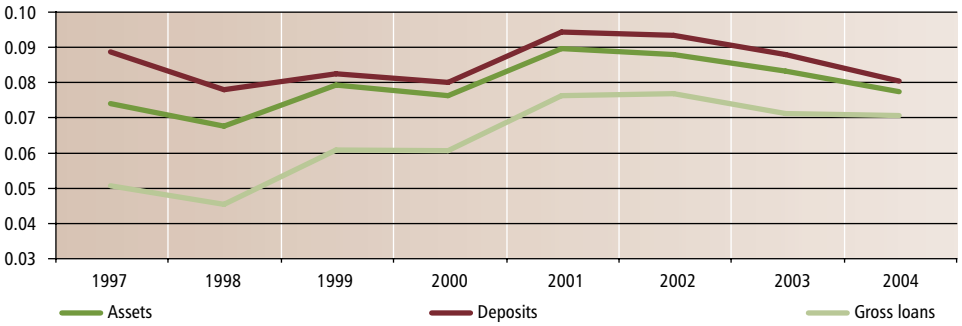
In the countries of the CEE region, a slight decrease in concentration as measured by the share of the five largest banks in assets (CR_5) has also been recorded. This stems from the fact that

[149] The Herfindahl-Hirschman Index is calculated as the sum of squares of market shares of individual commercial banks with regard to the gross lending, net assets, and deposits of commercial banks, respectively. Values of this index range from 0 to 1 – the higher the index, the more concentrated is the market. Markets for which the HHI is smaller than 0.1 are considered not to be concentrated. Where the value of the index is higher than 0.18, a market is considered to be concentrated. A market is considered to be moderately concentrated if the HHI ranges from 0.1 to 0.18. *Consolidation and Diversification in the Euro Area Banking Sector*, Monthly Bulletin, ECB, May 2005.

[150] CR_5, CR_{10}, CR_{15} represent the market shares of the largest 5, 10 and 15 banks in e.g. gross lending, assets and deposits of the banking sector, respectively.

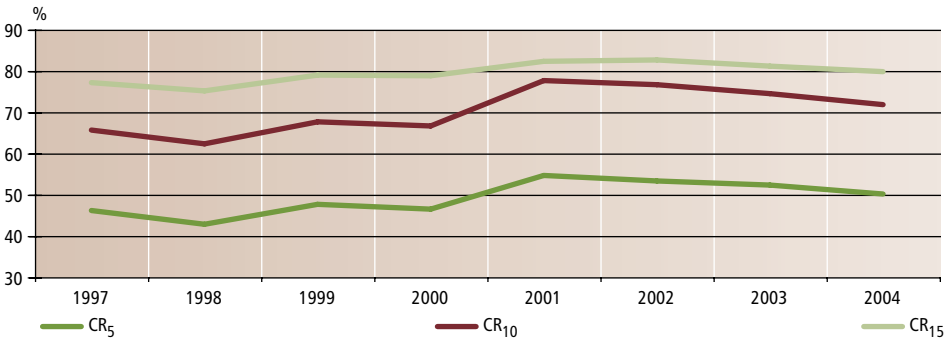
the same foreign banks are strategic investors in those countries.[151] A similar trend can be observed in EU-10 countries.[152] The concentration index as measured by the share of the five largest banks in banking sector assets in Poland is similar to the average ratio calculated for EU-15 countries (Figure 4.1.21).

Figure 4.1.19. Herfindahl-Hirschman Index (HHI)



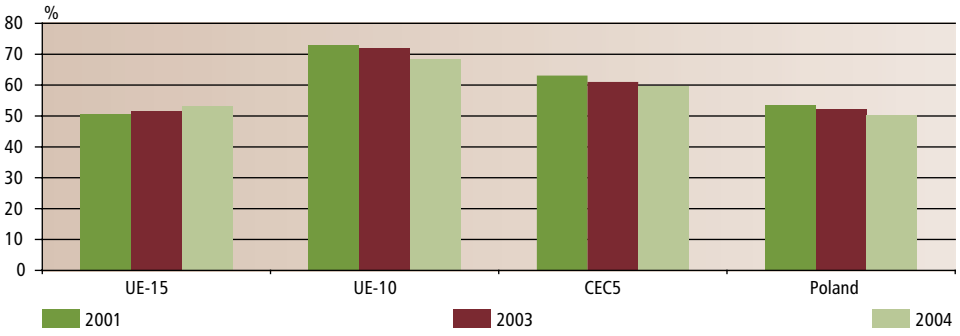
Source: NBP.

Figure 4.1.20. CR_5, CR_{10}, CR_{15} indices for assets



Source: NBP.

Figure 4.1.21. Banking sector concentration in EU-10 and CEC5 countries measured as the share of the five largest banks in assets (CR_5)



Sources: *Banking Structures in the New EU Member States*, ECB, January 2005, p. 32, 34; *Report on EU Banking Structures*, ECB, October 2005, p. 35, www.ecb.int.

[151] KBC, the HVB/BA-CA Group, Citibank, and UniCredito Italiano are among the most active in Poland.

[152] The new EU member states (Cyprus, the Czech Republic, Estonia, Malta, Lithuania, Latvia, Poland, Slovakia, Slovenia, Hungary).

Table 4.1.37. CR_5 and HHI banking sector concentration measures in selected EU countries

	Share of the five largest banks in sector assets – CR_5, %							
	1997	1998	1999	2000	2001	2002	2003	2004
Germany	17	19	19	20	20	20	21	22
Italy	25	25	25	23	28	30	32	n/d
Holland	79	82	82	81	83	83	84	84
Belgium	54	63	76	75	78	82	84	84
Ireland	41	40	41	43	45	46	44	n/d
Portugal	46	45	44	59	60	61	63	67
	Herfindahl-Hirschman Index (of total assets)							
	1997	1998	1999	2000	2001	2002	2003	2004
Germany	0.0114	0.0133	0.0140	0.0151	0.0158	0.0163	0.0173	0.0178
Italy	0.0201	0.0210	0.0220	0.0190	0.0260	0.0270	0.0240	0.0230
Holland	0.1654	0.1802	0.1700	0.1694	0.1762	0.1788	0.1744	0.1726
Belgium	0.0699	0.0909	0.1518	0.1506	0.1587	0.1905	0.2065	0.2100
Ireland	0.0500	0.0473	0.0480	0.0486	0.0512	0.0553	0.0562	0.0556
Portugal	0.0577	0.0575	0.0566	0.0986	0.0991	0.0963	0.1043	0.1093

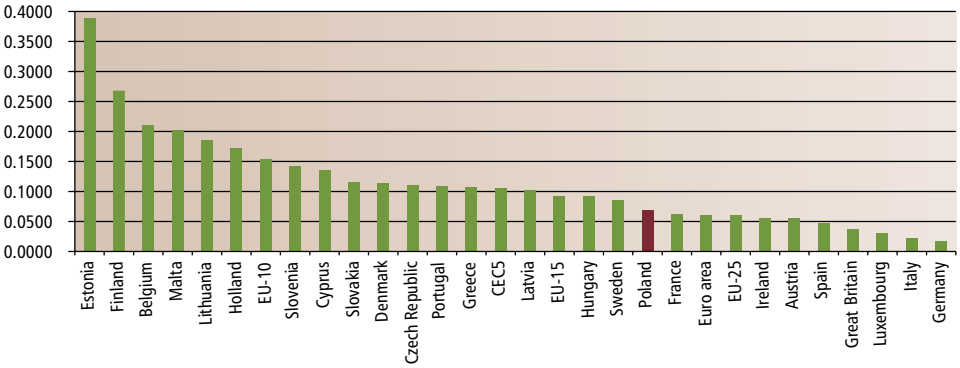
Sources: *Report on EU Banking Structures*, ECB, November 2004, p. 36–37; *Report on EU Banking Structures*, ECB, October 2005, p. 35. The publications can be found on the ECB web site: www.ecb.int.

Between 2001 and 2004, different trends prevailed with regard to the CR_5 index in Central and Eastern European countries and in EU-15 countries. In the banking sectors of CEE countries, concentration as measured by the CR_5 index decreased, while in EU-15 countries it grew slightly. However, the average level of concentration in the banking sectors of the states which acceded to the European Union in 2004 was still much higher than in EU-15 countries.

Changes in the level of banking sector concentration in selected EU-15 countries, which are the largest foreign investors in the Polish banking sector, are presented in Table 4.1.37.

The level of banking sector concentration in EU-25 countries as measured by the Herfindahl-Hirschman index is shown in Figure 4.1.22. The comparison between the value of this index in Poland and those in other countries indicates that the level of Polish banking sector concentration is low. However, the concentration level in Poland is slightly higher than the average HHI value for EU-25 countries.

Figure 4.1.22. Banking sector concentration in EU-25 countries measured by the HHI for assets, 2004



Source: *Report on EU Banking Structures*, ECB, October 2005, p. 35. The publication can be found at: http://www.ecb.int/pub/pdf/other/eubankingstructure102005en.pdf.

4.1.6. Changes in banks' product offer

In 2004, banks attempted to take advantage of the opportunities created by the improving macroeconomic situation and the considerable improvement in the financial standing of many customers. Therefore, their activity focused on customising their product offer to meet the needs of those segments which had hitherto been neglected. In terms of marketing strategies, particular emphasis was placed on the retail banking sector. Deep market segmentation enabled banks to identify new groups of customers: farmers and other beneficiaries of EU regional assistance, old-age pensioners as well as students (to whom credit cards were offered, among other things). Banks also tried to make their offers more attractive for existing customers. At the same time, their marketing policies involved intensified attempts at winning over customers from competitors (e.g. by the product of balance transfer consisting of offering customers more attractive credit card terms and conditions if they decided to switch from a card issued by another bank to a card issued by the bank offering the transfer). To this end, banks significantly increased their media advertising expenditure in 2004.[153] Moreover, the range of loans offered to the small and medium-sized enterprise sector (SMEs) for the funding of investment projects eligible for European Union subsidies has been extended recently. To some extent, this could be the result of banks' collaboration with BGK, which extends endorsements and guarantees related to loans for such projects (as part of the National Loan Guarantee Fund). Due to the fact that it was possible to obtain loan endorsements from the BGK quickly, banks could e.g. ease their credit standards and make their loan application procedures shorter.[154] The changes in the banks' offer in 2004 were also linked to the development of services based on advanced IT technologies, and particularly the Internet.

Internet banking services

At present, Internet banking is one of the fastest growing commercial applications of the Internet. An increasing number of banks are taking advantage of this electronic distribution channel and the number of customers using such services is growing steadily. Banks offering Internet services, both in Poland and abroad, can be divided into two major groups. The first group are banks which conduct operating activity using traditional branches, but at the same time develop Web-based solutions and offer their services via Internet. For such banks, Internet is an additional distribution channel for banking products and services. This banking model prevails on the market. It is a multi-channel distribution strategy where Internet access is one of the ways to manage one's bank account. The second group are virtual banks, i.e. ones that do not have traditional field branches. They offer remote access to the account without the option of visiting a traditional bank branch – there is no direct contact between the customer and bank personnel. Banks of this type also have phone distribution channels and ATM networks ensuring access to cash. Virtual banks attract customers primarily with favourable account terms and conditions which include no account maintenance fees, free bank transfers, free cash withdrawal from certain ATMs and free of charge payment card use. Moreover, interest rates on funds in personal transaction accounts at virtual banks are higher than at traditional ones.[155]

The number of banks which offer Web-based services has grown steadily since 1999 and the number of customers (both firms and individuals) who use Internet accounts has also been rising (Figure 4.1.23). In 1999, only three banks offered Internet banking services; as of year-end 2004, 19 banks did (Table 4.1.38).

[153] From January to November 2004, gross media advertising expenditure by financial institutions (excluding the insurance sector) amounted to around PLN 338.3 million, which was an increase of almost 50% compared to the same period of the previous year. Source: *Monitoring wydatków na reklamę*, Expert-Monitor monthly reports, www.expert-monitor.pl. The report was based on official media price lists. If discounts and reductions are factored in the estimate of the real increase in advertising expenditure, the expenditure rises by as much as 74%. Source: A. Szafrański, "Kredyty gwiazdą reklamy," *Gazeta Bankowa* No. 1 (845), January 3, 2005.

[154] P. Dziewulski, "Elastyczność krajowego sektora bankowego w finansowaniu małych i średnich przedsiębiorstw", *Zeszyty BRE CASE* No. 78/2005, p. 17.

[155] *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, pp. 124–125.

Table 4.1.38. Banks offering Internet banking services at the end of 2004

No.	Bank name	System/product name	Customer group
1	Bank Pekao SA	Pekao 24	Individuals
			Firms
2	Bank Zachodni WBK SA	BZ WBK 24 internet	Individuals
		BZ WBK 24 internet	Firms
3	Bank BPH SA	Sez@m	Individuals
		Sez@m Biznes	Firms
4	Fortis Bank Polska SA	Pl@net / e-Pakiet	Individuals
		Rachunek bieżący WWW	Firms
5	Lukas Bank SA	Lukas eBank	Individuals
6	BRE Bank SA	MBank	Individuals
		Multibank	Individuals
		Multibank	Firms
7	PKO Bank Polski SA	Inteligo	Individuals/firms
8	ING Bank Śląski SA	ING Bank Online	Individuals
		ING Bank Online	Firms
9	VW Bank Polska SA	Plus Konto/ Lokata Plus	Individuals
		Plus Konto Biznes/ Lokata Plus Biznes	Firms
10	Bank Handlowy SA	Citibank Online	Individuals
		CitiDirect	Firms
11	Nordea Bank Polska SA	Solo	Individuals
			Firms
12	BGŻ SA	e-Integrum	Individuals
		e-Integrum Firma	Firms
13	Kredyt Bank SA	KB 24 internet	Individuals
		KB 24 internet	Firms
14	Deutsche Bank PBC SA	DB internet	Individuals
			Firms
15	Invest Bank SA	SBE	Individuals
		SBE	Firms
16	Bank Przemysłowy SA*	e-Bank	Individuals
			Firms
17	Bank Millennium SA	Millenet	Individuals
			Firms
18	Raiffeisen Bank Polska SA	Raiffeisen on-line	Individuals
19	BOŚ Bank SA	BOŚBank24	Individuals

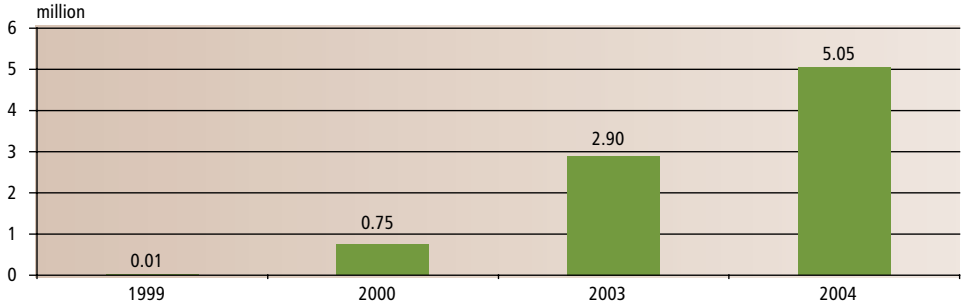
* On the 10th of December 2004, the Commission for Banking Supervision (CBS) decided that the Getin Bank could acquire Bank Przemysłowy.

Source: Polish Banking Association.

Ensuring adequate security has been the main problem for banks that use the electronic distribution channel. Steady growth in the number of Internet-based transactions necessitates constant enhancements to this channel. Transaction security is of fundamental importance in building trust between the customer and the bank. Despite the fact that the technological solutions currently in use ensure the necessary level of Internet transaction security, a psychological barrier still exists which effectively limits the number of institutions that decide to conduct online transactions. However, the continuing work on improving the security of such systems encourages an increasing number of companies to use Internet banking services.

Internet bank offers evolve continuously. Banks with the largest market shares distribute most traditional products via Internet and are currently developing new, entirely Web-based products. The introduction of such products may give the most active banks definite long-term competitive advantage. It should be noted, however, that the position of electronic banking within the banks' overall strategy is constantly changing. Whereas at the end of the 1990s virtual banking was seen as the future of the banking sector, currently the opinion prevails that the multi-channel

Figure 4.1.23. Number of firms and individual customers using Internet bank accounts



Source: Polish Banking Association.

provision of banking services is the future.[156] This is confirmed by the trend towards extending the traditional bank field branch network, which has been observed for some time now; however, these branches are much less expensive than those which opened several years ago (cost optimisation). Some banks have e.g. developed so-called partner networks, i.e. networks of small field branches operating pursuant to agreements with independent entrepreneurs (franchise agreements).

The most important changes in the products and services offered by banks introduced in 2004 are reviewed below. Since most of them concern the retail banking segment, they are broken down into individual products and services.

Loan offer changes

In 2004, like in the period 2002–2003, the number of housing loans grew rapidly. The factors behind the high demand for this type of loan were also similar to those in the period 2002–2003 (low inflation and the related decrease in interest rates).[157] Moreover, the increasing wealth of a part of the population[158] and the general improvement in Poland's economic situation had a favourable impact on home purchases and construction. The rise in the VAT rate on new homes, which is expected in 2008, also contributed to the undiminished demand for newly constructed homes as home purchases were often seen as long-term investments. At the same time, due to the increased activity of loan brokers and financial consultants as well as the emergence of new banks offering such loans, access to housing loans was facilitated for a much larger number of potential borrowers. As a result, the amount of a home loan instalment became comparable to monthly home rental rates. It should be noted that promotions consisting of preferential loan interest rates at the beginning of the repayment period (e.g. during the first six months) no longer attracted customers. Therefore banks tried to win customers in new ways, particularly through improving customer service quality, i.e. cutting red tape, reducing initial fees and costs as well as developing consultant networks.

The number of investment loans to farmers grew rapidly. This was partly caused by the fact that farmers wanted to take advantage of EU funds under the SAPARD programme. 2004 was the last year during which farmers could apply for preferential loans, since some of the programmes coordinated by the Agency for Restructuring and Modernisation of Agriculture were discontinued upon Poland's accession to the European Union. Due to the requirement that the farmers who

[156] C. Skinner, "Something to Talk About", *The Banker*, August 2, 2004. See also: A. Hislop, "Whatever Happened to Joined-up Banking," *The Banker*, September 2, 2004.

[157] *Development of the financial system in Poland 2002–2003*, Warsaw: NBP, 2004, p. 112.

[158] Research results indicate that the income gap in Poland is becoming more pronounced. The gap between the incomes of the richest and poorest the 20% of citizens grew by 21 percent between 1995 and 2000. Source: F. di Maggio, P. Romanowski, C. Walter, "Eastern European Banking Matures", *The McKinsey Quarterly*, No. 2/2003.

applied for subsidies were obliged to have bank accounts,[159] the number of farmers' accounts grew significantly, particularly at cooperative banks.[160] However, the extent to which farmers took advantage of banking services was limited. At the same time, many banks extended or modified their offers for this group of customers. The changes concerned primarily reduced formalities in opening bank accounts, often free-of-charge account maintenance in the initial period, issuance of payment cards without additional fees as well as access to non-cash financial operations, phone and Internet banking.

Credit card promotion was an important element of the banks' marketing strategy in 2004. In order to encourage customer interest in these products, banks reduced their fees both for the issue and use of credit cards or ceased to charge them temporarily. Banks also changed credit card eligibility criteria by lowering the minimum required income of the potential cardholder as well as making it possible to submit an application without the need to visit the bank, i.e. via the Internet or by mail. The significant liberalisation of credit card eligibility criteria in 2004 reflected the banks' wishes to enable access to these products for less affluent customers.[161] At the same time, banks attempted to attract customers in ways other than by reducing prices, by e.g. including customers' photographs on them or organising various competitions. In 2004, the difference between interest rates on credit card lending and those on authorised personal account overdrafts continued to decrease.[162] Despite the fact that the number of credit cards issued by banks increased steadily, the amount of credit card debt did not grow significantly. Authorised overdrafts, which were seen by some banks as products about to be phased out, constituted an alternative to credit card lending.[163] The attraction of authorised overdrafts lies in the fact that they enable the current financial standing of the customer to be monitored fairly easily. This led some banks to perceive overdrafts as promising products.

In 2004, the customers' position strengthened due to intensified competition in the loan market. This was reflected in the fact that banks replaced e.g. the customer's own contribution by additional loan security or the payment of a one-time insurance premium. Loans which included insurance against the loss of employment were also introduced.

Moreover, in 2004 the importance of loan brokers grew. Companies which provided such services also started to offer mortgage and housing loans, credit cards and insurance.[164] Banks spotted the opportunity to use loan brokerage as an additional distribution channel. This was evidenced in the consolidation and merging of such companies with banks which occurred in recent years as well as establishing separate subsidiaries (e.g. CitiFinancial) that offered selected types of retail loans from banks. The growth in instalment loans was negative, which resulted in a decrease in their share of loans to households.

Changes in services related to the investment of available funds

The newly introduced privatisation deposit, which made it possible to purchase PKO BP bank shares without any reductions and without the need to open an investment account with a brokerage office, proved very popular in 2004 as a way of investing available funds. Such deposits could be made by individual investors who deposited from PLN 500 to PLN 20,000, which enabled

[159] Without bank accounts, farmers could take advantage neither of VAT surplus refunds nor other forms of support (e.g. from the ARMA) for which they were eligible.

[160] See section 4.1.2. It is estimated that around 80% of farmers have accounts at cooperative banks. Source: *Wnioski z Forum Bankowego 2005*, Polish Banking Association press conference, March 22, 2005.

[161] Banks also offered credit cards to customers without permanent sources of income, e.g. students. In 2004, only one bank offered company credit cards.

[162] Based on bank fee and commission tables.

[163] The results of the Pentor institute *Audyt Bankowości Detalicznej* ("Retail Banking Audit") survey indicated that in December 2004, every fifth bank customer for whom a personal transaction account was maintained had an open line of credit.

[164] More on this subject in section 4.2.

them to purchase bank shares at a discount. The interest rate on the deposit was 3%. Around 65,000 privatisation deposits were made at the PKO BP bank.

Due to an improvement in the macroeconomic situation of the country, and the consequent improvement in consumer sentiment, banks increasingly offered more complex products, used to manage available funds in a more efficient manner, i.e. enabling customers to achieve much higher returns than traditional deposits. These were structured (hybrid) deposits, which had been offered in the past, but were now extended by adding new possibilities. Due to the fact that they were a combination of bank deposits, capital market investments and foreign exchange transactions, the interest on such deposits could include several components, i.e. guaranteed interest and extra interest depending on movements in the prices of underlying assets, e.g. stocks or indices. Such products were offered to affluent customers within the framework of private banking services – minimum deposit amounts were high (e.g. PLN 20,000).

Investments based on predetermined portfolios were an innovative form of investment in capital market products and bank deposits. They were available to a much larger number of customers, both individual and institutional ones, since banks set here the minimum deposit amount at a much lower level (e.g. PLN 2,000) or did not set it at all. These new products combined deposits with investment fund participation units. The portfolio composition and investment strategy as well as the amount invested could be changed later without losing the interest accrued. Some banks did not charge any fees for the purchase of participation units in the investment fund selected by the customer, but this only applied to the funds suggested by them within a given package. Customers who were interested in the insurance aspect of the product, on the other hand, were offered investment schemes based on unit-linked insurance. This manner of investing savings was particularly attractive from the legal and fiscal points of view since the capital gains tax is only levied upon partial policy surrender and the termination of the agreement. Responding to the increased interest in the capital market on the part of individual customers, which was reflected by the steady evolution in the structure of their savings, banks also offered packages of services which combined the features of bank and brokerage accounts as well as investments in all instruments listed on the Warsaw Stock Exchange and MTS CeTO.

Box 4.1.2

THE MOST IMPORTANT CHANGES INTRODUCED BY AMENDMENTS TO THE BANKING ACT THAT AFFECT BANKS' OFFERS[1]

Escrow account

Art. 59 of the Act introduced a new type of bank account – an escrow account. The Act defines the trustee who is the account holder. Pursuant to a separate agreement with the trustee, a third party (the trustor) entrusts a specified amount of funds, which is credited to the escrow account. The legal consequences of the conclusion of an agreement concerning the maintenance of such an account relate primarily to the protection of the funds entrusted from the trustee's creditors (they may not be seized where enforced collection proceedings are instituted against the trustee and are not included in the bankruptcy estate of the trustee). The provisions on escrow accounts in the Banking Act are the first in Polish legislation concerning this account type. It may be supposed that such accounts will be used primarily by property developers and their customers.

Direct debit

The maximum amount of a single direct debit transaction was increased from 10,000 euro to 50,000 euro for transactions where the debtor is an entity other than a person who does not engage in business activity. The primary objective for the increase in this limit was to encourage enterprises to use such settlement methods.

Monetary loans

Apart from the right to terminate a loan agreement, which they had had before, banks obtained the right to reduce the amount of loan granted. This applies to loans that have been granted but have not been disbursed. A bank may reduce the loan amount pursuant to a declaration of will submitted to the customer beforehand.

Bank guarantees, endorsements and letters of credit

The list of banking operations was extended by adding the confirmation of letters of credit. The article which had given the CBS the authority to stipulate special conditions for the extension of bank guarantees and endorsements by banks was deleted by regulation.

Special bank obligations and rights

The addition of Para. 4 to Art. 95 of the Act cleared the doubts regarding the manner of establishing a mortgage for the benefit of the bank and its entry. Currently this may be done pursuant to a written agreement and a bank's declaration meeting the requirements stipulated in the provision. As a result of the amendment to Art. 97, Para. 2 of the Act, the amount of debt stipulated in the debtor's statement of consent to enforced collection proceedings is the maximum amount for which the bank may issue the so-called bank enforcement collection order and not, as before, the maximum amount to the collection of which the debtor consents (the bank may, however, reserve the right to further interest in the bank enforcement collection order). Another change was also introduced with respect to bank enforcement collection orders: currently the debtor's statement of consent to enforced collection proceedings should include the date by which a bank may file a motion for a court to append an enforcement clause to a bank enforcement collection order and not, as before, the date by which a bank may issue a bank enforcement collection order.

[1] The Act Amending the Banking Act and Other Acts of April 1, 2004 (*Dz.U.* No. 81/2004, item 870).

In a market economy, the banks' offer is primarily shaped by the customers' needs and is the result of the adaptation of marketing strategies to the trends observed in the market. Applicable regulations also have a large impact on the banks' offer with regard to both loan and deposit services (Box 4.1.2).

4.1.7. Prospects

The year 2004 was very good for the banking sector, which was reflected by a considerable increase in its earnings compared to 2003.[165] At the same time, the predictions that Poland's accession to the EU would not cause major changes in the sector proved accurate. This was possible due to the process of adjusting Polish banking law to EU standards which had lasted for several years and also due to the earlier opening of the banking market reflected in the capital structure of the sector, which exhibits a significant share of foreign equity interest. In coming years, the operation within European market structures and the related opportunities and challenges will determine the shape of the Polish banking sector.

Taking into account the fact that the percentage of people over the age of 15 in Poland who use banking services is still low (58.4% in 2004),[166] and that a large part of the banking sector's profits in 2004 stemmed from its performance in the retail banking sector, it should be expected that banks will also strive to take advantage of this potential in the future. According to some researchers, the share of retail banking in Central and Eastern Europe in 2010 will account for

[165] See section 4.1.4.

[166] *Banki 2004, blaski i cienie w percepcji, wizerunku i działalności,* a Pentor institute presentation during the General Meeting of the Polish Banking Association, Warsaw, April 19, 2005.

Table 4.1.39. Opportunities and challenges for the Polish banking sector

Opportunities	Challenges
– expected increase in corporate investment;	– introduction of the New Capital Accord;
– the banks' increasing activity in the capital market;	– introduction of International Accounting Standards;
– adequate bank capitalisation (impact on lending);	– a better match between asset and liability maturity;
– extending the offer as a result of collaboration with non-banking financial institutions (bancassurance, leasing, loan and guarantee funds, venture capital funds);	– proper collateral valuation, increased liquidity and foreign exchange risk as a result of the increase in the amount of housing loans;
– use of existing collaboration potential under projects coordinated by BGK, PAED and KUKE;[1]	– competition from credit institution branches, investment funds, pension funds, insurance companies, and credit unions;
– project co-financing within the framework of European Union programmes.	– the banks' adjustment to operating in a relatively low interest rate environment;
	– development of bank asset securitisation;
	– enhancing the attractiveness of long-term saving offer;
	– streamlining information exchange within the sector.

[1] BGK – Bank Gospodarstwa Krajowego, PAED – Polish Agency for Enterprise Development (*Polska Agencja Rozwoju Przedsiębiorczości – PARP*), KUKE – Export Credit Insurance Corporation (*Korporacja Ubezpieczeń Kredytów Eksportowych*).

Source: NBP.

over 50% of the banking market (currently it is 36%) and will grow at the expense of corporate banking.[167] It may be expected that the number of home loans (including mortgage loans) will grow at the most rapid rate, particularly since the potential for the development of such services in Poland is considerable. This is corroborated by the ratio of housing loans granted to GDP, which represents around 5% in Poland, while in Western European countries it is around 33%.[168]

It should be noted that due to amendments to several acts which make the claim recovery process more effective and loosen the restrictions regarding bank exposure to customers, the banks' position in enforced collection proceedings improved in 2004.[169] These changes may contribute to increased lending in the future. On the other hand, draft legislative bills which may lead to opposite consequences emerged in 2004. They included e.g. the draft act limiting the interest rate on consumer loans to a maximum of five times the lombard rate (the so-called Usury Act).

The potential consequences of the adoption of draft amendments to the Civil Code and the Act on Land and Mortgage Register and Mortgage which would reintroduce the method of securing claims known as the land debt to the Polish property and mortgage law should also be considered. The land debt is a well-known institution, which is commonly used in the European market, e.g. in Germany. The establishment of this limited right in property, which is not related to the existence of the claim which it secures (this is the fundamental aspect which sets the land debt apart from the mortgage), should make lending more efficient, but on the other hand it may limit the use of mortgages considerably.

[167] F. di Maggio, P. Romanowski, C. Walter, "Eastern European Banking Matures", *The McKinsey Quarterly*, No. 2/2003.

[168] Based on *Report on EU Banking Structures*, ECB, October 2005. The publication can be found at: http://www.ecb.int/pub/pdf/other/eubankingstructure102005en.pdf.

[169] *Formalne i praktyczne aspekty windykacji należności bankowych w Polsce,* Warsaw: KNB, December 2004. This applies in particular to the regulations included in the Banking Act (which came into force on May 1, 2004), the Code of Civil Proceedings (of July 2004, most of its provisions are to come into force in February 2005), the Act on Court Executive Officers and Enforcement Proceedings (which came into force on November 13, 2004) and the Act on the Complaint against the Violation of a Party's Right for its Case to be Examined in Court Proceedings without Undue Delay (Act of June 17, 2004).

In 2004, measures aimed to streamline the exchange of information in the banking sector were also undertaken. The Credit Information Bureau began to offer scoring – an assessment of the probability that a customer's loan will become delinquent. The establishment of the InfoMonitor Biuro Informacji Gospodarczej SA enterprise database was also a welcome signal pointing to the fact that measures aimed at improving the transparency of the system for exchanging information about corporate customers in Poland were being undertaken. This is very important, particularly in view of the banks' extended offer for small and medium-sized enterprises. The development of such solutions makes it possible to mitigate the risk arising from funding business ventures. This risk is also mitigated by a system of guarantee institutions which extend loan guarantees to Polish enterprises. Its central element (organisationally and financially linked to Bank Gospodarstwa Krajowego) is the National Loan Guarantee Fund (*Krajowy Fundusz Poręczeń Kredytowych – KFPK*).[170] Via this fund, BGK actively contributes to the development of regional and local guarantee institutions, facilitating access to bank loans for the SME sector. The results of the operation of the EU Guarantee Fund (*Fundusz Poręczeń Unijnych – FPU*), which was established pursuant to the Act of April 16, 2004,[171] are not as significant as in the case of the National Loan Guarantee Fund. This is due to the fact that the fund has only operated for a short time, but it may also be caused by insufficient knowledge of the advantages of using the EU Guarantee Fund.

Credit institutions' activity will also affect the shape of the Polish banking sector. Pursuant to Directive 2000/12/EC of the European Parliament and of the Council related to the taking up and pursuit of the business of credit institutions, European banks may conduct activity in Poland on the basis of the single European passport.[172] From May 1, 2004 until December 31, 2004, 57 notifications regarding the intention to commence cross-border activity were submitted to the Commission for Banking Supervision.[173] The type and scale of operations conducted by such banks have not made them major competitors for banks conducting their activities in Poland so far, but their role may be expected to increase in the future.[174] Opinions regarding the activities undertaken by branches are similar.[175] The opportunities created for credit institutions by the Regulation on the Statute for a European Company should also be mentioned.[176] It facilitates takeovers by parent companies of their subsidiaries' activities by merging two companies from different countries into a so-called European Company (SE – *Societas Europaea*). One such merger has already taken place in Europe.[177] The number of applications for authorisation to establish a bank[178] submitted to the Commission for Banking Supervision indicates that the interest in establishing banks in Poland has grown.

[170] More information can be found in: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 136, and P. Dziewulski, "Elastyczność krajowego sektora bankowego w finansowaniu małych i średnich przedsiębiorstw", *Zeszyty BRE CASE* No. 78/2005, p. 17.

[171] The Act on the EU Guarantee Fund of April 16, 2004 (*Dz.U.* No. 121/2004, item 1262).

[172] See section 4.1.1.

[173] The largest number of notifications were sent from Great Britain, Austria and Germany. Source: *Sprawozdanie z działalności Komisji Nadzoru Bankowego za 2004 rok,* Warszawa: KNB, April 2005.

[174] W. Kwaśniak, "Obecne i przyszłe zmiany roli polskiego banku centralnego w zakresie nadzoru bankowego", *Zeszyty BRE Bank-CASE* No. 76/2005, p. 18.

[175] By the end of 2004, four notifications were submitted to the CBS regarding the taking up of business by a branch on the territory of Poland by two credit institutions from France and one each from Sweden and Denmark. Source: *Sprawozdanie z działalności Komisji Nadzoru Bankowego za 2004 rok*, p. 17.

[176] Council Regulation 2157/2001/EC of October 8, 2001, which came into force on October 1, 2004.

[177] The merger between a parent company and its subsidiary within the Nordea group.

[178] In 2004, four applications for authorizations to establish a new bank were submitted to the CBS. The CBS passed two resolutions concerning bank establishment.

4.2. Credit unions[179]

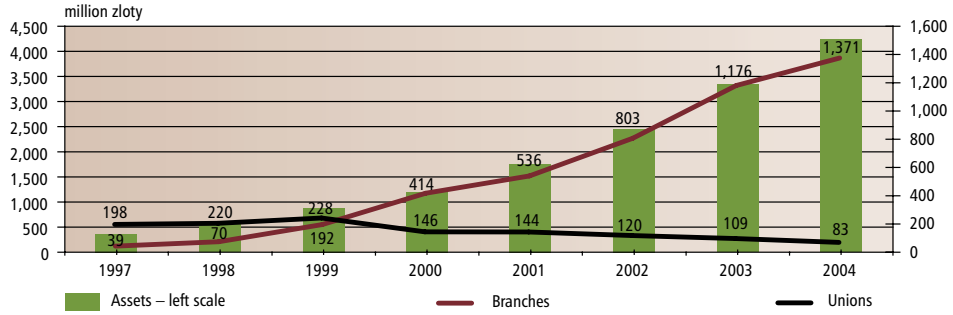
Basic profile of activity

Credit unions (*Spółdzielcze Kasy Oszczędnościowo-Kredytowe – SKOK*) operate on a non-profit basis[180] pursuant to the Act on Credit Unions[181] and the Cooperatives Act.[182] On December 2, 2004, cooperative savings and credit unions were classified as monetary financial institutions.[183]

All unions operate in line with the standards determined by the National Association of Credit Unions. The National Association has stipulated permissible risk standards for individual unions regarding their capital, debt collection procedures, the compliance of their operations with applicable laws, proper financial management and accounting as well as matching the interest rates and maturities of assets and liabilities.

Credit unions are a system of depository and lending institutions. The following institutions, among others, are associated with the unions: Towarzystwo Ubezpieczeń Wzajemnych (TUW SKOK, a mutual insurance company), Towarzystwo Ubezpieczeń na Życie SKOK SA (TU SKOK Życie, a life insurance company),[184] Towarzystwo Funduszy Inwestycyjnych SKOK SA (TFI SKOK, a fund management company),[185] and Asekuracja.[186]

Figure 4.2.1. Assets, number of unions and branches



Source: National Association of Credit Unions.

Table 4.2.1. Union members

	1997	1998	1999	2000	2001	2002	2003	2004
Number of members (thousands)	194	259	306	394	525	703	924	1,169

Source: National Association of Credit Unions.

[179] The analysis presented in this section has been based on the data submitted by the National Association of Credit Unions.

[180] The income from the activities of cooperative savings and credit unions is used to further their statutory objectives and is entirely exempt from tax.

[181] The legal grounds for the operation credit unions are provided by the Act on Cooperative Savings and Credit Unions of December 14, 1995 (*Dz.U.* No. 1/1996, item 2).

[182] The Cooperatives Act of September 16, 1982 (*Dz.U.* No. 30/1982, item 210 as amended).

[183] The Management Board of the NBP adopted Resolution No. 55/2004 on the procedure and detailed principles regarding the banks' submission of the data necessary for establishing the monetary policy and conducting periodic assessments of the state's monetary situation and the evaluation of the banks' financial standing and the risk of the banking sector to the National Bank of Poland, which introduced amendments to Resolution No. 23/2003.

[184] TU SKOK Życie commenced its operations in December 2003. The company was established after TUW SKOK and the National Association of Credit Unions had bought 100% of the shares in Metropolitan Life Poland SA. Since September 1, 2004, as a result of the Individual Pension Account Act having come into force, TU SKOK Życie SA has offered to all credit union members the possibility of depositing savings in Individual Pension accounts.

[185] TFI SKOK was established on November 19, 2003 and operates pursuant to the provisions of the Act on Investment Funds of August 28, 1997. On April 26, 2004, TFI SKOK obtained the approval of the Polish Securities and Exchange Commission for its operation and the establishment of its first fund: SKOK Fundusz Inwestycyjny Otwarty Rynku Pieniężnego (an open money market fund).

[186] Asekuracja is an insurance intermediary and provides comprehensive services concerning the selection of financial products to union members.

The National Association and TUW SKOK (the mutual insurance company) are parts of the so-called Savings Protection Programme.

Credit unions currently offer not only accounts, deposits and loans, but also debit and credit cards,[187] mortgage loans, insurance, investment funds and Individual Pensionaccounts.

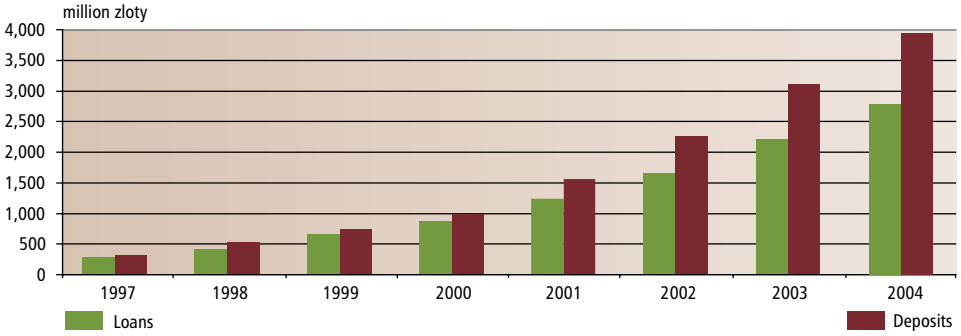
Size and structure evolution of the sector

2004 was the twelfth year of the cooperative savings and credit unions' operations[188] and another year during which the unions' assets and the number of members grew (Figure 4.2.1 and Table 4.2.1). The number of branches also increased.

The activities of credit unions are concentrated in three regions: in Pomerania, Silesia and Mazovia, where the largest unions with the highest numbers of members operate.

Despite the increase in the number of branches, the number of unions themselves has decreased in subsequent years as a result of consolidation. According to the National Association, mergers are initiated by the management of the unions which are being taken over and their

Figure 4.2.2. Credit unions' deposits and loans



Source: National Association of Credit Unions.

Table 4.2.2. Selected capital adequacy and performance indicators for credit unions, %

	2002	2003	2004[2]
General capital adequacy ratio[1]	8.00	8.44	8.49
Pre-tax earnings/assets	0.48	0.43	0.84
Net earnings/assets	0.46	0.42	0.81

Note: The figures for credit unions cannot be compared to bank indicators.

[1] The general capital adequacy ratio is defined as the ratio of total capital to assets.

[2] Preliminary data.

Source: National Association of Credit Unions.

Table 4.2.3. Credit unions' past due loans ratio, %

	2002	2003	2004
Past due loans as percentage of total loans	16.9	15.3	14.1[1]

Note: The figures credit unions cannot be compared to bank indicators.

[1] Preliminary data.

Source: National Association of Credit Unions.

[187] Credit unions were the first non-banking institutions in Poland to issue ATM cards to their members. The unions offer cards which can be used with ATMs belonging to the unions themselves and those forming part of the EURONET network as well as Visa payment cards. The Polish credit unions are the first European credit union system which has become a member of Visa International.

[188] Credit unions were established in 1992.

members. In most cases small, single-branch unions whose operations have become inefficient are taken over. Since 1992, no union has gone bankrupt because the National Association encouraged stronger unions to acquire the ones in jeopardy. Financial stability in the union doing the acquiring was a condition for the acquisition of a union with smaller capitalisation.

In 2004, the amount of union loans as well as deposits grew.[189] The annual increase in the amount of loans on 2003 was 29%. Loans with maturities exceeding 12 months prevailed in the unions' portfolios (with a share of almost 90% during the period under review). In 2004, deposits also grew steadily, exhibiting an increase of 21% over 2003. Deposits with maturities up to 12 months dominated in the deposit maturity structure (with a share of 88%).

As with commercial banks, 2004 was a favourable year for credit unions. Their net earnings grew and amounted to PLN 34 million (PLN 13 million in 2003). The unions also improved their capital adequacy and performance ratios.

The credit unions' capital forms the basis for the assessment of their capital adequacy. According to the recommendations issued by the World Council of Credit Unions, the unions' total capital includes two categories: institutional and supplementary capital.[190] In 2004, the unions' total capital grew by around 27%.

Credit unions make valuation allowances for their past due and uncollectible loans in accordance with the permissible risk standards set by the National Association. Compared with the previous year, the ratio of past due loans extended by cooperative savings and credit unions fell.

Future trends and prospects

Despite dynamic growth noted in the credit unions sector, their assets to comercial banks assets ratio is still insignificant (0.8% as of the year-end 2004). The situation is similar with regard to deposits (1.4%) and credits (1.2%) in the non-financial sector. The analysis of the credit unions services and the structure of their client base indicate that their strategies are focused on providing basic deposit and credit products, similar to those offered by banks. Taking into account the present credit unions activities direction, it is fairly likely that those institutions will take further steps to maintain and strengthen their position in the financial system. One of such activities that has currently been practised is combining their services with the offer of investment funds and insurance companies.

4.3. Non-banking institutions providing financial services

4.3.1. Leasing

Leasing is one of the forms of investment financing designed to make the fixed assets that are the subject of a lease agreement available for use for a definite period of time. The characteristic feature of leasing is that during the term of the agreement the lessor is the owner of the assets used by the lessee. There are two basic leasing types: operating and financial leasing.[191] Under operating leasing, the risk related to the assets which are made available is borne by the lessor, while in the case of financial leasing it is borne by the lessee. Each year, the popularity of leasing in Poland is growing – there is an upward trend in the value of assets leased (Figure 4.3.2). It is estimated that around 30% of enterprises (particularly small and medium-sized ones) have concluded lease agreements while 50% of enterprises have taken advantage of bank loans. Most lease contracts concluded were

[189] High interest rates on deposits and lower interest rates on loans prompted an increasing number of households to choose cooperative savings and credit unions instead of commercial or cooperative banks.

[190] Institutional capital (first tier capital) includes funds which are entirely designated to cover losses and do not incur any costs. The credit unions' regulatory capital meets these conditions. Supplementary capital (second tier capital) includes funds which, pursuant to the unions' statutes, may be directly or indirectly used to cover losses, despite the fact that they are not disclosed in the balance sheet under the capital and reserves item.

[191] The Polish Statistical Classification of Economic Activities (*Polska Klasyfikacja Działalności – PKD*) introduced the concepts of operating and financial leasing – Ordinance of the Council of Ministers on the Polish Statistical Classification of Economic Activities of October 7, 1997 (*Dz.U.* No. 128/1997, item 829 as amended). This distinction is also present in tax regulations.

financial leasing ones.[192] The rising interest in private leasing (the name has been introduced by the Polish Association of Leasing Companies), also called consumer leasing, should also be noted.[193] Consumer leasing is targeted at individuals. It is particularly common for vehicles with a gross weight of up to 3.5 tonnes. During the lease term the customer only pays instalments; after all instalments have been paid the car is purchased for the price set in the agreement. Consumer leasing may take the form of renewable leasing where the car is not purchased but used and the customer only pays for using the vehicle. Following the expiration of the leasing agreement, the car is returned to the lessor and the customer may conclude another agreement for a new vehicle.

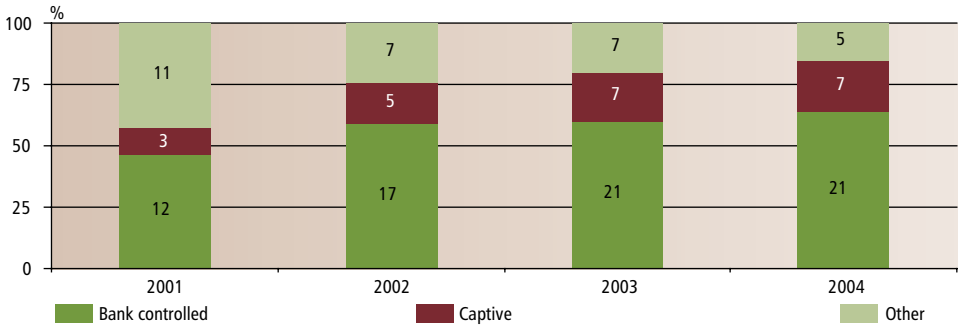
Number of companies and ownership structure

Consolidation processes have been underway for a few years in the leasing sector. In 1999, over 150 leasing companies were active on the market, while from 2000 there were around 40 of them; in 2004, there were also approximately 40 such companies.

In 2004, the leasing market was dominated by companies which were bank subsidiaries with stable financing sources. Among the 33 firms that submitted data to the Polish Association of Leasing Companies,[194] over a half had capital links with banks. In recent years, the ownership structure of Polish leasing companies has stabilised (Figure 4.3.1).

This trend has been in place since 2002. Similar trends were observed in Hungary and Romania. In the Czech Republic, as in Germany, companies independent from banks dominated.[195]

Figure 4.3.1. Ownership structure of leasing companies in Poland associated in the Polish Association of Leasing Companies



Source: NBP calculations based on Polish Association of Leasing Companies data, http://www.leasing.org.pl.

Size and structure of the sector

Until the end of the 1990s, the value of leased assets grew steadily. This upward trend was halted in 2000. For the Polish leasing sector, 2001 turned out to be the most difficult year, when only about PLN 7.7 billion worth of fixed assets – the lowest value ever recorded – were leased out.[196] From then on, the leasing industry developed continuously in terms of the growth in the value of assets funded through leasing. According to the data provided by the Polish Association of Leasing Companies, in 2003 the market reached the volume of PLN 11 billion, and in 2004 – PLN 14.2 billion. As a percentage of GDP, the value of leased assets in Poland remained low and amounted to 1.8%

[192] "Podsumowanie rynku w 2004 r. Leasing w Polsce", *Rzeczpospolita* supplement, May 9, 2005.

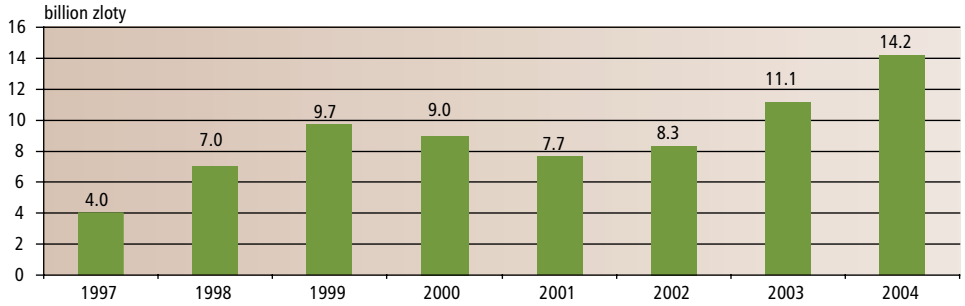
[193] More information can be found at: www.efl.com.pl.

[194] The Association comprised 26 companies in 1991, 29 in 2002, 35 in 2003 and 33 in 2004, which accounted for over 90% of the market share.

[195] The number of independent leasing companies in Germany was close to 130; there were around 60 bank-controlled companies and 30 captive ones.

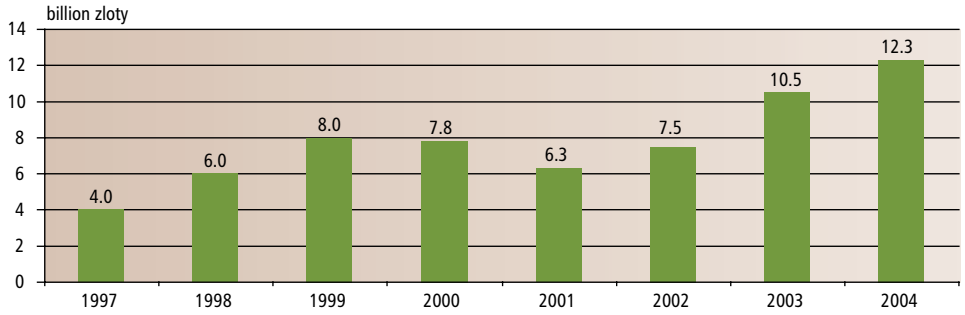
[196] Based on Polish Association of Leasing Companies data, http://www.leasing.org.pl.

Figure 4.3.2. Value of leased assets in Poland, 1997–2004



Source: NBP calculations based on Polish Association of Leasing Companies data.

Figure 4.3.3. Value of movables leased in Poland, 1997–2004



Source: NBP calculations based on Polish Association of Leasing Companies data.

in 2004 (versus 4.5% in the Czech Republic and 4.2% in Hungary).[197] The penetration rate is another indicator of leasing market development.[198] Its average value for the EU-25 countries was 14.8%. For Poland, the the penetration rate in 2004 amounted to 10.9% (9.2% in 2003), for the Czech Republic – 16.2% (18% in 2003), and for Hungary – 22% (21.9% in 2003).[199]

In 2004, motor vehicles used for commercial transport dominated the leasing market. Until 2003, the share of such assets remained at 50%. From 2003, this value has varied around 70%. In 2004, the share of machinery and equipment in assets was 23% (until 2003 – over 30%).

The shift in the structure of leasing sector assets towards vehicles used for transport has resulted from the increased interest in the leasing of passenger cars certified as lorries (with regard to fixed asset leasing, the value of leased passenger cars surged by 309% in 2004) as well as the continuous postponing of investment decisions related to, *inter alia*, the overhaul of machinery or the purchase of new machines and equipment by entrepreneurs.

In 2004, the single-digit share of computers and office equipment in leased assets was maintained (2.3% in 2003, 2.0% in 2004). This result was much lower compared to other EU countries (12% of movables leased in 2003),[200] but it is important that the downward trend in the development of this leased asset segment was halted. Moreover, interest in IT leasing on the part of large companies intensified. Certain growth was also recorded with respect to the leasing of aircraft, ships and rail transport means (so-called big ticket items).

In 2004, a significant revival with regard to property leasing was observed (an increase of 207% on 2003). As regards the trend, this brings the Polish leasing market (taking the overall

[197] Based on Eurostat (http://epp.eurostat.cec.eu.int) and European Central Bank.

[198] The penetration rate is the ratio of the value of assets leased to gross fixed capital formation by enterprises and households in a given country (term taken from a paper by the European Federation of Leasing Company Associations).

[199] Based on Leaseurope data, http://www.leaseurope.org.

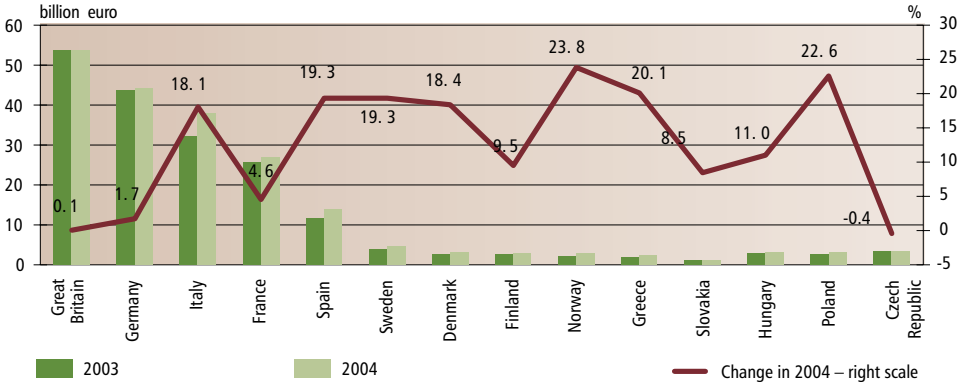
[200] Based on Leaseurope data, http://www.leaseurope.org.

Table 4.3.1. Changes in the net value and structure of leased assets, %

		Change				Structure			
		2001	2002	2003	2004	2001	2002	2003	2004
1.	Movables leased	-11.4	42.0	42.9	16.3	79.6	92.9	94.3	85.9
–	Machinery and equipment	-12.1	12.0	26.3	16.3	25.6	23.6	21.1	20.4
–	Computers and office equipment	1.3	3.5	-20.9	22.4	4.6	3.9	2.2	2.0
–	Rail, air and water transport means	-13.6	80.5	53.2	214.2	3.5	1.4	0.6	1.0
–	Road transport	513.9	269.8	13.2	16.4	42.5	63.1	68.7	61.5
–	of which: Passenger vehicles	-10.4	-51.6	38.6	309.2	2.4	7.4	6.0	9.0
–	Other	11.6	-66.6	156.7	-34.0	3.4	0.9	1.7	1.0
2.	Property leased	17.6	-57.5	11.5	207.0	20.4	7.1	5.7	14.1
3.	Total movables and property leased	-6.7	21.7	40.7	24.1	100	100	100	100

Source: NBP calculations based on Polish Association of Leasing Companies data, www.leasing.org.pl.

Figure 4.3.4. Annual change in the value of assets leased against the total value of assets leased in selected European countries (2004 on 2003, %)



Source: NBP calculations based on Leaseurope data.

structure of leased assets into account) closer to European standards. Property leasing plays the most important role in Italy, where it accounts for over 40% of the property leasing market, and is least important in Great Britain – 1% of the leasing market. Table 4.3.1 shows trends and changes in the structure of leased assets in Poland.

In 2004, the rapid growth in the value of leased assets could be related to the slowing growth in investment loans in Poland and the fact that small and medium-sized enterprises found it easier to finance asset purchases via leasing companies than via banks.

The value of assets leased in Europe in 2004 amounted to 226.6 billion euros. The largest shares of the European market were held by Great Britain (54.8 billion euros), Germany (44 billion euros), Italy (38.1 billion euros) and France (26.9 billion euros). Poland was ranked 11th (3.6 billion euros).[201]

Cars (53%) prevailed among the assets leased in EU countries. Moreover, machinery and equipment had a significant share – 23.5% (in Poland the share of leased machinery and equipment in Poland was similar). Turkey and Italy had a high share of machinery and equipment in total leased assets – 55% and 48%, respectively. Computers and office equipment accounted for 11.7% of the European leasing market. The largest shares of computer equipment in total assets leased were recorded in Holland (36%), Finland (36%) and Belgium (28%).[202] Lease agreements with terms ranging from 2 to 5 years prevailed in EU countries (77% of all agreements); the situation was

[201] Based on Leaseurope data, http://www.leaseurope.org.

[202] Based on Leaseurope data, http://www.leaseurope.org.

similar in Poland. In EU countries, lessees from the private service sector dominated. The public sector had a small share in total leasing in EU countries (5%), with the exception of Finland and Sweden – 29.7% and 14.5%, respectively. In Poland, no research regarding the share of leased assets in individual economy sectors has been conducted so far.

In 2004, bank loans in Poland remained the primary source of financing the operations of leasing companies. Lessors cooperated with foreign institutions with which they had capital links and which usually offered them preferential loans. Some loans to lessors were financed from EU funds, particularly with regard to small and medium-sized enterprises.

Leasing industry development prospects

The predominant popularity of leasing in Western European countries and the advantages derived by the companies using it compared to bank loans provide reasons to expect that the role of this method of financing will continue to increase in Poland. The fact that expenditure arising from a lease agreement has been deemed to be eligible for subsidies from the European Regional Development Fund (ERDF) by the European Commission, which significantly reduces the cost related to new investment financing (the principal component of the leasing instalment is eligible for subsidies) will be an important factor in the further development of the Polish leasing market. Agricultural machinery leasing has started to take on importance in Poland; the conditions are favourable due to the development prospects of rural areas and the considerable popularity of this method of investment funding among European farmers.[203] The fact that companies may apply for the reimbursement of investment expenditure encourages entrepreneurs to engage in new projects. The machinery and equipment leasing market also has favourable prospects (it is estimated that its share in leased assets may reach 28%), because it is easier for an entrepreneur to obtain funding for machinery purchases from a leasing company than from a bank.

The interest in a service called fleet management, which consists of the inclusion of vehicle servicing in the leasing offer, has been rising in Poland. In 2004, 28 companies providing such services were active on the Polish market, including representatives of the world's largest corporations in this sector.[204]

Just as in Western countries, the leasing of means of public transport (big ticket items) and leasing as a form of municipal financing will certainly become more popular.[205] The Polish services market has used leasing to a very limited extent so far, while in EU countries it is using leased assets on a considerable scale.[206]

Favourable economic climate forecasts will certainly increase the pace and scale of investments undertaken, which will translate to a significant growth in the Polish leasing market in coming years. Other important factors include the simplification of leasing procedures and faster access to leased assets as well as an extended range of products on offer, e.g. introducing the so-called high residual value leasing[207] or private leasing (currently, individuals account for only 1–2% of leasing company customers), which will certainly also fuel the growth of the leasing market in Poland. In most mature markets, private leasing is among the fastest growing financial system segments. The presence of foreign capital groups, which transfer models evolved in their own markets to Poland, has contributed to the rapid development of the Polish leasing market.

[203] Based on: Z. Biskupski, "Prawie rok w Unii", *Gazeta Prawna*, April 19, 2005.

[204] "Podsumowanie rynku w 2004 r. Leasing w Polsce", *Rzeczpospolita* supplement, May 9, 2005.

[205] Based on: Z. Biskupski, "Branża wciąż ustanawia rekordy", *Gazeta Prawna*, May 27, 2005.

[206] Based on Leaseurope data, http://www.leaseurope.org.

[207] High residual value leasing is a form of operating leasing which makes it possible to use the asset leased (usually a car) without the need to purchase it when the lease agreement is terminated. The purchase price of the asset leased would be quite high since the customer only pays the interest for using it.

4.3.2. Factoring

According to the 1998 Ottawa Convention[208], factoring is a financial service which addresses at least two of the following four tasks: financing undisputed and undue claims, assuming the debtor's insolvency risk, maintaining settlement accounts and collecting claims.

Factoring is a form of external financing suitable for enterprises with large-value claims, but with limited equity, which cooperate with their partners on a permanent basis, and simultaneously implement expansive revenue increase strategies – also through setting relatively long payment deadlines. Other significant characteristics of such enterprises include high demand for liquid funds met through the utilisation of current lines of credit and increased debtors' insolvency risk.

Factoring yields good results at enterprises where sales exhibit considerable seasonal variation. In Poland, this form of financing is most often taken advantage of by companies in the metallurgical, chemical, foodstuffs, machinery and equipment, clothing and textile, wood and paper, energy supply, furniture and construction industries. The interest of computer companies in factoring is also rising.[209] Similar trends are observed in other countries. There are various types of factoring.[210] In Poland, because of the risk calculation, recourse factoring is most popular: the receivable is returned to the factorer (the party using factoring services) when the debtor does not pay the debt by the date stipulated in the invoice.

Industry profile and performance

Both banks and factoring companies provide factoring services in Poland. The latter offer customers a much broader range of additional services apart from the purchase of receivables and the potential assumption of the debtor's insolvency risk, i.e. conducting settlements, debt collection or assistance in collecting past due debts. There are still few specialist factoring companies in Poland. In 2004, a new company with American equity (owned by one of the largest corporations in the world) commenced operations on the Polish factoring market. The operation of the factoring services market is monitored by the Factoring Institutions Conference (*Konferencja Instytucji Faktoringowych*), which included 9 companies in 2004. It is difficult to assess how many factoring companies operate outside FIC.

In 2004, the value of invoices purchased in Poland amounted to PLN 14 billion, which was an increase of 14.7% over 2003. The importance of factoring for the Polish economy continued to be limited since it remained at the level of 2.0% of GDP (3.5% in the Czech Republic and 1.9% in Hungary).[211] The highest number of invoices was purchased by bank subsidiaries; they amounted to PLN 3.45 billion in total, i.e. around 25% of the market.[212]

In 2004, the global value of factoring services amounted to 860.1 billion euros, which was an increase of 13.3% over the previous year. The value of factoring services in EU-25 countries came to 599.4 billion euros. In EU-25 countries, the ratio of factoring (amount of invoices purchased) to GDP was 5.8%. Europe is the largest factoring services market in the world, accounting for 70% of the global transaction value.[213] Factoring is most popular in Great Britain (invoices amounting

[208] The only international legal act which regulates the issues directly related to factoring is the UNIDROIT Convention on International Factoring signed on May 28, 1988 in Ottawa, which is known as the Ottawa Convention. Many countries, including Poland, have not ratified the convention, but it has given a uniform meaning to the concept of factoring. Factoring in Poland is based on Commercial Code and Civil Code provisions, particularly the titles related to obligations, and the factoring agreement itself has not been defined in Polish legislation despite the fact that it contains elements typical of a claim assignment agreement and a sales contract.

[209] http://www.faktoring.arvato.pl.

[210] More on this subject in: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, pp. 94–96.

[211] Own calculations based on Central Statistical Office, Factors Chain International and ECB data.

[212] G. Brycki, "Liderzy w skupie wierzytelności", *Rzeczpospolita* No. 22, January 27, 2005.

[213] Based on: *Faktoring – nowoczesne narzędzie finansowe wspierające rozwój gospodarki*, http://pekaofaktoring.com.pl/kif.

to 184.5 billion euros purchased), Italy (121 billion euros), France (81.6 billion euros) and Spain (45.3 billion euros).[214]

Most factoring companies in the world belong to the two largest organisations: Factors Chain International and International Factors Group.

Prospects

Factoring is considered to be an indispensable financial instrument in a modern economy and its popularity worldwide has grown for the last 50 years – particularly during periods of recession or economic slowdown, which are difficult for entrepreneurs.

In Poland, factoring is still not very popular as a source of financing. Factoring companies still cannot recognise documented losses as tax-deductible expenses (Poland is the only EU country where this is the case),[215] which certainly affects the cost of factoring transactions. In their trade agreements, super- and hypermarket chains prohibit partners from assigning their claims and thus make it impossible for companies which distribute goods via such shops to use factoring.[216] Moreover, access to information on debtors is still limited (only four business information offices operate so far) and the reinsurance market is relatively underdeveloped.

Things may improve somewhat thanks to the provisions of the Commercial Information Disclosure Act[217] of February 14, 2003 and the operation of the National Debt Register (*Krajowy Rejestr Długów – KRD*)[218] established pursuant to this Act. Until now, the only institution through which the creditworthiness of a future partner could be verified was the Insolvent Debtor Register (*Rejestr Dłużników Niewypłacalnych*) at the National Court Register (*Krajowy Rejestr Sądowy*). The Act stipulates the procedure and principles of disclosure by entrepreneurs of information about the delay in the performance of monetary obligations by entrepreneurs and consumers to third parties whose identity is not determined at the time when information is submitted.

The provisions of the Act on Payment Dates in Commercial Transactions,[219] which stipulate special rights of the creditor and obligations of the debtor regarding payment dates in commercial transactions, may also contribute to the prompt meeting of liabilities. The particular aim of the Act is to assist small and medium-sized enterprises in fighting the use of prolonged payment deadlines by manufacturers.

Factoring contributes to the rapid release of invested funds and therefore its role as a source of corporate financing will grow due to the significant demand among Polish firms for financial instruments which accelerate cash flow. The Polish factoring market is growing by 15–18% per annum, while global factoring revenues grow by 5–10% a year on average. Poland's accession to the EU contributed to an increased interest in export factoring on the part of Polish exporters because Western European companies prefer to collaborate with foreign partners who use factoring services.[220]

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[214] Based on Factors Chain International data, http://www.factors-chain.com.

[215] M. H. R. Bakker, L. Klapper, G. F. Udell, *Financing Small and Medium-size Enterprises with Factoring: Global Growth and Its Potential In Eastern Europe*, World Bank, 2004, p. 26.

[216] M. H. R. Bakker, L. Klapper, G. F. Udell, *Financing Small and Medium-size Enterprises with Factoring: Global Growth and Its Potential In Eastern Europe*, World Bank, 2004, p. 34.

[217] Commercial Information Disclosure Act of February 14, 2003 (*Dz.U.* No. 50/2003, item 424).

[218] The National Debt Register is maintained by Biuro Informacji Gospodarczej KRD BIG SA. An entrepreneur or consumer may be listed in the register upon a request by eligible companies stipulated in Chapter 3, Art. 7 of the Act if certain conditions regarding the amount of unpaid liabilities (at least PLN 500 for an entrepreneur and PLN 200 for a consumer) and certain deadlines (the payment has been due for at least 60 days and at least one month has elapsed since a demand for payment was sent by registered mail) have been met.

[219] The Act on Payment Dates in Commercial Transactions of June 12, 2003 (*Dz.U.* No. 139/2003, item 1323 as amended). The Act came into force on January 1, 2004, and replaced the Act on Payment Dates in Business Transactions of September 6, 2001 (*Dz.U.* No. 129/2001, item 1443).

[220] http://www.pekaofactoring.com.pl/kif.

The introduction of online IT systems which enable faster and more flexible access to information as well as the creation of documents by factoring companies will certainly contribute to an improvement in the quality of factoring services. Such systems will also enable prompter responses to the customers' needs. A more widespread use of electronic signatures would certainly be an improvement in this regard.

The development of the market also largely depends on the understanding of the essence of factoring services by entrepreneurs – they are often associated with debt collection. The Factoring Institutions Conference undertakes actions aimed at making factoring more popular.

4.3.3. Loan brokers

The Polish loan brokers market has been growing rapidly since the beginning of the 1990s. It supplements the market in loans extended directly by banks to persons. The economic slowdown between 2000 and 2002 led to a decrease in the size of loans extended, but economic recovery since has reversed the downward trend in the loan intermediaries market.

The introduction of provisions stipulating the manner and forms of outsourcing the performance of certain banking operations by banks to third parties in the Banking Act[221] may provide a new impulse for the development of the loan intermediaries sector. This will increase the security of the operations of firms which are parties to such agreements and will protect customers against dishonest practices by both banks and intermediaries.

Profile and size of the sector

Several thousand loan brokers firms operate in Poland. They are mostly small enterprises which cooperate with one or a few banks in the local market. However, several major national companies dominate. They are mainly controlled by banks. In recent years, numerous acquisitions took place on the loan intermediaries market. The process worked both ways: both banks and companies were acquirers.

According to estimates by the Financial Enterprises Conference (*Konferencja Przedsiębiorstw Finansowych*), the amount of loans extended by loan brokers in 2004 was PLN 14.5 billion, which was an increase of 16.4% over 2003.[222] Loan brokers sign loan agreements on behalf of banks – the amount of loans is reflected in the banks' assets.

Intermediaries strive to extend their range of services on offer, which includes instalment and cash loans, car loans and other types of cash advances. Financial intermediaries are increasingly involved in extending mortgage loans. Large financial intermediaries offer credit cards, thus replacing instalment loans, classical consumer loans and authorised overdrafts.[223] The increase in the importance of loan brokers in Poland contributed to the development of the market in loans for subprime customers; however, this market is still underdeveloped.[224]

Development trends and prospects

In the coming years, the importance of loans to individuals will continue to grow in Poland, mainly due to the forecast of rapid increase in the amount of housing loans, cash loans and credit card lending. The structure of the market in loans to individuals will become largely similar to that typical of EU countries.[225] Intermediaries will play an increasing role in the distribution of retail loans

[221] The new provisions have been in force since May 1, 2004. More information can be found in Chapter 2.

[222] http://www.kpf.pl.

[223] It is easier to purchase radio, TV or household appliances using a payment card than to draw a loan specially for this purpose. E. Więcław, *Zakupy coraz częściej na kredyt*, www.kpf.pl, June 10, 2005.

[224] *Zadłużenie konsumentów w bankach i instytucjach finansowych*, Gdańsk: Instytut Badań nad Gospodarką Rynkową, 2005.

[225] In countries with stable market economies, housing loans are the largest component of total household debt; e.g. in Holland and Finland such loans account for 90% of total household debt.

and contribute to the rising diversity of sources of loans to persons. According to the estimates of The Gdańsk Institute for Market Economics (*Instytut Badań nad Gospodarką Rynkową – IBnGR*), the share of brokers in the consumer loan market should rise from 30% to around 40% of the total amount of loans granted for consumer purposes by 2008.[226]

The retail loan sector will develop due to favourable economic climate forecasts and the resulting favourable consumer attitudes. The fairly large market growth (Polish household debt is relatively low compared to other countries) and intensified competition, particularly with regard to mortgage loans, will fuel this trend.

The rapid development of the loan brokers market is also the result of the fact that banks now have little possibility of increasing the sales of their services in the traditional way. Direct sales are a more efficient way of winning customers in small towns and rural areas. In large cities, customers look for intermediaries who can offer products from various institutions.

The planned establishment of a single retail market within the EU is a large opportunity for this market since it may reduce the cost of consumer loans.

