Report 2008

Economic and financial developments

National Bank OF BELGIUM

Eurosystem

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Foreword

by Guy Quaden, Governor

2008 will go down in economic history as the year which saw the most serious international financial crisis since World War II.

Severe financial turbulence had already erupted in 2007 following the crisis on the American subprime mortgage market. And from then on, central banks were already endeavouring to curb the resulting tensions on the money markets.

Yet in the first half of 2008, at least in Europe, the population and the monetary authorities were primarily concerned about increasing inflation, lmainly due to the surge in prices of commodities, particularly petroleum products. In July, the rise in the consumer price index peaked at 4 p.c. in the euro area, and almost reached 6 p.c. in Belgium.

Following the failure of the big American investment bank, Lehman Brothers, in mid September, the financial turmoil suddenly became far more serious and escalated into a genuinely global crisis.

The interbank markets, which had already been sluggish for several months, were paralysed; a number of financial institutions, among others in Belgium, faced an acute liquidity shortage and a loss of confidence in their solvency; risk premiums increased exponentially, and share prices collapsed. As investors sought refuge in instruments considered less risky, even the financial markets of the emerging countries were not left unscathed.

To contain the systemic risk, central banks – particularly those in the Eurosystem – reacted swiftly and resolutely with massive injections of liquidity accompanied by an extension of the list of assets classed as eligible collateral. They – and especially the National Bank of Belgium, it must be said – did everything to fulfil their role as lender of last resort.

Governments intervened in various ways to safeguard the financial system, more particularly by recapitalising financial institutions and by granting or extending guarantees to cover customer deposits or new interbank liabilities.

At the end of the year, however, the situation remained tense, as was evident from the continuing mutual mistrust among the various market participants.

In 2008, most industrialised countries recorded weaker economic growth than in 2007, but the figures were still positive over the year as a whole (1 p.c. on average in the euro area, and 1.1 p.c. in Belgium). However, these figures mask a steady deterioration during the year and a veritable collapse of activity in the fourth quarter.

As time went by, the idea that the economies of the rest of the world might be decoupled from the slowdown which had begun in the United States proved to be a mirage. In the second half of the year, a growing number of indicators revealed how the financial crisis was having an adverse impact on the real economy via various channels : a sudden slowdown in international trade, negative wealth effects resulting from the correction of share prices and – in some countries – property prices, tightening of the lending criteria applied by commercial banks, and plummeting business and consumer confidence.

As the financial crisis and the prospect of recession had considerably alleviated the threat of inflation, central banks did not hesitate to ease their interest rate policy to a substantial degree. In the euro area, the rate of the Eurosystem's main refinancing operations was cut from 4.25 p.c. at the beginning of October 2008 to 2 p.c. at the beginning of January 2009.

In addition to the operation of the automatic fiscal stabilisers, which are relatively significant in Europe, governments defined recovery plans to counteract the slump in private spending.

In view of the gravity of the slowdown in activity and its probable impact on employment, emergency measures are certainly justified, but they must form part of a medium- and long-term approach. In particular, the budgetary measures must be temporary and targeted so as not to jeopardise the future, but on the contrary, to strengthen both confidence and the economy's growth potential.

That is why, in Belgium, where the process of public debt ratio reduction has suddenly been suspended, the authorities must be committed to restoring a balanced budget and gradually creating structural surpluses as soon as more normal economic growth returns.

That is also why the various parties concerned must keep watch over the competitive position of Belgian firms, in order to consolidate employment and – when the time comes – to take full advantage of the recovery. Belgium's foreign account surplus has diminished in recent years, and in 2008 it disappeared. That is due partly to the higher prices of imported commodities, but it also reflects the declining market shares of Belgian exporters, due in turn to the deterioration in the relative costs of Belgian firms and their insufficient specialisation in products and markets where demand is growing most strongly.

Reform of the financial sector is obviously among the structural reforms which the current problems must not be allowed to delay.

The dramatic crisis in this sector has its roots in the quest for unrealistic returns, excessive risk-taking and debt levels, and inadequate control over innovations. It is vital to rectify the excesses and deficiencies thus revealed.

The serious gaps apparent in the management controls of numerous institutions, the inappropriate nature of the remuneration and incentive systems – encouraging attempts to achieve immediate results at the expense of long-term performance – and the role played by rating agencies or accounting standards call for discussion and changes.

Finally, a reform of the regulations must be based on appropriate supervision structures at both national and international level. In countries such as Belgium where that is not yet the case, the central banks must have access to all the information on individual institutions which could imperil overall financial stability. And – at the very least at euro area level – there should be an integrated system maintaining supervision over large cross-border financial groups.

In the midst of the economic and financial problems at the end of the year, the 10th anniversary of the introduction of the euro passed somewhat unnoticed. Yet the common European currency deserves a tribute. The euro successfully withstood the various turbulent episodes and secured its position as a credible currency, becoming the second most important currency in the world. The euro also protected the countries which have adopted it against additional problems. Belgium is a particularly good example, since – thanks to the euro – there was fortunately no foreign exchange crisis, as would have been the case in the past, to accompany the national political crisis and the financial crisis which followed.

The euro offers us protection, but that certainly does not mean we can sit back and relax. For instance, the yield differential between Belgian and German government bonds widened significantly in 2008. Admittedly that is due partly to a flight into the greater liquidity offered by the *Bund* and only concerns Belgian securities. But it also reflects the reappraisal by investors of risks of all kinds associated with different countries.

Constant Montald, detail from a design for an unproduced 20 franc note, watercolour and Indian ink, 1900, National Bank of Belgium collection

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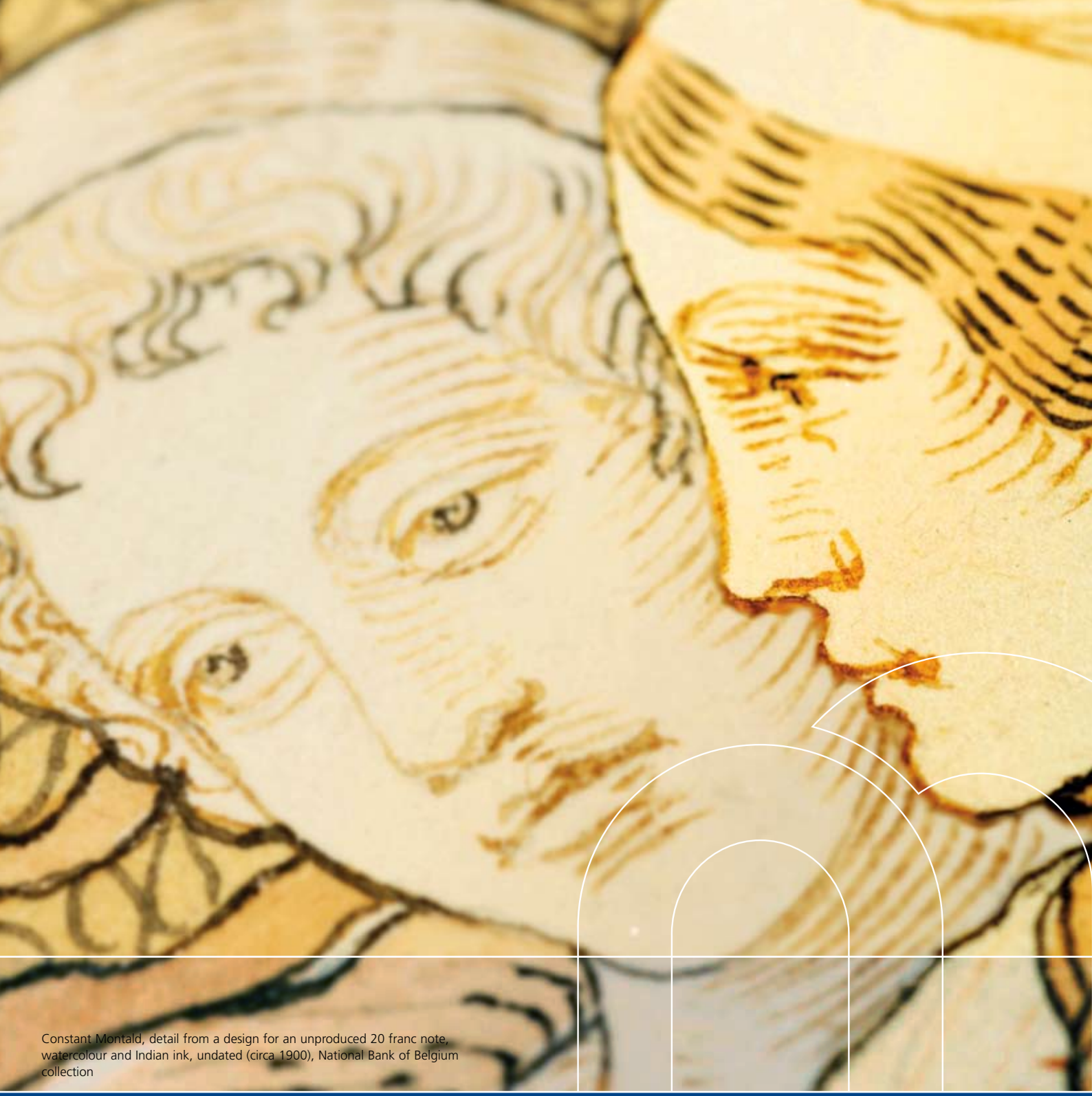

Constant Montald, detail from a design for an unproduced 20 franc note, watercolour and Indian ink, undated (circa 1900), National Bank of Belgium collection

Report presented by the Governor on behalf of the Council of Regency

1. The world economy suffered two severe shocks in 2008: an accelerating rise in commodity prices up to the middle of the year, and a sudden intensification of the tensions in the financial system from mid September. Although they have their specific causes, both are also due to the financial excesses of previous years. They triggered a temporary surge in inflation and a sharp slowdown in activity. Various authorities are being called upon to devise coordinated strategies comprising emergency measures and more fundamental reforms, in order to contain the crisis, to prevent the repetition of past errors, and to set the economies on the road to sustainable development.

Causes of the shocks in 2008

2. Although some institutions, including the Eurosystem, had already drawn attention to dangers originating from the financial system even before the outbreak of the turbulence in 2007, the scale of the shocks which occurred in 2008 was largely unexpected. Their roots lie in a prolonged phase of expanding credit and liquidity, under-estimation of risks, and strong growth of financial markets and of some parts of the real economy: soaring commodity prices were the latest symptom of this, and the financial crisis constitutes a particularly abrupt correction.

3. The rapid development of finance arose from a macroeconomic environment with low interest rates in conjunction with inadequately controlled financial innovations. The relatively low level of short- and long-term interest rates worldwide is itself due to a combination of factors. Thus, following the bursting of the stock market bubble in 2000-2001, monetary policy in the United States remained accommodating for quite some time, since the credibility which it had acquired and imports of cheap products from emerging economies neutralised the upward pressure on consumer prices. Following the 1997-1998 Asian crisis, the accumulation of excess savings by the emerging countries, particularly China, whose official external assets have grown constantly as a result of the chosen exchange rate regime, also depressed interest rates, as did the surpluses of the oil-exporting countries. The low interest rates encouraged debt financing. Moreover, financial market players went in quest of higher returns without taking proper account of the risks, which a lengthy period of low macroeconomic volatility had concealed.

4. These tendencies were also underpinned by innovations permitting the apparent dispersion of the risks. The large-scale use of techniques for transferring risks off bank balance sheets, particularly securitisation and the proliferation of complex structured products backed by claims of variable quality, caused a general relaxation of vigilance and inappropriate pricing of a wide range of financial instruments.

5. The out-of-control financial activities of recent years contributed to the rising prices of commodities and property, though they were not the sole cause. While the sudden drop in oil prices in the second half of 2008 resembles the bursting of a bubble, it must be remembered that the preceding upward trend was based mainly on fundamental tension between the growing energy needs of emerging economies and supply constraints. Overvaluation can be

diagnosed with greater confidence in the case of property prices in certain countries, including the United States, where a correction has set in. It was in fact American households that ultimately absorbed a large proportion of the global surplus savings, as the financial sector used the mortgage loans which it had granted to offer securities which enjoyed a good rating and were sought after by foreign investors.

6. The increase in interest rates initiated by the US Federal Reserve in mid 2004 eventually exposed the vulnerability of this financial edifice. A property crisis erupted in the United States in 2006, risk premiums on subprime-mortgage-backed securities went up sharply in 2007 and financial turbulence became widespread from August in that same year, when it became apparent that European financial institutions were hard hit by the drop in value of American mortgages. The confidence crisis which broke out on the interbank markets, but also infected other markets, deepened further in March 2008 following liquidity problems encountered by the *Bear Stearns* investment bank in the United States. At the time, the US authorities managed to soothe the tension.

7. However, the problems suddenly became far more serious in mid September when those same authorities refused to rescue the *Lehman Brothers* investment bank from bankruptcy. They probably wanted to avoid encouraging the belief that they would always intervene if insolvency threatened institutions considered too big to be allowed to fail. That decision led to a fundamental review of counterparty risks, and most banks, wishing to preserve their liquidity, called a halt to their interbank lending. Within a few days, solvent banks saw all their sources of liquidity evaporate, not only in the United States but also in Europe. A negative spiral of financial institutions incurring losses, with the selling and depreciation of financial assets, accelerated and interacted with the deteriorating economic outlook. Share prices everywhere tumbled as a result of selling by financial institutions, the worsening situation of the latter, expectations of a recession and the acute increase in risk aversion.

Emergency measures to rescue the financial system

8. In 2008, the leading central banks continued and intensified the measures taken in the previous year to ease the interbank market tensions. From mid September, they responded to the paralysis on those markets by significantly expanding their intermediation role. The Eurosystem, which had reacted promptly to the August 2007 liquidity crisis, considerably augmented its lending in euro to credit institutions. In October 2008, the priority was to reduce the uncertainty facing banks, even though this meant that the Eurosystem had to take over the function of the failing money market. Thus, the ECB Governing Council modified the procedure for the refinancing operations by conducting fixed-rate tenders with full allotment and extended the list of assets eligible as collateral for Eurosystem loans. It also narrowed the corridor formed by the standing facility rates, enabling the banks to meet their daily needs, and above all to deposit their surplus liquidity with the Eurosystem on more favourable terms than previously. In December, however, the ECB Governing Council decided that, from 21 January 2009, it would again widen the spread between the standing facility rates in order to encourage the banks to resume their interbank market activities.

9. The central banks also cooperated more closely on liquidity management, thus responding to the needs of banks with substantial international activities. For instance, the swap agreements concluded with the Federal Reserve in December 2007 were renewed and reinforced, enabling the Eurosystem to grant loans in US dollar to banks in the euro area.

10. From the end of September 2008, alongside the Eurosystem's liquidity management operations, some national central banks including the National Bank of Belgium had to take emergency steps to supply additional liquidity in euro and in US dollar to financial institutions facing particularly severe pressure. Although the tensions initially affected mainly banks encountering specific problems, they rapidly spread to many other institutions, requiring decisive action on the part of governments to contain the contagion. The various national intervention programmes, including the Belgian one, comprised a range of measures designed to strengthen the banks' solvency and restore access to liquidity for financial intermediaries.

11. In an environment where financial markets have substantially raised their expectations regarding bank capitalisation, the governments of several countries have acquired a direct stake in the capital of large systemic institutions. In some cases, they have also assumed some or all of the risks associated with inferior quality asset categories held by certain credit institutions.

12. In order to restart financing operations on the professional markets, many countries granted a guarantee to cover new liabilities of major banks in their territory towards institutional investors. The as yet limited effects of these measures on market liquidity and the fear of a credit crunch led the authorities of some countries, notably the United States, to intervene more directly in supplying funds to the final borrowers. To reassure savers, deposit guarantee schemes were reinforced in the EU. In Belgium, the amount of the guarantee per beneficiary was increased from 20,000 to 100,000 euro, and that protection was also made available for certain insurance products.

