



Henri Hendrickx, face of the allegory of geography, from a design for the security background of the 1892 series of the 20 franc note, pencil and ink, undated (circa 1890), National Bank of Belgium collection

Financial stability

8.

8.1 International financial markets

Over the weekend of 13 and 14 September 2008, the US authorities decided not to bail out *Lehman Brothers*, the fourth largest American investment bank, and, in the absence of a possible takeover by another financial institution, to allow it to file for bankruptcy protection before the markets opened. That decision proved to be a turning point in the global financial crisis which had broken out more than a year earlier (see section 1.2 in chapter 1 on the international environment for a chronological account of that crisis), delivering a heavy blow to a financial system which had already become extremely fragile. In fact, since the start of the financial turbulence, commercial and investment banks, hedge funds and numerous investment structures and vehicles, often sponsored by big banks which recorded the corresponding liabilities off balance sheet, had to contend with accumulating losses on financial products, particularly structured debt instruments, and a prolonged period of tight liquidity on the interbank markets. Yet these are precisely the markets that many of those institutions relied on to a very substantial degree, or even exclusively, in order to finance assets which had escalated in volume during the period preceding the summer of 2007, owing to the marked expansion of lending to the private sector.

Since *Lehman Brothers* was a large, systemic institution closely interlinked with the global financial system, the effects of its failure spread throughout the system via various transmission channels, both direct and indirect, contributing towards a sudden evaporation of liquidity on numerous markets.

The first of the direct channels concerns financial transactions in which *Lehman Brothers* was the debtor or counterparty. As a big investment bank and one of the world's leading financial brokers, *Lehman Brothers* had extended its operations to a wide variety of markets, so that its default impacted a large number of transactions with other financial institutions across the world. In particular, the central position of *Lehman Brothers* on private, over the counter (OCT), markets in derivatives, principally the credit derivatives market, was a source of

serious concern for the financial markets, in view of the specific characteristics of those markets where contracts are traded bilaterally without the intervention of a stock exchange or central counterparty to cover the credit risks. Serious doubts emerged over the possibility of an orderly unwinding of all the transactions concluded with *Lehman Brothers*, including the realisation of pledged securities and the conclusion of replacement contracts. Combined with the uncertainty over the total amount of the transactions concerned, these questions led to acute uneasiness about the real liquidity needs of many financial institutions and their actual ability to cover additional needs in extremely tense markets. These developments led to liquidity hoarding on the part of financial intermediaries exposed to the *Lehman Brothers* risk, which placed an even greater strain on the operation of the wholesale financial markets.

The failure of *Lehman Brothers*, followed a few days later by the default on the senior debt of the sixth largest American commercial bank, *Washington Mutual*, produced a second direct effect which proved even more damaging, via the heavy losses which it caused for its main creditors. With bank debts and bonds amounting to a consolidated total of over 600 billion dollars, *Lehman Brothers* became one of the world's largest defaults, the residual value of its unsecured debts, estimated on the basis of market prices, being only 10 p.c. of their face value. These value losses proved to be a key channel for transmission to the rest of the financial system. As *Lehman Brothers* had issued considerable volumes of commercial paper and other short-term instruments to raise finance, many American money market funds were exposed to a credit risk on this institution. Despite the crisis, the outstanding amount of assets managed by those money market funds had reached a record 3,500 billion dollars in August 2008, as investors considered these investments to be particularly secure owing to the undertaking given by these funds never to repay less than the amount initially put in. While a number of funds were covered by their managers and sponsoring banks in respect of the substantial losses which they incurred on their investments in *Lehman Brothers* securities, one of those funds, *Primary Reserve*, had to announce on

16 September that its net asset value had fallen below par, becoming the first money market fund to get into such a situation in fourteen years. The shock waves triggered by this news led to massive withdrawals from money market funds invested in commercial paper issued by financial and non-financial corporations, as investors reallocated their portfolios to money market funds invested in government securities.

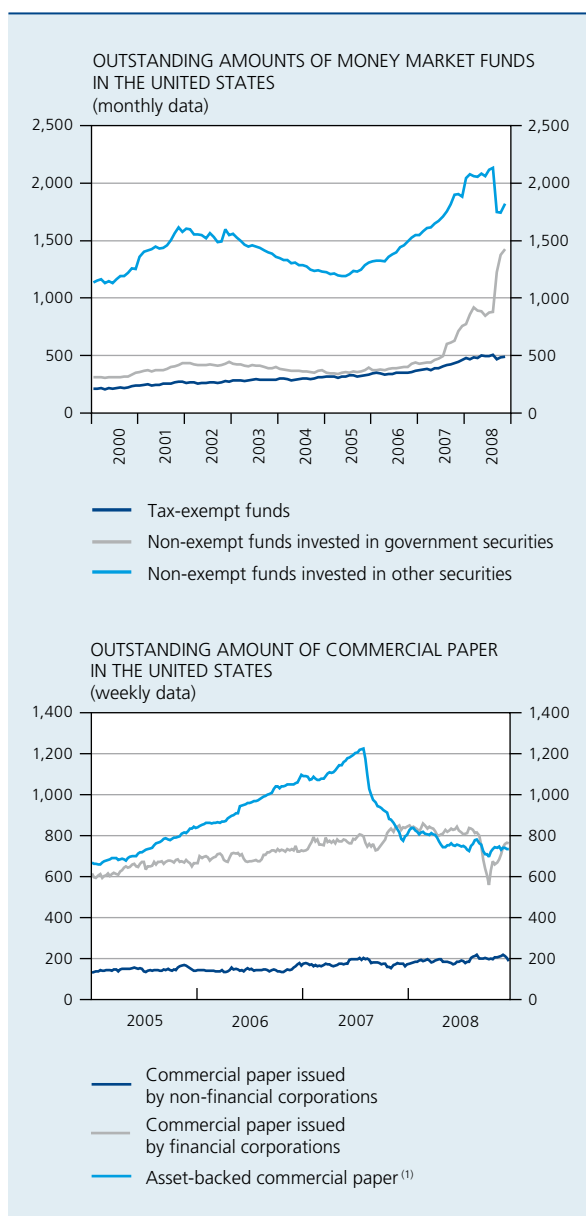
The markets in commercial paper, where the money market funds traditionally form the principal group of investors, were the first to be affected by these large-scale fund reallocations. Contrasting with the profile seen in the initial phase of the crisis, in the summer of 2007, both unsecured commercial paper and asset-backed commercial paper were affected. It was in fact the market in unsecured commercial paper issued by financial institutions that suffered the sharpest decline, further adding to the financial pressures on those institutions in markets which were already very tense. Maturities shortened and interest rates surged, while the outstanding amount of commercial paper in the United States shrank by over 360 billion dollars, from a figure of around 1,810 billion recorded on 12 September. In fact, it was not until the end of October that volumes began to recover, following the announcement by the US monetary authorities, and then the actual entry into force, of a new credit facility for the purchase of unsecured or asset-backed commercial paper (Commercial Paper Funding Facility). By this measure, the Federal Reserve in fact acts as the buyer of last resort, thus taking the place of market intermediation.

However, the implications of the failure of *Lehman Brothers* far exceeded the direct effects described above, and had a serious impact on markets disorientated by numerous other developments. Thus, the deterioration in the economic indicators was already kindling expectations of a more severe and widespread cyclical downturn in the world's leading economies. The bail-out, barely a week earlier, of the American government-sponsored mortgage agencies *Fannie Mae* and *Freddie Mac* had obliged the US Treasury to take on large commitments of up to 100 billion dollars for each of the two institutions concerned. The world's largest insurer, *AIG*, was desperately searching for funds to cover 18 billion dollars in additional collateral required by its entity specialising in financial products.

In this context, the default of *Lehman Brothers* was a rude awakening for the market, demonstrating that key intermediaries could no longer cope on their own with the essential balance sheet restructuring needs resulting from the international financial crisis.

CHART 79 **MARKETS FOR SHORT-TERM SECURITIES IN THE UNITED STATES**

(billions of dollars)



Sources: Investment Company Institute, Thomson Financial Datastream, Federal Reserve.

(1) These assets consist mainly of loans originated by banks but securitised and sold on by the latter in the form of mortgage-backed securities (MBS), asset-backed securities (ABS) or collateralised debt obligations (CDO).

At first, the need for such restructuring had been apparent mainly for non-bank financial institutions making substantial use of leverage, and financing the bulk of their assets with short-term debt. This concerned, in particular, structured investment vehicles and asset-backed commercial paper conduits: box 18 in the 2007 Report described how these work. While these institutions were able to keep their securities in their portfolio by using liquidity

lines and capital support from their sponsor banks in order to renew their liabilities, a number of financial institutions had no choice but to sell off assets – which had originally enjoyed an excellent rating in many cases – on what had become highly illiquid secondary markets.

At that point, the resulting downward spiral in prices on many markets generated losses in the investment portfolios of banks and other financial institutions, which had to reassess these asset categories quarterly at their fair value. On the eve of the collapse of *Lehman Brothers*, the losses officially recorded on financial instruments by the world's leading financial institutions already exceeded 500 billion dollars.

At first, financial intermediaries were able to make up for part of these substantial losses on financial assets by means of capital issues on private markets. In the second quarter of 2008, these recapitalisations actually exceeded the total writedowns on securities. During the third quarter, it proved increasingly difficult to maintain that loss compensation strategy, as is evident from the vain efforts of *Lehman Brothers* to raise funds in the summer by selling assets or issuing new shares. Investors became increasingly unwilling to take part in capital issues by banks, and the indices reflecting market expectations

regarding default risks in the financial sector deteriorated again, reversing the temporary improvement seen in the two months following the rescue of the American investment bank, *Bear Stearns*.

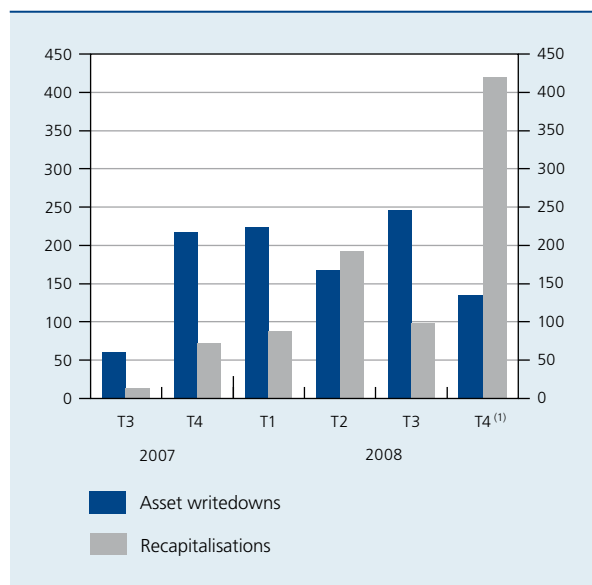
By giving substance to the anxieties of investors concerning the likelihood of default by large, systemic financial institutions, the collapse of *Lehman Brothers* exacerbated the fears associated with counterparty risks in the financial system, causing widespread paralysis on the financial markets, with only the most secure assets being spared. The market stress indicators reached new record levels during the third week of September, exceeding in particular the spikes marking black Monday in 1987.