4.3.4. Financial brokers and consultants

Apart from loan brokers, financial consultants are another group of intermediaries between customers and financial institutions; they are financial product brokers in the retail consumer market. Loan brokers usually cooperate with one bank and extend loans on its behalf. Meanwhile companies working in the broker system offer diverse financial products (designed not only by banks) and sign collaboration agreements with various financial market companies. The cooperating banks, insurance com panies and fund management companies may also design tailor-made products for the customers of a given broker/consultant.

Consultancy activities are not subject to licensing and the emergence of such firms has resulted from intensified competition and the large number of products offered by financial institutions. Financial consultancy firms combine the characteristics of banks with the flexibility of brokers.

The activities of financial consultants are oriented towards building long-term relationships with customers. Customers are offered personal finance consultancy services, which include the assessment of their financial standing, assistance in making financial decisions, tailoring the offer to their needs and other services enabling them to actively manage their finances. The brokers' range of products on offer includes products designed by financial institutions from various market segments – consumer loans, personal transaction accounts and payment cards as well as the purchase of investment fund participation units and insurance policies. Such brokerage activities have several advantages: individual contact with customers, security, discretion and the free choice of the time and place of meetings. Services are often offered free of charge (sometimes a returnable deposit must be made before the details of selected offers are presented).

In 2004, several firms providing financial consultancy services appeared on the Polish market. Consultants can be contacted online, on the phone or at customer service offices. Such firms are usually owned by persons involved in the loan brokerage market or former bank employees. Some companies which until now engaged exclusively in lending activities declare that they wish to include other financial products in their offer and switch to the brokerage system in order to offer products designed by more than one institution.

The innovativeness and rapid development of the financial market favour the creation of new distribution channels. Customers find it difficult to compare multiple offers and select the optimum one. Thus it should be expected that the financial market will evolve towards the emergence of specialised consultancy companies which will increase the accessibility and transparency of the financial market.

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[226] *Zadłużenie konsumentów w bankach i instytucjach finansowych*, Gdańsk: Instytut Badań nad Gospodarką Rynkową, 2005, p. 11.

4.4. Private equity/venture capital sector

Size of the sector

In 2004, the development trends observed since the end of 2002 in the Polish private equity/venture capital sector continued. Although the sector was affected by the same factors as in the previous year, their relative importance changed. Whereas in 2003 the investments of private equity/venture capital (PE/VC) funds grew significantly and the funds raised by them decreased, in 2004 the amount of investments fell while the amount of funds raised grew over elevenfold (Table 4.4.1).[227] Thus the trend towards a decrease in the annual amount of funds raised, which had prevailed since 2000, was reversed. The considerable increase in the amount of funds raised was the result of the establishment of the largest private equity fund in Central Europe (EUR 300 m) by one of the managing companies.

Due to the fact that the amount of PE/VC investments in 2004 was lower than in the previous year, and also as a result of the considerable GDP growth, the ratio of PE/VC investments to GDP decreased and amounted to 0.062%. The figure in Poland was equivalent to one fifth of the Western European average (Figure 4.4.1). On the other hand, 2004 was a record year for the European private equity and venture capital sector with respect to the value of investment projects initiated. This amount reached the highest level recorded so far (EUR 36.9 billion), which translated to an increase of 27% over 2003. The ratio of PE/VC investments to GDP also grew significantly (from 0.29% in 2003 to 0.33% in 2004).

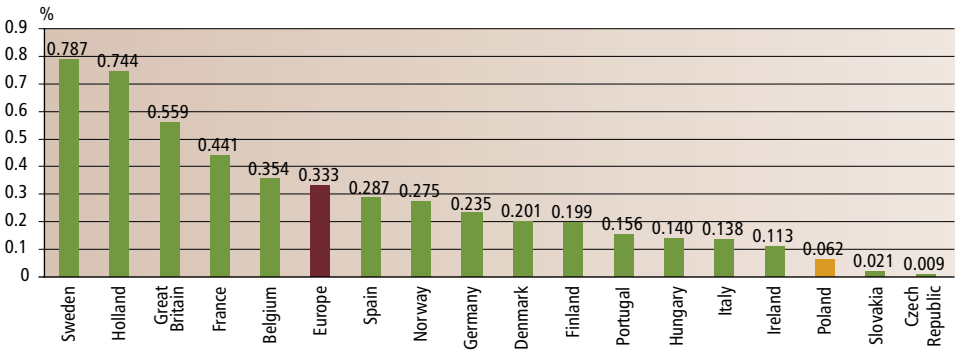
Table 4.4.1. Investment amounts and funds raised by PE/VC funds in Poland (PLN million)

	2001	2002	2003	2004[1]
Investment amount	386	529	779	590
Amount of funds raised	645	457	113	1378
Number of enterprises financed	57	86	48	34
Number of enterprises in which funds completed their investment	38	30	60	41
PE/VC investments as percentage of GDP	0.08	0.069	0.098	0.062

[1] The average 2004 NBP exchange rate has been used for calculations: EUR/PLN = 4.5340.

Source: 2001, 2002, 2003 yearbooks of the Polish Private Equity Association (*Polskie Stowarzyszenie Inwestorów Kapitałowych – PSIK*), European Private Equity and Venture Capital Association (EVCA).

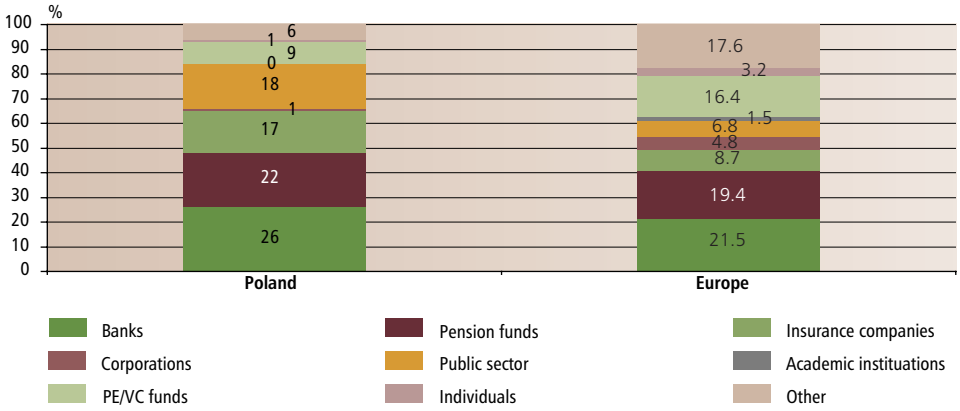
Figure 4.4.1. Private equity/venture capital investment as percentage of GDP, 2004



Sources: EVCA and PSIK.

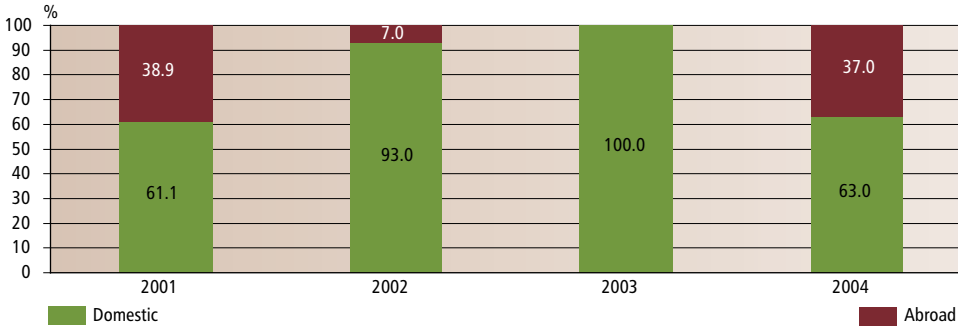
[227] Fundraising by private equity funds is a long-term process. In the initial stage, investor commitments are sought. Then, after certain conditions stipulated in the agreement between the investor and the managing company have been met, such commitments become so-called calls – the investor is called upon to put up the amounts to which he has committed in the agreement available to the management company. The entire fundraising process takes around six months on average. For this reason, the amount of funds raised during a given year should not be compared to the amount of investments made in this period when assessing the development of the private equity sector.

Figure 4.4.2. Private equity/venture capital funds sources in Poland and Europe, 2004



Source: NBP calculations based on *Annual Survey of Pan-European Private Equity and Venture Capital Activity*, EVCA Yearbook 2005.

Figure 4.4.3. Investments of private equity/venture capital funds with registered offices in Poland



Source: NBP calculations based on EVCA data.

The fact that the improvement in economic conditions in Poland in 2004 had no impact on the amount of PE/VC funds investments could have been caused by the strategy of such institutions. Some funds do not invest in several different industries. The activity of a fund which focuses on a specific industry does not necessarily depend on economic conditions. The rapid development of companies involved in debt collection during a period of economic stagnation in Poland between 2000 and 2002 is a good example. The companies which managed PE/VC funds tried to take advantage of this situation by investing in the debt collection area.[228]

As opposed to the situation in Poland, the amount of PE/VC investment in Europe was higher than the amount of funds raised (EUR 27.45 billion) for the third consecutive year. In 2004, it stabilised at 2002 and 2003 level.[229] Traditionally, a large part of capital raised by European funds ended up in the portfolios of funds managed by companies from Great Britain (37% of funds raised in Europe); Sweden was ranked second (13%) and Holland third (12%).

In 2004, Great Britain also had the largest share in Europe (26%) as the country of destination[230] as well as the country of management of PE/VC funds. The investments of such funds, both in Great Britain and beyond, accounted for 52% of total European investment in 2004.

[228] K. Sobańska, P. Sieradzan, *Inwestycje private equity/venture capital*, Warszawa: Key Text, 2004, p. 169.

[229] Based on *Annual Survey of Pan-European Private Equity and Venture Capital Activity*, EVCA Yearbook 2005. It is estimated that the amount of funds raised in Europe in 2005 will rise to EUR 46 billion. J. Croft, "Success Highlight Attractiveness of Sector. Special Report: Private Equity", *Financial Times*, June 22, 2005.

[230] P. Smith, "Record Year Highlights Vibrancy of the Sector. Special Report: Private Equity", *Financial Times*, June 22, 2005.

With regard to the origin of financial resources of the private equity/venture capital funds in Poland, foreign financial institutions continued to prevail.[231] In 2004, 99.9% of the of funds raised came from abroad. The dependence on the activity of foreign companies has been an obstacle to the development of this sector in Poland for many years. The limited diversity of capital sources is also notable. Foreign pension funds whose share in this regard exceeded 50% were more active than in previous years (Figure 4.4.2). In Europe, banks (21.7%) and pension funds (19.3%) supplied the largest amount of capital to PE/VC funds in 2004. As opposed to the situation in Poland, in Europe over 50% of capital raised annually by such funds come from domestic sources.

In 2004, significant changes emerged in the geographical breakdown of the investment by Polish companies managing PE/VC funds. In 2003, they focused exclusively on domestic companies, while, in 2004, 37% of their investment was earmarked for projects in other Central and Eastern European countries.[232]

The increasing regionalisation of PE/VC fund activities has been primarily caused by the accession of eight Central and Eastern European countries to the European Union.[233] The interest in private equity/venture capital investment in the region on the part of funds from other European countries as well as from the U.S. grew significantly. This, however, applied to major projects and those in later development stages. In Poland, for example, investments in new projects are very rare due to the significantly higher risk, while company buyout transactions are becoming increasingly common.[234] For this reason, the number of PE/VC investments has decreased in subsequent years while the average amount of a single transaction has risen (in 2004, it amounted to PLN 17.2 million). The amount of a single buyout transaction is much higher than the amount of investment in a project in the initial development stage.

The increasing popularity of buyout (particularly leveraged buyout) transactions in Poland reflects the development of the private equity/venture capital sector, since these are much more complex transactions than those several years earlier (e.g. in order to privatise enterprises). The significant change in the economic environment in Poland which has taken place since the first PE/VC funds were established has had a decisive influence on the profile of their activities and investment opportunities.

The breakdown of PE/VC investments in Poland by industry in 2004 was similar to that in the previous year. The telecommunications and media sectors attracted the largest share (34%) of the total volume invested in 2004. The share of the financial services industry (17%), although somewhat lower than in 2003 (23.7%), remained at a much higher level than in 2002 (1.2%). Services related to the manufacturing sector were the third largest investment area by industry. In Europe, as in previous years, consumer goods (23.1%), telecommunications and media industries (13.3% in total) had the largest shares by value. The comparison of such breakdowns in European countries and the United States clearly indicates that industries related to biotechnology and medicine are more attractive for U.S. private equity/venture capital funds.

In 2004, the amount of divestments in Poland decreased. Compared to the European private equity/venture capital sector,[235] the companies which manage funds in Poland used the stock

[231] They were mainly institutions with registered offices in other European countries and the United States. The European Bank for Reconstruction and Development remained the largest investor in Poland.

[232] It is estimated that PE/VC funds raised EUR 470 billion to EUR 550 billion in Central and Eastern Europe in 2004. J. Cienski, "Late Starter Hopes for Growth Spurt. Special Report: Poland", *Financial Times*, May 9, 2005. R. Anderson, "Exits and EU Enlargement Drive an Influx of Investors. Special Report: Private Equity", *Financial Times*, June 22, 2005.

[233] It should be noted that some Polish fund managers have started to establish subsidiaries in other countries, e.g. in Romania.

[234] P. Smith, "No End for Boom in Buy-Out Deals. Special Report: Private Equity", *Financial Times*, April 18, 2005. From 2000 to 2004, the involvement of such funds in seed and start-up stage projects gradually diminished and disappeared in 2004.

[235] For the purposes of this section, the European private equity/venture capital sector includes 20 countries, for which statistics were available. They are: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Holland, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland and Great Britain.

Table 4.4.2. Characteristic features of companies which manage private equity/venture capital funds in Poland

Criterion	Description
Minimum investment amount	50,000 U.S. dollars[1]
Legal status (number of firms)	joint-stock company (2) limited partnership (17) other – mainly partnerships established pursuant to English or U.S. law (10)
Preferred industries	Media, telecommunications, industrial products and services, IT, financial services, consumer goods, trade and manufacturing, industrial automation, construction, chemistry, medicine, biotechnology
Number of employees (average for 29 companies)	8 employees
Total amount of capital managed[2]	PLN 3.29 billion[3]
Financing stages	Typically expansion, development, management buyouts, restructuring. Few companies are involved in investments in initial development stages.
Number of portfolio companies in Poland	180[3]
Number of portfolio companies abroad	257[3]

[1] Most companies set a much higher minimum investment amount – EUR 1million to EUR 2 million on average.

[2] The average 2003 NBP exchange rate has been used for calculations: EUR/PLN = 4.3978, USD/PLN = 3.8889.

[3] Total for 29 companies, data as of year-end 2003.

Source: NBP calculations based on the data of the Polish Private Equity Association; the data presented refers to 29 companies which manage funds in Poland and abroad.

exchange for divestment purposes more often. In 2004, public offering was the second most important method of divestment (27% of total divestment amount). Only the share of sale to strategic investors (31%) was larger; for several years, it was the most popular way of exiting from private equity investments in Poland. The rapid development of the Warsaw Stock Exchange (WSE) in 2004 increased the opportunities for profits from domestic PE/VC investments. For managing companies, the development level of the stock exchange is one of the most important factors in deciding whether to invest in a given region.[236] In Europe, a record high with regard to divestments was observed (EUR 19.6 billion); trade sale had the largest share (23.7%). Profit realization via public offering accounted only for 7% of total divestments in Europe.

Since May 1, 2004, the single passport principle has contributed to the expansion of fund activities to other EU countries. The German venture capital fund bmp AG, which was first listed on the WSE on December 16, 2004, was the first foreign company to exploit this opportunity in Poland.

In order to support the development of the private equity/venture capital sector in Poland, particularly with regard to financing small and medium-sized enterprises, preparations on the Act on the National Capital Fund (*Krajowy Fundusz Kapitałowy – KFK*) have begun. According to the draft Act, the KFK will be incorporated by Bank Gospodarstwa Krajowego as a joint-stock company. Its objective will be to provide financial support to venture capital funds which invest in high growth potential projects in initial development stages. The draft anticipates that funding for KFK will be provided by central budget subsidies and EU structural funds.

Trends and development prospects

The analysis of the private equity/venture capital development in recent years clearly indicates that the sector is highly volatile. Poland's accession to the European Union increased the attractiveness of the country to private equity/venture capital funds; as a result, some of them no longer classify Poland as an emerging market. For this reason, interest in investment in other Central and Eastern European countries has grown, particularly Romania and Bulgaria. The rapid economic development of those countries (in 2004 Bulgarian GDP grew by 5.6%, and Romanian GDP grew by 8.3%) and the privatisation processes underway, as well as the development potential linked to the hitherto limited market penetration lead to the fact that PE/VC funds, which take advantage

[236] R. Anderson, "Exits and EU Enlargement Drive an Influx of Investors. Special Report: Private Equity", *Financial Times*, June 22, 2005.

of their experience gained in other developing countries, perceive these countries as places where considerable profits may be realised.

Until now, the Polish private equity/venture capital sector was the largest among Central and Eastern European countries with regard to annual investment amounts. In order to maintain this position in the coming years, obstacles to the development of the sector must be removed.[237] In particular, an appropriate legal framework for private equity/venture capital funds needs to be developed, which would increase the opportunities to invest in such assets for domestic institutional investors (e.g. pension funds). It should be noted, for example, that the attempt to establish the first fund of funds (FoF) in Poland in 2004 came to nothing because pension funds, to which the bonds were offered in the first place, were not interested.

Taking into account the amount of capital raised by Polish funds in 2004, it may be expected that favourable macroeconomic conditions will contribute to their use for investment purposes in 2005. However, the geographical breakdown of investment, which depends not only on economic, but also on legal conditions, is difficult to predict. In Europe, 2005 will probably be a record year

Box 4.4.1

IMPACT OF THE INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENT AND CAPITAL STANDARDS: A REVISED FRAMEWORK (BASEL II ACCORD) AND CAD III (CAPITAL ADEQUACY DIRECTIVE) ON THE EUROPEAN PRIVATE EQUITY/VENTURE CAPITAL SECTOR

The response of the groups linked to the private equity/venture capital sector to the proposals of the Basel Committee on Banking Supervision was unfavourable. According to the European Private Equity and Venture Capital Association (EVCA), the capital requirements stipulated by Basel II could decrease the attractiveness of private equity investments from the point of view of banks as capital suppliers, which would limit the fundraising capabilities of venture capital funds.[1] Funds obtained from banks account on average for 20 to 25% of the annual amount of capital raised by such funds (in some European countries this ratio is much higher, e.g. in Spain it was 44.7% in 2003).

CAD III is a European Union directive, which will implement the Basel II Accord.[2] The EU directive differs from the regulations stipulated in the Basel Accord. CAD III intended to be better suited to European conditions; apart from that, the range of undertakings covered by it will be broader. With regard to private equity, CAD III introduces a lower required amount of capital that will have to be maintained by European banks in relation to their PE/VC investments. The EVCA responded favourably to the proposals included in CAD III. It was stated that CAD III would be an important factor in the development of the private equity sector.[3] The comparison of provisions stipulated in both documents leads to the conclusion that whereas Basel II Accord requires a capital reserve equivalent to 24–32% of total investment amount to be maintained for such investments, CAD III stipulates reserves amounting to 13% (up to a maximum of 17%). This means that banks will have to maintain at least EUR 13 million to EUR 17 million of regulatory capital for every EUR 100 million invested in private equity, while pursuant to Basel II regulations they would have to maintain at least EUR 24 million to EUR 32 million for this type of investment.

[1] *Position Statement*, EVCA, January 31, 2003.

[2] CAD III will take effect on December 31, 2006.

[3] *Implementation of Basel II in the EU*, EVCA press release, Brussels, July 14, 2004.

[237] Obstacles to the development of the private equity/venture capital sector in Poland were discussed in: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004.

with regard to the amount of capital raised by PE/VC funds. It appears that in the coming year, funds will try to exploit the considerable potential of buyout transactions.

In the long run, the regulations of the New Capital Accord will also affect the global operation environment of private equity funds. Despite the fact that these regulations will take effect soon, their implications for the private equity/venture capital sector have not been exhaustively discussed in the literature yet.

4.5. Collective investment institutions

The objective of collective investment institutions (CII) is to invest the funds entrusted to them within the framework of a single investment portfolio, which ensures individual investors the access to a wide range of investment instruments. CII include pension funds, investment funds and insurance capital funds linked to life insurance. Due to the fact that it is impossible to separate the data on funds insurance capital funds linked to life insurance from the data on the entire insurance sector, this section of the report deals only with investment and pension funds.

4.5.1. Investment funds

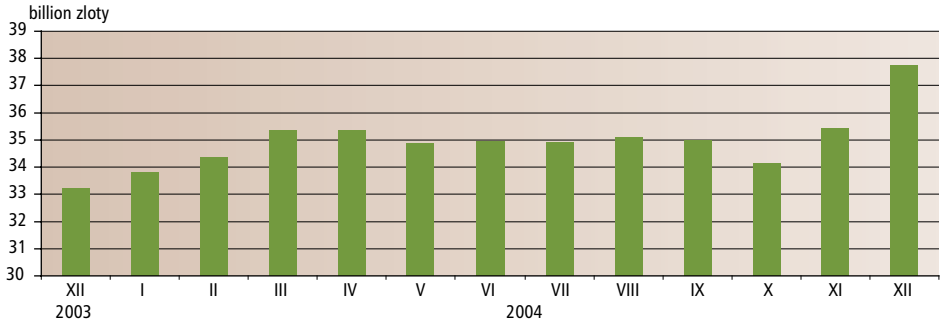
Size and growth of the sector

In 2004, the net amount of investment fund assets increased by PLN 4.5 billion (13.5%). The growth in assets in 2004 (in 2003, investment fund assets rose by 46% compared to 2002) slowed down due to heightened interest in other savings and investment products caused by an increase in interest rates and the bull market on the stock exchange. The inflow of funds during the year was very uneven. Funds enjoyed considerable interest in the first quarter of 2004, followed by a decrease in the amount assets, which continued until November (Figure 4.5.1).

The bull market on the stock exchange had the greatest impact on the growth trends of individual investment fund types in 2004. At the end of the year, share prices of 78% of listed companies were higher than in the previous year. This caused a boom in the equity investment fund market and the share of these funds in total investment fund assets grew from 6.9% to 12.7%. Hybrid funds, which invest both in stocks and in bonds, also increased their market share from 23.8% to 36.5%.[238]

Until July 2004, the prices of Treasury bonds, particularly those with long maturities, continued to fall. This contributed to the lower valuation of assets of the funds which invested in

Figure 4.5.1. Investment fund assets in Poland



Source: Association of Fund Management Companies in Poland (*Stowarzyszenie Towarzystw Funduszy Inwestycyjnych – STFI*).

[238] STFI data. From October 28, 2004, the Association of Fund Management Companies in Poland was replaced by the Fund and Asset Management Chamber (*Izba Zarządzających Funduszami i Aktywami*).

Table 4.5.1. Investment fund sector size

	2003	2004
Investment fund assets, net (PLN billion)	33	38
Investment fund assets as a percentage of GDP	4.1	4.3

Sources: STFI, Central Statistical Office.

domestic bonds and therefore reduced the rates of return of the funds, leading to a decrease in their market share from 40.7% to 21.2% at year-end 2004.

The appreciation of the zloty from the second quarter of 2004 onwards affected the valuation of assets of the funds which invested in foreign securities. Their value in the domestic currency diminished, and such funds incurred significant losses.

In 2004, 22 new investment funds and 4 new fund management companies were established, of which one company did not conduct any operating activity. According to Fund and Asset Management Chamber data, there were 150 investment funds in Poland in December 2004, which were managed by 19 companies.

The new Act on Investment Funds[239] enabled the introduction of many products, which had not been allowed by earlier regulations, on the market. It also enabled foreign investment funds to operate directly in the Polish market. A fund with a registered office abroad is required to notify

Box 4.5.1

INVESTMENT FUND TYPES

From July 1, 2004, investment funds may operate as:
– open funds;
– specialised open funds;
– closed-end funds.

The hitherto operating mixed and specialised closed-end investment funds must become closed-end investment funds by end-June 2005.

Investment funds may also be divided into several categories from the point of view of their investment strategies. In the Polish market, the following types of funds operate:
– equity funds;
– bond funds;
– balanced funds;
– stable growth funds;
– money market funds.

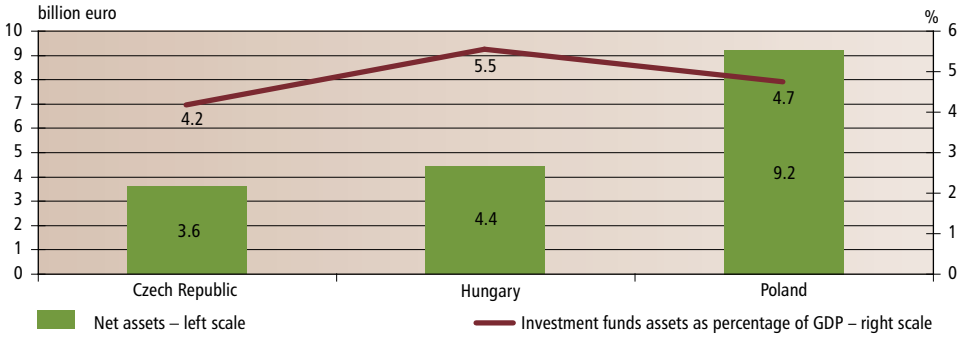
Equity and bond funds are further divided into domestic and foreign ones.

In order to give investors access to a wider range of investment funds and diverse asset management forms, the 2004 Act on Investment Funds introduced new fund forms and types. These are:
– funds with various participation unit categories;
– funds with separate sub-funds (so-called umbrella funds);
– master-feeder (hub and spoke) funds;
– funds of funds.

Within the framework of the aforementioned and already existing forms, the possibility of establishing securitisation, exchange traded funds or private equity funds has been created; money market funds whose investment strategy has been stipulated in a detailed manner by the new Act may also be established.

[239] The Act on Investment Funds of May 27, 2004 (*Dz.U.* No. 149/2004, item 1546).

Figure 4.5.2. Investment fund assets as percentage of GDP in Poland, the Czech Republic and Hungary, 2004



Sources: Czech and Hungarian central banks, European Fund and Asset Management Association.

the Polish Securities and Exchange Commission and to find a distributor. There is no obligation, however, to establish a fund management company. The operations of foreign funds are supervised by the competent authorities of the home country. The Securities and Exchange Commission only controls the sale of participation units on the territory of Poland. The new Act aimed to adjust the regulations concerning the Polish investment fund sector to EU legislation.[240]

The new Act of Investment Funds has broadened the scope of fund management company activities. Currently, they may provide asset management services. Moreover, the Act allows them to perform the function of foreign fund representatives, provide consultancy services with regard to securities trading as well as intermediation services related to the sale and repurchase of participation units in funds established by other companies or rights to participation units in foreign funds.

Due to changes in investment limits, funds may purchase participation units in other funds, including investment funds. This may stop the trend towards copying the strategies of foreign investment funds among Polish funds. Such copying was disadvantageous for the customers of "cloned" funds, since it entailed higher transaction costs and management fees compared to equivalent foreign funds.

In 2004, investment fund managers hoped that the amount of assets would increase as a result of the introduction of Individual Pension Accounts. IPA forms the third, voluntary pillar of the pension system. They enable five types of investment: in an investment fund, insurance company, bank account, brokerage account or in pension bonds (ten-year Treasury retirement savings bonds). By the end of 2004, 89 investment funds managed by 15 fund management companies decided to offer Individual Pension Accounts. Investment fund managers hoped that by the end of 2005 over 2 million Poles would decide to join the system. It turned out, however, that only 175,600 persons opened IPA in 2004.

When net assets of the investment fund sectors in Poland, the Czech Republic and Hungary are compared, Poland emerges as the leader. When the ratio of assets to GDP in 2004 is analysed, however, it is clear that investment funds in Hungary played the greatest role.

Concentration and competition

In 2004, the concentration of the fund management sector measured by the share of the three largest companies decreased. Based on the Herfindahl-Hirschman index, on the other hand, it may be stated that the level of competition within the sector diminished.[241] The strengthened

[240] Directive 85/611/EEC of the European Parliament and of the Council of December 20, 1985 and Directives 2001/107/EC and 2001/108/EC of January 21, 2002 regarding UCITS (Undertakings for Collective Investment in Transferable Securities).

[241] The Herfindahl-Hirschman index is calculated as the sum of squares of individual company market shares. Values of this index range from 0 to 1 – the higher the index value, the more concentrated the market. Markets for which the HHI is smaller than 0.1 are considered not to be concentrated. Where the value of the index is higher than 0.18, a market is considered to be concentrated. A market is considered to be moderately concentrated if the HHI ranges from 0.1 to 0.18.

Table 4.5.2. Fund management company concentration indices

	2003	2004
	Number	
Fund management companies	16	19
	CR3[1] (%)	
Fund management companies	57.97	55.09
	HHI[2]	
Fund management companies	0.1494	0.1603

[1] Market share of the three largest companies measured by net assets of funds managed.

[2] Herfindahl-Hirschman Index.

Source: NBP calculations based on STFI.

position of the leader whose market share reached 34.5% (30.5% in 2003) had a decisive impact on the increase in the HHI. At the same time, the gap between the three largest companies in terms of net assets as well as that between the largest company and other companies widened, which caused the market share of the three largest management companies to drop.

Asset structure

In 2004, the asset structure of investment funds in Poland changed largely under the influence of the price trends observed. Investors' funds were transferred to those types of funds which achieved the highest returns on assets. The amount of funds transferred was significant, which points to the sensitivity of investors to the processes occurring on domestic and global financial markets.

In 2004, balanced, stable growth and domestic equity funds enjoyed the greatest interest in terms of nominal change in net assets. This was a result of the bull market on the Warsaw Stock Exchange and global stock markets.[242] Profit expectations for the WSE attracted capital to equity funds, but also fuelled the interest of individual investors in direct stock trading, which could have created competition for investment funds.

Interest rate increases and a drop in bond prices contributed to a decrease in the value of domestic bond fund assets. Throughout 2004 (with the exception of the last two months), the outflow of investor funds from Polish bond funds could be observed. They lost their leading position to hybrid (balanced and stable growth) funds, which invest both in stocks and bonds.

The funds investing abroad did not experience a flight of investors despite considerable losses; they even increased the value of assets under management. This was due to the fact that trends in global markets were favourable and the appreciation of the zloty was the direct cause of

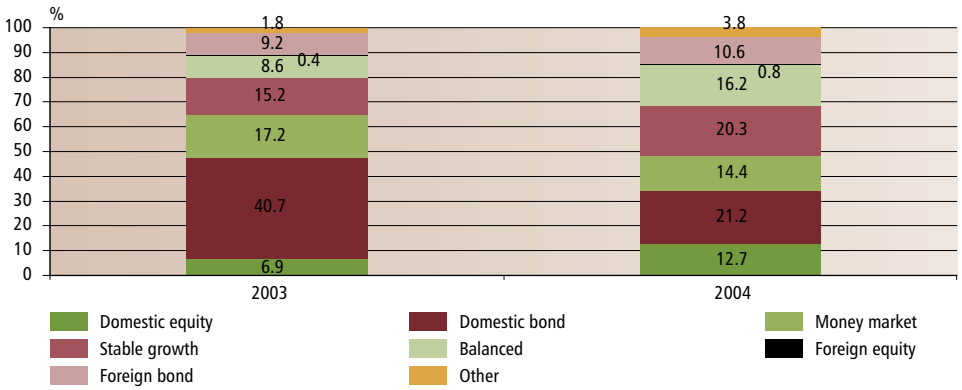
Table 4.5.3. Assets of particular investment fund types, net (PLN billion)

Fund type	2003	2004	Change, %
Domestic equity	2.3	4.8	108.0
Domestic bond	13.5	8.0	-40.7
Money market	5.7	5.4	-5.2
Stable growth	5.0	7.7	52.3
Balanced	2.9	6.1	113.2
Foreign equity	0.1	0.3	117.3
Foreign bond	3.0	4.0	30.7
Other	0.6	1.4	136.0
Total	33.2	37.7	13.5

Sources: STFI, Analizy Online.

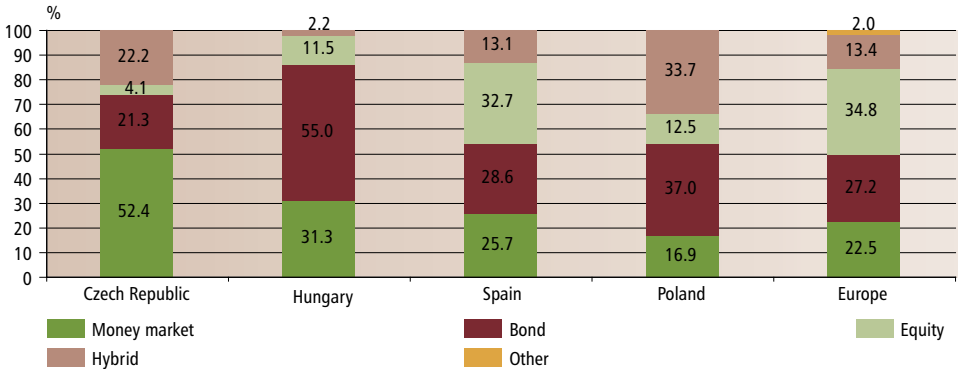
[242] In 2004, the WIG, WIRR and WIG-PL indices (the latter includes shares in domestic companies listed in the first-tier market except for National Investment Funds) as well as certain sectoral sub-indices reached all-time highs. The WIG-20 index, which includes the largest first-tier market companies, reached its highest level since September 2000. More information can be found in section 5.2.3.

Figure 4.5.3. Asset structure of investment funds in Poland by type



Source: STFI.

Figure 4.5.4. Investment fund asset structure by type in selected countries and European average, 2004



Note: The data in the "Europe" category includes all European countries except for Romania and Russia.
Source: Federation Europeenne Des Fonds Et Societes D`Investissement.

losses. The funds achieved positive rates of return in foreign currencies while recording losses in the domestic one.

The other investment fund category included, *inter alia*, funds which invested in the property market. In 2004, the amount of money deposited in real estate funds exceeded the amount withdrawn by PLN 400 million.

The asset structure of investment funds in Poland differed somewhat from that in other European countries (Figure 4.5.4).

Investment performance

In 2004, only those investment funds which invested on foreign markets incurred losses. The remaining funds recorded positive rates of return – both in nominal and real terms (Table 4.5.4, Figure 4.5.5).

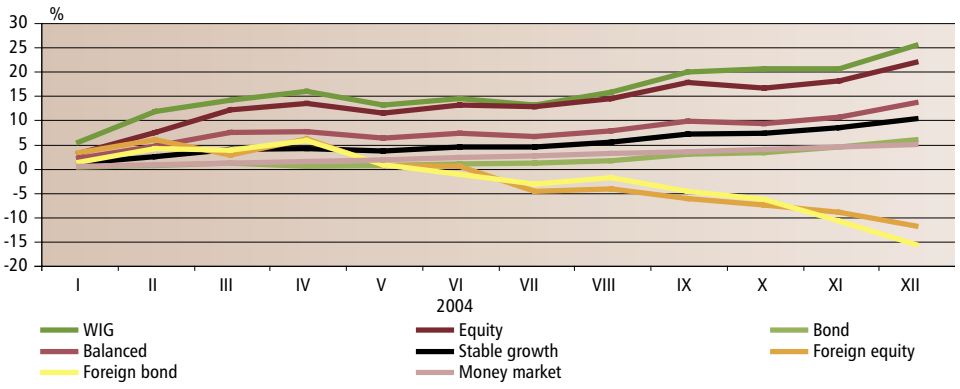
The rates of return achieved by investment funds were in most cases worse than in 2003. The funds which improved their performance compared to 2003, i.e. domestic bond and money market funds (Table 4.5.4), recorded the largest outflows of money nevertheless (Table 4.5.3). This was caused by the downward price trend which prevailed in the debt securities market in the first half of the year. The changes which occurred at the end of the year stopped the massive outflow of capital from those funds. This confirms the delay in investor responses to price trends in financial markets as well as to the announced rates of return achieved by funds. Both in 2003 and in 2004, equity

Table 4.5.4. Rates of return obtained by investment funds, %

Funds	2003	2004
Equity	35.02	23.82
Bond	2.81	6.03
Money market	4.95	5.01
Balanced	17.82	14.38
Stable growth	11.57	10.73
Foreign equity	23.74	-11.75
Foreign bond	10.54	-14.92
Investment fund weighted-average	8.78	7.67
Inflation	0.80	3.50

Note: The rates of return for investment funds are stated as arithmetic averages for a given fund category. Inflation figures are annual averages. The weighted-average for investment funds does not include the unclassified fund group.
Sources: Analizy Online, Central Statistical Office.

Figure 4.5.5. Cumulative rates of return obtained by investment funds in 2004, %



Note: Annual rates of return for investment funds have been expressed by the SAFU index, which is the arithmetic average of the rates of return for all funds which employ a given investment strategy.
Source: Analizy Online.

funds recorded the best results of all investment funds, which, among other things, contributed to their increased market share.

Since 2004, open investment funds may invest in derivatives, including OTC ones. Such investments may allow them to effectively hedge their investment risk and increase their rates of return. The use of derivatives in 2004, however, was very limited. In the opinion of market participants, this was caused by very strict regulations concerning investment risk management.[243]

New products offered

As a result of the new Act on Investment Funds taking effect, it was expected that a much broader offer of foreign investment funds would appear in the Polish market. Such funds may offer their services pursuant to the single passport principle, which guarantees them the right to operate in all European Union countries. However, only five applications from foreign funds, which wanted to distribute participation units in Poland, were submitted to the Polish Securities and Exchange Commission in 2004.[244] None of them started to sell units, however.

[243] Ordinance of the Minister of Finance on the conclusion of agreements concerning derivatives, including non-standardised derivatives, by open investment funds of August 26, 2004 (*Dz.U.* No. 197/2004, item 2021).

[244] The funds that submitted their notifications in 2004 were Citi FCP SA, Citi Money FCP, Citi SICAV, Nordea 1 SICAV and Investigeringforeningen Jyske Invest International.

New products in 2004 included two funds investing in the property market. They were established as closed-end and specialised closed-end funds and focused primarily on long-term property investment including residential construction as well as office, commercial and warehouse property. This was not the first attempt at establishing such funds. In 2002 and 2003, two failed subscriptions took place. However, the amount of money invested in these funds remains low. Market immaturity and investors' lack of knowledge were blamed for the failures of the first funds. Property funds are usually targeted at institutional investors, particularly pension funds. Due to the low correlation between property prices and the stock and bond markets, property funds allow investors to diversify their portfolio risk more effectively and ensure a steady long-term increase in unit value, which is less dependent on market trends. Investment funds of this type are developing very slowly in Poland. Based on the two successful subscriptions, it may be said that success here is conditioned by an appropriate distribution network and the risk level of the property portfolio. A revival in this sector is expected after the first property funds announce their results.

Prospects

Poland's accession to the European Union did not cause any rapid changes in the investment fund segment. It should be expected that, in 2005, new foreign investment fund offers may appear and the number of products on offer may rise. As a result of the broader range of products, significant changes may occur in the sector. Intensified competition should force reductions in management fees, which are much higher in Poland than in Western European countries.

Since the Act on Investment Funds took effect in the second half of the year, no new fund forms and types emerged in 2004. Neither funds of funds nor umbrella funds were established. The subscription for investment certificates of the first private equity fund, which was to invest capital in stocks and shares of unlisted companies also failed. It is expected that only in 2005 will the new statutory provisions be fully implemented.

It may be expected that the investment fund sector will develop dynamically since the solutions introduced by the new Act make it possible to enhance the market offer and mitigate risk at the same time.[245] The number of alternative investment funds in the Polish market, including hedge funds, will probably increase. Units in such funds are sold by private placement and targeted at wealthy individuals as well as institutions. The rapid development of this sector worldwide makes it reasonable to expect that the number of alternative investment funds in Poland may rise significantly.

The lack of uniform taxation principles regarding income from funds is an obstacle to investing in foreign investment funds. Until now, the fiscal system favoured domestic institutions by applying the capital gains tax to investors' profits. Investments in foreign funds were taxed according to general principles, which might force investors to pay a higher income tax rate. In this manner, domestic fund participants were taxed in a preferential manner. According to EU investment fund directives, however, the creation of a single European Union fund market is envisaged, which would force uniform treatment of domestic and foreign companies.

It may be expected that investment fund assets will grow in the coming years since the per capita amount of assets in Poland is much lower than in Western European countries. Moreover, a drop in interest rates may dampen interest in bank deposits. As was observed in earlier periods, when interest rates are reduced there is a massive inflow of capital to investment funds, which offer higher expected rates of return than bank deposits.

[245] Particularly investments in funds of funds enable risk to be mitigated since they make it possible to invest money in many funds which employ different investment strategies.

4.5.2. Pension funds

Size and growth of the sector

In 2004, the assets managed by pension companies increased by PLN 17.8 billion (40%). The rise in pension fund assets was caused primarily by the inflow of new contributions and, to a smaller extent, by the growth in asset prices. Due to their limited capabilities of investing abroad, pension funds were not exposed to foreign exchange risk[246], therefore the changes occurring in foreign markets and the exchange rate had no significant impact on the valuation of their assets.

The investment of pension funds in equity securities rose by almost 45%, while the overall increase in assets amounted to 40%. As a result of this, funds increased the share of equity securities in net assets, but given that the stock exchange capitalisation grew by 74%, the share of open pension funds in the WSE fell.

In 2004, the structure of the pension fund sector changed only slightly. As a result of one acquisition, the number of funds dropped to 15. The company which had managed the acquired fund was liquidated.[247]

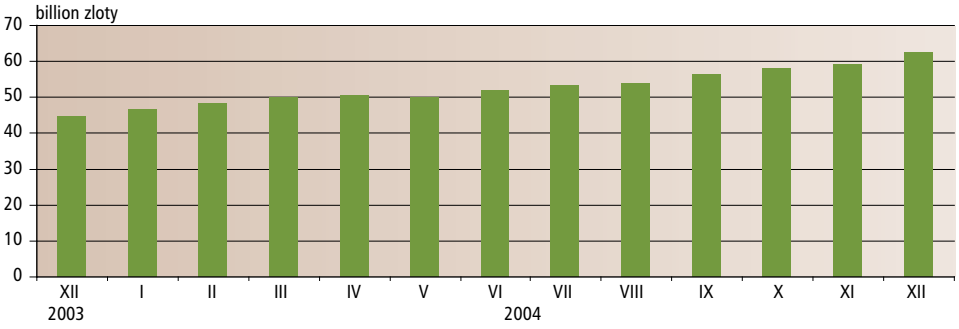
When pension systems in Poland, the Czech Republic and Hungary are compared, Poland is the regional leader with regard to the ratio of pension fund assets to GDP.[248] This is primarily the result of the scope of reforms which have been implemented in the aforementioned countries (Box 4.5.2) and their legislation. Due to the mandatory nature of the Polish pension system, pension fund assets will continue to exhibit a permanent upward trend in the future. Even in 2035, when the estimated amount accumulated capital funds will be twice as high as pension fund members' contributions, pension fund assets should grow due to investment returns[249] (the first second pillar pensions will be paid in 2009).

Table 4.5.5. Pension fund sector size

	2003	2004
Pension fund assets, net (PLN billion)	45	63
Pension fund assets as percentage of GDP	5.5	7.1

Sources: Insurance and Pension Funds Supervisory Commission, Central Statistical Office.

Figure 4.5.6. Pension fund assets in Poland



Source: Insurance and Pension Funds Supervisory Commission.

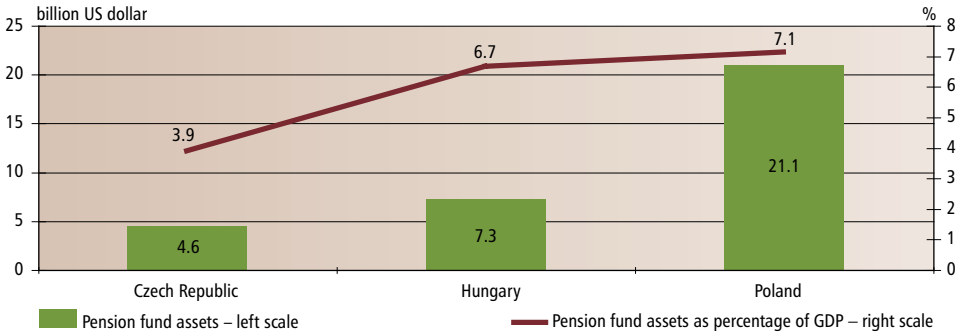
[246] The limit for foreign investments by open pension funds in Poland is set at 5% of a fund's assets, but funds do not utilise it fully.

[247] On December 10, 2004, PTE Polsat SA acquired OFE Kredyt Bank. This had been the first consolidation in over two years.

[248] Despite the mandatory nature of the second pillar of the Hungarian pension system, it only covers newly employed persons, which reduces the role of pension funds.

[249] *Koszty wypłat świadczeń z drugiego filara systemu emerytalnego*, Warszawa: KNUiFE, 2005, p. 11.

Figure 4.5.7. Pension fund assets as percentage of GDP in the Czech Republic, Hungary and Poland, 2004



Note: There is no second pillar of the pension system in the Czech Republic. The data presented in the figure refer to third-pillar funds, which are very popular.

Sources: Central banks of the Czech Republic and Hungary.

Box 4.5.2

COMPARISON OF PENSION SYSTEMS IN POLAND, THE CZECH REPUBLIC AND HUNGARY

The reformed Hungarian pension system, which includes three pillars, was introduced in 1998. Every newly employed person is required to join a pension fund which constitutes the second pillar of the pension system. Other employees may decide to join the new system. In Poland, the first pillar is based on individual employee accounts in which pension savings are accumulated. The Hungarian first-pillar solution is identical to that which had been in place in Poland before the reform was implemented, i.e. a defined benefit system.[1] The third pillar consists of voluntary savings in a pension, investment or health fund.[2]

In the Czech Republic, a two-tier pension system operates. When compared to the Polish solution, it may be stated that it consists of the first and third pillars of the pension system, where the third pillar encompasses voluntary schemes managed by private pension funds and products offered by insurance companies which play the role of additional insurance that is paid out upon attaining retirement age.[3]

[1] R. Holzmann, R. Hinz, *Old-age Income Support in the 21st Century: an International Perspective on Pension Systems and Reform*, World Bank 2005.

[2] *Report on the Activity of the Supervised Sectors in the First Quarter of 2004*, Hungarian Financial Supervisory Authority, 2004.

[3] D. Natali, *Czech Republic – The Reformed Pension System*, Service Public Fédéral Sécurité Sociale 2004.

Concentration and competition

In 2004, the concentration level in the pension fund sector measured by the share of the three largest societies decreased. This resulted from the decreased shares of two of the three largest societies in the sector; the leader lost the greatest part of the market. The remaining participants gained, which is confirmed by an increase in the competition level measured by the Herfindahl-Hirschman index.

Table 4.5.6. Pension societies concentration indices

	2003	2004
	Number	
Pension societies	16	15
	CR3[1] (%)	
Pension societies	64.75	64.10
	HHI[2]	
Pension societies	0.1646	0.1616

[1] Market share of the three largest entities measured by net assets of funds managed.

[2] Herfindahl-Hirschman Index.

Source: NBP calculations based on Insurance and Pension Funds Supervisory Commission data.

Competition in the pension fund sector may intensify due to a change in the system of lottery of those persons who have not selected a pension fund themselves. Until now, all existing funds took part in the lottery organised by the Social Insurance Institution (*Zakład Ubezpieczeń Społecznych – ZUS*), and the number of new members assigned to them was correlated with their share in the total number of fund members. The changes introduced in July 2004 only allow those funds which achieved rates of return higher than the respective weighted average rates of return for all funds in the last two calculation periods and their assets do not exceed 10% of total sector assets to take part in the draw. This solution prevents the largest funds and underperforming ones from taking part in the lottery, which may contribute to increased competition within the sector. At the same time, excessive concentration of system participants in the largest entities is avoided. The flow of funds between pension funds is of little significance for competition within the sector. This flow is hampered by the fees charged for switching funds.[250] In 2004, 308,600 persons (2.58% of all system participants) switched funds. It may be suspected, however, that transfers are primarily the result of salesperson activity and are affected by the funds' financial performance as well as distribution and management fees to a limited extent only. During the same period, the increase in the number of mandatory pension system participants amounted to 4.5%.

Asset structure

The financial instruments in which pension funds are allowed to invest were stipulated by the Act on the Organisation and Operation of Pension Funds of August 28, 1997. Amendments to this Act extended the funds' investment scope. Since 2004, they may additionally invest in:

– depository receipts admitted to public trading on the regulated market in Poland;[251]

– investment certificates issued by specialised closed-end investment funds;

– mortgage bonds not traded publicly;

– revenue bonds.[252]

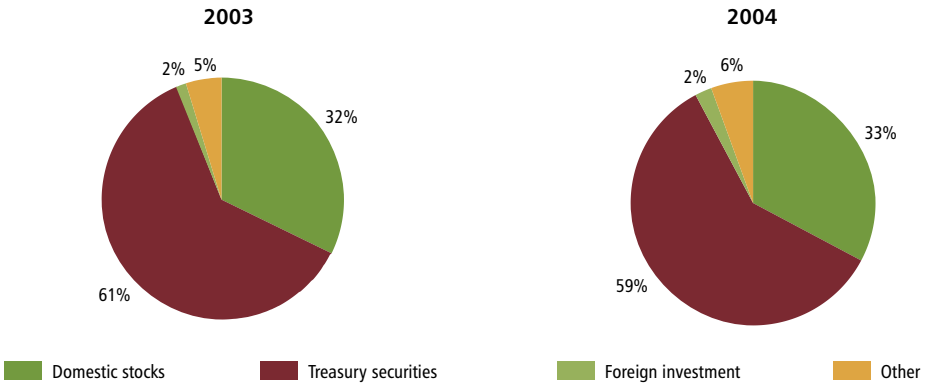
Treasury bonds continue to prevail in the pension funds' portfolio, although their share in assets has decreased by 1.5 percentage points. In 2004, the share of stocks (domestic and foreign ones) in pension fund portfolios grew by 1.3 percentage points. Thus the pension funds' investment

[250] A transfer fee is charged by pension companies where a member decides to switch funds earlier than 24 months after joining a fund; it amounts to PLN 160 where the membership was shorter than 12 months and PLN 80 where it was more than 12 but less than 24 months.

[251] Depository receipts are securities issued by a financial institution with its registered office in Poland, another EU member state or an OECD state. Such securities are traded outside the territory of the country where the financial institution has its registered office.

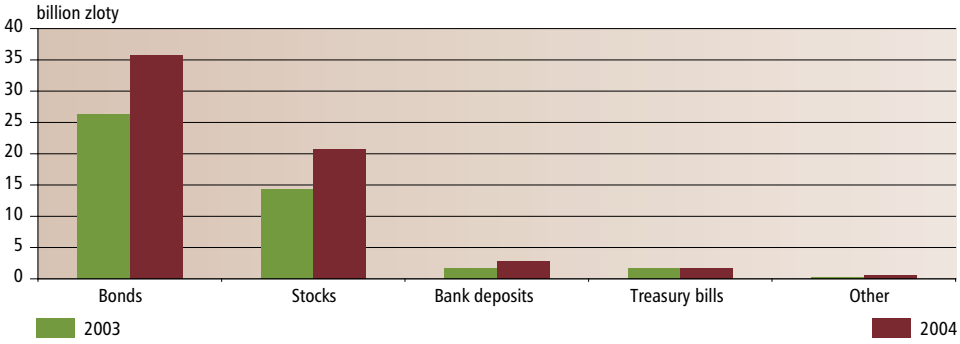
[252] More information on open pension fund investment limits can be found in section 2.3.

Figure 4.5.8. Pension fund investment structure, 2003–2004



Source: Insurance and Pension Funds Supervisory Commission.

Figure 4.5.9. Investments of open pension funds in Poland by type



Note: The "bonds" category includes Treasury debt securities, municipal bonds and corporate bonds; Treasury bonds constitute 98% of the total amount.

Source: Insurance and Pension Funds Supervisory Commission.

strategy did not change significantly compared to 2003 – they largely invested in Treasury securities and stocks (Figure 4.5.8).[253]

In nominal terms, funds increased their involvement in the stock market by 45%, while their holdings of debt securities grew by 35%. Since the statutory ceiling for investment in stocks was 40%, the limited increase in the share of those instruments in open pension fund portfolios may be interpreted as a sign that in the view of funds, the Warsaw Stock Exchange stock market was overvalued (Figure 4.5.9).

In 2004, pension funds increased their investments abroad. This was the first year in which foreign investments accounted for over 2% of the investment portfolio. Transaction costs are the most important obstacle to increasing foreign investments in the funds' portfolios, since any costs, which exceed equivalent domestic ones, must be covered by pension companies.

Investment performance

The investment performance of pension funds in 2004 was better than in 2003. At the same time, differences between rates of return within the entire sector were reduced. The investment strategy of pension funds is similar to that of stable growth funds, but their rates of return differed significantly in 2004.

[253] Czech pension funds invested primarily in debt securities (82% of the portfolio in 2003), like Hungarian pension funds, which invested over 90% of their assets in Treasury bonds and mortgage bonds (Czech and Hungarian central bank data).

Table 4.5.7. Rates of return obtained by pension funds, %

Funds	2003	2004
Best open pension fund	16.80	16.70
Worst open pension fund	9.70	11.91
Open pension fund weighted average	10.90	14.00
Inflation	0.80	3.50

Note: The best and worst open pension funds are the funds that achieved the best and worst investment performance in a given year, respectively. Inflation figures are annual averages.

Sources: Insurance and Pension Funds Supervisory Commission, Central Statistical Office.

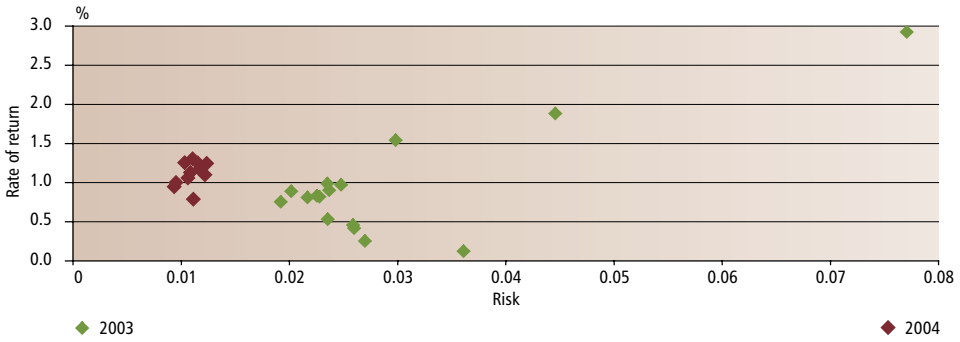
It is difficult to determine unequivocally the results of the change in the manner of calculating the minimum required rate of return (MRR) and the weighted average rate of return by analysing similar investment performance of pension funds. The new MRR calculation formula was meant to prevent the imitation of market leaders. It may be suspected, however, that the results turned out to be opposite to the expectations.

Open pension fund investment performance vs. risk level

In 2004, pension funds implemented less diversified portfolio management policies than in 2003, which resulted in similar risk levels. The funds again showed their inclination to imitate strategies. This was reflected in their rates of return, which reached nearly identical levels and small discrepancy in risks being taken. In order to avoid payments resulting from the occurrence of shortfalls in a pension fund, most pension societies imitated investment decisions made by other participants of the sector. It should be noted that in 2004 average monthly rate of return was higher than in 2003, reflecting smaller risks being taken.

The Sharpe ratio also suggests that the ratio of rate of return to risk has risen for all open pension funds.[254] It may be stated that pension societies have improved their management of pension fund assets.

Figure 4.5.10. Open pension fund rate of return against risk, 2003–2004

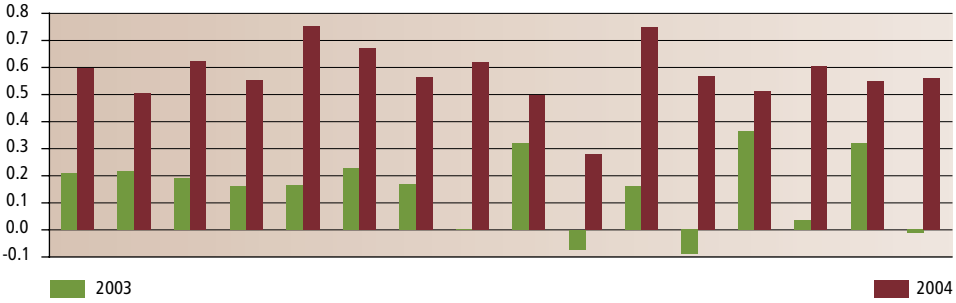


Note: The rate of return has been stated on a monthly basis, while risk has been expressed as the standard deviation of the rate of return according to the following formula: $s = \sqrt{\frac{\sum_{i=1}^{n}(x_i - \bar{x})^2}{n}}$, where x – monthly rate of return of a given fund in a year, $\bar{x}$– average rate of return of a given fund in a year, n – number of observations.

Source: NBP calculations based on Insurance and Pension Funds Supervisory Commission data.

254 $SR = \frac{R - RF}{s}$, where *SR* is the Sharpe ratio, *R* is the rate of return achieved by a given fund in the period under review, *RF* is the risk-free investment rate of return, and *s* is the standard deviation. The Sharpe ratio is a measure of investment efficiency understood as risk-adjusted return. The ratio reveals how much risk premium (the surplus of the rate of return achieved over the risk-free return) is achieved for every unit of risk assumed (as measured by standard deviation). The higher the ratio, the more efficient the investment.

Figure 4.5.11. Sharpe ratio for individual open pension funds



Source: NBP calculations.

New products offered

In 2004, as a result of the reform of the pension system, new products emerged which were meant to facilitate additional investment and saving for future retirement. Individual Pension Accounts, which form part of the third pillar of the pension system, were introduced. IPA did not prove as popular as it had been assumed. It should be stressed, however, that despite the fact that the largest number of accounts were opened with insurance companies, the largest amount of funds within the framework of IPA was deposited in investment funds. During the first four months, the average IPA deposit amounted to PLN 1,905. The highest amounts were deposited with brokerage offices and the lowest with insurance companies. The estimated total amount of IPA deposits was around PLN 200 million.

Compared to another third-pillar savings scheme (occupational pension schemes), IPA proved more popular. In 2004, 105,600 persons were active participants of occupational pension schemes, while 175,600 persons deposited funds in IPA. It should be remembered that IPA operated from September to December 2004. The following factors may be listed as reasons why the interest in IPA was more limited than it had been originally assumed:

– future pensioners' insufficient knowledge about IPA;

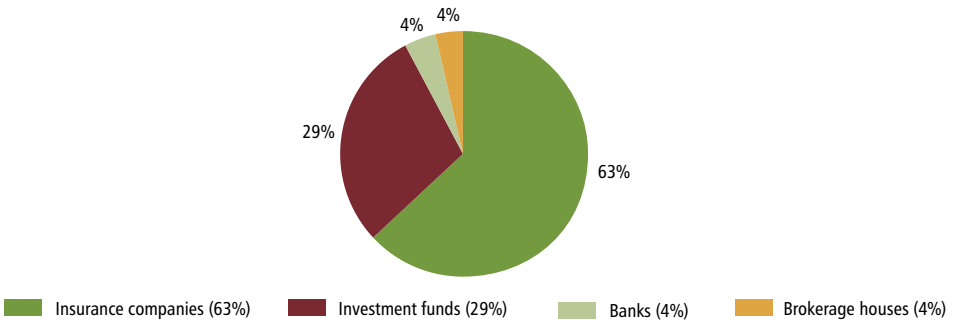
– the low liquidity of funds accumulated in IPA;

– limited tax incentives, i.e. a capital gains tax exemption, but no income tax relief;

– the risk of forfeiting the tax relief if funds are withdrawn before retirement age;[255]

– the limited amount that may be deposited in an IPA – up to 150% of the average monthly salary; in 2004, this amounted to PLN 3,435.[256]

Figure 4.5.12. Individual Pension Accounts opened with different institutions



Source: Insurance and Pension Funds Supervisory Commission.

[255] *Indywidualne konta emerytalne – pierwsze wyniki* (*Individual pension accounts – first results*) KNUiFE, 2005.

[256] Announcement of the Minister of Social Policy on the amount of funds deposited in individual pension accounts in 2004 of June 7, 2004 (*Monitor Polski* No. 56/2004 of December 31, 2004, item 957).

Prospects

Despite the limited interest in Individual Pension Accounts, expectations regarding the development of this third-pillar component in 2005 are still high. The introduction of personal income tax relief might revive the IPA sector as well as occupational pension schemes.

Pursuant to statutory provisions, pension companies may manage B-type funds in 2005; such funds are meant to be a safer way of accumulating retirement savings than the already existing ones. Their customers will be persons of pre-retirement age. Such funds will probably start to operate somewhat later since the present statutory provisions are insufficient for their establishment.

In 2004, pension funds were unable to invest in derivatives. There was no secondary legislation which would allow them to use derivatives to mitigate portfolio risk. Work is currently underway on an ordinance regarding open pension fund investments in derivatives, which will allow open pension funds to hedge against investment risk.

An increasing number of propositions have emerged regarding the partial deregulation of the Polish pension fund sector, particularly with regard to investment policy. Such issues are still in the discussion stage, however. Increased limits for foreign investment by pension funds as well as broader possibilities for using derivatives in fund portfolio risk management are the most important changes being considered.

4.5.3. Collective investment institutions and financial markets

The growing scale of assets managed by CII makes them important players on the Polish financial market.

The increased share of open pension funds in the Treasury bill and bond market is the result of the fact that in 2004, open pension fund assets grew faster than the outstanding value of Treasury bonds and bills. Much more important changes occurred with regard to the activity of pension and investment funds on stock markets. The amount of investment fund assets invested on the WSE grew by 79% on 2003. This, however, caused no significant rise in their share of stock exchange capitalisation since the value of listed companies surged. Moreover, several large companies (MOL, PKO BP) were listed on the stock exchange, driving its capitalisation up considerably.

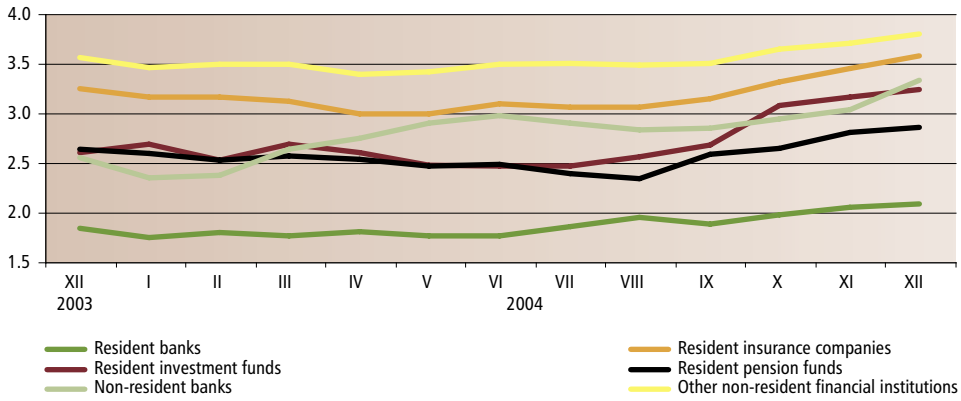
Pension funds, which pursue more stable investment policies, maintained a relatively constant share of stocks and bonds in their portfolios. Therefore an improvement in stock exchange indicators (capitalisation grew by 74% and free float doubled) caused the share of open pension funds on the stock market to decrease. The funds' reduced share in stock exchange trading is favourable both for them and the economy. Funds have a wider choice of companies in which they can invest and, therefore, they affect the price of securities to a smaller extent. At the same time, the market becomes more liquid. In this manner, the threat that might be caused by an increase in fund assets disproportionate to the opportunities offered by the stock exchange is mitigated.

Table 4.5.8. Collective investment institutions on the Polish financial market, %

	2003	2004
Open pension funds' share of the Treasury bill and bond market	11.7	13.4
Open pension funds' share in WSE free float	23.2	15.8
Open pension funds' share in stock exchange capitalisation	8.5	6.9
Investment funds' share of the Treasury bill and bond market share	7.8	6.8
Investment funds' share in WSE free float	7.9	6.7
Investment funds' share in stock exchange capitalisation	2.9	3.0

Sources: Insurance and Pension Funds Supervisory Commission, WSE, Ministry of Finance, NBP, Analizy Online.

Figure 4.5.13. Changes in pension and investment fund portfolio duration



Source: *Raport o stabilności systemu finansowego 2004*, Warszawa: NBP, 2005, p. 38.

In 2004, CII managed their bond portfolios actively, adjusting the securities' parameters to expected changes in market conditions. Until August 2004, CII reduced portfolio duration in order to hedge against the adverse impact of an increase in interest rates.[257] As of year-end 2003, pension and investment funds had very similar duration (around 2.6 years). As interest rates increased, they started to reduce the sensitivity of their portfolios to interest rate movements. From August 2004, the portfolio duration of investment and pension funds started to rise due to the waning expectations of interest rate hikes.

Changes in the average duration of pension fund portfolios were caused by the same factors which affected investment funds. Apart from expectations concerning interest rate decreases, the extension of the calculation period of the pension funds' minimum required rate of return also contributed to these changes. In 2004, debt securities with maturities exceeding 5 years accounted for 18.04% of the portfolio, while their share in 2003 amounted to 15.86%. The share in securities with maturity up to 1 year went down from 15.23% in 2003 to 13.74% in 2004. Securities with maturities ranging from 1 to 5 years continued to account for around 68% of the debt securities portfolio.

4.6. Insurance companies

4.6.1. Size and evolution of the insurance sector

Number of insurance companies

In 2004, 69 companies operated in the Polish insurance sector: 68 companies with registered offices in Poland and one chief branch[258] of a foreign insurance company.

The adjustment of legal regulations concerning the operation of insurance companies to EU standards and the coming into force of the insurance act package[259] were among the most

[257] The longer the average portfolio duration, the higher the sensitivity to interest rate movements.

[258] Foreign insurance companies from countries which are not EU and EFTA members conduct insurance activities in Poland as chief branches, while foreign insurance companies from countries which are EU and EFTA members conduct their activities as branches.

[259] The act package includes: The Insurance Activity Act of May 22, 2003 (*Dz.U.* No. 124/2003, item 1151), hereinafter referred to as the Insurance Activity Act; the Act on Compulsory Insurance, the Insurance Guarantee Fund and the Polish Motor Insurers' Bureau of May 22, 2003 (*Dz.U.* No. 124/2003, item 1152), hereinafter referred to as the Act on Compulsory Insurance; the Act on Insurance and Pension Funds Supervision and on Insurance Ombudsman of May 23, 2003 (*Dz.U.* No. 124/2003, item 1153); and the Insurance Intermediation Act of May 22, 2003 (*Dz.U.* No. 124/2003, item 1154), hereinafter referred to as the Insurance Intermediation Act.

important events of 2004. The Insurance Activity Act stipulated the conditions subject to which foreign insurance companies may conduct their activities on the territory of Poland and introduced the freedom to provide insurance services. Pursuant to the Act, a foreign insurance company may take up and pursue insurance activities via a chief branch; this does not apply to companies from EU countries, which may operate via branches. This distinction has direct implications for insurance supervision principles: chief branches are subject to Polish insurance supervisory authorities (Insurance and Pension Funds Supervisory Commission), while branches are subject to supervision in their home country and, therefore, are not included in official statistics regarding the number of insurance companies which operate in Poland. As a direct consequence of Poland's accession to the EU, three chief branches of foreign insurance companies from European Union member states were transformed into branches (Table 4.4.1).

In 2004, the number of insurance companies operating on the Polish market decreased (Figure 4.6.1). This was the result of withdrawal by four foreign investors. In 2004, the Insurance and Pension Funds Supervisory Commission issued only one new license to engage in insurance activity.

In 2004, two insurance companies were liquidated, one authorisation was withdrawn and three companies were acquired. The changes were caused by the companies' weak financial standing (in the case of acquisitions, weaker companies were taken over by strong ones).

Table 4.6.1. Number of insurance companies, branches and chief branches conducting activity on the territory of Poland

	2003 before EU accession	2004 after EU accession
Life insurance companies		
Insurance companies with registered offices in Poland	35	32
Foreign insurance company branches		1[1]
Foreign insurance company chief branches	1	
Non-life insurance companies		
Insurance companies with registered offices in Poland	38	36
Foreign insurance company branches		5[2]
Foreign insurance company chief branches	3	1[3]

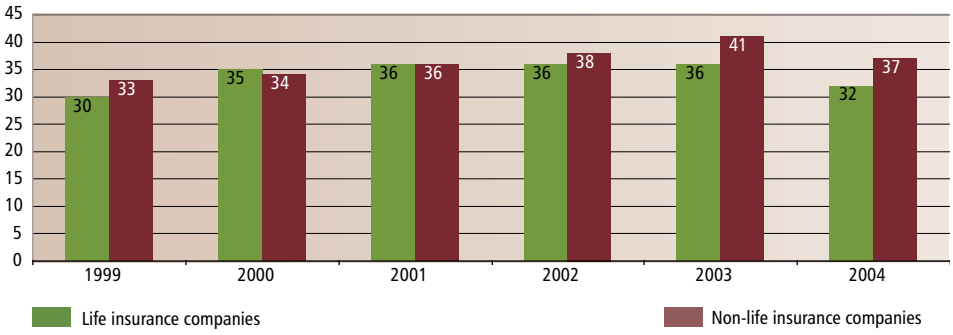
[1] Until April 30, 2004, this branch operated as a chief branch.

[2] Among the five foreign insurance company branches, two operated as chief branches until April 30, 2004, while three are new branches which submitted notifications in 2004.

[3] This chief branch has operated since 2003 and was not transformed into a branch on May 1, 2004 (the foreign insurance company has its registered office outside the EU).

Source: Insurance and Pension Funds Supervisory Commission.

Figure 4.6.1. Number of insurance companies in operation[1]



[1] Including foreign insurance company chief branches.

Source: Insurance and Pension Funds Supervisory Commission.