Macroeconomic consequences of the shocks

13. In the first part of the year, global growth was curbed above all by the steep rise in commodity prices, while in the second part of the year, the deepening financial crisis took over as the main factor in putting a much sharper brake on economic activity. These two shocks had opposing effects on inflation.

14. Global economic growth dropped from 5 p.c. in 2007 to 3.8 p.c. in 2008. The slowdown in activity, which had initially hit the United States, became widespread and the hope of a "decoupling" of the emerging economies proved false. In particular, the financial crisis exposed the vulnerability of the economies of Central and Eastern Europe, where businesses and households make extensive use of credit – often in foreign currencies – and levels of foreign debt are high. In the euro area, growth declined from 2.6 to 1 p.c. Countries which had enjoyed strong expansion and a property boom in preceding years, such as Spain and Ireland, were particularly hard hit. The slackening of activity was a little less marked in Belgium than in the large European countries, with Belgian GDP growth down from 2.6 to 1.1 p.c. Employment, which takes some time to respond to cyclical fluctuations, still expanded by 1.6 p.c. compared to 1.8 p.c. in 2007. The harmonised unemployment rate continued to fall, dropping from 7.5 to 7.1 p.c., although there has already been a noticeable increase in temporary lay-offs.

15. However, all these annual figures conceal a sharp deterioration during the year. In the final quarter, in particular, economic activity slumped in many countries, causing forecasters to make substantial downward revisions to the growth outlook for the global economy in 2009. Banking crises are often followed by contractions in activity, which they influence in various ways. Confronted by losses, the need to boost their solvency ratio – or in other words, to reduce their leverage – and the rising cost of their own funding, banks tend to restrict the supply of credit by increasing their margins and tightening up other lending conditions. Moreover, plummeting stock markets, combined in some countries with the collapse of property prices, produce negative wealth effects on private consumption. In addition, they contribute to upward pressure

on corporate financing costs, as does the rise in risk premiums included in bank lending rates and corporate bond yields. Finally, the crisis damages the confidence of both consumers, who increase their precautionary savings, and business leaders, who defer investment and recruitment.

16. Inflation gathered pace almost everywhere until the third quarter of 2008, driven by soaring commodity prices. It then eased when those prices collapsed as a result of the sudden deterioration in the demand outlook.

Economic policy responses

17. The financial crisis, which can already be considered the most serious since the 1929 stock market crash, requires a response commensurate with the risks entailed and the inherent opportunities for reform. Above all, it is essential to ensure consistency between the short and the long term, and international coordination of the economic policy responses to the crisis.

18. Speedy action was and still is needed to stabilise the financial system and limit the effects of its contraction on the real economy. However, emergency measures must not compromise the future, and they must not nurture the seeds of future crises. On the contrary, they need to be accompanied by more fundamental reforms of the operation of the economic and financial system in order to prevent repetition of past errors and enable a stronger economy to develop for the benefit of all, without being based on excessive debt and with due regard for the environmental costs and ecological risks.

19. Faced with the sudden threat of a global depression, there is good reason to rescue the banks and ease monetary and fiscal policies, but not without conditions. First, a bank bail-out is not equivalent to a blank cheque. While the "stagflation" of the 1970s had cast doubt on the ability of the government to provide a systematic stimulus for growth via expansionary macroeconomic policies, and highlighted the benefits of competition as an engine of economic progress, the current crisis has seriously dented belief in the ability of the markets to regulate themselves. There is clearly a need to reform the regulation and supervision of the financial system, the aim of the public authorities being not to take the place of the financial markets but to allow them to operate more correctly for the benefit of the economy. Next, the conduct of monetary policy must continue to focus on the objective of medium-term price stability. The easing of this policy is not inflationary in so far as it is responding to an extreme preference for liquidity on the part of the private sector and a contraction in demand for goods and services. Once normality returns, it will give way to a tighter stance, so as not to fuel new excesses. Finally, fiscal policy must also be geared to the medium and long term, otherwise it would forfeit its effectiveness as a counter-cyclical instrument owing to the loss of confidence among economic agents. Measures intended to support activity and employment during the cyclical downturn must be temporary and so designed that the growth potential of the economy and its resilience to shocks are not imperilled but are, on the contrary, reinforced.

20. This truly global crisis has also demonstrated that the interdependence between continents and nations is greater than ever before, and confirmed the importance of emerging economies. It is vital to resist the temptation to revert to protectionism, which caused so much damage in the 1930s. International cooperation needs to be intensified, both to ensure that the measures taken do not have adverse repercussions for other countries or distort competition, and to guarantee the coherence of the reforms. The European monetary union, which has celebrated its tenth anniversary, has been successful in withstanding a lot of turmoil, and even today the euro is still protecting the states which adopted it from additional difficulties, since the banking crisis has not been accompanied by an exchange rate crisis in those countries. However, the

economic policy responses in the euro area need to be better coordinated. Finally, since the global food, financial and economic crisis has a serious impact on the poorest countries, there is a need to maintain or even speed up the expansion of development aid towards the target of 0.7 p.c. of GDP, according priority to those nations.

Monetary policy

21. The primary objective of the Eurosystem's monetary policy, like that of most other central banks, is to maintain price stability. In times of trouble, it is essential to remain firmly focused on this medium-term objective, because inflationary or deflationary derailment could seriously damage economic activity and employment. Thanks to its medium-term monetary policy strategy, the ECB Governing Council was able to avoid over-reacting to the direct effects of higher import prices and could take account of all available information in order to assess the threats to price stability, including those emanating from the malfunctioning of the financial system.

22. In the first part of the year under review, there were differences in monetary policy conducted in the leading OECD economies, due mainly to the risks to price stability posed by the higher cost of commodities, taking account of such factors as capacity utilisation levels, expectations of economic agents and the probable effects of the financial turbulence. In the United States, the United Kingdom and Canada, the easing initiated at the end of 2007 continued. In other countries such as Japan, the main policy rates were left unchanged. In contrast, in the euro area, Sweden, Norway and Australia, the central banks increased interest rates by varying degrees. In the case of the Eurosystem, the minimum bid rate of the main refinancing operations was raised from 4 to 4.25 p.c. on 3 July 2008, owing to deteriorating inflation expectations.

23. Differences in the monetary policy stance – and the underlying heterogeneity of the domestic situations – influenced foreign exchange markets. Thus, in mid July, the exchange rate of the euro against the US dollar reached a record high. Other factors contributed to this appreciation, such as the frequently noted sensitivity of this exchange rate to oil prices, attenuating their fluctuations to the advantage of the euro area.

24. When the financial crisis took a more dramatic turn, lessening the risk of inflation, all the central banks eased their interest rate policy. On 8 October 2008, six central banks including the ECB announced a coordinated reduction in their main policy rate. In the United States, the target federal funds rate was reduced in three stages from 2 p.c., the level at which it had been set on 30 April, to between 0 and 0.25 p.c. Moreover, the Federal Reserve pursued an accommodating policy in terms of both quantity – by considerably expanding its balance sheet – and quality – by substituting riskier loans for government debt securities on the assets side of its balance sheet. In the euro area, the rate of the Eurosystem's main refinancing operations was cut in four stages from 4.25 at the beginning of October 2008 to 2 p.c. at the beginning of January 2009. It is essential that this easing should be reflected in a reduction in debit interest rates and the maintenance of an adequate supply of bank lending.

25. The euro's depreciation against the US dollar from August 2008 mainly reflected the prospects of a deterioration in the European economic situation and the possibility of a reaction by the Eurosystem, whose interest rates were higher than those of the Federal Reserve. That depreciation, accentuated in October by the extreme tensions on all financial markets, was partly offset by an appreciation in December. If account is also taken of the movement in other currencies, such as the pound sterling, the effective exchange rate of the euro reached a peak in mid December.

26. Recent events ought to rekindle the debate over whether monetary policy should take account of asset price fluctuations. The equilibrium value of assets – property or equities – is difficult to ascertain, but that is not sufficient reason to ignore the question. The Eurosystem's monetary policy strategy, with its medium-term stance and the combination of economic and monetary analysis, has the advantage of paying attention to money and credit developments, and any imbalances which are not immediately reflected in pressure on consumer prices. However, the interest rate policy cannot in itself guarantee financial stability, and therefore needs to be backed by prudential policies.

Maintaining financial stability

27. The current financial market upheaval demands action by the authorities at several levels. In the immediate future, it is absolutely vital to restore confidence within the financial system, to enable it to resume its full role of intermediation between savers and borrowers, for the benefit of the economy as a whole. In a longer-term perspective, it is necessary to amplify the work which has already begun on devising fundamental reforms to remedy the structural defects exposed by the crisis. Finally, from a more institutional angle, a review of the organisation of prudential supervision is required in order to establish a more effective system of financial stability surveillance and crisis prevention and management.

28. National intervention programmes intended to stabilise the financial system have so far been based on fairly similar principles. Conversely, it has proved more difficult to coordinate the operational arrangements, particularly at European level. Allowance for the specific situation of individual banks has to be reconciled with the prevention of distortions of competition between institutions, products and markets. Moreover, the intervention of governments as both shareholders and guarantors of certain bank debts may complicate the assessment and pricing of the various credit risks. It is therefore important to design these support measures in such a way as to ensure that they are used effectively, but also to make it easy to dismantle them at a later date.

29. Apart from these emergency plans, the excesses and defects exposed by the current crisis must be corrected without introducing excessively onerous new regulations which would stifle financial innovation, while still acknowledging the limits of self-regulation. Both the EU roadmap and the report of the Financial Stability Forum on enhancing market and institutional resilience bear witness to a broad consensus on the need for reform.

30. The serious gaps apparent in the management controls of numerous institutions which nevertheless enjoyed a good reputation require, in the first instance, an improvement in financial risk surveillance and protection. In particular, there is a need for monitoring and much more regular reporting on liquidity situations or on the concentration of positions on a small number of counterparties. In view of the substantial contribution of financial infrastructures to the management of liquidity risks and counterparty risks concerning payments and securities settlement, this type of infrastructure should also be introduced for transactions currently effected on over-the-counter markets, such as credit derivatives. The Basel Committee is going to adapt capital requirements to improve the cover for certain specific assets or risks. It is also examining the advisability of a more general increase in the level and quality of banks' own funds, and modifications to the methods of forming provisions, in order to encourage the creation of a security buffer which should prevent the banks from amplifying business cycles in their attempts to correct a shortage of capital when there is a downturn in economic activity.

31. It must also be acknowledged that risk management shortcomings were aggravated by remuneration systems and incentive mechanisms which too often encouraged the pursuit of immediate results, to the detriment of the creation of lasting value. There is a need to improve

governance and profit-sharing structures within the institutions, but also to take account of the new methods of conducting financial transactions, which are often broken down into multiple components involving several operators – such as brokers, insurers or rating agencies – interposed between the final lenders and borrowers. The essential role which rating agencies perform requires not only an improvement in their governance with a view to preventing conflicts of interests, but also the establishment of an appropriate supervision framework by the prudential authorities.

32. The crisis has also highlighted the extreme complexity of many financial instruments. In order to enhance the transparency of the system, it is necessary to re-examine the valuation and accounting methods applied to these products, so that they can be used more consistently in all market situations. Greater clarity, but also stricter regulation and more rigorous control, are needed in regard to the risks associated with the transactions which banks carry out via off-balance-sheet structures and vehicles, and to the activities of bodies which are not subject to supervision, such as hedge funds. Transparency and stringent regulation, which are necessary more particularly in the context of new financial products, must be combined with better communication and financial reporting.

33. However, the revision of the regulations will not be fully effective unless supported by a good supervision structure. Central banks, which were in the front line when it came to tackling the paralysis on the interbank markets, were able to derive support from their day-to-day relationship with the money market and their position at the heart of payment and settlement systems. However, the speed with which the most acute phase of the liquidity crisis developed showed that these contact channels are insufficient. Moreover, in an environment where financial markets are tending to be concentrated in the hands of a few large operators, the distinction between a macroprudential approach, defining action by the central banks, and the microprudential supervision of credit institutions, which remains the exclusive preserve of the supervisory authorities, has clearly demonstrated its limits. Central banks must have direct access to information on developments which, though affecting individual institutions, could endanger overall financial stability.

34. This problem of information does not arise if central banks themselves are in charge of supervision. In countries where that is not the case, there has to be a system of very close cooperation between the two authorities, and the institutional structures must be regularly reviewed in the light of both any weaknesses found in the supervision of financial stability and the often very rapid changes in the configuration of markets and in banking services. Recent developments undeniably require such a review in Belgium.

35. The discussions on this subject need to take place in the context of a more general reform of the organisation of bank supervision in the EU, but also supervision over insurance companies and pension funds, and the crisis management arrangements. Despite the progress achieved in cooperation between national authorities, especially via the supervisory boards set up for cross-border banking groups, the crisis has exposed serious defects. These concern more particularly the allocation of the costs of any government intervention in support of banks important for the operation of the system, and the absence of a genuine European prudential supervision structure, equipped with a centre in charge of coordination between national bodies. Such an institutional set-up would clearly be extremely useful in the supervision of the small group of large, systemically important European banks.

Fiscal policy

36. Since the deepening of the financial crisis, the government has rightly accorded priority to stabilising the financial system in order to protect the public's deposits and avoid an excessively tight credit contraction. In contrast to the guarantees covering certain bank debts, mentioned earlier, the recapitalisation of financial institutions has already added to the public debt, by 6.3 p.c. of GDP in Belgium's case. However, this is an essential investment to avert the danger of collapse of the banking system, as happened in the 1930s, and to lay the foundations for a recovery, as demonstrated by the admittedly more local experience of the Nordic countries in the 1990s. While the very specific role of the banking sector in the economy justifies such an assumption of financial risks by the government, that action must be transparent, remunerated and temporary, and must be accompanied by the reinforcement of supervision referred to earlier.

37. A number of countries have also introduced fiscal measures to support demand and thus attenuate the effects of the financial malaise on the real economy. In order to absorb global current account imbalances which were one of the causes of the crisis, those countries with a surplus should be more active in stimulating their domestic demand than others.

38. To be effective, it is crucial that fiscal stimuli form part of a credible and sustainable strategy, vital to the preservation of confidence. Economic agents must be reassured that government deficits are transient and will not entail a significant increase in the future tax burden or impair the government's ability to meet the costs of population ageing, otherwise the fiscal stimuli will merely boost private savings. The recovery measures need to be selected on the basis of their short- and long term effectiveness, they must be fast-acting, and temporary in their impact on the budget.

39. In Europe, the Stability and Growth Pact provides the appropriate framework for such strategies, offering both the short-term flexibility required to stabilise the economy, especially in exceptional circumstances, and criteria which ensure the sustainability of fiscal policies. Apart from the operation of the automatic stabilisers – relatively important in Europe – such as the decline in tax receipts and the increase in unemployment benefit payments, discretionary measures can be taken so long as the government's financial position permits. The economic recovery plan adopted by the European Council in December provides for a fiscal stimulus of 1.5 p.c. of the EU's GDP – 1.2 p.c. of which would come from budgetary expansion by Member States – in order to revitalise demand. However, compliance with the Stability and Growth Pact presupposes that each country takes part in the coordinated action in accordance with its own starting position. While some, such as Finland, have achieved their medium-term objective, regaining the scope for more significant counter-cyclical measures, many of them have unfortunately failed to take sufficient advantage of the thriving economy of recent years to make structural improvements to their public finances, thus limiting their room for manœuvre in today's more challenging circumstances.

40. In Belgium, in particular, the fiscal policy pursued over the past ten years since the adoption of the euro has not permitted the accumulation of the necessary structural surplus which had been publicised. The government did not use the substantial margin created by the fall in interest rates to speed up debt reduction, but opted for higher expenditure or cuts in certain levies, one aim being to provide structural support for growth and employment. Budget targets have been systematically lowered and sometimes missed.

41. The year 2008 was no exception. The public deficit expanded, rising from 0.3 to 1.1 p.c. of GDP, partly as a result of the slowdown in activity, so that Belgium's stability programme target, even after being scaled back in April 2008 from a surplus of 0.5 p.c. of GDP to a balanced budget, was not achieved.