Faced with the prospect that heightened balance sheet pressures in the banking system would prompt banks to cut back on lending to corporations and fuel a negative feedback loop between the financial sector and the real economy, equity market indices thus saw their losses accelerate after mid-September. During the week of 6 October, the indices plummeted by 20 p.c. or more, driving down price-earnings ratios in both the United States and the euro area well below their historical levels. The acute uncertainty over future corporate profits was reflected in a sudden rise in market expectations concerning stock market volatility. The implicit volatility indices climbed to levels well in excess of the records reached at the time of the bursting of the new information and communication technologies (ICT) bubble in the early 2000s, and even exceeded those at the time of the 1987 stock market crash. These indices remained very high throughout the fourth quarter of the year under review, bearing witness to the persistent uncertainty and risk aversion prevailing among investors.

Dramatic increases in risk premiums were also recorded on the markets in fixed-income securities, including good quality bonds, which saw price falls almost equalling those for speculative bonds. Thus, prices of bonds issued by banks with an A rating, or AAA tranches of bonds backed by commercial mortgage loans, slumped by over 10 p.c. in the period following the failure of *Lehman Brothers*. The yield differential between speculative bonds in dollar and US government securities jumped to over 19 p.c., almost double the spread seen in earlier periods of stress and rising defaults.

While the default rate on bonds is expected to rise sharply, the increase in risk premiums does not only reflect investors' growing fears of incurring credit losses on their corporate bonds. It is also due to a great extent to investors' insistence on much higher remuneration for the uncertainties and immobilisation of liquidity associated

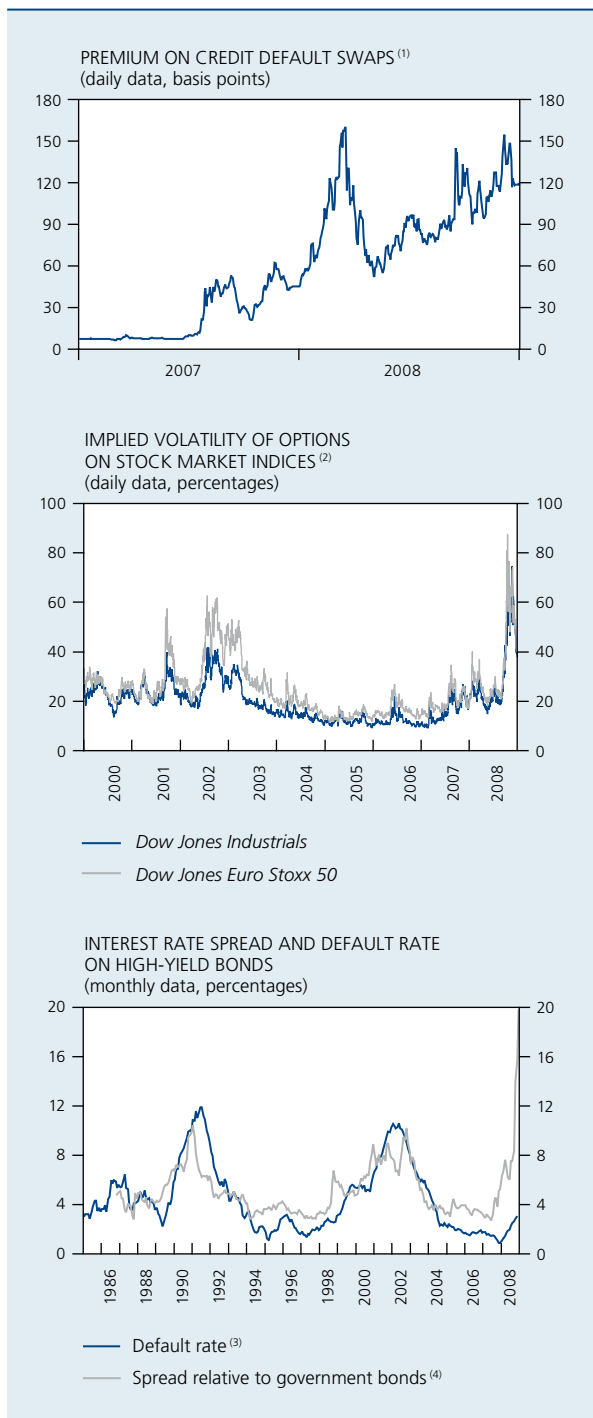
CHART 80 ASSET WRITEDOWNS AND RECAPITALISATIONS BY THE WORLD'S LEADING FINANCIAL INSTITUTIONS
(billions of dollars)



Source: Bloomberg.

(1) The figure for writedowns in the fourth quarter of 2008 is partial, since many institutions had not yet published their results for that quarter when this Report went to press.

CHART 81 FINANCIAL MARKET STRESS INDICATORS



Sources: Moody's, Thomson Financial Datastream.

(1) Premium on *iTraxx Financials*.

(2) Measures of expected volatility, derived from prices of a basket of options on stock market indices.

(3) Moody's monthly data. Number of bonds with a rating below Baa3 recording a default in the previous twelve months, expressed as a percentage of the total number of bonds with the same rating.

(4) Difference between the interest rate on ten-year US Treasury bonds and the yield on corporate bonds denominated in US dollar with a rating below BBB / Baa3.

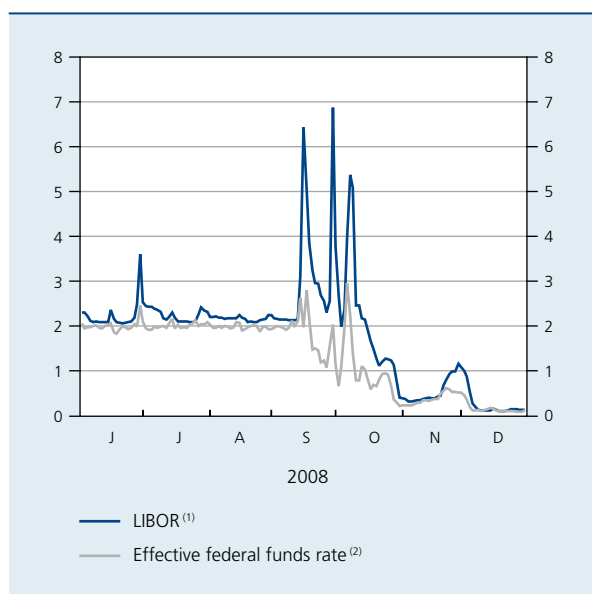
with bond investments, in a context in which the entire market is trying to hoard its liquidity and take refuge in the safest investments.

With banks no longer willing to provide financing to other banks, even on an overnight basis, due to perceived counterparty risks, the global money markets became completely dislocated in the days following the default of *Lehman Brothers*. The yield on three-month US Treasury Bills, considered to be a prime risk-free asset, plunged to virtually 0 p.c., while other money market rates, such as the LIBOR, continued to rise from levels which were already unusually high compared to those recorded previously. More important than the increasing price of funding for financial institutions, however, was the rationing of funding volumes in key segments of wholesale funding markets, including in Europe. The volume of lending declined dramatically, even on guaranteed markets where loans are covered by the pledge of securities as collateral in favour of the creditor. Some collateral categories were no longer accepted, in view of their plummeting prices, while banks with excess liquidity simply did not wish to lend it to other market counterparties any longer. Consequently, the volume of trading on the repo market, which had become a key component of the wholesale financing of financial institutions, declined, impeding the regular flow of funds which had previously taken place between institutions with a liquidity surplus and those with a deficit.

This interruption in the intermediation process was even more pronounced on the unsecured markets, where the supply evaporated completely for terms longer than overnight, and remained well short of demand for the latter, as is evident from the spikes in the overnight interbank rates in the United States and Europe. Moreover, since the market in foreign exchange swaps had become illiquid, strong demand for financing in dollar exacerbated the pressures on the overnight rates in that currency during European market trading hours. This is highlighted by the respective movements in the LIBOR overnight rate in dollar, which is fixed during business hours on the European market, and the effective overnight federal funds rate recorded at the end of the afternoon on the same day, i.e. during opening hours in the United States.

As discussed in chapter 2 on the monetary policy of the Eurosystem, the central banks endeavoured to alleviate these market tensions by special interventions and currency swaps. However, the financial institutions most heavily dependent on the wholesale markets and perceived by other participants as being in a precarious liquidity situation were singled out by the markets, which tried to test their resilience. It was in this context of acute financial tensions, mounting concerns over counterparty

CHART 82 RESPECTIVE OVERNIGHT FINANCING CONDITIONS IN DOLLAR DURING EUROPEAN AND US MARKET TRADING HOURS
(percentages)



Source: Thomson Financial Datastream.

(1) Overnight rate on the European interbank market, fixed in London at 11.00 a.m. GMT.

(2) Overnight rate on the US interbank market.

risk and the disrupted financial markets that numerous banking groups in Europe, including in Belgium, had increasing difficulty in renewing their financing on the wholesale markets, thus necessitating government support.

8.2 Belgian banking sector

The unprecedented stress in the global financial system put the profitability and liquidity position of key credit institutions in the Belgian financial system under severe pressure. The situation at two of the largest credit institutions (*Fortis* and *Dexia*) could only be stabilised by the injection of capital from the authorities. The whole system, however, had to cope with severe tensions, as reflected in large amounts of (un)realised losses on financial asset holdings or fragilised funding liquidity positions as a result of the seizure of key wholesale funding markets. In these circumstances, the authorities also took proactive steps to improve the sector's resilience to any subsequent shocks, as highlighted for example by the establishment of a scheme guaranteeing some of the banks' new short-term debts, the increase in the amount covered by deposit insurance, and the Belgian government's subscription to a capital increase in the *KBC* group.