Table 4.6.2. Name changes, liquidations and acquisitions among insurance companies in 2004

	Life insurance companies	Non-life insurance companies
Name change	From: Towarzystwo Ubezpieczeniowe Samopomoc Życie SA To: SAMOPOMOC Życie Towarzystwo Ubezpieczeń SA	From: Towarzystwo Ubezpieczeniowe Winterthur SA To: Credit Suisse Life&Pensions Towarzystwo Ubezpieczeń SA
	From: Prumerica Towarzystwo Ubezpieczeń na Życie SA To: PRAMERICA Życie Towarzystwo Ubezpieczeń i Reasekuracji SA	From: Polskie Towarzystwo Reasekuracyjne SA To: Polskie Towarzystwo Reasekuracji SA
	From: Towarzystwo Ubezpieczeń na Życie Royal PBK SA To: Royal Polska Towarzystwo Ubezpieczeń na Życie SA	From: FIAT Ubezpieczenia Majątkowe SA To: BENEFIA Towarzystwo Ubezpieczeń Majątkowych SA
	From: FIAT Ubezpieczenia Życiowe SA To: BENEFIA Towarzystwo Ubezpieczeń na Życie SA	
Liquidation	Wüstenrot Życie Towarzystwo Ubezpieczeniowe SA	IF Towarzystwo Ubezpieczeń SA
Authorisation withdrawn		Towarzystwo Ubezpieczeń w Rolnictwie i Gospodarce Żywnościowej Agropolisa SA
Acquisition	Generali Życie Towarzystwo Ubezpieczeń SA acquired Zurich Towarzystwo Ubezpieczeń na Życie SA – now operating as Generali Życie Towarzystwo Ubezpieczeń SA	Generali Towarzystwo Ubezpieczeń SA acquired Zurich Towarzystwo Ubezpieczeń SA – now operating as Generali Towarzystwo Ubezpieczeń SA
	UNIQA Towarzystwo Ubezpieczeń na Życie SA acquired Korporacja Ubezpieczeniowa Filar-Życie – now operating as UNIQA Towarzystwo Ubezpieczeń na Życie SA	

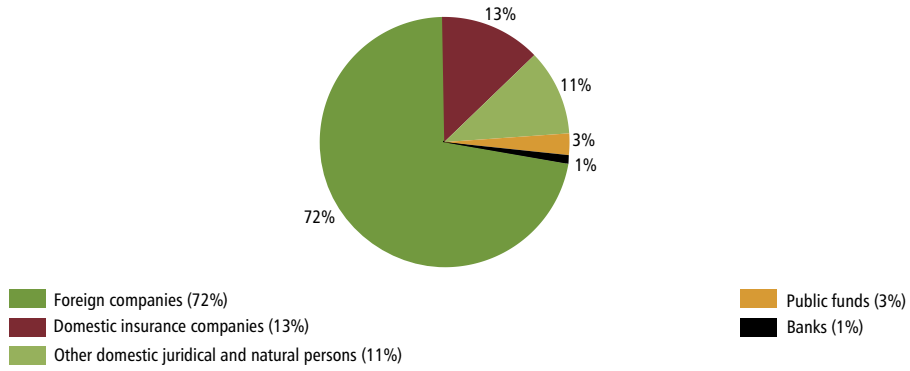
Source: Insurance and Pension Funds Supervisory Commission.

Ownership structure

Most insurance companies in Poland are owned by foreign investors (Figure 4.6.2).[260] Compared to 2003, the ownership structure in the life insurance sector did not change significantly.[261] The sector was not overly dominated by companies from any single country.

Companies from Germany continued to dominate in the non-life insurance sector, although compared to 2003 their share in total sector equity dropped to 36% (in 2003, German investment constituted 44% of non-life insurance company equity).[262] The increase in the share of Polish equity in the ownership structure of non-life insurance companies to 26% should be stressed (in 2003, the share of Polish equity was 24%).[263] The reason for this was an increase in the capital of companies belonging to the PZU SA Group, which was the largest insurer with majority Polish equity interest.

Figure 4.6.2. Subscribed capital structure by investor groups in 2004



Source: Insurance and Pension Funds Supervisory Commission.

[260] While analysing the ownership structure, subscribed capital was taken into account.

[261] Companies from Germany, the United States and Finland are discussed here: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 121.

[262] *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 121.

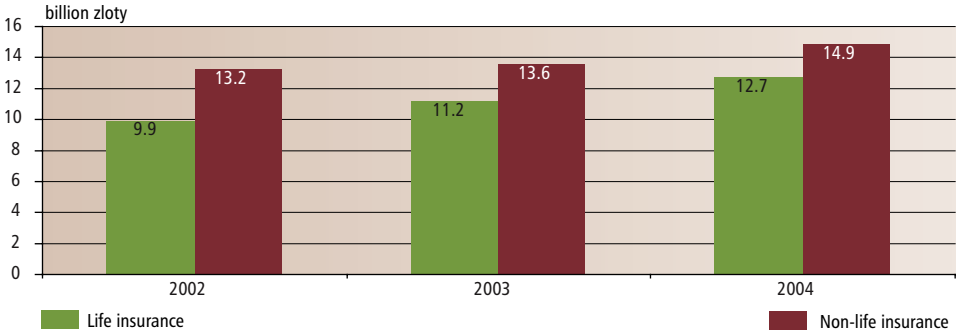
[263] *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 121.

Premium amount

In 2004, the premium amount[264] grew both in the life insurance sector (by 14.08%) and in the non-life insurance sector – by 9.59% (Figure 4.6.3).

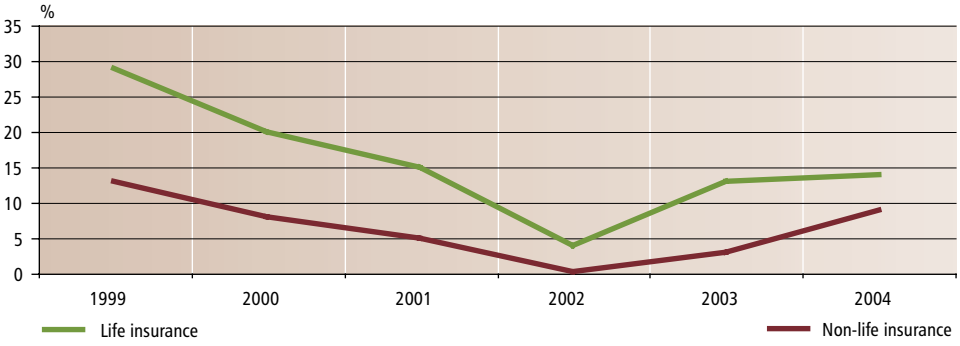
The total gross written premium in the entire sector amounted to PLN 27.6 billion, which was an increase of PLN 2.9 billion over 2003. The life insurance premium continued to grow more rapidly than the non-life insurance one (Figure 4.6.4), but the upward trend in growth rate in premiums was stronger in the non-life insurance sector.

Figure 4.6.3. Gross written premium amount in the insurance sector



Source: Insurance and Pension Funds Supervisory Commission.

Figure 4.6.4. Premium growth rate in Poland



Source: Insurance and Pension Funds Supervisory Commission.

Table 4.6.3. Premium growth rate in selected non-life insurance groups, %

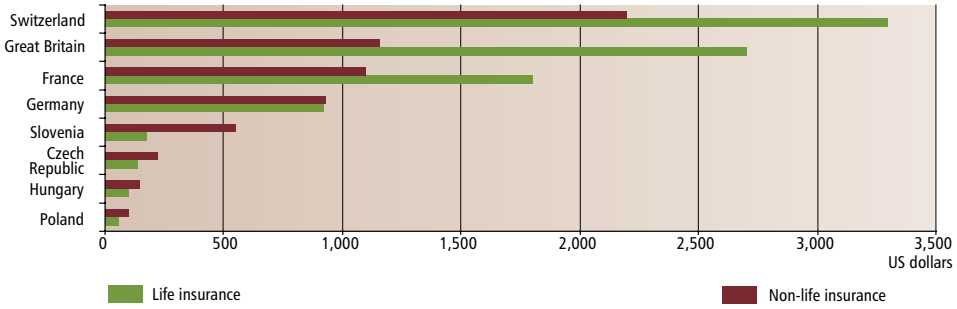
	2001	2002	2003	2004
General liability insurance[1]	13	9	16	20
Credit insurance	40	34	17	27
Financial risk insurance	25	29	20	39
Legal protection insurance	443	133	85	31
Non-life insurance	5	1	3	9

[1] Insurance products that include third-party liability related to the work of, for instance, tax consultants, insurance brokers, architects, certified auditors as well as the liability insurance of company management members – the so-called Directors & Officers (D&O) insurance. General liability insurance does not cover liability related to the use of land motor vehicles, sea vessels and aircraft as well as carrier's liability. The term "liability insurance" will hereinafter refer to "general liability insurance".

Source: Insurance and Pension Funds Supervisory Commission.

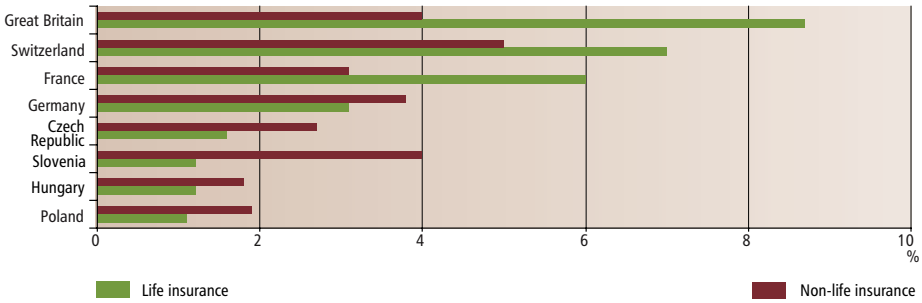
[264] Gross written premium is the amount of premium payable to the insurance company for a given period. The term "premium" will hereinafter refer to the gross written premium.

Figure 4.6.5. Insurance density (per capita premiums), 2003



Source: "World insurance in 2003: insurance industry on the road to recovery," *SIGMA* No. 3/2004, www.swissre.com.

Figure 4.6.6. Insurance penetration (ratio of gross written premiums to GDP), 2003



Source: "World insurance in 2003: insurance industry on the road to recovery," SIGMA No. 3/2004, www.swissre.com.

In life insurance, the gross written premium amount grew largely due to unit-linked insurance, while in the case of non-life insurers, as in previous years, insurance against various types of financial risk, credit insurance, legal expense insurance and general liability insurance grew particularly rapidly (Table 4.6.3).

In 2004, disproportions between EU member states regarding the amount of gross written premiums collected continued. Insurance gross written premiums per capita (insurance density) and the ratio of gross written premiums to GDP (insurance penetration) in Poland are lower than in developed European Union countries and other Central and Eastern European countries (Figures 4.6.5 and 4.6.6).

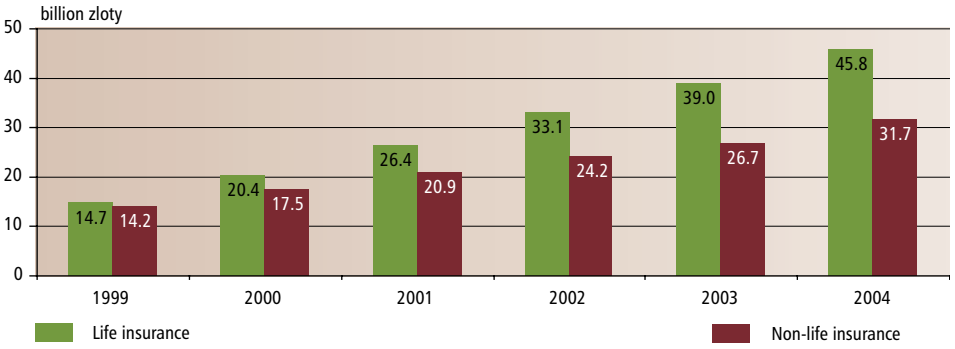
In Western European countries, the amount of premiums accumulated by insurers from life insurance sales is higher than that from the sale of non-life insurance policies. In Poland, life insurance is still perceived as an "elite" product.

Asset amounts

In 2004, sector assets grew by 15.1% to reach PLN 77.5 billion. The increase in assets was more pronounced in the case of life insurers (by 18.0% to PLN 45.8 billion) than for non-life insurers (a rise by 11.1% to PLN 31.7 billion).[265] This difference was largely caused by the nature of the two respective sectors' activities. Life insurance entails long-term contracts, and, therefore, the funds allotted for the payment of benefits accumulate, increasing the amount of assets. The NBP has no information about the number of contracts concluded.

[265] Insurance and Pension Funds Supervisory Commission.

Figure 4.6.7. Amount of insurance company assets

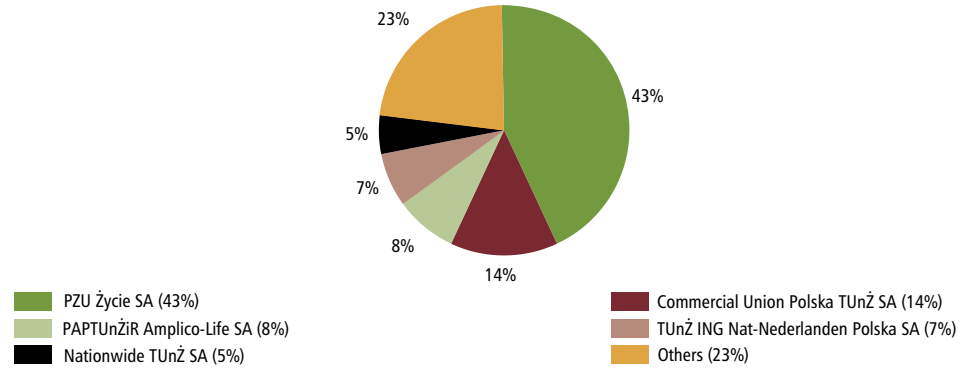


Source: Insurance and Pension Funds Supervisory Commission.

4.6.2. Concentration and competition within the sector

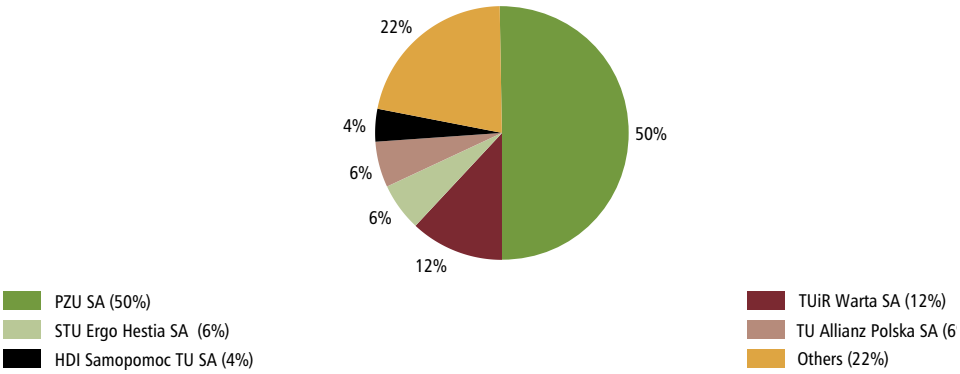
Compared with other financial system segments, the insurance sector exhibited a high level of concentration. The reason for this was a very high market share of the PZU SA Group with regard

Figure 4.6.8. Market shares of life insurance companies, 2004[266]



Source: NBP calculations based on Insurance and Pension Funds Supervisory Commission data.

Figure 4.6.9. Market shares of non-life insurance companies, 2004



Source: NBP calculations based on Insurance and Pension Funds Supervisory Commission.

[266] Market share measured by an insurer's share of premiums as a percentage of the entire sector's premiums.

Table 4.6.4. HHI concentration indices for individual financial system sectors

Institutions	Index calculated by:	2001	2002	2003	2004
Commercial banks	assets	0.0894	0.0877	0.0830	0.0772
Fund management companies	net assets of funds managed by fund management companies	0.1262	0.1419	0.1494	0.1603
Pension companies	net assets	0.1653	0.1650	0.1646	0.1616
Life insurance companies	premiums	0.3196	0.2957	0.2532	0.2223
Non-life insurance companies	premiums	0.3529	0.3387	0.3097	0.2785

Sources: NBP calculations based on NBP, Insurance and Pension Funds Supervisory Commission, Association of Fund Management Companies.

to non-life as well as life insurance. In 2004, as in several previous years, concentration indices decreased, however.

For life insurers, the CR_5 index amounted to 77%, while for non-life insurers it was 78%. The PZU SA Group remains the dominant insurer with 43% of the life insurance market and 50% of the non-life insurance market.

The decrease in concentration indices in recent years has been due to the fact that smaller insurers respond to market needs more rapidly and flexibly by offering new products. They also quote competitive prices and thus attract customers who want to minimise insurance costs. Moreover, they offer niche insurance products more often. Compared to 2003, the premiums collected by the five largest life insurers were lower by 5.7%, and the five largest non-life insurers – by 2.9%.[267]

4.6.3. Sector earnings

The earnings of life as well as non-life insurance companies indicated a further enhancement in the sector's financial standing. In 2004, both the balance on the technical account and earnings improved.[268]

Gross written premiums in the insurance sector grew; the balance on the technical account of the entire sector went up by 40.9% and total earnings rose by 46.3%. Equity capital also grew – by 24.3% in total (Table 4.6.5). Such a significant increase was caused by the fact that when premiums

Table 4.6.5. Selected financial figures for insurance companies, PLN million

		2001	2002	2003	2004
Life insurance companies	Premiums	9,257	9,902	11,167	12,739
	Balance on technical account	411	741	1,126	1,320
	Earnings	402	540	1,139	1,463
	Assets	26,971	33,136	38,991	45,782
	Equity	3,762	4,499	5,483	6,507
Non-life insurance companies	Premiums	13,123	13,158	13,589	14,892
	Balance on technical account	-249	-98	77	366
	Earnings	672	923	905	1,512
	Assets	21,203	24,249	26,732	31,717
	Equity	5,101	6,279	7,078	11,233

Source: Insurance and Pension Funds Supervisory Commission.

[267] Insurance and Pension Funds Supervisory Commission.

[268] The balance on the technical account is the profit or loss on insurance activity, while earnings are the profit or loss on all activities.

Table 4.6.6. Numbers of insurance companies with positive and negative balances on the technical account[1]

	Total		Life insurance companies		Non-life insurance companies	
	2003	2004	2003	2004	2003	2004
Positive balance on technical account	18	25	6	13	12	12
Negative balance on technical account	55	43	29	19	26	24

[1] Only data regarding insurance companies with registered offices in Poland has been included. Therefore, with regard to non-life insurance, the balance of the chief branch has not been included.

Source: Insurance and Pension Funds Supervisory Commission.

surged, insurance companies had to increase their equity in order to meet the requirements of the Insurance Activity Act and maintain the required solvency margins.[269]

In 2004, the number of insurance companies with positive balances on the technical account increased (Table 4.6.6).

Performance indicators also improved. It should be remembered that the performance of the PZU SA Group, which remains the leader on the Polish market despite decreasing concentration levels, had a significant impact on this improvement. In general, larger insurance companies achieved better earnings. The strong brands and market positions of such insurers guaranteed high premium income without the need to offer competitive prices and they found it easier to cut costs at the same time.

4.6.4. Investment portfolio structure

Insurance companies remained cautious in their investment policies in 2004. They preferred investments in bonds, whose share in overall assets has been high for many years. A trend towards a decrease in their proportion in the investment portfolio and the increased popularity of other investment types should be noted nevertheless.

Stocks formed a relatively minor part of insurers' investment portfolios. In 2003 and 2004, however, the amount of investment in stocks grew and the share of capital investments in the investment portfolio rose noticeably. The increase in stock investments was probably the result of the rising value of listed companies included in investment portfolios and not due to new

Table 4.6.7. Investment portfolio structure, entire sector

	2002		2003		2004	
	Value (PLN million)	Share (%)	Value (PLN million)	Share (%)	Value (PLN million)	Share (%)
Investments in related entities[1]	2,651	5.0	2,740	5.2	5,692	10.1
Stocks[2]	3,043	6.6	4,117	7.9	4,935	8.8
Bonds[3]	38,068	83.2	43,077	82.2	42,606	75.8
Secured mortgage loans and other loans	112	0.2	128	0.2	101	0.2
Other investments[4]	1,896	4.1	2,346	4.5	2,890	5.1

[1] Shares or stock in related entities prevail here.

[2] This item also includes investment fund units and investment certificates.

[3] Treasury bonds prevail here.

[4] Time deposits with credit institutions prevail here.

Source: NBP calculations based on Insurance and Pension Funds Supervisory Commission data.

[269] Pursuant to Art. 146 of the Insurance Activity Act, insurance companies must have own funds amounting to at least the required solvency margin. The manner of calculating the required solvency margin for individual insurance sectors and groups has been stipulated by the Ordinance of the Minister of Finance on the method for the calculation of the required solvency margin and the minimum guarantee capital for individual insurance sectors and groups of November 28, 2003 (*Dz.U.* No. 211/2003, item 2060).

investments, since the insurers' stock portfolio grew more slowly than the WIG stock exchange index. The increase in investments in related entities was the result of the activity of non-life insurers. In 2004, investment in related entities brought considerable profits to non-life insurers, while life insurance companies incurred losses in this regard.

4.6.5. Product offer

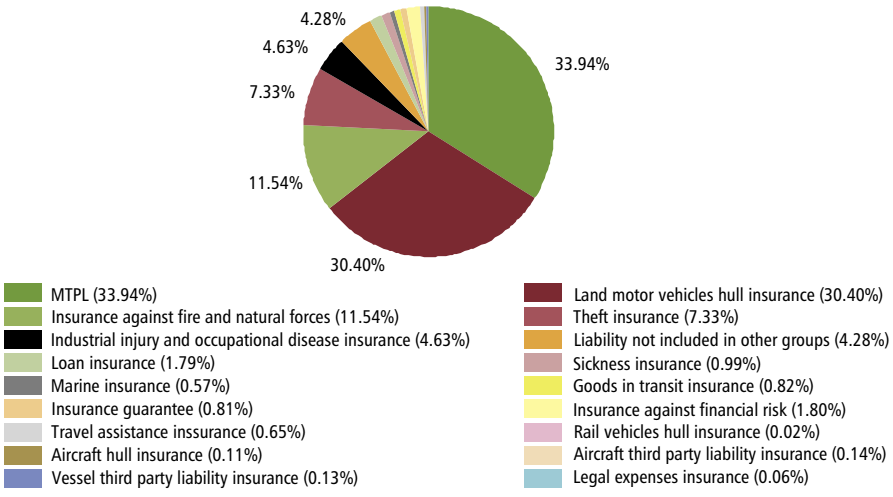
The range of products on offer did not change significantly in 2004. With regard to non-life insurance, motor vehicle insurance (motor vehicle third party liability and hull insurance), which accounted for two thirds of the entire portfolio, prevailed (Figure 4.6.10). Among life insurance products, life insurance and pure endowment policies as well as combinations of such policies continued to have the greatest share of the market (Figure 4.6.11).

The range of products offered by insurance companies did not change significantly in 2004 despite their attempts to introduce new insurance types to the market. Some products appeared as a result of the adjustment of Polish regulations to EU standards (upon Poland's accession to the EU, the coverage of the mandatory motor third party liability insurance increased to include the entire European Union).

In 2004, the sales of insurance products like general liability insurance, financial insurance (including credit and financial risk insurance such as insurance against loss of employment, loss of profits, loss of permanent source of income and loss of market value) and legal expenses insurance developed considerably.[270] Despite rapid growth, however, their percentage share of non-life insurance sector premiums remains low (Table 4.6.8).

Compulsory professional indemnity insurance is a type of general liability insurance. As a result of the Act on Compulsory Insurance having come into force, members of certain professions are required to have professional indemnity insurance policies. Companies have adjusted the range of liability insurance products on offer to statutory requirements – professional indemnity insurance policies have been introduced for barristers, counsels, notaries public, certified auditors, court executive officers, etc.

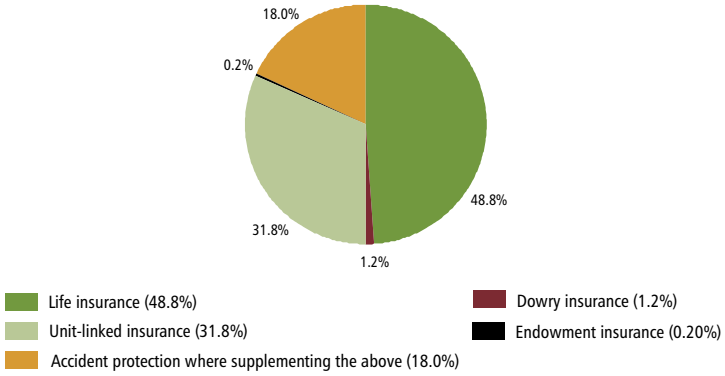
Figure 4.6.10. Non-life insurance product structure, 2004



Source: NBP calculations based on Insurance and Pension Funds Supervisory Commission data.

[270] This type of insurance is meant to insure "the weaker party to the contract". On the basis of the policy issued, the insurer covers the expenses related to e.g. the remuneration of a barrister, counsel or expert witnesses appointed by the court as well as court fees.

Figure 4.6.11. Life insurance product structure, 2004



Source: NBP calculations based on Insurance and Pension Funds Supervisory Commission data.

Table 4.6.8. Premium share of groups with the highest gross written premium growth rate in the non-life sector, %

	2002	2003	2004
General liability insurance	3.4	3.8	4.3
Credit insurance	1.3	1.5	1.8
Financial risk insurance	1.2	1.4	1.8
Legal expense insurance	0.03	0.05	0.06

Source: Insurance and Pension Funds Supervisory Commission.

With regard to legal expense insurance products – apart from motor vehicle legal expense insurance – personal legal expense, professional legal expense and commercial legal expense insurance products have appeared on the market.

Mortgage credit insurance gives temporary insurance cover for the period until the entry of the mortgage in the land and mortgage register becomes valid; it is very popular and closely connected to the development of the housing loan market. With regard to such insurance policies, companies continue to include new types of risk in insurance cover: apart from death, companies also the risk of loss of employment, the risk of permanent and temporary inability to work, etc.

Sales of financial insurance products continue to grow rapidly, largely due to the rising demand for credit and trade receivable insurance. Among financial insurance products, trade receivable insurance is of considerable importance. After Poland's accession to the EU the volume of trade has increased; Polish companies insure their claims on partners from EU countries more often and foreign counterparties demand that deferred payment receivables from Polish entrepreneurs be guaranteed. Exporters have been given the ability to insure against financial losses arising from foreign exchange risk when using trade loans. With regard to trade loan insurance, an innovative manner of calculating premiums has been offered – the insurance taker sets the premium amount, thus determining the maximum amount of insurance.

In 2004, life insurance policies covering not only the insured person's family, but also guarantors were introduced. In looking for market niches, insurance companies offered innovative solutions targeted at small groups of customers such as packages for divers, insurance for cyclists, group life insurance for parents and guardians of disabled children or free of charge life insurance for kidney or partial liver donors.

Until appropriate statutory solutions are adopted, no commercial health insurance products should be expected to appear on the market. In 2004, insurance companies worked on offers which

could meet customers' expectations at least in part (life insurance with a very broad healthcare scope based on agreements concluded with renowned healthcare providers).

4.6.6. Distribution channels

Insurance agents remained the unquestioned leaders with regard to insurance distribution on the Polish market (they accounted for 55% of the insurance companies' premiums).[271] Insurance companies signed contracts of agency with entities of various legal status.[272] Persons who performed agency services could work for agents.[273]

Direct insurance sales (i.e. without intermediaries) grew as well. Direct sales included sales by employees[274] (i.e. at branches and customer service offices), via the Internet and over the phone.

Insurance companies obtained around 30% of their premiums through employees. However, if the PZU SA Group, the largest insurer in the market with its extensive branch and customer service office network, is excluded from calculations, the structure of distribution channels changes significantly. It turns out that except for the leader, only 12% of the premium amount was the result of sales by employees.

Insurance companies attempted to use new distribution channels in order to facilitate access to their products by potential customers. Banks became an important distribution channel (*bancassurance*). This trend became more pronounced in 2004. Insurance companies obtained 5.31% of total premiums via bank sales channels compared to 2.83% in 2003.[275]

Phone and Internet sales grew. Insurance offers were often presented on bank web sites – 3.4% of the insurers' total premium was obtained on the phone and via the Internet (4.1% for life insurance and 2.8% for non-life insurance).

In 2003, this share was lower – 1.5% for life insurance and 1.8% for non-life insurance.[276] This manner of purchasing policies has gradually won support from insurance buyers. Life as well as non-life insurance policies were offered via the Internet; it should be noted, though, that mainly products for which the underwriting process was straightforward were sold in this manner. The further development of new distribution channels will enhance the attractiveness of products on offer, make them more accessible and reduce costs.

Cross-border services were provided mainly to corporate customers, and rarely for retail ones (due to language barriers, no sense of security, and obstacles related to costs).[277] The cross-border market in insurance services should be considered of marginal importance at the moment.

4.6.7. Prospects

The single passport principle is very important for the development of the insurance sector. Pursuant to this principle, an insurance company licensed in any European Union country may provide insurance services on the territories of other Community member states on the same conditions as domestic companies. The single passport principle makes it possible to establish branches and provide services in other EU countries without the need to obtain additional authorisation to engage in insurance activities.

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[271] Own calculations based on Insurance and Pension Funds Supervisory Commission data.

[272] They may be persons, juridical persons or entities which are not juridical persons.

[273] Provided that they met the requirements stipulated in Art. 9 of the Insurance Intermediation Act.

[274] Permanent employees work at insurance company branches and customer service offices; they sell insurance to customers directly and without charging any commission; insurance agents look for customers and receive commission upon the conclusion of an insurance contract (sale of a policy).

[275] Own calculations based on Insurance and Pension Funds Supervisory Commission data.

[276] Insurance and Pension Funds Supervisory Commission.

[277] The cost barrier is related to the cost of transferring the insurance premium abroad, particularly in those countries which have not joined the euro area and where the premium is collected in domestic currency.

Since Poland's accession to the European Union, insurance companies have been able to sell policies in all EU member states (pursuant to the principle of freedom to provide insurance services). Services may be provided in the following manner:

– active freedom to provide services – the service provider crosses the border in order to sell services in another country;

– passive freedom to provide services – the customer goes to the service provider's country in order to purchase a service (policy);

– by mail – the service provider and customer remain in their respective countries and the service is provided by mail.

By the end of December 2004, 174 insurance companies from EU-25 and EFTA countries[278] expressed interest in selling policies in Poland and notified the Insurance and Pension Funds Supervisory Commission about their intention to conduct insurance activities. They included:

– 29 life insurance companies;

– 145 non-life insurance companies.

If foreign insurers put their plans into effect, the competition on the Polish insurance market may grow; this, however, depends on whether they commence operating activities.

The list of those insurance companies suggests that most of them will be interested in major industrial risks and international insurance programmes. It should be stressed that leading European insurers were already present on the Polish market before Poland's accession to the EU.

Polish insurance companies behaved much less expansively within the EU than their foreign competitors in Poland. By the end of 2004, only four Polish companies (two life insurance companies and two non-life insurance ones) notified their intention to offer services in EU countries (in the Baltic states, Germany and Hungary).[279] The relatively limited external expansion is a result of the significant share of foreign investors from the European Union in companies which operate in Poland. Therefore, no foreign expansion should be expected on the part of insurance companies active in Poland.

The future structure of the insurance sector will be the result of two opposing forces. On the one hand, the trend towards a decrease in sector concentration will continue due to the fact that leaders will lose their market share to smaller companies. On the other hand, a trend towards sector consolidation may emerge due to intensified competition. Smaller and economically "weaker" companies may be acquired by stronger ones. Despite the noticeable improvement in the balance on the technical account and earnings of insurance companies in 2004, certain insurance companies will not be able to achieve significant market share and cross the profitability threshold.

At the same time, increased competition will enhance the customers' position. Improved customer service quality, an extended range of insurance products on offer and more attention to the customers' needs can be expected.

4.7. Brokerage houses and offices

There are two types of institutions on the market which conduct brokerage activities: brokerage offices and brokerage houses. For the purposes of this report, "brokerage houses" will denote independent entities operating exclusively as public limited companies,[280] whereas "brokerage offices" will denote financially and organisationally separate units belonging to banks which conduct brokerage activities.

[278] Insurance and Pension Funds Supervisory Commission.

[279] "Polski rynek ubezpieczeń i funduszy emerytalnych w roku 2004", *Biuletyn Miesięczny KNUiFE* No. 1/2005.

[280] Some brokerage houses are bank subsidiaries which operate within the same capital group.

4.7.1. Evolution of the size and structure of the sector of brokerage activity

In 2003 and 2004, brokerage institutions' assets grew after declining in 2001 and 2002. In 2004, brokerage firms recorded the highest increase in the value of assets among financial institutions (by 48.7%); their assets reached PLN 5.5 billion.

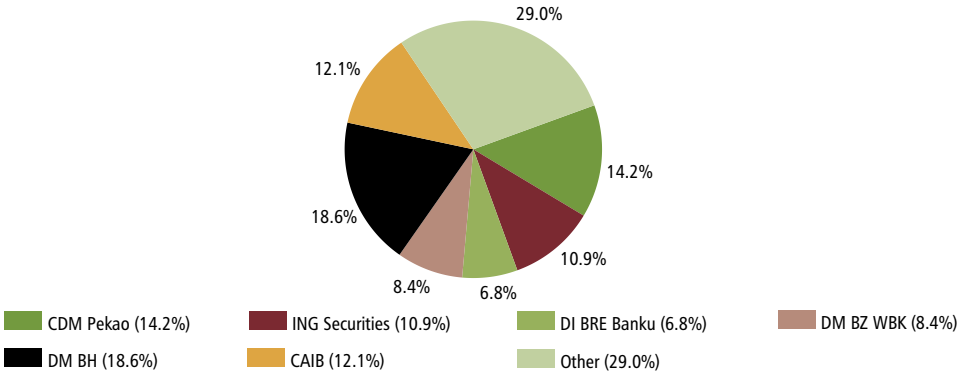
The reduction in the number of brokerage offices and houses in recent years was caused by intensified competition and an unfavourable economic climate in 2001 and 2002. In 2004, the downward trend regarding these firms was reversed and their number rose to 39[281] compared to 36 in 2003, and 38 in 2002).

Pronounced concentration process has been underway in the brokerage services sector for several years. In 2001, the share of the five (CR 5) largest brokerage firms in stock trading on the WSE came to 43%, in 2002 – to 54% and in 2003 – to 64%. In 2004, this figure dropped slightly (to 62%), which may be a sign that the concentration process was stopped. In 2004, BDM PKO BP doubled its share in stock and bond market turnover and joined the group of firms with the highest share in stock exchange turnover. The shares of the largest firms in WSE stock turnover in 2003 and 2004 are presented in Figure 4.7.1.

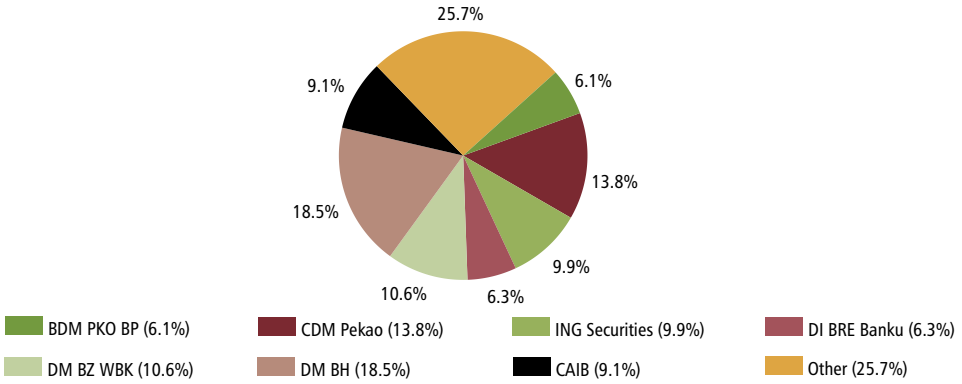
In 2004, no changes occurred with regard to the leaders in individual stock exchange market segments. DM BH maintained its position in the stock market and the share of CDM Pekao in the bond market decreased by 4.4 percentage points. The share of DI BRE Banku in the options market

Figure 4.7.1. Shares of the largest brokerage firms in WSE stock turnover

2003



2004



Source: WSE.

[281] Including 33 brokerage houses and 6 brokerage offices.

grew considerably (by 15 percentage points compared to 2003). The present leader in the futures market (DM BOŚ) is also consistently strengthening its position (an increase of 5 percentage points). Firms with the highest share in stock exchange turnover in 2004 are presented in Table 4.7.1.

Table 4.7.1. Firms with the highest share in stock exchange turnover, 2004 (percentage of market share, trading volume in PLN million and in quantitative terms)

Stock market	Bond market	Futures market	Options market
DM BH 18.47% PLN 20,276.52 million	CDM Pekao SA 35.55% PLN 2,779.90 million	DM BOŚ SA 20.67% 1,491,695 contracts	DI BRE Banku 39.55% 62,290 contracts

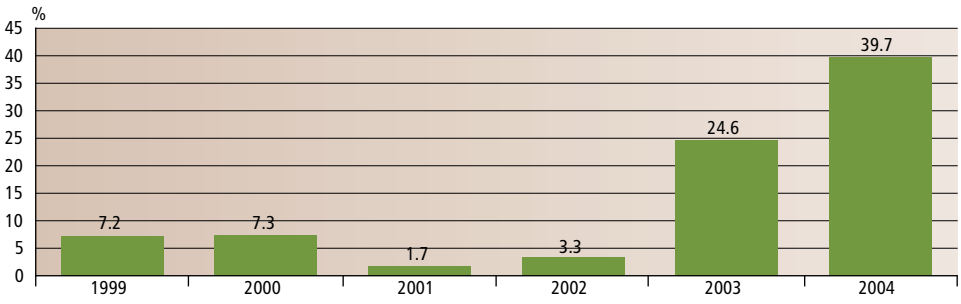
Source: WSE.

4.7.2. Financial results[282]

In 2002 and 2003, brokerage institutions reduced their costs due to the unfavourable market situation. Together with the improvement in stock exchange trends in the second half of 2003, those measures contributed to a gradual rise in financial results. 2004 was a very good year for brokerage firms. Their total pre-tax financial results in 2004 (PLN 519 million) were much higher than in 2003 (PLN 238 million). In 2004, 29 firms recorded profits from operations, while 8 recorded losses. The condition of brokerage firms in recent years is illustrated by changes in the value of pre-tax return on revenue shown in Figure 4.7.2.

In 2004, brokerage firms achieved a higher income from fees (an increase of 47% on 2003), including income from intermediation in the sale of securities on the primary market (an increase of 180%). Income from intermediation in investment fund unit sales also grew, but not as rapidly as in 2003 (an increase of 54% in 2004 compared to 200% in 2003). Despite very good financial results, brokerage firms did not declare that they would reduce fees charged to customers.

Figure 4.7.2. Brokerage offices' and houses' pre-tax return on revenue



Note: Pre-tax return on revenue is calculated as the ratio of gains/losses on business activity to income from all activities.

Source: Central Statistical Office.

4.7.3. Brokerage services market

The much improved financial standing of brokerage offices and houses was the result of the revival on the primary market and favourable trends on the secondary one. In 2004, 36 companies were floated on the WSE (compared to only 6 in 2003), stock market turnover grew

[282] Data concerning 37 brokerage firms which submitted their 2004 annual reports.

Table 4.7.2. Number of accounts and the amount of funds held in customers' securities accounts

	2001	2002	2003	2004
Number of securities accounts maintained by brokerage offices and houses (as at year-end)	1,175,988	1,251,061	1,176,625	1,535,500
Amount of funds in securities accounts held by brokerage offices and houses customers (PLN million)	32,561.4	29,153.5	33,747.6	64,994.2

Source: Central Statistical Office.

by 65% and capitalisation went up by 74%.[283] The most public offerings were underwritten by BDM PKO BP (10), but with regard to the value of offerings DM BGŻ, which offered PKO BP stock, was the leader.

In 2004, as in the previous year, the amount of funds in securities accounts held by brokerage offices and houses customers increased. The number of investment accounts also grew. The number of investment accounts and the amount of assets held there are presented in Table 4.7.2.

In 2004, the distribution of brokerage services via the Internet developed further, assisted by an improvement in stock exchange trends and numerous public offerings by companies. This communication channel is particularly popular among individual investors. In the second half of the year, the average share of Internet accounts in the total number of accounts held with brokerage offices and houses came to 14% (versus 9% in the second half of 2003). In total, brokerage firms maintain around 74,000 such accounts. DM BZ WBK continues to maintain the largest number of Internet accounts (around 18,000).

Amendments to the Act on Public Trading in Securities[284] also accelerated changes in the distribution of brokerage services. The amendment enabled banks whose structure does not include brokerage offices to offer brokerage services. This should amplify the already present trend towards offering brokerage services at banks. This solution will enable banks to make their offer more attractive, while brokerage houses will be able to reach more customers at lower cost (offering services at bank field branches is less costly than opening new customer service offices).

The new legal regulations have also made it possible to extend the range of services offered. The Individual Pension Account Act[285] has enabled brokerage institutions to offer this additional method of saving towards one's retirement since September 1, 2004. However, brokerage offices and houses did not exhibit significant interest in maintaining IPA (only 3.6% of all accounts in 2004 were opened with them). This was caused by the low limit of IPA deposits,[286] which could cause tax benefits to be lower than the cost related to investment account maintenance. However, customers who opened accounts with brokerage institutions deposited higher amounts (PLN 3,300 on average) than in the case of other financial institutions. Therefore brokerage offices and houses attracted over 10% of total IPA deposits.

4.7.4. Prospects

In 2002 and 2003, some foreign brokerage firms decided to close their offices in Poland. The improved economic climate as well as the introduction of the single passport on May 1, 2004, which makes it easier for foreign institutions to conduct their activities in Poland, will contribute to an increase in their presence. However, notifications about the intention to engage in

283 Capitalisation of domestic and foreign companies listed on the WSE.

284 The Act Amending the Act on Public Trading in Securities and Other Acts of March 12, 2004 (*Dz.U.* No. 64/2004, item 594).

285 The Individual Retirement Account Act of April 20, 2004 (*Dz.U.* No. 116/2004, item 1205).

286 The payments made towards an Individual Pension Account within a calendar year may not exceed 150% of the forecast average monthly salary in the national economy for a given year, which is stipulated in the Budget Act or the Interim Budget Act. In 2004, this amounted to PLN 3,435.

brokerage activities submitted to the Polish Securities and Exchange Commission are not necessarily tantamount to commencing operating activity.[287] In 2004, only the Czech Internet brokerage company FIO commenced operations in Poland.[288] Despite the interest, no foreign firms took advantage of the possibility of becoming a remote member of the WSE in 2004.[289] This suggests that foreign firms may begin to compete on the Polish market in a gradual manner.

The new operation standards developed in 2004 by the Chamber of Brokerage Houses (*Izba Domów Maklerskich – IDM*)[290] will contribute to enhancing the transparency of brokerage offices' and houses' operations. Since May 2004, a new standard stipulating the principles for investing by brokerage house employees and firms linked with brokerage houses has been in force. In November 2004, the Code of Good Practice of Brokerage Houses was adopted.[291] Apart from improving the quality and security of customer service, such regulations may also help the Polish brokerage services sector to compete with foreign companies.

The role of the Internet brokerage service distribution channel should continue to increase in the coming years. Such services will also be offered at bank field branches more often. 2005 may also be a good year for brokerage firms. The continued interest of Polish companies in raising funds on the stock market can be observed.[292] Some of the new customers who have been attracted to brokerage offices and houses by the public offerings may also develop interest in other listed companies, which would increase fee income.

[287] By December 31, 2004, 90 investment firms and 50 credit institutions notified of their intention to commence activity on the territory of Poland.

[288] Brokerage House Fio burzovní společnost, a.s. has offered trading in the stocks of companies listed on the U.S., German and Czech markets to Polish customers since September 2004.

[289] Remote membership gives foreign brokerage firms direct access to the WSE system without the need to establish a physical presence in Poland or to use local intermediaries.

[290] An organisation whose members are firms engaging in brokerage activities.

[291] It will take effect from January 2005.

[292] More on this subject in: *Wybrane determinanty rozwoju rynku akcji i korporacyjnych instrumentów dłużnych w Polsce. Wyniki badania ankietowego*, Warszawa: NBP, 2005.

5
Financial markets

5.1. Money market

The money market includes marketable short-term debt securities and deposit transactions with maturities of up to and including one year.

5.1.1. Evolution of the money market size and structure

Compared to 2003, the outstanding value of short-term debt securities issued by all types of issuers (the Treasury, commercial banks and enterprises) decreased. As in previous years, in 2004, the Treasury bill market was the largest segment of the short-term debt securities market. FX swaps remained the most liquid investment instruments; they were most commonly used by non-residents to finance their investments in Treasury bonds and speculate on the zloty exchange rate. Commercial banks managed their current liquidity position mainly on the unsecured deposit market. The conditional transaction market was developing slowly. The increased turnover on this market resulted largely from trading between BGK and other banks, which was a consequence of transferring part of central government time deposits outside the central bank.

Table 5.1.1. Outstanding value of individual money market instruments as of year-end (PLN billion)

	2001	2002	2003	2004
Treasury bills	35.2	42.0	48.1	46.9
NBP bills	14.3	7.3	6.0	5.7
Short-term corporate bonds	n/d	8.0	7.3	6.5
Short-term commercial bank debt securities	1.8	2.8	3.5	2.7
Unsecured deposits (interbank deposits)	25.0	23.5	22.3	25.1
Secured deposits (FX swaps and conditional transactions)[1]	n/d	n/d	n/d	n/d

[1] It is not possible to determine the values of the banks' positions due to FX swaps and conditional transactions on the basis of data from the bank reporting system.

Source: NBP.

5.1.2. Marketable short-term debt securities market

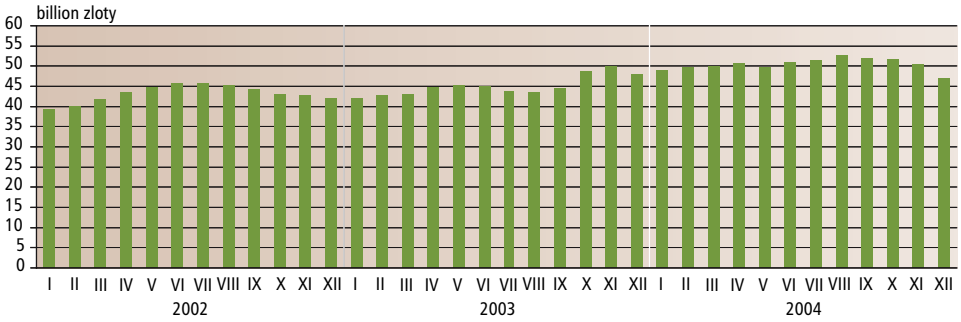
5.1.2.1. Treasury bills

Treasury bills are short-term debt securities issued by the Ministry of Finance. Basic types of bills include 13-, 26- and 52-week instruments. From July 1995, they are issued as dematerialised bills in the electronic book-entry form.

Market size

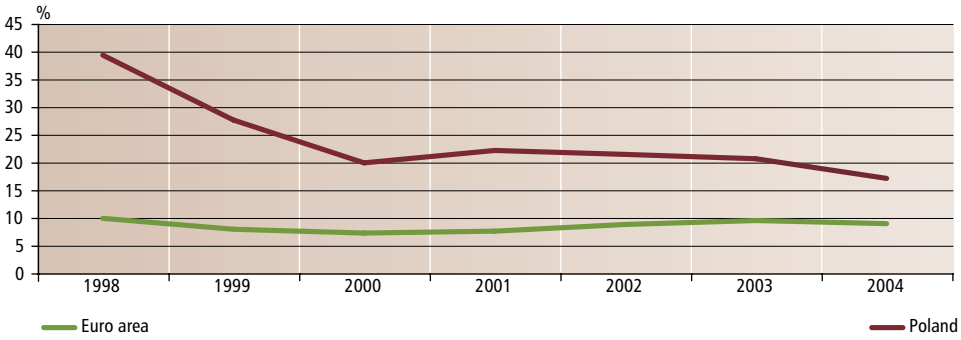
With regard to the amounts issued, the Polish Treasury bill market is the largest among the new EU Member States, like the entire Polish Treasury securities (TS) market. As in previous years, in 2004 the Treasury bill market was the second largest segment of the domestic debt securities market. Its share in this market amounted to 15.2% (a decrease of around 3 percentage points compared to 2003) and was second only to the Treasury bond market. As of year-end 2004, the outstanding value of Treasury bills issued was PLN 46.9 billion and decreased by PLN 1.2 billion

Figure 5.1.1. Treasury bills (outstanding amounts)



Source: NBP calculations based on NBP and Ministry of Finance data.

Figure 5.1.2. Share of Treasury bills in the domestic TS market (as of year-end)



Source: NBP calculations based on ECB, NBP and Ministry of Finance data.

compared to 2003 (Figure 5.1.1). At the same time, the total outstanding value of Treasury securities issued domestically rose to PLN 286.9 billion (i.e. by PLN 40.9 billion).

The reduction in the outstanding value of Treasury bills was the result of the good financial position of the central budget and the implementation of the public debt management strategy, which assumed an increase in public debt duration. The average level of the central budget liquidity reserve, which was held in accounts with the NBP and BGK, amounted to PLN 15.4 billion (compared to PLN 8.5 billion in 2003). The improvement in the liquidity situation was the result of both changes in liquidity management policy and smaller than assumed borrowing requirements. The reduction of the proportion of Treasury bills in domestic debt was also meant to limit the risk of its refinancing.

The decrease in the amount of Treasury bills issued meant returning to the trend towards the decreasing importance of Treasury bills in financing the borrowing requirements of the central budget, which had been present in the second half of the 1990s. However, the share of Treasury bills in the outstanding value of domestic Treasury securities issued in Poland remained twice the ratio in the euro area (Figure 5.1.2). It was similar to the average ratio recorded in new EU member states. The improvement in central budget deficit should contribute to the convergence of the Polish level of financing budget shortfalls with short-term securities towards the one observed in the EU-15.

Primary market

As in previous years, Treasury bills were sold during weekly auctions organised by the NBP.[293] From April 1, 2003, Treasury bills are sold to a selected group of banks – Primary Dealers (*Dealerzy Skarbowych Papierów Wartościowych – DSPW*) and Bank Gospodarstwa Krajowego. The Primary Dealers System is based on agreements concluded between the issuer of Treasury securities (the

[293] The auctions were held every Monday.

Box 5.1.1

PUBLIC DEBT MANAGEMENT BODIES WITHIN THE EU

Country	Name of public debt management body
Agency model:	
Austria	Österreichische Bundesfinanzierungsagentur
Belgium	Agence de la Dette (Agentschap van deSchuld)
Finland	Valtiokonttori
France	Agence France Trésor
Greece	Debt Office
Holland	Agentschap van het ministerie van Financiën
Ireland	National Treasury Management Agency
Latvia	Valsts Kase
Germany	Finanzagentur GmbH
Portugal	Instituto de Gestão do Crédito Público
Slovakia	Štátna pokladnica
Sweden	Riksgäldskontoret
Hungary	Magyar Állampapír
Graet Britain	Debt Management Office
Bank model:	
Cyprus	Central Bank of Cyprus
Denmark	Dansk Nationalbanken
Malta	Central Bank of Malta
Government model:	
Czech Republic	Ministerstvo financí
Estonia	Rahandusministeeriu
Spain	Ministerio de Economia
Lithuania	Finansų Ministerija
Luxembourg	Ministère des Finances
Poland	Ministerstwo Finansów
Slovenia	Ministrstvo za finance
Italy	Ministero dell'Economia e delle Finance

Source: Ministry of Finance.

Ministry of Finance) and the selected banks. Until April 2004, twelve banks played the role of Primary Dealers. In April 2004, the Ministry of Finance terminated the Primary Dealer agreement with one bank; as a result, the number of Primary Dealers dropped to eleven.

The direction of the Treasury securities market development is determined by the public debt management strategy. Three models of government debt management are present in EU countries: the agency, bank and government models. The agency model, where debt management is entrusted to a specialised body, is the most popular in European Union countries (Box 5.1.1). It is used by over half of member states (14 out of 25). Only in three EU countries does public debt management belong to central bank responsibilities. Five out of ten new EU member states (including Poland) have used the government model, where debt management is the responsibility

Table 5.1.2. Treasury bills by maturity, %

Treasury bills	2001	2002	2003	2004
8-week	0.4	0.0	0.0	0.0
13-week	8.1	3.9	4.9	3.3
26-week	14.2	5.0	6.1	1.2
39-week	4.2	1.7	0.0	0.0
52-week	67.5	89.4	82.9	95.5
Other	5.6	0.0	6.1	0.0
Total	100.0	100.0	100.0	100.0

Source: NBP calculations based on Ministry of Finance data.

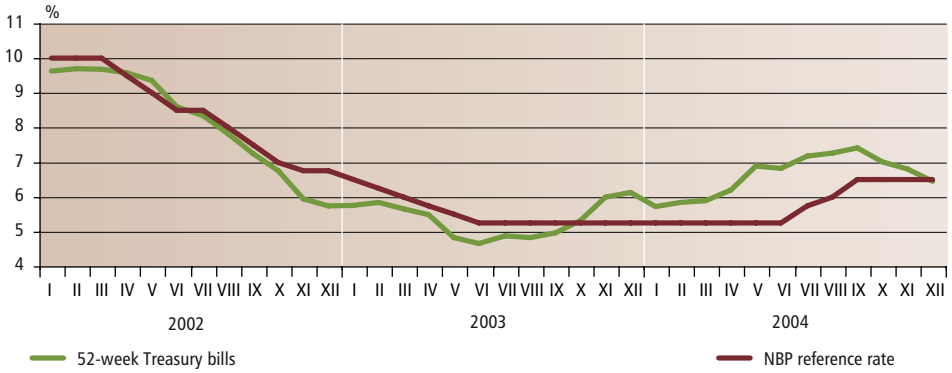
of the Ministry of Finance (or the Ministry of the Treasury). This model offers the greatest opportunities for establishing legal and institutional infrastructure necessary for the operation of efficient financial markets.

The improvement in the budget position caused the value of Treasury bills issued to drop from PLN 57.0 billion in 2003 to PLN 48.7 billion 2004.[294] In 2004, the importance of 52-week bills increased further. 13- and 26-week bills were placed on the market depending on the current needs (13-week bills in order to determine interest rates on 3-year savings bonds and 26-week ones in order to reduce the concentration of bill redemption dates). At the same time, the significant drop in the amount of 26-week bills issued indicates that the financial standing of the state stabilised. In 2001, i.e. during the period when serious difficulties in financing the budget deficit appeared, the amount of 26-week bills issued was higher.

The current level of the NBP reference rate and expectations concerning its trend are the main factors influencing the yield on Treasury bills. Until September 2004, investors expected interest rate increases. The yield on Treasury bills was rising and exceeded the NBP reference rate. In the fourth quarter of 2004, expectations concerning interest rate increases by the Monetary Policy Council waned and, consequently, the yield on Treasury bills converged towards the NBP reference rate (Figure 5.1.3).

Expectations of interest rate increases in 2004 led to a rise in the demand for Treasury bills relative to their supply (Figure 5.1.14).[295] In 2004, the ratio was 2.33 while in 2003 it rose to 2.7.

Figure 5.1.3. Monthly average yield of Treasury bills on the primary market vs. the NBP reference rate, 1998–2004

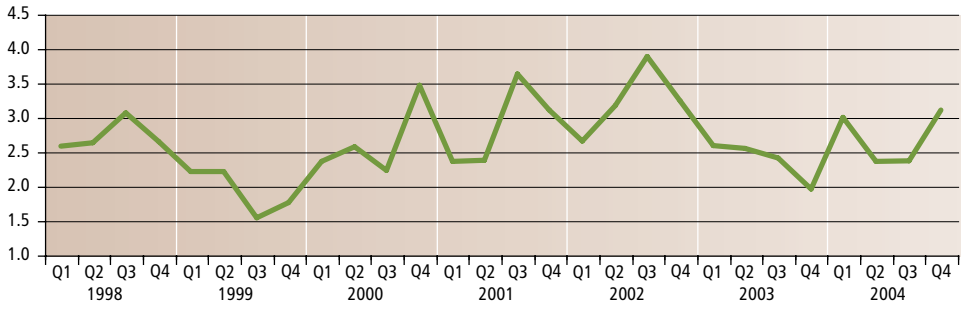


Note: The NBP reference rate as at month-end.
Source: NBP.

[294] The amount issued has been calculated according to the nominal value of Treasury bills.

[295] The influence of interest rates on duration is described in: F.J. Fabozzi "Rynki obligacji, analiza i strategie". WIG-PRESS, Warszawa 2000, pp. 121–124.

Figure 5.1.4. Demand/supply ratio of Treasury bills on the primary market



Source: NBP calculations.

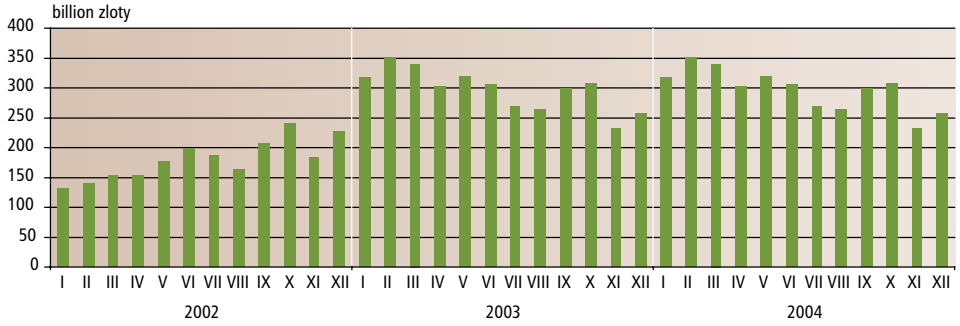
Secondary market

In 2004, after a period of rapid growth, the gross turnover in Treasury bills stabilised at PLN 3,546 billion decreasing by 0.5% relative to 2003. As a result, the liquidity ratio of Treasury bills decreased from 6.58 in 2003 to 5.86 in 2004.[296] Higher investors' interest in securities with short maturities was, in the period of interest rate rises, one of the reasons for a smaller decrease in Treasury bill turnover compared to bond turnover.

The higher demand for Treasury bills caused outright transactions to constitute a higher proportion of turnover than in previous years. Nevertheless, conditional transactions (SBBs/BSBs and repos) prevailed. In 2004, their share of gross Treasury bill turnover amounted to 88.1% (in 2003 – 93%, and in 2002 – 87%).[297]

Treasury bills were traded on the interbank market (99.6% of total turnover) and on the electronic platform (0.4%).[298] In 2004, significant changes occurred with regard to the organisation of the electronic platform. The Italian MTS company became its co-owner. The existing Electronic TS Market was transformed into MTS Poland. At the end of November 2004, the technology utilised by the Electronic Treasury Securities Market was replaced by the Italian Telematico technology used by all markets operating within the MTS Group. Those changes had a favourable impact on the

Figure 5.1.5. Gross turnover in Treasury bills, 2002–2004



Note: Turnover includes conditional transactions, for which initial and final exchange values have been taken into account.

Source: NBP.

[296] The liquidity ratio is calculated as the ratio of average monthly gross turnover to the average outstanding value of bills issued in subsequent months.

[297] When calculating the shares presented, initial and final exchange values have been taken into account for conditional transactions. Repos and SBB/BSB transactions are discussed in detail in section 5.1.3.2.2.

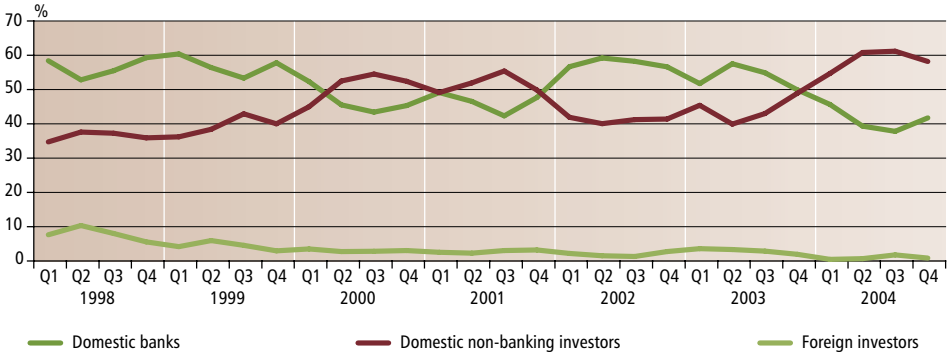
[298] The electronic platform is an organised non-regulated market, i.e. is not subject to supervision by the Polish Securities and Exchange Commission.

operation of the electronic market. Treasury bill turnover in December 2004 was 12.9% higher compared to the previous month and 17.8% higher than in October 2004. In spite of this, turnover in the electronic market was still insignificant compared to the total Treasury bill turnover.

Investors

In 2004, domestic non-banking investors accounted for the largest share of Treasury bill purchasers. Their share amounted to 58.5% and was the highest recorded since 1998.[299] Domestic banks, which had been the dominant investors in the Treasury bill market since the end of 2001, accounted, on average, for 40.9% of Treasury bills issued and outstanding in 2004 (Figure 5.1.6). The heightened interest in these instruments on the part of domestic non-banking investors was caused by, among other things, high corporate liquidity and the increase in the yield on Treasury bills.

Figure 5.1.6. Investors on the Treasury bill market by nominal outstanding value



Source: NBP.

Development trends

At the end of 2004, the downward trend in the share of Treasury bills in financing the borrowing requirements of the central budget emerged again. If the financial standing of the state remains stable, this trend should be sustained in the coming years. The more stable and transparent the fiscal policy and the lower the volatility of Treasury securities' prices, the lower the interest in instruments with short maturities (Figure 5.1.7).

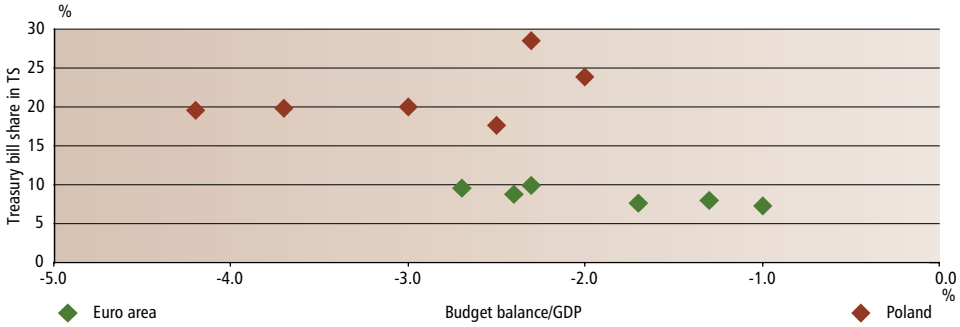
The need to maintain the budget deficit at a low and stable level – linked to Poland's planned entry into the euro area – will contribute to limiting the role of Treasury bills in financing the borrowing requirements of the central budget. Given the comparable budget deficit levels, the share of Treasury bills in financing the borrowing requirements of the central budget in Poland is much higher than in the euro area. Therefore a gradual decrease in the amount of Treasury bills issued to the level observed in more developed countries should be expected.

In December 2004, the competition for candidates for Primary Dealers in 2006 began. For the first time, foreign banks entered the competition. This means that in the coming years, non-residents will be able to purchase Treasury securities on the primary market. The increase in the number of Primary Dealers may reduce the cost of financing the budget deficit.

Changes in the ownership structure of CeTO and the inclusion of the Electronic Treasury Securities Market in the MTS international platform network should encourage trading in Treasury securities on the electronic market. However, traditional methods of conducting transactions – using the Reuters Direct electronic communications system and voice brokers – will continue to dominate.

[299] The ratio indicated is the average of amounts at the end of subsequent quarters.

Figure 5.1.7. Relation between the central budget balance and the share of Treasury bills in the euro area and Poland, 1998–2004



Note: TS is the outstanding value of securities in domestic currency issued by the Treasury. The central budget balance refers to the general government sector.

Source: NBP calculations based on ***OECD Economic outlook 2003/2*** No. 74, ***ECB*** *Monthly Bulletin 3/2005* and Ministry of Finance data.

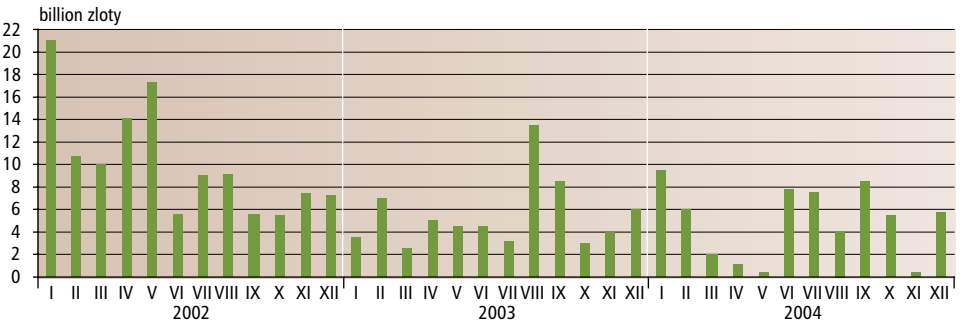
5.1.2.2. NBP bills

Market size

The issue of money market bills is the main open market operation performed by the NBP on the domestic money market. Therefore the amount of every issue and the value of money market bills issued and outstanding depend on the scale of excess liquidity in the banking system that the central bank wishes to absorb.

Between 2002 and 2004, the excess liquidity of the banking sector, as measured by the balance of money market bills issued and outstanding, decreased gradually. From April 2004, short-term excess liquidity was largely absorbed by the Ministry of Finance, which held a large amount of interest-bearing zloty time deposits in its central bank account (PLN 12.19 billion on average in 2004 and PLN 6.07 billion in 2003).[300] This was the main cause for the lower value of bills issued and outstanding (on an annual average basis, it was lower by around PLN 0.9 billion compared to 2003). The value of money market bills issued and outstanding at the end of December 2004 totalled PLN 5.74 billion, a decrease by PLN 0.26 billion from the previous year. Change in the amount of Ministry of Finance funds held in its time deposit account with the NBP was the most important factor leading to significant fluctuations in the value of NBP bills issued and outstanding (Figure 5.1.8). In order to ensure the liquidity needed to finance public expenditure, the Ministry of Finance decided to maintain a much larger liquidity reserve than in previous years. The accumulation of very large time deposits in April and

Figure 5.1.8. NBP bills issued and outstanding



Source: NBP Securities Register.

[300] More on this subject: *Instrumenty polityki pieniężnej na tle płynności sektora bankowego w 2004 r.*, Warszawa: NBP, 2005.

Box 5.1.2

CENTRAL GOVERNMENT DEPOSITS WITH EURO AREA CENTRAL BANKS

The transfer of central government deposits outside the central bank is a prerequisite for limiting the fluctuations in short-term interest rates on the interbank money market. In most member states which entered the euro area, central banks negotiated the transfer of central government deposits to the banking sector. In other countries, central government deposits have not been entirely transferred outside the central bank, but their amount and volatility have been limited by stipulating a ceiling for the deposits that may be maintained by the government with the central bank or by setting lower-than-market interest rates. The ECB indirectly forced such developments by introducing a ranking of liquidity forecasts drawn up by individual euro area central banks. Since movements in deposit amounts were the most important cause of errors in liquidity forecasts, stabilising the amount of central government deposits was the most effective method for improving the accuracy of such forecasts. Movements in central government deposits of several countries which have not introduced the aforementioned solutions (Italy and France among others) were nevertheless the most important autonomous factor affecting liquidity conditions in the euro area between 1999 and 2001.[1] In recent years, the Bank of France and Bank of Italy changed their central government deposit maintenance systems, which enabled to reduce the scale of liquidity fluctuations in the euro area.

[1] *The liquidity management of the ECB*, ECB Monthly Bulletin, May 2002, p. 41–51, and *Economic developments in the euro area*, ECB Monthly Bulletin, July 1999, p. 16–17.

May 2004 (the average monthly amount exceeded PLN 15 billion) caused a considerable decrease in the amount of money market bills and a temporary liquidity shortfall among banks. As a result, the NBP limited the amount of bills offered at several auctions to PLN 0.1 billion.

During this period, discussions with the Ministry of Finance were initiated by the NBP regarding changes in the principles of depositing central government funds with the central bank. The proposals presented aimed to curb the amount of time deposits held by the Ministry of Finance with the NBP. As a consequence, the Ministry of Finance undertook measures designed to enable the distribution of surplus funds on the interbank market. On May 21, 2004, the Ministry of Finance concluded an agreement with Bank Gospodarstwa Krajowego (BGK) concerning the maintenance of zloty time deposit accounts on behalf of the Ministry. Pursuant to this agreement, BGK also undertook to invest funds on the interbank market by concluding repo and buy-sell-back transactions with banks acting as Primary Dealers. In 2004, BGK only engaged in buy-sell-backs collateralised by Treasury bills. Euro area experience indicates that transferring central government deposits outside the central bank is the best way to stabilise the liquidity of the banking system (Box 5.1.2).

In November 2004, the Ministry of Finance did not deposit liquidity surpluses on the market via BGK; the funds obtained from the privatisation of PKO BP were placed in time deposits with the NBP. This reduced the amount of liquid funds available on the interbank market and again prompted the NBP to reduce considerably the amount of money market bills issued (Figure 5.1.8). In order to prevent such situations in the future, on December 15, 2004 the NBP signed a new framework agreement with the Ministry of Finance regarding the placing of funds in time deposit accounts with the central bank. Pursuant to this agreement, at the beginning of 2005, limits will be introduced on the daily amounts of interest-bearing central government time deposits placed with the NBP. The agreement stipulates that this limit will be gradually lowered (to PLN 1 billion in 2007).[301] The aim is to minimise the impact of current central budget surpluses on the banking sector liquidity movements.

[301] *Instrumenty polityki pieniężnej na tle płynności sektora bankowego w 2004 r.*, Warszawa: NBP, 2005, p. 37.