42. This led to wider deviation from the budget path recommended by the High Council of Finance, which aims to guarantee the sustainability of public finances in the context of population ageing and to ensure that the resulting costs do not become too heavy a burden for future generations. Moreover, the public debt ratio increased during the year under review for the first time since 1993, rising from 83.9 to 88.7 p.c. of GDP following the injections of capital into struggling financial institutions.

43. Given the severity of the deterioration in the economic situation, it is currently sensible to let the automatic stabilisers operate to full effect and consider carefully targeted economic support measures. In particular, the social security system must perform its task of protecting the most vulnerable and supporting demand. However, deviation from the medium-term path is acceptable only if it is limited and temporary. The widening of the spread between interest rates on government bonds in Belgium and the corresponding German rates is also reason for caution, even though it is due partly to a flight to the liquidity offered by the German government bond market, and is not an isolated instance in Europe. The government must ensure that any economic recovery measures can be reversed. It must be steadfastly committed to restoring a balanced budget as soon as more normal economic growth returns, and to creating surpluses thereafter by adopting a medium-term approach.

44. Moreover, the narrow fiscal scope should encourage the authorities at all levels of government to enhance both the quality and the effectiveness of public intervention, to ensure that revenues are properly collected, and to combat all forms of fraud. It does not prevent the government from choosing between various types of expenditure and revenue to ensure that public finances are better geared to boosting the economy's growth potential and sustainable development.

Prices and incomes

45. In the first ten years since the creation of the European monetary union, the inflation differentials between Member States were comparable to those between the regions of other large currency areas such as the United States. However, they have been more persistent. The cumulative divergences between inflation rates are a problem if they do not reflect the gradual convergence of prices resulting from the process of catching up with the level of productivity achieved by the most advanced economies in the area, but are instead a sign of a surge in domestic demand in some countries, accompanied by a loss of competitiveness. That appears to have been the case in Spain and Ireland, which are today experiencing a sharp correction. It is the task of the national government and social partners to prevent such imbalances.

46. In Belgium, growth and inflation have generally remained close to the euro area average. However, in 2008, Belgian consumer prices recorded one of the steepest increases: an annual average of 4.5 p.c., compared to 3.3 p.c. in the euro area. Energy prices account for 1.1 percentage points of that difference. Only a small part – 0.2. percentage point – is due to the stronger impact of international crude and refined oil prices, owing to the greater weight of petroleum products in the Belgian HICP and the lower level of lump-sum taxes on these products. Most of it – 0.9 percentage point – originates from a sharper increase in gas and electricity prices in Belgium. This was due to a combination of factors, some relating to methodology – such as the fact that the Belgian HICP takes account of monthly rather than annual tariffs – and others more real, concerning both the actual energy component and the transport and distribution charges, which were increased after the courts ruled against the reductions imposed by the federal energy regulator, the CREG, in 2007. While food price rises also outstripped those in the euro area, prices of other goods and services considered as a whole rose at the average rate for the euro area, namely 1.8 p.c. However, a relative deterioration set in during the year, and in the final quarter the year-on-year increase in these prices came to 2.4 p.c., compared to 1.9 p.c. in the euro area.

47. This could indicate the start of second-round effects – though they are doubtless far less significant than the dramatic effects in the 1970s – due to the increasing cost of commodities, the direct impact of which has already been more pronounced in Belgium. The system of automatic wage indexation specific to that country, and the formal or informal mechanisms for the indexation of other incomes and prices, especially in the branches relatively sheltered from foreign competition, increase the risk of a more marked transmission of import price increases, and consequently a loss of competitiveness for the Belgian economy. In that regard, it is reassuring that the fall in commodity prices in the second half of 2008 clearly tempered inflation expectations.

48. Meanwhile, the competitive position of Belgian firms has deteriorated. The predominant export focus on countries where demand is rather weak and the persistent losses of market share contributed to the disappearance of Belgium's current account surplus in 2008, although this was also due to the higher cost of imported raw materials and the relative resilience of domestic demand, particularly for investments. The reason for the decline in market share lies both in the adverse movement in relative costs and the insufficient specialisation in products which, thanks to their technology content and specific characteristics, are more in demand.

49. While it will take the resolute pursuit of structural policies to improve the more qualitative aspects of the Belgian economy's competitiveness, cost control is based on two pillars. On the one hand, the Competition Council and the network industry regulators, aided by the findings of the newly created Price Observatory, will simultaneously help to maintain consumer purchasing power and moderate business costs via more effective competition, e.g. in the trade sector, and a reduction in monopoly rents in various sectors, such as electricity, gas and telecommunications. On the other hand, the wage negotiations must be concluded in the spirit of the law on the promotion of employment and the safeguarding of competitiveness, another feature specific to Belgium. The wage norm agreed in that connection for the period 2007-2008 was exceeded because inflation was higher than expected. Overall, from 1996 to 2008, the increase in hourly labour costs in Belgium was around 4 percentage points above the reference value, namely the average increase recorded in the three neighbouring countries : Germany, France and the Netherlands. In the central agreement concluded in December 2008 for the years 2009 and 2010, the social partners set the scope for negotiation at a maximum of 250 euro per worker in standard operation, in addition to the application of the wage-indexation mechanism and scale increases. A maximum of 125 euro may be granted in 2009, either non-recurring or chargeable to that amount. Government support will facilitate a further reduction in business operating costs which could help to alleviate the competitive handicap. In a period when the economy is shrinking and the outlook for prices in Belgium and wages in the partner countries is more uncertain, the primary concern for the pay negotiators in individual sectors and firms must be to avoid aggravating that handicap and to protect employment.

Structural policy

50. At a time when the financial crisis and its implications are the main focus of attention, it is important not to neglect the Lisbon strategy and structural reforms designed to improve the efficiency of all markets and ensure sustainable development. The crisis itself will lead to restructuring, and while there is a need to attenuate the consequences, the primary consideration is to prepare the economy for the changes ahead.

51. Thus, the labour market in Belgium is bound to feel the impact of the contraction in global demand. In these circumstances, it is vital to ensure that the cyclical job losses do not result in structural unemployment and permanent retirement from the workplace, as happened in previous recessions, because such a derailment would compromise future growth potential. Efforts must be concentrated on helping victims of the crisis who lose their job, particularly

by ensuring that the job centres have the resources to implement a retraining policy geared to labour market requirements. More generally, there is a need to improve the monitoring and training of the unemployed. The augmentation of the assistance procedure for new job seekers will therefore be welcome. In order to prevent young people – especially those with few skills – from joining the ranks of the long-term unemployed, they must also be provided with support as soon as they leave school, and steered towards suitable training where appropriate, preferably in the form of apprenticeships.

52. Preparing for the post-crisis period also implies taking account of the demographic prospects and the structural mismatch between labour supply and demand, which could quickly lead to the recurrence of labour shortages in some market segments once activity picks up. Allowance must be made for the time required to implement the measures. Thus, the gradual raising of the female retirement age, initiated several years ago, is continuing to have a beneficial effect on the average employment rate of the population of working age. However, in 2008 that rate was still only 62.5 p.c. The efforts designed to encourage the participation of groups who are more difficult to integrate into working life, such as those over the age of 55 and those from non-EU countries, must be maintained. Improvements in basic and lifelong training remain crucial in order to give the maximum number of people a better chance of finding work and to make progress towards the knowledge economy. Both functional and geographical mobility must be encouraged.

53. The same concern for the future is required in regard to support for producers of goods and services. In the short term, the government will monitor financing conditions and take measures to ensure that businesses, particularly small and medium-sized firms, do not have to contend with funding constraints. The longer-term policies aimed at encouraging the establishment and development of businesses, stimulating innovation and creativity, and promoting forms of production and consumption which are better for the environment – particularly those which use less energy and other natural resources – must also be intensified; they may help to find a way out of the crisis via the development of new activities.

54. A rise in the prosperity of the Belgian population will continue to depend on productivity gains in all sectors and on the development of a supply of ever-improving goods and services, of a quality appreciated by foreign markets. A microeconomic analysis of industry reveals that exports of goods from Belgium depend on a relatively small number of firms, which are larger and more productive than the average. It is important to ensure that the population of exporters is renewed and expanded by supporting entrepreneurial spirit and innovation. R&D efforts are also over concentrated and need to be augmented. Too often, foreign sales are confined to neighbouring markets; greater advantage should be taken of demand from emerging economies. Where market services are concerned, Belgium's performance is relatively satisfactory in the case of business services: here, growth between 2000 and 2005 actually outpaced that in the United States, and productivity has benefited from substantial investment in information technology and telecommunications. That performance needs to be extended to all branches of activity, including non-market services. While innovation increasingly originates via participation in international networks, the strengthening of higher education and research hubs, and close cooperation between public authorities, research centres and enterprises, remain essential factors in comparative advantages. It is also essential to remove the barriers impeding the entry on the economic scene of new players with the potential to innovate and stimulate competition.

55. The year 2008 ended with a dramatic deterioration in the global economic situation. Today, the key issue is to restore confidence and find a route to recovery via a consistent package of speedy measures and fundamental reforms, in a framework of closer international and European cooperation. Belgium will not escape the repercussions of the financial crisis, but the quality of

the economic policy response will be decisive. It is vital to incorporate the shock prevention or attenuation measures in a strategy which does not lose sight of the longer-term objectives, and in which all economic decision-makers participate.

Brussels, 28 January 2009

[3] Guy Quaden, GOVERNOR
[7] Luc Coene, VICE-GOVERNOR
[8] Marcia De Wachter, DIRECTOR
[2] Jan Smets, DIRECTOR
[5] Françoise Masai, DIRECTOR
[4] Jean Hilgers, DIRECTOR
[6] Peter Praet, DIRECTOR
[1] Norbert De Batselier, DIRECTOR

Board of directors

2 3 4 6
5 7
1 8

[13] Guy Quaden, GOVERNOR
[18] Luc Coene, VICE-GOVERNOR
[16] Marcia De Wachter, DIRECTOR
[14] Jan Smets, DIRECTOR
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[17] Peter Praet, DIRECTOR
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[2] Didier Matray, REGENT
[4] Rudi Thomaes, REGENT
[7] Rudy De Leeuw REGENT
[1] Piet Vanthemsche REGENT
[6] Jean-Pierre Arnoldi, GOVERNMENT COMMISSIONER

Council of regency

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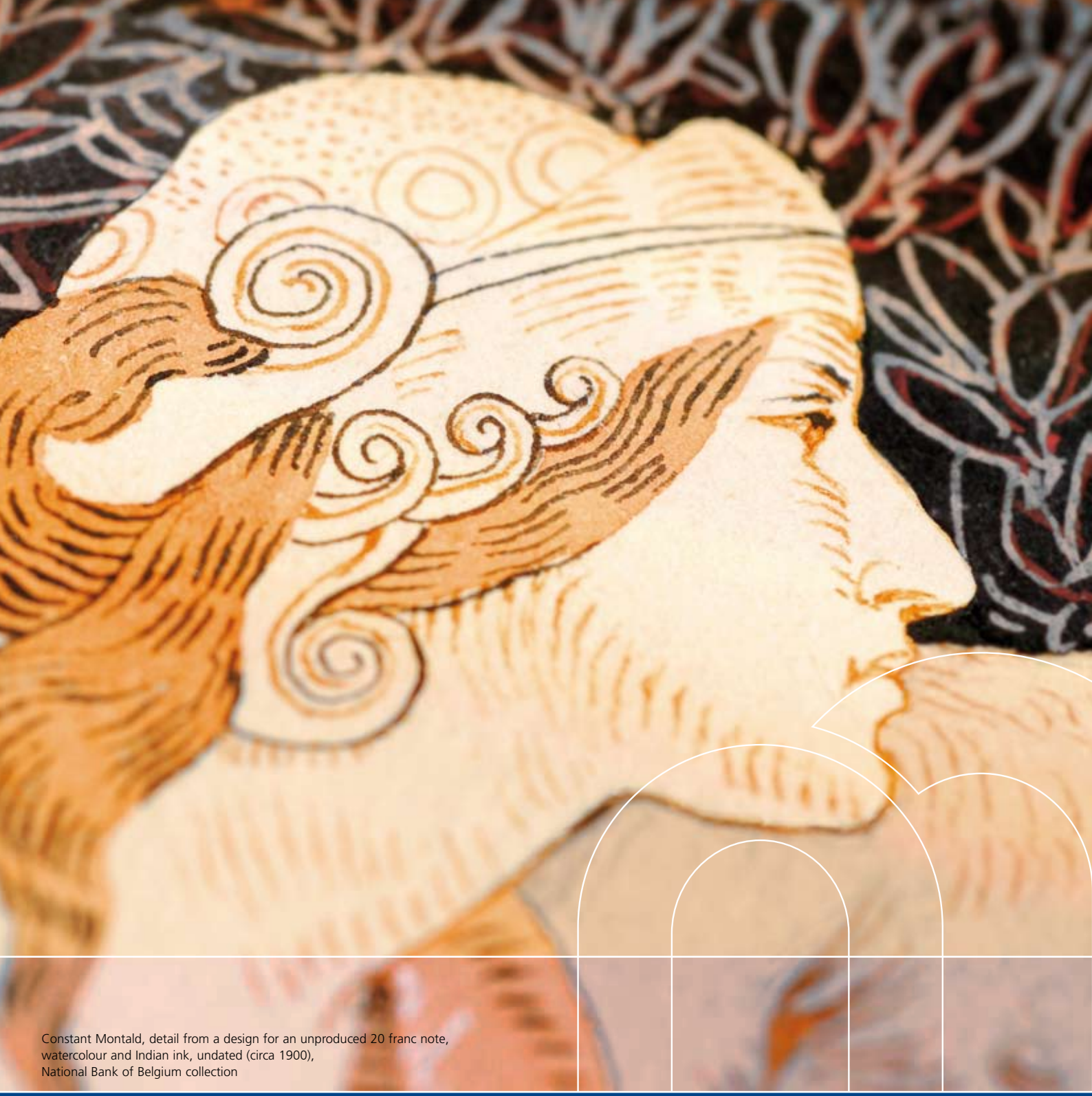


Constant Montald, detail from a design for an unproduced 20 franc note,
watercolour and Indian ink, undated (circa 1900),
National Bank of Belgium collection

International environment

1.

1.1 Summary

The financial turmoil which erupted in mid 2007 following the collapse of the subprime mortgage market in the United States spread in waves during the year under review, culminating in the most severe international financial crisis in decades.

During 2008, the impact affected more and more financial market segments and a steadily growing number of institutions, headed by those which were seriously exposed to the residential property crisis in the United States or those heavily dependent on wholesale market finance. Thus, the American investment bank *Bear Stearns* encountered liquidity problems in the spring, while the government-sponsored mortgage agencies, *Fannie Mae* and *Freddie Mac*, which control or guarantee a large part of the US mortgage market, and the world's largest insurer, *AIG*, got into difficulties during the summer. However, the crisis escalated from mid September, after the announcement in the United States of the failure of a leading investment bank, *Lehman Brothers*, followed by the problems facing the commercial bank *Washington Mutual*.

Not only did this mean substantial write-downs for numerous counterparties throughout the world, but it also and above all caused a serious loss of confidence in the solvency of financial institutions. The consequences were disastrous in many countries: interbank markets, which had already been struggling for several months, were paralysed, several financial institutions faced an acute liquidity deficit, risk premiums increased exponentially and stock markets plummeted. Financial markets of emerging countries, which were not directly affected by losses on assets linked to American mortgage loans, did not escape unscathed since international investors took refuge in what they considered the safest investments, such as securities of sovereign issuers in advanced countries. Emerging economies facing serious internal or external imbalances, such as substantial public deficits or heavy external debts denominated in foreign currency, proved to be the most vulnerable to the reversal of investor sentiment.