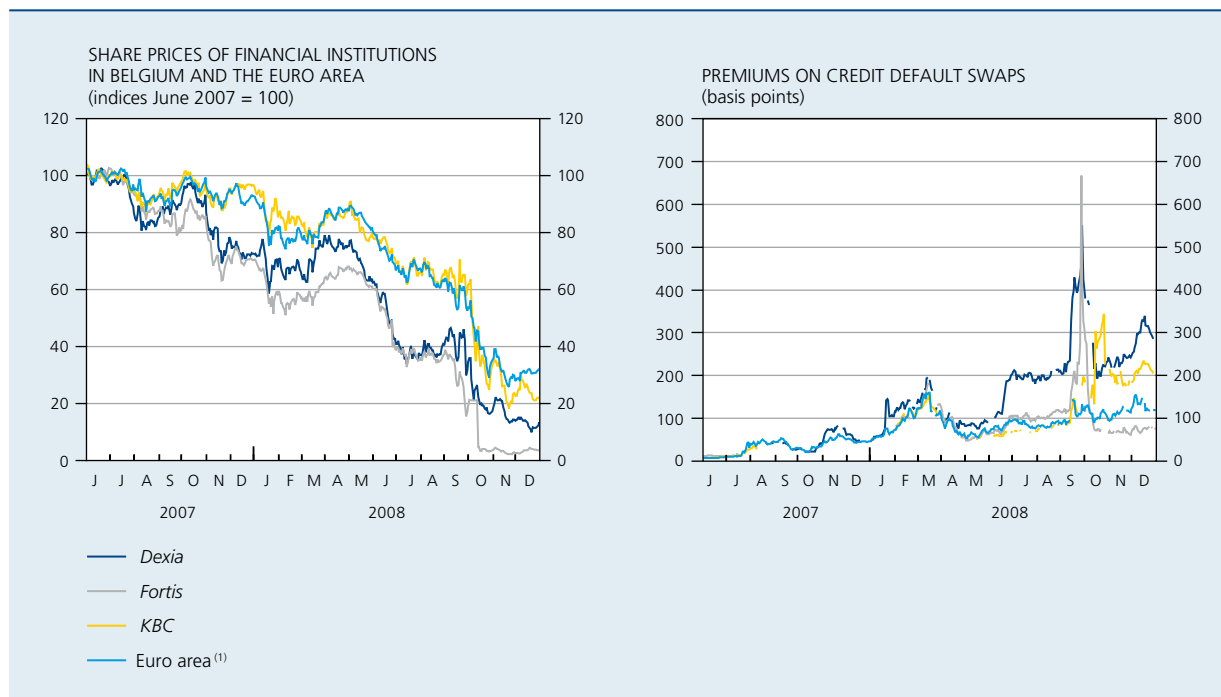
8.2.1 Developments in the main *bancassurance* groups

Fortis and *Dexia*, two of the four large *bancassurance* groups operating in Belgium, were embroiled in the turbulence which followed the collapse of *Lehman Brothers*, as these two institutions encountered increasing problems in renewing their short-term financing on the wholesale markets, while having to contend with substantial deposit withdrawals by professional counterparties. The pressures on these two institutions were also reflected in the movement in the market indicators, notably in the form of abrupt falls in share prices, or even more so in escalating premiums applied to credit default swaps (CDS) referencing *Fortis* or *Dexia* entities. During the week of 22 September, the price of these credit default swaps – which enable a counterparty (the purchaser of the insurance) to obtain cover from another counterparty (the seller of the insurance) against losses resulting from a credit event relating to the referenced institution – climbed above an annual premium of 500 basis points in the case of *Fortis* and *Dexia*. That was well in excess of the premium applied to the CDS of a range of European financial institutions, as measured by the iTraxx Financials Senior index. The CDS premium for *KBC* also exceeded that benchmark during the same period, though was still well short of the extreme levels applicable to *Fortis* and *Dexia*. In the case of *KBC*, the peak was in fact reached two weeks later, following the announcement of substantial writedowns on a portfolio of collateralised debt obligations (CDOs). These developments show that, while all major systemic *bancassurance* groups were affected more or less simultaneously by the extreme risk aversion and widespread mistrust of bank counterparties manifested on the financial markets, they had to face the crisis from widely differing individual starting positions.

Fortis proved all the more vulnerable to the extremely tense and unstable conditions which plagued the international financial markets, since the acquisition of *ABN AMRO* had reduced this group's financial flexibility. It was in October 2007 that *Fortis* had made that acquisition, jointly with *Royal Bank of Scotland (RBS)* and *Santander*. This deal was the culmination of a takeover process launched several months previously, which in legal terms was effected by *RFS Holdings B.V.*, an entity specially created for the purpose and owned jointly by the three groups. *Fortis*, *RBS* and *Santander* agreed on a shareholder structure for *RFS Holdings* in proportion to their respective financial commitments which, in *Fortis'* case, amounted to 24 billion euro. *Fortis* had obtained approval from the EC – as the relevant competition authority – for the acquisition of *ABN AMRO*, but on

CHART 83 MARKET INDICATORS FOR BELGIAN AND EURO AREA FINANCIAL INSTITUTIONS

(daily data)



Source : Thomson Financial Datastream.

(1) *iTraxx Financials* for credit default swaps and a stock market index compiled by *Thomson Financial Datastream* for the share prices of financial intermediaries.

condition that certain competition problems raised by the deal on the Dutch banking market were resolved by a series of divestments concerning specific parts of the Dutch division of *ABN AMRO*.

Since most of the transfers of parts of *ABN AMRO* to *Fortis* were scheduled to take place between the end of 2008 and 2009, *Fortis* was to have sufficient time to implement four measures to enable it to meet its solvency targets, namely retained earnings, strict control of the growth of its capital requirements, total or partial disposal of non-strategic assets, and the raising of non-diluting capital instruments.

On 26 June, following a further deterioration in market conditions from the end of May and the prospect of losses as a result of the forced sale of certain Dutch commercial banking activities as required by the EC, *Fortis* announced that it was modifying and speeding up its solvency plan. These new measures totalling 8.3 billion euro, comprised a capital increase of around 1.5 billion, the decision not to pay an interim dividend in 2008 worth an expected 1.3 billion, a proposal for paying the 2008 dividend in the form of shares, a capital relief programme, including a sale-and-lease-back real estate

transaction amounting to around 1.5 billion, an issue of non-diluting capital instruments for up to 2 billion, and new disposals of non-strategic assets which would also enhance overall solvency by around 2 billion. The announcement of these measures triggered a further fall in the *Fortis* share price. Moreover, a sizeable exposure to structured finance instruments, amounting to 42 billion euro at the end of June 2008, made *Fortis* a target for financial speculation.

Following the collapse of *Lehman Brothers*, *Fortis* faced serious refinancing problems on the interbank and wholesale markets, and the withdrawal of deposits by professional counterparties. The resulting liquidity shortage forced the Bank to provide emergency assistance to *Fortis*, from 29 September, in the form of overnight credit in euro and in dollar at penalty interest rates, backed by collateral not eligible for the ECB's normal refinancing operations. This emergency liquidity assistance (ELA) was extended until 9 October and peaked at the equivalent of 51.3 billion euro on 3 October. To ensure the institution's survival, the Dutch, Belgian and Luxembourg governments also had to set up a rescue operation, which is described in more detail in box 16.

Like a number of other European banks heavily dependent on the wholesale financial markets, *Dexia* was also affected by the collapse of *Lehman Brothers*. The group's vulnerability was further amplified by its exposure to asset-backed securities via *Financial Security Assurance (FSA)*, the US subsidiary of *Dexia Crédit local de France*. The core business of *FSA*, one of the world's five leading monoline bond guarantors, consists in protecting bond investors against the default risk associated with a particular bond by offering credit insurance covering the payment of the coupons and the principal. If the bond's original debtor defaults, the financial guarantor, also called the monoline insurer, undertakes to ensure continuity of the coupon and principal payments to the holders in accordance with the payment schedule specified in the contractual clauses relating to the insured bond. This credit insurance technique, introduced in 1971, was initially used on the US municipal bond market, before being steadily extended from the mid 1980s to the insurance of securitised assets and structured finance instruments, such as (tranches of) mortgage-backed securities (MBS) and other asset-backed securities (ABS) and, more recently, collateralised debt obligations (CDO). It was through these last asset classes that the international financial crisis affected the monoline insurance sector, which suffered much larger than expected losses on US mortgage-backed securities.

While *FSA* had refrained from insuring the riskiest securities, it nonetheless was not immune when the losses spread to other types of mortgage-backed securities as a result of the proliferating problems on the US housing market. These developments concerned only a small part of the outstanding amount of the insurance guarantees granted by *FSA*, totalling 443 billion dollars at the end of June, of which 30 p.c. concerned asset-backed securities and 70 p.c. public finance securities. Nevertheless, they were a significant source of potential losses and, moreover, contributed to valuation losses on the portfolio of 16.5 billion dollars in asset-backed securities which *FSA* held in its *Asset Management* entity, whose main activity consists in offering guaranteed investment contracts to municipalities and other investors wishing to invest only in instruments with an AAA rating.

On 21 July, *Moody's* placed *FSA's* AAA rating on review for possible downgrade. This prompted *Dexia* to announce, on 6 August, a recapitalisation of *FSA* in the sum of 300 million euro and the provision of a 5 billion dollar confirmed and unsecured liquidity line for *FSA's* *Asset Management* subsidiary. The purpose of this line is to ensure repayment of the liabilities of this business line and to avoid having to crystallise the losses which

would result from a premature sale of assets from that subsidiary's portfolio. *FSA* also announced that it was withdrawing from the business of insuring asset-backed securities.

Apart from the significant financial commitments of its subsidiary *FSA*, *Dexia* also suffered as a result of its financing structure, which made it vulnerable to the disruption of the interbank market. As the group only collects retail deposits in Belgium and Luxembourg, it is dependent on the wholesale markets to cover some of its activities. In particular, it mobilises a large proportion of its portfolio of securities bearing the highest ratings to borrow on the secured interbank market. The dislocation of that market in the days following the collapse of *Lehman Brothers* affected key sources of funding for *Dexia*. This exacerbated counterparties' concerns about the group's exposure to credit risks in the United States and the accumulation of substantial unrealised losses which the group had to record on bonds, despite their high rating, following the dramatic increase in risk premiums. Here, too, the authorities had to intervene (see box 16).

In the case of *KBC*, the problems emerged later and were smaller in scale than those afflicting *Fortis* or *Dexia*. Following *Moody's* announcement of the downgrading of the rating on a series of collateralised debt obligations created by *KBC Financial Products*, the group – whose exposure to structured finance instruments came to 16 billion euro at the end of June 2008 – had to post a substantial loss on these investments in its results for the third quarter. In line with the many initiatives taken by numerous other countries to ensure the liquidity of sound banking institutions, restore confidence in the financial system and preserve access to credit for households and non-financial corporations, the Belgian government subscribed to a special issue of debt instruments, eligible as Tier 1 capital, in order to boost the solvency of *KBC* (see box 16).

The developments which affected the leading systemic Belgian banks are obviously reflected in the aggregate data on the banking sector as a whole, which are used in the rest of this section. It is important to remember that in the case of the *Dexia* group, these data – taken from standardised reporting schemes used for prudential supervision – concern only *Dexia Bank Belgium* and its subsidiaries, i.e. excluding the group's other large subsidiaries in Luxembourg and France, and *FSA*.

Box 16 – Measures taken by the authorities to strengthen financial stability in Belgium

Alongside the action taken by the Bank to provide emergency liquidity assistance when necessary, the Belgian authorities have taken various measures to strengthen the stability of the financial system. The measures are based on three pillars:

- recapitalisation of systemic financial institutions, combined – for each operation – with significant changes in the governance structure;
- a State guarantee scheme to facilitate the refinancing of credit institutions and financial holding companies on the interbank markets, and with institutional counterparties;
- raising the maximum amount covered by the deposit insurance scheme and extending it, on a voluntary basis, to class 21 insurance products.

Recapitalisation measures

Fortis Bank Belgium

On 29 September 2008, the governments of Belgium, the Netherlands and Luxembourg concluded an agreement whereby each of the three countries acquired a stake of around 49 p.c. in the capital of the *Fortis Bank* entity located in its own territory. The Belgian State's investment in the capital of *Fortis Bank Belgium*, amounting to 4.7 billion euro, was effected through the Federal Participation and Investment Corporation. At the same time, the National Bank of Belgium, and later the *Nederlandsche Bank*, decided to provide emergency liquidity assistance to *Fortis Bank Belgium* and *Fortis Bank Nederland* respectively.

On 3 October, the Dutch government acquired the banking and insurance business of the *Fortis* group based in the Netherlands (including *ABN AMRO*), for a total of 16.8 billion euro. Following this purchase, the Belgian and Dutch entities of the *Fortis* group were uncoupled and the Dutch part of the 29 September deal was cancelled.