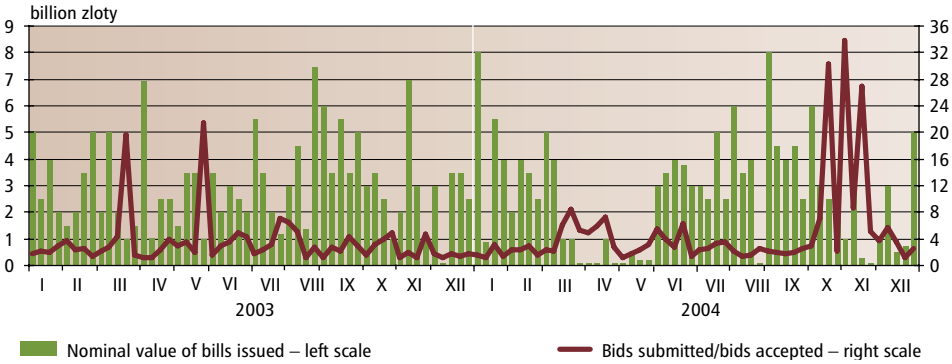
Primary market

In 2004, only 14-day money market bills were sold by the NBP. Issues were conducted weekly, each Friday.[302] Auction participants included 13 banks – Primary Dealers[303] – and, pursuant to statutory provisions, the Bank Guarantee Fund.[304] As in previous years, the demand for money market bills from commercial banks exceeded their supply. However, in the fourth quarter of 2004, demand considerably exceeded the amount of bills offered by the NBP at several auctions (Figure 5.1.9). This phenomenon is known as overbidding. In quantitative terms (ratio of demand to supply), overbidding was strongest at the auctions where the supply of bills was low. Overbidding made it more difficult for the banks participating in auctions to manage their liquidity, since dealers were unable to predict the scale of bid reduction conducted by the NBP. Thus, they could not forecast with any precision the amount of their banks' liquid funds that would be absorbed.

The analysis of overbidding indicates that it was mainly caused by significant differences in the assessment of the liquidity situation between the banking sector and the NBP. The banks' expectations concerning liquidity conditions do not take into account the information to which only the central bank has access (the planned amount of central government time deposits held with the NBP, among other things). For this reason, the supply of bills announced by the NBP at certain auctions differed from the amount of open market operations expected by banks. In November 2004, changes in the amount of Ministry of Finance time deposits held with the NBP, which largely resulted from the privatisation of PKO BP, had a significant impact on the banking sector liquidity. This factor was not taken into account in commercial bank liquidity forecasts, which was the main reason for the prevalence of overbidding during this period. Additionally, overbidding is a self-perpetuating mechanism. At subsequent auctions, banks place even higher bids since they take into account not only their liquidity forecasts, but also the relationship between demand and supply during previous auctions. Thus some banks could have deliberately placed much higher bids than the amount of funds they wished to invest. They could have been prompted to such a course of action and risk-taking by the analysis of other auction participants behaviour.

Overbidding was also observed at the ECB main refinancing operations tenders. This undesirable phenomenon was eliminated by introducing changes in tender procedures (Box 5.1.3). It should be noted, however, that in Poland, as opposed to the euro area, main open market operations by the central bank aim to absorb liquidity. Under structural excess liquidity in the banking system, it is impossible to introduce variable rate tenders. The minimum yield on money market bills is determined by the reference rate set by the MPC, so in practice there is no room for compe-

Figure 5.1.9. Overbidding on the NBP bills market



Source: NBP.

[302] When Friday was an official holiday, the auction was held on Thursday.

[303] These were the banks most active in the money, Treasury securities and OTC interest rate derivatives markets. The banks were selected based on the uniform Dealer Activity Index criteria introduced in 1996.

[304] The Act on the Bank Guarantee Fund of December 14, 1994 (consolidated text in *Dz.U.* No. 9/2000, item 131 as amended).

Box 5.1.3

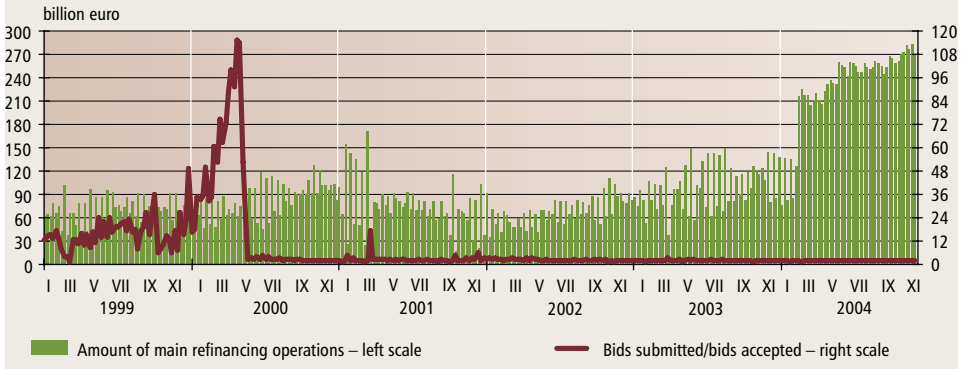
OVERBIDDING AND UNDERBIDDING IN THE EURO AREA AND CHANGES TO THE EUROSYSTEM'S OPERATIONAL FRAMEWORK FOR MONETARY POLICY

Central banks hold two types of main open market operations tenders – fixed and variable interest ones. Initially, the ECB conducted fixed rate tenders. During auctions, banks made uniform interest rate bids and the ECB only made decisions regarding the amount of funds allotted during each operation. Since the interest rate adopted for open market operations is usually the lower limit for the interest rate on interbank deposits with similar maturities, this tender formula led to so-called overbidding. Under a liquidity deficit, commercial banks tried to obtain as much funds as possible in operations conducted with the central bank. Auction participants were aware that even if the funds allotted exceeded their needs, they would be able to deposit the fund surplus on the interbank market without any diffiulty. The demand declared by banks during auctions exceeded their actual needs significantly (Figure 5.1.10). For example, where a bank wished to obtain e.g. EUR 1million through open market operations, it declared demand for a multiple of this amount since it expected similar behaviour from other banks and a reduction of bids to a fraction of their value (the amount of funds allotted by the ECB to individual entities was reduced). This phenomenon became even more noticeable when interest rate increases were predicted, since banks expected that subsequent operations supplying the banking system with funds would be conducted at higher interest rates. At subsequent auctions, the surplus of declared demand over the banks' actual liquidity needs grew. On May 31, 2000, the ratio of declared demand to allotted funds was as high as 115 to 1.

Overbidding made it difficult to manage liquidity in individual banks, since it was difficult to predict the amount of funds obtained through the open market operations due to the changing bid reduction scale. Banks often declared demand exceeding the amount of collateral which they could use in operations with the ECB, thus exposing themselves to the risk of a shortfall in securities which could be pledged against the funds allotted during the auction. In order to overcome this problem, the ECB changed the tender formula in June 2000.[1] Currently, banks participate in variable rate tenders – they compete in terms of the price at which they want to obtain funds. The ECB has, however, retained the minimum bid rate; it accepts bids with the highest interest rates.

After the tender formula had been changed, the opposite phenomenon of underbidding was observed when interest rate decreases were expected in the euro area.[2] Banks underbid when the demand they declare is lower than their actual need for liquid funds; they expect to supplement fund shortfalls during subsequent auctions, which will be conducted at lower

Figure 5.1.10. Overbidding at the ECB main open market operations tenders



Source: ECB.

interest rates. Underbidding cannot be eliminated entirely since a commercial bank may always deem it preferable to delay refinancing until market interest rates fall. The scale of this phenomenon was limited, however, by changes in the range of ECB monetary policy instruments introduced at the beginning of 2004.

In March 2004, the ECB made certain modifications to its operational framework. Required reserve maintenance periods changed. The maturity of main open market operations was shortened to one week. A principle was also introduced according to which any changes to the interest rate adopted in the main operations would be made at the beginning of a new required reserve maintenance period. This period would begin on the day when the main Eurosystem operations maturing immediately after the meeting of the Governing Council are settled (Wednesday).[3] The change in the ECB range of instruments is justified not only by the practice of this bank to date, but also by the theory according to which monetary authorities should change interest rates at the very beginning of the reserve period (the period during which the required reserve amount calculated earlier is to be held) in order to prevent speculation.[4] Moreover, the changes introduced will counteract both underbidding and overbidding.

[1] "The switch to variable rate tenders in the main refinancing operations", *ECB Monthly Bulletin*, July 2001, p. 37–42.

[2] "Bidding behaviour of counterparties in the Eurosystem's regular open market operations", *ECB Monthly Bulletin*, October 2001, p. 54–58.

[3] More information on changes in ECB instruments: "Changes to the Eurosystem's operational framework for monetary policy", *ECB Monthly Bulletin*, August 2003, p. 47–48 and: *The monetary policy of the ECB*, Frankfurt: ECB, 2004, p. 71–91.

[4] H. Davies, *Averaging in a framework of zero reserve requirements: implications for the operation of monetary policy*, Working Paper Series No 84, London: Bank of England, 1998, p. 10.

tition with regard to the amount of discount that would be acceptable for banks. Therefore, any measures aiming to limit the scale of overbidding could only concern enabling commercial banks to assess market liquidity conditions more accurately.

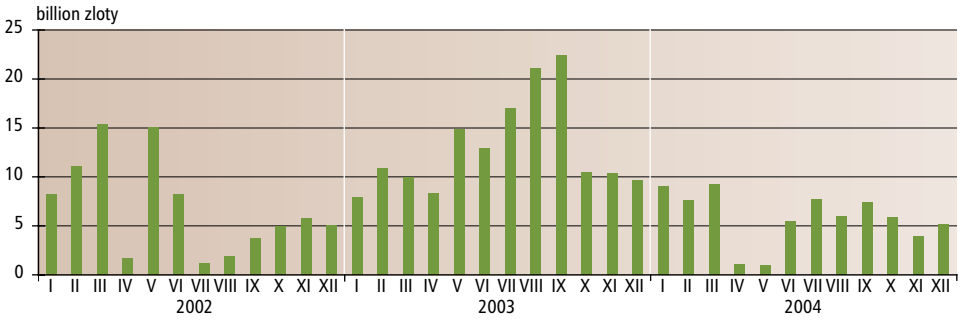
In 2004, the MPC decided that from January 1, 2005 the maturity of the main open market operations consisting in the issue of money market bills would be reduced to one week.[305] The shorter maturity of money market bills should facilitate liquidity management at commercial banks. Planning needs one week ahead should be easier both for the banks participating in auctions and for the central bank. This change will contribute to the stabilisation of liquidity conditions in the entire banking sector and reduce the volatility of short-term interest rates on the interbank market. The shortened maturity of the main open market operations was also part of the adjustment of NBP monetary policy instruments to the operational framework of the ECB, which was modified in 2004 (Box 5.1.2).

Secondary market

Secondary trading in money market bills takes place on the non-regulated interbank market. The secondary market in NBP bills exhibits low liquidity, which is a direct consequence of this instrument's function and its short maturity. Transactions on the secondary market are generally concluded immediately following the settlement of auctions when money market dealers resell the bills to other banks. In 2004, secondary market turnover was less than half 2003 (Figure 5.1.11). Both the number of outright transactions and repos fell. This was primarily the result of the lower amount of money market bills issued and temporary liquidity disruptions, which were observed on the market. The lowest turnover was recorded in the months when the NBP reduced bill issues due

[305] Resolution No. 15/2004 of the Monetary Policy Council of December 14, 2004 on the principles of conducting open market operations.

Figure 5.1.11. Secondary market for NBP bills, monthly net turnover



Note: The figures presented include both outright transactions and repos. Initial and final exchange values have been taken into account for repos.

Source: NBP Securities Register.

to high amounts of central government deposits with the central bank (in April and May). As in previous years, repos accounted for around 10% of total net turnover.[306]

Development trends and prospects

Pursuant to the framework agreement concluded on December 15, 2004 between the NBP and the Ministry of Finance, the amount of central government time deposits with the central bank will be gradually reduced in the coming years. As a result of the solution adopted, most budget surpluses will be placed on the interbank market, which will, in turn, contribute to stabilising liquidity conditions and reducing fluctuations in short-term interest rates. The accuracy of liquidity forecasts drawn up by the central bank will also improve and the Polish system for managing the current liquidity of the central budget will be brought closer to European standards. In adjusting its operational instruments to Eurosystem standards, the NBP should enable broader access to open market operations. It should be expected that all banks operating in Poland will soon be able to participate in money market bill auctions; they will only have to meet the technical requirements associated with conducting such operations.

Pursuant to the monetary policy strategy, excess operational liquidity will be maintained in the Polish banking system until Poland enters the euro area.[307] The scale of excess liquidity will depend on changes in the amount of Ministry of Finance deposits with the NBP, the amount of notes and coins in circulation as well as net foreign exchange sales/purchases. The NBP will absorb surplus liquid funds by issuing money market bills until the single currency is adopted. When Poland joins the EMU, liquidity conditions within the banking system will change. Excess liquid funds in the domestic banking system will be absorbed by banks from the euro area where structural liquidity shortfalls exist. The NBP will cease to issue money market bills and will conduct refinancing operations within the framework of the Eurosystem.

5.1.2.3. Short-term commercial bank debt securities

Banks may issue the following types of short-term bank debt securities (SBDS):

– bank securities issued pursuant to the Banking Act;[308]

– bank bonds issued pursuant to the Bonds Act.[309]

[306] This is the ratio of the nominal value of repo transactions to the total net value of money market bill transactions. Estimates based on reports submitted by a group of banks – money market dealers – to the NBP.

[307] *Monetary Policy Strategy beyond 2003*, Warszawa: NBP, 2003.

[308] The Banking Act of August 29, 1997 (consolidated text in *Dz.U.* No. 72/2002, item 359 as amended).

[309] The Bonds Act of June 29, 1995 (consolidated text in *Dz.U.* No. 120/2001, item 1300 as amended).

Market size

The outstanding value of SBDS at the end of 2004 accounted for about 0.9% of the entire Polish debt securities market and 60.3% of total debt securities issued by banks.[310] Short-term debt securities issued by monetary financial institutions in euro area countries accounted for 11% of the total value of outstanding debt securities issued by such institutions. In 2004, the downward trend in the share of SBDS in outstanding debt securities issued by banks and in the entire Polish debt securities market continued.

The reduction in the amount of SBDS issued in 2004 was mainly caused by the expiration of the capital gains tax relief on January 1, 2004.[311] The issue of anti-tax bonds, the bulk of which were one-year bonds, was the most important factor behind the increase in the amount of debt securities issued by banks in 2002 and 2003. Due to the fact that the capital gains tax relief was not extended, further issuance of anti-tax bonds became pointless.

The fall in the outstanding value of anti-tax bonds issued by banks and offered through public issues was partly set off by the increase in private placements. The outstanding value of non-public bonds issued by banks as of year-end 2004 was almost three times higher than a year earlier. At the end of 2004, the value of non-public bonds denominated in zloty accounted for 23.6% of the outstanding value of bonds issued by banks (compared to 5.9% at the end of 2003).[312] As a result of the discontinued issues of anti-tax bonds, the maturity structure of SBDS changed. Securities with maturities ranging from 1 to 3 months constituted the bulk of those issued in 2004 (Table 5.1.4).

Table 5.1.3. Bank liabilities arising from short-term debt securities issued

	2002	2003	2004
Bank liabilities arising from SBDS issued, billion zloty	2.8	3.5	2.7
Share of SBDS in bank liabilities arising from debt securities issued, %	89.6	69.2	60.3

Source: NBP.

Table 5.1.4. Maturity structure of short-term bank debt securities, %

	2002	2003	2004
Up to 1 month	7.5	5.2	12.2
From 1 month up to 3 months	19.3	13.4	41.7
From 3 months up to 6 months	6.7	16.0	14.4
From 6 months up to 1 year	66.5	65.3	31.6
Total	100.0	100.0	100.0

Note: Original maturities have been presented in the table. The ranges presented are closed on the right.
Source: NBP.

Primary market

In 2004, no significant changes occurred with regard to bank debt security issues. Bank securities were issued by banks with relatively small branch networks or those specialising in a specific type of banking service (e.g. car finance banks). In contrast, bonds were issued by banks with developed branch networks. This applies primarily to securities offered through public issues, which accounted for 21.4% of the outstanding SBDS.

[310] Available data on the issues of bank debt securities do not enable international comparisons concerning the development of markets for such securities in Poland and the EU.

[311] More information can be found in: *Rozwój systemu finansowego w Polsce 2002–2003*, Warszawa: NBP, 2004, p.177.

[312] The data presented refer to short- and long-term bonds.

Secondary market

As in previous years, only bank bonds offered through public issues were traded in regulated markets.[313] In 2004, as a result of amendments to regulations, it became possible to maintain a deposit of bank securities in dematerialised form outside the issuer bank. Until 2004, bank securities in the form of book entries could only be deposited with the bank that issued those securities. Amendments to the Banking Act also made it possible for the National Depository for Securities or brokerage firms to maintain bank securities deposits.[314] Such amendments were introduced in order to enable the establishment of a clearing house for such securities as well as facilitate trading in them. As of year-end 2004, however, no bank securities were registered with the National Depository for Securities. The NBP has no information concerning the trading in securities whose deposits are maintained at issuer banks or brokerage firms.

Investors[315]

Companies were the most important purchasers of bank securities denominated in zloty. As of year-end 2004, they held 61.1% of bank securities with maturities up to one year (compared to 42.7% at year-end 2003). As a result of the improvement in the economic situation, companies had fund surpluses, which they invested, among other things, in short-term bank securities.[316]

Companies were the main purchasers of bank bonds with maturities of up to 1 year issued through private placement. At the end of 2004, they held 97% of non-public bonds. On the other hand, bonds offered through public issues, which accounted for 76.4% of the outstanding value of bonds issued by banks at year-end 2004, were mainly targeted at individual investors. Trading in those securities was arranged by brokerage offices.

Development trends

The importance of short-term bank debt securities will probably decrease. No new factors have emerged so far that could change the present trend towards the decrease in the role of SBDS in bank debt securities issues. It may be expected that the amount of mortgage credits will continue to grow and universal banks will need long-term financing. Issues of long-term bank debt securities could be a source of long-term capital. If banks decided to finance the lending related to mortgage loans in this manner, the role of SBDS in commercial bank issue policies would diminish.

5.1.2.4. Short-term corporate bonds

Market size

Since 2001, the short-term corporate bond (SCB) segment has steadily diminished – in 2004, the outstanding value of such instruments issued by enterprises fell by 11.4% (to PLN 6.5 billion at the end of December 2004). The number of issuers of such instruments has also gradually decreased (Table 5.1.5).

In 2002 and 2003, short-term instruments prevailed on the corporate bond market. In 2004, the share of SCBs decreased and amounted to 48% at the end of December. Since the total outstanding value of short-term and long-term corporate bonds grew only by 4.4% (from December 2003 to December 2004), the composition of securities issued has changed (Figure 5.1.12).

In 2002 and 2003, the firms' decreasing interest in using SCBs as a source of financing could be partly explained by issue arrangers and purchasers negative exeprience during the eco-

[313] The operation of the secondary market in short-term bank bonds is discussed in section 5.2.2.4 alongside with the market in long-term bank debt securities.

[314] The Act Amending the Banking Act (*Dz.U.* No. 91/2004, item 870).

[315] The analysis is based on data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

[316] Company portfolios contained no bank securities or bonds with maturities exceeding one year.

nomic slowdown in previous years, when several enterprises did not redeem their issues. On the other hand, the small amount of SCB issues in 2004 resulted from the large amounts of available funds accumulated by companies in bank accounts. According to the firms which had not issued debt securities on the public market before, the main reason for not using SCBs as a source of finance was the lack of the need for additional financing.[317] Companies did not resort to external financing since they had sufficient funds in the form of deposits. At year-end 2004, such deposits totalled PLN 85 billion – an increase of PLN 16.7 billion on 2003 (Figure 5.1.13). Where enterprises needed external financing, they usually preferred bank loans. In the first three quarters of 2004, the attractiveness of SCBs could also be limited by the rising costs of capital for corporates (Figure 5.1.14).

The low share of short-term bonds in the total outstanding value of securities issued was also typical for the euro area (Figure 5.1.15). In recent years, the segment of long-term instruments in the euro developed more rapidly and its domination over the short-term one was even more pronounced than on the Polish market.

Table 5.1.5. Outstanding value of SCBs issued (end of December)

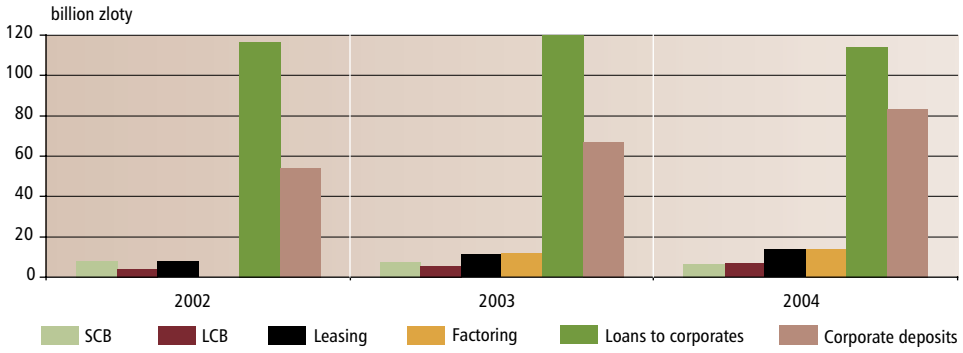
	2001	2002	2003	2004
Outstanding value (PLN billion)	n/d	7.99	7.34	6.5
SCB issuers	309	272	232	193

Sources: NBP data submitted by banks – Primary Dealers and/or money market dealers serving as depositories, Fitch Polska SA.

Figure 5.1.12. Changes in the composition of debt securities issued in 2004

Source: NBP calculations based on data submitted by banks – Primary Dealers and/or money market dealers serving as depositaries.

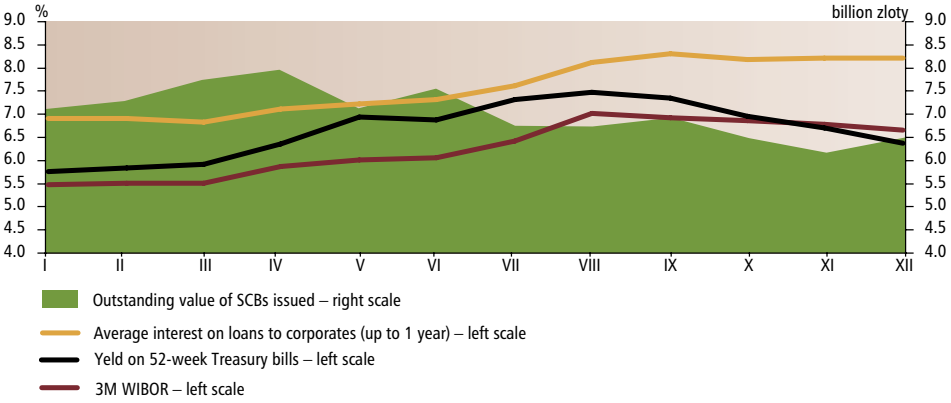
Figure 5.1.13. Selected external financing sources in Poland vs. corporate deposits



Sources: NBP, Polish Association of Leasing Companies (www.leasing.org.pl) and Financing Institutions Conference.

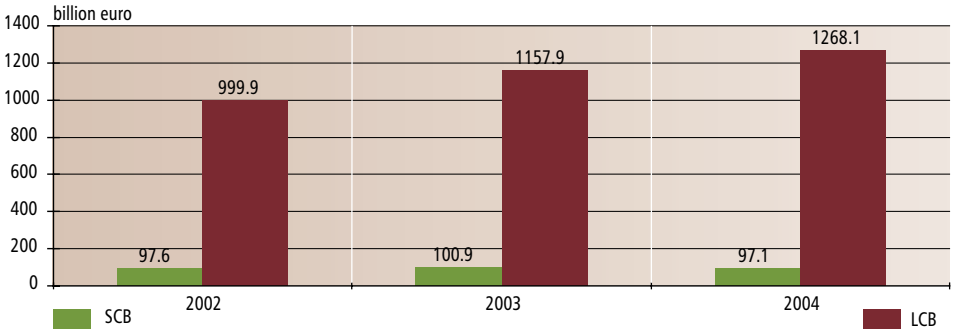
[317] *Wybrane determinanty rozwoju rynku akcji i korporacyjnych instrumentów dłużnych w Polsce. Wyniki badania ankietowego*, Warszawa: NBP, 2005, pp. 55–60.

Figure 5.1.14. Cost of raising capital for corporates and outstanding value of SCBs, 2004



Source: NBP.

Figure 5.1.15. Outstanding value of short-term and long-term debt securities issued by non-financial corporations in the euro area



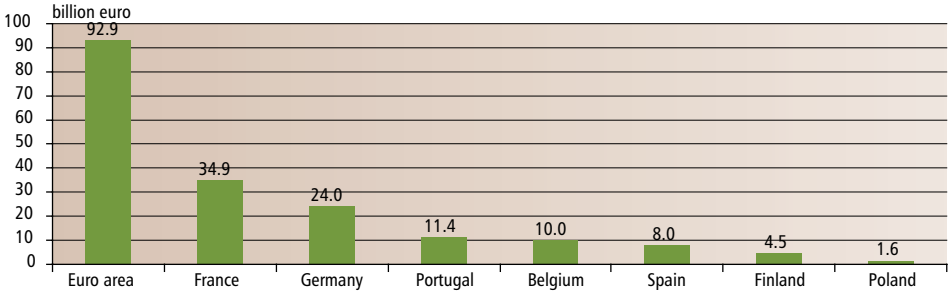
Note:

1. Non-financial corporations include businesses and non-monetary financial corporations, i.e. other financial intermediaries, financial auxiliaries, insurance companies and pension funds.

2. Data apply only to issues by euro area residents.

Source: *Euro Area Securities Issues Statistics*, European Central Bank, www.ecb.int.

Figure 5.1.16. Short-term non-government debt securities market in the euro area and Poland, end 2004



Note: Data does not include short-term bank debt securities. Data does not include Ireland and Luxembourg.

Source: *Euro Area Securities Issues Statistics: November 2004*, European Central Bank, www.ecb.int.

The oldest and most developed short-term debt securities market operates in France (at the end of December 2004, it accounted for nearly 38% of the outstanding value for the entire euro area). When the outstanding values of corporate bonds issued in the euro area and in Poland are compared, the Polish SCB market accounts for around 1.7% of the euro area market (Figure 5.1.16).

Primary market

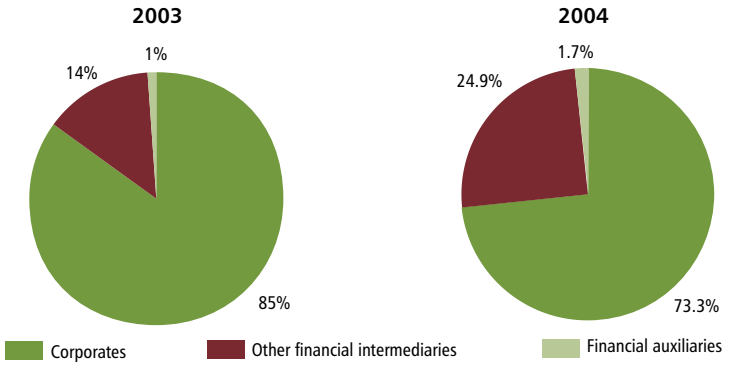
In 2004, the trends observed in the structure of SCB issuers[318] in 2002 and 2003 were sustained (Figure 5.1.17). The share of businesses fell (from 85.1% of the outstanding value of SCBs issued in 2003 to 73.3% in 2004), while that of other financial intermediaries, particularly leasing companies (an increase from 13.9% to 24.9%) grew. The reduction in the amount of SCBs issued by enterprises was the consequence of companies' high liquidity. On the other hand, the increased amount of SCBs issued by lessors was the result of the rapid development of this industry in recent years (particularly car leasing, since SCBs were also issued by car leasing firms, e.g. Volkswagen Leasing, FCE Credit and Toyota Leasing). The rising interest of leasing companies in SCB issues was, however, insufficient to reverse the downward trend in the outstanding value of SCBs issued.

In 2003 and 2004, instruments with maturities of up to one month dominated in the maturity structure of SCBs, calculated according to issue amount.[319] In 2004, enterprises conducted fewer issues with maturities ranging from one to three months and more with maturities of up to six months (Figure 5.1.18).

As in previous years, the Bonds Act was the most commonly used legal basis for the issue of SCBs (78.6% issues by outstanding value as of year-end 2004). The shares of issues conducted pursuant to the Bill of Exchange Act and the Civil Code were similar and amounted to 9.8% and 11.6%, respectively (Figure 5.1.19).

SCB issues pursuant to the Civil Code were conducted exclusively by enterprises, while SCBs in the form of promissory notes were most commonly issued by other financial intermediaries.

Figure 5.1.17. The structure of SCB issuers, end December

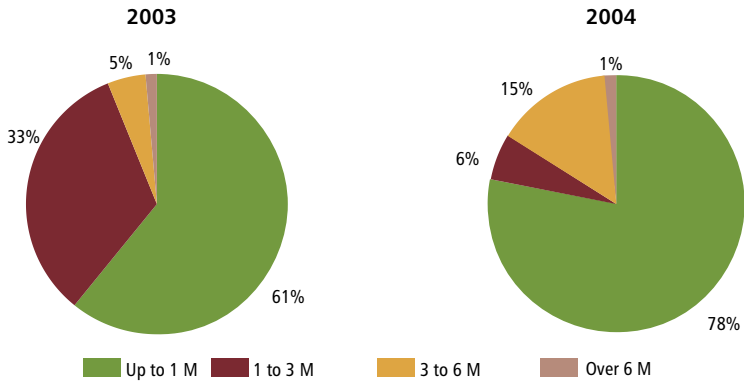


Source: NBP calculations based on data submitted by banks – Primary Dealers and/or money market dealers serving as depositaries.

[318] SCB issuers have been classified pursuant to ESA 95 (European System of Accounts 1995) – a European standard concerning sectoral classification principles in the euro area monetary and banking statistics, which was introduced by Council Regulation No. 2223/96 of June 1996 on the European System of national and regional accounts in the Community. Apart from enterprises, pursuant to the ESA standard SCBs may be issued by: (1) other financial intermediaries (including, *inter alia*, credit unions, leasing companies, factoring companies, brokerage houses and investment funds), and (2) financial auxiliaries (e.g. currency exchange offices, stock exchanges, hire purchase institutions).

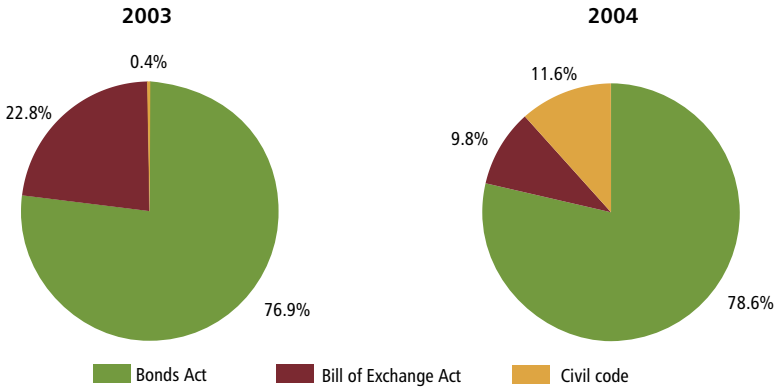
[319] The domination of instruments with original maturities of up to one month stemmed from the fact that several enterprises used SCB issues for the liquidity management, often issuing large-value securities with the maturity of maximum a few days.

Figure 5.1.18. SCBs by maturity (according to flow amounts)



Source: NBP calculations based on data submitted by banks – Primary Dealers and/or money market dealers serving as depositaries.

Figure 5.1.19. Regulations forming legal grounds for SCB issues, by outstanding value



Source: NBP calculations based on data submitted by banks – Primary Dealers and/or money market dealers serving as depositaries.

Among banks which arranged SCB issues in 2004, eight conducted them pursuant to the Bill of Exchange Act and only two pursuant to the Civil Code. The much more common use of the Bonds Act in SCB issues results from the fact that it enables the issuer to reach a larger group of potential investors and does not entail the obligation to pay the stamp duty, which amounts to 0.1% of the promissory note amount in the case of issues conducted pursuant to the Bill of Exchange Act. On the other hand, the relatively quick claim enforcement is the most important advantage of using the Bill of Exchange Act.

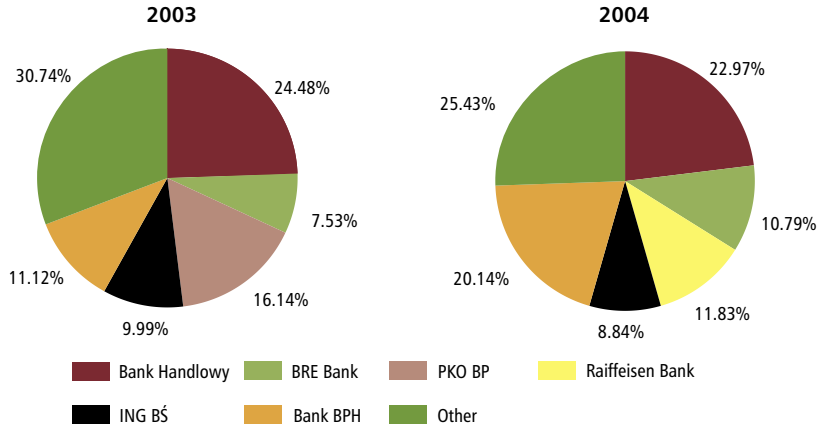
The number of new SCB issuance programmes declined gradually. In 2002, 44 new issuance programmes were initiated while, in 2004 only 19.[320] The amounts of individual SCB issues in the last year ranged from PLN 300,000 to PLN 127 million. The largest new issuance programmes initiated in 2004 were those by Europejski Fundusz Leasingowy (PLN 600 million), Toyota Leasing Polska (PLN 500 million) and Franfinance Polska (PLN 200 million). The nominal values of single instruments ranged from PLN 1,000 to PLN 1 million in the period under review. The structure of SCB issuers by industry was similar to the one in 2003. No public issue of such instruments was conducted.

The concentration among arrangers observed for several years was also present in 2004 (5 banks accounted for 74.6% of SCB issues conducted as measured by outstanding value). Since the end of 2003, the number of arrangers has decreased from 20 to 18.[321]

[320] Based on Fitch Polska reports included in the *Rating & Rynek* publication. Summary of subsequent quarters of 2004 (www.fitchpolska.com.pl).

[321] *Rating & Rynek* No. 24 (183) of December 31, 2004, Fitch Polska SA.

Figure 5.1.20. Share of issuing agents in organising short-term corporate bond issues, end December



Source: NBP calculations based on data submitted by banks – Primary Dealers and/or money market dealers serving as depositaries.

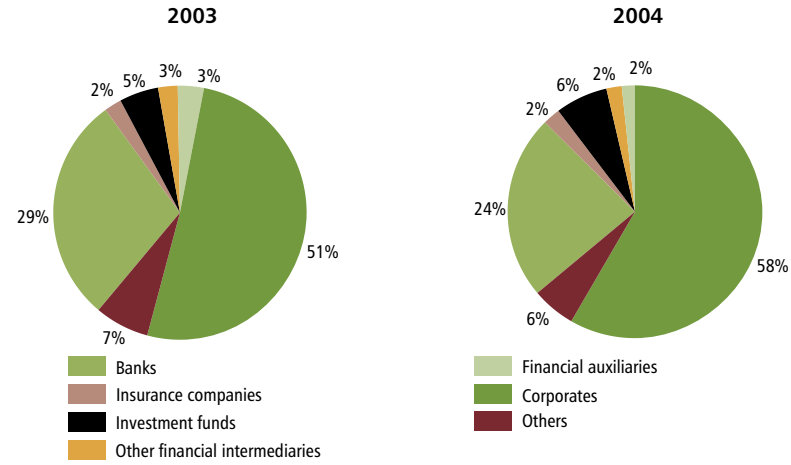
Secondary market

As in previous years, the liquidity of the secondary SCB market was low. The results of the survey conducted by the NBP in April 2004[322] showed that almost 90% of such issues were targeted either at the investors indicated by the issuing agent (37%) and at the agent itself (13%) or at the investors indicated by the issuer (37%). Due to the absence of a common clearing house (deposits for such instruments are maintained by arrangers) and the existence of three types of legal grounds for issues, no uniform secondary market in SCBs operated, just as in previous years. The operation of more than ten centres of trading in such securities, which were organised by banks – issuing agents, was not conducive to the development of the SCB segment given the limited issue scale.

Investors

As in 2002 and 2003, enterprises and banks, which jointly purchased 82% of the total amount of SCBs issued, were dominant investors in the SCB market (Figure 5.1.21). The changes in

Figure 5.1.21. Short-term corporate bond purchasers, end December



Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers, serving as depositaries.

[322] *Wybrane determinanty rozwoju rynku akcji i korporacyjnych instrumentów dłużnych w Polsce. Wyniki badania ankietowego*, Warszawa: NBP, 2005, p. 29.

the structure of purchasers in 2004 were different from those regarding LCBs – the banks' interest in the purchase of SCBs declined, while that of enterprises rose. The high proportion of enterprises among the purchasers of such securities resulted from the fact that often – acting jointly with the issuer or the issuing agent – they were the predetermined group of target investors.

Development trends and prospects

In view of the results of the survey conducted by the NBP in 2004 among both debt securities issuers and companies that had not issued SCBs previously, this segment may be expected to shrink further. Among companies which had already conducted SCB issues, only 51% expect to use this source of financing within the next two years. Among the companies, which had not issued such instruments previously, 99.5% do not expect to conduct issues in the next two years. According to 59% of surveyed companies, which had already issued SCBs, the cost of raising funds through private placement was lower than that of a bank loan (Table 5.1.6).

Taking into account the results of the aforementioned survey, it is worth considering to what extent the low popularity of credit ratings in Poland hampers the development of the SCB market. Many Polish enterprises which issue securities know about the possibility of obtaining a rating, but in their opinion having a rating would not increase the investor base (since it is often known from the outset) and would not reduce the cost of raising funds; they also state that the cost of obtaining the rating would be too high. Due to the uncertainty whether small companies, which are not well known in the market, would meet their obligations, banks only consider large and well-known ones as potential issuers. Such companies, in turn, are better positioned to find attractive external financing sources due to their market experience and often also non-financial support in the form of guarantees by companies belonging to the same capital group. It may be supposed that in the long run, enterprises, which have up until now used SCB issues for financing purposes, will prefer medium- and long-term bonds. This would be in line with trends observed in European Union countries.

In coming years, the STEP (Short-Term European Paper)[323] initiative developed in December 2003 by the ACI-STEP Task Force, ECB experts and national central banks of European Union Member States may affect the development of the Polish SCB market. It is assumed that within the framework of this initiative a common standard for the issue of non-government short-term debt securities will be established. The proposal recommends the introduction of a special STEP label for

Table 5.1.6. Comparison of attractiveness of SCB issues as a source of external financing in 2004

Instrument	%
Yield on 52-week Treasury bills on the primary market (December 31, 2004 auction)	6.3
Yield on SCBs on the secondary market (issuing agent: Bank Handlowy w Warszawie SA)	minimum: 6.07 (issuer: Rabobank, securities with a maturity of 10 days) maximum: 6.63 (issuer: Żywiec, securities with a maturity of 1 47 days) average: 6.36
Average annual interest rate on loans to corporates with maturities of up to 1 year	7.57
Average annual interest rate on corporate time deposits with declared maturities of up to 1 year	3.34
Average WIBOR values between January 1 and December 31, 2004:	
– WIBOR 1W	5.92
– WIBOR 2W	5.96
– WIBOR 1M	6.02
– WIBOR 3M	6.20

Source: NBP data, quotes as of December 10, 2004 published by the *Rzeczpospolita* daily on December 13, 2004.

[323] More information on the STEP initiative: *The Short-Term Paper Market in Europe. Proposals and recommendations for the development of pan-European market*, ACI-STEP Task Force 2003.

the issues that meet the requirements stipulated by ACI.[324] This initiative is in line with the objective of reducing market fragmentation across the European Union envisaged in the Lisbon Strategy. In response to the 2004 request of the ACI-STEP Task Force, the ECB agreed to cooperate in the performance of certain tasks related to the STEP project within the first two years of its operation. It may be expected that first issues meeting the standards developed within the STEP initiative will be conducted in 2005. As a result of awarding the STEP label to selected instruments, market transparency will improve. This will enable better credit risk assessment, which may in turn contribute to the growth in demand for SCBs and an increase in the number of its issuers in Poland.

5.1.3. Deposit transaction market

The deposit transaction market is used for current financial liquidity management by enabling participants to invest temporary surpluses or borrow funds. Taking into account transaction credit risk, unsecured interbank deposits as well as deposits collateralised by foreign currency (FX swaps) and by securities (conditional operations – repos and sell-buy-backs) can be distinguished.

Banks, which lend available funds to one another, are the most important participants on the deposit transaction market. Large-value transactions with maturities ranging from one day to one year are concluded on the interbank market. A comparison between the interbank deposit transaction markets in Poland and the euro area indicates significant differences (Figure 5.1.22). In 2003 and 2004, conditional transactions, mainly repos with maturities ranging from T/N to one month, prevailed on the euro area money market, in which banks from various countries participate. O/N transactions dominated on the unsecured deposit market. This turnover structure resulted from the fact that transactions with longer maturities involve higher credit risk. FX swaps were the least popular deposit instrument among euro area banks. Transactions with maturities of up to one week have dominated in this deposit transaction market segment.[325]

In 2004, unsecured interbank deposits were the most popular instruments used to manage bank liquidity in Poland. Conditional transactions with other banks were used to to a limited extent only. The average daily amount of conditional transactions between domestic banks was less than one seventh of the turnover in the unsecured deposit market. The noticeable rise in the share of conditional transactions in 2004 was largely due to buy-sell-back transactions with BGK.[326] Transactions between residents in the FX swap market, which are used, among other things, to manage the zloty liquidity position of domestic banks, only had a small share in net turnover (10–15%). The structure of the interbank money market in Poland was similar to those in other countries of the region – e.g. in Hungary, unsecured deposits also prevailed among the deposit transactions concluded between resident banks.[327] The absence of a developed conditional transaction segment points to the inefficiency of the Polish money market. The financing possibilities of small and medium-sized banks on the interbank unsecured deposit market are limited due to low credit limits; such banks must often depend on switch transactions where a third party is necessary.[328]

The experiences of some countries which have already joined the euro area indicate that the adoption of the single currency does not entail a change in the structure of the deposit transaction market. Despite the development of the conditional transaction market in most EMU countries, such operations still played a limited role in the transactions of banks operating in Finland.[329] As in Poland, unsecured deposits prevailed among bank deposit transactions there. This was caused by the fact that not even a moderately liquid conditional transaction market had existed in Finland

[324] *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 146.

[325] *Euro Money Market Study 2004*, Frankfurt: ECB, 2005, pp. 8–30.

[326] See sections 5.1.2.2 and 5.1.3.3.

[327] C. Balogh, P. Gabriel, *The interbank money market. Past and future trends*, Budapest: Magyar Nemzeti Bank, 2003, pp. 18–27.

[328] More information on switch transactions: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 148.

[329] H. Koskenkylä (ed.), *Finnish Financial Markets 2002,* Helsinki: Bank of Finland, 2003, pp. 41–42.

Figure 5.1.22. Turnover between resident banks on the deposit transaction market in Poland and in the euro area

Note: Net turnover on the deposit transaction market amounts to the nominal value of unsecured deposits, conditional transactions and FX swaps concluded between banks – Polish and euro area residents, denominated in zloty and euro, respectively.

Source: NBP calculations based on NBP and National Depository for Securities data as well as ECB reports: *Money Market Study 2003,* Frankfurt: ECB, 2004; *Euro Money Market Study 2004,* Frankfurt: ECB, 2005.

prior to its entry to the euro area. By force of habit, Finnish banks continued to use unsecured interbank deposits only for managing their liquidity positions despite the fact that they had access to the euro area repo market. Therefore, it appears that in coming years, the Polish money market should evolve towards the model operating in the euro area so that the markets can be fully integrated after the single currency has been adopted.

5

5.1.3.1. Unsecured deposits

Unsecured interbank deposits are the easiest manner in which banks obtain short-term funding. On the interbank deposit market, funds are continuously transferred from banks with temporary surpluses to banks with liquidity shortfalls resulting e.g. from the need to maintain the average amount of required reserves. This market fulfils a very important function from the point of view of financial system stability since it ensures the distribution of liquidity throughout the entire banking system. As opposed to conditional transactions and FX swaps, borrowing on the interbank deposit market has a certain advantage – it does not require any collateral in the form of securities or foreign currency, respectively. On the other hand, however, the size and liquidity of the domestic unsecured deposit market is constrained by credit limits mutually imposed by commercial banks. Conditional transactions and FX swaps charge the credit limit of up to 10% of the nominal value of the transaction, while for a classical interbank deposit it is 100% of the nominal value.

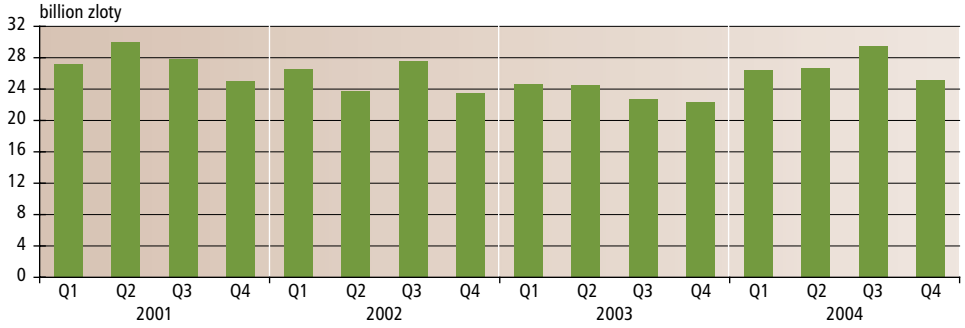
Market size

No significant changes in the value of funds placed in unsecured interbank deposits market have occurred in recent years. After an insignificant decrease in average outstanding in 2003, it grew again and amounted to over PLN 25 billion as of year-end 2004 (Figure 5.1.23). In 2004, the average daily net turnover in the interbank deposit market decreased by PLN 0.3 billion compared to 2003 and amounted to PLN 7.4 billion (Figure 5.1.24). Transactions with maturities of up to one week prevailed. Market participants stated that O/N deposits accounted for as much as 75–80% of net turnover. This term structure resulted from the flexibility offered by O/N deposits with regard to bank liquidity management – the liquidity of the banking system and the surpluses or needs of individual undertakings change daily. Such a turnover maturity structure was typical not only in Poland. In Hungary, for example, overnight transactions also had the largest share in turnover (84%).[330] In the euro area, the share of O/N deposits in net turnover in the unsecured deposit transaction market was slightly lower and amounted to 65%.[331]

[330] *Report on financial stability. December 2004*, Budapest: Magyar Nemzeti Bank, 2004, pp. 46–48.

[331] *Euro Money Market Study 2004,* Frankfurt: ECB, 2005, p. 10.

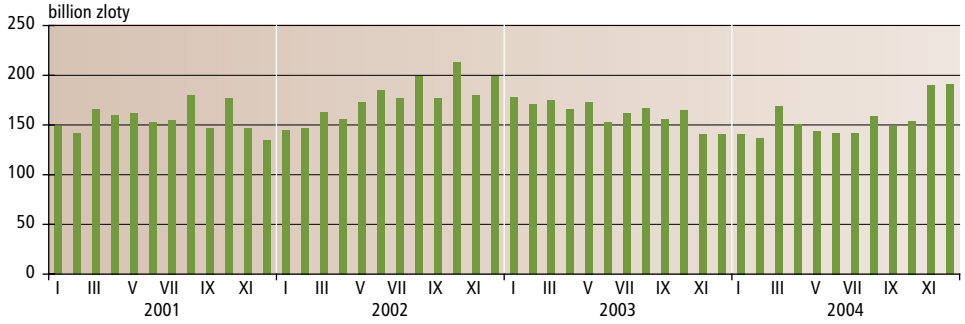
Figure 5.1.23. Interbank deposits outstanding



Note: Interbank deposits outstanding is the amount of zloty interbank deposits placed by domestic banks with other domestic banks.

Source: NBP.

Figure 5.1.24. Monthly net turnover in the interbank deposit market



Source: NBP.

Market structure

The term structure of turnover affected outstanding breakdown by original deposit maturity (Figure 5.1.25). O/N transactions accounted for almost half of the debt. Deposits with original maturities of over three months comprised just around 15%.

In 2004, the spread between the rates at which banks wished to lend funds to other banks (WIBOR) and accept deposits (WIBID) was more stable than in previous years. The spread quoted ranged from 10–15 basis points for deposits with maturities from one month to one year to 15–25 basis points for transactions with maturities from one day to two weeks. The wider spread for deposits with maturities of up to two weeks was a result of the higher volatility of short-term interest rates, which are much more sensitive to changes in banking system liquidity.

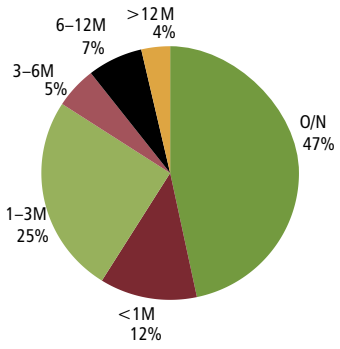
In 2004, the O/N rate fluctuated most (Figure 5.1.26). This resulted mainly from changes in the amount of central government deposits with the NBP. Insufficient TS portfolios at certain banks were a factor increasing the volatility of O/N rates – Treasury securities are used as collateral in lombard loans. The average deviation of the 2W WIBOR rate from the reference rate amounted to 18 basis points and was 7 basis points higher than in 2003. This deviation was particularly high in April, May and November, i.e. during periods when tensions occurred in the money market. Interest rates on deposits with 1M and longer maturities were more stable. Such rates were much less dependent on money demand and supply. Market participants' expectations concerning the future level of interest rates were the most important factor in determining these rates.

Just as in 2003, banks managed funds in their current accounts efficiently, which, combined with open market operations, allowed them to maintain low surpluses of the average reserve

holding on current accounts with the NBP compared to the required reserves (Figure 5.1.27). The average positive deviation of the amount of funds in accounts held with the NBP compared to the minimum reserves was PLN 23 million (0.2% of required reserves) and was PLN 2 million lower than in 2003. Maintaining a low surplus was facilitated by granting banks access to NBP overnight standing facilities and the daily publication in Reuters of information on the obligatory required reserves and the amount of commercial banks' funds held on accounts with the NBP on the previous day.

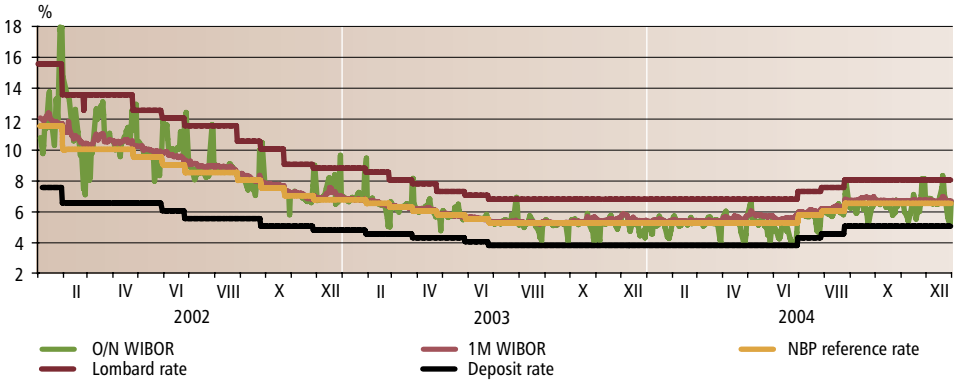
Funds held on current accounts with the central bank are used to make large-value payments in the SORBNET system. Changes concerning the calculation of reserve requirements introduced in the fourth quarter of 2003 caused a reduction in the amount of funds maintained by banks in current accounts with the NBP.[332] This means that banks had to settle the same payments with less funds at their disposal. The ratio of turnover to the amount of banks' funds held on accounts with the NBP increased even more in the fourth quarter of 2004 (Figure 5.1.28). During this period, the turnover in banks' settlement accounts grew considerably. This was a result of higher flows arising from interbank customer orders related to non-residents' intensified activity in the zloty spot market and the zloty FX swap market. Such transactions are settled by non-residents via nostro accounts with domestic banks participating in the SORBNET system.

Figure 5.1.25. Maturity structure of interbank deposits outstanding, end October 2004



Note: Maturity bands are closed on the right. The band labelled as "<1M" covers all deposits with maturities of one month or less (including T/N and S/N ones) except for O/N transactions.
Source: NBP.

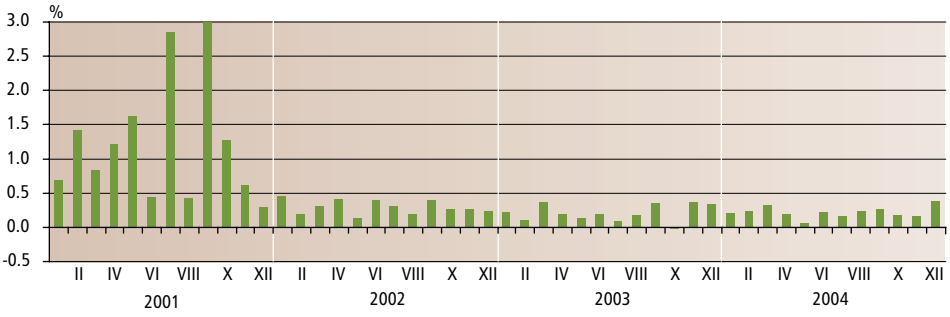
Figure 5.1.26. WIBOR and NBP (reference, lombard and deposit) rates



Source: Reuters.

[332] Since September 30, 2004, each bank denotes from the calculated amount of required reserves an allowance of EUR 500,000. Since October 31, 2004, the reserve ratio has been reduced to 3.5%. More information on changes concerning the reserve requirement in Poland in: *Report on Monetary Policy Implementation in 2003,* Warsaw, NBP, 2004, pp. 25–26.

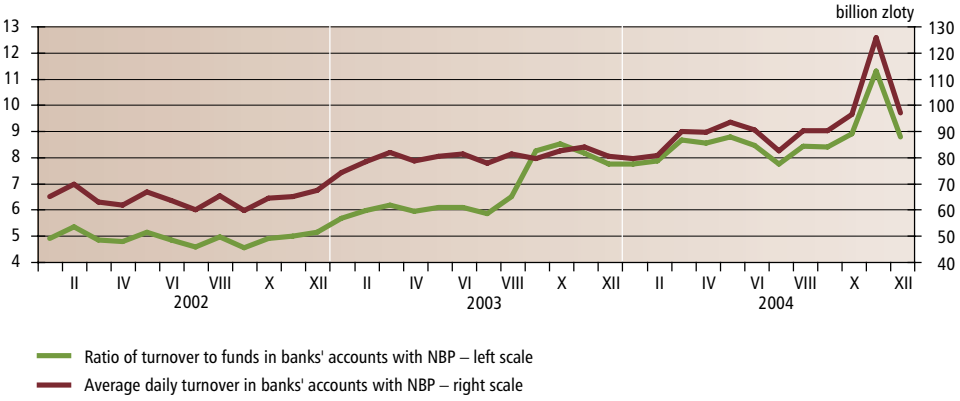
Figure 5.1.27. Deviation of the reserve holdings held on current accounts with the NBP from required reserves



Source: NBP.

Figure 5.1.28. Turnover in bank current accounts with the NBP and the ratio of this turnover to the average amount of funds held on these accounts, 2002–2004

Source: NBP.



In 2004, the NBP finished work undertaken in co-operation with the Polish Bank Dealers Association ACI Polska on the introduction of the POLONIA (Polish Overnight Index Average) rate, the equivalent of the euro area EONIA rate. Fixing rules were developed and operational tests were conducted regarding the transfer of data and rate calculation. The manner and principles of determining the POLONIA rate will be similar to those applicable to the CZEONIA rate introduced in the Czech Republic in December 2001. As the average interest rate on O/N deposits weighted by their amounts, the POLONIA rate will reflect the true cost of raising funds on the money market more accurately than the O/N WIBOR rate. The introduction of this more transparent reference rate, which is planned for January 2005, should contribute to the development of the Overnight Index Swap market.[333] As planned, the NBP will be responsible for the fixing (calculation of the POLONIA rate). The POLONIA rate will be published by the NBP in Reuters each working day at 5 p. m. The banks which are WIBOR and WIBID Reference Rate Fixing Participants will participate in POLONIA rate fixing.[334] They will be required to submit to the central bank information (concerning amounts, interest rates and counterparties) on all unsecured O/N transactions concluded with other fixing participants.

[333] More information about the development of the market for this instrument in Poland can be found in section 5.4.1.2.

[334] *The rules and regulations for the fixing of the reference rates WIBOR and WIBID*, Warsaw: Polskie Stowarzyszenie Dealerów Bankowych ACI Polska, 2004.

In 2004, unsecured deposit transactions were concluded on the domestic interbank market using voice brokers and the Reuters Dealing Direct electronic communications system as well as on the phone. A very small number of banks used the Delta Dealing System. The relatively high share of voice brokers relative to other markets resulted from the considerable flexibility of such transactions, which makes it possible to find switch transaction intermediaries.

In 2004, the e-MID company – the organiser of, *inter alia*, the electronic euro interbank deposit market whose participants included several dozen banks from various EU countries – undertook further measures aimed at establishing an electronic trading platform for zloty deposits. The system is to be tested in Poland in the second half of 2005. It is planned that transactions in the electronic zloty deposit market will be concluded via the Bloomberg service or on the Internet. In the EU, the e-MID platform accounts for 18% of net turnover in the euro interbank deposit market.[335] The use of the e-MID platform by domestic banks should bring the structure of the domestic market closer to the EMU money market, where the role of electronic transaction systems has grown considerably in recent years. It would also make the interbank deposit market more transparent. The establishment and operation of the e-MID platform for zloty interbank deposits will largely depend on the interest of potential participants – banks operating in Poland.

Development trends and prospects

The further development of the unsecured interbank deposit market will depend on the credit limits imposed by market participants on each other. The liquidity of this market may also be affected by the probable evolution of the Polish money market towards the model functioning in the euro area where a well-developed repo market operates. In such a case, the focus of domestic banks' activity would partly shift from the unsecured deposit market to the conditional transaction one. The potential utilisation of the e-MID platform by domestic banks and the launch of the SORBNET-EURO (large-value euro payment system) which is planned for the first quarter of 2005 will facilitate the integration of the Polish money market with the euro area market even before the single currency is adopted.

The experience of countries which established the EMU indicates that after Poland adopts the euro, interbank deposit market participants may split into three groups. Some domestic banks with majority foreign equity will be transformed into branches of foreign credit institutions and will not manage their euro liquidity position in Poland. The second group will be the largest banks, which currently conclude diverse transactions with foreign banks and have considerable credit limits with them. These banks will be active in the integrated single euro area market. Their creditworthiness will allow them to conduct transactions in the local market (with smaller domestic banks) as well as cross-border ones. The third group, which will mainly cover small banks, which manage their liquidity independently, will conclude unsecured deposit transactions on the domestic market exclusively. Therefore it appears that such banks should frequently use other deposit instruments – repos or sell-buy-backs – which would allow them to extend the list of potential transaction partners on the interbank market.

5.1.3.2. Secured deposits

The analysis of the secured deposit transaction market will be divided into two parts – on FX swaps (deposits collateralised by foreign currency) and conditional transactions – repos and sell-buy-backs/buy-sell-backs (deposits collateralised by securities).

5.1.3.2.1. FX swaps

An FX swap is a combination of two opposite foreign exchange transactions which are settled on different dates. Thus an FX swap consists of two secured deposit transactions. This instru-

[335] Own estimates based on e-MID data and ECB reports: *Money Market Study,* Frankfurt: ECB, 2003; *Euro Money Market Study 2004,* Frankfurt: ECB, 2005.

ment makes it possible to obtain liquidity in the domestic currency for a definite period as a result of the sale of a foreign currency in the initial exchange (the short leg) and its obligatory repurchase in the final exchange (the long leg).

Market size

FX swap remained the most liquid instrument on the Polish money market. In 2004, the average daily turnover in the Polish interbank FX swap market amounted to PLN 12.9 billion,[336] of which 89% were transactions with non-residents (Figure 5.1.29). The considerable liquidity of the FX swap market was the result of Polish regulations which favoured this instrument over traditional interbank deposits – e.g. deposits accepted from non-residents in FX swaps were not subject to the reserve requirements because FX swaps are off-balance sheet operations.[337] In addition, diverse applications of this instrument contributed to the dynamic market development.[338] Various investment strategies employing FX swaps were pursued not only in Poland but also in other countries of the region, e.g. in Hungary.[339]

In 2004, a further rapid development of the domestic FX swap market in terms of turnover was observed (Figure 5.1.29). Compared to 2003, average daily net turnover grew by around 10%, and the share of non-residents went up by 3 percentage points on average. Based on information obtained from market participants, it may be claimed that the higher liquidity stemmed from speculation on the zloty exchange rate using synthetic forwards and from the fact that part of the considerable increase in non-residents' investments in Treasury bonds issued in Poland (in 2004, these investments rose by about PLN 20 billion) was financed using this market. In the second half of 2004, the strong trend towards the appreciation of the zloty and the investors' considerable interest in emerging markets' currencies favoured the carry trades in the zloty market. Based on data from several domestic banks, it may be estimated that in 2004 around 65% of average daily turnover in the FX swap market (only resident – non-resident transactions) were deals where non-residents purchased zlotys in the initial exchange. On this basis, it may be estimated that at least several billion zloty invested by non-residents in Polish Treasury bonds could be obtained on the FX swap market. The increase in FX swap market liquidity could be one of the reasons for the rise in the foreign currency deposits held by domestic banks with foreign banks (the amount of such deposits grew by 40% in balance sheet terms compared to year-end 2003). It does not appear, however, to have been the most important factor determining the amount of foreign currency deposits since foreign currencies obtained by domestic banks through FX swaps only constituted part of the foreign currency deposits. Most of non-residents' net investments in Treasury bonds were probably financed on the spot market, which largely contributed to the increase in domestic banks' foreign currency deposits.

The survey of FX and OTC derivatives market development (*Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004*)[340] conducted in April 2004 and coordinated by the Bank for International Settlements was the first comprehensive source of information on the liquidity of the zloty FX swap market, including transactions concluded outside Poland. Taking into account that the value of transactions recorded on the interbank market in Poland in April 2004 was lower than the annual average and allowing for the balance of omissions resulting from survey

[336] This is the average daily nominal value of transactions adjusted for double-counting. Only the zloty leg of the initial or final exchange is taken into account.

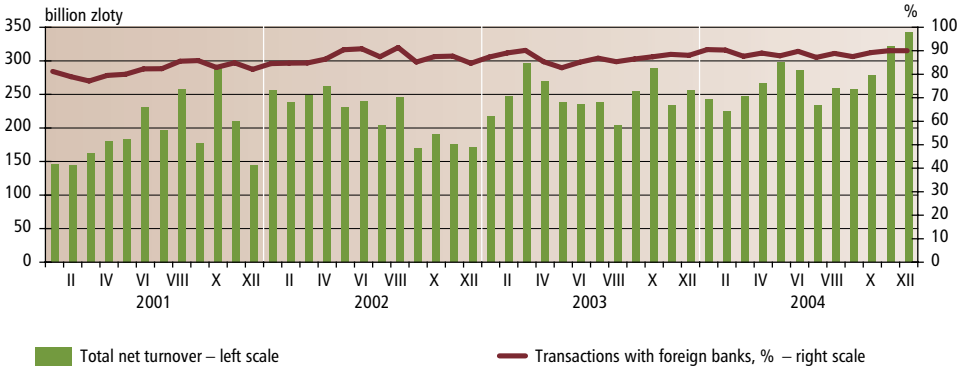
[337] Nominal value of currency which should be bought and sold in the long leg of FX swap is recognised in off-balance sheet as "liabilities from FX operations".

[338] More on this subject: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, pp. 152–153, and A. Sławiński, „Zastosowania transakcji fx swap na polskim rynku finansowym", *Rynek Terminowy* No. 16/2/2002, pp. 50–53.

[339] For a description of the application of such strategies in the forint market in 2003: C. Csávás, G. Kóczán, *Development of the Hungarian derivatives market and its effect on financial stability*, in: *Report on financial stability. December 2003*, Budapest: Magyar Nemzeti Bank, 2003, pp. 88–92.

[340] Survey methodology and detailed results for Poland have been presented in: *Turnover in Polish foreign exchange and OTC derivatives markets in April 2004. Results summary.* NBP – www.nbp.pl/SystemFinansowy.

Figure 5.1.29. Monthly turnover on the interbank FX swap market in Poland



Note: Net turnover – monthly nominal value of transactions adjusted for double-counting. The figures presented only include transactions where the zloty was one of the currencies involved.

Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

Table 5.1.7. Average daily turnover in zloty, Czech koruna and forint FX swap markets, April 2004, USD million

	Zloty	Czech koruna	Hungarian forint
Total turnover, of which:	**4,982**	**1,824**	**2,565**
Transactions between residents	446	134	205
Resident – non-resident transactions	3,049	731	1,356
Transactions between non-residents (offshore)	1,487	959	1,003

Note: The balance of omissions has not been taken into account.

Sources: NBP calculations based on *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004*, Basel: Bank for International Settlements, 2005, p. 48–51 and domestic figures submitted by the NBP, Czech National Bank and the National Bank of Hungary.

methodology, the total average daily turnover in the zloty FX swap market should be estimated at USD 5.35–5.45 billion. This is undoubtedly the largest market among the currencies of the region (Table 5.1.7), over three times more liquid than the Russian rouble FX swap market.[341]

Market structure

Based on the aforementioned survey it may be stated that transactions between non-residents accounted for almost 30% of total turnover on the zloty FX swap market, while transactions between residents constituted less than 10%. An even larger share of offshore turnover was observed on the forint and Czech koruna markets. Taking into account the very high share of non-residents in transactions with domestic banks (almost 90%) and the value of deals concluded outside Poland, it should be stated that the FX swap market was dominated by non-residents. In the Czech Republic and Hungary, as in Poland, non-residents usually used FX swaps to speculate on exchange rates and finance their investments in domestic assets. The low value of transactions with non-banking institutions was another typical feature of the FX swap market in Central and Eastern European currencies (Table 5.1.8). Non-financial companies were counterparties to FX swap transactions very rarely, since they largely used outright-forward transactions and option strategies to hedge FX risk.

On the domestic FX swap market, USD/PLN deals dominated – 98% of the value of transactions involving the zloty. A similar situation occurred in Hungary. The higher share of the

[341] *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004*, Basel: Bank for International Settlements, 2005, pp. 50–51.

Table 5.1.8. Average daily turnover and structure of FX swap market in Poland, the Czech Republic and Hungary in April 2004, USD million

	Poland	Czech Republic	Hungary
Turnover – foreign currencies/domestic currency, USD million	3,495	865	1,562
– of which: EUR/domestic currency, %	2	18	4
– of which: USD/domestic currency, %	98	78	96
Interbank market, USD million	3,458	770	1,554
Customer market, USD million	37	95	7
Turnover – foreign currencies/foreign currencies, USD million	600	412	409

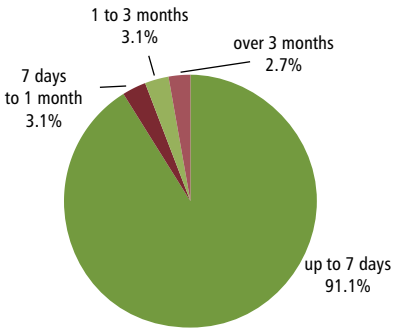
Note: In emerging markets, the "other reporting institutions" category included mostly smaller banks. Therefore, in this table the interbank market includes transactions concluded with "other reporting institutions" and "other financial institutions".

Sources: NBP calculations based on domestic results of *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004* submitted by the NBP, Czech National Bank and the National Bank of Hungary.

EUR/domestic currency pair in the Czech Republic was caused by the relatively high amount of customer transactions (11% of turnover, while in Poland and Hungary they accounted for around 1%). The domination of USD/domestic currency transactions on the interbank FX swap market resulted from the standard prevailing on the global market. The US dollar was universally used both as collateral for short-term FX swap loans and for financing a long position in a currency with a higher interest rate on the forward market. Domestic banks also engaged in FX swaps which did not involve the zloty. The average daily turnover in the foreign currency/foreign currency segment in April 2004 amounted to USD 600 m; these were mainly EUR/USD and USD/CHF swaps.

The popularity of FX swaps for financing positions in Treasury securities and short-term speculation on the exchange rate is confirmed by the term structure of these operations – transactions with maturities of 7 days or less constituted 91% of turnover (Figure 5.1.30). According to dealers operating on the Polish money market, O/N and T/N transactions accounted for 75–85% of all FX swaps. As in previous years, T/N FX swaps prevailed among the transactions used to obtain zlotys required for Treasury security investments.[342] The widespread use of T/N swaps was related to the standard date of spot transaction settlement (on the second business day). Where an FX swap is concluded, the flows arising from the spot transaction conducted the day before can be neutralised while maintaining the zloty position. When an investor wants to maintain his FX position for a longer period, he rolls the T/N swap over daily. Transactions with maturities exceeding one month accounted for around 10% of turnover, similarly as in Hungary, and were primarily used for speculation on interest rate movements and hedging positions in forward transactions.

Figure 5.1.30. Maturity structure of turnover on the FX swap market in Poland, 2004



Note: The maturity bands closed on the right.

Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

[342] *Financial System Developm ent in Poland 2002–2003*, Warsaw: NBP, 2004, p. 154.

During the period under analysis, banks very often concluded FX swaps where the fixed amount was expressed in zloty. Transaction terms on the interbank market were mainly arranged using the Reuters Dealing Direct electronic transaction system.