In response to this exceptionally unstable situation, central banks took decisive action in order to limit the systemic risk presented by the crisis, by granting more liquidity and relaxing the associated conditions, notably in regard to collateral. National authorities also intervened in various ways to safeguard the financial system, in particular by the recapitalisation of financial institutions and the provision or extension of guarantees covering deposits or new interbank liabilities. Finally, the first moves to reinforce the regulatory framework were made at the European level and in international fora such as the G20. Together, these measures restored relative calm on the financial markets. However, the situation remained very precarious, as was evident from the obvious mutual mistrust which market players continued to display, so that the central banks had to continue their massive injections of liquidity.

As time went by, a growing number of indicators revealed that the global banking and financial crisis was having adverse consequences for the real economy, via the tightening of credit conditions for businesses and individuals, the loss of confidence among consumers and business leaders, the negative wealth effects resulting from share price and house price corrections, and the impact of the deceleration in economic activity on international trade. As a result, estimates and forecasts relating to economic growth were regularly revised downwards.

Confronted not only by this exceptionally severe banking and financial crisis, but also by the consequences of commodity prices rising to new record levels, and the chill wind on the residential property market which affected a number of regions, the global economy could not escape a marked slowdown in 2008, after several years of exceptionally vigorous activity with growth rates approaching 5 p.c. The advanced economies suffered most from the cyclical downturn. Thus, the euro area and Japan recorded negative growth by the second quarter and were joined by the United States from the second half of the year, as fiscal stimuli and buoyant exports had supported demand in that country until the summer. Taking the year under review as a whole, most of the OECD member countries still recorded positive growth, but that is due largely

to the significant carry-over effect originating from the expansion of activity during 2007.

Although, as in previous years, the emerging economies made by far the biggest contribution to the expansion of the global economy – 2 percentage points in the case of the emerging Asian and Latin American countries – it became increasingly clear as time went by that they, too, would feel the impact of events in the advanced countries. On the financial front, the frantic quest for liquidity by some institutions and the strong preference for risk-free securities caused share prices to tumble, drove risk premiums much higher on securities issued by governments of emerging countries, and exerted pressure on exchange rates. Moreover, exports of countries such as the new EU Member States and China are still very dependent on the advanced economies, which are their main trading partners. The slump in growth in the United States and the euro area therefore had an adverse effect on exports in those countries.

In the first half of the year, galloping inflation due largely to the surge in commodity prices forced a number of central banks to adjust the path of their main policy rates. For instance, after April the US Federal Reserve had to halt the reductions in the target federal funds rate initiated in September 2007. At the beginning of July, the ECB Governing Council decided to raise the minimum bid rate of the main refinancing operations to 4.25 p.c. Subsequently, however, the risk of inflation subsided in the wake of the marked downturn in commodity prices, and medium-term inflation expectations moved back in line with the objective of price stability, so that the monetary authorities were able to take greater account of the outlook for economic activity, which had meanwhile become considerably gloomier owing to the financial

TABLE 1 GDP GROWTH IN THE MAIN ECONOMIES

(percentage volume changes compared to the previous year, unless otherwise stated)

	2006	2007	2008	*p.m. 2007, share of global GDP*[1]	*p.m. 2008, contribution to world GDP growth*[1]
United States	2.8	2.0	1.4	*21.6*	*0.30*
Japan	2.4	2.1	0.5	*6.7*	*0.03*
Euro area[2]	3.0	2.6	1.0	*16.3*	*0.17*
Denmark, United Kingdom and Sweden	3.1	2.9	0.7	*4.7*	*0.04*
Other EU Member States[3]	6.7	6.3	4.8	*1.8*	*0.08*
Other advanced OECD countries[4]	2.9	3.3	1.2	*3.9*	*0.05*
China	11.6	11.9	9.7	*10.9*	*1.06*
India	9.6	9.3	7.9	*4.6*	*0.36*
Other emerging Asian countries[5]	5.5	5.8	4.6	*6.9*	*0.31*
Latin America[6]	5.2	5.5	4.3	*7.8*	*0.33*
Main oil-exporting countries[7]	6.7	7.1	6.3	*7.7*	*0.49*
Rest of the world	5.1	7.3	8.0	*7.2*	*0.58*
World[1]	5.0	5.0	3.8	*100.0*	
p.m. World trade[8]	*9.4*	*7.0*	*4.8*		

Sources: EC, IMF, OECD.

(1) The percentage point contribution to global GDP growth of the country or group of countries considered and their percentage share of global GDP are calculated in the same way as global growth, on the basis of purchasing power parities.

(2) Excluding the countries which joined the euro area after 2006.

(3) Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia.

(4) Australia, Canada, Iceland, New Zealand and Switzerland.

(5) Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand.

(6) Excluding Venezuela.

(7) Oil-exporting countries recording a current account surplus in excess of 25 billion US dollars over the period 2005-2007 (Algeria, Angola, Iran, Kuwait, Libya, Nigeria, Norway, Qatar, Russian Federation, Saudi Arabia, United Arab Emirates and Venezuela).

(8) Average exports and imports of goods and services.

crisis. On 8 October, a number of central banks including the Federal Reserve, the Eurosystem and the Bank of England therefore implemented a coordinated reduction in their main policy rates, action which was followed on the same day by the People's Bank of China. That was the prelude to a more widespread reduction in those rates, which in mid December even led two of the largest central banks to opt for a zero or almost zero interest rate policy. Thus, the US Federal Reserve cut its target for the federal funds rate to a range of 0 to 0.25 p.c., while the Bank of Japan reduced its central rate to 0.10 p.c. Overall, taking account of the 50 basis point reduction decided on 15 January 2009, the Eurosystem cut its central rate to 2 p.c. In the same way, the Bank of England and the People's Bank of China also eased their monetary policy.

The measures which the authorities adopted to contain the financial crisis and support economic activity had an impact on public finances in 2008. In the United States in particular, where fiscal stimuli had already been introduced early in the year, the structural public deficit mushroomed while the public debt escalated even faster. In the euro area, the budget position was also affected but the impact was more limited overall. In Japan, the public sector borrowing requirement actually recorded a structural improvement. Nonetheless, it is mainly in 2009 that the effects of the economic recovery plans will place a burden on the budget balance in these economies, since the measures taken in this connection were generally not adopted until towards the end of the year under review.

1.2 The financial crisis

Origin and causes of the financial crisis

The turmoil which disrupted the international financial system from mid 2007 became steadily more severe and engulfed an ever-increasing number of financial market operators. In the second half of 2008, it culminated in the most serious banking and financial crisis since the great depression of the 1930s. While the factors which triggered this disruption were the deterioration in the residential property market in the United States and the ensuing proliferation of defaults in the American sub-prime mortgage segment, the causes of the calamity are more profound.

Recent years saw particularly strong credit growth in a context of risk under-pricing, leading to excessive risk-taking which inflated and weakened the balance sheets of financial institutions. In addition, the declining propensity to save among households in a number of advanced countries reduced the banks' scope for retail funding, forcing them to turn increasingly to the short-term wholesale market to finance their lending. Various factors encouraged the exceptional expansion of credit and the low risk premiums.

The first point to mention is the low level of short-term interest rates worldwide in the first half of the decade, especially in the United States. Following the bursting of the stock market bubble in 2000-2001, the US monetary authorities conducted a very accommodating monetary policy for several years, in an environment where price stability was fostered by the influence on inflation of globalisation, namely the downward pressure exerted by ever-expanding cheap imports from a number of emerging countries, such as China. Since those countries did not allow their currency to appreciate significantly against the US dollar, they eased their monetary policy to a marked degree and accumulated substantial official reserves.

These developments augmented global imbalances, particularly the worsening foreign trade deficit of the United States and the expansion of current account surpluses in emerging economies, reflecting an abnormally low level of American household savings and, conversely, excess savings in China and other emerging countries. By investing their official reserves in claims on advanced economies, emerging countries contributed to a further easing of financial conditions there, both short and long term.

The low interest rates stimulated demand for loans, principally in a number of advanced countries, and prompted a quest for yield and a decline in risk aversion in a context of a stable and vigorous global economy. This therefore led to excessive prices, not only for financial assets but also in some cases for property.

A number of changes or shortcomings in the financial system also merit a mention. First, financial innovations, and especially those connected with the development of the originate-to-distribute model, had a considerable influence. In this model, credit institutions offer loans which they originated, for sale on the capital market, whether after securitisation or not. There was sustained demand for the securities thus placed in circulation, since at first sight they appeared to combine a high return with low risk. In addition, the fierce competition in the financial sector and the mechanisms introduced for remunerating certain categories of staff in many financial institutions led to increased risk-taking. Finally, there were in some cases clear defects in both the internal and the external regulation and supervision of the financial sector. Thus, the regulations were not always adapted in line with new developments in the sector. Moreover, supervision was

too fragmented, and sometimes there was also a lack of coordination between the various regulators.

The escalating defaults on a small and – at first sight – isolated market in American subprime mortgages revealed the lack of attention to the ever-increasing risk profile of the borrowers and to the lack of transparency in the instruments – particularly structured finance products – which the credit institutions had used to securitise their loans for the purpose of selling them on the markets. This made it difficult to determine the market value of those products and the market players' individual exposure to potential losses. These problems led to an erosion of confidence among financial institutions, which became reluctant to grant one another liquidity, and to increasing fears regarding their solvency as the crisis spread to other market segments and economic growth lost momentum. The crisis unfolded in waves with successive periods of heightened tension, engendered mainly by the deteriorating economic outlook and growing anxiety about the vulnerability of some financial institutions. The temporary lulls between these phases of tension were generally due to government intervention.

Initial phase of the financial crisis

As explained in detail in box 2 of the Bank's 2007 Report, payment defaults in the subprime mortgage market in the United States had begun to proliferate during 2005, particularly when market interest rates increased in response to the tightening of monetary policy by the US Federal Reserve. However, it was not until the beginning of 2007 that risk premiums on a range of securities backed by subprime mortgage loans increased substantially. This process had accelerated from June 2007 owing to the rating agencies' revision of their method of valuing these securities, which had led to an unexpected downgrading of the rating accorded to some of them and the announcement of substantial losses on these instruments by a number of hedge funds. This led to a slump in the volume of trading in these instruments, and a number of institutions experienced increasing difficulty in meeting their liquidity needs. By the end of July 2007, the fall-out from the incipient crisis had begun to have an impact outside the United States. The tension had reached an initial temporary peak on 9 August 2007, when the French bank *BNP Paribas* had announced that several of its investment funds could no longer meet investors' demands for repayment, following problems in realising the underlying assets. This caused a crisis of confidence on the interbank markets, with a rapid widening of the spread between the interbank interest rate and the fixed rate paid on overnight index swaps (OIS), increased volatility and a slump in the volumes traded. These troubles had rapidly contaminated other financial market segments. Stock markets plummeted, particularly the prices of financial stocks, and the yield differential between corporate and government bonds widened, owing both to the need for various financial institutions to sell assets in order to release liquidity, and to a flight by investors into risk-free securities. During this period, the financial markets of the emerging countries had stood up fairly well, having regard to the relatively good fundamentals of those economies, and the fact that their financial institutions had little direct or indirect involvement in funding the US mortgage market.

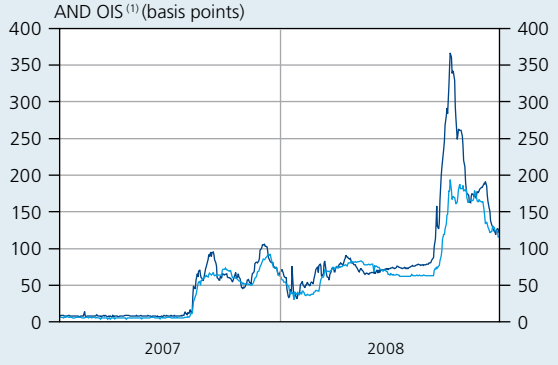
The multiple measures by central banks of advanced countries in the form of the supply of additional liquidity on the money market, the British government's granting of a guarantee covering deposits with the mortgage bank *Northern Rock*, and the US Federal Reserve's interest rate cut had secured a brief improvement in the financial market situation from the second half of September 2007. However, pressure had intensified again by mid October as a result of bad news concerning the US residential property market and further downgrading of the ratings of products linked to subprime mortgage loans. It had also become clear that banks needed more funds than initially expected, owing to the incorporation in their balance sheets of a range of structured investment vehicles which could no longer be sure of obtaining market funding – notably by the issue of commercial paper. The fears surrounding the financial sector had been further accentuated by the publication of disappointing interim results, the difficulties facing monoline insurers, and uncertainties over the availability of sufficient liquidity at the end of the year, though the latter were quickly dissipated by the massive injection of liquidity by the central banks.

After the tensions on the financial markets had stabilised to some extent at the end of 2007, the publication of adverse economic figures in early 2008 reinforced the fears concerning the impact of the financial crisis on the economies of the United States and the rest of the world. In February, the approval of the Economic Stimulus Act (ESA) by the American Congress had hardly any effect. The tensions reached a new temporary peak in the first half of March 2008 with the liquidity problems facing the American investment bank, *Bear Stearns*. This greatly heightened the fear of a systemic crisis. The US authorities responded by adopting a range of measures, which included facilitating the financing of the takeover of *Bear Stearns* by *JPMorgan Chase*, a major American financial services group, while shortly afterwards the Federal Reserve made a large cut in its central rate, at the same time initiating a number of moves to improve market liquidity. After having narrowed at the end of 2007,

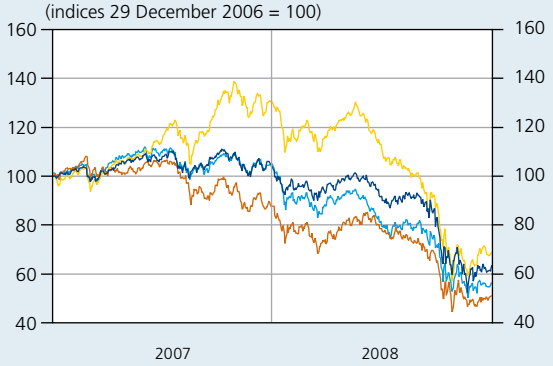
CHART 1 MARKET CONDITIONS

(daily data, unless otherwise stated)

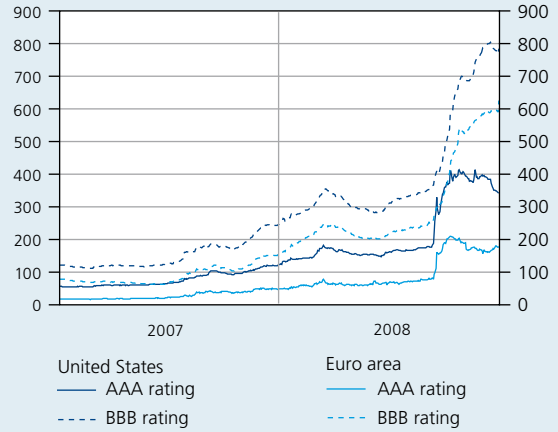
SPREADS BETWEEN THE THREE-MONTH LIBOR/EURIBOR AND OIS [1] (basis points)



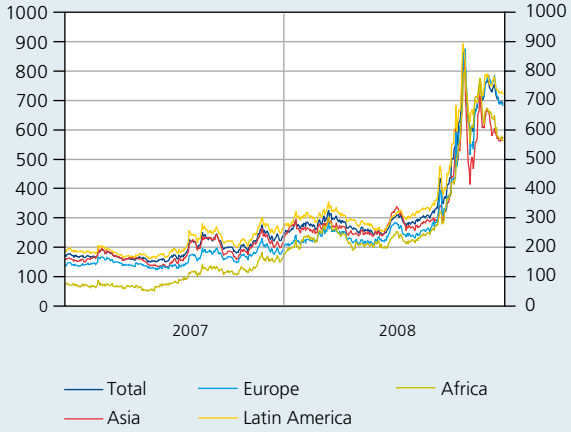
STOCK MARKETS
(indices 29 December 2006 = 100)



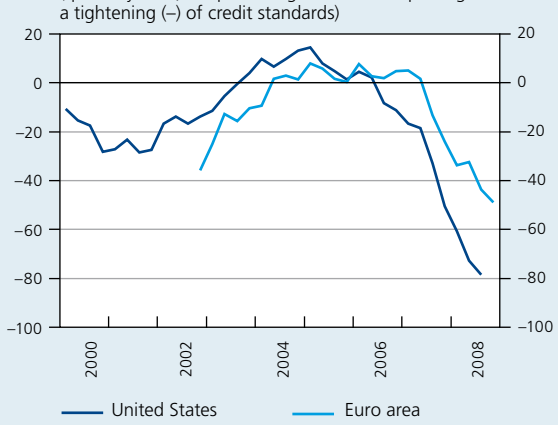
YIELD DIFFERENTIALS BETWEEN CORPORATE BONDS AND BENCHMARK GOVERNMENT BONDS
(basis points)



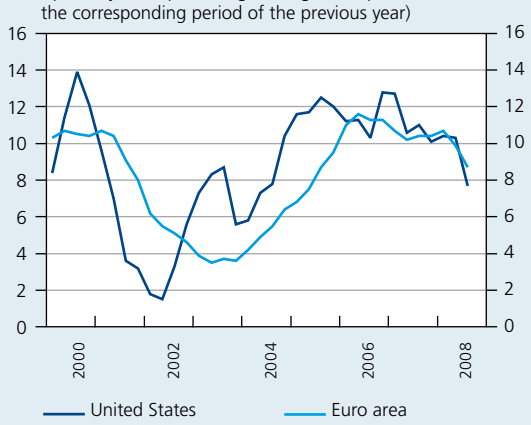
YIELD DIFFERENTIALS ON GOVERNMENT BONDS BETWEEN EMERGING COUNTRIES AND THE UNITED STATES [6]
(basis points)



CREDIT STANDARDS [7]
(quarterly data, net percentages of banks reporting a tightening (–) of credit standards)



BANK LOANS TO BUSINESSES AND HOUSEHOLDS
(quarterly data, percentage changes compared to the corresponding period of the previous year)



Sources: Bloomberg, JPMorgan Chase, Thomson Financial Datastream, Federal Reserve, ECB.