On 6 October, the Belgian State acquired, for 4.7 billion, via the Federal Participation and Investment Corporation, the shares which *Fortis Holding* held in *Fortis Bank Belgium*, a transaction which resulted in 99.93 p.c. ownership of *Fortis Bank Belgium*. At the same time, the Belgian government – retaining a blocking minority – agreed with *BNP Paribas* to transfer just under 75 p.c. of its stake in the capital of *Fortis Bank Belgium* in exchange for 121.2 million shares to be issued by *BNP Paribas*. It was also agreed that *BNP Paribas* would take over the Belgian insurance business belonging to *Fortis Holding* and acquire a 66 p.c. stake in the banking activities of *Fortis Holding* in Luxembourg.

Finally, it was agreed to transfer to a special purpose vehicle a portfolio of risky assets held by *Fortis Bank Belgium* for a total amount of 10.4 billion euro. The Belgian State was to finance 24 p.c. of that figure, with 10 p.c. from *BNP Paribas* and 66 p.c. from *Fortis Holding*. If the Belgian State's contribution of 2.8 billion – in the form of shares and loans amounting respectively to 0.8 and 2 billion – in connection with this transfer is added to the two equity investments totalling 4.7 billion each and the bridging loan equivalent to 3 billion granted to the said special purpose vehicle to help *Fortis Holding* finance its share in the risky assets, the whole of the amount injected via the Federal Participation and Investment Corporation in 2008 should, in principle, have come to 15.2 billion.

On 12 December 2008, the Brussels Court of Appeal handed down a judgment suspending the sale to *BNP Paribas* of the shares purchased by the Federal Participation and Investment Corporation from *Fortis Holding*. In the light of this ruling, the Federal Participation and Investment Corporation did not transfer to the special purpose vehicle the funds which it had obtained for that purpose from the Treasury (around 6 billion euro).

The EC approved the various *Fortis* recapitalisation operations on 3 December.



Dexia

The recapitalisation of *Dexia*, on 30 September, amounting to 6.4 billion euro, was the result of a joint intervention by the Belgian, French and Luxembourg governments. In Belgium, the 3 billion euro recapitalisation was realised with the aid of the federal government (1 billion, via the Federal Participation and Investment Corporation) and the regional governments (500 million from the Flemish Community, 350 million indirectly from the Walloon Region and 150 million from the Brussels-Capital Region), and existing institutional shareholders (*Holding Communal*, *Arcofin* and *Ethias* for a total of 1 billion).

The French public authorities contributed 3 billion to the increase in *Dexia's* capital. The Luxembourg government subscribed to the issue of new convertible bonds totalling 376 million.

In addition, on 14 November 2008, the Belgian and French States agreed to guarantee the portfolio of assets owned by *FSA Asset Management*, a subsidiary which will not be included in the sale of *FSA* to be arranged as part of the transformation of *Dexia* group, on the understanding that *Dexia* would cover the first loss of 3.1 billion US dollars in excess of the existing reserves amounting to 1.4 billion dollars. This portfolio amounted to 16.5 billion dollars. The States in question will qualify for preference shares if the guarantee has to be honoured.

KBC

On 27 October 2008, the Belgian government decided to subscribe to the issue by *KBC* of specific securities totalling 3.5 billion euro. These non-transferable, non-voting core-capital debt securities, were issued at a price of 29.50 euro each (or the average closing price for the three stock market trading days preceding the announcement of the recapitalisation). The annual coupon per security will be whichever is the higher of two amounts, namely 2.51 euro (corresponding to an interest rate of 8.5 p.c.), or an amount equal to 120 p.c. of the dividend paid on ordinary shares for the year 2009 and 125 p.c. from 2010. However, no coupon is due if the ordinary shares do not attract a dividend.

KBC will use the proceeds of the transaction to increase its regulatory core capital by 2.25 billion in its banking activities and to increase its solvency margin by 1.25 billion in its insurance activities. The EC approved this transaction on 18 December.

Ethias

On 21 October 2008, the Belgian federal government, plus the Flemish Community and the Walloon Region, decided to recapitalise the insurance company *Ethias* in the sum of 500 million euro each, making a total of 1.5 billion euro. This transaction gave each authority a blocking minority.

State guarantee to facilitate refinancing on the interbank and wholesale markets

By a Royal Decree dated 16 October 2008, pursuant to Article 117bis of the law of 2 August 2002 on the supervision of the financial sector and on financial services, and as amended by the Royal Decree of 10 December 2008 on the guarantee covering certain risks assumed by financial institutions, the Belgian government set up a temporary guarantee scheme to facilitate the refinancing of credit institutions and financial holding companies on the interbank and wholesale markets.

Participation in the scheme is voluntary, and the institutions concerned must apply to join. The eligibility criteria for the scheme relate to the institution's solvency and liquidity and its importance for the Belgian economy and for the protection of depositors in general.



The guarantee can be granted for all finance raised by the beneficiary institution for the purpose of refinancing itself with credit institutions and institutional counterparties, including in the form of bonds and debt instruments issued to institutional investors, so long as the borrowings mature before 31 October 2011. The scheme thus covers instruments such as interbank deposits, deposits by fiduciaries, central bank deposits, institutional deposits, commercial paper, certificates of deposit and negotiable medium-term notes, provided they were contracted or renewed by the beneficiary institution between 9 October 2008 and 31 October 2009. The guarantee is granted in return for payment of a fee reflecting the financial benefit derived by the institution from this guarantee.

On 20 November 2008, the EC authorised the guarantee schemes set up jointly by the Belgian, French and Luxembourg governments for *Dexia* group, and the Belgian government's scheme for *Fortis Bank*.

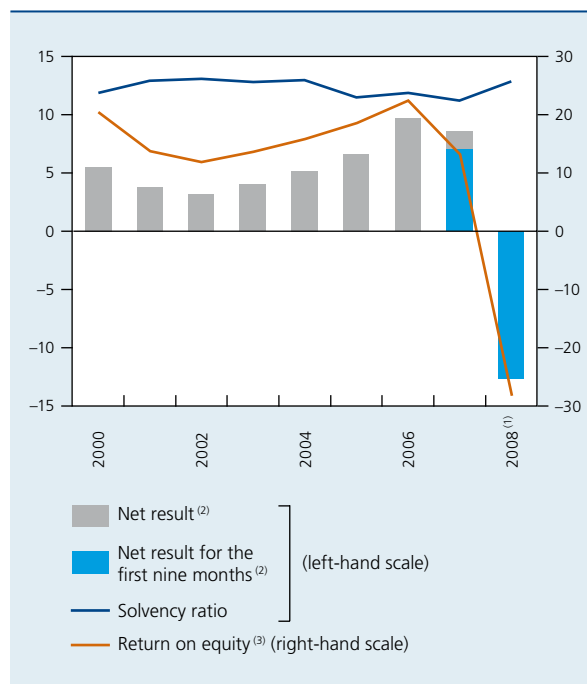
Deposit insurance

The Royal Decree of 14 November implementing the law of 15 October 2008 raises the cover offered to deposit holders from 20,000 to 100,000 euro, and offers insurance companies, on a voluntary basis, the opportunity to guarantee class 21 products in a similar way. For this purpose, the government set up the Special Protection Fund for deposits and life insurance. This Fund covers class 21 products, and the 50,000 to 100,000 euro tranche of deposits with credit institutions, the first tranche of 0 to 50,000 euro being covered by the existing Protection Fund for deposits and financial instruments.

8.2.2 Profitability and solvency

The profitability of the Belgian banking sector in the first nine months of 2008 clearly showed the impact of the financial crisis, with Belgian banks reporting net losses of 12.7 billion euro. These include exceptional losses totalling 8.9 billion, relating to activities which were discontinued, and in that connection they mainly reflect the loss anticipated by *Fortis* on the sale of its participation in the *RFS* consortium (on this subject, see section 8.2.1). Since the value of this stake was deducted from *Fortis'* regulatory own funds at the time of the investment, the exceptional loss associated with its sale had no impact, in net terms, on the sector's regulatory capital. The regulatory solvency ratio even continued to improve, partly as a result of the Belgian State's subscription on 29 September, to a capital increase in *Fortis Bank Belgium*. Two other factors also helped to maintain a high ratio. First, the method of recording unrealised capital gains or losses on fixed-income portfolios which Belgian banks hold for investment purposes has the effect of filtering out, in the calculation of the regulatory capital, the impact of unrealised losses recorded on securities available for sale, as defined in the IFRS standards. Also, since 1 January 2008, the new Basel II regulatory requirements have applied to all bank assets. Indeed, the most sophisticated methods for calculating regulatory requirements for credit risk give many of the

CHART 84 PROFITABILITY AND SOLVENCY OF BELGIAN CREDIT INSTITUTIONS
(consolidated data; percentages, unless otherwise stated)



Sources: CBFA, NBB.

(1) Based on data for the first nine months.

(2) Billions of euro.

(3) Annualised figure.

TABLE 41 PROFIT AND LOSS ACCOUNT OF BELGIAN CREDIT INSTITUTIONS

(consolidated data, billions of euro, unless otherwise stated)

| | First nine months of 2007 | First nine months of 2008 | |
|---|------------------------------|---------------------------|--|
| | | | Percentage changes compared to the corresponding period of 2007 |
| Banking income | 20.2 | 17.5 | -13.0 |
| Net interest income | 9.7 | 10.9 | 11.6 |
| Non-interest income | 10.4 | 6.7 | -35.9 |
| Net fee income | 5.6 | 5.5 | -2.4 |
| Realised and unrealised gains and losses on financial instruments | 3.6 | 0.6 | -83.5 |
| Other non-interest income | 1.1 | 0.6 | -50.6 |
| Operating expenses (-) | 11.9 | 12.5 | 5.1 |
| Staff expenses | 6.7 | 7.0 | 4.7 |
| Other operating expenses | 5.1 | 5.4 | 5.7 |
| Gross operating result | 8.3 | 5.1 | -38.8 |
| Impairments and provisions (-) | 0.4 | 7.2 | - |
| Share of profits or losses of participations accounted through the equity method | 0.4 | 0.1 | -66.5 |
| Net operating result | 8.2 | -2.0 | - |
| <i>p.m. Profit or loss (net)</i> | 7.1 | -12.7 | - |

Sources: CBFA, NBB.

assets of the main Belgian banks a more favourable risk weighting than under the previous Basel I regime. The outstanding total of the risk-weighted assets therefore declined, generating an improvement in the regulatory solvency ratios.