Participants

The domestic interbank FX swap market was considerably concentrated; the degree of concentration was higher than on the zloty spot market. The share of the three most active domestic banks in net turnover was over 50% (Figure 5.1.31). In Hungary, the analogous concentration index was even higher, at 60%.[343]

As has already been mentioned, non-residents were the most important participants on the zloty FX swap market. Among this group, banks operating in London were the most active. Information obtained from market participants indicates that in the second half of 2004, when a strong appreciation trend was present on the zloty market, hedge funds often employed carry trade strategies using FX swaps in order to speculate on zloty appreciation.[344] In 2002 and 2003, hedge funds intensified their activity on the global FX market considerably. In searching for yields higher than those to be achieved on the securities market, asset managers started to invest, among other things, in currencies with higher interest rates than the US dollar and the euro. Investment and hedge funds employed the carry trade strategy in emerging markets (including the zloty market) as well as applied momentum trading there – taking huge open positions in currencies whose exchange rates are shaped by strong appreciation trends.[345]

The impact of the employment of the two most popular FX swap strategies (financing positions in zloty assets and carry trades) by non-residents on the zloty exchange rate, is analysed below. The first strategy – financing non-residents' investments in Treasury bonds – is neutral for exchange rate. The conclusion of an FX swap does not change the FX position, and therefore domestic banks do not have to hedge using spot FX transactions. Moreover, there are several other reasons why domestic banks rarely sell foreign currencies obtained in the first leg of FX swap. First, the resale of the foreign currency would entail opening an FX position. Apart from the market risk, liquidity risk would also emerge since a non-resident may cease to roll over FX swaps. Second, in the fourth quarter of 2004, the sale of US dollars obtained in FX swaps would require an additional spot EUR/USD transaction to be conducted.[346] Moreover, domestic banks, which lend zlotys to non-residents in FX swaps, obtain the domestic currency not on the spot FX market but on the interbank unsecured deposit market. Therefore a surge in the non--residents' positions in T-bonds financed via FX swaps may result in an increase in interest rates on short-term interbank loans, which might in turn affect the exchange rate by changing the interest rate disparity. This impact would, however, be limited due to the possibility of conducting open market operations by the central bank as well as an increase in the cost of financing the positions in bonds and, therefore, a drop in demand for liquid zloty funds. In conclusion, increased investments by non-residents in Polish T-bonds financed on the FX swap market do not entail pressure towards zloty appreciation caused by the sale of foreign currencies on the spot market by domestic banks. Slight exchange rate movements may potentially result from a change in interest rate disparity brought about by a significant increase in demand for zlotys on the money market. The second strategy (carry trade) has a direct impact on the zloty exchange rate, since the purchase of Polish currency by non-residents on the spot market forms part of this appreciation

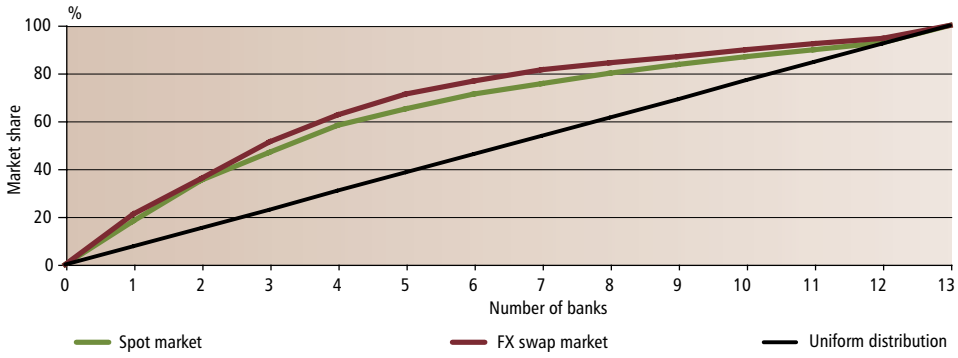
[343] *Report on financial stability. December 2004*, Budapest: Magyar Nemzeti Bank, 2004, p. 39.

[344] More on this subject: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, pp. 152–153, and A. Sławiński, „*Zastosowania transakcji fx swap na polskim rynku finansowym*", Rynek Terminowy No. 16/2/2002, pp. 50–53.

[345] G. Galati, M. Melin, *Why has FX trading surged? Explaining the 2004 triennial survey*, BIS Quarterly Review December 2004, pp. 67–74.

[346] While USD/PLN transactions account for around 98% of turnover on the domestic FX swap market, in the fourth quarter of 2004 the EUR/PLN pair prevailed in the interbank spot market with a 68.5% share in turnover. Thus, US dollars from the FX swap would have to be converted into euros first and only later into zlotys.

Figure 5.1.31. Concentration in the FX swap and zloty spot markets, April 2004



Source: NBP calculations based on data submitted by banks taking part in the *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004* in Poland.

speculation strategy. Moreover, this strategy affects counterparties' FX positions. Banks, which are the counterparties to such transactions, take a long off-balance sheet position in a foreign currency. They may sell the foreign currency on the spot market in order to limit the open FX position, which may increase the pressure towards zloty appreciation.

Development trends and prospects

Until Poland adopts the single currency, the FX swap market will remain the most liquid segment of the domestic money market. The liquidity of this market will be determined by both global and local factors. On the one hand, continuing global excess liquidity and the related search for yield as well as the considerable activity of hedge funds in emerging markets should stimulate the development of the FX swap market, since for non-residents, participation in this market is a way of obtaining zlotys, which enables them to invest on the Polish financial market. On the other hand, further consolidation in the domestic banking system may limit FX swap market liquidity.

Poland's entry into the euro area will be a watershed in the development of the domestic FX swap market. The experience of countries which have already joined the EMU indicate that the replacement of the zloty by the euro will involve a significant decrease in FX swap market. The examples of Finland and Portugal – countries where the money market structure in 1998 was similar to that currently observed in Poland – indicate that the value of FX swap transactions concluded by residents may drop considerably (Table 5.1.9). Due to the impossibility of speculating on the zloty exchange rate and investing in Treasury securities denominated in zlotys via the FX swaps, market size will be reduced. Transactions involving the euro will not replace zloty transactions, since the most important market participants (non-residents) will simply have no reason to conclude transactions with banks operating in Poland, as transactions involving speculation on the euro exchange rate may be concluded with entities from all over the world.

Table 5.1.9. Average daily net turnover in FX swap markets in Finland and Portugal, USD million

	1998	2001	2004
Finland	2,751	1,034	869
Portugal	2,227	688	820

Sources: Bank of Finland press releases: *Survey of foreign exchange and derivatives market activity in Finland, Spring 2001; Survey of foreign exchange and derivatives market activity in Finland, Spring 2004*, and the press release of the Bank of Portugal: *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity. Data for Portugal – Preliminary Results.*

5.1.3.2.2. Conditional transactions

Deposits in form of conditional transactions have certain advantages, since they involve a smaller credit exposure to the counterparty than traditional interbank deposits. The fact that such deposits are collateralised by securities guarantees greater security for market participants and allows them to manage their liquidity freely even when the credit risk of financial institutions is higher. In conditional transactions, risk does not arise from the counterparty's creditworthiness, but solely from the volatility of collateral value. Moreover, because of the collateral, the cost of such loans is lower than that of loans on the interbank deposit market.

Two types of conditional transactions collateralised by debt securities are concluded on the Polish money market: repos and sell-buy-back/buy-sell-back (SBB/BSB) transactions. In 2004, beginning with the July reserve maintenance period, a zero reserve ratio was introduced for repo transactions conducted by banks with non-banking institutions.[347] Since that time, the economic application and characteristics of these instruments have been almost identical. Changes in accounting principles (IAS 39) have made it possible to recognise the assets collateralising repos and SBBs/BSBs on the balance sheet in a uniform manner. For both types of transactions, the party obtaining funds should keep on its balance sheet the instruments that have been submitted as collateral for the duration of those transactions. Currently, only certain details in their legal construction concerning, among other things, proceeds from securities, cause these two types of conditional transactions to be treated as distinct in Poland. As a result of these details, different investment limits for non-banking financial institutions have been imposed on repos and SBB/BSB transactions; there is no uniform manner of recording the securities submitted as collateral in depositories, either.[348]

Market size

Due to the exemption of SBB/BSB transactions concluded by banks with non-banking institutions from the reserve base as well as restrictions regarding repo transactions imposed on certain institutional investors (e.g. pension funds), the SBB/BSB market was more liquid in Poland. Since the latter constraint still holds, changes in the required reserve regime introduced in July 2004 did not improve the liquidity of the repo market. As a result of this structure of conditional transactions, the Polish money market differed from the euro area one. In most European countries with developed financial markets (e.g. France, Germany or Great Britain), but also in Hungary, the traditional repo market was more developed. Only in Italy and Spain did SBBs/BSBs prevail – their share in total turnover on the conditional transaction market exceeded 75%.[349]

In fact, the increase in turnover on the conditional transaction market observed in 2004 was the result of intensified activity in the SBB/BSB segment (Figure 5.1.32). The average daily turnover on the SBB/BSB market grew by almost 10% compared to 2003 and reached PLN 4.3 billion. The rise in the value of these transactions in the second half of 2004 stemmed from operations concluded between BGK and other banks which provided liquidity to the banking system.[350]

Average daily turnover on the repo market amounted to around PLN 180 million, which only accounted for 4% of turnover on the conditional transaction market (Figure 5.1.32). Despite the aforementioned changes in the required reserve system in the second half of 2004, repo transactions were still concluded almost exclusively between banks. Nevertheless, SBB/BSB transactions dominated on the interbank market. In 2004, SBBs/BSBs accounted for 80% of turnover on the interbank conditional transaction market. The increase in this share by 20 percentage

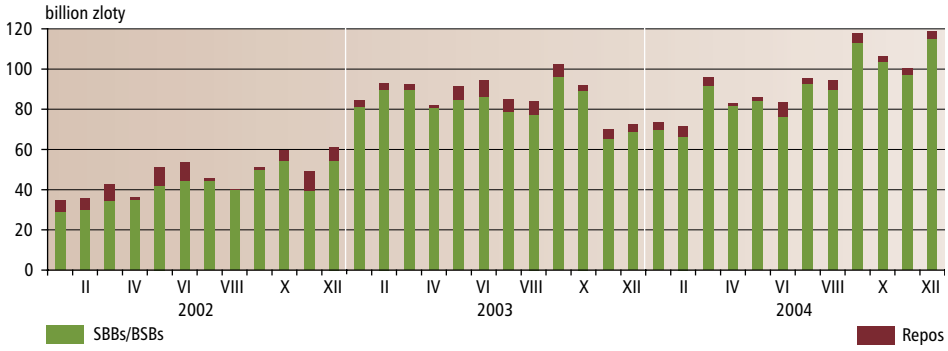
[347] Resolution No. 1/2004 of the Monetary Policy Council on banks' reserve requirements and the rate at which required reserves are remunerated of March 30, 2004 (Official Journal of the NBP No. 2/2004, item 2).

[348] More information on differences between repos and SBB/BSB transactions and their application: *Financial System Development in Poland 2002–2003*, Warszawa: NBP, 2004, p. 155.

[349] M. Ciampolini, B. Rohde, *Money market integration a market perspective*, paper for the conference "The Operational Framework of the Eurosystem and Financial Markets" at the ECB, Frankfurt 2000, pp. 17–18.

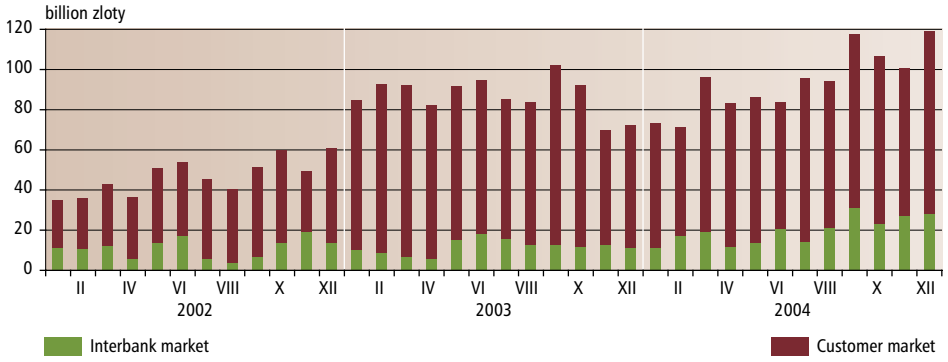
[350] See section 5.2.2.

Figure 5.1.32. Monthly turnover in SBB/BSB and repo segments in Poland



Source: NBP calculations based on NBP Securities Register and National Depository for Securities data as well as reports submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

Figure 5.1.33. Monthly net turnover on interbank and customer conditional transaction markets



Source: NBP calculations based on NBP Securities Register and National Depository for Securities data as well as reports submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

points compared to 2003 resulted from the inclusion in statistics of the aforementioned buy-sell--backs conducted between BGK and the banks performing the function of Primary Dealers.

The conditional transaction market in Poland, as in Hungary, has been dominated by transactions with non-banking institutions (over 80% of turnover).[351] Non-banking financial institutions invested their temporary surpluses in short-term secured deposits. The turnover breakdown by counterparty was different from that observed in EMU countries. In the euro area, 80% of conditional transactions were conducted on the interbank market. In 2004, rapid growth in customer market activity observed in 2003 was halted. Turnover remained at a level similar to that observed in 2003.

Despite the considerable rise in activity on the interbank market in 2004, which can be noticed in the structure of deposit transactions presented above (Figure 5.1.22), operations between banks still accounted for less than one fifth of net turnover on the conditional transaction market. It should also be mentioned that securities-driven deals constituted a large proportion of transactions between banks. The aim of these deals was not to obtain liquidity, but to borrow specific securities in order to close positions arising from other transactions or to eliminate mismatches in the maturity

[351] C. Balogh, P. Gabriel, *The interbank money market. Past and future trends*, Budapest: Magyar Nemzeti Bank, 2003, pp. 29–33.

structure of investment portfolios. This confirms that compared to euro area banks, Polish banks used conditional transactions for current liquidity management relatively rarely.

Market structure

In 2004, certain changes in the structure of conditional transaction collateral occurred. On the repo market, banks pledged NBP bills and Treasury bonds in order to borrow funds increasingly rarely; Treasury bills were favored for this purpose (Figure 5.1.34a). The decrease in the share of NBP bills in collateral structure resulted from the considerable volatility and smaller amounts of bills in circulation.

The share of Treasury bonds as collateral for SBB/BSB transactions, which prevailed on the domestic market, increased. This was partly necessitated by the scale of SBBs/BSBs. Treasury bills remained the type of collateral preferred by market participants. However, the amount of Treasury bills held by the banking system was much lower than that of Treasury bonds – the investments of domestic banks in those instruments as of year-end 2004 were PLN 19.5 billion and PLN 57.6 billion, respectively.[352] In 2004, the value of Treasury bills held by banks decreased, on average, by around PLN 3 billion compared to 2003. Moreover, Treasury bills were often used in transactions with the central bank as collateral for the intraday credit and lombard facilities. Due to the limited amount of Treasury bills in bank portfolios in 2004, Treasury bonds were more frequently used as collateral for deposits made by institutional investors (Figure 5.1.34b). However, if the scales of the banks' investment in Treasury bills and bonds are compared, the share of the latter in the conditional transaction collateral structure must be considered very low. This claim is justified by the fact that Treasury bonds are the most important collateral in conditional transactions on developed financial markets. In the future, the share of this instrument as collateral for conditional transactions concluded in Poland should grow. In 2005, transactions conducted by BGK will also be collateralised by Treasury bonds. The launch of the bond futures on the WSE, which is planned for the first quarter of 2005, may be another factor contributing to the increased use of Treasury bonds in conditional transactions. In 2004, transactions collateralised by non-government bonds where the banks' counterparties were typically non-financial institutions also became more common.

Compared to 2003, no significant changes occurred in the term structure of turnover. Both on the repo and SBB/BSB markets, transactions with maturities of several days dominated. For both types of instruments, transactions with initial maturities of up to 7 days constituted around 85% of total turnover.[353] These were usually secured deposits from institutional investors. The maturities of such deposits were closely related to the settlement dates of transactions involving the instruments which constituted investment assets for such institutions. Secured deposits with maturities exceeding one month were only made sporadically (their share in turnover was less than 5%).

Most repos and SBBs/BSBs were concluded on the unregulated OTC market via a conventional transaction system, a voice broker or on the phone. Conditional transactions collateralised by Treasury securities could also be concluded using the MTS Poland electronic platform (the Electronic Treasury Securities Market before November 24, 2004). Bank activity on this market continued to be small, however.

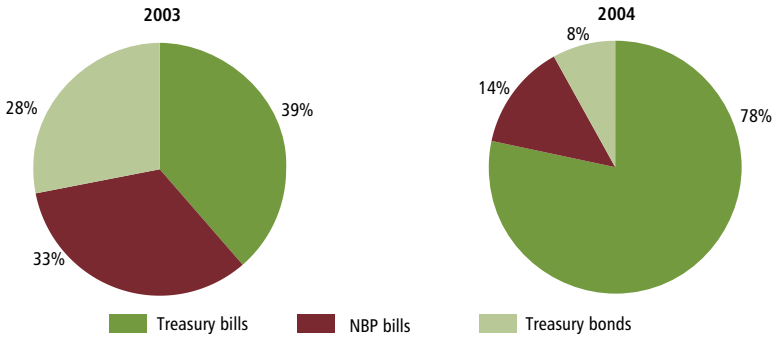
Establishing uniform principles for recording instruments used as collateral in depositories would be a factor contributing to the development of the conditional transaction market in Poland. The transfer of title to securities, typical for classic repos, is not always applied. In 2004, the volume of repo transactions with non-banking institutions grew. In the transactions mentioned above, securities were blocked in the accounts of the transferor (the party which borrowed funds).

[352] National Depository for Securities and Securities Register data as of end December 2004.

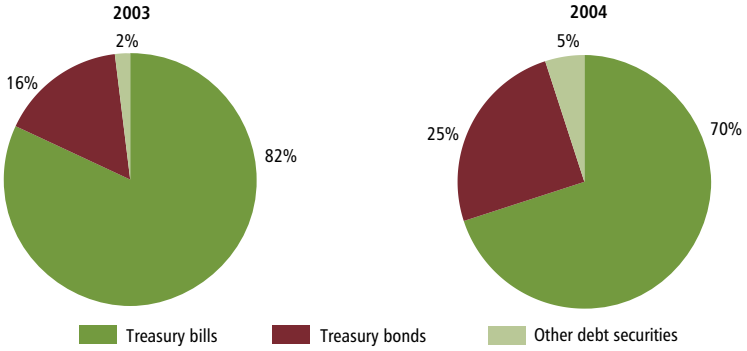
[353] These figures are estimates since SBBs/BSBs are treated as two separate transactions by depositories, which makes it difficult to obtain comprehensive and uniform data concerning the maturity structure of conditional transactions.

Figure 5.1.34. Conditional transaction collateral structure in Poland

Repo transactions



SBB/BSB transactions



Source: NBP calculations based on NBP Securities Register and National Depository for Securities data as well as reports submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

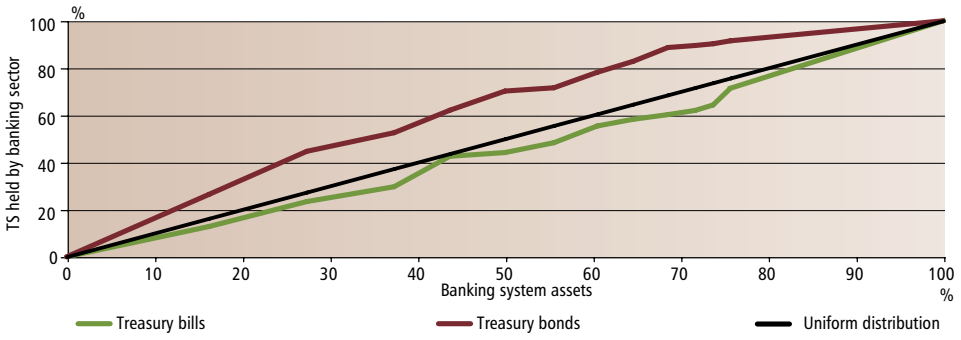
Market participants

Not all domestic banks which perform the function of Primary Dealers actively participated in the conditional transaction market, therefore the interbank repo market remained underdeveloped. Infrastructural issues as well as legal and accounting regulations should no longer constitute major obstacles to its development. Paradoxically, banks' asset management policies seem to be the most important impediment here. In 2004, some banks maintained very small Treasury securities portfolios. Apart from the uneven distribution of liquidity within the banking system in Poland, the distribution of Treasury bonds in banks' investment portfolios was also uneven (Figure 5.1.35). The five largest banks held over 70% of Treasury bonds in banking portfolio system. Most small banks, which exhibited liquidity deficit, did not have the collateral necessary to actively participate in the conditional transaction market and obtain liquidity in this manner. This situation is typical not only of Poland. Similar obstacles to the development of the interbank conditional transaction market also exist in Hungary.[354] Moreover, at most banks, dealers who manage bond portfolios are not those who ensure bank liquidity. Thus, the dealers who managed bank liquidity had a limited amount of bonds at their disposal. This allocation of asset management tasks and the more even distribution of Treasury bills within the banking system are factors behind the preference for Treasury bills as collateral for conditional transactions and the intraday credit facility.

In terms of transactions with non-banking institutions, investment and pension funds were the most important group of counterparties. The share of each of those two investor categories

[354] C. Balogh, P. Gabriel, *The interbank money market. Past and future trends*, Budapest: Magyar Nemzeti Bank, 2003, p. 36.

Figure 5.1.35. Distribution of Treasury securities in the Polish banking system



Source: NBP calculations based on NBP and National Depository for Securities data.

in net turnover ranged from 20 to 30%.[355] These institutions mainly made secured deposits by concluding BSB transactions, since pension funds could not borrow securities through repo transactions.[356] Banks offered conditional transactions among the products for corporate liquidity management. Non-financial companies took advantage of this offer increasingly often, and invested their temporary excess liquidity in BSB transactions. Conditional transactions with non-residents were very rare.

Development trends and prospects

In coming years, turnover on the conditional transaction market should grow gradually, but steadily. The increase of central government deposits made outside the NBP will stimulate the quantitative growth of this market. Therefore, banks will have to engage in conditional transactions with BGK increasingly often. This may contribute to the establishment of a uniform standard for the conclusion, recording and settlement of conditional transactions. Due to the investment limits of non-banking financial institutions and the habits of market participants, it appears that the SBB/BSB segment will continue to dominate. The growing activity of institutional investors and limited amount of Treasury bills in circulation should force a further increase in the use of bonds as collateral. Banks' intensified activity on the conditional transaction market could contribute to an improvement in the liquidity of other financial market segments in Poland, i.e. Treasury bill and bond markets.

The absence of a liquid interbank repo market certainly poses a major problem for the Polish money market. Poland's entry into the EMU will cause a sudden change in the liquidity of the banking system. Banks with surpluses will try to invest them on the interbank market, since the central bank will not engage in open market operations in order to absorb funds. Investing such surpluses through unsecured deposits may prove difficult since banks active in Poland will only have high credit limits vis-á-vis a limited number of euro area interbank market participants. Taking advantage of transactions collateralised by Treasury securities appears to be a better solution, especially since foreign banks have large amounts of Polish bonds in their portfolios.

The low liquidity of interbank conditional transactions may also marginalise the Polish money market after the single currency is adopted. In Europe, strategic areas of bank activities, including risk control, liquidity management and back-office operations, are being centralised. Some major banking groups decide to manage their euro liquidity positions from limited locations – so-called liquidity hubs. The results of this process can be observed e.g. in the Finnish banking system, where no liquid conditional transaction market has ever developed. Currently, not all banks in Finland

[355] Estimates based on data submitted by banks – money market dealers – to the NBP.

[356] Act on the Organisation and Operation of Pension Funds of August 28, 1997 (consolidated text in *Dz.U.* No. 159/1997, item 1677).

manage their liquidity on the local market. At some banks, the euro liquidity position has been transferred to head offices abroad.[357] This example shows that the absence of a mature money market with a developed repo segment may cause operations in Poland to be less efficient than in other countries at the group level. It seems that the closer the structure of the domestic money market gets to that of the euro area market, the more transactions will be conducted by banks operating in Poland.

The interbank conditional transaction market would develop more rapidly in Poland if domestic banks changed their asset management policies. The development of uniform transaction recording principles and infrastructure adjustments will additionally contribute to increasing liquidity.

5.2. Capital market

5.2.1. Evolution of the capital market: size and structure

In 2004, the Treasury bond market and stock market remained the most important segments of the Polish capital market. The remaining segments were still much less significant. The stock market was the fastest developing segment of the capital market in 2004. WSE capitalisation grew by 74% as a result of 36 IPOs and the increase in the prices of listed equities.

Table 5.2.1. Outstanding value of individual capital market instruments, PLN billion

	2001	2002	2003	2004
Debt securities	138.3	173.3	202.1	246.1
Marketable Treasury bonds	123.5	153.9	184.5	226.6
Municipal bonds	1.6	2.2	2.7	3.0
Long-term corporate bonds	n/d	3.9[1]	5.5[2]	6.9
Long-term commercial bank debt securities	0.06	0.09	0.75	0.78
Mortgage bonds	0.1	0.2	0.8	1.0
NBP bonds	13.0	13.0	7.8	7.8
Equities – stocks[3]	103.4	110.6	167.7	291.7

[1] As of end January 2003.

[2] As of end January 2004.

[3] WSE capitalisation (domestic companies).

Sources: Ministry of Finance, NBP and WSE.

5.2.2. Marketable long-term debt securities market

5.2.2.1. Treasury bonds

Market size and structure

In 2004, the outstanding value of Treasury bonds issued grew faster than the size of the entire long-term debt securities market (increases of 22.8% and 15.3%, respectively).[358] The share of Treasury bonds in the entire (short-term and long-term) debt securities market grew from 69% as of year-end 2003 to 73.6% as of year-end 2004. The rapid growth of the outstanding value of Treasury bonds resulted from an increase in the borrowing needs of the central budget. In 2004, public debt grew by 16.1% and the budget deficit was PLN 4.4 billion higher than in 2003. However, the rise in borrowing needs was slower than predicted.[359]

[357] H. Koskenkylä (ed.), *Finnish Financial Markets 2002,* Helsinki: Bank of Finland, 2003, pp. 38–42.

[358] Market size is measured by the outstanding value of securities issued.

[359] According to preliminary Ministry of Finance data, the budget deficit in 2004 amounted to PLN 41.4 billion and was PLN 3.9 billion lower than the projected figure.

Apart from the considerable borrowing needs of the Treasury, the underdevelopment of the non-government securities market is another fundamental reason for the domination of the Treasury bond segment in the debt securities market. In euro area countries, banks alone issue debt securities in amounts similar to those of Treasury securities issues. As of year-end 2004, bank debt securities constituted 35.8% of the debt securities market in euro area countries, while in Poland their share was only 1.4%.[360]

The share of the Treasury securities sector in the entire debt securities market is lower in euro area countries despite the fact that ratios of public debt to GDP there are higher than in Poland (Table 5.2.2).

In 2004, as in 2002 and 2003, the outstanding value of marketable bonds recorded the highest growth rate among securities issued by the Treasury.[361] Between 2002 and 2004, the share of marketable bonds in domestic government debt grew steadily. As of year-end 2004, this share amounted to 77.7% (as of year-end 2003 – 73.5%, and as of year-end 2002 – 66.7%).

The fact that the size of the Treasury bond market grew faster than domestic government debt was caused by the decrease in the amount of Treasury bills issued and the continuation of the policy of the Ministry of Finance consisting of reducing the outstanding value of non-marketable Treasury bonds. The Ministry of Finance did not issue any new non-marketable bonds and redeemed maturing ones.

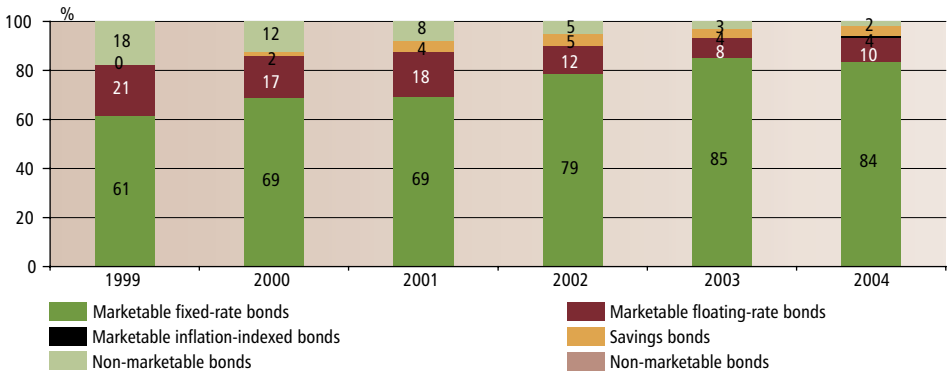
Whereas in 2002 and 2003, the rapid growth of the Treasury bond market was largely a result of the development of the fixed-rate bond segment, in 2004 floating-rate bonds were the fastest developing segment of the Treasury securities market (Table 5.2.3). Demand for these instruments was caused by an increase in inflation in 2004, which was accompanied by rising interest rates

Table 5.2.2. Treasury bond market vs. public debt in Poland and in the euro area in 2004, %

	Poland	Euro area
Share of Treasury bonds in debt securities market	73.6	43.0
Public debt to GDP ratio	43.6	70.9

Note: Data as of year-end 2004; bond market data only include debt securities denominated in domestic currency.
Source: NBP calculations based on Ministry of Finance data and *Monthly Bulletin*, ECB, May 2005.

Figure 5.2.1. Structure of Treasury bonds issued



Source: Ministry of Finance.

[360] Data for the euro area have been calculated on the basis of *Monthly Bulletin,* ECB, May 2005. Data apply to issues denominated in euros. Calculations for Poland have been based on data including both long- and short-term bank debt securities denominated in zloty.

[361] Marketable bonds are construed as debt securities that may be traded on financial markets.

Table 5.2.3. Government debt structure and growth rate, 2001–2004 (as of year-end, PLN billion)

Item	2001	2002	2003	2004	Growth rate, %			
					2002	2003	2004	2004/ 2001
Government debt	283.9	327.9	378.9	402.9	15.5	15.6	6.3	41.9
I. Domestic government debt	185.0	219.3	251.2	291.7	18.5	14.5	16.1	57.6
1. Outstanding value of TS	176.0	212.4	246.0	286.9	20.6	15.8	16.6	63.0
1.1. Marketable TS	158.7	195.9	232.6	273.5	23.4	18.7	17.6	72.3
1.1.1. Marketable bonds	123.5	153.9	184.5	226.6	24.6	19.9	22.8	83.5
– fixed rate bonds	97.5	133.8	169.0	200.9	37.2	26.3	18.9	106.0
– floating rate bonds	25.9	20.1	15.5	23.0	-22.6	-22.6	48.3	-11.2
– inflation-indexed bonds	–	–	–	2.6	–	–	–	–
1.2. Savings bonds	6.1	7.7	7.4	9.1	27.4	-3.5	21.5	49.4
1.3. Non-marketable TS	11.3	8.8	6.0	4.3	-22.4			-61.7

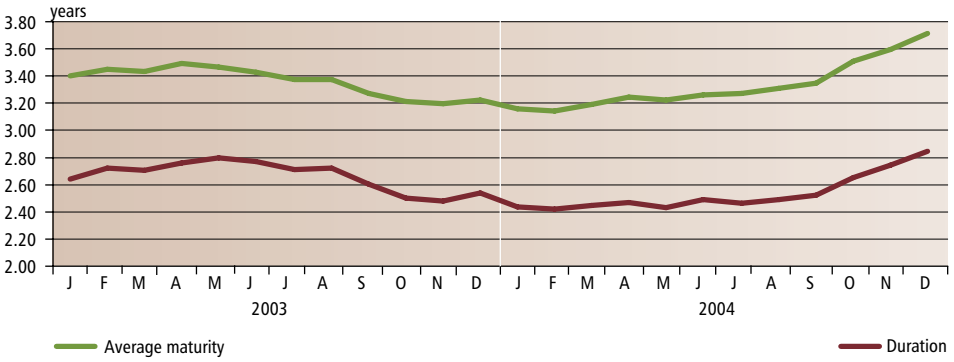
Source: Ministry of Finance.

as well as the need to include instruments which reduced long-term investment risk in the range of securities purchased. Floating-rate bonds allow investors, particularly long-term ones, to profit during periods when inflation and interest rates rise. On the other hand, the Ministry of Finance issued such bonds expecting that the increase in inflation would be a temporary phenomenon and raising funds using floating-rate bonds would be cheaper than using fixed-rate instruments. However, floating-rate bonds remained a relatively small part of the market – at year-end 2004 they accounted for 10.2% of the Treasury bond market (Figure 5.2.1).

Investors' fears regarding future fiscal policy, expectations of an increase in inflation and rising interest rates contributed to a drop in demand for long-term securities from the second half of 2003 onwards. This resulted in the shortened duration of outstanding bonds as of year-end 2003. Duration stabilised in the first three quarters of 2004 and started to rise at the end of the year (Figure 5.2.2).

In 2004, the average maturity of TS was still much shorter than in EU-15 countries. In June 2004 in Poland it was 2.7 years, while in Austria it was 3.9 years, in Finland 4.8, in Germany 5.3, in Holland 5.9, in Italy 6.2, in Belgium 6.3 and in Great Britain – 11.9 years.[362]

Figure 5.2.2. Average maturity and duration of bonds issued in the domestic market



Source: Ministry of Finance.

[362] *Strategia zarządzania długiem sektora finansów publicznych w latach 2005–07*, Warszawa: Ministerstwo Finansów, September 2004, p. 18.

Table 5.2.4. Structure of Treasury securities with initial maturities exceeding 1 year in the European Union in 2004, %

	Up to 3 years	From 3 to 5 years	From 5 to 7 years	From 7 to 10 years	From 10 to 15 years	From 15 to 30 years
Euro area countries						
Austria	0.1	6.2	4.5	68.3	15.1	5.8
Belgium	–	–	0.6	46.1	26.3	26.9
Finland	3.1		–	–	96.9	–
France	22.7	40.2	–	21.3	5.6	10.1
Greece (2003)	23.9	28.8	–	30.7	–	14.4
Spain	41.1	20.5	–	21.3	13.1	4
Holland	35.5	25.8	–	38.7	–	–
Ireland	–	–	–	–	100	–
Luxembourg	–	–	–	–	–	–
Germany	38.3	23.4	–	31.8	–	6.5
Portugal	77.4	–	–	22.6	–	–
Italy	32.7	13.9	16.3	22.1	8.6	6.5
Non-euro area countries						
Cyprus	52	42.9	–	2.6	2.6	–
Czech Republic	19	28.3	–	30	22.8	–
Denmark	40	20	–	40	–	–
Estonia	–	–	–	–	–	–
Lithuania	37.2	41.2	–	21.6	–	–
Latvia	–	–	–	100	–	–
Malta	–	–	13.15	8.99	11.8	17.3
Poland	48.4	34.4	1.6	14.1	1.6[1]	–
Slovakia	35.3	43.4	–	9.1	12.2	–
Slovenia	25.4	25.4		49.3	–	–
Sweden	41.4	16.1	6.1	9	22.6	4.8
Hungary	42.9	28.6	–	21.4	7.1	–
Great Britain	15.8	15.8	–	21.8	–	46.5

[1] The figure includes 20-year bonds.

Source: European Commission.

Marketable fixed-rate bonds

Fixed-rate bonds constitute the bulk of the TS market. As of year-end 2004, they accounted for 88.7% of the outstanding value of marketable bonds issued by the Treasury (Figure 5.2.1). The already mentioned increase in inflation and interest rates (Figure 5.2.3) was one of the most important factors that halted the upward trend in the share of fixed-rate bonds in 2004. Demand for fixed-rate bonds is sensitive to such changes, since significant inflation rate movements cause an increase in investment risk. The need for the inclusion of inflation-indexed bonds and floating-rate bonds targeted at pension funds in the range of bonds offered by the Ministry of Finance was another reason for the drop in the share of fixed-rate bonds.

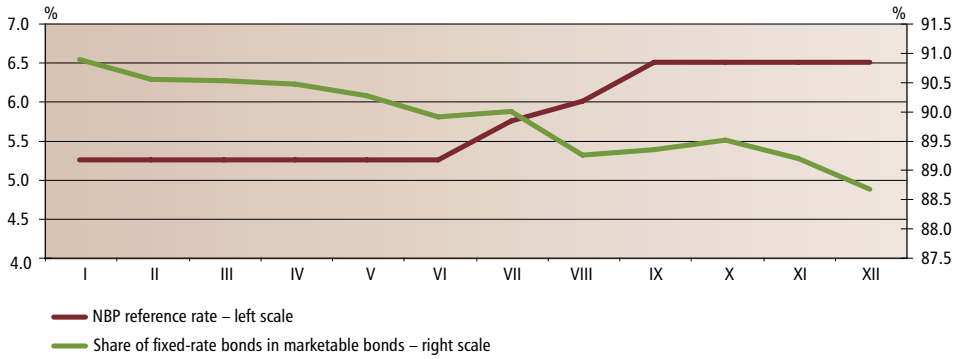
In 2004, as in previous years, 2-, 5-, 10- and 20-year bonds were issued. The issue policy of the Ministry of Finance aimed to limit the number of bond issues while gradually increasing their values to a level equivalent to at least EUR 5 billion. The objective was to improve market liquidity and thus reduce the future cost of servicing the public debt. Limiting the number of bond issues while increasing their amounts will lead to an accumulation of bond redemption in the future. Compared to 2003, as a result of the implementation of this policy:

– the number of wholesale bond issues decreased from 23 to 19;

– the average amount of a wholesale bond issue grew from PLN 7.0 billion to PLN 10.3 billion;

– the amount of the largest issue grew from PLN 22.8 billion to PLN 28.6 billion;

Figure 5.2.3. Share of fixed-rate bonds in total bonds vs. NBP reference rate, 2004



Sources: Ministry of Finance and NBP.

Table 5.2.5. Structure of the outstanding value of marketable fixed-rate bonds issued by the Treasury, %

Item	2001	2002	2003	2004
2-year zero-coupon bonds	22.5	28.2	31.0	26.3
Bonds with maturities of up to 5 years	53.3	50.7	48.0	35.2
10-year bonds	9.3	12.2	15.5	34.2
20-year bonds	–	1.0	0.9	1.7
Retail bonds	0.4	1.3	1.2	1.3
Other bonds	14.5	6.5	3.3	1.3
Fixed rate bonds	100.0	100.0	100.0	100.0

Source: own calculations based on Ministry of Finance data.

– the share of the largest issue in the outstanding value of wholesale fixed-rate bonds issued by the Treasury grew from 14.1% to 14.6%.

In euro area countries, fixed-rate securities also dominate in the government bonds market. At year-end 2004, they constituted 91.3% of outstanding bonds.[363] The high share of fixed-rate Treasury bonds is typical of developed markets with stable financial environments.

Marketable floating-rate bonds

In 2004, the marketable floating-rate bond market was the fastest developing segment of the Treasury securities market. After a period of decreased demand for floating-rate securities, the trend was reversed. As of year-end 2004, the outstanding value of such bonds issued by the Treasury amounted to PLN 23.0 billion, which was an increase of 48.3% compared to the end of 2003. The number of instruments issued also grew. Apart from the 3-year retail and 10-year wholesale bonds in circulation, new wholesale bonds (3- and 7-year ones) appeared on the market; private placements were also conducted.[364] Table 5.2.6 presents the composition of the floating-rate bond market.

WIBOR 3M and 6M rates formed the basis for determining the coupons of such bonds. This also applied to the new 3-year retail bonds. In previous years, the yield on 13-week Treasury bills was the basis for the calculation of interest on 3-year retail bonds.

[363] Calculations based on *Monthly Bulletin*, ECB, May 2005.

[364] More on this subject in Box 5.2.1.

Table 5.2.6. Floating-rate bond market composition (as of year-end)

Instrument name	Bond value, PLN billion		Bond structure, %	
	2003	2004	2003	2004
3-year retail bonds	5.3	3.4	34.1	14.8
3-year wholesale bonds	–	6.7	0.0	29.2
7-year wholesale bonds	–	1.1	0.0	4.9
10-year wholesale bonds	10.2	11.0	65.9	47.9
Private placements	–	0.8	–	3.3

Source: own calculations based on Ministry of Finance data.

Marketable inflation-indexed bonds

In 2004, the Ministry of Finance introduced marketable inflation-indexed bonds to the market. No such securities had been issued in previous years.[365] The bonds issued in 2004 were designed in a manner different from typical bonds. The interest rate on inflation-indexed bonds was fixed and amounted to 3% per annum. The nominal value of bonds, on the other hand, was variable – indexed according to the coefficient calculated by the Ministry of Finance on the basis of the cumulative monthly consumer price index.[366] The issue of inflation-indexed Treasury bonds is advantageous, since it:

– increases the issuer's motivation to combat inflation;

– increases the security of investing in debt securities in the long term.

As of year-end 2004, the outstanding value of marketable inflation-indexed bonds issued by the Treasury amounted to PLN 2.6 billion.

Savings bonds

Savings bonds enable households to invest their savings. A decrease in inflation and interest rates to the levels found in stable financial systems usually increases households' interest in non-banking forms of accumulating savings. Given higher interest rates on bonds (assuming a positive slope of the yield curve), the role of securities as savings deposits for the general population grows, while the importance of traditional forms of saving such as bank deposits decreases (Table 5.2.7). From the issuer's point of view, issues of savings bonds make it possible to expand the purchaser base and reduce the cost of budget deficit financing. Savings bonds usually carry lower interest rates than wholesale bonds with similar parameters.

Savings bonds are not traded on the secondary market, they are stored in the Bond Purchaser Register maintained by the issuing agent (since 2003 – PKO BP SA) and only individuals may hold such type of securities. Since Poland's accession to the EU, savings bonds may also be purchased by persons who are non-residents.

In 2004, the Ministry of Finance issued 10-year retirement bonds. These are floating-rate bonds; the interest rate for a given interest period is calculated based on the consumer price index.

Table 5.2.7. Share of savings bonds in household savings, %

	2000	2001	2002	2003	2004
Share	0.9	2.4	2.9	2.7	3.0

Source: Ministry of Finance.

[365] The Ministry of Finance only issued inflation-indexed savings bonds.

[366] More information can be found in: Issue Letter No. 29/2004 of the Minister of Finance of August 4, 2004 on the issue of inflation-indexed Treasury bonds maturing on August 24, 2016, www.mofnet.gov.pl.

Table 5.2.8. Outstanding value of savings bonds issued by the Treasury

Year	Savings bonds, PLN billion	Share of savings bonds,%		
		2-year bonds	4-year bonds	10-year bonds
1999	0.5	95.4	4.6	–
2000	2.0	74.8	25.2	–
2001	6.1	85.3	14.7	–
2002	7.7	86.4	13.6	–
2003	7.4	85.1	14.9	–
2004	9.1	90.0	9.4	0.6

Source: Ministry of Finance.

Their issue was related to the introduction of Individual Pension Accounts, but demand proved limited. Most persons who opened IPA deposited their funds with investment funds and insurance companies. At year-end 2004, the share of 10-year retirement bonds in savings bonds amounted to 0.6% (Table 5.2.8).

In 2004, apart from 10-year bonds, investors held 2-year fixed-rate bonds and 4-year inflation-indexed bonds.

Non-marketable (passive) bonds

In 2004, the policy of reducing the outstanding value of non-marketable bonds issued by the Treasury was continued (Table 5.2.9). The Treasury issued no new non-marketable bonds, while bringing down the outstanding value of those already issued.

Table 5.2.9. Outstanding value of non-marketable bonds issued by the Treasury (as of year-end, PLN billion)

Year	Restructuring bonds	Bonds to increase the capital of BGŻ	Bonds denominated in US dollars (1991)
1999	6.2	0.91	8.2
2000	6.4	0.79	6.3
2001	6.1	0.80	4.4
2002	5.5	0.77	2.5
2003	4.4	0.71	0.8
2004	3.7	0.64	–

Source: Ministry of Finance.

Primary market

The organisation of the primary market was adjusted to the amounts and types of Treasury bonds sold. Marketable wholesale bonds were sold through:

– auctions organised for Primary Dealers;

– private placements.

Sales of marketable retail bonds and savings bonds were conducted by PKO BP SA. This structure of the primary Treasury securities market was established in 2002 and 2003. Certain adjustments in order to streamline system operation were introduced in 2004, but they did not change the organisational principles of the primary market.

Box 5.2.1

ARRANGING PRIVATE PLACEMENTS OF BONDS WITH OPTIONAL NON-STANDARD COUPONS HEDGED WITH INTEREST RATE SWAPS

Private placements are targeted at selected purchasers in order to minimise fundraising costs. When conducting private placements, the Ministry of Finance additionally utilises interest rate swaps. A bond issue combined with an exchange of interest payments form a synthetic instrument with a lower servicing cost than issues of standard Treasury bonds.

Issue arrangement requirements:

1. An ISDA or Framework Agreement must be concluded with the Ministry of Finance.
2. The bond issue hedged by the swap should constitute a synthetic instrument with parameters identical to or similar to the parameters of standard medium- and long-term bonds.
3. It is recommended that the design of bond coupons be based on published parameters (indices).
4. The synthetic instrument consisting of the bond and the swap should reduce debt servicing costs compared to standard bonds. The standard of reference for the synthetic instrument may be:
   – the primary market (average auction price);
   – the secondary market;
   – a reference index, e.g. WIBOR.

Proposal selection procedure:

1. The MF sends notices informing of its readiness to conduct a private placement of bonds hedged with a swap, indicating:
   – the maturity of such bonds;
   – the minimum amount of issue for a given instrument;
   – the minimum spread.
2. Banks which have received the inquiry from the Ministry of Finance and meet the requirements submit proposals including:
   – the design of the transaction (of the bond and the hedging transaction);
   – the projected transaction amount (not less than the minimum amount);
   – the spread within the limits set by the Ministry of Finance;
   – the approximate structure of potential bond purchasers.
3. A proposal is accepted after formal requirements have been met.
4. The acceptance of a proposal by the Ministry of Finance entails the conclusion within five working days of an agreement concerning the granting of the exclusive right to submit an offer for the purchase of Treasury bonds, which shall remain in force for 30 calendar days.

Source: based on Ministry of Finance information.

Issue amount

In 2004, the Ministry of Finance issued bonds amounting to PLN 93.8 billion, of which wholesale bonds accounted for PLN 86.9 billion (Figure 5.2.4). Compared to 2003, it was an increase of 38.4% in the gross amount issued.

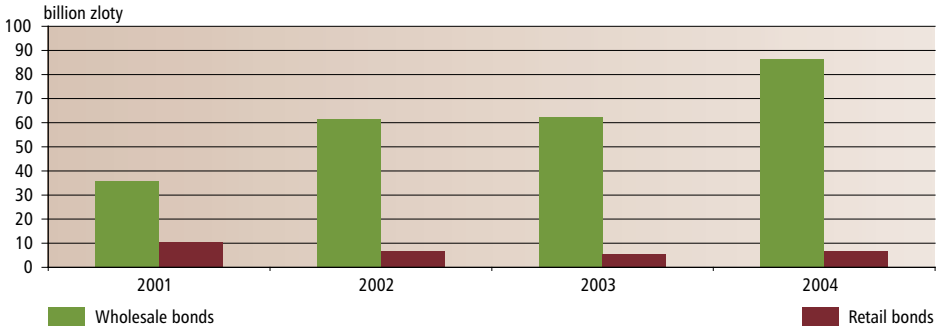
The gross amount issued is determined by the borrowing needs of the central budget and the policy of the Ministry of Finance regarding debt structure (domestic and foreign issues) (Table

5.2.10). The 3-year issue policy is determined annually and set down in a document entitled *Strategia zarządzania długiem sektora finansów publicznych* ("General Government Sector Debt Management Strategy").[367] This document constitutes an appendix to the Budget Act. In 2004, the Ministry of Finance presented the public debt management strategy for the years 2005–2007.[368] The fundamental objectives of the new strategy remained unchanged. These include, *inter alia*, maintaining the amount of public debt at a safe level, the long-term minimisation of debt servicing costs, increasing the liquidity, efficiency and transparency of the Treasury Securities (TS) market, and adjusting public debt management methods as well as TS market organisation to EU standards.

Auctions are the most important way in which wholesale bonds are sold. I this way, the Ministry of Finance sold 75.8% of bonds issued in 2004 (amounting to PLN 65.9 billion).[369] In 2004, the Ministry of Finance increased bond sales due to switch auctions. In 2004, securities amounting to PLN 20.3 billion were sold in this way (PLN 5.7 billion in 2003), which constituted 23.3% of the amount of wholesale bonds sold on the primary market. Private placement (0.9% of sales), which was introduced in 2004, was a new way of selling wholesale bonds.

Between 2001 and 2003, the average value of wholesale bonds offer at a single auction grew gradually (in 2001, it was PLN 1.0 billion; in 2002 – PLN 1.8 billion, and in 2003 – PLN 2.2 billion) to decrease in 2004 to PLN 2.0 billion. However, this fall during individual auctions did not lead to a decrease in the value of individual issues. In 2004, the value of average issue grew further to PLN 10.3 billion compared to PLN 7.0 billion in 2003.

Figure 5.2.4. Treasury bonds issued, gross



Source: NBP calculations based on NBP and Ministry of Finance data.

Table 5.2.10. Gross amount of Treasury bonds issued vs. increase in government debt, PLN billion

Year	Treasury bonds issued, gross	Increase in the outstanding value of Treasury bonds issued	Increase in domestic government debt	Increase in government debt
2002	68.5	29.5	34.3	44.0
2003	67.8	27.6	31.8	51.0
2004	93.8	42.1	40.5	23.9

Note: In 2004, the amount of foreign debt decreased by PLN 16.6 billion.
Source: NBP calculations based on NBP and Ministry of Finance data.

[367] The rationale behind drawing up 3-year strategies annually is to correct the adopted assumptions on an ongoing basis.

[368] More information can be found in the Ministry of Finance document: *Strategia zarządzania długiem sektora finansów publicznych w latach 2005–2007*, Warszawa, September 2004.

[369] Including non-competitive auctions.

Secondary market

Turnover[370]

High growth rates in T-bond turnover were recorded both in 2002 and 2003. In 2002, turnover grew by 129%, and in 2003 – by 82%. In 2004, this process was halted (Figure 5.2.5) and the registered turnover was 2.2% lower compared to 2003.

An analysis of the investor activity in 2004 makes it possible to distinguish two clear-cut periods:

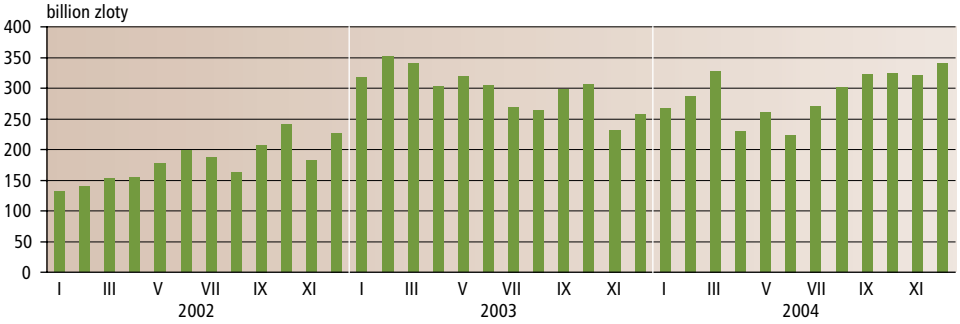
– in the first half of the year, interest in Treasury bonds among investors (particularly domestic ones) decreased, causing a drop in turnover;

– in the second half of the year, demand for bonds started to grow, fuelling turnover.

Bond price movements were the primary factor affecting investors' behaviour. In the first half of 2004, bond prices decreased, while in the second half the trend was reversed and they started to rise (Figure 5.2.6). Turnover was positively correlated with price movements and negatively correlated with changes in bond yield (Figure 5.2.7). As prices decreased, the supply of securities in the secondary market dwindled. Market activity continued to be low until expectations of a decrease in yields appeared. The use of interest rate derivatives only partially limited the impact of the decrease in prices on the drop in turnover, since not all investors could use hedging instruments.

Given the increase in the outstanding value of Treasury bonds issued, the stabilisation in turnover in 2004 meant a reduction in market liquidity. The liquidity ratio was 1.39 (versus 1.67 in 2003).[371] In reality, the decrease in the liquidity of the Treasury bond market was even more pronounced, since, in 2004, the amount of conditional transactions collateralised by Treasury bonds doubled compared to 2003.

Figure 5.2.5. Monthly turnover in the Treasury bond secondary market, 2002–2004



Note: Including the unregulated market, stock exchange and electronic platform.
Source: National Depository for Securities

Table 5.2.11. Breakdown of Treasury bond transactions on the unregulated interbank market by transaction type, %

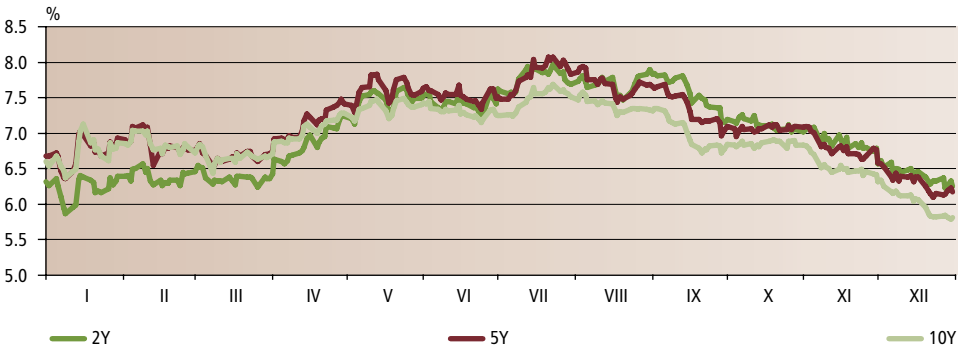
	2003	2004
Outright transactions	84.0	68.5
Repo	1.7	0.4
Sell-buy-back	14.3	31.1
Total	100.0	100.0

Source: National Depository for Securities.

[370] Turnover refers to gross turnover, unless otherwise indicated.

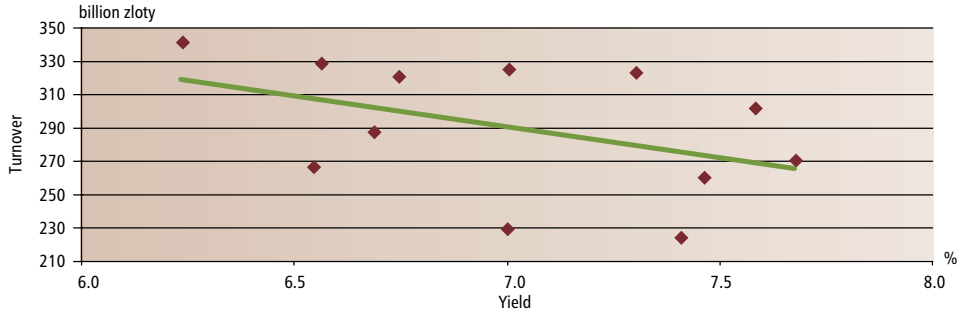
[371] Liquidity is measured as the ratio of the average monthly turnover of Treasury bonds to the average amount of bonds held by investors at the end of individual months.

Figure 5.2.6. Treasury bond yield, 2004



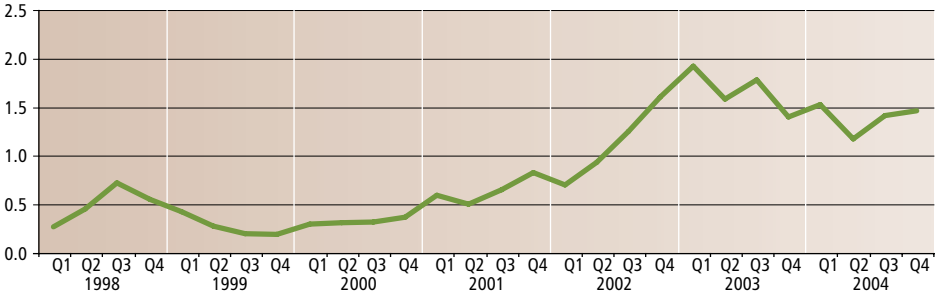
Source: NBP.

Figure 5.2.7. Treasury bond yield vs. monthly turnover, 2004



Sources: NBP and National Depository for Securities.

Figure 5.2.8. Treasury bond market liquidity ratio



Source: NBP calculations based on National Depository of Securities data.

Table 5.2.12. Treasury bond markets – size, turnover and liquidity

Country	Amount of bonds in domestic currency outstanding (as of end 2003, EUR billion)	Average monthly turnover in 2003, EUR billion	Liquidity ratio
France	589.1	4,931.3	8.4
Poland	39.1	74.7	1.9
Hungary	22.4	11.4	0.5
Czech Republic	11.0	5.4	0.5
Slovakia	6.3	3.8	0.6
Slovenia	2.4	0.0	0.02

Note: The liquidity ratio has been calculated as the ratio of the average monthly turnover of bonds in domestic currency to the amount of bonds outstanding as of year-end. The ratio for Poland deviates from the one presented earlier due to differences in calculation methodology.

Source: *Statistical Capital Market Structure Survey*, ECB 2004. 2003.

International comparisons suggest that higher market liquidity may be related to larger amounts of bonds outstanding. Larger markets enable the entry of major investors, which enhances their liquidity and thus reduces the cost of purchasing securities.

Organisation of trade

Treasury bonds were traded on three markets: the interbank market, the MTS-Poland electronic platform and the Warsaw Stock Exchange.

In Poland, as in most European Union countries, the OTC market dominates. In France and Finland, 100% of Treasury bond transactions are conducted on unregulated markets; in Greece, 89%.[372] Primary market organisation is the most important reason for the concentration of turnover on the unregulated market. Banks are original purchasers of Treasury securities and later organise the trading in such securities. Demand for Treasury bonds, where declared by households, is largely satisfied by collective investmentcompanies which make wholesale purchases of bonds. In euro area countries, over 50% of household savings are invested with such companies. The Polish stock exchange bond market is too small for collective investment companies to engage in significant transactions there. High liquidity of the interbank market makes it more attractive for major investors and reduces investment costs. Stock exchange markets, where pricing is more transparent, attract primarily individual investors.

The electronic platform was the secondary market on which the most significant decrease in turnover was recorded in 2004. Compared to 2003, turnover in this segment was 44% lower. In 2004, significant changes occurred with regard to the organisation of the electronic market. The hitherto existing Electronic TS Market was transformed into the MTS-Poland electronic platform as of November 25, 2004. Non-residents gained direct access to it.[373] The first results of MTS-Poland activities indicate a certain increase in trading on this market.

5

Table 5.2.13. Individual markets' share in total turnover on the Treasury bond market, %

Year	Unregulated market[1]	WSE	Electronic platform[1, 2]	Transactions conducted within the framework of NBP open market operations
1998	92.5	6.4	1.1	–
1999	95.6	4.2	0.2	–
2000	97.6	1.8	0.1	0.5
2001	98.0	0.6	0.0	1.4
2002	94.2	0.2	5.0	0.6
2003	94.1	0.4	5.4	0.1
2004	96.3	0.2	3.1	–

[1] Including repo and sell-buy-back transactions.

[2] In parallel to the electronic platform also an off-exchange OTC (CeTO) market operates in Poland. However, transactions on this market are rarely concluded.

Source: NBP calculations based on NBP and National Depository for Securities data.

Table 5.2.14. Average amounts of single Treasury bond transactions on secondary markets, PLN million

Market	2002	2003	2004
Interbank unregulated market	11.05	19.41	19.25
Electronic platform	6.09	11.18	12.81
Warsaw Stock Exchange	0.03	0.06	0.04

Source: NBP calculations based on National Depository of Securities data.

[372] Data for 2003 based on *Statistical Capital Market Structure Survey*, ECB 2004.

[373] There were no non-resident market participants in 2004, largely due to settlement problems.

Table 5.2.15. Turnover on MTS markets in Europe

MTS	Daily turnover in MTS markets in 2003, EUR million
Italy	8,400
Germany	870
Spain	724
Belgium	593
Portugal	503
Denmark	500
Holland	500
Finland	250
Poland[1]	**129**
Austria	115

[1] Turnover from December 2004 to February 2005.

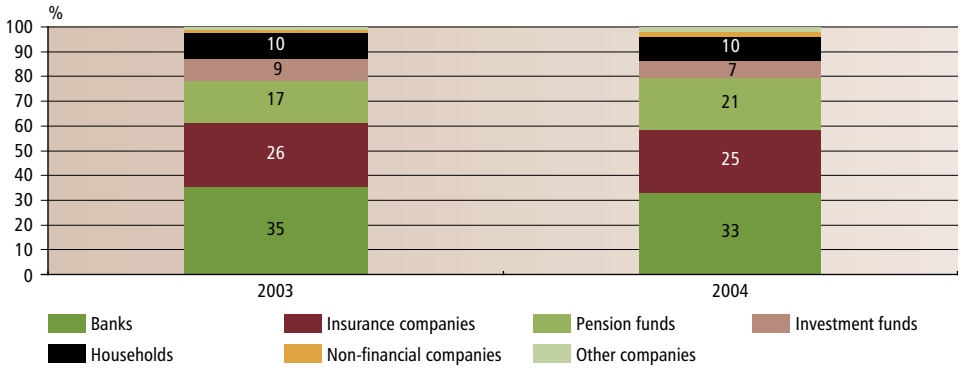
Sources: *The Euro Bond Market Study 2004,* Frankfurt: ECB, December 2004, p. 36. Data for Poland – own calculations based on MTS-CeTO SA statistics.

Relatively high spreads (differences between the bid and offer yields quoted) are among the obstacles to the development of this market. In 2004, spreads on the electronic platform were over twice as high as on the interbank market and much higher than on other MTS platforms. Research concerning transaction costs indicates that spreads on electronic platforms are usually low and similar in individual EU-15 countries.[374] The lowest spreads (from 1 to 3 basis points) were quoted for the most liquid bonds (with maturities of up to 10 years); for bonds with maturities exceeding 10 years, spreads ranged from 11 to 18 basis points. In Poland, spreads for bonds with maturities of up to 10 years ranged from 7 to 13 basis points on MTS-Poland, and from 2 to 7 basis points on the interbank market. Higher spreads on the electronic platform are caused primarily by the relatively low turnover, and this in turn is linked to the lack of interest on the part of banks, which are accustomed to operating on a less transparent market.

Investors

Domestic companies whose market share at year-end 2004 was 72.8% are the most important investors on the Treasury bond market. Compared to 2003, their share decreased by 5.3 percentage points. In 2004, no significant changes occurred with regard to the structure of domestic Treasury bond purchasers (Figure 5.2.9). As in previous years, domestic banks were major purchasers of such bonds. Banks maintained their position despite a gradual decrease in their

Figure 5.2.9. Domestic investors on the Treasury bond market, as of year-end



Source: National Depository for Securities.

[374] Y. Chung Cheung, F. de Jong, B. Rindi, Trading European Sovereign Bonds, the Microstructure of the MTS Trading Platforms, Working Paper Series No. 432, Frankfurt: ECB, January 2005, pp. 16–17 and 27.

Table 5.2.16. Foreign investors on the bond market, as of year-end

Year	Amount of Treasury bonds held by foreign investors, PLN billion	Foreign investors' share in domestic bond market, %
1999	6.6	9.4
2000	15.7	12.7
2001	19.9	16.1
2002	30.3	19.7
2003	40.3	21.9
2004	62.0	27.2

Source: Ministry of Finance.

Table 5.2.17. Average annual yields of 10-year Treasury bonds in Poland and in the euro area, %

Year	Poland	Euro area	Spread between bond yields in Poland and the euro area
2001	10.72	5.03	5.69
2002	7.34	4.92	2.42
2003	5.78	4.16	1.62
2004	6.90	4.14	2.76

Source: NBP calculations based on ECB and NBP data.

share. Pension funds were a category of investors which rapidly increased their share in this market between 2002 and 2004.

In the period under consideration, the involvement of foreign investors increased significantly again (Table 5.2.16). In 2004, the value of non-residents' portfolios went up by 54% (as compared to 33% in 2003). Even the decrease in bond prices in the second half of 2003 and the first half of 2004 did not reverse this trend.

The sustained interest rate disparity (Table 5.2.17), decrease in risk premium after Poland's accession to the EU and continuing global excess liquidity were reasons for foreign investor interest in Polish bonds. Low interest rates in developed countries and global excess liquidity triggered the search for higher yields. Due to Poland's accession to the EU, some institutional investors from EU-15 countries (particularly long-term ones) could invest in the Polish market for the first time.

Development trends and prospects

The size of the domestic Treasury securities market is determined by the amount of government debt, current fiscal policy and the direction of public debt management policy.

Poland's accession to the EU and the prospect of entry into the euro area made the Polish market more attractive to investors. Poland's accession to the EU enabled institutional investors that are allowed to invest in instruments issued within the Community to enter the Polish market. The increase in involvement by foreign investors, which was more pronounced than in previous years, and the rise in the average securities holding period have been, among other things, the result of the new investors' activity.

As has already been mentioned, the trade in Treasury bonds is concentrated on the interbank market. This state of affairs will continue in the coming years due to the organisation of the primary market. In the long run, however, this concentration may decrease. Electronic platforms have developed robustly in recent years. Their number in Europe and the U.S. grew from 11 in 1997 to 77 in 2003 (MTS and Icap/BrokerTec are among the largest). Electronic platforms may contribute to improving market liquidity. They should, however, be characterised by low costs and enable the performance of cross-border transactions.[375]

[375] *The Euro Bond Market Study 2004,* Frankfurt: ECB, December 2004, p. 31.

Table 5.2.18. Public debt as percentage of GDP in selected European countries

Country	2001	2002	2003	2004
Poland	**36.7**	**41.2**	**45.4**	**43.6**
Czech Republic	27.2	30.7	38.3	37.4
Hungary	52.2	55.5	56.9	57.6
Slovakia	48.7	43.3	42.6	43.6
Cyprus	61.9	65.2	69.8	71.9
Estonia	4.4	5.3	5.3	4.9
Italy	110.7	108.0	106.3	105.8
Luxembourg	7.2	7.5	7.1	7.5
Euro area	69.4	69.2	70.7	
EU	62.2	61.7	63.3	63.8

Note: Apart from Central and Eastern European countries (Poland, the Czech Republic, Hungary and Slovakia), the table includes countries with the highest and lowest public debt among new EU countries and euro area countries.

Sources: ECB data, Statistic Pocket Book.

The introduction of Treasury bond futures on the WSE in 2005 may contribute to the development of the Treasury bond market. Such futures will allow long-term institutional investors to hedge their positions. The introduction of this instrument may also heighten short-term investor interest in the bond market, since bond futures enable active investment as well as profiting from drops in bond prices. One of the conditions for the T-bond market to develop is an appropriate level of liquidity of the futures market.

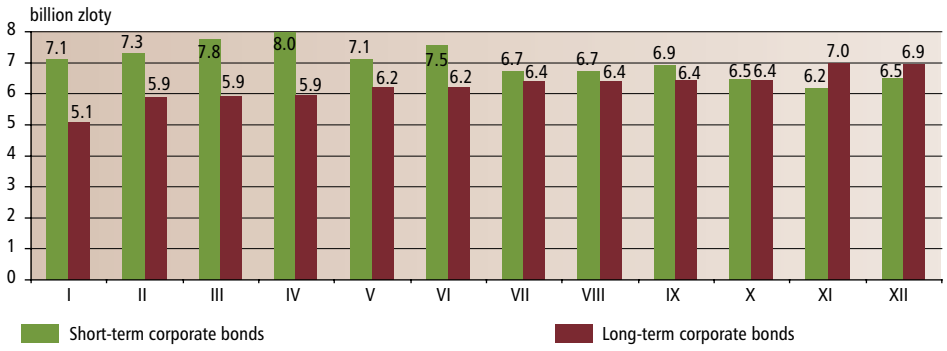
5.2.2.2. Corporate bonds

Market size

As opposed to short-term corporate bonds (SCB), the development of the long-term corporate bond (LBC) market in 2004 was rapid, although the initial level was relatively low. The outstanding value of long-term debt securities issued by corporates increased by over 25% from PLN 5.54 billion at year-end 2003 to PLN 6.94 billion at year-end 2004. In November 2004, the outstanding value of long-term corporate bonds issued for the first time exceeded the outstanding value of short-term instruments issued (Figure 5.2.10). The increased interest in LCB issues was also reflected in the growing number of companies using this form of financing (Table 5.2.19).

An important event that took place in January 2004 was the first issue of mortgage-backed bonds on the Polish market (Box 5.2.2). The bonds were issued by Europejski Fundusz

Figure 5.2.10. Outstanding value of LCBs and SCBs, 2004



Source: NBP data submitted by banks – Primary Dealers and/or money market dealers serving as depositaries.

Table 5.2.19. Outstanding value of LCBs issued and number of issuers

	2001	2002[1]	2003[2]	2004
Outstanding value, PLN billion	n/d	3.90	5.54	6.94
Number of issuers	51	53	59	69

[1] As of end January 2003.

[2] As of end January 2004.

Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers, Fitch Polska SA.

Box 5.2.2

MORTGAGE-BACKED BONDS

Mortgage-backed bonds (*obligacje hipoteczne*) are securities, where the claims have been secured by a mortgage and are fully secured by property value. The mortgage securing the claim arising from bonds may be established by the issuer or by a third party. Where a mortgage is established by the issuer, mortgage creditors (bondholders) are privileged versus the issuer's other creditors, since they have priority in satisfying their claims using the issuer's specified assets. In a proposal concerning the purchase of a mortgage-backed bond targeted at potential investors, the issuer includes detailed information concerning the mortgage entry made (the value of security, identification of property owner) as well as data concerning the property assessment.

The provisions of the Bonds Act do not stipulate that only banks have the right to issue such securities, therefore all companies that may issue bonds may also issue mortgage-backed bonds.[1]

[1] I. Heropolitańska, M. Michalski, *Hipoteka, listy zastawne, obligacje hipoteczne*, Warszawa: Twigger, 2001, p. 564.

Hipoteczny SA. Securities with an amount of PLN 16 million, forming part of an issuance programme amounting to PLN 600 million, were introduced to trading in the qualified investor segment of MTS-CeTO.

Primary market

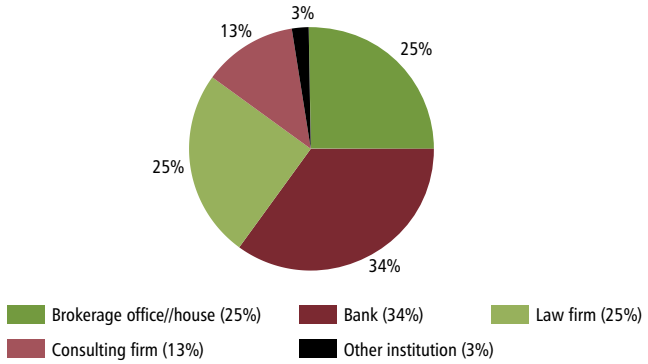
In 2004, enterprises had the largest share (over 93%) in the total outstanding value of LCBs issued. As in the SCB segment, increased interest in fundraising through LCB issues was recorded in the other financial intermediaries group (particularly in the leasing industry). Their share in total outstanding value grew by around 2 percentage points during the year and amounted to over 6%. Around 40 new issuance programmes were launched on the market.[376] Most of them were floating-rate bond issues for which the WIBOR was the base rate. The largest issuance programme concerned Polish State Railways (Polskie Koleje Państwowe SA) bonds (PLN 1.5 billion).