(1) Fixed rate paid by the counterparty of an interest rate swap receiving the overnight rate for a three-month term (Eonia for the euro area, effective federal funds rate for the United States).

(2) *Wilshire 5000* index.

(3) *Dow Jones Euro Stoxx Broad* index.

(4) *Topix* index.

(5) *MSCI Emerging Markets* index.

(6) *EMBI+* index, differentials on loans for similar terms, in dollar.

(7) Average of the responses to bank surveys on lending to businesses and households.

however, the spread between the interbank rate and the OIS fixed rate widened again, as did the differential between yields on corporate and government bonds, which spiked in mid March, partly as a result of the flight to quality on the part of investors. Stock markets fell sharply in the initial months of the year, and the financial markets of emerging countries also came under pressure, although they proved relatively resilient.

From the second half of March and in the ensuing two months, most markets recovered thanks to repeated intervention by governments and central banks. Moreover, thanks partly to that intervention, the economic outlook improved and there were encouraging reports of recapitalisation efforts being made by various banks. This alleviated fears of a systemic risk. A number of indicators also improved during this period: yield spreads on bond markets diminished, stock markets rallied and liquidity increased on a number of financial markets. However, there was no notable narrowing of interest rate spreads on the interbank market, since the problems with *Bear Stearns* had clearly exposed the vulnerability of financial institutions in the face of the evaporation of liquidity on this market.

From the end of May, financial market tension intensified once again, owing to a growing number of signs indicating a slowdown in global economic activity, plus rising inflation. There was therefore concern over the soundness of businesses and the corresponding changes in their ratings. During this period, the crisis spread progressively to market segments which had previously been relatively spared.

Second phase of the financial crisis

After a slight lull in July, the situation worsened again from August, owing in particular to the rising anxiety about the solvency of two government-sponsored mortgage refinancing agencies in the United States, *Fannie Mae* and *Freddie Mac*, in the context of the crisis in the residential property sector in America. To remedy the situation, the American government adopted a series of radical measures at the beginning of September to save these two institutions from bankruptcy, including the injection of capital and the transfer of their routine management to the *Federal Housing Finance Agency*, the body responsible for regulating the government-sponsored mortgage refinancing agencies. This government intervention was particularly important in view of the crucial role of these two agencies on the American mortgage market, and in the global financial system. In fact, around 50 p.c. of American mortgage loans are held or guaranteed by these agencies, and their securities are spread throughout the global financial system. Attention then focused on other American financial institutions, particularly the big investment banks which faced growing pressure. From mid September, a number of significant events had a serious impact on the prospects for the American financial sector. First, the investment bank *Lehman Brothers* went into composition proceedings. Shortly afterwards came the announcement of a plan to rescue the world's largest insurance company, *AIG*, with the State acquiring a majority interest; the investment bank *Merrill Lynch* was taken over by the *Bank of America* and several other commercial banks were placed in conservatorship (*Washington Mutual* was taken over by *JPMorgan Chase,* and *Wachovia* by *Wells Fargo*, another commercial bank). Finally, the major investment banks, *Goldman Sachs* and *Morgan Stanley*, announced their change of status to bank holding companies, in order to gain easier access to Federal Reserve loans.

These events, and especially the failure of *Lehman Brothers* in view of that institution's role on international financial markets, as discussed in more detail in chapter 8 of this Report, triggered a widespread and extremely rapid loss of confidence. In consequence, market players scaled down their exposure and became extremely reluctant to grant one another loans, even in the very short term. This seriously disrupted the operation of the interbank markets, and liquidity dried up almost completely on those markets. Investors turned to investments reputed to be risk free, such as gold and sovereign securities. Central banks responded to this exceptional situation by granting additional liquidity and relaxing the conditions applicable to these operations. Chapter 2 on monetary policy explains in more detail how the Eurosystem addressed the situation. In addition, swap agreements in dollar between the Federal Reserve and a number of central banks, including the Eurosystem, were extended and new agreements were concluded with other central banks, in order to guarantee liquidity in dollar outside the United States. A number of national governments also took the initiative in coming to the aid of financial markets. In the United States, a temporary government guarantee was granted in respect of money market funds, and Congress approved the Emergency Economic Stabilization Act, one aim being to make available 700 billion dollars. A number of countries also decided to prohibit short selling of shares issued by financial institutions.

Despite this intervention, the markets became increasingly nervous from the end of September and financial institutions were beset by serious problems in many countries, such as Germany, Belgium, Iceland, the Netherlands and the United Kingdom. It appears that the institutions

which came under the most severe stress generally had a number of characteristics in common, namely exposure to the US property crisis, the granting of risky loans, a high debt ratio and, more particularly, heavy dependence on wholesale market funding. Spreads between interbank interest rates and the OIS fixed interest rate continued to widen, as did yield differentials on the bond market; share prices collapsed; there was a renewed clamour for government paper; emerging markets came under growing pressure, with plummeting share prices and a marked widening of the yield differential in relation to US government bonds. In a number of countries, government authorities responded by intervening once again, recapitalising financial institutions, granting or extending guarantees on bank deposits and guaranteeing interbank liabilities where necessary. In addition, monetary authorities reacted with a coordinated reduction in their main policy rates, an additional supply of liquidity, and further relaxation of the conditions for granting liquidity. Furthermore, the Federal Reserve offered unlimited liquidity in dollar to certain central banks, including the Eurosystem. In Europe, the authorities examined ways of strengthening the regulatory framework governing the operation of the financial system. Thus, at the beginning of October, the European Commission proposed several amendments to the Capital Requirements Directive, such as a limit on interbank financing by credit institutions, more stringent supervision of banks active in multiple countries, the obligation on financial institutions to retain on their balance sheets some of the mortgage-backed securities which they issued, definition of clear criteria on regulatory own funds, and improvements to liquidity risk management for banks active in several countries. In addition, euro area Member States agreed a series of measures to stabilise the financial sector.

Some of the measures by the authorities were successful, and from mid October the escalation of financial market tension ceased, and an improvement even appeared on a number of markets. This consisted mainly in the marked narrowing of the spread between LIBOR and the OIS fixed interest rate. The interest rate premium on government bonds issued by the emerging economies also narrowed. However, the situation remained uncertain. Thus, on the interbank markets, players continued to display great mistrust of one another, so that it was still the central banks that supplied most of the liquidity. In view of a new deterioration in the economic situation, share prices continued to slide, the yield differential between corporate bonds with a BBB rating and government bonds widened further, and the interest rate premium on government bonds issued by the emerging economies increased again. Moreover, the financial sector situation remained unstable, as is evident from the plan developed at the end of November by the US authorities to rescue *Citigroup*, a major American bank. On 15 November, the G20 – representing the main advanced and emerging economies, and meeting by way of exception at the heads of State and government level – reached agreement in principle on a number of global reforms to the financial system and market surveillance. On 26 November, the European Commission proposed a plan to revive the European economy and to coordinate national efforts to combat the effects of the financial crisis. At the European summit on 11 and 12 December, the EU Member States lent their support to this initiative by announcing fiscal stimuli totalling 1.5 p.c. of GDP for the Union as a whole, including 0.3 percentage point at the expense of Community institutions. The US Federal Reserve announced a programme for taking over some of the bonds and mortgage-backed securities issued by government agencies.

During December, sentiment improved on most of the financial markets: the leading stock markets rallied, and interest rate differentials on interbank markets and emerging bond markets diminished, as did those on some corporate bonds. This improvement was due to a combination of factors. At the beginning of December, the president-elect Barack Obama announced a new American economic recovery plan. In mid December, the American central bank slashed the target federal funds rate, reducing it to a range between 0 and 0.25 p.c., and also announced that it would continue to support the smooth operation of the financial markets and stimulate the economy by various initiatives. At the end of a lengthy period of negotiations, the American government agreed at the same time, under certain conditions, to grant loans to the car manufacturers *General Motors* and *Chrysler*. Finally, at the end of December, an operation was conducted to rescue *GMAC Financial Services*, an agency specialising in the financing of motor vehicle sales. In that context, the announcement that fraud had been committed at *Bernard Madoff Investment Securities*, leading to heavy losses for many institutional investors, had only a temporary adverse effect on a few financial markets. Despite the improvement on financial markets at the end of the year, the situation remained far more unfavourable than it had been prior to the failure of *Lehman Brothers*.

Consequences of the financial crisis

The financial crisis engendered substantial losses. Thus, in its October 2008 Financial Stability Report, the Bank of England estimated that, for the United States, the United Kingdom and the euro area, the losses due to writedowns on securitised instruments and corporate bonds totalled around 2,800 billion US dollars. The current crisis differs

from the major banking crises of recent decades in that it is affecting a far greater number of institutions and geographical regions. Moreover, it is still not possible to arrive at a comprehensive assessment, not only because the financial turmoil has not yet fully subsided but also because the losses were not confined to the securities considered in the Bank of England's estimate, particularly as regards shares and other forms of financial holdings.

During 2008, it became clear that the financial crisis would have major repercussions not only on the financial sector but also on the economy, especially as it coincided with a cyclical downturn and reflected dire problems facing both financial markets and actual banking institutions. There are several channels through which the ramifications spread to the real economy.

One transmission channel concerns the tightening of financing conditions. Thus, in the context of turmoil on financial markets, corporate financing has become more expensive worldwide, owing to increased risk premiums and tumbling share prices. In some cases, finance has also become more expensive for households, leading to a decline in demand for credit, especially as these developments are accompanied by a slackening of economic activity.

A second transmission channel concerns the tightening of other financing conditions on financial markets, e.g. in regard to bank lending, via a restriction on volumes or loan terms, or stricter collateral requirements. That tightening may lead to a reduction in the supply of funds available to businesses or households. Nonetheless, it is difficult to assess the actual importance of this channel as the developments recorded also reflect a slump in demand for funding due to slackening economic activity, higher financing costs and mounting uncertainty. As regards corporate issues of quoted shares, bonds or short-term securities, market conditions have been such that these methods of financing have dried up temporarily. In regard to bank loans, tougher lending conditions were recorded in the United States by the third quarter of 2006, and in the euro area from the third quarter of 2007, in response to the problems facing credit institutions. In both these economies, lending by banks to non-financial corporations and households decelerated sharply in the second half of the year, although in the third quarter of 2008 the rate of expansion was still vigorous at around 8 and 9 p.c. year-on-year respectively.

A third transmission channel lies in the negative wealth effects which followed the collapse of share prices, and in some countries property prices, because the resulting decline in their wealth may prompt households to increase their savings in order to acquire sufficient assets to cover their future needs, and to make corresponding cuts in their consumption expenditure. This effect materialised more rapidly and was more pronounced in the United States, as households in that country have more scope to mobilise the value of their property by obtaining loans to finance current expenditure.

The erosion of confidence is a fourth transmission channel whereby the real economy can be influenced. Less favourable prospects for employment and profitability may undermine confidence in the economy, thus depressing expenditure. In all economies, business and household confidence indicators fell sharply in the second half of 2008.

Finally, there is the international transmission channel whereby a slowdown in economic activity in several countries gradually spreads via international trade, as the slackening of domestic demand in one region affects foreign demand of other economies. In 2008, the rate of expansion of world trade thus dropped to 4.8 p.c. against 9.4 and 7 p.c. respectively in the preceding two years.

1.3 Main developments on the foreign exchange and commodity markets

Exchange rates

The downward trend in the weighted average exchange rate of the US dollar was suddenly reversed during the summer of 2008, as growth prospects in the rest of the world deteriorated. The dollar's appreciation was reinforced by the worsening international financial crisis, when institutional investors turned on a massive scale to low-risk investments, and the US dollar became attractive again on account of its reserve currency status and the high liquidity of American bond markets. Between September and November, the dollar thus gained ground against practically all the leading currencies except the Japanese yen and the Chinese renminbi.

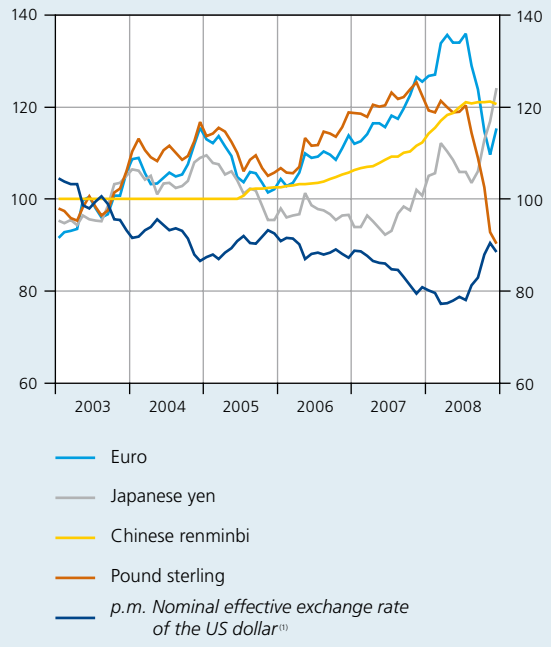
During the year under review, the movement in the weighted average dollar rate was dictated largely by its bilateral exchange rate against the euro. During the period from the eruption of the financial crisis in August 2007 until April 2008, the euro's appreciation against the dollar accelerated. On 15 July, the exchange rate reached an all-time high of 1.599 dollar to the euro (ECB fixing). This rise reflected the widening of the interest rate spreads between the euro area and the United States, and growth prospects which were deemed relatively stronger for the

euro area at that time. After July, when those prospects changed in favour of the United States, the euro began to depreciate sharply against the dollar. In mid September, it recovered to some extent, as a result of concerns over the implementation of the plan to rescue the American financial sector, but it then continued to weaken steadily in the context of the worsening problems facing European financial institutions. In December, it nevertheless appreciated strongly in the backwash triggered by the collapse of *Bernard Madoff Investment Securities* and the decision by the US monetary authorities to cut their key interest rate to virtually 0 p.c. Overall, the euro exchange rate almost regained the level prevailing on 31 December 2007, losing only 5.6 p.c. against the dollar.