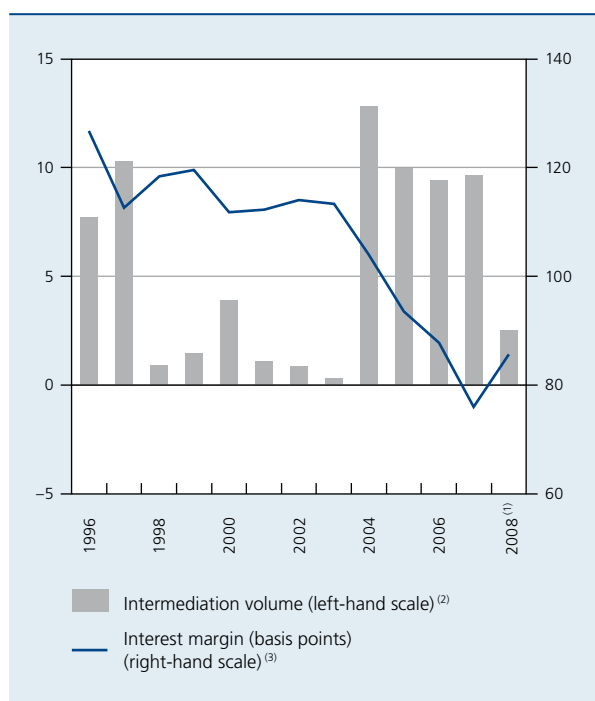
Leaving aside the exceptional losses related to the sale by *Fortis* of its participation in the *RFS* consortium, the Belgian banks' traditional banking activities generated losses of 2 billion euro during the first nine months of 2008, a deterioration of over 10 billion compared to the corresponding period of 2007. All profit and loss account items contributed to the deterioration in the net operating result, except for net interest income which represented 62 p.c. of total banking income. Net fee income was down by 2.4 p.c. and operating expenses continued to rise by 5.1 p.c. Nevertheless, it was the losses incurred on structured finance products that did most to depress the operating result, affecting both realised and unrealised gains and losses on financial instruments (down by 3 billion euro against the corresponding period of 2007) and impairments and provisions (up by 6.8 billion). The latter were also augmented by the increase in provisions for

losses on claims relating to the more traditional activities of Belgian banks.

Net interest income increased by 11.6 p.c. in the first nine months of 2008. While still benefiting from rising volumes, the growth rate of deposits and loans was down sharply compared to previous years. Conversely, the downward trend in the interest margin, apparent since 2003, was reversed following the respective movements in the interest rates applicable to the main categories of bank assets and liabilities, described in chapters 1 and 7 of this Report.

The exact scale of the valuation losses incurred in recent quarters is hard to measure, especially for structured finance products which suffered the heaviest losses. Market liquidity for these instruments, which were initially already trading on narrow secondary markets owing to their complexity and their lack of standardisation, evaporated as a result of the financial crisis. In the absence of any market price, banks thus had to resort to alternative valuation methods based on the use of models which are, in themselves, very complicated to calibrate.

CHART 85 DETERMINANTS OF THE NET INTEREST INCOME OF BELGIAN CREDIT INSTITUTIONS
(unconsolidated data)



Sources: CBFA, NBB.

- (1) Annual percentages calculated on the basis of the data for the first nine months.
(2) Average of the annual growth rates of the interest-bearing assets, percentages.
(3) The interest margin corresponds to the difference between the average implicit rates charged and paid on the outstanding amount of the interest-bearing assets and liabilities respectively.

Apart from these valuation problems, the difficulty in estimating valuation losses on financial instruments is due to specificities of the accounting methods. They differ not only according to the reasons why banks hold securities, as embodied in the IFRS accounting standards, but also according to the actual sources of the valuation losses, so that the latter are recorded under various headings in the profit and loss account, or sometimes even directly on the balance sheet.

The first item concerned in the profit and loss account is the non-interest income component relating to realised and unrealised gains or losses on financial instruments. Overall, that income component was down by 83.5 p.c. against the corresponding period of 2007, amounting to just 0.6 billion euro in the first nine months of 2008. It was at this level that the Belgian banks recorded their biggest losses, whether realised or not, on fixed-income instruments and associated derivatives, contained in the held-for-trading portfolio. The slump in prices of structured finance products included in this portfolio generated losses totalling almost 3 billion euro in the first nine months of the year.

However, a large proportion of these structured products are held in the 'available for sale' portfolio of the banks. The losses actually realised on the sale of these securities are also recorded under the heading discussed above, but the major part of the valuation losses on them is nonetheless latent because the losses are not yet realised.

TABLE 42 IMPACT OF VALUATION CHANGES ON FINANCIAL ASSETS HELD BY BELGIAN CREDIT INSTITUTIONS
(consolidated data, billions of euro)

| | 2006 | 2007 | First nine months | |
|--|------|------|-------------------|------|
| | | | 2007 | 2008 |
| Impact via the profit and loss account (flows during the period) | | | | |
| Realised or unrealised gains or losses (-) on financial instruments | 3.9 | 3.8 | 3.6 | 0.6 |
| of which: on fixed-income instruments and associated derivatives contained in the portfolio held for trading | 0.5 | -0.9 | 0.3 | -3.0 |
| Impairments and provisions | 0.4 | 2.9 | 0.4 | 7.2 |
| of which: on assets available for sale | 0.0 | 2.5 | 0.1 | 3.9 |
| Impact via accounting equity (stock at end of period) | | | | |
| Revaluation reserve for securities available for sale | 2.8 | -0.6 | 0.1 | -6.3 |

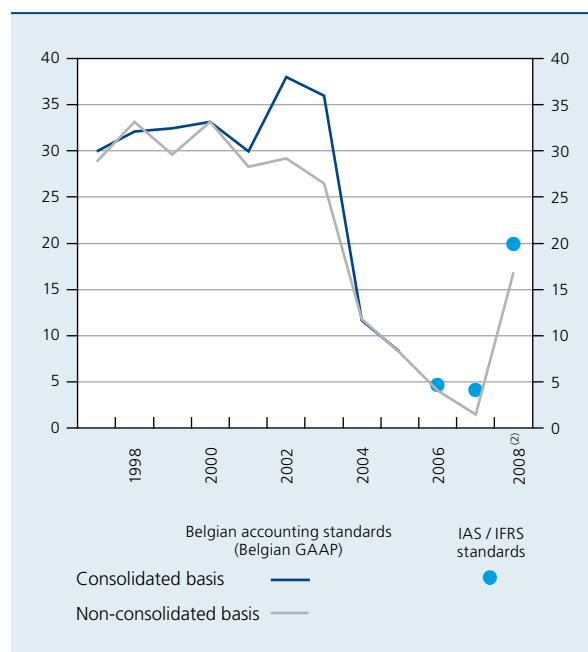
Sources: CBFA, NBB.

There are two types of losses here. If they correspond to probable losses on these instruments, relating either to debtor default or to reductions in value which can be considered permanent, they must be entered under the profit and loss account item comprising total impairments and provisions. Impairments specific to securities available for sale represented 2.5 billion euro in 2007 and 3.9 billion in the first nine months of 2008. Conversely, if the unrealised losses on these financial instruments available for sale are judged to be temporary and may be reversed subsequently, they are not recorded in the profit and loss account but recognised directly in the balance sheet, as a deduction from the accounting capital in the form of a decline in the revaluation reserve for securities available for sale. At the end of September 2008, the outstanding amount of this reserve, recognised directly in the accounting equity, had fallen to a decidedly negative figure, or –6.3 billion euro, compared to a figure of –0.6 billion at the end of 2007 and 2.8 billion at the end of 2006.

For completeness, it must be said that the gains or losses on the portfolio of securities held to maturity – which makes up a very minor part of the banks' assets – are not recorded in the accounts unless the losses are considered permanent, in which case they are also shown under impairments and provisions in the profit and loss account.

The allocation of a security to one of the three main categories – assets held for trading, assets available for sale, and investments held to maturity – therefore has significant implications for banks. Temporary fluctuations in the market value of these securities will affect both profitability and solvency in the first case, and solvency only in the second, while having no effect in the third. There are two methods of attenuating these potential consequences, which are very damaging in the case of exceptional fluctuations. The first is known as the prudential filter method, by which the supervisors authorise banks to exclude from the calculation of the regulatory solvency ratios the negative impact on the accounting equity of unrealised losses – considered temporary – on the portfolio of fixed-income securities available for sale. The other method, made possible by a recent amendment to the IAS 39 international accounting standard, enables credit institutions – subject to certain conditions and in exceptional circumstances – to reclassify securities outside the item comprising assets held for trading (with the exception of derivatives) and the item comprising assets available for sale. Unlike some European banks, the Belgian banks had not yet made use of this second option for the presentation of their accounts in the third quarter of 2008, though they did envisage using it for

CHART 86 LOAN LOSS RATIO OF BELGIAN CREDIT INSTITUTIONS ⁽¹⁾
(basis points)



Sources: CBFA, NBB.

(1) The loan loss ratio corresponds to the net flow of new provisions for credit losses expressed as a percentage of the outstanding claims. Data from 2006 onwards relate to the loan loss ratio for the category "Loans and receivables" according to IAS / IFRS.

(2) On the basis of data for the first nine months.

the publication of their year-end statements. However, it must be acknowledged that financial analysts and rating agencies make substantial allowance for the many effects of these differences of treatment in their comparative analyses of large, systemic European banks.

8.2.3 Risk factors

The financial crisis has clearly demonstrated the manifold interconnections which structured finance products have created between credit risk and market risk, even within a portfolio of securities originally accorded the best ratings. While the materialisation of credit risks to which the Belgian banks are exposed has so far primarily concerned these structured instruments, the slowdown in economic activity is expected to spread the risks and credit losses to the more traditional loan portfolios. In 2008, the loan loss ratio in fact already began rising steeply.

The size of the impact on Belgian banks of the downturn in the business cycle will depend partly on the geographical distribution of their loans and the nature

of their exposures. The loan portfolio of Belgian banks as a whole expanded by 12.6 p.c. in 2007 and 2 p.c. in the first nine months of 2008, to reach a total of 1,006.3 billion euro. Having risen by 19 p.c. in the first nine months of 2008, loans to businesses made the principal contribution to total lending growth. Conversely, interbank claims were down sharply, particularly in the third quarter, dropping by a total of 9 p.c. during the period considered. In terms of outstanding amounts, corporations account for around 37 p.c. of total loans and advances, while credit institutions and retail clients each represent about 29 p.c. of the total.

The geographical breakdown of the loan portfolio reveals that Belgium, other euro area countries and the rest of the world each represent around one-third. If one looks at the distribution for each of the three main types of counterparties individually, this distribution is more skewed. It is interbank loans that present by far the highest degree of internationalisation and which form the main component of the relatively large share of non-resident counterparties in the total loan portfolio. While loans to the retail sector are the least international, the share of Belgian residents in this type is only just over 50 p.c. Finally, a significant proportion of corporate loans are granted to corporations outside the euro area.

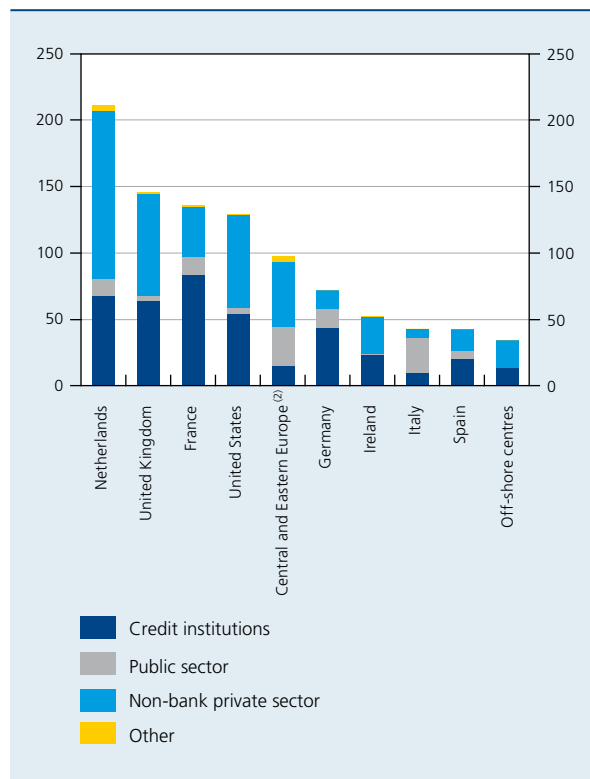
By using a different set of statistics – though the coverage is broader since they include exposures in the form of both loans and bonds – it is possible to analyse the Belgian banking sector's claims on the rest of the world by country.