Apart from zloty issues, foreign currency issues were also conducted. As of year-end 2004, the outstanding value of LCBs denominated in foreign currencies amounted to 7.72% of the total outstanding value of LCBs issued.

Only a few banks specialised in conducting LCB issues. The five banks that arranged around 72% of issues by value were BRE Bank SA, Deutsche Bank SA, PKO BP SA, Bank Handlowy w Warszawie SA and Bank Pekao SA.

[376] Based on 2004 *Rating & Rynek* reports, Fitch Polska SA.

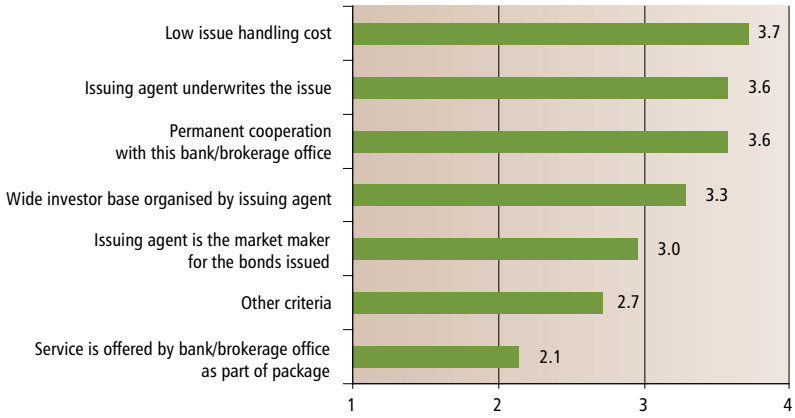
Figure 5.2.11. Companies providing consultancy services to LCB issuers



Note: Based on 22 companies which issued LCBs. The average response rate was ca. 90%.

Source: Results of a survey conducted by the NBP at the end of March/beginning of April 2004.

Figure 5.2.12. Issue agent selection criteria adopted by enterprises – LCB issuers



Note: Based on 22 companies that issued LCBs. The average response rate was ca. 90%. The average significance of each criterion is presented in the chart: a "1" means that a given factor was not significant at all, while a "5" means that it was very significant.

Source: results of a survey conducted by the NBP at the end of March/beginning of April 2004.

Surveys indicate that almost 42% of surveyed businesses that decided to issue LCBs used consultancy services. They usually turned to banks as well as brokerage offices and houses (Figure 5.2.11).

With regard to issue agent selection, low handling costs were the most important criterion for LCB issuers; it was also important that the issue agent would underwrite the issue and that it collaborated with a bank or brokerage office on a permanent basis (Figure 5.2.12).

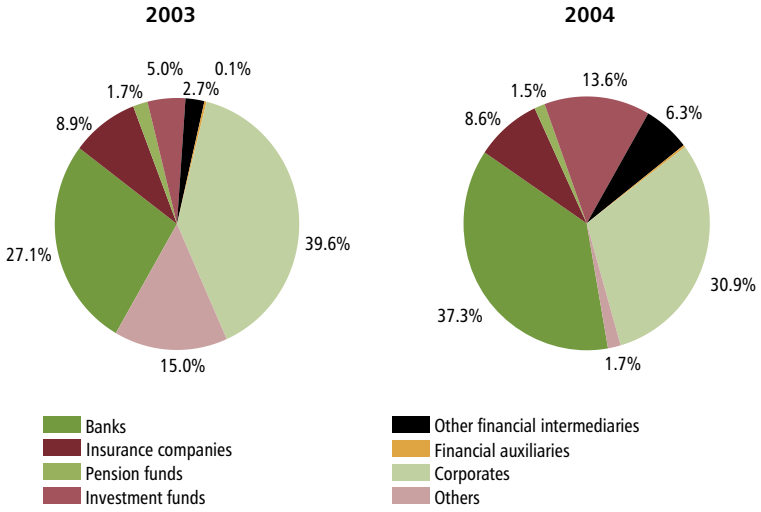
Secondary market

The LCB secondary market is primarily unregulated; transactions are settled by banks arranging the issue. The NBP has no information about the turnover of such instruments on the secondary market. Only data on trading in corporate bonds on the CeTO regulated OTC market are available. In 2004, turnover on this market more than tripled compared to the previous year, but, compared to the total outstanding value of LCBs issued, MTS-CeTO turnover remained small. Bonds issued by four companies (out of a total of 69 issues) were listed on MTS-CeTO, while bonds of only two companies (leasing companies with capital links to the BZ WBK bank) were traded. In 2004, the total turnover in these instruments amounted to PLN 24.9 million.

Investors

As in previous years, other companies and banks were the most important investors in the LCB market in 2004. As of the end of December, they jointly held 68.2% of the total value of such instruments issued in their portfolios.

Figure 5.2.13. Long-term corporate bond purchasers, as of year-end



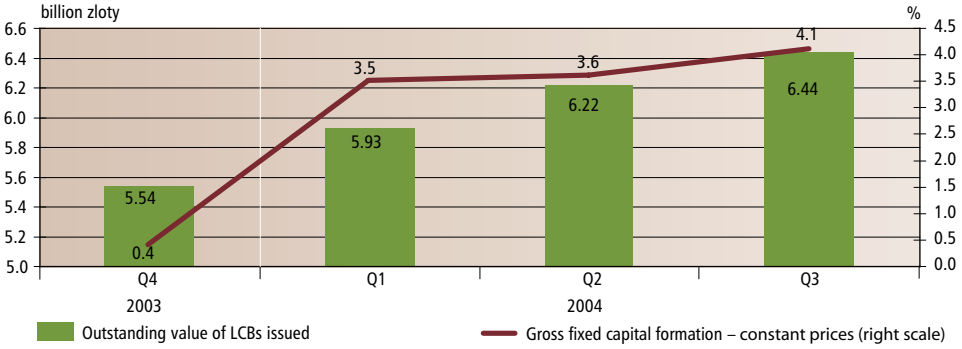
Source: NBP data submitted by banks – Primary Dealers and/or money market dealers serving as depositaries.

Compared to the previous year, the share of banks and investment funds among LCB purchasers grew by 10.2 and 8.6 percentage points, respectively.

Development trends and prospects

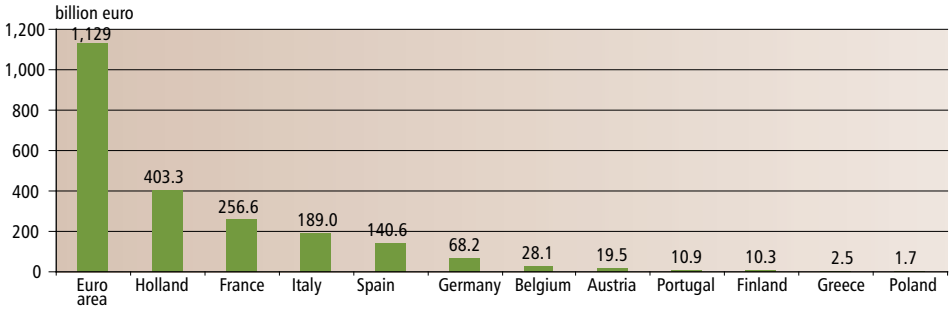
In 2004, growing gross fixed capital formation contributed to the development of the LCB market (Figure 5.2.12). Funds raised through LCB issues were mainly allocated to financing companies' investment needs. As a result, some companies, which had issued short-term instruments, changed their preferences and decided to issue debt securities with maturities exceeding one year.

Figure 5.2.14. Outstanding value of LCBs issued vs. increase in gross fixed capital formation



Sources: NBP, Central Statistical Office.

Figure 5.2.15. Outstanding value of bonds issued by non-financial corporations in the euro area and in Poland, end December 2004



Note: Non-financial corporations include enterprises and non-monetary financial corporations, i.e. other financial intermediaries, financial auxiliaries, insurance companies and pension funds. Data do not include Ireland and Luxembourg.

Source: *Euro Area Securities Issues Statistics*, European Central Bank, www.ecb.int.

Increased interest in using LCB for financing purposes has also been observed in euro area markets in recent years. The introduction of the single European currency, which extended corporate financing opportunities while limiting FX risk, was one of the most important factors contributing to the development of this segment.[377] At the same time, it is indicated that the surge in interest in the corporate debt market has been caused by intensified activity related to mergers and acquisitions and firms' resulting capital needs.[378] Moreover, the increasing competition in the European corporate sector leads enterprises to pay more attention to issues like achieving the optimum financing structure and using financial leverage for this purpose.[379] The low yield on Treasury bonds in the euro area and the reduction of the ratio of public debt to GDP at the end of the 1990s (due to the restrictions imposed by the Stability and Growth Pact)[380] were among the demand-side factors contributing to increased interest in corporate bonds.

Significant growth has been recorded in the corporate bond market in the euro area in recent years, but it should be noted that this market is still small and fragmented compared to the U.S. or Japanese one. In 2001, the ratio of the outstanding value of such instruments issued by non-financial corporations to GDP in the euro area did not exceed 8%, while in the United States it was 29%, and in Japan – 25%. This has largely been the result of the fact that the financial system in continental Europe has been historically shaped as a bank-oriented one, where enterprises raise funds mainly via financial institutions, and not directly on the market (i.e. through securities issues).

Figure 5.2.15 illustrates the considerable development potential of the Polish corporate bond market. 2005 will probably be another year in which enterprises will exhibit increased interest in fundraising through long-term bond issues.[381] It may be expected that the development of property leasing observed in Poland in 2004 will fuel the financing needs of leasing companies, which will in turn lead them to use LCB issues to a greater extent.

[377] H. Koskenkylä, *Financial Integration*, Bank of Finland Studies, A: 108, 2004, p. 53.

[378] *Second ECB Central Banking Conference Materials*, B. Carnergie-Brown, M. King, *The Transformation Of The European Financial System,* in: V. Gaspar et al., *The Transformation of The European Financial System*, ECB, 2003, p. 250.

[379] L. Baele, A. Ferrando, P. Hordahl, E. Krylova, C. Monnet, *Measuring Financial Integration In The Euro Area*, ECB Occasional Paper No. 14, April 2004, p. 45.

[380] L. Baele, A. Ferrando, P. Hordahl, E. Krylova, C. Monnet, *Measuring Financial Integration In The Euro Area*, ECB Occasional Paper No. 14, April 2004, p. 45.

[381] *Wybrane determinanty rozwoju rynku akcji i korporacyjnych instrumentów dłużnych w Polsce. Wyniki badania ankietowego*, Warszawa: NBP, 2005.

5.2.2.3. Municipal bonds

Market size

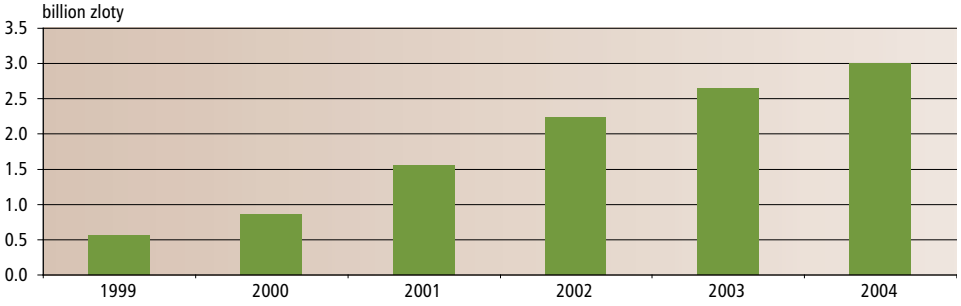
The municipal bond market is one of the smallest segments of the debt securities market. In 2004, its share in the entire debt securities market amounted to 1%. In the European Union, municipal bonds also constitute a small segment of the debt securities market (2.9% as of year-end 2004).

The outstanding value of municipal bonds issued by local government units (LGU) grew by 12.9% in 2004 but it was another year when the growth rate of the municipal bond market decreased. In 2001, it amounted to 80.6%, in 2002 – 44.4%, and in 2003 – 18.4%.

The slowdown in the development of the municipal bond market resulted from an improvement in the financial standing of LGUs. In 2004, the LGUs' total income grew by 15.6% compared to 2003, while total expenditure rose by 12.9%. As a result of the favourable balance, LGU budgets recorded a surplus of PLN 117 million, while a deficit of PLN 5.3 billion had been projected for 2004.[382] In 2003, LGU deficits amounted to PLN 1.8 billion. The improvement in the financial performance of these units was not caused by reduced investment. The LGUs' investment outlays grew faster than their income in 2004 (the investment growth rate amounted to 120.5%).

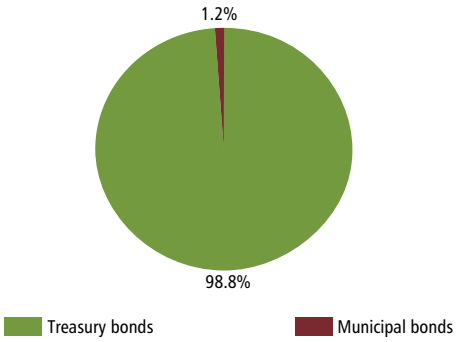
The development of the municipal securities market in 2004 resulted primarily from the LGUs' growing interest in the issue of debt securities in order to obtain funds, e.g. for the imple-

Figure 5.2.16. Outstanding value of debt securities issued by local government units, 1999–2004



Source: Ministry of Finance.

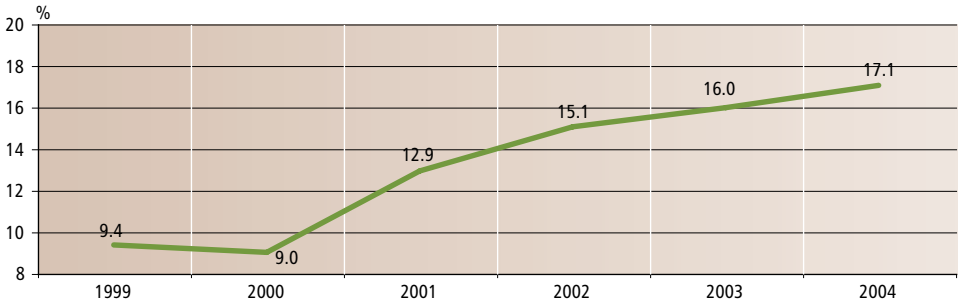
Figure 5.2.17. Composition of bonds issued by the public sector, end 2004



Source: Ministry of Finance.

[382] Based on the report of the Ministry of Finance on the budget performance of local government units for the four quarters of 2004.

Figure 5.2.18. Share of the outstanding value of securities issued in the domestic debt of local government units



Source: NBP calculations based on Ministry of Finance data.

mentation of projects co-financed by the EU. As of year-end 2004, debt securities constituted 17.1% of the LGUs' domestic liabilities compared to 15.1% as of year-end 2003. Loans remained the primary financing source for LGUs (80.8% of debt as of year-end 2004).

Municipal bond issues have, *inter alia*, the following advantages compared to loans:

– the possibility of raising funds at lower cost;

– the possibility of raising funds for longer periods;

– no need to establish additional security on the issuer's assets;

– more flexible choice of dates on which the repayment of the funds borrowed is to begin.

The low amount of individual issues is an obstacle to the development of the municipal bond market. Fixed costs are a significant component of the costs of issuing securities, and therefore low--amount bond issues may not be cost-effective. Many municipalities are small and unable to issue debt securities for economic reasons. Municipalities could solve the low issue amount problem by forming associations for the purpose of issuing bonds. In 2004, the average outstanding value of municipal bonds issued by individual LGUs was PLN 13.0 million.[383]

Primary market

Issue organisation

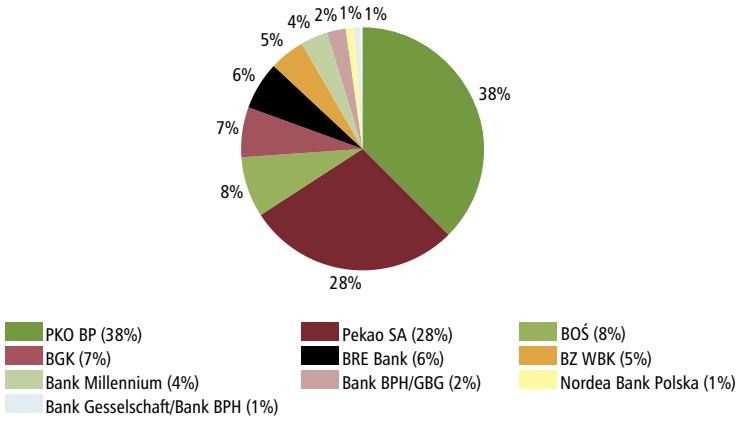
Due to the small amounts individual municipal bond issues were usually non-public, just as in previous years. As of year-end 2004, bonds issued by private placement accounted for 87% of all municipal bonds.

In 2004, no significant changes occurred with regard to the organisation of the public market which accounted for 13% of the municipal bond market and was concentrated around MTS-CeTO. As in 2003, three cities (Ostrów Wielkopolski, Poznań and Rybillionik) placed issues on this market. Since placing issues on the public market involves higher fixed costs, the amounts of public issues were much higher than those of private placements. The average amount of issues registered with MTS-CeTO in 2004 amounted to PLN 66.1 million (PLN 57.4 million in 2003).

Municipal bond issues are arranged by banks (Figure 5.2.19). Their responsibilities include, among other things, assistance in the preparation and placing of issues, maintaining bond depo-sits, settlements related to bond sales and redemption as well as interest payouts. Arranger banks may also underwrite issues.

[383] Calculations based on *Rating & Rynek* No. 24 (183), 2004, Fitch Polska SA.

Figure 5.2.19. Municipal bond issue arrangers – share in the municipal bond market, 2004



Note: Market structure includes the largest arrangers only. The issues organised by them account for over 90% of municipal bond market size.

Source: NBP calculations based on Fitch Polska SA data.

Secondary market

Public municipal bonds are traded on the MTS-CeTO regulated OTC market. Seven bond issues by the aforementioned three cities, amounting to PLN 396.5 million in total, were registered on this market.

In 2004, turnover on the public market amounted to PLN 195.4 million (compared to PLN 1.0 million in 2003). The surge in municipal bond turnover resulted solely from its very limited scale in 2003 – municipal bond liquidity still remains low. The liquidity ratio of municipal bonds amounted to 0.04 in 2004. This means that, on average, 25% of bonds in public trading changed owners once a year. Reasons for the low liquidity of municipal bonds include:

– low individual issue amounts;

– floating interest rate (floating-rate bonds are usually less liquid than fixed-rate bonds).

The NBP has no information about the turnover on the non-public market.

Investors

In 2004, as in previous years, domestic investors were major purchasers of municipal bonds. As of year-end 2004, they held 90.7% of municipal bonds. In 2004, interest in municipal bond purchases on the part of non-banking financial intermediaries, particularly investment funds, grew. Foreign investors held 9.3% of municipal bonds.[384]

Development trends and prospects

The increasing interest of local government units in the issue of municipal bonds indicates that this market segment still has development potential. In the immediate future, however, the municipal bond market will remain a small segment of the whole debt securities market. Due to the domination of low value issues, this market will also remain largely non-public in the coming years.

The need to co-finance the investments implemented by local government units with the use of EU funds is a factor which may significantly contribute to the development of the municipal bond market, since bond issues make it possible to rapidly raise the local contribution necessary

[384] The structure of purchasers has been based on a sample which includes around 90% of the municipal bond segment.

to fund such investments. The increased awareness regarding this instrument is also important for financing investment using municipal bonds.

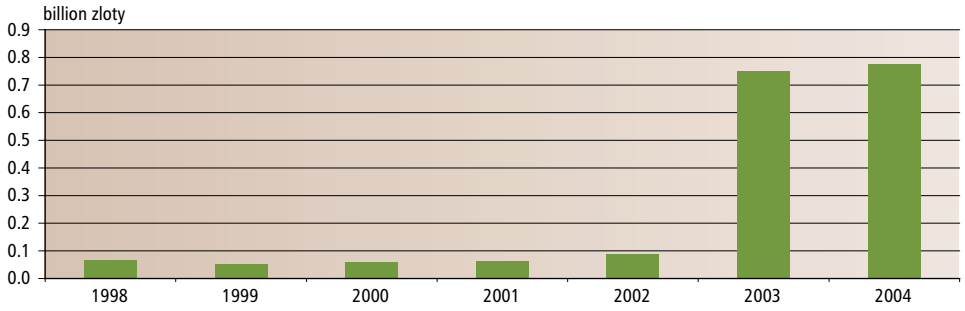
5.2.2.4. Long-term commercial bank debt securities

Long-term bank debt securities (LBDS) are securities issued by commercial banks with maturities of at least one year.[385] LBDS are issued as bank bonds and bank securities.

Market size

The outstanding value of LBDS issued was equal to around 0.25% of the entire Polish debt securities market as of year-end 2004.[386] In the euro area, issues of long-term debt securities by

Figure 5.2.20. Outstanding value of LBDS issued by commercial banks



Source: NBP.

Table 5.2.20. Currency structure of the outstanding value of LBDS, year-end

Year	Outstanding value of zloty bonds		Outstanding value of foreign-currency bonds	
	PLN million	%	PLN million	%
2002	1,857.4	77.7	532.6	22.3
2003	2,392.6	81.9	529.0	18.1
2004	1,607.2	48.8	1,684.0	51.2

Note: Among the bonds denominated in foreign currencies, which amounted to PLN 1,684 million, those issued on the domestic market amounted to PLN 177 million.

Source: NBP.

Table 5.2.21. Share of LBDS in the outstanding value of securities issued by banks, %

	1998	1999	2000	2001	2002	2003	2004
LBDS share	7.5	4.4	4.0	3.3	2.9	14.9	18.9

Source: NBP.

[385] Bank debt securities include unsecured and secured ones. In this section, unsecured securities are discussed. Secured ones (mortgage bonds) are discussed in a separate section.

[386] The European Investment Bank has also issued debt securities on the Polish market. According to National Depository for Securities data, the nominal value of EIB bonds amounted to PLN 1,875 million as of year-end 2004 (an increase of PLN 90 million on year-end 2003). 78% of the bonds issued by the EIB (by amount) are listed on the Warsaw Stock Exchange. Moreover, two 2004 issues by foreign banks amounting to PLN 40 million were placed on the non-public market.

monetary financial institutions accounted for 31.8% of the total debt securities market.[387] As of year-end 2004, funds raised by commercial banks through LBDS issues constituted around 0.2% of total commercial bank liabilities. In euro area countries, this ratio stood at 14.6% as of year-end 2004.[388]

The significant increase in the size of the LBDS market, which occurred in 2003, was not replicated in 2004. There was no incentive for banks to take interest in the issue of such instruments; in the previous year, anti-tax bond issues provided such an incentive.[389] At the same time, banks increased the amount of LBDS denominated in foreign currencies issued on markets abroad. This indirectly contributed to the slow development of the domestic LBDS market. Issues of bonds denominated in foreign currencies were conducted via private placement. Moreover, the increase in interest rates in 2004 adversely affected the growth of the LBDS market.

Primary market

In 2004, bonds amounting to PLN 2.6 million were offered through public issues, while private placements came to PLN 30 million. The organisation of the LBDS primary market is analogous to that for SBDS.

Secondary market

CeTO-RPW and the WSE are the most important secondary bond trading markets. As of year-end 2004, bonds issued by four banks were registered with CeTO-RPW and bonds issued by one bank with the WSE.[390] Until 2003, there had been no public trading in bank bonds. A significant

Table 5.2.22. Share of LBDS in total long-term securities secondary market turnover and the relative size of debt securities markets in non-euro area EU countries and accession countries, 2003

Country	LBDS share in total long-term securities secondary market turnover, %	Debt securities market size as a proportion of GDP, %
Czech Republic	3	56
Denmark	71	201
Estonia	19	3
Cyprus	24	62
Latvia	24	11
Lithuania	0	16
Hungary	1	62
Malta	3	71
Poland	**1**	**38**
Slovenia	1	47
Slovakia	1	38
Sweden	33	107

Source: NBP calculations based on: *Bond Markets And Long- Term Interest Rates In Non-Euro Area Member States Of The European Union And In Accession Countries*, Frankfurt: ECB, 2004.

[387] Calculations for the euro area have been based on ECB statistical data. In the euro area, secured bonds constitute around 40% of bank bonds. For full comparability with the euro area bank debt securities market, the mortgage bond segment should be combined with the LBDS segment, which would translate to a total share of the entire Polish debt securities market amounting to around 0.5%.

[388] Calculations based on *Monthly Bulletin*, ECB, April 2004.

[389] Anti-tax bond issues were described in: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 176.

[390] Moreover, four types of bonds issued by the European Investment Bank, amounting to PLN 1,465 million, were registered with the WSE. The turnover in these bonds amounted to PLN 532 million. Bearing in mind high nominal values of these bonds, i.e. PLN 10,000 (three bonds and PLN 100,000 (one bond) primarily institutional investors are able to participate in trading. Four EIB bonds amounting to PLN 410 million have not been introduced to public trading.

change occurred in 2003. The turnover in these securities amounted to PLN 7.6 billion.[391] The high turnover of bank bonds did not mean that the market was highly liquid – it was mainly caused by early redemptions of bonds by their issuers.[392] In 2004, total turnover amounted to PLN 3.0 billion, i.e. less than half of the 2003 figure. The decrease in early redemptions was the primary reason for decreased bank bond turnover. In EU-15 countries, the share of LBDS in total long-term securities turnover was higher (Table 5.2.22).

Compared to Treasury Securities, the values of LBDS issues are low which limits their liquidity. As of year-end 2004, the smallest issue of wholesale fixed-rate Treasury bonds amounted to over PLN 3 billion, while the maximum amount of a public bank bond issue was around PLN 300 million. This situation is not only typical of the Polish market. In EU-15 countries, the amounts of bank bond issues are also lower than those of Treasury securities issues. In the EU, standard Treasury bond issues (particularly benchmark ones) amount to at least EUR 5 billion, while almost 50% of EU bank debt securities issues amount to less than EUR 500 m.[393]

The NBP has no information about LBDS turnover on the non-public market.

Investors

Public bank bond issues have been targeted primarily at individuals. Private placements, on the other hand, have been targeted at institutions.

Development trends and prospects

The issue of bank debt securities makes it possible to go beyond the traditional methods of fundraising (branch network, interbank market). It may also improve a bank's long-term financing stability due to a greater diversification of its sources.

The development of long-term loans, particularly housing loans, is an important factor which will affect the use of LBDS issues. Currently, deposits taken from non-financial customers are the main source of financing for rapidly growing housing loans. Such a situation is not optimal from the point of view of bank stability. Moreover, if inflation remains at a low and stable level, then given the relatively low interest rates, a decrease in demand for deposits may be expected, e.g. as a result of competition from investment funds. In such circumstances, banks will have to look for other financing sources. Such sources may include the issue of long-term securities or asset securitisation. Management boards of individual banks will decide on the forms of financing applicable, depending on their strategies.

Supervisory regulations also favour development of the LBDS market – they may increase banks' interest in holding other banks' debt securities, since as regards risk measurement, liabilities arising from the issue of such instruments are treated in a privileged manner.[394]

The maturity structure of bank debt securities still exhibits a fraction of long-term securities. Poland's entry into the euro area should contribute to an increase in the value of BDS issued, since opportunities for selling BDS to foreign investors, who largely want to buy long-term instruments, will increase. In EU-15 countries, LBDS are the most important segment of the bank debt securities market. On the other hand, due to the ownership structure of the banking sector and rating differences, contracting liabilities with parent banks may prove to be more advantageous.

Due to the low value of individual bank securities issues this market will probably remain illiquid.

[391] Turnover figures presented refer to short- and long-term bonds.

[392] Early bond redemption was an integral component of anti-tax bonds.

[393] *The Euro Bond Market Study 2004,* Frankfurt: ECB, December 2004, p. 24.

[394] *Euro Money Market Study 2004,* Frankfurt: ECB, 2004, p. 24.

5.2.2.5. Mortgage bonds

Market size

In 2004, four mortgage banks were authorised to operate: HypoVereinsbank Bank Hipoteczny SA, Rheinhyp BRE Bank Hipoteczny SA, Śląski Bank Hipoteczny SA and Nykredit Bank Hipoteczny SA. During the period under analysis, the outstanding value of mortgage bonds issued by mortgage banks, both in zloty and in foreign currencies, steadily increased.

Table 5.2.23. Outstanding value of mortgage bonds issued by mortgage banks in Poland between 2001 and 2004 (end December, PLN million)

2001	2002	2003	2004
115.1	245.1	803.8	1,010.9

Source: NBP.

Rheinhyp BRE Bank Hipoteczny SA maintained its dominant position on the mortgage bond market, although its share dropped to 83% (compared to 91% in 2003). In 2004, the bank conducted two private mortgage bond placements amounting to USD 25 million and EUR 25 million. In 2004, Śląski Bank Hipoteczny SA also conducted a private placement amounting to PLN 30 million. During the period under consideration, no public issues of mortgage bonds were conducted.

Table 5.2.24 presents basic data on private placements and public issues of mortgage bonds in Poland. In total, 17 issues of such instruments have been conducted in Poland since 2000.

Market organisation

Issues are arranged by universal banks with capital links to mortgage banks. They act as dealers, paying agents and depositaries simultaneously. BRE Bank additionally organises the secondary market for mortgage bonds issued through private placements by Rheinhyp BRE Bank Hipoteczny SA.

Table 5.2.24. Mortgage bond issues in Poland

Bank name	Issue date	Maturity	Issue amount, millions	Issue currency	Issue type
Rheinhyp BRE Bank Hipoteczny SA	Jun 28, 2000	5-year	5	PLN	PP
	Sep 14, 2001	3-year	10	USD	PP
	Sep 14, 2001	3-year	5	EUR	PP
	Nov 20, 2001	4-year	10	USD	PP
	May 20, 2002	6-year	10	USD	PP
	May 20, 2002	7-year	10	EUR	PP
	Jul 29, 2002	4-year	50	PLN	PP
	Apr 10, 2003	5-year	200	PLN	PI
	May 20, 2003	6-year	20	EUR	PP
	Oct 23, 2003	5-year	200	PLN	PI
	May 20, 2004	5-year	25	EUR	PP
	May 20, 2004	5-year	25	USD	PP
HypoVereinsbank Bank Hipoteczny S.A.	Apr 29, 2002	5-year	22	PLN	PP
	May 16, 2002	5-year	8	PLN	PP
	May 16, 2002	5-year	10	PLN	PP
Śląski Bank Hipoteczny SA	Jan 24, 2003	4-year	3	EUR	PP
	Nov 29, 2004	3-year	30	PLN	PP

Note: "PI" denotes a public issue, while "PP" denotes a private placement.
Source: NBP.

Secondary market

Secondary trading in mortgage bonds can take place both on the public and non-public markets. Public trading is organised by MTS-CeTO.

Although in 2004 turnover amounted to PLN 122 million which is a significant increase over the previous year (PLN 59 million) market liquidity remained low (the liquidity ratio in 2004 was 0.03). Only two public mortgage bond issues were listed, valued at PLN 200 million each. The NBP has no information about turnover on the non-public market.

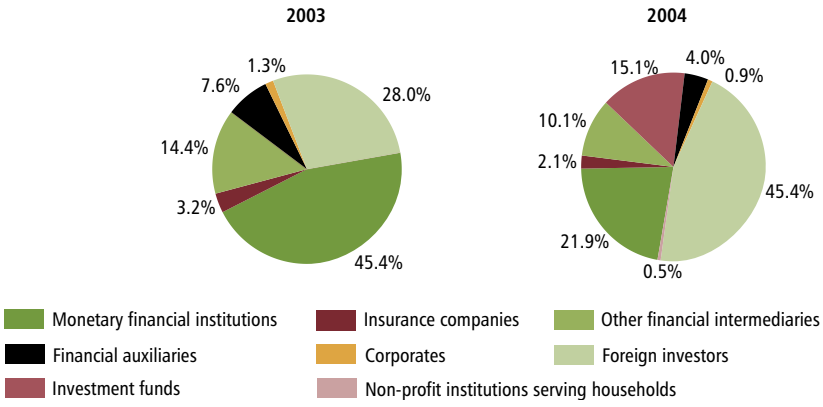
Investors

Mortgage bonds can be purchased on the primary market by banks, insurance companies, open pension funds,[395] investment funds and asset management companies.

MTS-CeTO does not publish official data on the the mortgage bond investors' structure on the public market. According to the information submitted by Rheinhyp-BRE Bank Hipoteczny, such instruments had been purchased by investment funds (60%), banks (21%), open pension funds (11%), insurance companies (5%) and asset management companies (3%).[396]

In 2004, investors' structure on the non-public mortgage bond market changed significantly. Until 2003, these instruments were primarily purchased by domestic banks but in 2004, their market share dropped to 21.9%. Foreign investors were the largest group of purchasers in terms of market share (45.4%). In 2004, investment funds appeared in mortgage bond purchaser statistics for the first time.

Figure 5.2.21. Investors on the mortgage bond market (private placements)



Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

Development trends and prospects

The market for securities used to finance the property sector (including mortgage bonds) still has considerable development potential in Poland. If the demand for mortgage loans, which was observed in 2004, continues, it will trigger an increase in the banks' demand for long-term financing. In consequence this will lead to a rise in the supply of such financial instruments. In European

[395] Open pension funds could purchase mortgage bonds issued both on the public and non-public markets. As of year-end 2004, open pension funds held publicly issued mortgage bonds amounting to PLN 85.3 million (compared to PLN 85.1 million in 2003), which was equal to 0.14% of their investment portfolio.

[396] Presentation: P. Łopuszański, *Polski list zastawny na tle europejskich covered bonds*, 2004, http://stock.wne.edu.pl/~mkopec/3c.ppt.

Table 5.2.25. Housing loans granted by commercial and mortgage banks (year-end, PLN million)

Bank	2002	2003	2004[1]
Commercial banks	27,237.3	38,247.9	42,793.8
Mortgage banks	336.5	674.5	769.0
Total banks	27,573.8	38,922.4	43,562.8

[1] Preliminary data.

Source: NBP.

Union member states, the outstanding value of only one type of such securities – mortgage bonds – issued by banks was over EUR 1.5 trillion as of year-end 2003,[397] which constituted 16.5% of Community GDP (similarly as in 2002). This market has developed rapidly in France, Ireland and Spain. However, Great Britain and Germany, which account for around half of the European market, remain the largest mortgage bond markets in the European Union. In Germany, France, Denmark, Sweden and Hungary, mortgage banks extend most mortgage loans. In other EU countries, such loans are usually supplied by commercial (universal) banks.

In 2004, the mortgage loan market accounted for two-thirds of loans to households and 35% of total loans in European Union countries. The market amounted to EUR 4,000 billion, i.e. 40% of GDP.

The limited development of the mortgage bond market in Poland is related to the dominance of universal banks on the housing loan market (Table 5.2.25). Since universal banks finance mortgage loans with short-term deposits, they are able to offer low-interest rate housing loans. Such banks also have extensive branch and sub-branch networks, which facilitate access to customers. However, extending long-term loans (up to 30 years) using short-term deposits may cause considerable risk for banks. Therefore, the importance of institutions that are able to obtain long-term financing – mortgage banks which issue mortgage bonds or banks which issue bonds – may grow with time. Universal banks may also use securitisation by selling mortgage loan portfolios to companies established specially for this purpose – so-called SPVs (special purpose vehicles). As universal banks and mortgage banks operating in Poland belong to the same banking groups, the decision concerning the choice between these options and, therefore, the development of a specific securities market segment will depend on the strategy adopted by a given group.

In previous years, prolonged procedures at land and mortgage register court divisions were an important obstacle to market development. In order to streamline work at the courts which maintain land and mortgage registers, courts computerised their register systems in 2004. The time necessary for a mortgage entry to be made was reduced considerably, but still exceeded one month. In the opinion of market participants, the long wait for land and mortgage register entries to be made continues to pose significant problems, particularly in large cities.

Activities of institutional investors (investment and pension funds, insurance companies) will be among the decisive factors in development of the secondary market in mortgage bonds. Considerable financial assets at their disposal as well as their long investment horizon enable the development of this financial market segment. Although legal regulations allow insurance companies, investment funds and pension funds to invest a specified percentage of financial assets in mortgage bonds they do not constitute an obstacle to market development.[398] Domestic institutional inve-

[397] *Annual Report 2004*, European Mortgage Federation, www.hypo.org.

[398] With regard to investments in mortgage bonds by institutional investors, the following rules were in force:

– insurance companies could invest up to 10% of the amount of technical provisions (the Insurance Activity Act of May 22, 2003, *Dz.U.* No. 124/2003, item 1151 as amended);

– investment funds could invest up to 80% of fund assets, but not more than 25% of assets in mortgage bonds issued by a single mortgage bank (the Act on Investment Funds of May 27, 2004, *Dz.U.* No. 146/2004, item 1546);

– open pension funds could invest up to 40% of assets, but not more than 15% in mortgage bonds not admitted to public trading (Ordinance of the Council of Ministers on the determination of the maximum percentage of assets of an open pension fund that may be invested in individual investment categories as well as additional restrictions regarding the investment activities of pension funds of February 3, 2004, *Dz.U.* No. 32/2004, item 276).

stors do not invest in the mortgage bond market in an active manner. Pension funds, which manage considerable assets, are virtually absent from this financial market segment. The low amount of public issues and the absence of a liquid secondary market are among the most important reasons for the lack of involvement on the part of domestic institutional investors.

5.2.2.6. NBP bonds

In 2004, the outstanding value of bonds issued by the NBP remained unchanged and equalled PLN 7.82 billion. As of year-end 2004, the share of those bonds in the long-term bond market amounted to 3.2%.

NBP bonds were issued in 2002 in order to convert existing 6- to 8-year non-marketable bonds into 10-year marketable ones. They were purchased by commercial banks. Since NBP bonds have been made marketable, they may be traded on the secondary market and purchased by natural and juridical persons, both domestic and foreign. The bonds are issued in dematerialised form and registered in the securities depository maintained by the National Depository for Securities. Their nominal value is 100 zloty and interest is calculated quarterly on a floating rate basis as the arithmetic mean of yields on 52-week Treasury bills sold by the Minister of Finance at auctions held within the two months directly preceding the month in which a given interest period begins.[399]

The floating rate is among the chief factors making NBP bonds relatively illiquid. In 2004, the turnover of NBP bonds totalled PLN 1.7 billion and was 70% lower than in 2003. As in 2003, repos accounted for the entire turnover.

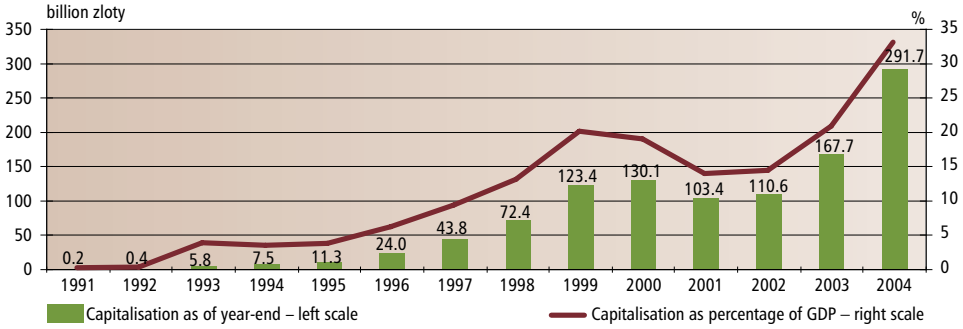
5.2.3. Marketable equities market – stocks

In 2004, the marketable equities market included allotment certificates, subscription rights and priority rights alongside shares.

Market size

The value of shares in listed companies, and thus the size of the stock market was influenced by processes related to IPOs, delisting of other companies and changes in the valuation of shares. In 2004, the upward trend from 2003 continued. Market capitalisation grew by 74% and the WIG index rose 28%, reaching an all-time high of 26,636.19 points. On 31 December companies listed on the parallel market brought the highest returns – the WIRR index rose by 73%. Favourable macroeconomic data concerning Poland, which were reflected by companies' growing profits,

Figure 5.2.22. WSE capitalisation



Note: Capitalisation of domestic and foreign companies listed on the WSE.
Source: WSE.

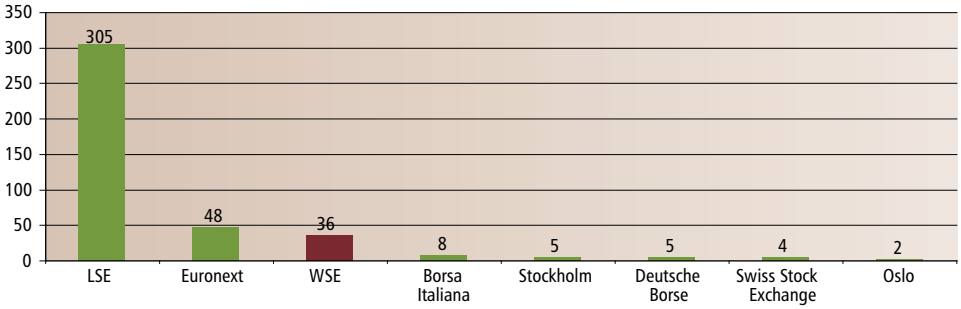
[399] Resolution No. 5/6/PPK/2002 of the Management Board of the National Bank of Poland on the issue by the National Bank of Poland of bonds earmarked for the conversion of part of the bonds purchased by banks in connection with the reduction in required reserve ratios of February 8, 2002 (*Official Gazette of NBP* No. 3/2002, item 5).

contributed to the bull market. Poland's accession to the European Union as well as upward trends in global stock markets were also important.

Primary market

The rise in stock exchange capitalisation in 2004 was mainly the result of a considerable increase in the number of initial public offerings. Thirty-six new companies, including four foreign ones, entered the WSE. Demand declared by investors on the primary market exceeded the supply of new stocks. Only two of the newly listed companies were sold by the Treasury while the remaining

Figure 5.2.23. IPOs on selected European stock exchanges, 2004



Source: *IPO Watch Europe. Review of the year 2004*, PricewaterhouseCoopers.

Box 5.2.3

5

FIRST LISTING OF PKO BP SA ON THE WSE

Shares in the largest commercial bank PKO BP were first listed on the stock exchange on November 10, 2004. During the public offering, the Treasury sold 385 million bank shares (38.5% of the bank's equity capital), 42% of which (160 m) were purchased by individual investors, 34% (132 m) by domestic institutional investors and 8% (85 m) by foreign investors. Due to the very high demand, bids by retail investors were reduced by 89.99% on average. The PKO BP offering boosted the number of investment accounts – 80 thousand were opened, bringing their number to over 800 thousand.

Table 5.2.26. WSE stock market statistics

	2000	2001	2002	2003	2004
1. Exchange capitalisation, year-end (PLN million)[1]	130,085	103,370	110,565	167,717	291,697
– of which domestic companies (PLN million)	130,085	103,370	110,565	140,002	214,313
2. Number of listed companies	225	230	216	203	230
3. Number of newly listed companies	13	9	5	6	36
4. WIG index					
– year-beginning (points)	18,981.7	17,672.8	13,995.2	14,378.1	21,299.4
– year-end (points)	17,847.5	13,922.2	14,366.7	20,820.1	26,636.2
– year minimum (points)	14,929.3	11,564.6	12,582.4	13,502.7	21,299.4
– year maximum (points)	22,868.4	17,875.9	16,311.6	22,033.8	26,636.2
– return on index (%) (y-o-y)	-1.3	-22.0	3.2	44.9	27.9
5. Investment accounts at year-end (thousands)	1,236	1,085	1,016	947	851
6. Capitalisation as a proportion of GDP (%)	18.97	13.92	14.34	20.84	32.99

[1] Capitalisation calculated for all companies listed on the WSE (both domestic and foreign).

Source: WSE.

were introduced to the market by private investors.[400] The significant increase in capitalisation in November (by 14%) was largely the result of the IPO of PKO BP bank, which became the largest domestic company listed on the WSE. This was the second largest IPO in Europe in 2004.[401] With regard to the number of new companies listed, the WSE was ranked third among European stock exchanges after the London Stock Exchange and Euronext.

In 2004, nine companies were delisted due to acquisitions (8 companies) and bankruptcy (one company). Compared to previous years, the number of delisted companies decreased considerably (in 2003, there were 19). In December, bmp AG – one of the L.G.VC funds became the first corporation admitted to public on the basis of the single European passport.

Apart from WSE, CeTO-RPW was the second market where equities were traded. The profile of companies listed on this platform (small and medium-sized ones) did not change. Favourable trends on CeTO-RPW prevailed until September 2004, but were reversed later over the whole year. ITO index[402] dropped by 16% and capitalisation rose slightly (by 3%).

Box 5.2.4

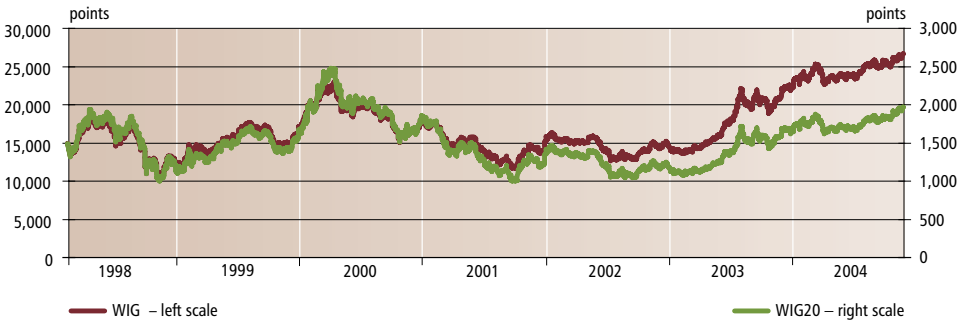
STOCK EXCHANGE INDICES

As in previous years, the WSE published seven indices: WIG, WIG-20, WIRR, NIF, MIDWIG, TechWIG and WIG-PL. Moreover, the stock exchange also published five sectoral sub-indices: WIG Banks, WIG Construction, WIG IT, WIG Foodstuffs and WIG Telecommunications.

In 2004, due to the upward trend prevailing on the stock market, rates of return on all stock exchange indices were positive. As in 2003, the highest rate of return was recorded for small companies included in the WIRR index (72.9%). For the first time in many years, companies included in the NIF index brought strong positive rate of return (66.8%). Investors could also achieve significant profits by investing in medium-sized companies included in the MIDWIG index (36.3%). The lowest returns were recorded for companies included in the TechWIG index (16.5%).

Stock market indices reached all-time highs several times. At the last session in 2004, indices set new all-time highs (WIG – 26,636.19 points, WIG-PL – 26,540.11 points) and highest annual levels (WIG-20 – 1,960.57 points).

Figure 5.2.24. Main market indices (WIG and WIG-20) on the WSE



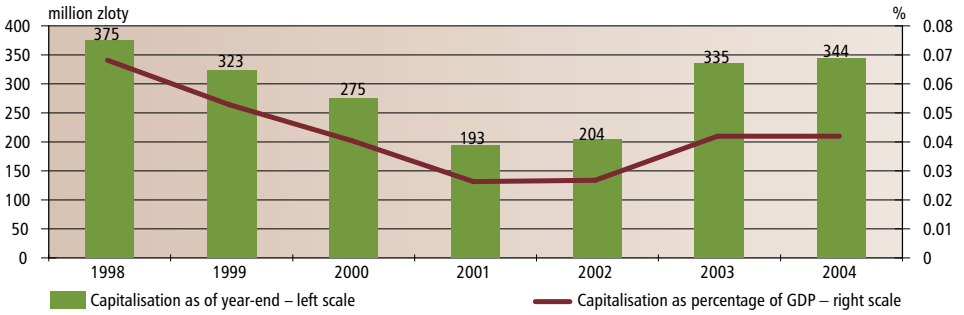
Source: WSE.

[400] The first privatisations of Treasury companies (PKO BP and WSiP) in 5 years were a success. In the case of both companies, investors' bids were reduced by around 90%.

[401] *IPO Watch 4Q 2004*, PricewaterhouseCoopers.

[402] The ITO index is the Central Table of Offers (CeTo) stock index.

Figure 5.2.25. CeTO-RPW capitalisation



Source: MTS-CeTO.

Table 5.2.27. Basic CeTO-RPW market statistics

CeTO	1998	1999	2000	2001	2002	2003	2004
Number of listed companies	25	24	21	21	21	22	18
Capitalisation (PLN million)	375	323	275	193	204	335	344
ITO index (points)	11,500.1	15,548.8	15,254.1	9,114.9	9,775.8	9,703.5	9,456.9

Source: MTS-CeTO.

In 2004, no new company entered CeTO-RPW and the number of listed companies decreased as a result of four firms having been delisted due to their liquidation, bankruptcy or transfer to the WSE.

5

Secondary market

Company stocks are listed on the Warsaw Stock Exchange (WSE) and the Central Table of Offers (CeTO-RPW). The former is the stock exchange market, the latter – the OTC market.

In 2004, the By-laws of the Warsaw Stock Exchange changed. This enabled a wider group of participants to conduct certain transaction types. Currently, apart from brokerage houses and banks engaging in brokerage activities, stock exchange members may include foreign investment companies and juridical persons, other National Depository for Securities participants and commercial banks.[403] Those companies may conduct transactions on their own account or a customer's account via stock exchange brokers or dealers. As of year-end 2004, there were 26 companies with the status of stock exchange members (16 brokerage houses, 4 banks engaging in brokerage activities and 6 commercial banks which were National Depository for Securities members). Selected brokerage houses and offices also perform functions of market makers and issuer market makers. As of year-end 2004, 10 stock exchange members were market makers and 14 companies were issuer market makers.

From March 8, 2004, limits on stock price fluctuations with regard to the reference price changed on the WSE. Currently, the opening stock price may change by a maximum of 10% compared to the previous day closing price (earlier, it was 15%).[404] This change was introduced in order to reduce the considerable differences between settlement prices.

Since May 1, 2004, the stock exchange market has been divided into official (main) and unofficial (parallel) markets. Shares in companies which satisfy applicable share dispersion criteria, and with capitalisations exceeding one million euros, may be listed on the official market. No capital requirements have been stipulated for the unofficial market. In order to be listed on this market, a

[403] By-laws of the Warsaw Stock Exchange of September 22, 2004, www.gpw.com.pl. Commercial banks may only conduct transactions on the derivatives market, for their own account and on their own behalf only.

[404] Resolution No. 36 of the Management Board of the Stock Exchange of February 4, 2004.

Box 5.2.5

TRANSPARENCY OF LISTED COMPANIES

In July 2002, the Committee of Good Practices drew up the document *Dobre praktyki w spółkach publicznych w 2002 r.* ("Code of Good Practice at Listed Companies in 2002"). The document is a set of rules which should be adhered to by company authorities and their members as well as majority and minority shareholders. In September 2002, the code was adopted by the Management and Supervisory Boards of the WSE. In July 2003, listed companies submitted their declarations regarding the adherence to the rules for the first time.

In July 2004, all companies listed on the WSE submitted their declarations regarding the adherence to the Code of Good Practice. Seven companies stated that they adhered to all rules (compared to three in 2003). The number of companies which declared that they would not adhere to any rules dropped from 17 in 2003 to 9 in 2004.

The companies whose stocks are traded on the CeTO-RPW market also submitted declarations. Issuers declared adherence to all general rules and most specific ones.

Table 5.2.28. Number of companies listed on individual WSE markets, 1998–2004

Market type	2000	2001	2002	2003	2004
Main	121 + 14 NFI	123 + 14 NFI	118 + 14 NFI	112 + 14 NFI	201 + 14 NFI
Parallel	67	61	57	54	15
Free	23	32	27	23	x

Source: WSE.

company must be admitted to public trading and it must be confirmed that it is neither bankrupt nor under an arrangement with creditors. Segments for outstanding companies have been organised by the stock exchange on both markets: the Plus segment on the official market, and the Prim segment on the unofficial one. Shares in eight companies have been listed in the Plus segment, while no companies have been listed in the Prim[405] one. Due to the rapid increase in the supply of stocks in new companies, the total number of firms listed on the WSE grew to 230 (i.e. by 13%).

CeTO-RPW also introduced many changes to its By-laws, which concerned, among other things, reporting obligations and the amounts and structure of fees.[406] In order to enable a more flexible response to the changing market situation, the Management Board of MTS-CeTO was granted the right to reduce fees charged to market participants or waive them. Significant changes were also introduced regarding the admission of participants to operation on the market. A bank, which is not a National Depository for Securities member, may also become a participant in CeTO-RPW.[407]

Turnover

In 2004, WSE turnover amounted to PLN 109.8 billion,[408] which was an all-time high. Compared to 2003, it increased by 65%. This was the result of increases in both company supply

[405] More on this subject in Chapter 3.

[406] No fee is charged to share issuers for the listing of equities introduced into trading during the calendar year and listed together with equities which have been traded earlier.

[407] An company admitted to operate on the market which acts for its own account and on its own behalf may be a participant in CeTO-RPW. Cf.: *Regulamin obrotu*, www.mts-ceto.pl.

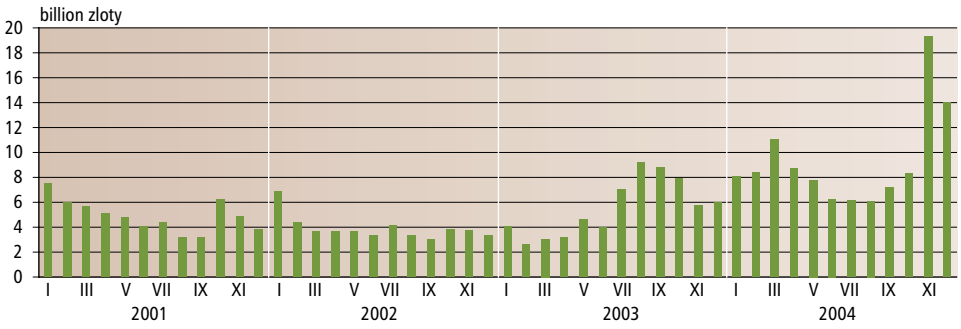
[408] Previously, the highest annual stock turnover was recorded in 2000 (PLN 103.7 billion).

and demand for stocks due to the rising sshare prices which had continued since 2003. The first listing of PKO BP SA bank in November 2004 significantly contributed to the rise in turnover. On the day of the IPO, the turnover in PKO BP shares amounted to PLN 2,780.4 million – the highest session turnover of single company stock in WSE history. The turnover on the WSE in all companies also reached a record high. In November, monthly turnover more than doubled compared to October 2004.

In 2004, the turnover of stock in the twenty largest companies dropped to 77% of total WSE turnover (compared to 83% in 2003), which was a favourable trend.

In 2004, negative trends on the CeTO-RPW market were reversed. For the first time since 2001, total stock turnover on this market grew by almost 150%. The average number of

Figure 5.2.26. Stock turnover on the WSE



Note: Turnover calculated as the sum total of daily turnover over a given month.
Source: WSE.

Table 5.2.29. Stock turnover on the WSE

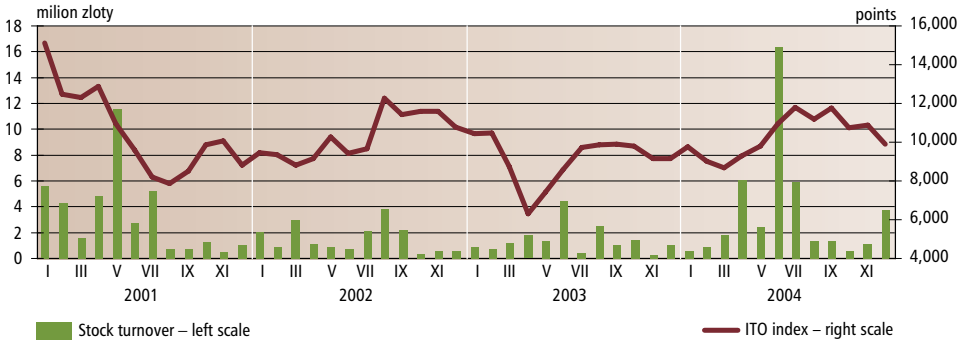
	2000	2001	2002	2003	2004
Stock market turnover (PLN million)[1]	103,658	60,548	47,729	66,443	109,775
– trading day average (PLN million)	676.4	321.8	255.7	317.8	464.8
Turnover ratio (%)[2]	42.9	30.8	22.9	29.2	32.3
Transactions per session	14,919	12,512	11,358	12,228	15,467

[1] Excluding block transactions.

[2] Turnover ratio for shares is the ratio of the number of shares traded to the average number of shares in trading and introduced into trading during the period under analysis.

Source: WSE.

Figure 5.2.27. Stock turnover and the ITO index at CeTO-RPW



Note: 1. Stock turnover calculated as the sum total of daily turnover over a given month.
2. ITO index calculated as the average monthly index level.

Source: MTS-CeTO.

Table 5.2.30. Stock turnover at CeTO-RPW

	2000	2001	2002	2003	2004
Total turnover (PLN million)	241	40	18	17	42
– average daily turnover (PLN million)	0.96	0.16	0.07	0.07	0.17
Average number of transactions per trading day	93	17	9	8	15

Source: MTS-CeTO.

transactions per trading day also rose from 8 to 15 (by 88%). Nevertheless, turnover remained very low and in 2004 it equalled 170,000 zloty range on average (i.e. much higher than in 2003). In 2003, the high incidence of block transactions was typical for the OTC stock market. Their share in total turnover amounted to 73%. A significant change occurred in 2004 – block transactions accounted for only 26% of turnover.

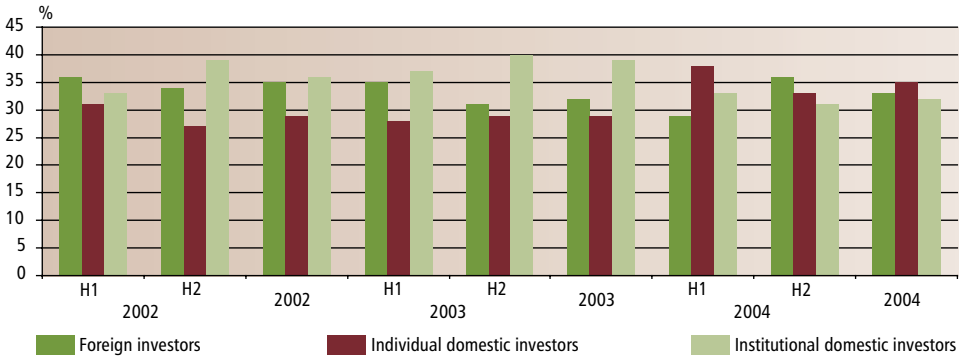
In 2004, WSE and National Depository for Securities continued to pursue fee reduction policies. The WSE reduced fees charged to its members for stock trading twice. The first reduction took place in April (to 0.051% of turnover), and the second in November (to 0.035% of turnover). The NDS also introduced changes to its fee policy. Among other things, fees charged to participants and issuers for direct participation were reduced by 30% (from PLN 20,000) and the quarterly fee for maintaining a share deposit decreased to 0.0025% of the shares' market value. The charging formula also changed (no operating fees, modification of settlement fees).

Participants

Information about stock exchange participants may be obtained from several sources. Based on responses to questionnaires sent to brokerage offices and houses, the WSE publishes information about the share of individual investor categories in company stock turnover. The Central Statistical Office and the NBP publish data concerning the amount of stocks held in the investor portfolios. Central Statistical Office data are based on information obtained from brokerage offices and houses and do not include stocks deposited with trustee banks (this applies to portfolios held by institutional investors who must adhere to statutory requirements and by strategic investors). On the other hand, the data collected by the NBP in order to calculate Poland's investment position only includes foreign investors.

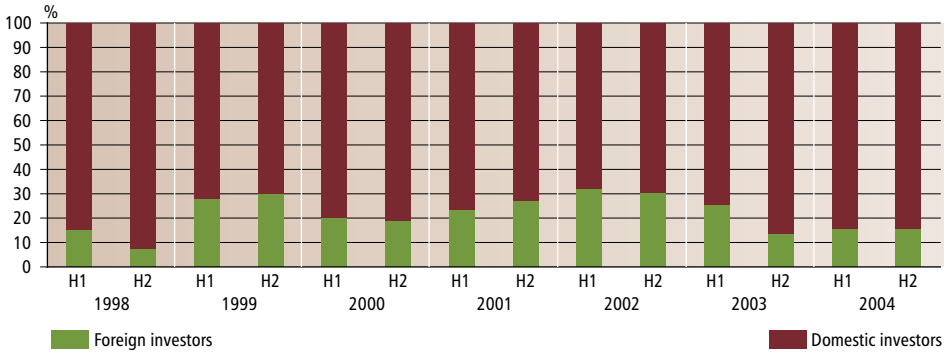
During the period under analysis, the composition of investors trading on the WSE stock market changed. The share of individual investors grew significantly – to 35% (in 2003 it amounted to 29%). This change was primarily caused by the increased involvement of these investors in the first half of 2004 (38% share of turnover). The share of foreign investors in WSE stock turnover rose slightly compared to 2003 (by 1%). On the other hand, the turnover generated by foreign entities grew by as much as 69%. This was probably the result of Poland's accession to the European Union as well as the upward trend on the primary market. The share of domestic institutional investors

Figure 5.2.28. Investors on the stock market by share of turnover



Source: WSE.

Figure 5.2.29. WSE investor structure by the value of shares in investment accounts maintained with brokerage offices and houses



Source: NBP calculations based on Central Statistical Office data.

Figure 5.2.30. Value of shares admitted to public trading in foreign investors' portfolios to WSE capitalisation

Source: NBP calculations based on NBP and WSE data.

dropped significantly – to 32% (compared to 39% in 2003). This may suggest that open pension funds and investment funds employed the "buy and hold" strategy.[409]

According to Central Statistical Office data on the value of stocks in investment accounts maintained with brokerage offices and houses, the share of foreign investors in 2004 grew slightly, and at the end of 2004 reached 15.9% (Figure 5.2.29). This increase was primarily caused by the upward trend on the stock market.

However, the data collected by the NBP for the purposes of compiling statistics on Poland's investment position suggest that the foreign investors' involvement in the Polish stock market was much higher (Figure 5.2.30). This results from the fact that NBP data also include shares held by strategic investors (i.e. controlling more than 10% of the shares in a given company), registered shares at trustee banks and stocks held by a large proportion of foreign institutional investors which are not included in CSO data. Strategic investors control a significant part of shares which are excluded from stock exchange trading and therefore are not held in investment accounts with brokerage offices and houses.

The amount of shares held by open pension funds was equal to 6.9% of WSE capitalisation (8.5% as of year-end 2003). A slight decrease in 2004 compared with the previous year was caused by the fact that WSE capitalisation grew more rapidly than open pension funds assets.

[409] As of end December 2004, the amount of stocks in the open pension funds' aggregate portfolio was PLN 20.2 billion, i.e. 33% of the entire portfolio. Stocks in the WIG-20 index constituted 73% of stocks held by open pension funds (76.1% in 2003). The open pension funds' interest in medium-sized and small companies increased. The funds also purchased part of the equity in companies which entered WSE in 2004. Stocks included in the MIDWIG index constituted 21.4% of stocks held by open pension funds (18.6% in 2003), and stocks included in the WIRR index – 0.8%.

The amount of stocks held in investment funds' portfolios was over PLN 8.6 billion, i.e. 2.96% of stock market capitalisation (versus 2.93% in 2003).[410]

Development trends and prospects versus other countries in the region and EU

The Polish stock market has maintained its position among Central and Eastern European counterparts. Its dominant role is reflected by basic indicators describing market size - e.g. capitalisation and the number of listed companies. The economic roles played by the region's stock exchanges, measured as the ratio of capitalisation to GDP, are similar. The stock exchanges are also comparable with regard to absolute turnover. The lower liquidity of the Warsaw Stock Exchange compared to other exchanges in the region (and also the Dublin and Vienna exchanges) may be caused by the fact that the average size of companies listed abroad is higher (in Poland the size of listed companies is smaller).

Compared to most European Union markets, the WSE remains relatively small both with regard to capitalisation and turnover. Development trends on the Polish stock market will continue to be strongly influenced by the processes currently underway in the European Union and the related measures aimed at integrating financial markets. As a member state, Poland also participates in these processes.

One of the results of Poland's accession to the EU was a growth in the number of foreign companies listed on the WSE.

It appears that, at the moment, there is no threat of the largest domestic companies transferring their listings to European markets. This has been confirmed by the results of a survey conducted by the NBP.[411] The main reason for this fact is that in Poland domestic companies can be certain of investors' demand for their shares. Moreover, the process of delisting of companies by strategic (mainly foreign) investors has slowed.

The decreasing supply of new stocks had been an important problem for the market development over the last few years. The situation improved in 2004. For the first time in several years, two Treasury companies (PKO BP and WSiP) were privatised via the stock exchange. The process of raising funds on the stock market will continue in 2005 – several IPOs have been planned for this year. The bullish market in 2004 made private owners of companies seek capital on the WSE rather than from other sources and several IPOs have already been planned.

Table 5.2.31. Selected stock exchange indicators

Stock exchange	2002	2003	2004	Stock exchange	2002	2003	2004
	Number of listed companies[1]				Liquidity ratio, %[2]		
Budapest	48	49	46	Budapest	50.4	48.4	51.0
Dublin	76	66	65	Dublin	61.3	57.1	43.3
Prague	79	65	55	Prague	41.3	39.9	46.7
Warsaw	216	203	230	Warsaw	29.8	26.8	25.4
Vienna	129	125	120	Vienna	19.6	21.3	30.0
	Capitalisation, EUR billion[3]				Turnover, EUR billion[4]		
Budapest	12.4	15.0	21.0	Budapest	6.2	7.3	10.7
Dublin	57.1	67.7	83.9	Dublin	34.9	38.6	36.3
Prague	15.1	19.9	21.7	Prague	6.2	7.9	15.0
Warsaw	27.5	29.8	51.9	Warsaw	8.2	8.0	13.2
Vienna	32.0	45.0	64.6	Vienna	6.3	9.6	19.4

[1] The number of listed companies includes domestic and foreign companies.

[2] Liquidity ratio calculated as the ratio of turnover to capitalisation.

[3] Capitalisation of domestic companies.

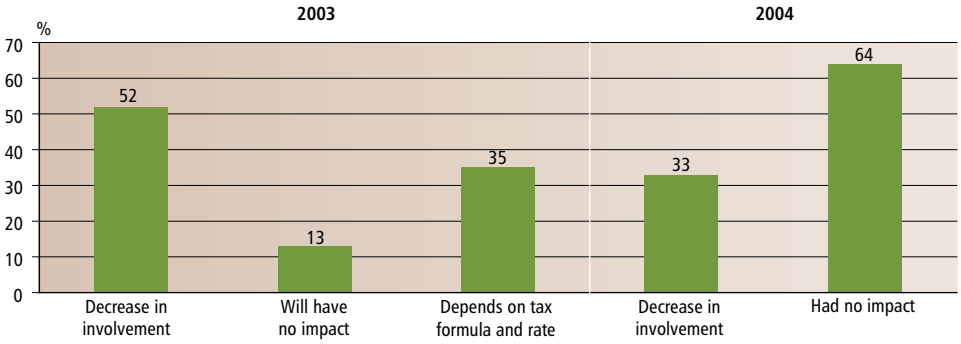
[4] Turnover of domestic companies, single-counted.

Source: NBP calculations based on Federation of European Securities Exchanges data and annual reports by individual stock exchanges.

[410] *Inwestycje funduszy inwestycyjnych na rynku akcji*, December 2004, www.analizy.pl.

[411] *Wybrane determinanty rozwoju rynku akcji i korporacyjnych instrumentów dłużnych w Polsce. Wyniki badania ankietowego*, Warszawa: NBP, 2005, p. 31.

Figure 5.2.31. Impact of the introduction of the capital gains tax on individual investors' investment



Source: Association of Individual Investors – presentation: *Ogólnopolskie badanie inwestorów indywidualnych 2004*, June 30, 2004, www.sii.org.pl.

The development of the domestic collective investment company sector remains the most important demand-side factor in the development of the stock market.[412]

The threat of a price bubble forming due to open pension funds' significant involvement in stocks and limited supply of stocks in new companies in 2004, which was earlier indicated by some market participants, has decreased as a result of a considerable supply of new share issues.

In 2004, individual investors again became the most active group on the stock market. In 2003, the capital gains tax levied on stock investments, which came into force at the beginning of 2004, was perceived to be a factor which could dampen the activity of individual investors. However, surveys conducted by the Association of Individual Investors (*Stowarzyszenie Inwestorów Indywidualnych*) indicated that the fears related to tax introduction were more pronounced than what really happened in practice (Figure 5.2.31).[413]

However, the organisation of fundraising via share issues by small and medium-sized enterprises remained an obstacle to capital market development. In 2004, the importance of the CeTO--RPW stock market, which was established specially for for the SME sector decreased significantly (a drop in the number of listed companies, no new offerings and low turnover). The maintenance of the stock market by CeTO-RPW becomes increasingly less cost-effective. It appears that the development of a liquid and efficient electronic debt securities market will be the main strategic direction of CeTO-RPW. In 2004, talks were in progress with the WSE (the company's most important shareholder) regarding the transfer of MTS-CeTO firms to the Warsaw Stock Exchange. However, these are mainly small companies for which the transfer to the WSE would prove costly due to e.g. the repeated market entry procedure, reporting obligations and transaction fees. Therefore most company management boards do not approve of this solution.

5.3. Spot FX market

In 2004, significant changes occurred on the zloty spot market. The most important change was the considerable increase in the share of the euro in the currency structure of turnover on the interbank market – the EUR/PLN pair became the dominant one on the zloty market, and the zloty was gradually losing its basket nature. In the second half of 2004, the liquidity of the offshore market grew significantly, which was probably linked to the intensified activity of hedge funds in emerging FX markets.

[412] See section 4.3.