During the same period, the pound sterling depreciated by 26.5 p.c. against the dollar. In contrast to the euro, the pound had already begun falling against the US currency in the first half of the year, as the growth outlook for the British economy was less favourable in view of the greater exposure of the British banks to American subprime mortgages and the adverse effects on the real economy of the bursting of the property bubble in the United Kingdom. The outlook became decidedly gloomier still from October, fuelling expectations of more aggressive interest rate cuts in the United Kingdom. The Bank of England did indeed slash its base rate from 5 to 2 p.c. These factors amplified the fall of sterling.

CHART 2 BILATERAL EXCHANGE RATES OF THE LEADING CURRENCIES AGAINST THE US DOLLAR

(monthly averages, indices January 1999 = 100)



Sources: BIS, ECB.

(1) Average exchange rate of the dollar against the currencies of twenty-one advanced countries and four emerging Asian economies, weighted according to their share in US foreign trade.

The exchange rate of the yen follows a different pattern from other currencies and is also more volatile. That is due in particular to the role of the yen as a source for carry trade transactions, in which investments in high interest currencies are financed by borrowings in low interest currencies such as the yen and the Swiss franc. The attractiveness of these transactions is highly sensitive to risk assessment revisions based on macroeconomic and financial developments. In the early part of the year under review, the unwinding of speculative transactions thus continued, coming to a halt in the spring with the return of a degree of stability on financial markets. In September, it resumed when new financial shocks broke out. Overall, the yen appreciated against the dollar by 23.2 p.c.

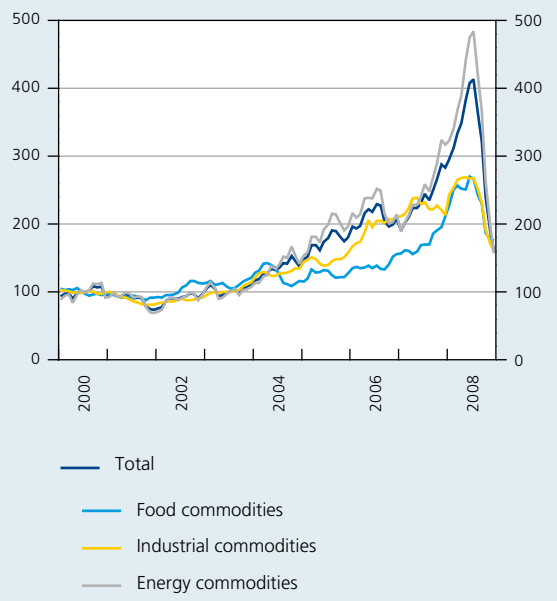
The Chinese renminbi appreciated by 7.8 p.c. between the end of December 2007 and July 2008. This marked acceleration compared to 2007 can be attributed to the need to keep domestic inflation under control. As the inflationary pressures subsided and the international economic crisis spread, the People's Bank of China switched its priority to maintaining growth, reverting to a more or less fixed exchange rate regime at around 6.84 renminbi per US dollar.

Commodity prices

As an annual average, prices of raw materials expressed in US dollar increased by 32.4 p.c., essentially as a result of the increased price of energy and food commodities. However, those prices were very volatile, and there were two quite distinct periods: first a strong rise and then a very marked decline. Owing to the permanent tensions between supply and demand in a context of low stock levels and limited excess production capacity, the upward trend of preceding years persisted in the first half year. In the second half year, those tensions largely subsided as a result of the slowdown in global economic growth and the deteriorating economic outlook. This triggered a steep decline in prices to the point where most commodities were cheaper at the end of the year under review than at the end of 2007. Various studies by international institutions such as the IMF and the International Energy Agency revealed that speculation or keener interest among investors in commodities as an alternative investment had only reinforced the price trend and volatility, but without having any permanent effect. Expressed in real terms, i.e. by comparing them with consumer prices in the United

CHART 3 COMMODITY PRICES

(monthly data, US dollars, indices 2000 = 100)



Source : HWWI.

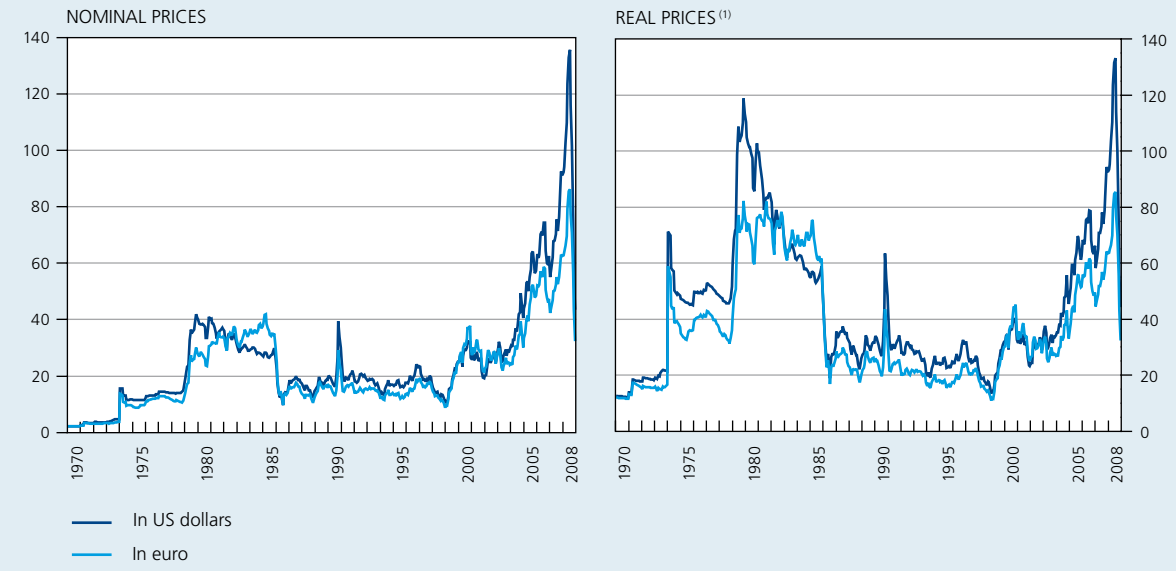
States, commodity prices at the end of 2008 were around 10 p.c. below the average for the past thirty years.

Prices of Brent crude oil expressed in US dollars increased by an average of 35.9 p.c. The oil price was highly volatile during the year under review. After remaining relatively stable between November 2007 and February 2008, it began rising again, peaking at 145.7 dollars on 4 July. It then fell sharply from mid July, returning to around 40 dollars at the end of December, 58 p.c. below the level of a year earlier. In real terms, prices expressed in both euro and dollar hit a new record in July. Prices of energy commodities other than oil, such as natural gas and coal, also increased. Owing to production and supply problems and the increasing substitution of coal for oil in power stations, the coal price soared by an average of 95 p.c. over the year.

The renewed surge in the price per barrel of Brent in the first half of the year was due partly to the persistently strong demand from the emerging countries. In those countries, a policy of increasingly generous subsidies has in fact largely sheltered consumers from the price rises on the international markets in recent years. Moreover, economic growth there has remained vigorous. On the supply side, there was uncertainty regarding output, especially owing to geopolitical tensions, and it was not possible

CHART 4 CRUDE OIL PRICES

(monthly averages, per barrel of Brent)



Sources : EC, Thomson Financial Datastream.

(1) Nominal prices deflated by the CPI or, if available, the HICP (indices 2008 = 100) of the United States and the euro area. For the conversion of the euro price per barrel of Brent, figures prior to 1999 are based on the ecu rate against the dollar.

to bring additional production capacity into use at short notice. Finally, financial factors, such as the continuing depreciation of the dollar, also played a role.

The dramatic fall in the oil price in the second half of the year was due primarily to the sharp contraction in demand in advanced countries and the serious worsening of global economic prospects. Taking the year under review as a whole, final demand for oil declined for the first time since 1984, falling by 0.3 p.c. compared to a 1.1 p.c. increase in 2007. Supplies remained at a high level throughout the year despite the output restrictions introduced by OPEC in the second half of the year. On average, total output increased by 1.2 p.c. in 2008, compared to 0.1 p.c. in 2007. Finally, the strong appreciation of the dollar in the second half of the year also exerted downward pressure on the Brent price.

For the whole year under review, food commodity prices expressed in US dollars increased by an average of 33.6 p.c. against 2007. This rise, which had begun in 2002, continued in the first half of the year, mainly owing to soaring energy prices and the proliferation of export restrictions. From July, better harvests, the lifting of some of those restrictions and the fall in energy prices triggered a downward trend. At the end of the year, prices of most food commodities were below those prevailing a year earlier, with the notable exception of rice, which remained over 40 p.c. more expensive.

After declining in the second half of 2007, industrial commodity prices increased in the first half of 2008, propelled mainly by the rising prices of ferrous metals. In the second half of the year, there was a marked fall in the prices of most metals, owing to the slowdown in global growth and the deteriorating economic outlook. Taking 2008 as a whole, industrial commodity prices rose by an average of 5.4 p.c., the driving force being ferrous metals which went up by 60.4 p.c.

1.4 Advanced economies

1.4.1 United States

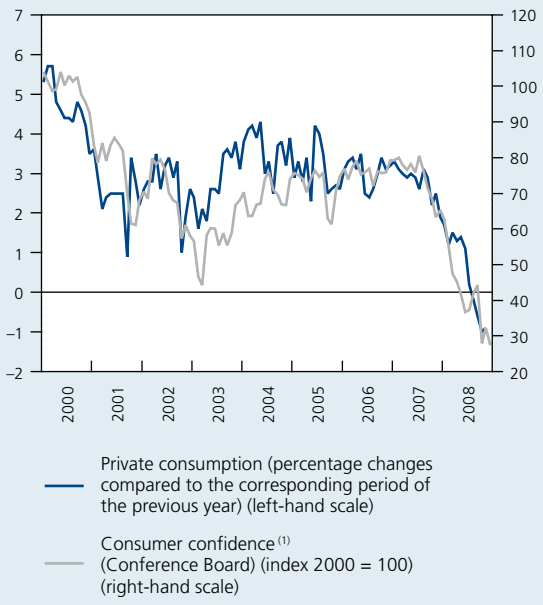
American economic growth became negative during 2008, as a result of the growing malaise affecting the residential property sector and the deepening financial crisis. The sluggishness of domestic demand, not only for investment but also – for the first time in the current economic cycle – for private consumption brought a marked slowdown in economic activity. Conversely, net exports made a significant positive contribution, even greater than in the previous year. Over the year as a whole, the economy grew by 1.4 p.c., but that was due essentially to the carry-over from 2007 and to a relatively favourable first half year, resulting partly from the economic stimulus package approved by the US government. However, the labour market situation deteriorated: employment declined and the unemployment rate increased.

Following a slight contraction in the final quarter of 2007, economic activity expanded by 0.2 and 0.7 p.c. respectively in the ensuing two quarters. GDP growth clearly diminished in the second half year, and the economy contracted by 0.1 p.c. in the third quarter, and as much as 0.7 p.c. in the fourth quarter.

Household consumption expenditure was much less dynamic than in previous years. It increased by only 0.4 p.c. over the year as a whole, compared to an annual average of 3 p.c. from 2003 to 2007. There are several factors which account for this. First, the rise in disposable income in real terms dropped from 2.8 to 1.3 p.c. owing to more moderate wage increases, declining employment and rising inflation. Next, there was a decline in net household assets owing to the additional fall in house prices and the share price correction: in the third quarter, those assets were around 11 p.c. below the peak

CHART 5 PRIVATE CONSUMPTION AND CONSUMER CONFIDENCE IN THE UNITED STATES

(seasonally adjusted monthly data)



Source: Thomson Financial Datastream.
(1) Balance of responses to the monthly survey.

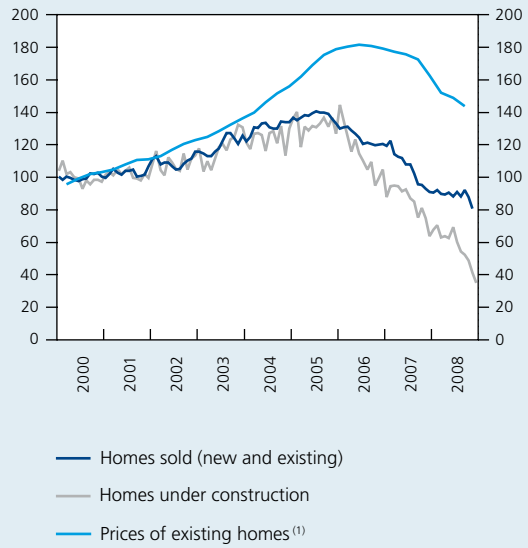
attained in the corresponding quarter of 2007. Finally, renewed tightening of lending conditions applied by financial institutions also depressed household spending. Conversely, private consumption was sustained, primarily in the second quarter, by the tax rebate cheques received by some households under the Economic Stimulus Act discussed below. Overall, the household savings ratio increased from 0.6 to 1.6 p.c.

As in previous years, individuals substantially scaled down their investment in housing, owing to the large stock of unsold homes – due partly to the considerable number of forced sales – and the accompanying fall in residential property prices. The worsening financial crisis also played a key role, leading to a further tightening of mortgage lending conditions and a temporary rise in a number of reference mortgage rates. In November, the number of homes sold was 42.6 p.c. down against its July 2005 peak, while in December the number of homes under construction was 75.8 p.c. below the record level of January 2006.

American business investment languished, expanding by only 2.4 p.c. compared to 4.9 p.c. in 2007. This slowdown is due to the deterioration in the business climate and the economic outlook, and to less favourable financing conditions. In contrast to non-residential construction expenditure, spending on equipment and software declined, especially in the case of industrial and transport equipment. The reason for the relative dynamism of the non-residential construction sector is that this type of project is preceded by a lengthy period of planning, and demand for replacement investments was still sustained. The most dynamic branches of activity in terms of construction expenditure were chemicals, oil refining, the aerospace industry and electricity production.

CHART 6 ACTIVITY AND PRICES IN THE RESIDENTIAL PROPERTY MARKET IN THE UNITED STATES

(indices 2000 = 100 ; monthly data, unless otherwise stated)



Sources : Standard & Poor's, Thomson Financial Datastream.
(1) National *Case-Shiller* index, quarterly data.

In marked contrast to domestic demand, foreign trade increased its contribution to economic growth, owing to the combined effects of the substantial export expansion and the decline in imports. For much of the year, exports were bolstered by strong demand from the main trading partners and by the effects of the dollar's depreciation in recent years. Exports of industrial goods were the main item to record a strong increase. Conversely, imports exhibited the negative effects of stagnating domestic demand. Despite a marked deterioration in the terms of trade – due essentially to the surge in energy prices – the trade deficit diminished. Combined with a further improvement in the income account, this brought a reduction in the balance of payments current account deficit, down from 5.3 to 4.9 p.c. of GDP.

Measured by the change in the CPI, inflation was up from 2.9 p.c. in 2007 to 3.8 p.c. That rise was due mainly to the escalating food and energy prices. Propelled by those prices, inflation gathered pace, rising from 4.1 p.c. at the end of 2007 to a peak of 5.6 p.c. in July, before abating to 0.1 p.c. at the end of the year. In contrast, the underlying trend in inflation remained relatively stable for much of the year, fluctuating between 2.2 and 2.5 p.c., before dropping to 1.8 p.c. in November.

Faced with the further worsening of the residential property crisis and the tensions affecting the financial markets, both the Federal Reserve and the federal government took a set of measures to support the sectors concerned and limit the impact of the financial crisis on the real economy.