This shows that the Belgian banks hold substantial claims on the non-bank private sector in the Netherlands, the United Kingdom, the United States and Central and Eastern Europe. In view of the particularly sharp slow-down in economic growth in the United Kingdom and the United States, following a phase of strong credit expansion, and the problems facing some central European countries, these exposures could lead to credit losses. The exposure to the Irish non-bank private sector could also cause problems.

The claims on the banking sector are concentrated mainly in France, the Netherlands, the United Kingdom, the United States and Germany. In the case of the first two countries, the exposures respectively comprise intra-group transactions by *Dexia Bank Belgium* and *ING Belgium* with sister entities in other countries, since *Dexia* and *ING* are only partially consolidated in the prudential reporting data used to assess the geographical exposures of Belgian banks.

CHART 87 ASSETS OF BELGIAN CREDIT INSTITUTIONS ON THE REST OF THE WORLD⁽¹⁾

(consolidated data at the end of September 2008, billions of euro)



Sources: CBFA, NBB.

- (1) The assets in this chart are broken down on the basis of final risk, i.e. after risk transfer. These data are still based on the Belgian accounting rules (*Belgian GAAP*).
 (2) Including Turkey and Russia.

The Belgian banking sector recently suffered impairments on its exposure to foreign banks, partly as a result of the defaults on bonds issued by *Lehman Brothers* or by Icelandic banks. However, those bonds represented only a fraction of the large portfolio of debt securities held by Belgian credit institutions, which, at the end of September 2008, recorded an outstanding total of 300 billion euro or 18 p.c. of the total assets. Almost half of that portfolio consisted of securities issued by central governments, of which just over one-third comprised securities issued by the Belgian State. The other half was divided more or less equally between securities issued by credit institutions and corporate bonds.

The latter include, in particular, exposures to structured finance products. On the basis of the data published by the main *bancassurance* groups, the Belgian banking sector's exposure to these classes of structured assets – including in the form of derivatives – came to around 80 billion euro at the end of 2007. It was these assets

TABLE 43 BREAKDOWN OF THE LOAN PORTFOLIO OF BELGIAN CREDIT INSTITUTIONS BY COUNTERPARTY SECTOR AND RESIDENCE

(consolidated end-of-period data, billions of euro, unless otherwise stated)

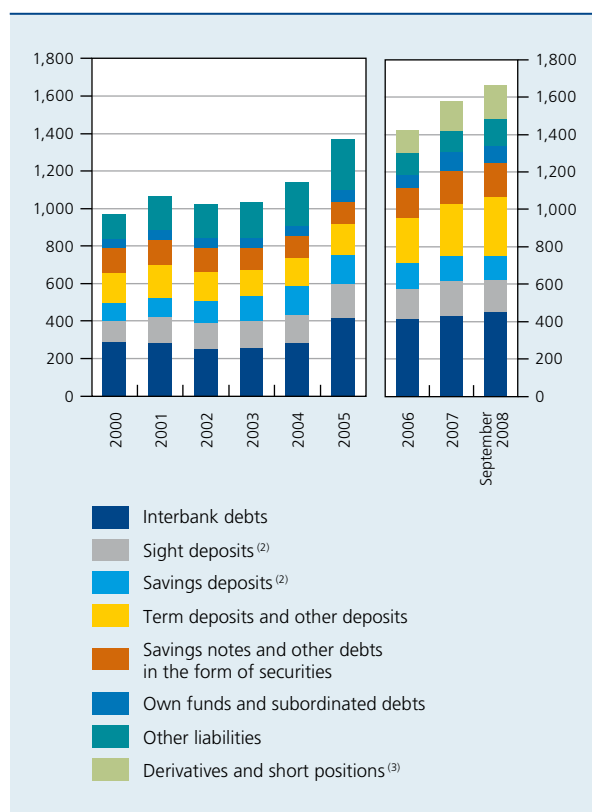
| | 2006 | 2007 | September 2008 | Breakdown in 2008 by counterparty residence (percentages of the total) | | | Total |
|--|--------------|--------------|----------------|--|-------------|-------------------|--------------|
| | | | | Belgium | Euro area | Rest of the world | |
| Credit institutions | 285.7 | 320.8 | 291.1 | 2.2 | 15.4 | 11.3 | 28.9 |
| Corporations | 260.9 | 313.5 | 371.8 | 10.2 | 11.3 | 15.4 | 36.9 |
| Retail | 260.1 | 276.2 | 287.3 | 15.0 | 10.7 | 2.9 | 28.6 |
| Central governments | 11.4 | 16.4 | 17.5 | 0.6 | 0.2 | 0.9 | 1.7 |
| Non-credit institutions ⁽¹⁾ | 58.6 | 60.1 | 38.5 | 3.2 | 0.1 | 0.5 | 3.8 |
| Total | 876.7 | 987.0 | 1.006.3 | 31.2 | 37.8 | 31.0 | 100.0 |

Sources: CBFA, NBB.

(1) The counterparty "non-credit institutions" includes loans to financial institutions other than banks and to local authorities.

CHART 88 LIABILITIES OF BELGIAN CREDIT INSTITUTIONS⁽¹⁾

(consolidated end-of-period data, billions of euro)



Sources: CBFA, NBB.

(1) Data compiled according to the Belgian accounting standards up to 2005 (Belgian GAAP) and according to IAS / IFRS from 2006.

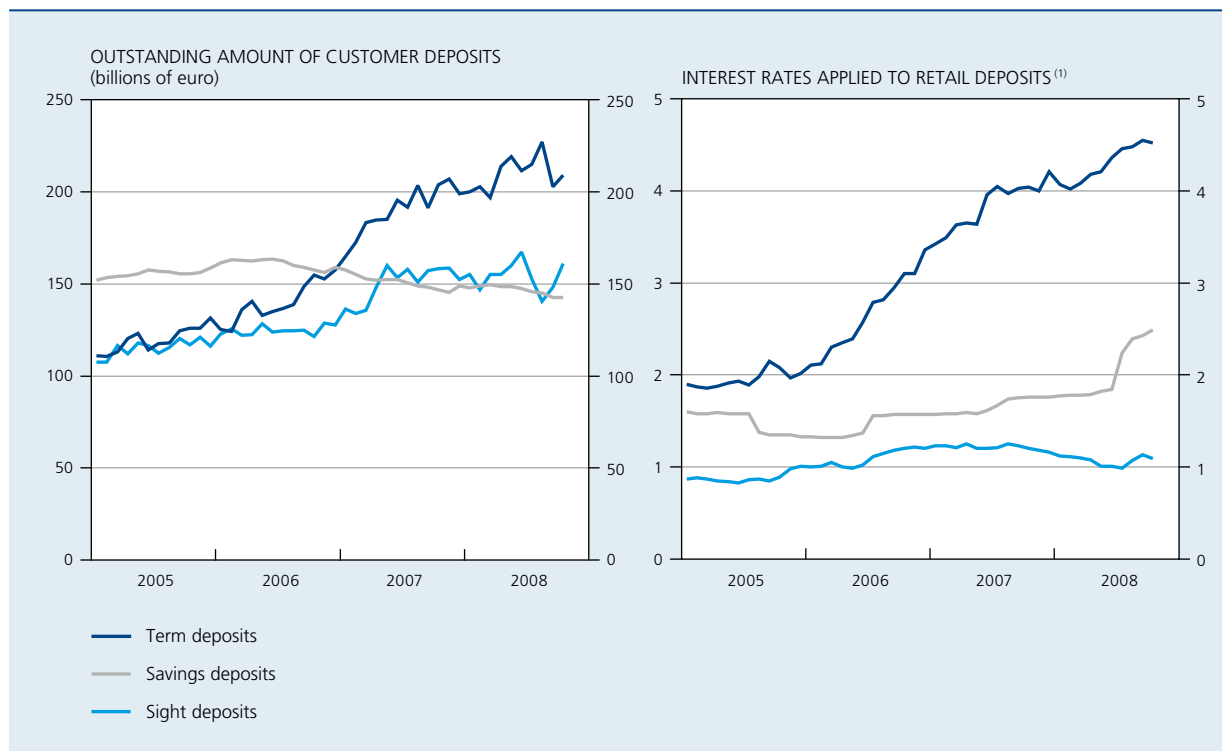
(2) Including only loans and deposits recorded at amortised cost.

(3) Derivatives recorded at market value.

which were the main source of the realised or unrealised losses or impairments discussed above.

The extensive bond portfolio held by Belgian banks plays a major role in liquidity management, since these securities can be used as collateral for borrowing on the wholesale markets. The volume of these guaranteed loan transactions between professional counterparties had been constantly growing in recent years, contributing towards the increase in the percentage of wholesale financing – as opposed to financing via customer deposits – on the balance sheet of Belgian banks. At the end of September 2008, the total liabilities of the Belgian banking sector stood at 1,662 billion euro, of which over a quarter, or 449 billion, consisted of interbank deposits. While other deposits – sight, savings or term deposits – represented 662 billion euro, or 37 p.c. of the total liabilities on that same date, a substantial proportion of those deposits could be regarded as wholesale financing, in that retail deposits alone amounted to only 275 billion. This heavy dependence on deposits by banks, large corporations, institutional investors, central banks and other financial institutions was the main vehicle transmitting the financial market tensions to the Belgian banking sector in the second half of September. Following the collapse of *Lehman Brothers*, certain securities were no longer accepted as loan collateral, or only on far less favourable conditions. Since access to unsecured financing had meanwhile become practically impossible, large Belgian banking groups, particularly *Fortis* and *Dexia*, were no longer able to cover the whole of their funding needs, forcing the central bank and then the government to intervene.

CHART 89 CUSTOMER DEPOSITS IN THE BELGIAN BANKING SECTOR: OUTSTANDING AMOUNTS AND INTEREST RATES APPLIED
(monthly data on an unconsolidated basis)



Sources : CBFA, NBB.
(1) Data from the monthly MIR survey in the case of new deposits.

These developments showed that it is vital for banks to have a well-diversified financing structure and to provide for alternative liquidity sources in case certain markets should close. The benefits of a sound financing base comprising retail deposits also became abundantly clear.

Nevertheless, these deposits have a cost. In recent years, term deposits – which are a proportionately more expensive form of financing – have expanded faster than sight and savings deposits. The desire to limit transfers between deposit categories, but also to attract retail savings in a context in which other funding sources were drying up, led many banks to increase the interest rates offered on savings deposits in the third quarter of 2008. The financial crisis also prompted unusually large shifts in deposits between individual banks, and augmented demand for banknotes. One of the measures adopted by the Belgian government to maintain the confidence of retail depositors, in line with similar initiatives in other European countries, was to raise the amount covered by the deposit insurance scheme.