[413] Presentation: *Ogólnopolskie badanie inwestorów indywidualnych*, press conference, June 2004. The presentation can be found on the Association of Individual Investors web site: www.sii.org.pl.

In this section, a comprehensive analysis of the development of the zloty market, taking transactions in which residents were not involved (the offshore market) into account has been presented for the first time. The liquidity of the offshore market, which is largely concentrated in London, could be determined on the basis of the *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004*, which was conducted in April 2004.[414]

Market size

The zloty market was the most liquid among the FX markets of new European Union member states. The average daily value of zloty exchange transactions recorded in April 2004 was USD 1.566 billion (Table 5.3.1). This means that the zloty was ranked twenty-first in the world with regard to spot market turnover. Since this survey covered one month only, an attempt has been made below to estimate the zloty market liquidity in a more representative way; the domestic market (transactions where at least one of the parties is a resident) and the offshore one have been distinguished. Taking into account that the turnover on the domestic interbank market in April was lower than the annual average by around 6% (Figure 5.3.1) and bearing in mind the balance of omissions resulting from survey methodology, the average daily net turnover in the domestic FX market in 2004 was around USD 1.15–1.20 billion. The adjusted value of transactions between non-residents in April was around USD 0.55 billion. Based on information obtained from market participants, it may be concluded that, in the second half of the year, the value of transactions between non-residents grew very considerably (by around 50%). This was probably a result of the intensified activity of hedge funds, which took advantage of the strong trend towards zloty appreciation (Figure 5.3.2) and opened large positions in the Polish currency, speculating on its strengthening further. Orders from foreign institutional investors affected the FX positions of the banks that acted as market makers on the zloty market, which in turn increased turnover on the London interbank market.[415] Market participants state that hedge funds additionally took large positions in zloty FX options. The issuers of such options – London-based banks – had to hedge their positions dynamically using to so-called delta hedging[416] on the spot market. The intensified activity on the offshore market is confirmed by an increase in the amount of interbank customer orders in the SORBNET system (in the fourth quarter, the amount grew by around 18% compared to the other months of 2004). Therefore, the average daily value of zloty exchange transactions on the offshore market in the last months of 2004 may be estimated at around USD 0.8 billion. In conclusion, the daily net turnover on the zloty market in 2004 amounted to USD 1.7–2.0 billion.

Table 5.3.1. Average daily net turnover on the zloty, Czech koruna and forint spot FX markets, April 2004, USD million

	Zloty	Czech koruna	Forint
Total turnover, of which:	1,566	736	752
Transactions between residents	571	174	162
Resident – non-resident transactions	481	280	245
Transactions between non-residents (offshore)	514	281	345

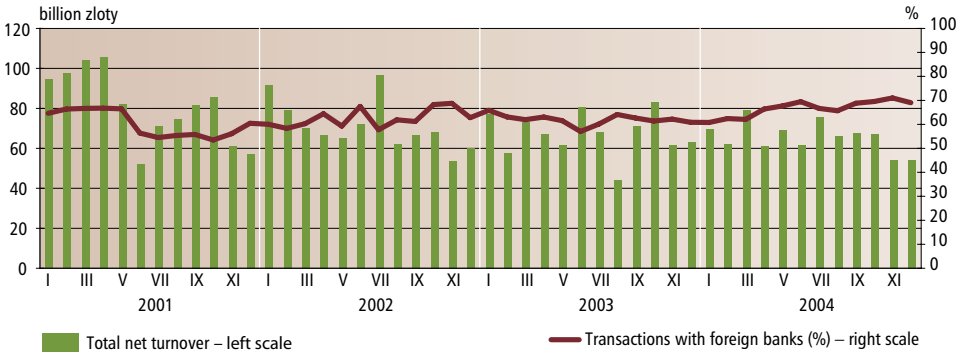
Source: NBP calculations based on *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004*, Basel: Bank for International Settlements, 2005, p. 48–51 and domestic figures submitted by the NBP, Czech National Bank and the National Bank of Hungary. The balance of omissions has not been taken into account.

414 Survey methodology and detailed results for Poland: *Turnover in Polish foreign exchange and OTC derivatives markets in April 2004. Results summary.* NBP – www.nbp.pl/SystemFinansowy. Global results have been published in: *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004*, Basel: Bank for International Settlements, 2005.

415 A large customer order, e.g. amounting to USD 50 million, affects a FX dealer's position considerably. In order to maintain his previous position, which reflects his expectations concerning exchange rate movements, the dealer concludes appropriate transactions on the interbank market. He usually conducts several trades with lower amounts, e.g. 10 transactions with banks of USD 5 million each. Subsequently, each bank tries to balance its position and concludes more transactions. This behaviour is described as "passing on a hot potato" in literature. Cf. R. K. Lyons, *The Microstructure Approach to Exchange Rates*, MIT Press, 2001, pp. 144–149.

416 N. Taleb, *Dynamic Hedging*, New York: John Wiley and Sons, 1999.

Figure 5.3.1. Monthly turnover on the domestic interbank zloty market



Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

Despite the fact that the turnover in zloty was twice as high as the value of transactions in the forint or Czech koruna markets, the liquidity of the zloty spot market should be considered moderate. This is confirmed by the significant spread between the bid and offer rates and the low activity in late afternoon hours. On the interbank market, the spread for the EUR/PLN and USD/PLN exchange rates ranged from 5 to 15 basis points, and even reached 30 basis points under low liquidity.[417] The scale of market liquidity was also reflected by the low standard transaction amount on the zloty market, which was 3 million euros or US dollars for trades concluded using the conversational system (Reuters Dealing Direct) and 1 million euros/US dollars for the Spot Matching system. The limited liquidity of the zloty market poses problems with balancing FX positions, but it may also affect the exchange rate of the domestic currency as well as cause increased exchange rate volatility where large zloty buy or sell orders emerge, since a significant zloty buy/sell order may cause its appreciation/depreciation and the widening of the spread quoted. The possible extent of zloty appreciation/depreciation is not accurately known but, for example, research on the Czech koruna market microstructure has indicated that the sale of EUR 10 million in exchange for koruna (a standard transaction amount in the EUR/USD market) may cause the Czech koruna to strengthen by 7.6 basis points.[418]

In 2004, the trend towards a gradual decrease in turnover on the domestic interbank zloty market continued. Compared to 2003, the average daily net turnover dropped by approximately PLN 0.1 billion. Thus, the claim that the development potential of the domestic FX market has been exhausted is confirmed. The decrease in liquidity on the domestic interbank market is largely the result of risk centralisation at the level of banking groups and thus the transfer of the banks' activity abroad. On the other hand, during the period under analysis the value of transactions with non-banking institutions grew. Compared to 2003, the average daily turnover on the domestic customer market increased by 6% and amounted to PLN 0.59 billion. The intensified activity of non-financial customers on the spot market was caused by an increase in foreign trade volume (in 2004, exports and imports went up by 26% and 18%, respectively). However, speculative transactions between financial institutions still constituted the majority of trades on the domestic FX market (Table 5.3.2).

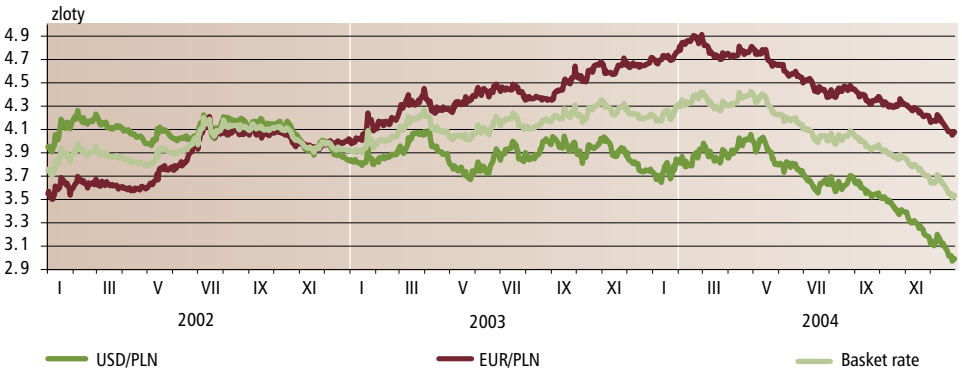
In 2004, the lowest activity on the domestic interbank market was recorded in November and December (Figure 5.3.1), i.e. during the period when the turnover between non-residents was much higher than the average for the first half of the year. This means that a clear division between the domestic and offshore zloty markets was present. This was caused by two factors: First, domestic banks did not trade with foreign hedge funds – due to the absence of credit limits and too-high transaction amounts, among other things. Second, the credit limits imposed by London-based banks on banks from Poland in the Spot Matching system[419] were low compared

[417] With regard to the zloty exchange rate, basis points are equal to one-hundredths of 1 grosz.

[418] A. Scalia, *Is foreign exchange intervention effective? Some micro-analitycal evidence from Central Europe*, 2004, http://faculty.haas.berkeley.edu/lyons/Scalia%20intervention.pdf, pp. 14–21.

[419] Such a limit determines the amount which can be exchanged with a given bank within one day.

Figure 5.3.2. Zloty exchange rate, 2002–2004



Note: The basket exchange rate is the notional exchange rate assuming the following weights: 50% EUR/PLN and 50% USD/PLN.

Source: Reuters.

to those set for foreign banks. Therefore, positions arising from large-value orders by non-banking financial institutions were mainly closed on the London market. This also explains why the quoted spread available to domestic banks did not narrow despite the higher liquidity of the zloty market from June to October 2004 – the increased activity was limited to transactions between non-residents. It should be stressed that the significant share of non-residents in the turnover on the domestic interbank market (almost 70%) and the aforementioned rise in activity on the offshore market mean that the zloty exchange rate was primarily shaped by the decisions of foreign financial institutions. This was also typical for other currencies in the region (Table 5.3.1).

Market structure

The most important qualitative change on the Polish FX market concerned the currency composition of interbank transactions. In April 2004, the share of the USD/PLN pair in zloty market turnover was still 76%. This distinguished the zloty market from the FX markets of other countries planning to join the EMU (Table 5.3.2). In the Czech Republic and Hungary, the basic foreign exchange relationship that reflected the strength of the domestic currency had for several years involved the euro. The increase in EUR/PLN transactions in Poland occurred gradually from the fourth quarter of 2003 onwards. However, after Poland's accession to the EU on May 1, 2004, the volume of EUR/PLN transactions grew significantly, in line with the expectations outlined in last year's report. At the same time, banks limited their activities in the USD/PLN segment (Figure 5.3.3). Market participants probably decided that EU accession brought Poland much closer to

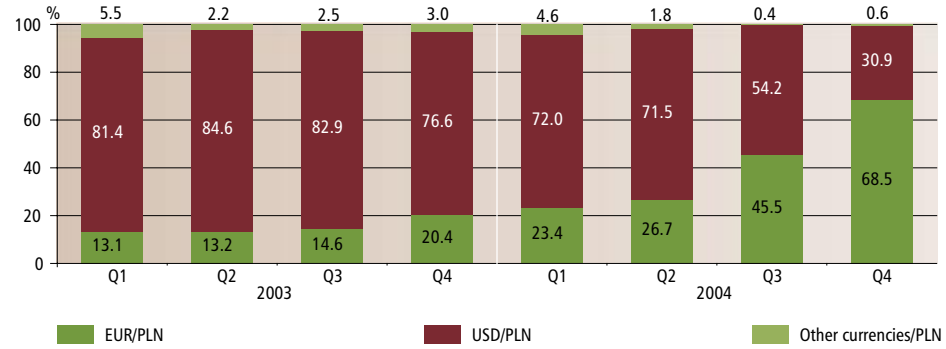
Table 5.3.2. Average daily net turnover and structure of the spot FX market in Poland, the Czech Republic and Hungary in April 2004, USD million

	Poland	Czech Republic	Hungary
Turnover – foreign currencies/domestic currency, USD million	1,052	455	407
Interbank market, USD million	767	362	346
– of which: EUR/domestic currency, %	23	94	89
– of which: USD/domestic currency, %	76	5	9
Customer market, USD million	285	92	61
– of which: EUR/domestic currency, %	64	77	69
– of which: USD/domestic currency, %	31	18	26
Turnover – foreign currencies/foreign currencies, USD million	879	413	279

Note: In emerging markets, the "other reporting institutions" category included mostly smaller banks. Therefore, in this table the interbank market includes transactions concluded with "other reporting institutions" and "other financial institutions."

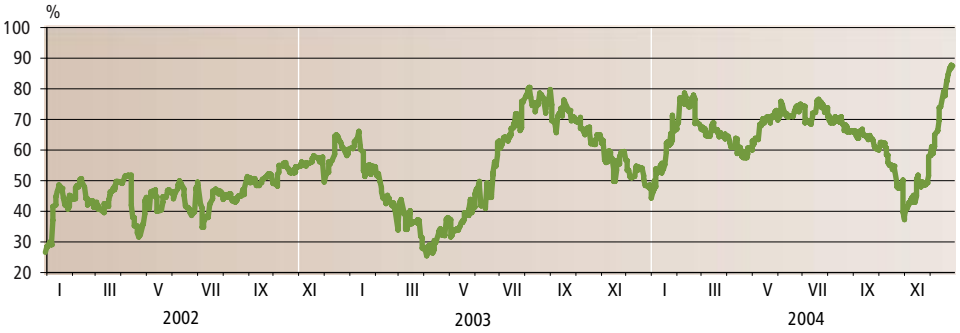
Source: NBP calculations based on domestic results of *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004* submitted by the NBP, Czech National Bank and the National Bank of Hungary.

Figure 5.3.3. Currency composition of zloty exchange transactions concluded on the domestic interbank market



Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

Figure 5.3.4. Share of the euro in the zloty basket ensuring variance of minimum daily returns



Note: The share of the euro in the zloty basket ensuring minimum variance of daily returns presented has been determined for return rates observed over 66 trading days.

Sources: NBP data, Reuters.

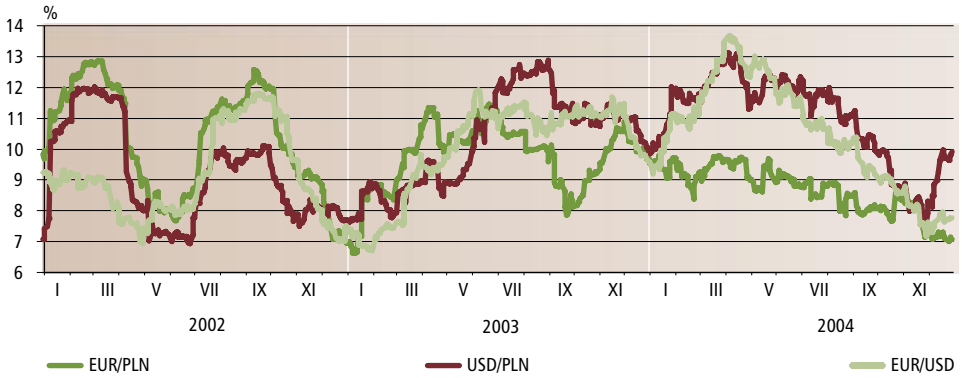
adopting the euro. Taking Poland's future ERM II participation into account, FX dealers decided that the EUR/PLN should be the main currency pair on the Polish market. In the fourth quarter of 2004, EUR/PLN transactions already prevailed on the interbank market and accounted for almost 70% of turnover.

The change in the currency composition of turnover on the interbank market was accompanied by another process – the zloty was shedding its basket nature. In previous years, there had been no dominant currency pair on the zloty market in the sense that a basket exchange rate (50% USD/PLN and 50% EUR/PLN) reflected the strength of the zloty. The dominance of transactions involving the US dollar and the basket nature of the zloty forced dealers to convert part of their exposures to euros in order to minimise effects of EUR/USD exchange rate fluctuations. In 2003, several market makers departed from the balanced currency basket and started using a new basket (70% EUR/PLN and 30% USD/PLN) when converting their positions.[420] In 2004, the use of this basket became common among zloty market participants, since it minimised the volatility of daily returns in the long-run. In December, the share of the euro in the basket that ensured minimum variance of daily returns grew even further (Figure 5.3.4).

In 2004, the currency composition of customer market turnover did not change significantly and was similar to that in other countries of the region. The prevalence of EUR/PLN transactions

[420] *Financial System Development in Poland 2002–2003*, Warszawa: NBP, 2004, pp. 193–194.

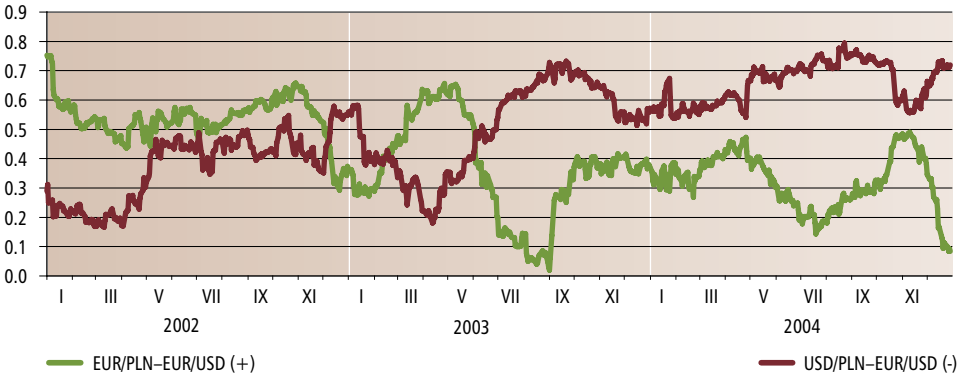
Figure 5.3.5. USD/PLN, EUR/PLN and EUR/USD three-month historical volatility



Note: Three-month historical volatility is the standard deviation of the distribution of daily returns observed over 66 trading days. Volatility is presented on an annual basis.

Sources: NBP data, Reuters.

Figure 5.3.6. Three-month rolling correlations of USD/PLN and EUR/PLN rates with the EUR/USD rate



Note: Absolute correlation coefficient values have been presented. The correlations of EUR/PLN and USD/PLN rates vis-á-vis the EUR/USD exchange rate are positive and negative, respectively. An absolute correlation coefficient value close to one signifies a strong relationship between exchange rate movements, while a value close to zero signifies a very weak relationship.

Source: NBP.

(Table 5.3.2) and the shares of other currency pairs reflected the structure of Poland's foreign trade payments and the close connection between the real sector of the Polish economy and the EU.[421]

The historical volatility of EUR/PLN and USD/PLN exchange rates as well as the correlations between those exchange rates and the EUR/USD one confirm that the EUR/PLN rate reflected the strength of the zloty in an increasingly accurate manner. In 2004, EUR/PLN volatility decreased and was considerably lower than that of the USD/PLN rate (Figure 5.3.5). The USD/PLN volatility was similar to that of the EUR/USD rate. The fact that the volatility of the zloty exchange rate was lower than in 2003 resulted from the strong appreciation trend present on the zloty market in the second half of 2004.

As in the Czech Republic and Hungary, the exchange rate of the domestic currency against the US dollar became a resultant exchange rate, i.e. one dependent on the EUR/USD rate. This was confirmed by the correlation coefficient between those exchange rates, which was high throughout 2004 (Figure 5.3.6). The EUR/PLN became the main currency pair on the zloty market. The lower volatility of the EUR/PLN exchange rate and its weak correlation with the EUR/USD rate meant that

[421] According to NBP estimates, 69.4% of the amount of payments arising from goods exports and 61.7% of those arising from imports were denominated in euros in 2004.

the nominal exchange rate of the euro against the zloty yielded very accurate information about the appreciation or depreciation of the latter in 2004. The aforementioned structural changes, which occurred on the spot FX market in 2004, confirm that the zloty almost lost its basket nature and the EUR/PLN became the main currency pair on the zloty market. This pair prevailed in turnover and changes in the exchange rate of the zloty against the euro depended on changes in the EUR/USD exchange rate to a small extent only.

Trades where foreign currencies are exchanged for foreign currencies are also conducted on the domestic FX market. In April 2004, the average daily turnover in this segment amounted to USD 879 million. With regard to the currency structure, EUR/USD transactions distinctly prevailed (73%). GBP/USD, CHF/USD and EUR/JPY pairs also had significant shares. The concentration of turnover on the EUR/USD exchange rate was caused by the basket nature of the zloty. As the zloty basket changed, turnover in this segment fell. In the second half of 2004, the amount of EUR/USD exchange transactions was, on average, 25% lower than in the first half of the year.

The results of the *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004* for Poland indicate that domestic banks conducted transactions on the spot market with the use of an electronic system that automatically matches buy and sell orders increasingly often. In April 2004, the amount of zloty exchanges conducted using the Reuters Spot Matching system accounted for around 44% of registered turnover. More than half of all transactions were conducted using a conversational system (Reuters Dealing Direct). Occasionally, dealers agreed transaction terms on the phone or by using the services of a voice broker.

The rapid development of electronic transaction systems on the global FX market affects the zloty market. Such systems are used increasingly often, not only on the interbank market but also in transactions with non-banking institutions. Zloty exchange transactions may be conducted via portals established by several banks (e.g. FXall) as well as via systems offered by individual banks (e.g. Deutsche Bank's Autobahn).[422] The value of transactions conducted via such portals is obviously much lower than in the Spot Matching system which can only be used by banks; this results in wider spreads, of course. Despite this, non-banking financial institutions, particularly hedge funds, often use electronic trading portals since they enable transactions to be concluded automatically and rapidly. Moreover, banks, which supply such systems, offer additional services related to FX trading – the confirmation of transaction and settlement terms is fully automated for trades concluded via electronic trading systems (straight-through processing).

Market participants

Turnover on the zloty spot market was highly concentrated. The four most active market makers accounted for around 60% of turnover on the domestic market (Figure 5.1.31). The domestic forint market exhibited lower concentration – the share of the six most active banks amounted to 60%.[423] The most active foreign banks on the zloty market were Citigroup, Deutsche Bank, UBS, JP Morgan, ABN Amro, Dresdner Kleinwort Wasserstein and HSBC.[424]

FX dealers state that foreign hedge funds intensified their activities on the zloty market in 2004. This group of investors differed from other market participants with regard to the risk taken and their investment horizon. Turnover data confirm heightened interest in the zloty among such institutions. In April 2004, over half of transactions on the offshore market (USD 270 million) were concluded with "other financial institutions". This category includes, *inter alia*, hedge funds. The increased activity of hedge funds is a global phenomenon. Between 2002 and 2004, these institutions increased their involvement on the FX market and perceived foreign exchange as an asset category which brought higher profits than stock or bond investments. Moreover, FX market operations enabled them to diversify their portfolios, since returns on the FX market were weakly correla-

[422] More on electronic trading platforms in the FX market: D. Rime, *New Electronic Trading Systems in Foreign Exchange Markets*, Stockholm: Norges Bank and Stockholm Institute for Financial Research, 2003.

[423] *Report on financial stability. December 2004*, Budapest: Magyar Nemzeti Bank, 2004, p. 38.

[424] Euromoney foreign exchange market survey: *Euromoney,* May 2004, Vol. 35, No. 421, pp. 54–71.

ted with returns on securities.[425] Global excess liquidity as well as changes in market infrastructure – the increasingly common use of electronic trading platforms and prime brokerage services,[426] which enable the group of potential counterparties to be broadened considerably – contributed to the intensified activity of hedge funds.

In 2004, hedge funds eagerly invested in emerging FX markets. Carry trade and momentum trading were very popular speculation strategies, which were also employed on the zloty market. Those investors also took large positions on the FX option market. The relatively high (compared to developed countries) interest rates and the strong trend towards the appreciation of the zloty present since May 2004 fuelled hedge funds' activity on the zloty market. Operations by this group of investors certainly contributed to the strengthening of the zloty in 2004.[427] In the future, the hedge funds' activities may also affect the zloty exchange rate considerably.

Development trends and prospects

In the coming years, turnover on the domestic interbank market will continue to decrease slowly. This will be a result of planned mergers within banking system in Poland and policies aimed at the centralisation of FX position management within banking groups. Nevertheless, a slight increase in turnover on the zloty market should be expected in 2005, since the number of transactions between non-residents will grow further. Global factors – differences between interest rates in developed countries and in Poland as well as global excess liquidity and the related activity of hedge funds – will primarily affect the liquidity of the offshore zloty market.

It may be expected that, in 2005, the zloty will cease to be a basket currency. The share of the euro in the basket ensuring minimum variance of daily returns in the long-term will range from 90% to 100%. A further increase in the share of the EUR/PLN pair in the currency composition of turnover to around 80% should also be expected. The heightened activity of hedge funds on the zloty market and changes in trends on the EUR/USD market may cause periodical changes in the currency composition of turnover and the basket ensuring minimum variance of daily returns, since such investors use US dollar financing (they cooperate with Swiss and U. S. banks) and often speculate on the FX swap market, which is dominated by the USD/PLN pair, employing carry trades.

After Poland enters the euro area, the activity of banks on the domestic spot FX market will be considerably limited. This will be one of the effects of adopting the single currency. A slump in activity on the domestic market may already be observable during Poland's participation in ERM II. It appears that due to the ownership structure of the banking system in Poland and the centralisation of risk, zloty exchange transactions will only be replaced by operations involving the euro to a certain degree. Results of the survey coordinated by the Bank for International Settlements enable the extent of potential changes on the spot market after the adoption of the euro to be estimated (Table 5.3.3) – turnover on the spot market in Poland may even drop by 50%. Participation in the

Table 5.3.3. Average daily turnover on spot FX markets in Finland and Portugal before and after joining the EMU, USD billion

	1998	2001	2004
Finland	1,156	503	743
Portugal	1,834	917	1,005

Sources: Bank of Finland press releases: *Survey of foreign exchange and derivatives market activity in Finland, Spring 2001; Survey of foreign exchange and derivatives market activity in Finland, Spring 2004,* and the press release of the Bank of Portugal: *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity. Data for Portugal – Preliminary Results.*

[425] G. Galati, M. Melin, "Why has FX trading surged? Explaining the 2004 triennial survey", *BIS Quarterly Review*, December 2004, pp. 67–74.

[426] Within the framework of such services, banks make their credit lines available against payment. Hedge funds using such services may conclude transactions with multiple entities while being subject to the credit rating of only one bank and maintaining collateral with only one bank whose credit lines they utilise.

[427] An assessment of the impact of the hedge fund activities on the exchange rates of currencies in our region can be found in: *Hedge fund activities and exchange rates in Central and Eastern Europe*, in: *Report on financial stability April 2005*, Budapest: Magyar Nemzeti Bank, 2005, pp. 86–88.

euro market will entail an increase in the volume of transactions concluded using matching systems. After Poland's entry into the EMU, domestic banks will lose the greatest advantage that enabled them to trade with foreign banks – better access to information, thanks to which political risk and its impact on the zloty exchange rate could be better assessed. Moreover, after the adoption of the euro, the demand for spot transactions from non-financial customers will decrease considerably due to the absence of FX risk (most payments arising from foreign trade are settled in euros). If domestic banks manage the FX position of the entire group with regard to the currencies of EU candidate countries (Bulgaria and Romania), this may be a way of sustaining their activity.

5.4. Derivatives market

Financial derivatives are traded in the stock exchange and over-the-counter (OTC) markets. The publication of the Bank for International Settlements concerning the development of the global[428] derivatives market indicates that the stock exchange market was much more liquid in 2004. The trading rules of the stock exchange as well as the operation of clearing houses limit the credit risk of transaction counterparties considerably and enable multiple entities to participate. Interest rate derivatives, particularly money market index and Treasury bond futures, account for the largest part of turnover (Table 5.4.1). Transactions involving FX derivatives were mainly concluded on the OTC market.

Table 5.4.1. Average daily net turnover on the global derivatives market, USD billion

	April 2001	April 2004
OTC market	686	1,373
Interest rate derivatives	489	1,025
FX derivatives	197	348
Stock exchange market	2,180	4,543
Interest rate derivatives	2,170	4,521
FX derivatives	10	22

Note: The "FX derivatives" category for the OTC market does not include the FX swap market, which was discussed in section 5.1.3.2.1.

Source: *Triennial Central Bank Survey. Foreign exchange and derivatives market activity in 2004*, Basel: Bank for International Settlements, 2005, p. 5 and 16.

5.4.1. Evolution of the derivatives market: size and structure

In the Polish financial system, the structure of the derivatives market is different from the one described above, i.e. the OTC market was much more developed. In April 2004, the turnover recorded on the OTC market was significantly higher than that of derivatives listed on the WSE (Table 5.4.2). WIG-20 index futures were the most liquid organised market instruments. The dominance of the OTC market resulted from the Polish bank-oriented financial system model as well as from considerable activity of foreign banks. On the OTC market, banks, i.e. institutions with the largest assets within the Polish financial system, were market makers. The direct participation of banks, which engaged not only in hedging transactions, but primarily in speculative ones, ensured the liquidity of this market. The considerable activity of foreign banks, which are almost absent from Polish exchanges, had a large impact on the turnover on most OTC derivatives markets. Moreover, Polish enterprises that managed their financial risk chose derivatives offered by banks much more frequently than those offered on stock exchanges. Factors behind their preferences included higher flexibility of those instruments, long-term relationships between banks and enterprises and higher market liquidity, which affected the cost of the hedging instrument used.

[428] Due to the limited availability of data concerning the European derivatives market, the global market will be the reference point for comparisons concerning the degree of development and structure of the Polish derivatives market.

Table 5.4.2. Average daily net turnover on the domestic derivatives market, PLN million

	April 2004
OTC market	5,832.8
Interest rate derivatives	3,809.0
FX derivatives	2,023.8
Stock exchange market	254.7
Interest rate derivatives	0.0
FX derivatives	0.4
Stock market derivatives	254.3
of which WIG-20 futures	247.7

Note: OTC market turnover calculated according to nominal value; stock exchange market turnover calculated according to settlement amounts. The stock exchange market only includes instruments listed on the WSE. The "FX derivatives" category for the OTC market does not include FX swaps.

Source: NBP calculations based on NBP and WSE data.

The amendments introduced to the Act on Public Trading in Securities and WSE regulations in 2004, which enable banks to directly participate in the futures and options markets, should contribute to the development of the stock exchange market. It appears, however, that credit limits and the amount of domestic banks' capital, which determine, *inter alia*, the scale of their involvement in the derivatives market, are too low for liquid markets in multiple derivatives to operate in Poland. This is confirmed by the fact that in 2004, the FRA market ceased to develop due to domestic banks' preference for IRS contracts during this period. Moreover, the decrease in liquidity of the domestic FX option market, resulting from the fact that non-residents transferred part of their activities offshore, indicates that the presence of foreign banks is of fundamental importance for the development of the Polish derivatives market. Therefore the active participation of foreign banks on the WSE derivatives market alongside domestic banks would be a welcome phenomenon.

5.4.2. OTC derivatives

The OTC derivatives market plays a very important role in the financial system, since it enables financial institutions and enterprises to manage their FX and interest rate risks in an effective manner. Due to the decentralised nature of this market, banks are major participants here. The analysis of domestic banks' gross positions by nominal values of individual instruments confirms that the interest rate derivatives segment was the most developed one in Poland and banks focused their activities on instruments denominated in zloty (Table 5.4.3).

FRA and IRS contract markets were the largest segments. Liquidity in those markets was mainly generated by interbank transactions. The banks' off balance sheet positions indicated that some of them occasionally concluded forward contracts involving Polish Treasury bonds. Therefore, it appears that banks would also welcome the long-awaited appearance of bond futures on the WSE. Options remained the least often sold interest rate derivatives. Domestic banks did not maintain portfolios of such instruments and only a few offered them to non-banking customers. The emergence of a new product – the Overnight Index Swap – was the most important qualitative change that occurred in the domestic OTC interest rate derivatives market in 2004.

FX forwards remained the most frequently used derivatives among non-banking customers. As in previous years, synthetic forward contracts (combinations of FX swaps and spot transactions) were used on the interbank market. Turnover on the domestic FX option market (both interbank and customer) dropped significantly. CIRS contracts, which can be used to manage FX and interest rate risk, were concluded very rarely.

The limited involvement in instruments whose value depended on stock prices resulted from the closing of the exposure caused by the sales of structured deposits to private banking customers. Such deposits usually included foreign stock exchange index options.

Table 5.4.3. Gross positions of domestic banks on the OTC derivatives market, end June 2004 (nominal value of instruments, USD billion)

	Zloty[1]	Other currencies
FX derivatives	46.98	14.40
Forwards and FX swaps[2]	36.04	11.27
CIRS	4.59	1.19
Options	6.35	1.94
Interest rate derivatives	164.77	19.60
FRAs	96.28	7.69
IRS	67.49	11.82
Options	0.42	0.06
Bond forwards	0.52	0.03
Stock market derivatives	0.04	0.19
Credit derivatives	0.00	0.00

[1] For FX derivatives, the nominal value of derivatives transactions regarding zloty exchange rates against foreign currencies has been presented.

[2] Pursuant to the research methodology adopted, the exposure arising from FX forwards and FX swaps is listed as a single item.

Source: NBP survey covering 13 domestic banks. Data have been collected and presented pursuant to the methodology developed by the Bank for International Settlements and used for the analysis of positions arising from transactions involving derivatives concluded in the OTC market. Cf. *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004*, Basel: Bank for International Settlements, 2005.

The analysis of off balance sheet positions confirms that the credit derivatives market has not developed in Poland yet. It should be noted, however, that in 2004 the Polish Banking Association worked on setting standards for this market and drew up a draft Recommendation on the conclusion of credit futures contracts on the Polish interbank market. This document includes a very detailed description of credit options and swaps as well as legal definitions and English equivalents of basic terms related to such instruments. Transaction documents, which should be used by market participants (agreement templates), are included in the earlier Recommendation on the conclusion of certain transactions on the Polish interbank market. However, the adoption of the standard will only be the first step towards the development of the market in credit derivatives involving exposure to Polish receivables. The Commission for Banking Supervision has already adopted applicable regulations that enable banks to use credit derivatives in order to release their regulatory capital.[429] However, in order for the market to develop, regulatory changes regarding investments by non-banking financial institutions, demand from those companies, and the upgrade of IT systems as well as the development of operating procedures concerning the monitoring of the risk related to such instruments are necessary, among other things. Moreover, the valuation of credit derivatives is based on ratings whose limited popularity in Poland may constitute an obstacle to the development of this derivatives market segment.

Further in this section, the structure and factors behind the development of the domestic OTC derivatives market (broken down into FX and interest rate derivatives) are discussed in more detail. For zloty exchange rate derivatives, the liquidity of the offshore market has also been estimated.

5.4.2.1. Interest rate derivatives

Market size

In 2004, with an average daily turnover in the range of USD 1 billion, the domestic OTC interest rate derivatives market was the largest in the region. The Polish market was distinguished

[429] Resolution No. 4/2004 of the Commission for Banking Supervision on the scope and detailed principles of determining capital requirements related to individual risk types as well as the scope of utilisation of statistical methods and the conditions which must be fulfilled in order to obtain approval for their use, the manner and detailed principles of calculating a bank's capital adequacy ratio, the scope and manner of including banks operating in groups when calculating capital requirements and the capital adequacy ratio as well as the determination of additional bank balance sheet items included together with a bank's regulatory capital in the calculation of a bank's capital adequacy and the scope, manner and conditions for their determination of September 8, 2004. The Resolution will take effect on January 1, 2005.

Table 5.4.4. Average daily turnover on the OTC interest rate derivatives market in Poland, the Czech Republic and Hungary in April 2004, USD million

	Poland	Czech Republic	Hungary
FRAs	691	477	105
– of which domestic currency FRAs	635	260	93
– of which with non-banking customers	14	2	0
IRS	267	60	90
– of which domestic currency IRS	213	19	87
– of which with non-banking customers	1	0	0
Options	0	2	0
TOTAL	958	539	195

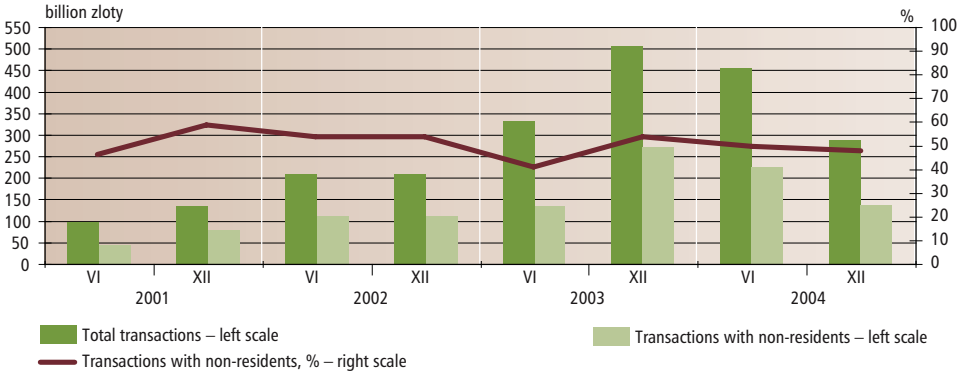
Source: NBP calculations based on the results of *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004* submitted by the NBP, Czech National Bank and the National Bank of Hungary.

by its relatively high liquidity in the FRA and IRS segments, therefore domestic financial institutions could take off balance sheet positions involving exposure to the entire yield curve. In Poland, as in the Czech and Hungarian markets, transactions involving domestic interest rates dominated (Table 5.4.4). Those markets were also characterised by the very low proportion of transactions with non-financial customers. The banks' considerable activity resulted from the fact that those instruments were used both to hedge positions in Treasury securities and for speculation on interest rate movements. No options market has developed in any of the region's countries.

It should be added that FRA and IRS contracts denominated in zloty were also traded abroad – in London. The NBP has no data about the value of transactions concluded between non-residents. However, based on information obtained from market participants, it may be estimated that the value of IRS transactions on the offshore market was similar to the turnover on the domestic one. Taking into account the above information, as well as the significant share of non-residents in operations with domestic banks, it has to be stated that the liquidity of the OTC Polish interest rate derivatives market was largely shaped by London-based banks.

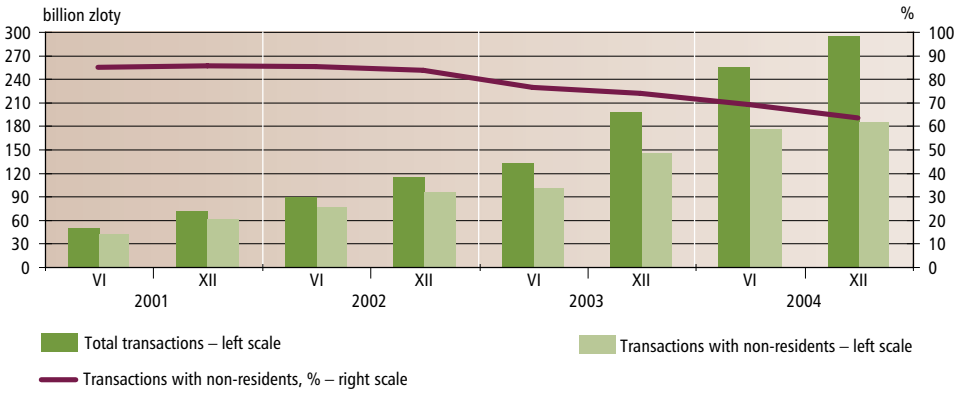
In 2004, a significant change occurred with regard to the quantitative development of the FRA and IRS markets. The increase in the size of the domestic FRA market as measured by the banks' gross positions arising from contracts concluded, which had been observed since its emergence, was halted. Compared to the end of 2003, the involvement of the banking system in the FRA market decreased by more than 40% (Figure 5.4.1). Changes in the banks' positions in the first half of 2004 were probably the consequence of the events that occurred on the debt market in the fourth quarter of 2003. As a result of the significant change in interest rates, some banks incurred considerable losses on off balance sheet interest rate positions. This resulted in lower limits on open derivatives positions. The reduction in exposure could mostly affect the instruments where exposure was the largest, i.e. FRA contracts.

Figure 5.4.1. FRA market size



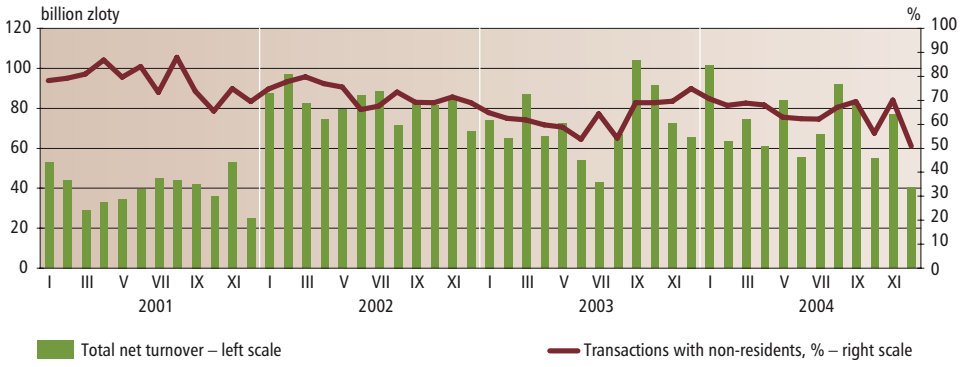
Note: Gross nominal value of FRAs (sold and bought) in domestic banks' portfolios.
Source: NBP.

Figure 5.4.2. IRS market size



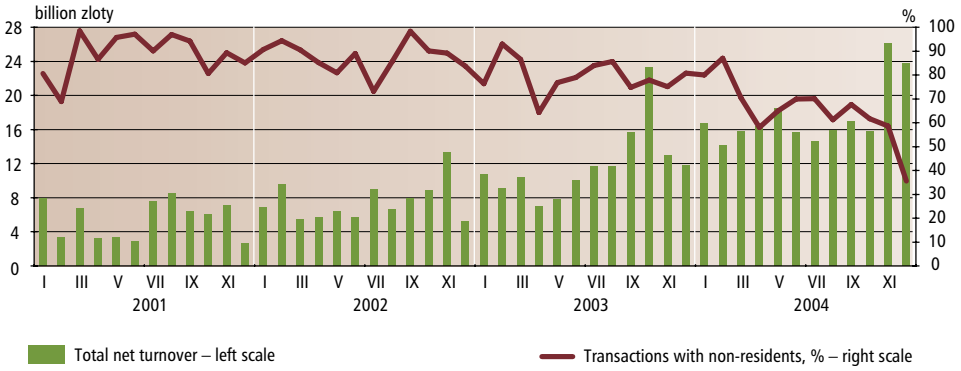
Note: Gross nominal value of IRS (sold and bought) in domestic banks' portfolios.
Source: NBP.

Figure 5.4.3. Average monthly net turnover on the FRA market



Note: Data adjusted for double-counting.
Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

Figure 5.4.4. Average monthly net turnover on the IRS market



Note: Data adjusted for double-counting.
Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

In 2004, the value of positions related to IRS contracts increased – the nominal value of contracts concluded grew by almost 50% (Figure 5.4.2). With regard to off balance sheet positions, it should be noted that the share of IRS transactions concluded with non-residents was lower than in previous years (a drop to 60%).

The stabilisation of turnover also confirms that the development of the FRA market was halted (Figure 5.4.3). In 2004, the average daily turnover was similar to that in 2003 and amounted to PLN 3.4 billion but the number of active market participants, the most important development factor, did not increase. In principle, all major banks operating in Poland conclude FRAs. On the other hand, the value of transactions concluded on the IRS market grew considerably. The average daily turnover went up by around 48% and amounted to PLN 0.83 billion. Domestic banks were particularly active in November and December, i.e. during the period when the turnover in the FRA market decreased (Figure 5.4.4).

The 2004 trends in the FRA and IRS markets presented above had a common cause. The involvement of domestic banks in FRAs decreased considerably, since dealers transferred their activities to the IRS market. It should be noted here that banks used most transactions in the FRA market to hedge their positions in Treasury bills and bonds with short maturities. In the second half of 2004, market participants used short-term (mainly one-year) interest rate swaps for this purpose.

A 1Y IRS hedge is equivalent to a combination of three FRAs (3x6, 6x9 and 9x12), each with a nominal value equal to that of the swap transaction. This is because of the fact that the BPV[430] of a 1Y IRS is approximately three times higher than the BPV of a 3M WIBOR FRA. This means that a decrease in the value of FRA positions could be compensated for by an increase in exposure to the IRS market equal to one third of this decrease, assuming the same exposure to interest rate risk in off balance sheet transactions. This explains the significant (PLN 220 billion) drop in gross FRA positions and the less than proportional (PLN 100 billion) increase in the nominal value of the IRS portfolio. The share of operations between residents, which was higher in the second half of 2004 (by 10 percentage points compared to the first half of the year, on average), also confirmed that domestic banks concluded interest rate swap transactions increasingly often.

The value of transactions concluded in the least developed OTC interest rate derivatives segment – the option market – remained very low. In 2004, the average monthly net turnover was around 0.1 billion zloty. In most cases, these were transactions with non-banking customers and transactions used to close the exposure arising from the conclusion of the former. Back-to-back hedges were concluded with foreign banks, usually parent companies.[431]

In 2004, a new instrument – the Overnight Index Swap (Box 5.4.1) – was introduced on the Polish derivatives market. Quotes for this instrument, for which the O/N WIBOR constituted the reference rate, were published by one of the brokerage firms. Due to the time necessary to develop the procedures for managing the risk related to this instrument, only a few banks participated in the OIS market. The NBP has no data concerning turnover, but on the basis of information obtained from dealers, the monthly amount of transactions conducted may be estimated at PLN 100 million. Transactions with maturities of up to two weeks prevailed, which was a direct result of the maturity of open market operations conducted by the NBP. In April 2004, the Polish Bank Dealer Association (Polskie Stowarzyszenie Dealerów Bankowych FOREX Polska) issued the recommendation *Transakcja swapa odsetkowego opartego na indeksie WIBOR Overnight (OIS)* – "Interest Rate Swap Transaction Based on the WIBOR Overnight Index (OIS)". The absence of a reliable reference rate was an obstacle to the development of the OIS market in Poland. The O/N WIBOR did not always reflect the cost of raising funds on the interbank market accurately, which made the use of OIS ineffective. Therefore, in the second half of 2004, the NBP together with the Polish Bank Dealer Association worked on the introduction of a more representative reference rate – the POLONIA rate.

[430] The BPV (basis point value) is a fundamental measure used in interest rate instrument portfolio management which corresponds to the change in the value of an instrument (portfolio) caused by a shift of one basis point in the yield curve. For example, the BPV for a 3x6 FRA with a nominal value of PLN 100 million is around PLN 2,500 (PLN 100,000,000 * 1/4 * 0.01%, where 1/4 is the fraction of the year elapsed).

[431] *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 205.

Box 5.4.1

OVERNIGHT INDEX SWAP (OIS) AND ITS APPLICATIONS

An Overnight Index Swap is an interest rate swap where interest on the nominal value stipulated in the agreement accrued at a fixed interest rate is exchanged for interest accrued at a floating interest rate (the capitalised O/N rate). These are short-term transactions with maturities of up to one year. The OIS is a non-deliverable forward – parties to the transaction only exchange the difference between the interest accrued at the fixed interest rate and the interest accrued at the rate calculated based on daily O/N reference rates.

The OIS facilitates liquidity management at banks since it enables them to guarantee a fixed cost of raising funds on the money market. Banks usually finance their positions in Treasury securities on the interbank market, using O/N or T/N transactions. The purchase of an OIS contract (where interest is payable according to a fixed rate) makes the cost of refinancing the position independent of sudden liquidity movements within the banking sector and fluctuations of the O/N rate. This instrument makes it possible to determine the cost of maintaining required reserves in advance. The OIS may also be used to speculate on changes in central bank interest rates. This type of speculation has a certain advantage – due to the fact that the settlement does not entail delivery, no significant cash flows are generated. In the euro area, arbitrage related to such swaps was profitable when the OIS rate was lower than the interest rate on main refinancing operations.[1] The OIS may also be used by non-financial companies in order to hedge the interest rate on cash surpluses invested in overnight deposits.

[1] Cf. *Euro Money Market Study 2001*, Frankfurt: ECB, 2002, p. 15–18 and 28–30.

At the same time, dealers were drawing up a recommendation for the OIS settled according to the new index. The NBP will start to conduct POLONIA fixing in January 2005. This should contribute to increasing bank activity in this new derivatives market segment. Bearing in mind the very rapid development of the OIS market in the euro area in recent years,[432] it should be expected that OIS will also become one of the most liquid instruments on the domestic OTC derivatives market in Poland.

Market structure

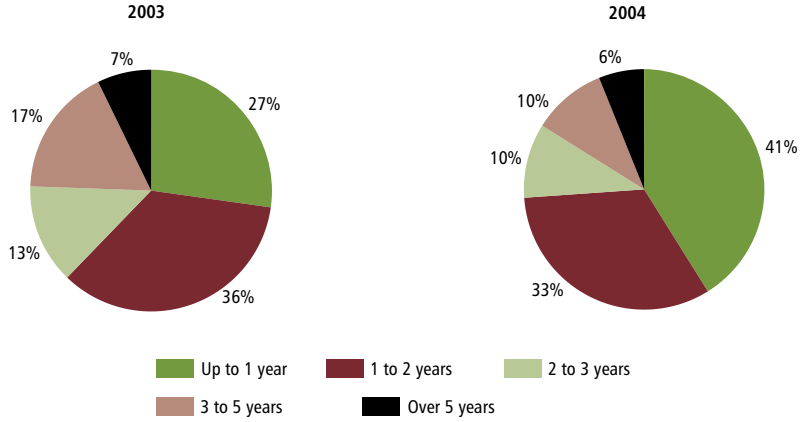
As in previous years, transactions where the 1M, 3M and 6M WIBOR served as reference rates were concluded on the FRA market. In 2004, the number of transactions with maturities exceeding one year (12x15, 12x18, 18x24) rose slightly, but the liquidity of this market segment remained low. The interest in FRA IMM contracts decreased.[433] The active participation of most domestic banks prevented arbitrage between the FX swap and FRA markets. Standard FRA nominal values ranged from PLN 100 to 300 million, while the spreads quoted between the bid and offer rates still ranged from 5 to 10 basis points.

In 2004, the maturity structure of turnover on the interest rate swap market changed significantly. The share of transactions with the shortest maturities (mainly 1Y IRS) grew considerably (Figure 5.4.5). This resulted from the aforementioned shift of dealer activity from the FRA market towards the 1Y IRS one. The increase in transactions with a one-year horizon caused the shares of remaining contract categories to drop. Additionally, demand for transactions with

[432] *Euro Money Market Study 2004,* Frankfurt: ECB, 2005, pp. 24–27.

[433] For FRA IMM contracts, the fixing date is the third Wednesday of one of the months in the March, June, September, December cycle.

Figure 5.4.5. Maturity structure of IRS contracts, 2003 and 2004



Note: Breakdown by original maturities; contract maturity bands are closed on the right.
Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

maturities exceeding three years was limited by interest rate deconvergence.[434] The liquidity of the segment for contracts with maturities exceeding 10 years remained low. In 2004, interest in short-term transactions where a one-month interest rate was the reference rate increased (1Y IRS contracts with a floating 1M WIBOR rate). Such transactions came up on the domestic market in 2003. Dealers fixed the cost of financing positions in short-term Treasury securities by concluding contracts based on the 1M WIBOR rate, since this rate reflected the effective cost of such financing (usually O/N or T/N loans) more accurately than the 3M WIBOR. Moreover, IRS contracts with a one-month floating rate provided an alternative to FRAs with the 1M WIBOR as the reference rate. Standard IRS contract amounts remained unchanged at PLN 25–50 million.

Market participants

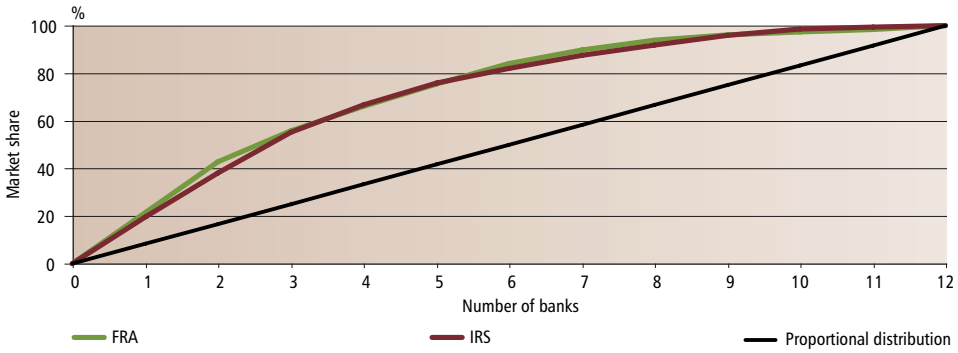
OTC interest rate derivatives market participants included almost exclusively banks. Both the FRA and IRS markets showed significant concentration – the share of the five most active banks in total net turnover amounted to around 75% (Figure 5.4.6). In 2004, the number of domestic banks which concluded IRS contracts on a regular basis increased. The market maker function, however, was still performed by three banks. Data about bank turnover and positions confirm that foreign (mainly London-based) banks played a major role in the Polish interest rate derivatives market. As in the spot FX and FX swap markets, the non-residents' activity affected the liquidity of FRA and IRS contracts strongly. On the IRS market, foreign banks often employed the calendar spread strategy geared to non-parallel shifts in the yield curve.

Transactions with non-banking entities were rare and accounted for a few percent of total turnover (Table 5.4.4). Polish enterprises hedged against interest rate risk very rarely, although most of them were exposed to this type of risk. The limited interest in derivatives among enterprises was linked to the high cost of using them as well as concerns whether such hedging would be effective (Box 5.4.2). Based on NBP data, it may be concluded that enterprises seldom take positions in FRA contracts. Customers used IRS transactions for interest rate risk management more often, despite the fact that, in order to purchase such instruments, rigorous credit requirements have to be met. Issuers of long-term bonds could use IRS contracts in order to match the interest profiles of assets and liabilities. In 2004, amortising and drawdown swaps were very popular among customers.

As in previous years, the activity of institutional investors on the derivatives market was low. Given the investment horizon of such companies, IRS contracts are a perfect tool enabling them to

[434] Interest rate deconvergence – a phenomenon consisting in the widening gap between the yield on Polish Treasury bonds and IRS contracts on one side and yields in euro area countries on the other.

Figure 5.4.6. FRA and IRS market turnover concentration



Source: NBP calculations based on data submitted by banks taking part in the *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004* in Poland.

Box 5.4.2

THE USE OF DERIVATIVES FOR HEDGING INTEREST RATE RISK BY POLISH ENTERPRISES

At the end of March and beginning of April 2004, the NBP commissioned the Ipsos institute to conduct a survey using the Emitent system concerning the use of derivatives for interest rate risk management by enterprises. The analysis comprised 363 responses from companies of different sizes and legal statuses which had operated for varying periods, from different industries and with varied experience on the capital market (issuers of stock on the public market and of bonds as well as companies which had not used this form of fundraising so far were surveyed).[1]

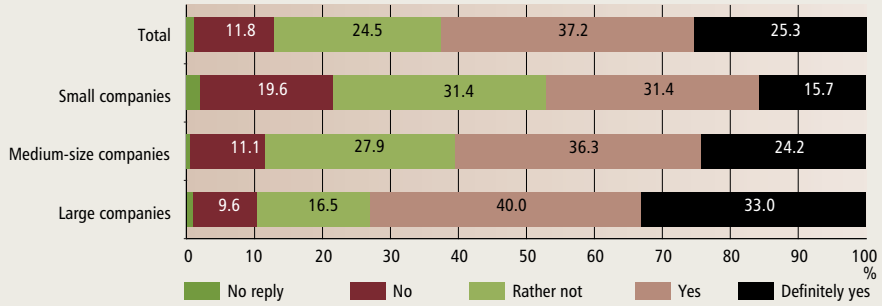
The survey confirms that interest rate movements are a factor which affects earnings of enterprises operating in Poland. To a question whether the company was exposed to interest rate risk, over 25.3% of companies surveyed replied "definitely" and 37.2% replied "probably" (Figure 5.4.7). The share of companies surveyed that think they are exposed to this type of risk is the highest among large enterprises and the lowest among small ones. Only 11.8% of institutions surveyed stated that their operations did not involve exposure to interest rate risk.

Despite being exposed to interest rate risk, a large majority of enterprises did not attempt to mitigate this risk regularly in the past. To a question whether the enterprise had ever hedged against this type of risk, only 7.8% of respondents stated that they had done this "often" or "very often." Among the firms surveyed, only 1.6% had always hedged against interest rate movements. It should be noted that the firms that raise funds on the financial market by issuing bonds hedge their exposure to interest rate risk more often than other companies (Figure 5.4.8).

The enterprises that had hedged against interest rate risk in the past were asked to indicate how often they used individual financial instruments in their hedging strategies. The analysis of the responses confirms that enterprises employ derivatives very rarely. Where they do decide to hedge against risk using derivatives, they usually use simple instruments – FRAs, IRS and futures contracts (Figure 5.4.9).

[1] Survey methodology and a detailed description of the sample surveyed can be found in: *Wybrane determinanty rozwoju rynku akcji i korporacyjnych instrumentów dłużnych w Polsce. Wyniki badania ankietowego*, Warszawa: NBP, 2004, p. 8–11.

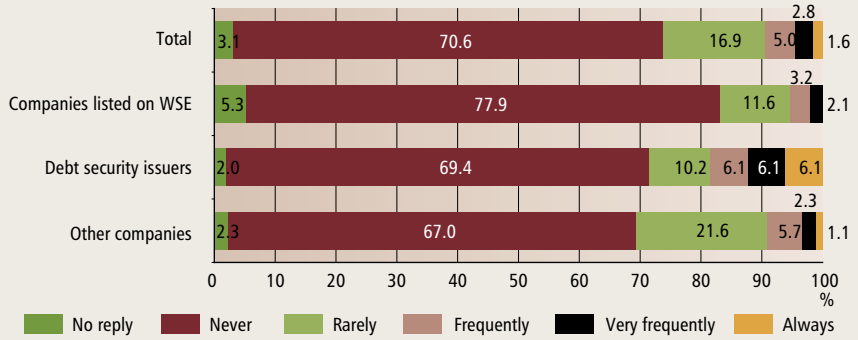
Figure 5.4.7. Enterprises' exposure to interest rate risk



Sample: 363 enterprises.

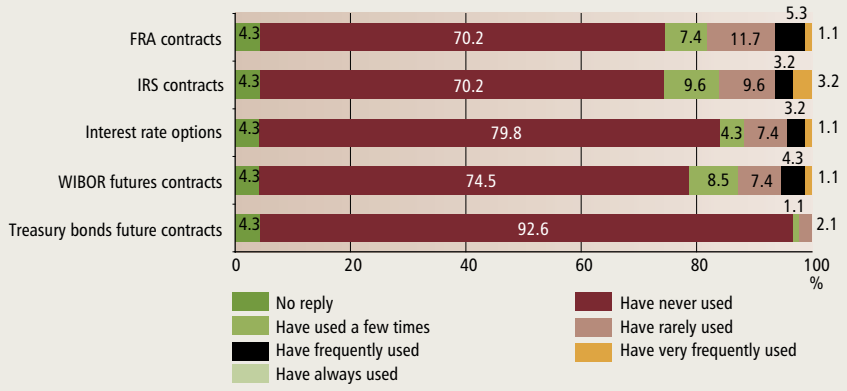
Note: Small, medium-sized and large enterprises are defined as firms with net revenues of up to and including EUR 7 million, from 7 million up to and including EUR 40 million and over EUR 40 million, respectively. The division adopted is in line with the provisions of the Act on Business Activity of November 19, 1999 (*Dz.U.* No. 101/1999, item 1178).

Figure 5.4.8. Hedging against interest rate risk



Sample: 320 enterprises. The sample does not include the enterprises that stated that they were not exposed to interest rate risk.

Figure 5.4.9. Derivatives used by enterprises for interest rate risk management



Sample: 94 enterprises. The sample does not include the enterprises that stated that they were not exposed to interest rate risk and those that had never hedged against this risk.

The survey attempted to identify the most significant factors for the limited interest in derivatives among the enterprises exposed to interest rate risk.[2] According to the companies surveyed, the most important reasons for the infrequent use of derivatives included their cost and concerns regarding their effectiveness. A large part of enterprises consider the advantages of hedging to be too small relative to its cost (average grade 3.08, a very significant or significant factor for 37.5% of companies). According to the companies surveyed, the cost of products/instruments offered by banks (average grade 3.02, a very significant or significant factor for 34.1% of companies) and stock exchanges (average grade 2.77, a very significant or significant factor for 26.6% of companies) was also an important factor. Firms were also concerned about the effectiveness of the strategies offered (average grade 2.79, a very significant or significant factor for 29.7% of companies). The factors which are popularly believed to be obstacles to the use of derivatives – complex accounting principles regarding derivative operations and the insufficient knowledge of instruments and market operation principles – were considered to be the least important by surveyed companies (average grades of 2.16 and 2.25, respectively). It should be added that for every fifth enterprise, the lack of consent on the part of the firm's owners to the conclusion of derivatives transactions was a significant or very significant reason for not using them.

[2] The comanies surveyed graded the significance of individual factors on a 1 to 5 scale; a "1" meant that a given factor was insignificant and a "5" that it was very significant. 320 enterprises responded to this question (the sample did not include the enterprises that stated that they were not exposed to interest rate risk).

manage their Treasury bond portfolios effectively. The amendments to sectoral regulations, which took effect in 2004, enabled insurance companies and open investment funds to use this instrument in order to hedge their investment risk (hedge the value of their debt securities portfolios). However, no ordinance stipulating the principles of open pension funds' investments in derivative rights in order to hedge against investment risk has been issued. Work on this document is scheduled for completion in 2005. The increasing value and duration of bond portfolios held by such institutions exacerbate the risk of a decrease in the amount of future pensioners' savings. This risk may materialise if interest rates rise considerably.

Development trends and prospects

The period of rapid development of the domestic OTC interest rate derivatives market appears to have passed. The emergence of an interbank interest rate options market in Poland is improbable. Due to the high cost of purchasing the systems required and the need to develop risk management procedures, no bank is likely to maintain a portfolio of those instruments in the coming years. After Poland adopts the single currency, however, domestic banks may only serve as intermediaries in the sale of euro area interest rate options to non-banking customers, while portfolios will be managed abroad by their parent companies.[435]

The OIS market exhibits the largest development potential. The introduction of the new reference rate for this instrument should contribute to its development. However, many banks need to develop operating procedures related to the monitoring of positions and risk generated by OIS transactions. After the POLONIA reference rate is introduced, the banks' activity may be reduced temporarily. Market participants may divide into two groups according to their preference for the new or the old rate. Some banks may prefer to settle OIS contracts according to the O/N WIBOR, since they may influence the level of this index to a greater degree by participating in its fixing.

The liquidity of the FRA market should not change significantly until Poland enters the euro area. The IRS market has better development prospects. The quantitative development of this

[435] More on the factors behind the development of the Polish interest rate options market: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, pp. 204–205.

Table 5.4.5. Average daily turnover in selected segments of OTC derivatives markets in Finland and Portugal, USD million

	1998	2001	2004
Finland			
FRAs	1,781	30	43
IRS	331	328	209
Portugal			
FRAs	801	38	0
IRS	157	288	627

Sources: Bank of Finland press releases: *Survey of foreign exchange and derivatives market activity in Finland, Spring 2001; Survey of foreign exchange and derivatives market activity in Finland. Spring 2004,* and the press release of the Bank of Portugal: *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity. Data for Portugal – Preliminary Results.*

market may be stimulated by the rising involvement of institutional investors and the increasing duration of domestic public debt. The most important factors shaping the structure and liquidity of the FRA and IRS markets in the coming years will be:

– low credit limits imposed on transaction counterparties by domestic banks, which may limit market liquidity;

– the activity of non-banking financial institutions and the fact that open pension funds are now able to mitigate investment risk by investing in derivative rights;

– the development of the Treasury bond futures market on the WSE (this instrument will provide an alternative to IRS contracts);

– the limited use of derivatives for interest rate risk management by Polish enterprises.

Poland's entry into the EMU will cause significant changes in the domestic OTC derivatives market. Judging by transformations in the financial markets of the countries that have already entered the euro area, a major decrease in turnover in the FRA market (and even an atrophy of this market) may be expected (Table 5.4.5). The much smaller decrease in IRS transactions in Finland and the quadrupling of their amount in Portugal largely reflect statistical methodology – OIS contracts are included in the IRS category and the OIS market is developing rapidly in the euro area. Thus it appears that in coming years, the OIS market should be developed in Poland so that banks and their customers are familiar with this instrument when the euro is adopted and are able to actively participate in the market for swaps settled according to the EONIA rate. Since operation in the euro area market and risk management centralisation will entail a reduction in interbank transactions, products targeted at non-banking customers and tailored to their needs should be promoted. More complex derivatives and structured products should be expected to appear in the range of products offered by banks.

5.4.2.2. FX derivatives

Market size

The predominance of transactions between non-residents was a characteristic feature of the OTC market for zloty, forint and Czech koruna FX derivatives. This was particularly evident in the most liquid market – the forward one (Table 5.4.6). London-based banks usually conducted forward FX transactions with non-banking financial institutions. The high turnover in the forward market in Poland was also a result of the high value of transactions between domestic banks and non-financial customers. In 2004, the zloty FX derivatives market was distinguished by its option segment, which was well developed compared to other Central and Eastern European FX markets (Table 5.4.7). It should be stressed, however, that just as in the forward market, a large proportion of transactions (around 50%) were concluded abroad, between London- and New York-based banks.

Table 5.4.6. Average daily turnover on the zloty, Czech koruna and forint forward FX markets, April 2004, USD million

	Zloty	Czech koruna	Forint
Total turnover, of which:	483	253	308
Transactions between residents	161	39	54
Resident – non-resident transactions	27	3	28
Transactions between non-residents (offshore)	295	211	226

Sources: NBP calculations based on *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004*, Basel: Bank for International Settlements, 2005, p. 76–79 and domestic figures submitted by the NBP, Czech National Bank and the National Bank of Hungary. The balance of omissions has not been taken into account.

Table 5.4.7. Average daily turnover on the zloty, Czech koruna and forint FX option markets, April 2004, USD million

	Zloty	Czech koruna	Forint
Total turnover, of which:	260	98	49
Transactions between residents	53	15	6
Resident – non-resident transactions	90	32	7
Transactions between non-residents (offshore)	117	51	36

Source: NBP calculations based on *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004*, Basel: Bank for International Settlements, 2005, p. 80–83 and domestic figures submitted by the NBP, Czech National Bank and the National Bank of Hungary. The balance of omissions has not been taken into account.

No liquid market for cross-currency interest rate swaps has developed in any of the region's countries. The average daily turnover on the CIRS market where the zloty, forint or Czech koruna was one of the currencies amounted to just a few million US dollars in April 2004.[436]

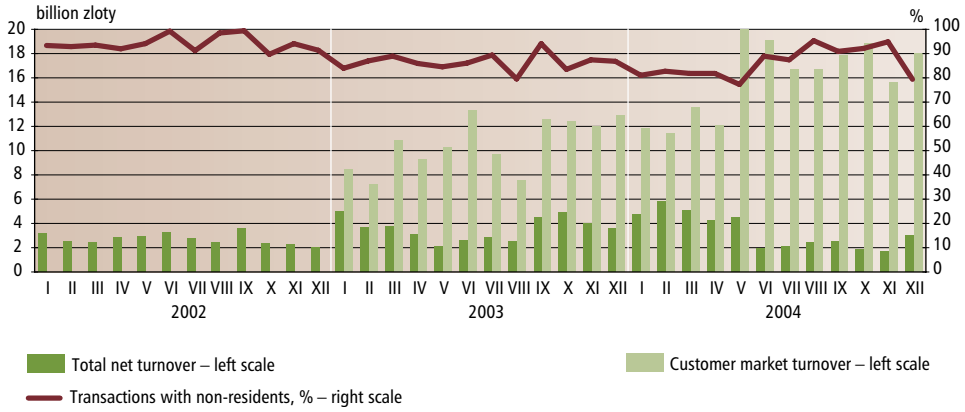
A much higher share of transactions with non-banking customers was an important feature which distinguished the domestic OTC FX derivatives market from the interest rate derivatives one in 2004. The interbank forward market, where the average daily net turnover amounted to 0.16 billion zloty in 2004, was almost five times smaller than the customer market, which had an average daily turnover of 0.76 billion zloty (Figure 5.4.10). The situation in the Czech Republic and Hungary was similar (Table 5.4.8). Non-banking customers used forward transactions to hedge against FX risk very often. On the interbank market, synthetic forwards that combined transactions concluded in more liquid markets (the spot FX and FX swap ones) were used instead of forwards. In 2004, the liquidity of the interbank forward transaction market in Poland did not change significantly. In the second half of the year, the share of transactions concluded with foreign banks rose slightly and amounted to around 90%.

In 2004, turnover on the customer market grew significantly (by around 50%). After Poland's accession to the EU, the liquidity of this segment of the forward market rose considerably. This resulted from an increase in trade and the accompanying increased demand for instruments that enable hedging of the value of future payments denominated in foreign currencies.

On the domestic FX option market, interbank transactions prevailed, just as in the Czech Republic (Table 5.4.9). In 2004, FX option portfolios were still managed by only a few banks among those operating in Poland. Therefore, liquidity on the interbank market was largely generated by foreign banks (over 95% share of turnover). Domestic banks concluded FX option transactions among themselves very rarely. In 2004, the steady growth in turnover on the domestic zloty FX option market was halted (Figure 5.4.11). Liquidity decreased both on the customer market (the average daily turnover amounted to PLN 0.1 billion and was around 60% lower than in 2003) and on the interbank one (the average daily turnover amounted to PLN 0.03 billion and was around 40% lower than in 2003). Non-banking customers used this instrument less often due to the lower volatility of the zloty and a strong upward trend in its

[436] *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004*, Basel: Bank for International Settlements, 2005, pp. 76–77.

Figure 5.4.10. Monthly net turnover on the forward FX market



Note: Data for the customer market are only available for 2003 and 2004.

Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

Table 5.4.8. Average daily turnover and structure of the forward FX market in Poland, the Czech Republic and Hungary in April 2004

	Poland	Czech Republic	Hungary
Turnover – foreign currencies/domestic currency, USD million	188	42	82
– of which: EUR/domestic currency, %	63	74	70
– of which: USD/domestic currency, %	33	24	21
Interbank market, USD million	32	7	22
Customer market, USD million	156	35	60
Turnover – foreign currencies/foreign currencies, USD million	141	28	43

Note: In emerging markets, the "other reporting institutions" category included mostly smaller banks. Therefore, in this table the interbank market includes transactions concluded with "other reporting institutions" and "other financial institutions."