First, the US central bank slashed its main policy rates, cutting the target federal funds rate from 4.25 p.c. at the end of 2007 to a range between 0 and 0.25 p.c., and the discount rate from 4.75 to 0.50 p.c. It also took three types of initiative to promote the effectiveness of monetary policy and ensure the smooth operation of financial markets. First, by introducing new instruments or by extending existing arrangements, it supplied a larger volume of liquidity to a greater number of financial institutions under more flexible conditions regarding collateral. Second, it supplied liquidity directly to operators

TABLE 2 ECONOMIC DEVELOPMENTS IN THE UNITED STATES

(percentage changes compared to the previous year, unless otherwise stated)

	2006	2007	2008
Expenditure (volume)[1]			
Final domestic demand	2.6	1.8	0.2
Final consumption expenditure			
Households	3.0	2.8	0.4
General government	1.6	1.9	2.8
Gross fixed capital formation			
Housing	–7.1	–17.9	–21.3
Enterprises	7.5	4.9	2.4
General government	2.1	3.0	3.6
Change in stocks[2]	0.0	–0.4	–0.3
Net exports of goods and services[2]	0.0	0.6	1.4
Exports	9.1	8.4	8.5
Imports	6.0	2.2	–2.3
GDP	2.8	2.0	1.4
Labour market[3]			
Employment	1.9	1.1	–0.5
Unemployment[4]	4.6	4.6	5.8
Prices and costs			
Consumer prices (CPI)	3.2	2.9	3.8
Unit labour costs	2.9	3.1	2.2
Prices of imported goods and services	4.3	3.7	12.5
Terms of trade	–0.8	–0.1	–5.2
Balance of payments and budget balance[5]			
Balance of current transactions	–6.0	–5.3	–4.9
Budget balance of general government			
Observed	–2.2	–2.9	–5.3
Structural[6]	–2.7	–3.0	–5.2
p.m. Private savings ratio[7]	*0.7*	*0.6*	*1.6*
Gross debt ratio of general government[5]	*61.7*	*62.9*	*73.2*

Sources: OECD, BLS.
(1) Calendar adjusted data.
(2) Contribution to the change in GDP, percentage points.
(3) According to the household survey.
(4) Ratio between the number of unemployed and the labour force, as a percentage.
(5) Balance or outstanding total expressed as a percentage of GDP.
(6) Balance adjusted for the economic cycle and the effect of non-recurring measures.
(7) Net savings expressed as a percentage of net disposable income.

on certain key credit markets, such as the commercial paper market. Third, it announced a programme for taking over up to 100 billion dollars of debt from the American government-sponsored mortgage agencies, *Fannie Mae* (Federal National Mortgage Association) and *Freddie Mac* (Federal Home Loan Mortgage Corporation), and from the Federal Home Loan Banks, and up to 500 billion of the mortgage-backed securities held by the first two cited and by *Ginnie Mae* (Government National Mortgage Association). Finally, it also played a key role in rescuing a number of large financial institutions and in the preparation of the government's economic recovery and stabilisation plans.

In February 2008, Congress thus ratified the Economic Stimulus Act. That law comprised support measures in the form of tax concessions for low and middle income groups and businesses, and the temporary raising of the ceiling on the portion of each home loan that the American government-sponsored mortgage finance agencies can buy back. Its overall cost comes to 168 billion dollars, or around 1.2 p.c. of GDP. In October, Congress approved the Emergency Economic Stabilization Act (EESA). This law aimed to restore liquidity and stability on American financial markets and contain the financial crisis fall-out. A key element of the EESA is the Troubled Asset Relief Program, authorising the government to make available a maximum of 700 billion dollars. This programme was used to recapitalise a number of financial institutions, to refinance certain groups of car manufacturers and to guarantee loans granted by the New York Federal Reserve via a new liquidity instrument, the Term Asset-backed Securities Loan Facility. The EESA also comprises other measures, such as the temporary increase in the federal deposit guarantee, tax concessions for businesses and individuals, and the remuneration of reserves held by deposit institutions with the Federal Reserve. In addition, the Federal Deposit Insurance Corporation (FDIC) launched what was called the Temporary Liquidity Guarantee Program, to provide a temporary guarantee for new unsecured liabilities contracted by financial institutions and to remove the ceiling on the amount of the guarantee applicable to unremunerated current accounts held by businesses.

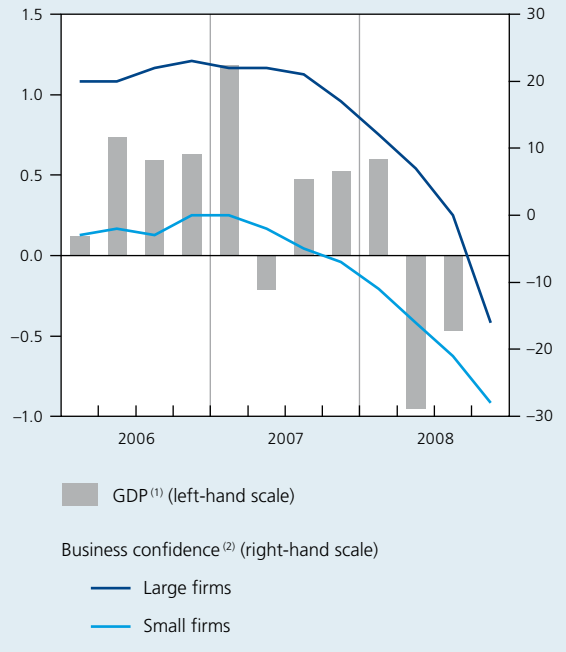
The government's structural budget deficit climbed from 3 to 5.2 p.c. of GDP in 2008. The expansion of public spending, due in particular to the initiatives aimed at solving the financial crisis, but also to higher expenditure on defence and social security, was not offset by increased revenues. On the contrary, tumbling share prices led to a decline in revenues generated by personal and corporate taxation. The gross debt of general government increased sharply from 62.9 to 73.2 p.c. of GDP.

1.4.2 Japan

Japanese financial institutions were hardly affected by the consequences of the turmoil on the US subprime mortgage market, because they had strengthened their capital after the banking crisis which Japan had experienced in the 1990s, and since then they have adopted a very prudent investment strategy. However, Japan did not escape the slowdown in foreign demand. During the year under review, GDP grew by only 0.5 p.c., compared to 2.1 p.c. in 2007. In the first quarter of 2008, growth remained vigorous, but in the second and third quarters activity slowed sharply. From the second quarter, the rate of expansion of exports to the three main markets – United States, East Asia and the EU – weakened considerably. Exports to China and the new industrialised economies of Asia fell particularly sharply. In recent years, East Asia, which represents a bit less than half of Japan's exports, had been the engine of Japan's economic growth. The appreciation of the yen in the autumn applied an additional brake to Japanese exports.

CHART 7 QUARTERLY PROFILE OF GDP AND BUSINESS CONFIDENCE IN JAPAN

(indices 2000 = 100 ; monthly data, unless otherwise stated)



Sources : Statistical Office (Japan), Bank of Japan.

(1) Seasonally adjusted data, percentage changes in volume compared to the previous quarter.

(2) Balance of responses to the quarterly survey.

While business investment had done much to underpin growth in recent years, it declined slightly in 2008. The main reason for that decline lies in the erosion of business confidence. In large firms, which are generally active on the export markets, confidence was dented by the adverse developments on foreign markets, while in small firms it was affected by the weakness of domestic demand. Furthermore, owing to competition, companies were unable to pass on the increased cost of commodities in full to their customers, so that their profitability suffered. Finally, from mid September, financing conditions became considerably tighter following the collapse of share prices and the marked appreciation of the yen.

Investment in housing dipped sharply. In fact, it had not fully recovered from the downturn caused towards the end of 2007 by the tightening of the rules for granting building permits, even though that measure was soon amended. Public investment was slashed further for the purpose of fiscal consolidation.

Against the backdrop of stagnating household purchasing power, private consumer spending hardly increased during the year under review, as the whole of the increase in household disposable incomes was negated by the rise in prices of food, petroleum products, gas and electricity. Moreover, the increase in household incomes slowed down at the end of the year under review, owing to the less favourable developments on the labour market.

Overall, domestic demand made a slightly negative direct contribution to growth. However, the decline in domestic expenditure also led to a marked slackening of import growth, so that net exports of goods and services continued to make a positive contribution to economic expansion. Japan recorded a trade surplus despite the deterioration in the terms of trade, but the current account surplus was again due mainly to the gains on the income account, resulting from the repatriation of profits of foreign subsidiaries by Japanese firms.

After having fluctuated around zero for a number of years, inflation measured by the change in the CPI climbed to 1.4 p.c. during the year under review. This break with the past is due to the marked rise in the cost of commodities and the weakness of the yen at the beginning of the year. In contrast, underlying inflation remained negligible, motivating the Bank of Japan to leave its main policy rate unchanged for much of the year at 0.50 p.c. The eruption of the international financial crisis prompted a downward revision of the economic outlook and a tightening of financial conditions, causing the Bank of Japan, in common with other central banks, to relax its monetary policy. The base rate was cut first by 20 basis points at the

TABLE 3 ECONOMIC DEVELOPMENTS IN JAPAN

(percentage changes compared to the previous year, unless otherwise stated)

	2006	2007	2008
Expenditure (volume)[1]			
Final domestic demand	1.4	0.9	–0.1
Final consumption expenditure			
Households	2.0	1.5	0.7
General government	–0.4	0.7	0.3
Gross fixed capital formation			
Housing	0.9	–9.5	–9.2
Enterprises	4.3	2.1	–0.6
General government	–8.1	–2.5	–4.0
Change in stocks[2]	0.2	0.1	–0.2
Net exports of goods and services[2]	0.8	1.1	0.8
Exports	9.7	8.6	5.3
Imports	4.2	1.7	0.9
GDP	2.4	2.1	0.5
Labour market			
Employment	0.4	0.5	–0.3
Unemployment[3]	4.1	3.9	4.1
Prices and costs			
Consumer prices (CPI)	0.2	0.1	1.4
Unit labour costs	–0.8	–1.8	0.8
Prices of imported goods and services	11.4	7.1	6.7
Terms of trade	–6.9	–4.6	–9.0
Balance of payments and budget balance[4]			
Balance of current transactions	3.9	4.8	3.8
Budget balance of general government			
Observed	–1.4	–2.4	–1.4
Structural[5]	–3.7	–3.1	–2.7
p.m. Private savings ratio[6]	3.3	3.1	3.3
Gross debt ratio of general government[4]	*171.9*	*170.6*	*173.0*

Sources: OECD, Ministry of Foreign Affairs and Communication (Japan).
(1) Calendar adjusted data.
(2) Contribution to the change in GDP, percentage points.
(3) Ratio between the number of unemployed and the labour force, as a percentage.
(4) Balance or outstanding total expressed as a percentage of GDP.
(5) Balance adjusted for the economic cycle and the effect of non-recurring measures.
(6) Net savings expressed as a percentage of net disposable income.

end of October, and measures were taken to ensure an adequate supply of liquidity for the banking sector. The most important move was the decision to grant temporary remuneration on the compulsory reserves held by the banks with the Bank of Japan. In mid December, the latter cut its base rate to 0.10 p.c.

The deterioration in both domestic demand and exports prompted the Japanese authorities to adopt two fiscal stimulus packages, comprising new measures totalling respectively 0.3 and 1 p.c. of GDP, including cheques for households, a temporary increase in the tax relief on mortgage loans, credit guarantees and provisional tax cuts for SMEs, plus new infrastructure projects. The Japanese authorities also examined the possibility of further capital injections for the banks, but that proved unnecessary during the year under review. However, in view of the current population ageing and the exceptionally high level of gross public debt - in 2008 the figure was 173 p.c. of GDP -, the Japanese government has little scope to offer fiscal stimuli. Since the above measures were not approved until the end of the year under review, their impact on the structural financing requirement of general government was limited in 2008, so that the improvement which had begun in 2003 continued and the deficit dropped to 2.7 p.c. of GDP.

1.4.3 Euro area

ACTIVITY, LABOUR MARKET AND BALANCE OF CURRENT TRANSACTIONS

During 2008, the euro area entered recession for the first time since the creation of monetary union ten years ago. Annual GDP growth averaged only 1 p.c., whereas the two preceding years had brought a marked expansion in activity, amounting to 3 and 2.6 p.c. respectively. In the first quarter, the economic outlook was still promising: GDP recorded a strong rise of 0.7 p.c. against the previous quarter, though admittedly this was due partly to the exceptional level of activity in the construction industry on account of the mild winter, and to stock formation. However, the rate of economic expansion slowed dramatically from the second quarter, so that activity contracted by 0.2 p.c. quarter-on-quarter. In the third quarter, the downturn continued with a further decline of 0.2 p.c.

Private consumption expenditure increased by only 0.4 p.c. in 2008. In the first half of the year, it was curbed by the soaring prices of energy and other commodities, which depressed the real growth of household disposable income. The stagnation of private consumption also reflected the growing pessimism among consumers,

TABLE 4 ECONOMIC DEVELOPMENTS IN THE EURO AREA

(percentage changes compared to the previous year, unless otherwise stated)

	2006	2007	2008
Expenditure (volume)[1][2]			
Final domestic demand	2.8	2.3	0.7
Final consumption expenditure			
Households	2.0	1.6	0.4
General government	1.9	2.3	1.8
Gross fixed capital formation			
Housing	6.7	1.4	–3.4
Enterprises	6.4	5.5	1.4
General government	1.0	3.2	3.0
Change in stocks[3]	0.1	0.0	0.2
Net exports of goods and services[3]	0.1	0.3	0.2
Exports	8.3	5.9	3.1
Imports	8.2	5.3	2.5
GDP	3.0	2.6	1.0
Labour market			
Employment[1]	1.6	1.8	1.0
Unemployment[4]	8.3	7.4	7.5
Prices and costs			
Consumer prices (HICP)	2.2	2.1	3.3
Unit labour costs[1]	1.1	1.8	3.4
Prices of imported goods and services[1]	3.8	1.3	3.7
Terms of trade[1]	–1.1	0.2	–1.3
Balance of payments and budget balance[5]			
Balance of current transactions[1]	0.4	0.3	–0.4
Budget balance of general government			
Observed	–1.3	–0.6	–1.7
Structural[6]	–1.8	–1.6	–2.3
p.m. Private savings ratio[1][7]	*9.3*	*9.2*	*9.9*
Gross debt ratio of general government[5]	*68.5*	*66.4*	*69.0*

Sources: EC, OECD.
(1) Excluding the countries which joined the euro area after 2006.
(2) Calendar adjusted data, except for exports and imports.
(3) Contribution to the change in GDP, percentage points.
(4) Ratio between the number of unemployed and the labour force, percentages.
(5) Balance or outstanding total as a percentage of GDP.
(6) Balance adjusted for the economic cycle and the effect of non-recurring measures.
(7) Net savings as a percentage of net disposable income, except for Spain and Portugal where the aggregate used for the calculations is only available on a gross basis.

evident for example from the decline in retail sales. Having started in mid 2007, the steady erosion of consumer confidence continued during the year under review. Owing in particular to the scale of the financial crisis and the cooling of the housing market, households became much more concerned about the general economic situation, and – primarily in the second quarter – much more afraid of losing their jobs.

The negative wealth effects caused by the slump on the housing market in a number of member countries and the collapse of share prices may also already have had some influence on private consumption. In 2007, residential property in the euro area was valued at around 4.5 times gross disposable income of households, making up the major part of their assets. Nonetheless, it seems that the effects associated with property assets were minor in comparison with those in other advanced economies such as the United States and the United Kingdom, especially as house prices in the euro area continued to edge upwards, on average, overall during the first half of the year. That is due to certain institutional characteristics specific to the housing and mortgage markets in the euro area, particularly the generally limited scope for mortgage equity withdrawal (i.e. obtaining a larger mortgage loan if the value of the underlying property has increased). The situation on these markets nevertheless

CHART 8 RETAIL SALES AND CONSUMER CONFIDENCE IN THE EURO AREA

Sources: EC, ECB.
(1) Annual percentage changes, three-month moving average.
(2) Balance of responses to the monthly survey, seasonally adjusted data.

varied greatly between Member States. Thus, prices had already been falling in real terms for several quarters in those where property prices had boomed in recent years, especially Spain and Ireland. Moreover, as shown in box 1, the increase in the assets of households during the recent period had been accompanied by a steep rise in their debt in some Member States. Households therefore had to endeavour to restore the balance between assets and debts, which further curbed their consumption expenditure.