8.3 Insurance companies

The crisis on the global financial markets had a substantial impact on the accounts of the Belgian insurance sector in 2008. However, its implications were felt more specifically by the *Ethias* company, owing to its large stake in the *Dexia* group. That participation is linked to the historical origins of *Ethias*, which was originally an insurance company that concentrated on serving local authorities, public enterprises and civil servants. The sharp fall in *Dexia*'s share price in the second half of 2008 magnified the amount of unrealised losses on the portfolio of financial assets held by *Ethias*, threatening the group's solvency and prompting a request from the CBFA for corrective measures.

On 21 October, that request led to a capital injection of 1.5 billion by public authorities, along the lines explained in box 16 of this Report. The announcement of *Ethias*' financial problems also led to substantial withdrawals on the trademark product sold by *Ethias*, namely its "First" life insurance contract with a capital guarantee and profit sharing. Although it was a class 21 insurance policy, the First contract – which had garnered up to 8.7 billion euro

for *Ethias* – had special characteristics which, in particular, offered very great flexibility, with no entry and exit fees. As part of its financial recovery plan, *Ethias* revised the conditions applicable to new First accounts in order to reduce the group’s liquidity risk exposure. The Belgian government supported these efforts by offering insurance companies the opportunity to participate voluntarily in the deposit insurance system, on payment of a premium, in order to cover life insurance products with features similar to bank deposits.

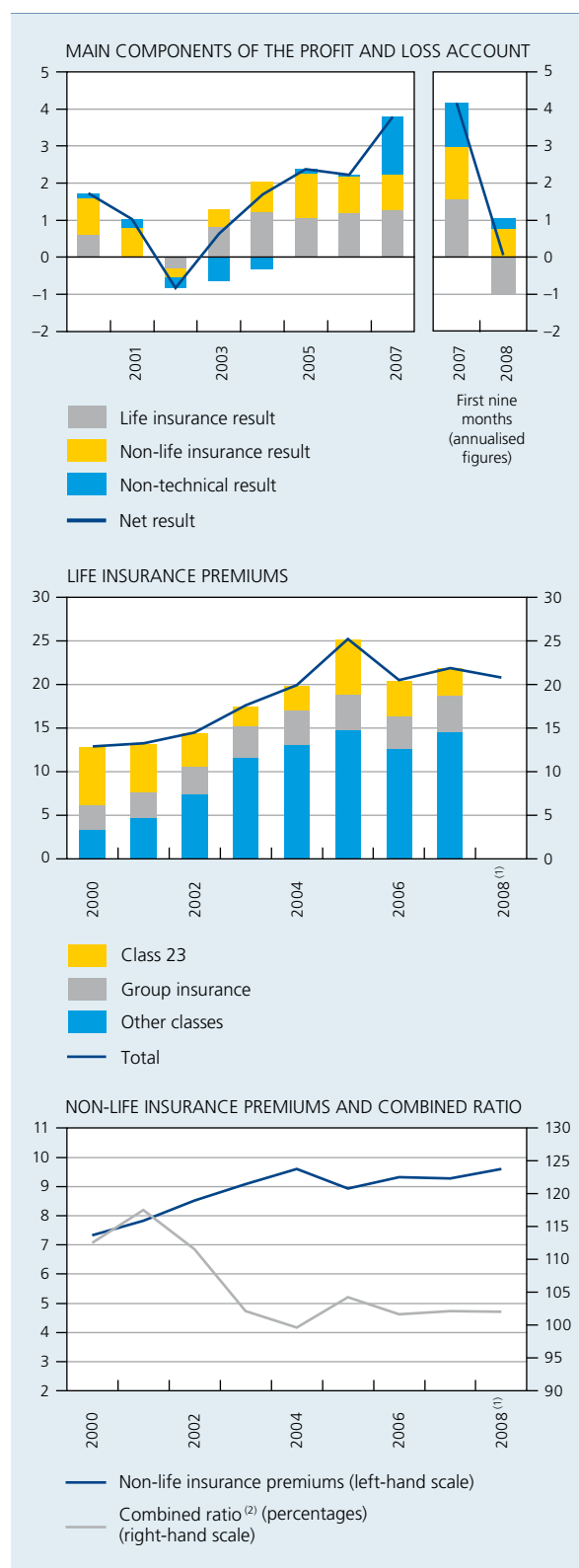
Apart from the developments affecting *Ethias*, the profitability of other Belgian insurance companies also suffered a sharp fall. Thus, the overall net result of the sector came to less than 50 million euro, on an annualised basis, in the first three quarters of 2008. This decline in profitability follows a long period of profit growth, culminating in 2007 with net profits of almost 3.8 billion euro. Admittedly, that excellent result was an outlier, as it benefited from exceptional gains on investments in associated companies, which had augmented the investment income included in the non-technical result.

The serious deterioration in profitability can hardly be explained by a downturn in the volume of business, as measured by premium income in the life and non-life sectors, even if the deteriorating conditions on the international financial markets did contribute to some deceleration in premium income in the life branch.

A comparison with the year 2007, or with the average volume of premiums over the period from 2004 to 2007, shows that the annualised estimate of premiums in the life branch declined by around 4.9 p.c. in 2008, while remaining well above the level seen in the initial years of the decade. In this regard, it should be remembered that the particularly large amount of premiums collected in 2005 is due to the shifts which occurred between 2005 and 2006 following the introduction on 1 January 2006 of a 1.1 p.c. tax on premiums paid on individual life insurance contracts. Since households had anticipated this tax by paying additional premiums in the final months of 2005, and then reduced their payments in 2006, the net results for 2005 and 2006 were first artificially driven up and then depressed, compared to the picture which would have been expected in the absence of this tax measure.

The great majority of premiums – in both group and individual life insurance – are collected on contracts where the risks relating to financial market developments are borne, at least in part, by the insurer. The proportion of premiums for class 23 contracts, under which the policyholder assumes the financial risks associated with the

CHART 90 NET RESULTS OF THE INSURANCE SECTOR, VOLUME OF ACTIVITY AND LEVEL OF COSTS (billions of euro, unless otherwise stated)



Sources: CBFA, NBB.
 (1) Projection based on data for the first nine months.
 (2) The combined ratio expresses the sum of insurance and operating costs as a ratio of net premium income.

investments, represented under 20 p.c. of the total during the period 2004-2007. Of the other policies, class 21 life insurance contracts offering a guaranteed minimum return are among the most widespread.

That non-life insurance premiums continued to grow at the same time in 2008 is further evidence that a change in the volume of business was not a significant factor in the sharp fall in profits. Moreover, the underlying profitability of non-life insurance does not seem to have played a role either. An inverted measure of that underlying profitability is traditionally supplied by the combined ratio which expresses insurance and operating costs as a percentage of net premium income. In 2008, that combined ratio stabilised at 102 p.c., a level comparable to the average for the period 2003-2007 and in sharp contrast to the much less favourable position in the years 2000 to 2002, when this ratio had exceeded 110 p.c. This good control over the combined ratio from 2003 is due to regular adjustments to premiums, better cost control and more rigorous management of the risks covered in insurance branches recording a deficit.

In reality, the deterioration in the overall profitability of the insurance sector essentially reflects the impact of the international financial crisis, which caused a loss of income and writedowns on insurance companies' investments in financial assets. Substantial writedowns were in fact recognised in 2008, in both the life and non-life branches. In the quarterly financial statements, they were reflected in an increase in investment costs. These costs, which include gross impairments and reductions in the market value of positions in financial assets, increased by 2.8 and 0.7 billion euro respectively in the life and non-life technical results in the first nine months of 2008, compared to the same period of 2007.

The size of these investment portfolios, formed to meet future commitments, seems proportionately much greater in life insurance than in non-life insurance, having regard to the relative shares of premiums in these two branches of activity, namely around 70 p.c. for life insurance and 30 p.c. for non-life insurance. This is because, in the case of non-life insurance contracts, the production cycle – which usually provides for annual renewal – tends to be shorter than in life insurance, where premiums are generally collected over long periods – in anticipation of a payment in the distant future – requiring the premiums collected to be invested in the meantime.

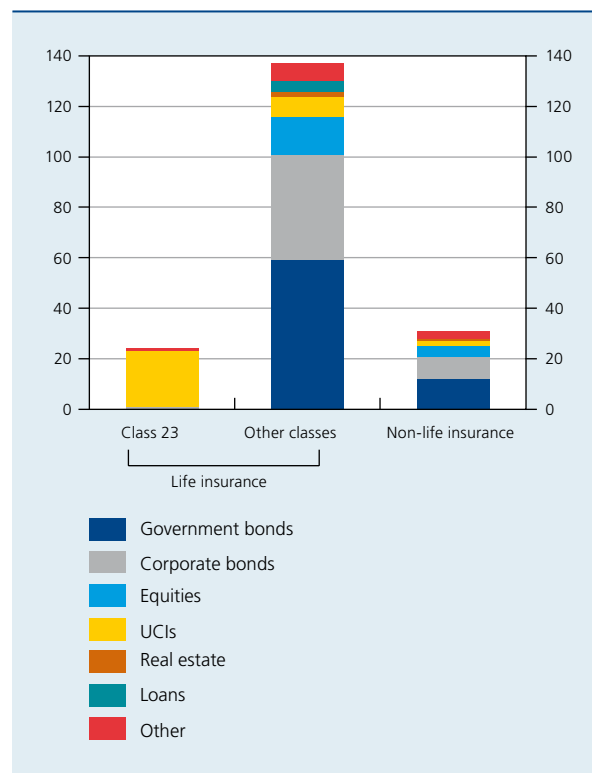
To limit their exposure to fluctuations in financial asset prices, companies sell life insurance contracts which transfer that risk to the policyholder. Thus, life insurance policies with variable capital, better known as class 23

products, entail no market risk for the companies even though the corresponding assets are recorded on their balance sheet. These products are in fact comparable to mutual investment funds in which the policyholder/investor bears all the investment risks. In terms of outstanding amounts, variable capital contracts represent barely 15 p.c. of the technical reserves or the assets covering all life insurance policies. A breakdown of the assets covering these class 23 contracts confirms that they are invested mainly in UCI units.

Most of the other life insurance contracts, which mainly comprise class 21 policies, entail some market risk for the insurance companies, owing to the existence of the guaranteed minimum rate of return. That guaranteed rate is generally combined with a profit-sharing mechanism which – though it does not, in principle, imply any market risk for the insurance company – entails a commercial risk.

A second technique which companies use to limit their financial risks in both life and non-life is the diversification of the covering assets. In the case of life insurance policies other than variable capital contracts, these assets consist

CHART 91 COMPOSITION OF THE COVERING ASSETS PER INSURANCE BRANCH
(unconsolidated data, end of 2007, billions of euro)



Sources: CBFA, NBB.

mainly of government and corporate bonds, which represented 43.6 and 30.6 p.c. respectively of the portfolio at the end of 2007. Equities, including participations in (associated) companies, accounted for only 11 p.c. of the covering assets, while loans and real estate investments represented a fairly marginal percentage. The breakdown of the assets covering non-life insurance policies does not seem to be fundamentally different, even though the relative share of equities was a little higher, at 13.8 p.c., offset by lower investments in government and corporate bonds.