Source: NBP calculations based on domestic results of *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004* submitted by the NBP, Czech National Bank and the National Bank of Hungary.

exchange rate. Moreover, they preferred simpler instruments (forward transactions) for managing their FX risk. The decrease in demand for FX options on the customer market was among the factors which limited turnover in the interbank one, since some domestic banks which offered FX options acted as intermediaries – they closed position arising from the conclusion of an option transaction with a customer by concluding an opposite transaction with their parent company or another foreign bank.

The transfer of non-residents' activities to the offshore market was an important factor contributing to the decrease in turnover on the domestic interbank FX option market. In 2004, the increase in turnover on the offshore market was accompanied by a drop in liquidity on the domestic one. Based on information obtained from dealers who manage FX option portfolios, it may be stated that, in the second half of 2004, turnover on the offshore market was much higher than that recorded in April (Table 5.4.7). Participants in the interbank zloty exchange rate option market became segmented – increasingly often, domestic banks could not conclude transactions with foreign ones due to the excessively high nominal values of options strategies. The standard nominal value of the most popular option strategy (ATMF straddle)[437] on the domestic market was EUR 10 million (US dollars),[438] while major foreign banks traded strategies with nominal values of EUR 50, EUR 100 and sometimes even EUR 200 million (US dollars). Based on information

[437] More information on this and other option strategies sold on the interbank market can be found in: P. Mielus, *Rynek opcji walutowych w Polsce*, Warszawa: Wydawnictwo K. E. LIBER, 2002, pp. 109–117.

[438] This figure refers to the nominal value of each option included in the strategy sold.

Table 5.4.9. Average daily turnover and structure of the FX option market in Poland, the Czech Republic and Hungary in April 2004

	Poland	Czech Republic	Hungary
Turnover – foreign currencies/domestic currency, USD million	143	47	13
– of which: EUR/domestic currency, %	55	80	4
– of which: USD/domestic currency, %	44	17	40
Interbank market, USD million	96	35	7
Customer market, USD million	47	12	6
Turnover – foreign currencies/foreign currencies, USD million	38	14	33

Note: In emerging markets, the "other reporting institutions" category included mostly smaller banks. Therefore, in this table the interbank market includes transactions concluded with "other reporting institutions" and "other financial institutions".

Source: NBP calculations based on the results of *Triennial Central Bank Survey – Foreign exchange and derivatives market activity in 2004* submitted by the NBP, Czech National Bank and the National Bank of Hungary.

Figure 5.4.11. Average monthly turnover on the zloty FX option market by nominal value

Note: According to the Bank for International Settlements standard, the figures presented include the nominal value of each option included in the strategies.

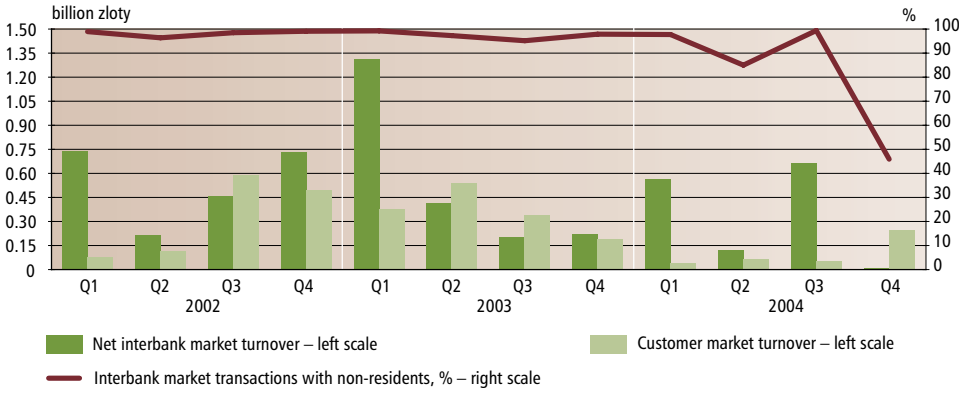
Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

obtained from market participants, it may be concluded that, in the second half of 2004, foreign banks concluded transactions of such amounts with hedge funds relatively often. Thus, only a small part of the exposure arising from the purchase or sale of strategies with such high nominal values could be closed on the domestic market. Banks operating in Poland were prevented from concluding transactions with higher nominal values by limits imposed on counterparties, but primarily by market risk limits. Therefore, the amount of capital of banks operating in Poland, which determined the scope of risk they could take, was the factor which limited the liquidity of the domestic interbank FX option market.

In 2004, the CIRS market remained one of the least developed segments of the domestic OTC derivatives market. In 2004, the average daily amount of CIRS transactions concluded amounted to PLN 5 million. Basis swap transactions with foreign banks prevailed (Figure 5.4.12). Contracts between domestic banks were rarely concluded.

Monthly turnover on the customer market amounted to PLN 100 million. As in previous years, large enterprises, which borrowed funds on international markets, were parties to cross-currency interest rate swaps. They used CIRS contracts to hedge against FX risk and interest rate risk resulting from the mismatch between assets and liabilities.

Figure 5.4.12. Average monthly turnover on the CIRS market (foreign currency/PLN)



Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

Market structure

EUR/PLN transactions accounted for the greatest part of turnover on the zloty forward market (Table 5.4.8). The dominance of this pair in the customer market resulted from the large share of the euro in the settlement of foreign business transactions. On the interbank market, banks were active in the EUR/PLN segment since they closed FX positions arising from customer transactions. Short-term transactions with maturities of up to 6 months prevailed. Contracts with maturities of up to 7 days constituted around 43% of turnover, while the share of contracts that are settled one year after the conclusion of the agreement was under 1%. In 2004, enterprises increasingly took advantage of forward options and par forwards. Such contracts were quoted with higher spreads than generic forwards, but, on the other hand, they constituted more flexible hedging instruments which could be more easily adjusted to the cash flows planned.[439] Non-deliverable forwards remained popular among private banking customers who speculated on the zloty exchange rate. The relatively high turnover in the foreign currency/foreign currency segment recorded in April 2004 (Table 5.4.8) was not representative and resulted from a large amount of customer EUR/JPY exchange transactions.

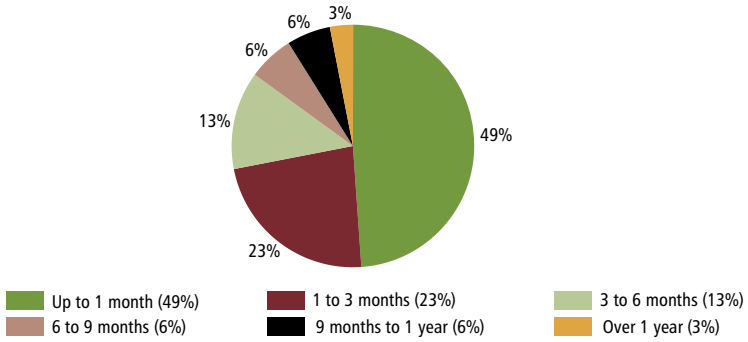
Banks, which managed FX option portfolios, published quotes for strategies with maturities ranging from one week to one year (1W, 1M, 2M, 3M, 6M, 1Y). In 2004, the maturity structure of turnover did not change significantly. Transactions with the shortest maturities prevailed. Just as in Hungary,[440] options with expiration periods of up to 1 month accounted for 50% of turnover (Figure 5.4.13). On the domestic market, EUR/PLN options were traded most often – 55% of the amount of transactions involving the zloty exchange rate. USD/PLN transactions accounted for 44%. The dominance of the EUR/PLN pair resulted from the currency structure of payments hedged by enterprises and the increasing role of this pair in turnover on the spot FX market. With regard to the currency structure of the Polish and Hungarian option markets, the relatively high turnover of foreign currency exchange rate options should be noted (Table 5.4.9). EUR/USD exchange rate strategies constituted the bulk of such transactions. The spread quoted for the ATMF straddle option strategy published on bank pages by Reuters remained very wide (from 0.7 to 1.5 percentage points).

The maturity structure of transactions concluded in 2004 on the CIRS market confirms that this market cannot be considered well-developed. Transactions with maturities of up to and including 2 years still prevailed, accounting for 60% of turnover (Figure 5.4.14). Contracts

[439] More information on forward options and par forwards can be found in: J. Zając, *Polski rynek walutowy w praktyce*, Warszawa: Wydawnictwo K. E. LIBER, 2004, pp. 57–59 and 203–106.

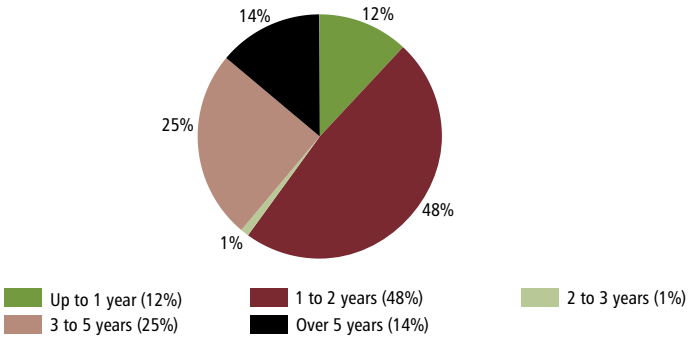
[440] *Report on financial stability. December 2004*, Budapest: Magyar Nemzeti Bank, 2004, p. 40.

Figure 5.4.13. Maturity structure of turnover on the zloty FX option market, 2004



Note: Breakdown by original maturities; contract maturity ranges are closed on the right.
Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

Figure 5.4.14. Maturity structure of turnover on the CIRS market, 2004



Note: Contract maturity bands are closed on the right.
Source: NBP data submitted by banks – Primary Dealers and/or money market dealers and candidates for dealers.

with maturities longer than five years were concluded very rarely. This maturity structure resulted primarily from the fact that transactions with longer maturities use up more of banks' lines of credit. The shares of transactions involving the euro and the US dollar on the interbank market were similar. Non-financial companies most often swapped interest payments in zloty for payments denominated in euros.

Market participants

In 2004, domestic banks, foreign banks and non-financial companies continued to be the most important participants on the markets discussed here. As has already been mentioned, liquidity in the forward market was created mainly through trading with non-banking customers, and in the option market – through foreign banks' activity. Enterprises that hedged against FX risk on the financial market usually employed various types of forward contracts (Box 5.4.2). Apart from enterprises, the second group of active participants in the FX forward market were private banking customers who speculated on the zloty exchange rate. Institutional investors still concluded derivative transactions, including those involving FX derivatives, infrequently. This was caused, among other things, by investment limits imposed on open pension funds with regard to investing on foreign markets and the resulting lack of need to hedge against FX risk.

In terms of the FX options market, the number of domestic banks managing portfolios of such instruments did not increase. Turnover on this market was considerably concentrated. Only

four banks concluded FX options transactions on a regular basis. Their share in net turnover in April 2004 was around 85%, and the share of the two most active banks exceeded 50%. Based on NBP data, it may be concluded that most domestic banks owned by foreign companies were only intermediaries in this market. This trend, which was observed not only in Poland, resulted from risk management centralisation. The portfolios of more complex instruments (which included options in emerging markets) were transferred to parent companies. In 2004, non-resident activity on the offshore market grew significantly. Based on information obtained from market participants, it may be concluded that zloty exchange rate options were traded not only among London-based banks, but also among banks and hedge funds operating in the United States. In the period under consideration, interest in FX options among non-banking customers decreased. Complex strategies and diverse exotic options, whose payment profiles matched the enterprises' individual needs, were still the preferred choice, however.

There were very few active participants in the CIRS market. Only three banks concluded cross-currency interest rate swaps on a regular basis. Some banks were parties to single high-value transactions because they hedged exposures resulting from the mismatch between loans extended and deposits accepted. High requirements regarding counterparties' creditworthiness continued to limit the number of potential customer market participants.

Development trends and prospects

It appears that demand for forward contracts from non-banking institutions will not increase significantly in the coming years. Therefore, turnover on the domestic forward transaction market will remain at the 2004 level. The market will still be dominated by customer transactions, since domestic banks will continue to prefer synthetic forward contracts (combinations of spot transactions and FX swaps). No increase in interest in this instrument should be expected from open pension funds either, since due to sectoral regulations foreign currency assets will only constitute a small part of their investment portfolio. The trends observed in 2004 suggest that, in coming years, the amount of transactions concluded on the domestic FX option market may decrease further. Foreign banks whose share in Polish market turnover exceeds 90% will conclude

Box 5.4.3

THE USE OF DERIVATIVES FOR HEDGING FX RISK BY POLISH ENTERPRISES

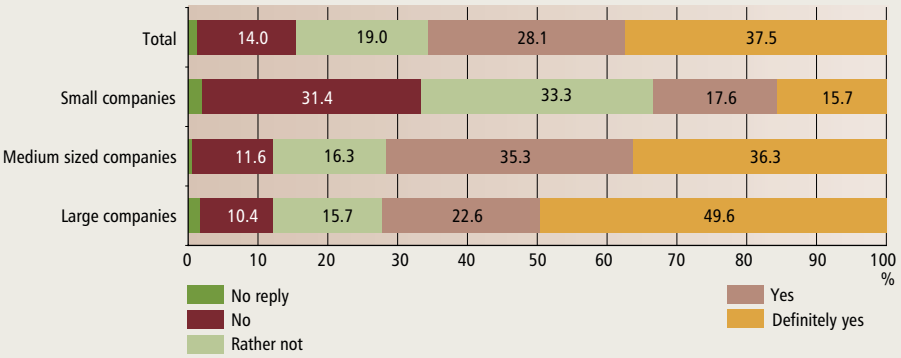
The survey conducted by the NBP at the end of March and beginning of April 2004 (see Box 5.4.1) enabled to analyse the use of derivatives for FX risk management by enterprises operating in Poland to be analysed.[1]

Based on survey results, it may be stated that, for most enterprises, exchange rate fluctuations may lead to increased earnings volatility. To a question whether the company was exposed to FX risk, 37.5% of companies surveyed replied "definitely" and 28.1% replied "probably". Only 14% of companies surveyed stated that their operations did not involve exposure to FX risk (Figure 5.4.15). The results for the entire sample are similar to those obtained in other surveys.[2] It should be stressed, however, that the percentage of companies surveyed that think they are exposed to FX risk is clearly the lowest among small enterprises and the highest among large ones. This probably results from the fact that exports and

[1] Survey methodology and a detailed description of the sample surveyed can be found in: *Wybrane determinanty rozwoju rynku akcji i korporacyjnych instrumentów dłużnych w Polsce. Wyniki badania ankietowego*, Warszawa: NBP, 2004, p. 8–11.

[2] P. Perz, P. Znamirowski, *Zarządzanie ryzykiem walutowym w przedsiębiorstwie*, Rzeszów: Instytut Gospodarki Wyższej Szkoły Informatyki i Zarządzania w Rzeszowie, 2003.

Figure 5.4.15. Enterprises' exposure to FX risk



Sample: 363 enterprises.

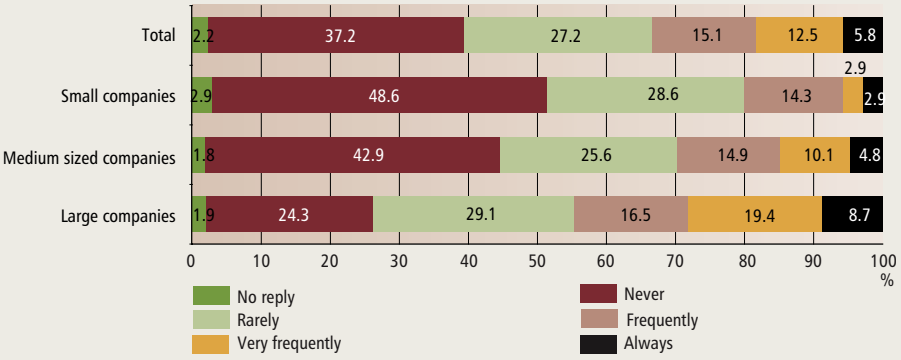
Note: Small, medium-sized and large enterprises are defined as firms with net revenues of up to and including EUR 7 million, from EUR 7 million up to and including EUR 40 million and over EUR 40 million, respectively. The division adopted is in line with the provisions of the Act on Business Activity of November 19, 1999 (*Dz.U.* No. 101/1999, item 1178).

imports account for a smaller proportion of turnover for small firms than for medium-sized and large ones.

Replies to the question whether a given company hedges against FX risk suggest that enterprises operating in Poland are much more concerned about changes in exchange rates than in interest rates. Every third firm tries to limit its FX exposure regularly, and 5.8% of them always do it (Figure 5.4.16). However, as many as 37.2% of companies surveyed had never hedged against this risk. As with the previous question, responses depended on the enterprise size. The highest share of firms, which declared that they hedged against exchange rate movements, was recorded among the companies most exposed to this risk, i.e. large enterprises.

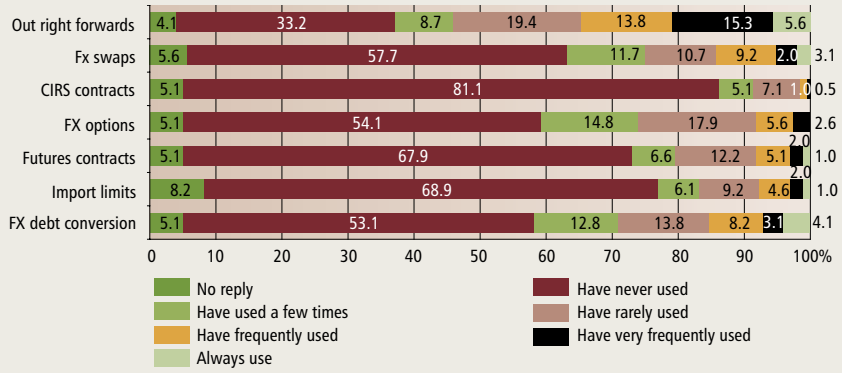
The enterprises that had ever hedged against FX risk were asked to indicate the methods employed. Survey results confirm that a large number of enterprises resort to forward transactions in managing FX risk – around 35% of firms regularly use this method. Other derivatives offered by banks and stock exchanges are used less frequently (Figure 5.4.17). The considerable interest in forward transactions may be explained by their simple design and flexibility as well as the fact that banks offer an extensive range of such instruments. Companies surveyed often used natural risk mitigation techniques as well – limiting imports or converting their debt to another currency. On the basis of survey results it may be supposed

Figure 5.4.16. Hedging against FX risk



Sample: 312 enterprises. The sample does not include the enterprises that stated that they were not exposed to FX risk.

Figure 5.4.17. Methods used by enterprises for FX risk management



Sample: 196 enterprises. The sample does not include the enterprises that stated that they were not exposed to FX risk and those that had never hedged against this risk.

that most firms try to negotiate the terms of the hedging instruments used. When making decisions regarding the use of derivatives, enterprises usually take advantage of consulting services and products offered by several banks (52%). 24% of companies surveyed only consulted the bank which provided services to them on an ongoing basis. The same percentage cooperated with specialist risk management firms in this regard.

The survey attempted to identify the most significant factors which may constitute obstacles and raise concerns with regard to the use of derivatives for limiting FX exposure.[3] According to the companies surveyed, the most important reasons for not using derivatives included (as in the case of interest rate risk) their cost and concerns regarding their effectiveness. In the opin ion of the companies surveyed, the cost of products/instruments offered both by banks (average grade 3.12) and stock exchanges (2.79) was the most important factor. This is confirmed by the grades assigned to the "benefits too small relative to hedging cost" factor (average grade 2.99, a very significant or significant factor for 21.15% of companies). Firms were also concerned about the effectiveness of the strategies offered (average grade 2.73). The insufficient knowledge of instruments and market operation principles as well as complicated accounting principles related to derivatives transactions were considered the least important (average grades of 2.17 and 2.13, respectively). It should be added that for 21.79% of companies surveyed, the lack of consent on part of the firm's owners to the conclusion of derivatives transactions was a significant or very significant reason for not using them.

[3] The companies surveyed graded the significance of individual factors on a 1 to 5 scale; a "1" meant that a given factor was insignificant and a "5" that it was very significant. 320 enterprises responded to this question (the sample did not include the enterprises that stated that they were not exposed to FX risk).

transactions with domestic banks less frequently and will focus on the offshore market instead. This is a very probable scenario, since the number of domestic banks managing option portfolios will not increase. To manage such portfolios it is necessary to purchase appropriate IT systems and develop risk management procedures, which entails costs that are high by Polish standards. The amount of domestic banks' capital will prevent the emergence of a liquid interbank CIRS market, while the passive attitude of institutional investors and high credit requirements will limit the number of transactions on the customer market.

Poland's entry into the EMU will cause a decrease in turnover on the domestic FX derivatives market, since the demand of non-financial corporations for forward contracts and option strategies hedging against FX risk will be diminished. Consolidation and risk centralisation will limit the amount of banks' transactions on the interbank market. The adoption of the euro may e.g. entail the liquidation of option portfolios by some banks. Derivative transactions denominated in zloty conducted on the domestic market will not be fully replaced by euro ones, since positions in euro derivatives will be managed from abroad. Most domestic banks will only act as intermediaries in the sale of FX derivatives. Therefore, from the banks' point of view, products targeted at non-banking customers should be developed and more complex ones such as exotic options should be included in the product range on offer.

5.4.3. Stock exchange derivatives

Financial derivatives are traded on the Warsaw Stock Exchange (WSE) and the Warsaw Commodity Exchange (WCE). In 2004, the range of products offered by both exchanges remained unchanged. The following products were traded on the WSE: stock index futures (on WIG-20, TechWIG and MIDWIG indices), FX futures (on USD/PLN and EUR/PLN exchange rates),[441] single stock futures, MiniWIG-20 index participation units, warrants and stock index options (WIG-20). The WCE offered FX futures on the USD/PLN, EUR/PLN, CHF/PLN, EUR/USD, EUR/CZK and both EUR/HUF exchange rates and interest rate futures (on 1M WIBOR and 3M WIBOR rates as well as on 2-, 3- and 5-year Treasury bonds) and FX futures options.

In 2004, the stock index futures market remained a dominant segment of the regulated derivatives market on the WSE. The share of stock index futures in the total turnover of the WSE futures market was 98% (the same as in 2003) and turnover rose by 8%. Stock futures were the second largest segment with regard to share of turnover (1.7%). Compared to 2003, turnover in this segment was 19% higher. On the other hand, the turnover of FX futures dropped significantly (by 48% compared to 2003), as did the turnover of MiniWIG-20 index participation units[442] (by 54%).

On the WCE, as in previous years, investors were mostly interested in FX futures, particularly on EUR/USD, EUR/PLN and USD/PLN exchange rates. On the options market, investors' involvement in FX futures, particularly on the EUR/USD exchange rate, surged (the number of contracts sold was 546 times higher). Virtually no turnover was recorded on the short-term interest rate futures and Treasury bond futures markets.

Transactions on both exchanges may only be concluded by institutions which have a status of exchange members. In 2004, amendments were introduced to the By-laws of the Warsaw Stock Exchange, which enabled a wider group of participants to conclude transactions on the stock exchange. Currently, apart from brokerage houses and banks engaging in brokerage activities, stock exchange members may include foreign investment companies and juridical persons, other National Depository for Securities participants and commercial banks.[443] As of year-end 2003, 21 brokerage houses had the status of WSE members; as of year-end 2004, there were 26 such firms (16 brokerage houses, 4 banks engaging in brokerage activities and 6 banks which did not engage in brokerage activities and were National Depository for Securities members). On the WCE, there were 17 brokerage houses and offices with the status of public members[444] in 2003; in 2004, there were 16.

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441 PLN/EUR and PLN/USD labels are used in contract standards.

442 More information on the MiniWIG20 instrument can be found in: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 228.

443 *Regulamin Giełdy Papierów Wartościowych w Warszawie z 22 września 2004 r.*, www.gpw.com.pl. Banks may operate on the stock exchange on their own account and on their own behalf via stock exchange brokers.

444 Pursuant to WCE By-laws, two types of WCE membership (public and non-public) are defined. A non-public WCE member only has the right to conclude transactions on its own behalf, i.e. it cannot accept and execute customers' orders. A public WCE member may also conclude transactions on its customers' behalf, i.e. engage in brokerage activities.

In 2004, derivatives were traded on the WSE in the continuous trading system, from Monday to Friday from 9 a.m. to 4.20 p.m. On the WCE, trading was based on the open-outcry system,[445] and took place from Monday to Friday from 9.15 a. m. to 4.10 p. m.

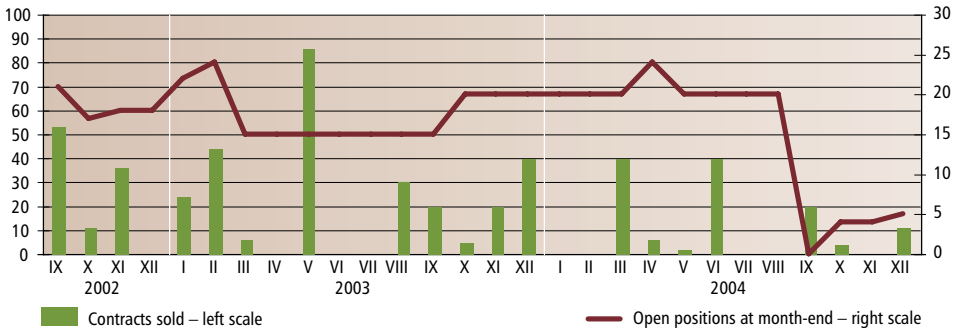
5.4.3.1. Interest rate derivatives

Interest rate futures are part of the WCE range of products on offer. It includes contracts based on both short-term (1M WIBOR and 3M WIBOR) and long-term (2-, 5- and 10-year Treasury bonds) interest rates.

Market size

Despite the fact that the interest rate futures market on the WCE has a six-year history, its liquidity remains limited[446] (Figure 5.4.18). In 2004, both the number of contracts sold (except for 3M WIBOR futures) and the number of open positions decreased (Tables 5.4.10 and 5.4.11).

Figure 5.4.18. Treasury bond futures on the WCE (total)



Source: WCE.

Table 5.4.10. Gross annual number of interest rate futures sold on the WCE

Instrument	2000	2001	2002	2003	2004
WIBOR 1M futures	0	0	0	0	0
WIBOR 3M futures	534	0	51	53	70
2-year bond futures	–	–	9	44	11
5-year bond futures	–	–	49	161	89
10-year bond futures	–	–	42	70	23

Source: WCE.

Table 5.4.11. Open positions in interest rate futures on the WCE (as of year-end)

Instrument	2000	2001	2002	2003	2004
WIBOR 1M futures	0	0	0	0	0
WIBOR 3M futures	0	0	0	38	18
2-year bond futures	–	–	1	1	2
5-year bond futures	–	–	12	15	2
10-year bond futures	–	–	5	4	1

Source: WCE.

[445] Open-outcry is a system whereby transactions are concluded directly on the trading floor.

[446] More on the causes in: *Financial System Development in Poland 2002–2003*, Warszawa: NBP, 2004, pp. 215–216.

In 2004, the Warsaw Stock Exchange was preparing to introduce synthetic bond futures. The WSE plans to start trading in such instruments in January 2005. In order to ensure the liquidity of the new derivatives, the WSE allowed banks and other National Depository for Securities members to participate directly in this market.

Development trends and prospects

Among financial derivatives on global markets, interest rate futures have enjoyed investors' greatest interest for many years. On Eurex,[447] the largest European derivatives exchange, German Treasury securities futures are the most popular contracts (Table 5.4.12). Such instruments are most commonly purchased by institutional investors and enterprises which hedge against adverse interest rate movements. Moreover, such contracts may be convenient bond portfolio management tools. Therefore, it may be expected that, in Poland, the bond futures market also has some development potential. Domestic institutional investors (open pension funds, insurance companies, investment funds) invest a large part of their assets in Treasury securities and, therefore, their investment portfolios exhibit considerable exposure to interest rate risk. Until the end of 2004, open pension funds could not conduct transactions on the derivatives market.[448] Foreign institutional investors who are active on the Polish Treasury bond market may also be interested in bond futures. The active participation of institutional investors, who could ensure adequate liquidity, is necessary for this market to develop.

Table 5.4.12. Annual turnover (number of contracts sold) of interest rate futures on Eurex and Euronext exchanges

Underlying instrument	Exchange	2003	2004
Euro-Bund	Eurex	244,414,274	239,787,517
Euro-Bobl	Eurex	150,087,139	159,166,394
3M EURIBOR	Euronext LIFFE	137,692,241	157,746,684
Euro-Schatz	Eurex	117,370,528	122,928,076
Long Gilt	Euronext LIFFE	10,150,267	14,045,404

Note: Euro-Bund – German long-term Treasury debt securities with an interest rate of 6%;
Euro-Bobl – German medium-term Treasury debt securities with an interest rate of 6%;
Euro-Schatz – German short-term Treasury debt securities with an interest rate of 6%;
Long Gilt – British long-term Treasury debt securities with an interest rate of 6%.
Sources: Eurex and Euronext.

Investors on global futures exchanges also exhibit considerable interest in money market interest rate futures. 3M EURIBOR, 3M LIBOR (USD) and 3M TIBOR interest rate futures are the most popular. In 2004, the share of turnover of short-term interest rate futures listed on the Euronext exchange in total turnover amounted to 28%. Such instruments are most commonly used for short-term interest rate risk management. In Poland, the liquid FRA market offers similar possibilities. Due to the fact that FRA contracts are traded on the interbank market, they are only available to major investors. On the other hand, WIBOR futures, which are traded on the WCE, may be used by smaller companies. Those two types of contracts do not compete with each other. Therefore, it may be supposed that the short-term interest rate futures market on the WCE will slowly start to develop.

[447] Eurex consists of Deutsche Börse AG and SWX Swiss Exchange.

[448] The law allowed such companies to conclude transactions on the derivatives market in order to hedge against investment risk to which the fund's assets were exposed. No secondary legislation has been issued in this respect, however.

5.4.3.2. FX derivatives

FX futures are traded on the WSE and WCE. Until 2001, the WSE led in terms of turnover, but the WCE overtook it in 2002 when the number of contracts sold there tripled. In 2004, the number of contracts sold on the WCE was eight times higher than on the WSE (Table 5.4.13).

Neither exchange introduced new FX futures into trading in 2004. EUR/PLN and USD/PLN futures were listed on the WSE while EUR/PLN, USD/PLN, CHF/PLN, EUR/USD, EUR/HUF and EUR/CZK futures were traded on the WCE.

Market size

In 2004, the situations of the two exchanges differed. On the WSE, investor interest in FX futures declined considerably. The number of contracts sold dropped by 44% compared to 2003 (Figure 5.4.19). The average number of open positions also decreased from 250 to 215 (by 14%). From the time FX futures were introduced on the WSE until 2003, investors were mostly interested in EUR/PLN futures. In 2004, the trend changed – their share of total turnover dropped significantly and amounted to 41% (against 68% in 2003). The average number of transactions per session fell from 10 in 2003 to 3 in 2004. For the first time in the history of FX futures listings, investors' interest in USD/PLN futures grew considerably. In 2004, their share of total turnover reached 59% (versus 32% in 2003). This was largely caused by the depreciation of the US dollar against the zloty and the higher volatility of the USD/PLN exchange rate compared to the EUR/PLN one.

The situation on WCE was different. The upward trend present since 2002 continued. In 2004, the turnover in FX futures rose by 38% compared to 2003 (Figure 5.4.20). The number of open positions also increased (by 95%). Enterprises exhibited higher interest in such instruments, which enabled them to hedge against adverse exchange rate movements. A significant part of transactions (USD/EUR ones) was also of a speculative nature.

As in previous years, EUR/USD, EUR/PLN and USD/PLN futures were the most popular FX futures (Table 5.4.14). Both the number of contracts sold and that of open positions grew for all

Table 5.4.13. Annual turnover (number of contracts sold) and open positions in FX futures, WSE and WCE

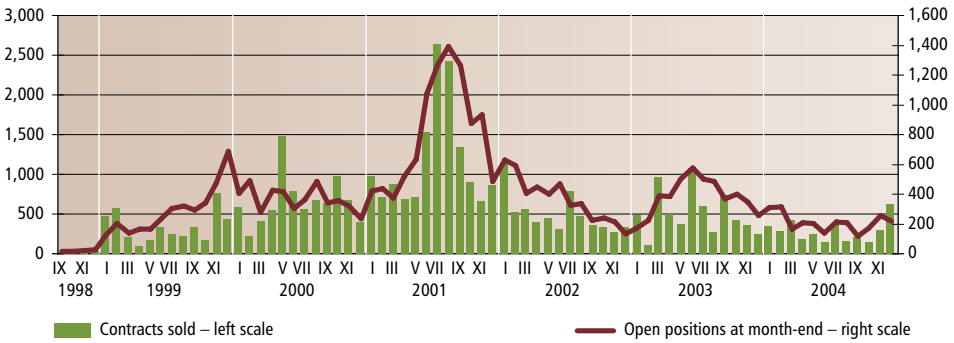
	2001		2002		2003		2004	
	A	B	A	B	A	B	A	B
WSE	14,325	478	5,957	126	6,145	250	3,455	215
WCE	2,302	61	7,076	169	19,579	273	27,005	533

A – number of contracts sold.

B – open positions as of year-end.

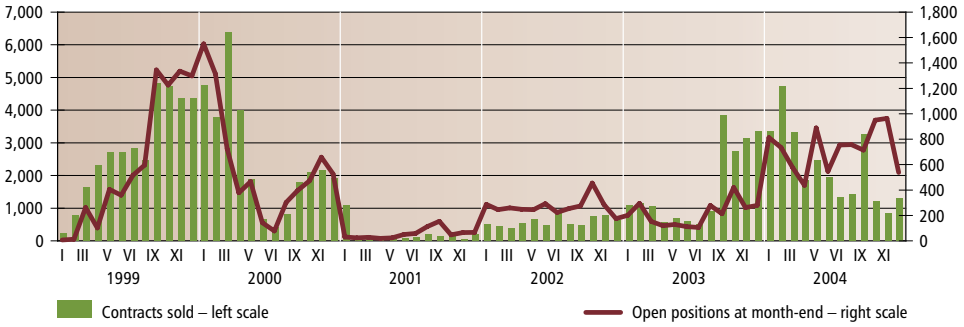
Sources: WSE and WCE.

Figure 5.4.19. FX futures on the WSE



Source: WSE.

Figure 5.4.20. FX futures on the WCE



Source: WCE.

Table 5.4.14. Annual turnover (number of contracts sold) and open positions in FX futures, WCE

Underlying instrument	2002		2003		2004	
	A	B	A	B	A	B
USD/PLN exchange rate	2,596	10	3,500	88	4,486	258
EUR/PLN exchange rate	866	86	4,464	70	9,597	186
USD/EUR exchange rate	937	21	11,000	113	12,848	67
CHF/PLN exchange rate	2,677	52	615	2	74	22

A – number of contracts sold.

B – open positions as at year-end.

Source: WCE.

types of contracts (except for CHF/PLN futures where turnover dropped again). The highest growth was recorded for EUR/PLN futures. No transactions were conducted in the Czech koruna and Hungarian forint FX futures segment.

Market organisation

A single company (CDM Pekao) acted as a market maker on the WSE in 2004. Price fluctuation limits were in force with regard to FX futures trading. The maximum admissible change was ±3% relative to the previous settlement price.[449] No price fluctuation limits were in force on the WCE. No market makers operated there, either.

Investors

From the time derivatives were first listed on the WSE, individual investors were the most important group of market participants while on the WCE, enterprises that hedged against FX risk dominated. Some transactions were conducted by short-term investors and were of speculative nature.

Development trends and prospects

According to Bank for International Settlements data, in 2004, FX futures recorded the highest growth among all types of derivatives in terms of contracts sold (by 42.3%).[450] In Poland, the FX futures market was still underdeveloped. The introduction of the capital gains tax, which made tax rates on profits from transactions involving stock exchange index and stock futures and those involving FX futures equal, did not fuel individual investor interest in the latter.

It appears, however, that the FX futures market in Poland does have development potential, which is evidenced, among other things, by the steady increase in FX futures turnover on the WCE.

[449] The new rules have been in force since February 6, 2004.

[450] *BIS Quarterly Review, March 2005*, Basel: Bank for International Settlements, 2005.

Demand for such instruments will grow together with the knowledge of enterprise managers about the possibilities of hedging FX risk exposure and their willingness to take advantage of the products offered. An increase in the limit on open pension funds' investment in foreign assets could contribute to the development of this market segment. In order to use this potential, however, other obstacles, which have limited the liquidity of this market until now, must be eliminated.[451]

5.4.3.3. Stock index and stock derivatives

5.4.3.3.1. Stock index futures

In 2004, as in previous years, WIG-20, TechWIG and MIDWIG stock index futures were traded on the WSE. WIG-20 futures continue to dominate on the market. In 2004, their share of the total number of stock index futures sold was 99.1% (versus 99.7% in 2003).

Market size

In 2004, the number of WIG-20 futures sold during the entire year decreased by 15.4% compared to 2003. On the other hand, thanks to the bull market, turnover rose by 7.5% (Figure 5.4.21 and Table 5.4.15).

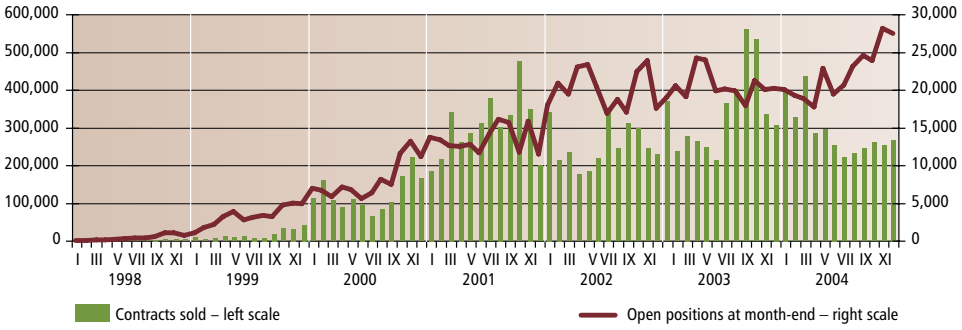
The average number of open positions and their average value grew steadily in the WIG-20 futures market. In 2004, both indicators for the remaining stock index futures also increased; the growth was more pronounced for the contracts for which the MIDWIG index was the underlying instrument (Table 5.4.16).

In 2004, the migration of investors from the spot market to the WIG-20 futures market was halted. Rising stock prices and thus the possibility of achieving significant profits on the spot market were among the reasons for the change in individual investors' preferences. The ratio of WIG-20 futures turnover to the turnover of stocks in the WIG-20 index (the so-called liquidity ratio) decreased considerably to 144.9% (Table 5.4.17).

MIDWIG futures had been listed for two years.[452] They enjoyed a growing interest right from their introduction (Figure 5.4.22). However, in 2004, the MIDWIG futures liquidity ratio[453] was only 5.8% (in 2003 – 4.1%).

Investors' interest in TechWIG futures also increased (Figure 5.4.23). This resulted from increased demand for stocks in companies from the high-tech industry. The liquidity ratio for TechWIG futures remained low and amounted to 0.4% (in 2003 – 0.2%).

Figure 5.4.21. WIG-20 futures listed on the WSE



Source: WSE.

[451] More information on obstacles to the development of this market can be found in: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 219.

[452] They were introduced in February 2002.

[453] Ratio of the turnover of such contracts to the turnover of stocks included in the MIDWIG index.

Table 5.4.15. Annual number of contracts sold and the turnover of stock index futures on the WSE

Instrument	2002		2003		2004	
	A	B	A	B	A	B
WIG-20 futures	75,241	3,057,237	113,662	4,118,952	122,192	3,484,397
TechWIG futures	130	12,927	43	4,379	102	7,961
MIDWIG futures	144	7,672	215	9,418	842	25,424

A – turnover (PLN million)

B – number of contracts sold

Source: WSE.

Table 5.4.16. Average number and amount of open positions in stock index futures on the WSE

Instrument	2002		2003		2004	
	A	B	A	B	A	B
WIG-20 futures	20,100	249.6	20,480	272.3	22,126	392.0
TechWIG futures	340	1.2	184	0.9	199	1.3
MIDWIG futures	170	1.4	109	1.2	349	5.9

A – average number of open positions during the year calculated according to data for the end of subsequent months

B – average open position amount during the year calculated according to data for the end of subsequent months (PLN million)

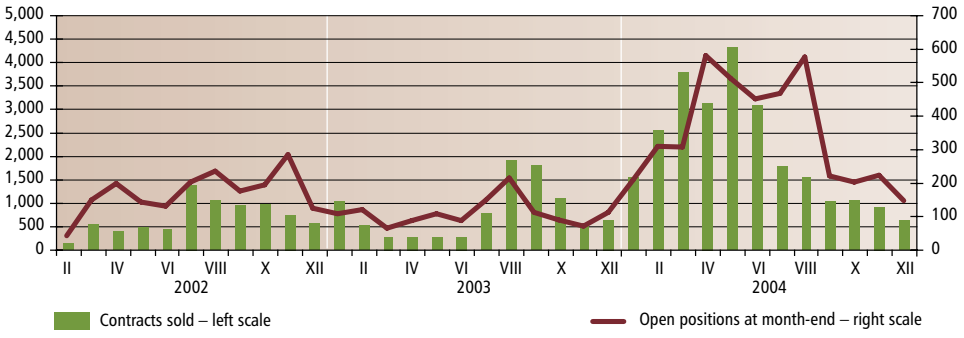
Source: WSE.

Table 5.4.17. WIG-20 futures to stocks included in WIG-20 index turnover ratio on the WSE

Year	Turnover (PLN million)		Liquidity ratio (%)
	WIG-20 stocks	WIG-20 futures	
1999	39,126.5	6,014.6	15.4
2000	83,784.6	57,501.0	68.6
2001	52,583.7	95,932.1	182.4
2002	43,276.9	75,241.0	173.9
2003	55,121.7	113,661.9	206.2
2004	84,350.4	122,192.4	144.9

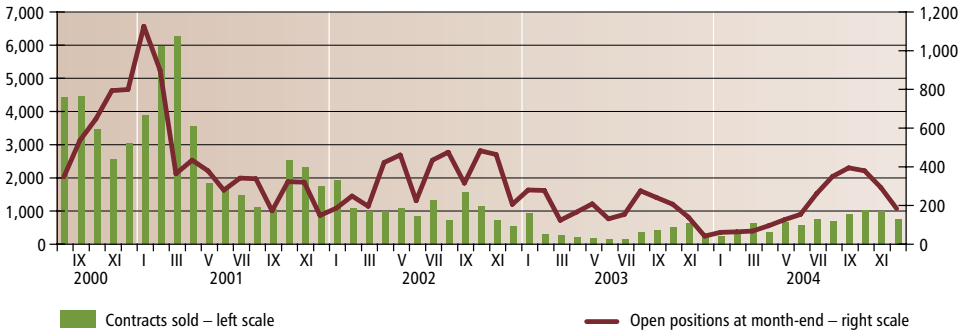
Source: NBP calculations based on WSE.

Figure 5.4.22. MIDWIG futures listed on the WSE



Source: WSE.

Figure 5.4.23. TechWIG futures listed on the WSE



Source: WSE.

Market organisation

Market liquidity is ensured by market makers. As of year-end 2004, this function was performed by eight brokerage firms (in 2003 – nine). Price fluctuation limits were in force with regard to stock index futures trading. The maximum admissible change was 5% relative to the previous settlement price.[454]

Development trends and prospects

In 2004, WIG-20 futures were ranked ninth among European exchanges in terms of the number of contracts sold (as in 2003), while in terms of turnover they were ranked twelfth (also the same as in 2003). In coming years, it should be expected that this market segment will be growing.

Table 5.4.18. Major stock index futures in Europe – annual number of contracts sold

Underlying instrument	Exchange	2002	2003	2004
DJ EURO STOXX50	Eurex	86,354,731	116,035,326	121,661,944
CAC40	Euronext Paris	26,411,321	29,319,624	24,058,528
DAX30	Eurex	19,996,503	27,181,218	29,229,847
FTSE100	Euronext LIFFE	17,238,726	20,252,114	20,772,878
OMX	OM	12,457,089	14,567,900	16,460,920
SMI	Eurex	7,019,626	8,969,235	8,098,575
AEX	Euronext Amsterdam	4,231,053	5,215,465	5,651,747
IBEX35	MEFF	3,896,643	3,545,942	4,354,868
WIG-20	**WSE**	**3,057,237**	**4,118,952**	**3,484,397**
MIB30	IDEM	4,877,668	4,263,886	3,331,843

Sources: WSE, Eurex, Euronext, IDEM and OM.

5.4.3.3.2. Stock futures

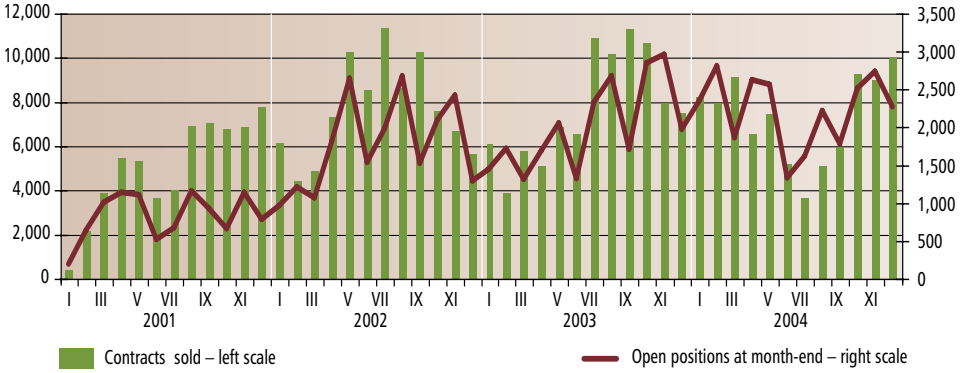
In 2004, futures on stocks in ten companies (KGHM Polska Miedź, PKN Orlen, Telekomunikacja Polska, Agora, BRE Bank, Bank Pekao, Prokom, BPH, BZ WBK and Bank Millennium) were traded on the WSE.

Market size

From the time when single stock futures were introduced, investors' interest in these instruments grew steadily until 2003. In 2004, the number of contracts sold dropped by 5.6% compared to 2003, but turnover grew by 18.6% at the same time (Figure 5.4.24 and Table 5.4.19).

[454] The new rules have been in force since February 6, 2004.

Figure 5.4.24. Stock futures listed on the WSE



Source: WSE.

Table 5.4.19. Basic statistical data concerning the stock futures market on the WSE

	2001	2002	2003	2004
Number of transactions				
– total	43,743	67,509	67,099	63,296
– session average	185	271	267	248
Number of contracts sold				
– total	60,557	92,097	93,055	87,888
– session average	257	370	371	345
Turnover (millions of zloty)				
– total	923	1,333	1,758	2,085
– session average	4	5	7	8
Open positions as of year-end	779	1,291	1,972	2,268
Amount of open positions as of year-end (PLN million)	3	9	19	29

Source: WSE.

The turnover on this market segment reached the highest level in the history. The liquidity ratio for stock futures decreased slightly and amounted to 3.1% (versus 3.7% in 2003).[455] KGHM, TPSA and PKN Orlen stock futures attracted the most interest from investors.

Market organisation

Market liquidity was ensured by market makers. As of year-end 2004, this function was performed by six brokerage firms, the same number as in 2003. Price fluctuation limits were in force with regard to stock futures trading. The maximum admissible change was ±5% relative to the previous settlement price.[456]

Development trends and prospects

In view of the development of single stock futures markets on most European exchanges, this process may also be expected to take place in Poland (Table 5.4.20). The decline in interest in stock futures in 2004 resulted from the upward trend in the spot market, which allowed investors to achieve considerable profits there.

[455] The liquidity ratio is the ratio of the turnover of single stock futures to the turnover of underlying stocks.

[456] The new rules have been in force since February 6, 2004.

Table 5.4.20. Turnover (number of contracts sold) of stock futures in Europe

Exchange	2002	2003	2004
Euronext (total)	7,570,175	7,004,235	13,491,781
Euronext LIFFE (London)	3,935,121	6,349,198	12,929,406
MEFF (Madrid)	12,645,186	12,492,568	12,054,799
OM (Stockholm)	1,290,181	1,424,890	1,881,919
IDEM	59,868	468,083	1,734,256
BSE (Budapest)	452,638	618,261	706,386
WSE	**92,097**	**93,055**	**87,888**

Sources: WSE, Euronext, IDEM, BSE, MEFF and OM.

5.4.3.3.3. Warrants

Option warrants are traded on the WSE. Two types of such instruments (European – 21 and American – 8) are listed.[457] In 2004, two companies – BRE Bank and Beskidzki Dom Maklerski (BDM) – issued warrants. Compared to 2003, the number of issuers did not change. Call and put warrants for several of the most liquid company stocks as well as for WIG-20 futures were traded.

Market size

The warrant market is underdeveloped.[458] In 2004, turnover[459] amounted to PLN 11 million, which was a 26% decrease compared to 2003. The average session turnover also decreased in 2004 (Table 5.4.21).

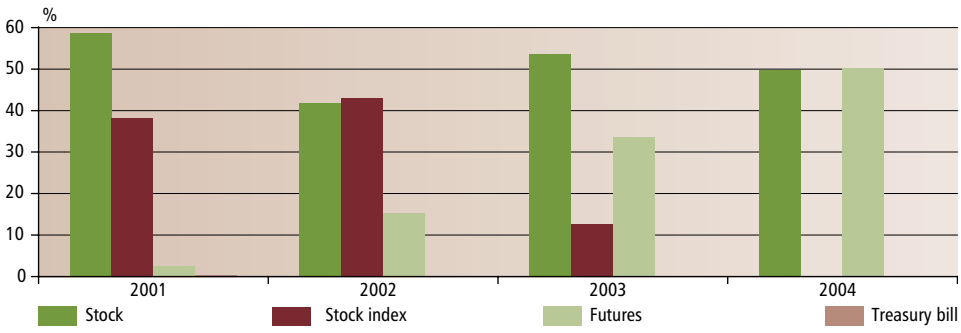
In 2004, similar turnover was recorded for stock warrants and WIG-20 futures warrants. Their shares in total warrant turnover were 49.7% and 50.2%, respectively (Figure 5.4.25). The interest in WIG-20 futures warrants, which had been rising since 2001, was sustained in 2004, although this

Table 5.4.21. Basic indicators concerning warrant trading on the WSE

Indicator	2000	2001	2002	2003	2004
Transactions per session	76	29	14	22	15
Total turnover (PLN million)	72	20	8	15	11
Average session turnover (PLN thousand)	287	82	34	62	45

Source: WSE.

Figure 5.4.25. Warrant turnover structure, 2001–2004



Source: WSE.

[457] European warrants may only be exercised on the expiry date, which is set in advance by the issuer. American warrants, on the other hand, may be exercised on any date up to and including the expiry date.

[458] More information on causes of the underdevelopment of this market can be found in: *Financial System Development in Poland 2002–2003*, Warszawa: NBP, 2004, p. 225.

[459] Gross turnover is the number of warrants sold (double-counted) multiplied by the premium.

increase was not significant (10% compared to 2003). On the other hand, the share of stock index warrants continued to decline in 2004 (to 0.1%). Due to the lack of demand, these instruments were withdrawn from stock exchange trading in March 2004.

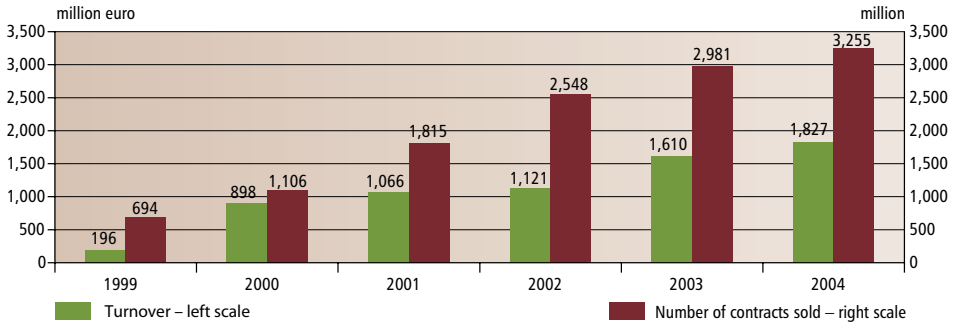
Market organisation

Limits were in force on warrant price fluctuations: the maximum admissible change was ±100% relative to the previous settlement price. Information submitted by the WSE indicates that warrants were mainly purchased by individual investors.

Development trends and prospects

In EU-15 countries, warrants are popular financial instruments, which is evidenced by the example of the Spanish stock exchange (Figure 5.4.26). Warrants are issued e.g. on company stocks, stock indices and foreign exchange rates. In countries with developed financial markets, a clear upward trend could be observed in warrant markets for several years. In Poland, however, this segment has failed to develop. In 2004, the trading of stock index options, which provided an alternative to warrants to a certain extent, was an additional factor hampering its development. In 2003, the impact of the introduction of stock index options on the WSE was reflected by a decrease in stock index warrant turnover. This trend became more pronounced in 2004.

Figure 5.4.26. Number of warrants sold and warrant turnover on the Spanish MEFF exchange, 1999–2004



Source: MEFF.

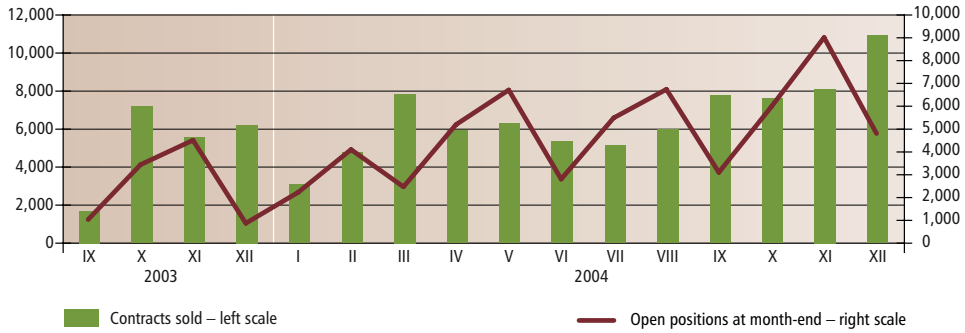
5.4.3.3.4. Stock index options

Market size

WIG-20 index options were first listed on the WSE in September 2003. From the beginning, investors' interest has been rising steadily (Figure 5.4.27). Due to the short history of options listings on the WSE, figures for 2003 and 2004 cannot be compared. Therefore, monthly averages for both years have been compared. In 2004, both the average monthly number of options sold and the average monthly number of open positions increased (by 27.1% and 99.5%, respectively). The average number of transactions per month also rose (by 40.8%). On the other hand, the average monthly turnover decreased by 14.0%. The liquidity ratio for call and put options amounted to 0.06% (against 0.03% in 2003)[460] and is very low compared to the liquidity ratio of WIG-20 futures (164.7%). The very short history of this market segment should be taken into account, however.

[460] The liquidity ratio is the ratio of option turnover to the turnover of stocks included in the WIG-20 index.

Figure 5.4.27. WIG-20 index options listed on the WSE



Source: WSE.

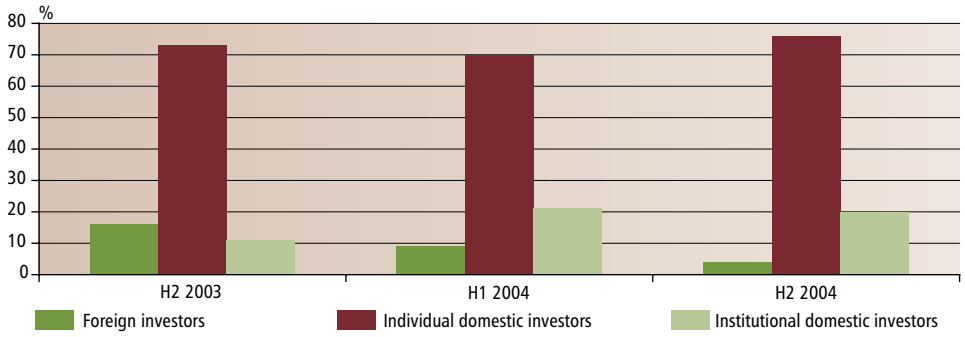
Market organisation

Limits were in force on option price fluctuations: the maximum admissible change was ±100% relative to the previous settlement price. A single company performed the function of market maker in 2004.

Market participants

In 2004, the predominance of individual domestic investors on the WIG-20 options market strengthened. Their share in options market turnover grew from 73% to 76%. Institutional domestic investors also exhibited greater interest (an increase in share from 11% to 20%) On the other hand, foreign investors' interest dropped significantly (from 16% to 4%).

Figure 5.4.28. Investors on the WIG-20 option market



Source: WSE.

Development trends and prospects

The numbers of stock index options sold on other European exchanges indicate that the options market on the WSE also has development potential (Table 5.4.22). The turnover ratio on the domestic options market is only a fraction of those on other European markets. Moreover, Bank for International Settlements data indicate that, in 2004, the proportion of the number of stock index options sold to the total number of options sold (89%) was much higher than the share of stock futures turnover in total futures turnover (29%).[461] An increase in the number of market makers may also provide an incentive for the market to develop. In 2005, the WSE plans to introduce company stock options. On global markets, the turnover in this instrument is much higher than that in stock futures and stock index options.

[461] *BIS Quarterly Review, March 2005*, Basel: Bank for International Settlements, 2005.

Table 5.4.22. Major stock index options – annual turnover (number of contracts sold)

Underlying instrument	Exchange	2002	2003	2004
CAC40	Euronext Paris	84,342,670	73,668,131	63,152,339
DJ EURO STOXX50	Eurex	39,477,430	61,794,673	71,406,377
DAX30	Eurex	44,027,830	41,521,920	42,184,611
FTSE100	Euronext LIFFE	13,263,116	14,619,893	17,866,310
AEX	Euronext Amsterdam	9,133,875	14,120,099	17,093,573
OMX	OM	4,916,726	6,371,381	8,947,439
SMI	Eurex	4,230,082	3,983,918	3,645,596
IBEX35	MEFF	5,366,944	2,981,593	2,947,529
MIB30	IDEM	2,588,407	2,505,351	2,220,807
WIG20	**WSE**	**–**	**20,647**	**78,752**

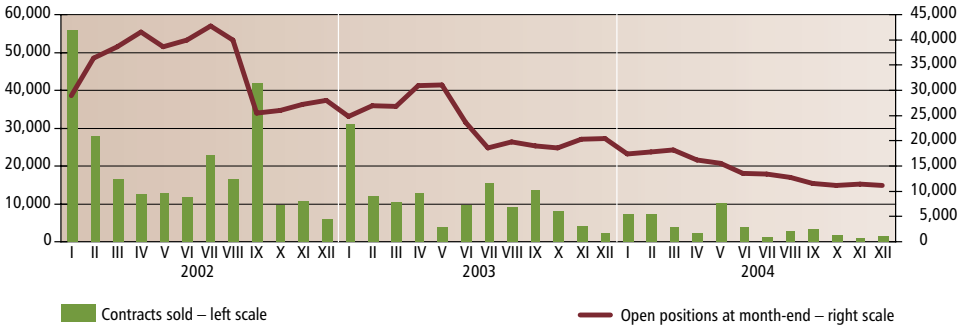
Sources: WSE, Eurex, Euronext, IDEM and OM.

5.4.3.3.5. Index participation units

Market size

2004 was another year when the number of index participation units sold decreased considerably (Figure 5.4.29). It reached an all-time low – 45,640 units (i.e. a 65.5% decrease on 2003). Turnover also dropped from PLN 34 million in 2003 to PLN 16 million in 2004 (by 53.9%). In 2004, open positions averaged 14,000 units (compared to 23,000 in 2003). The number of transactions concluded also fell from 2,484 in 2003 to 1,718 in 2004 (by 30.8%).

Figure 5.4.29. MiniWIG-20 index participation units on the WSE



Source: WSE.

Market organisation

Price fluctuation limits amounting to ±5% are in force with regard to trade in index participation units. The adequate liquidity of the index participation unit market is ensured by market makers. In 2004, as in 2003, this function was performed by three companies.

Development trends and prospects

Despite many advantages, MiniWIG-20 index participation units have not become popular with investors.[462] It appears that this market segment will remain underdeveloped.

[462] Obstacles to the development of this market have been discussed in: *Financial System Development in Poland 2002–2003*, Warsaw: NBP, 2004, p. 229.

Trends and development prospects of the Polish financial system

The *Financial System Development in Poland 2004* report presents a comprehensive analysis of individual components of the Polish financial system before and after Poland's accession to the European Union as well as during the period of the most rapid economic growth in the past seven years. The conclusions of the present report make it possible to outline the most probable directions for the development of the Polish financial system in the coming years.

The importance of the financial system measured as the ratio of its assets to GDP will without doubt continue to increase gradually. On the other hand, significant differences in the growth rate of financial institution assets reflect the change which is taking place with regard to the structure of household savings. The predominance of the banking sector with regard to the activation of non-financial sector funds will gradually decrease. However, in Poland, as in most European Union countries, banks will remain the mainstay of the financial system. It should be remembered that sources of financing other than loans are also supplied by banks to a large extent. This is a consequence of the ownership structure of companies belonging to the quasi-bank institution sector, e.g. leasing and factoring companies, which are often bank subsidiaries. The current rapid development of the Warsaw Stock Exchange will be conducive to the growth of non-banking corporate financing. Investment funds will also be active in competing for Poles' savings. With regard to settling household payments, rapidly developing financial intermediaries will constitute a strong competition for banks.

As a result of foreign financial institutions (credit, insurance and other institutions taking advantage of the single passport principle) initiating business activities in Poland, intensified competition is expected in the field of financial services in coming years. This will be reflected both by the range of products on offer and by the more common use of cross-selling in order to deepen existing distribution channels. In looking for long-term sources of mortgage loan financing, banks will be interested in active collaboration with insurance companies (bancassurance) as well as constructing long-term savings schemes for their customers (e.g. combining the attributes of bank deposits with the sale of investment fund participation units, movements in stock indexes, etc.). Increasing competition in the banking sector will sustain the downward trend in net interest margin, contributing to its gradual decrease to the level observed in EU-15 countries.

As a result of growth in the assets managed by pension funds, their position as institutions shaping the Polish financial market will be strengthened. The degree of pension funds' involvement in shaping this part of the financial system will depend on future amendments to the legal acts which regulate their activity.

Operating within the Community framework will also intensify competition among the companies which comprise the financial market infrastructure in Poland. In the immediate future, these institutions will continue their work on implementing long-term development strategies, which may be reflected in, among other things, changes in their ownership structure (e.g. WSE privatisation).

In terms of financial market development, the convergence of interest rates to the level observed in the euro area will enhance the attractiveness of capital market debt securities versus money market debt securities. A further increase in the outstanding value of long-term bonds issued by most groups of companies may be expected. However, the structure of both markets with regard to the outstanding value of individual instruments will not change considerably. Treasury securities will continue to dominate on the Polish debt securities market, and enterprises' interest in raising funds through the issue of short- and long-term bonds will rise at a moderate pace. The domestic FX swap market is expected to develop further and FX swaps will remain the most liquid money market instrument until Poland adopts the single currency. In terms of the capital market, the capitalisation of the Warsaw Stock Exchange will grow further due to the increase in the number

of listed companies. Due to banks' increased involvement in mergers and acquisitions expected in the coming years as well as banking groups' policies of FX position management centralisation, turnover on the domestic interbank FX market will decline gradually. Nevertheless, a slight increase in turnover on the zloty market should be expected in 2005, since the number of transactions between non-residents will grow further. Global factors – differences between interest rates in developed countries and in Poland as well as global excess liquidity and the related activity of hedge funds – will primarily affect the liquidity of the offshore zloty market. With regard to derivatives, the OTC market is expected to remain larger than the stock exchange one.

Abbreviations used in this report

1M	one month
1Y	one year
ARMA	Agency for Restructuring and Modernisation of Agriculture (*Agencja Restrukturyzacji i Modernizacji Rolnictwa*)
ATMF	at the money forward
BGF	Bank Guarantee Fund (*Bankowy Fundusz Gwarancyjny*)
BGK	Bank Gospodarstwa Krajowego
BIK	Credit Information Bureau (*Biuro Informacji Kredytowej*)
BIS	Bank for International Settlements
BPV	basis point value
BSB	buy-sell-back
CAD III	Capital Adequacy Directive III
CBS	Commission for Banking Supervision (*Komisja Nadzoru Bankowego*)
CCP	Central Counterparty
CEC	Central European Countries
CEE	Central and Eastern Europe
CESR	Committee of European Securities Regulators
CeTO	Central Table of Offers (*Centralna Tabela Ofert*)
CIRS	currency interest rate swap
CPI	Consumer Price Index
DSPW	Primary Dealers (*Dealerzy Skarbowych Papierów Wartościowych*)
EBA	Euro Banking Association
EC	European Commission
EC	European Communities
ECB	European Central Bank
EFTA	European Free Trade Association
EMU	Economic and Monetary Union
EONIA	Euro Overnight Index Average
EPC	European Payment Council
ERDF	European Regional Development Fund
ERM II	Exchange Rate Mechanism II
ERSPW	Electronic Treasury Securities Market (*Elektroniczny Rynek Skarbowych Papierów Wartościowych*)
ESC	European Securities Committee
EU	European Union
EU-10	the 10 countries which acceded to the European Union on May 1, 2004 (Poland, the Czech Republic, Hungary, Slovakia, Slovenia, Cyprus, Estonia, Malta, Lithuania, Latvia)
EU-12	the 12 European Union member states which belong to the euro area
EU-15	the 15 countries which were European Union member states before May 1, 2004
EVCA	European Private Equity and Venture Capital Association
FoF	fund of funds
FPU	EU Guarantee Fund (*Fundusz Poręczeń Unijnych*)
FRA	forward rate agreement
GDP	gross domestic product
GIODO	Inspector General for the Protection of Personal Data (*Generalny Inspektor Ochrony Danych Osobowych*)
IAS	International Accounting Standards
IBAN	International Bank Account Number
IBnGR	Gdańsk Institute for Market Economics (*Instytut Badań nad Gospodarką Rynkową*)
IDM	Chamber of Brokerage Houses (*Izba Domów Maklerskich*)
IPA	Individual Pension Account
IRIP	Derivatives Clearing House (*Izba Rozrachunkowa Instrumentów Pochodnych*)
IRS	interest rate swap
KDPW	National Depository for Securities (*Krajowy Depozyt Papierów Wartościowych SA*)
KFK	National Capital Fund (*Krajowy Fundusz Kapitałowy*)
KFPK	National Loan Guarantee Fund (*Krajowy Fundusz Poręczeń Kredytowych*)
KIR	National Clearing House (Krajowa Izba Rozliczeniowa)
KNUiFE	Insurance and Pension Funds Supervisory Commission (*Komisja Nadzoru Ubezpieczeń i Funduszy Emerytalnych*)
KPWiG	Polish Securities and Exchange Commission (*Komisja Papierów Wartościowych i Giełd*)

KSKOK	National Association of Cooperative Savings and Credit Unions (*Krajowa Spółdzielcza Kasa Oszczędnościowo-Kredytowa*)
KUKE	Export Credit Insurance Corporation (*Korporacja Ubezpieczeń Kredytów Eksportowych*)
LBDS	long-term bank debt securities
LCB	long-term corporate bonds
LGU	local government units
LIBOR	London Interbank Offered Rate
MF	Ministry of Finance (*Ministerstwo Finansów*)
MIC	collectiveinvestment companies
MIDWIG	index of medium-sized companies listed on the WSE main market
MIFID	Directive on Markets in Financial Instruments
MPC	Monetary Policy Council (*Rada Polityki Pieniężnej*)
MRR	minimum required rate of return
NBP	National Bank of Poland (*Narodowy Bank Polski*)
NCA	New Capital Accord
NIM	net interest margin
NRB	Bank Account Number (*Numer Rachunku Bankowego*)
O/N	overnight
OFE	open pension fund (*Otwarty Fundusz Emerytalny*)
OIS	Overnight Index Swap
OTC	over-the-counter
PARP	Polish Agency for Enterprise Development (*Polska Agencja Rozwoju Przedsiębiorczości*)
PE	private equity
PKD	Polish Statistical Classification of Economic Activities (*Polska Klasyfikacja Działalności*)
POLONIA	Polish Overnight Index Average
PoS	point of sale
PPE	occupational pension scheme (*Pracowniczy Program Emerytalny*)
PPI	Producer Price Index
PSIK	Polish Private Equity Association (*Polskie Stowarzyszenie Inwestorów Kapitałowych*)
PTE	pension company (*Powszechne Towarzystwo Emerytalne*)
ROA	return on assets
ROE	return on equity
RPW	Securities Register (*Rejestr Papierów Wartościowych*)
SBB	sell-buy-back
SBDS	short-term bank debt securities
SCB	short-term corporate bonds
SE	Societas Europaea
SKOK	Cooperative Savings and Credit Union (*Spółdzielcza Kasa Oszczędnościowo-Kredytowa*)
SME	small and medium-sized enterprises
SP	Treasury (*Skarb Państwa*)
SSS	securities settlement system
STEP	Short-Term European Paper
STFI	Association of Fund Management Companies (*Stowarzyszenie Towarzystw Funduszy Inwestycyjnych*)
T/N	tomorrow next
TARGET	Trans-European Automated Real Time Gross Settlement Express Transfer System
TechWIG	index of companies listed on the WSE which belong to the High-Tech Segment
TFI	fund management company (*Towarzystwo Funduszy Inwestycyjnych*)
TIBOR	Tokyo Interbank Offered Rate
TS	Treasury securities (*Skarbowe Papiery Wartościowe*)
TUnŻ	life insurance company (*Towarzystwo Ubezpieczeń na Życie*)
TUW	mutual insurance company (*Towarzystwo Ubezpieczeń Wzajemnych*)
VC	venture capital
WCE	Warsaw Commodity Exchange (*Warszawska Giełda Towarowa*)
WIBID	Warsaw Interbank Bid Rate
WIBOR	Warsaw Interbank Offered Rate
WIG	Warsaw stock exchange index (*Warszawski Indeks Giełdowy*)
WIG-20	index of the 20 largest companies listed on the WSE main market
WSE	Warsaw Stock Exchange (*Giełda Papierów Wartościowych w Warszawie SA*)
ZPL	Polish Association of Leasing Companies (*Związek Przedsiębiorstw Leasingowych*)