The exposure of the Belgian insurance sector to market risk is therefore very heavily concentrated on fixed-income instruments, making the sector vulnerable to interest rate fluctuations and – in the case of corporate bonds – to credit risk premiums. The securities issued by corporations include structured finance instruments. In that regard, a recent study of a sample of large insurance companies showed that exposure to these instruments is lower than 10 p.c. of the total investment portfolio. However, the very tense conditions on international financial markets considerably depressed the prices of these structured products and, more generally, those of all securities with the sole exception of the most secure assets.

The lower dependence on financial investments in the non-life branch compared to the life branch explains why the global market crisis had much less impact on the former than on the latter. Though it dropped from 13.8 p.c. in

TABLE 44 COMPARISON OF THE MARKET VALUE AND BOOK VALUE OF THE INVESTMENT PORTFOLIO OF BELGIAN INSURANCE COMPANIES

(data at the end of September 2008, billions of euro)

| | Book value | Market value | Difference |
|--|--------------|--------------|-------------|
| Real estate | 2.5 | 4.1 | +1.5 |
| Participations in associated companies | 15.1 | 15.9 | +0.8 |
| Equities | 17.3 | 15.7 | -1.5 |
| Bonds | 137.8 | 132.1 | -5.8 |
| Other | 11.6 | 11.8 | +0.2 |
| Total | 184.3 | 179.5 | -4.8 |

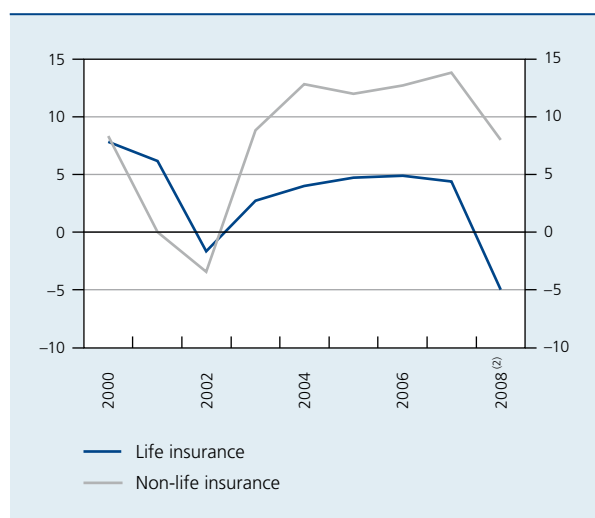
Sources: CBFA, NBB.

2007 to 8 p.c. in 2008, the net technical result in non-life insurance, expressed as a percentage of premium income, remained well above the levels recorded in 2001 and in 2002. Conversely, in life insurance, the deterioration was much more marked, since the net technical result measured on the same basis slumped from 4.4 p.c. in 2007 to -5 p.c. in 2008, compared with -1.7 p.c. in 2002.

The financial market developments not only affected the profit and loss account of the Belgian insurance sector. Via the unrealised losses, they also had an impact on solvency. A comparison of the market value and book value of the investment portfolio of Belgian insurance companies reveals that, at the end of September 2008, there was a negative differential of 4.8 billion euro between these two values. The unrealised losses on financial investments are concentrated on fixed-income securities (5.8 billion) and equities (1.5 billion).

The solvency of insurance companies is based on three components. The explicit margin consists of own funds, subordinated debts and certain other balance sheet items, such as the fund for future allocations, which corresponds to the positive balance of the technical life insurance result for which, on the closing date for the financial year, the decision on the allocation between shareholders and policyholders is still pending. Apart from these explicit components, insurance companies may also, subject to CBFA approval, include other specific elements in their implicit regulatory solvency margin, the principal one comprising part of the unrealised gains on the investment portfolio. This last possibility is linked to the current rules on the valuation of insurance company assets, whereby most

CHART 92 COMPARISON OF THE PROFITABILITY OF LIFE AND NON-LIFE INSURANCE ACTIVITIES⁽¹⁾
(non-consolidated data, percentages)

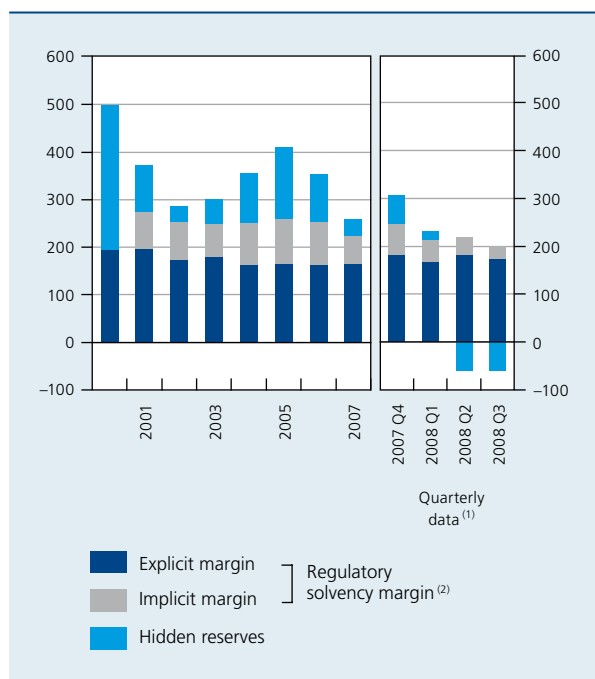


Sources: CBFA, NBB.

(1) Net technical result as a percentage of premium income.

(2) On the basis of the data for the first nine months.

CHART 93 SOLVENCY MARGIN OF BELGIAN INSURANCE COMPANIES
(percentages of the minimum required margin)



Sources: CBFA, NBB.

- (1) The quarterly figures are not entirely comparable with the final annual figures. In particular, they take no account of any redistribution of profits to shareholders and policyholders.
- (2) This margin is composed of an explicit margin – including the own funds, subordinated debts and certain other balance sheet items – and an implicit margin which, subject to the approval of the CBFA, comprises certain other specific elements, the principal one being a part of the unrealised gains on investment portfolios.

of the unrealised gains are not incorporated in the book value of the investment portfolios of insurance companies, and therefore do not cause any change in the capital. Finally, the rest of the unrealised capital gains or losses, which insurance companies are not permitted to include in their implicit solvency margin, can be regarded as a hidden buffer. This component was particularly hard hit by the financial crisis, and became decidedly negative in 2008.

Interest rate changes and fluctuations in bond prices are also a crucial parameter in the asset and liability management of insurance companies, especially for the life branch. Exposure to interest rate fluctuations is in fact one of the main risks facing insurance companies in the management of their investments, since the average duration of the sector's financial assets does not match that of the liabilities. The scale and even the direction of this gap differ between the life and non-life segments, as was again confirmed by the stress tests conducted in 2008 by the main companies in the sector, at the request of the NBB and the CBFA.

On the one hand, the average duration difference between the investment portfolios and the technical provisions is generally smaller for non-life than for life insurance, so that the former has a lower exposure to interest rate risk. On the other hand, the average duration of the investment portfolios generally exceeds the duration of the corresponding contracts in the case of non-life insurance, while the opposite is true in life insurance. Moreover, in life insurance there is a relative asymmetry between the negative and positive effects of an upward and downward shift in interest rates. This is due to the characteristics of life insurance contracts with a guaranteed rate of return, under which insurance companies may have to share part of the benefit of higher interest rates with the policyholders, in the form of profit-sharing, while the risk of interest rates falling below the guaranteed minimum is borne entirely by those companies.

The risks associated with the financial investments of insurance companies will be more explicitly taken into account in the Solvency II Directive, which enters into force in 2012. Like the new Basel II rules applicable to banks, this Directive also provides for a three-pillar system. This combines the quantitative rules for calculating the capital requirements, more qualitative requirements concerning risk control – the prudential authorities having the option of imposing supplementary capital requirements – and finally, obligations regarding the disclosure of information, designed to strengthen market discipline. The quantitative rules under the first pillar take account of a much wider range of risks, and enable companies to use their own risk management models to calculate the capital required. They also incorporate the impact on solvency of fair value accounting in the case of both the financial investments, on the assets side, and the technical provisions, on the liabilities side. This last requirement will correct a serious anomaly in the current model of calculating regulatory capital, namely the absence of any adjustment to the rate

TABLE 45 IMPACT OF AN INTEREST RATE SHOCK ON THE NET ASSET VALUE OF BELGIAN INSURANCE COMPANIES (1)

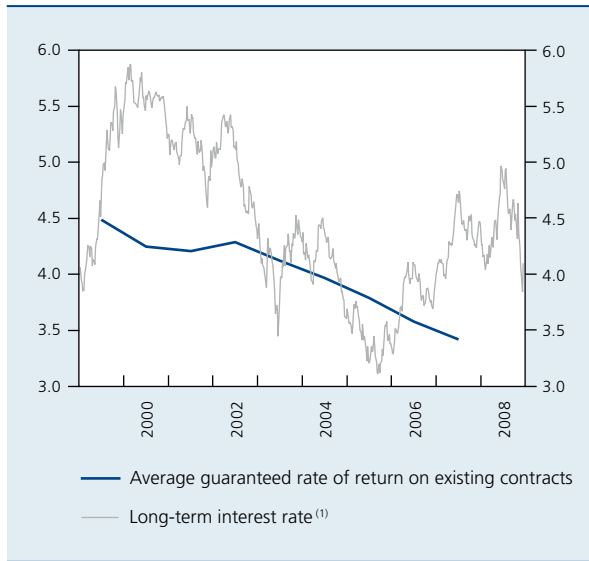
(data as at the end of June 2008, percentage of the available regulatory capital)

| | Life insurance | Non-life insurance | Total |
|----------------------|----------------|--------------------|-------|
| Upward shift | +1.5 | -3.0 | -0.3 |
| Downward shift | -31.9 | +4.3 | -19.5 |

Sources: CBFA, insurance company calculations, NBB.

- (1) Impact of a parallel shift in the yield curve of 200 basis points, calculated on the basis of internal models and the assumptions of the main companies.

CHART 94 LONG-TERM INTEREST RATE AND GUARANTEED RATE OF RETURN ON CLASS 21 CONTRACTS



Sources: CBFA, NBB.

(1) Yield on the secondary market in ten-year Belgian government loans (OLOs) (daily data).

for discounting the technical provisions in the event of market interest rate fluctuations.

The fair value has to be calculated with due regard for such factors as the minimum guaranteed rate of return for life insurance policyholders. The level of these guaranteed yields is a particularly significant constraint when interest rates on risk-free products fall to low levels, as was the case in the final quarter of 2008. In fact, such a development could erode the profitability of some guaranteed yield contracts, as happened a few years ago when the returns which insurance companies achieved on their investment portfolio had fallen well below the statutory ceiling on the minimum guaranteed rate of return, namely 4.75 p.c. up to the end of June 1999 and 3.75 p.c. thereafter. Since then, the sector has gradually rectified this adverse structure by marketing new contracts with clauses and guaranteed yields which are both more in line with risk-free interest rates and can be revised if market conditions change. These measures contributed to a reduction in the average guaranteed interest rates on class 21 contracts, which were down from 4.5 p.c. in 1999 to 3.4 p.c. in 2007.