Box 1 – Assets and liabilities of domestic non-financial sectors in the euro area and in the United States

As explained in section 1.2 of this chapter, the international banking and financial crisis may have affected economic activity in the advanced countries in a number of ways. Apart from damaging confidence and depressing value added of the financial sector, it has brought capital losses and a deterioration in financing conditions, effects which have spread to the real economy. The relative vulnerability of the United States and the euro area to the financial shocks depends partly on the course and structure of the assets and liabilities of the non-financial sectors in those economies.

In the United States, the steady decline in house prices was one of the principal causes of the recession which struck in 2008. In contrast, in the euro area house prices continued to edge upwards, on average, in the first half of the year. Moreover, the property wealth effects seem to be more limited overall in the euro area, taking account in particular of the differences in the institutional characteristics of the property and mortgage markets. However, the housing market situation varies greatly between Member States of the euro area. Thus, negative wealth effects were felt in countries where real house prices have already declined sharply. In 2007, household assets in the form of residential property in the euro area were estimated at around 450 p.c. of gross disposable income, or about 60 p.c. of the total gross assets of households. These percentages are significantly higher than those in the United States, where residential property assets expressed as a percentage of households' disposable income represented only about half that figure, or roughly one-third of their total assets.

It was probably the movement in financial assets rather than the trend in property values that influenced economic activity in the euro area during the year under review. The collapse of share prices since the end of 2007 may in fact have encouraged households to rebuild their assets to some extent to meet future needs, particularly to maintain their living standards in the event of unemployment or after retirement. This factor may be part of the reason for the marked rise in the private savings ratio during the year under review, while the slowing growth of real disposable income suggested the opposite, as experience has shown that households tend to cut back their savings to maintain their consumption expenditure. However, the financial wealth effect could be more moderate in the euro area than in the United States since financial assets – and more particularly the part allocated to equities and investment funds – represent a smaller proportion of disposable income.

Regarding the consequences of the deterioration in financing conditions for economic activity, the degree to which an economy is vulnerable to a rise in interest rates, a tightening of credit conditions or a reduction in the supply of bank lending depends on the financial situation of households and non-financial enterprises.

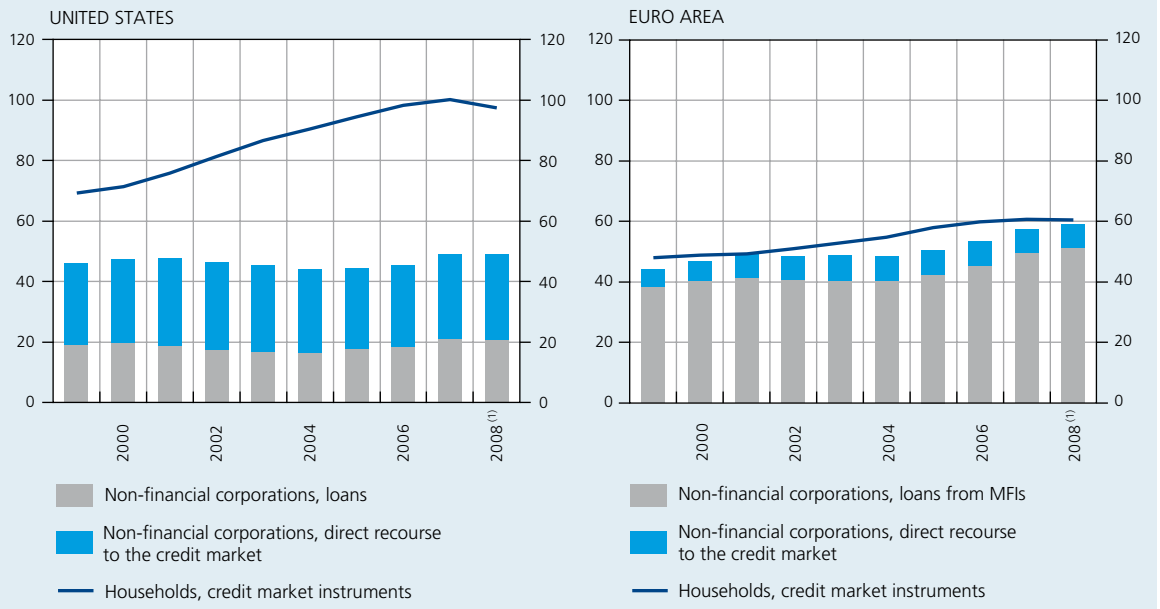
In 2007, the financial situation of households was more robust in the euro area than in the United States, so that European households should be relatively less vulnerable to financial shocks. They in fact have fewer debts than their American counterparts. The latter's liabilities increased considerably in the recent period, reaching just under 140 p.c. of their disposable income – or around 100 p.c. of GDP – in 2007. In the euro area, the household debt ratio also increased but – although it must be said that the relevant statistics are not entirely comparable – the ratio was more modest at only just over 90 p.c. of disposable income or around 60 p.c. of GDP. However, in some Member States the household debt ratio rose much more strongly than in the euro area as a whole; thus, in Ireland and Spain, the expansion of house building was accompanied by a marked increase in the debt ratio. In the

▸

Netherlands and Portugal, too, the household indebtedness expressed as a percentage of disposable income is well above the average for the euro area. With the exception of the Netherlands, these are countries with a relatively large proportion of variable interest rate mortgages, which means that if banks raise their interest rates that has a speedier effect in increasing the debt burden of households and thus depresses their disposable income.

LIABILITIES OF DOMESTIC NON-FINANCIAL SECTORS

(outstanding amount at end of period, percentages of GDP)



Sources : EC, BEA, Federal Reserve, ECB.

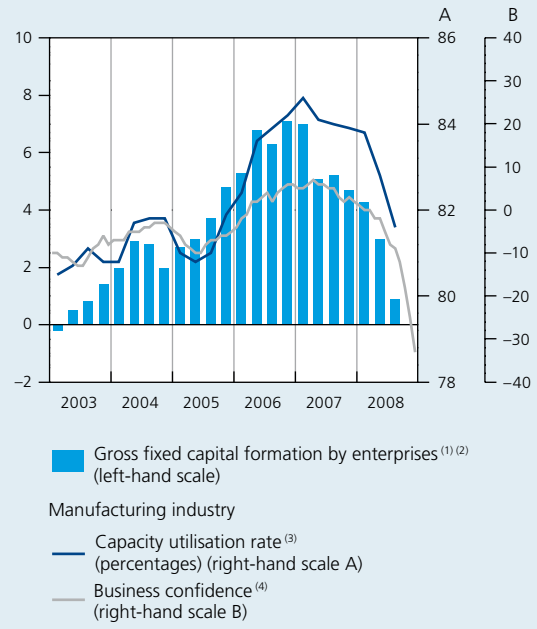
(1) First three quarters for the United States; two quarters for the euro area.

All other things being equal, the vulnerability of enterprises to an increase in external financing costs and a reduction in the availability of credit also depends on their debt levels. In the euro area, indebtedness of non-financial corporations has risen significantly since 2004. That is true, in particular, of the total outstanding borrowings and liabilities contracted in the form of debt securities, which increased from just under 49 p.c. of GDP in 2004 to just over 59 p.c. in the middle of the year under review. There are no entirely comparable statistics available for the United States, but on the basis of the most similar concept, it can be estimated that this outstanding total also increased there, while remaining at a lower level of around 49 p.c. of GDP at the end of the third quarter of 2008. This comparison also reveals a notable difference in the financing of enterprises between the two economies, namely that corporate credit market liabilities in the euro area are financed essentially by credit institutions, whereas in the United States non-financial corporations raise considerably more of their finance via credit market instruments (treasury bills, bonds, etc.). Consequently, the rising financing cost of these instruments, illustrated by the sudden increase in risk premiums on corporate bonds and the particularly low volumes of treasury bills issued on the markets in 2008, may have had a greater impact on corporate financing and activity in the United States than in the euro area. Conversely, firms in the euro area remain vulnerable to potential restrictions on the volume of bank lending.

While gross fixed capital formation by enterprises had been the engine of the economic recovery in the euro area during the previous two years, that slowed significantly in 2008, with an increase of just 1.4 p.c. compared to 5.5 p.c. in 2007. The primary reason lies in the flagging market growth, reflected in the marked decline throughout the year in the degree of capacity utilisation in manufacturing industry. Thus, in view of the slower growth of order books, in particular, business confidence was severely eroded in manufacturing industry. It also suffered in the service sector. Thus, at the end of the year under review, it reached a historical low in the two sectors concerned. Corporate profitability also diminished owing to the adverse movement in productivity and higher labour costs. In addition, it is probable that less favourable financing conditions in the wake of the financial crisis have gradually had a negative influence, for example on firms with a high proportion of short-term debt. Thus, the Eurosystem's Bank Lending Survey highlighted a marked tightening of corporate credit standards during the year under review, particularly for large firms. Moreover, interest rates on bank loans to non-financial corporations began rising again from mid 2008 until October, though they dropped back thereafter. Although this type of lending continued to expand rapidly during the year under review, a deceleration was apparent from the second quarter. Apart from the tightening of bank conditions, the fall in share prices and the widening of the spread between corporate bond yields and those on government loans also contributed to less favourable financing conditions. As explained in box 1, in comparison with other advanced economies, especially the United States, non-financial corporations in the euro area depend less on direct financing via financial markets and they arrange their debt financing mainly via credit institutions.

CHART 9 BUSINESS INVESTMENT AND BUSINESS CONFIDENCE IN THE EURO AREA

(seasonally adjusted data)



Sources: EC, OECD.

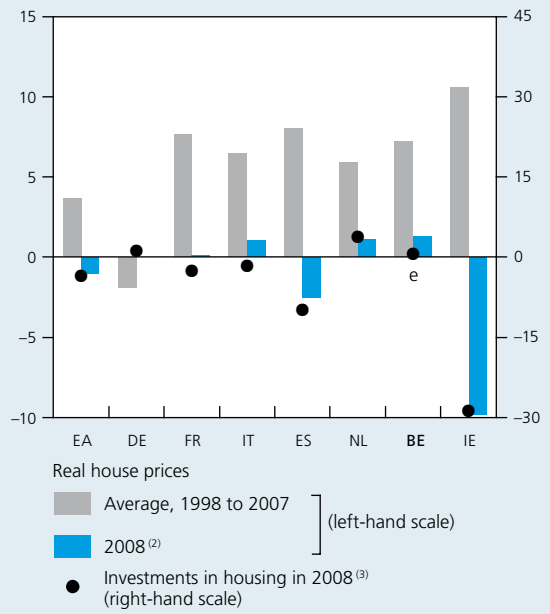
(1) Calendar adjusted data, percentage changes in volume compared to the corresponding quarter of the previous year.
(2) Excluding countries which joined the euro area after 2006.
(3) Measured on the basis of the quarterly survey.
(4) Balance of replies to the monthly survey.

Following a marked growth deceleration in 2007, private investment in housing was down by 3.4 p.c., mainly on account of the deterioration in the climate on the secondary property market. Price rises there slowed further during the first half of the year, and substantial real price falls were actually recorded in several Member States. In some of those countries, the large number of new homes built in recent years has resulted in a housing surplus, and hence a contraction in activity in this sector. Moreover, mortgage financing conditions became steadily less favourable. While mortgage credit had become gradually more expensive since the end of 2005, the Eurosystem Bank Lending Survey revealed a considerable tightening of standards for granting this type of finance from mid 2007. The weaker demand for home loans resulting from these various developments was reflected in a further deceleration in the growth of the outstanding amount of those loans during the year under review.

The rate of expansion of exports of goods and services dipped sharply, from 5.9 p.c. in 2007 to 3.1 p.c. This is undoubtedly connected with the marked downturn in global trade expansion and hence in the growth of the euro area's markets. Initially, the volume of exports continued to record relatively sustained growth, probably because exports to strongly expanding regions and oil-exporting countries counterbalanced the negative effects of weakening demand, seen mainly in advanced economies. In the second and third quarters, however, exports stagnated. Exporters had to contend not only with a loss of market dynamism, but also with the delayed effects of a strong euro: although the euro depreciated significantly during much of the second half of 2008, its weighted average exchange rate remained above its 2007 level over the year as a whole. Owing to the combined effects of the marked weakening of domestic demand in the euro area and higher import prices, the expansion of imports of goods and services decelerated sharply, declining from 5.3 p.c. in 2007 to 2.5 p.c. In particular, the volume of oil imports declined in the first nine months of 2008. Taking

CHART 10 REAL HOUSE PRICES [1] AND INVESTMENTS IN HOUSING IN THE EURO AREA

(percentage changes compared to the corresponding period of the previous year)



Sources : EC ; IMF and OECD, Seminar on housing price indices (Paris, 6 and 7 November 2006) ; OECD ; Thomson Financial Datastream ; Stadim ; CBS ; Department of the Environment, Heritage and Local Government (IE) ; Ministerio de Vivienda (ES) ; ECB ; NBB.

(1) Nominal house prices, deflated by the HICP of the euro area or the corresponding country.

(2) First three months for Italy ; first six months for the euro area, Belgium, France and Ireland ; first nine months for Spain and the Netherlands ; data not available for Germany.

(3) Euro area, excluding countries which joined after 2006.

account of these developments, the contribution made by net exports to GDP growth was slightly lower than in 2007, at 0.2 p.c. of GDP compared to 0.3 p.c.

However, this positive contribution was not reflected in the balance of current transactions, where the surplus of 0.3 p.c. of GDP in 2007 became a deficit of 0.4 p.c. That is due partly to developments in the balance on the income account and in net current transfers, but also to the decline in the surplus on the balance of goods and services caused by the deterioration in the terms of trade. Although the fall in the prices of oil and other commodities tempered the rise in import prices from mid 2008, the increase in import prices over the year as a whole significantly exceeded the rise in export prices, so that imports expressed in terms of value increased by much more than exports.

None of the fifteen Member States escaped the cyclical slowdown. However, the scale of the slowdown was not the same in all countries. Some of them were harder hit owing to their particular vulnerability to the adverse developments on the housing market. That was clearly the case in Spain and Ireland. Thus, in Ireland, the crisis on the housing market spread to the economy as a whole, and the expansion of activity gave way to a deep recession. In consequence, Ireland - which had recorded one of the strongest growth figures in the euro area, became by far the weakest performer in the course of one year. Spain, where activity had continued to expand considerably last year, also recorded a marked downturn in growth, owing to the decline in investments, primarily in housing construction, and a deceleration in the growth of private consumption. The chill wind on the housing market took its toll in France, too, where investment in house building dipped sharply. Most other components of domestic demand also weakened there. Conversely, in Germany, where house prices had been falling for several years and where the residential property market had only recently become relatively stable, investment in housing was stronger than in 2007. On the other hand, that country's activity was hit by its sensitivity to exports, as export growth was practically halved by the contraction of the markets. In Italy, the decline in domestic demand, due in particular to faltering investment in housing, and the fall in exports explain why GDP growth was halted and gave way to a recession.

TABLE 5 GDP GROWTH IN THE EURO AREA COUNTRIES [1]

(non calendar adjusted volume data, unless otherwise stated ; percentage changes compared to the previous year)

	2006	2007	2008
Germany	3.0	2.5	1.3
France	2.2	2.2	0.7
Italy	1.8	1.5	–0.6
Spain	3.9	3.7	1.2
Netherlands	3.4	3.5	1.9
Belgium	3.0	2.8	1.3
Austria	3.4	3.1	1.7
Greece	4.5	4.0	2.9
Finland	4.9	4.5	1.5
Ireland	5.7	6.0	–2.0
Portugal	1.4	1.9	0.2
Slovenia	5.9	6.8	4.0
Luxembourg	6.4	5.2	1.0
Cyprus	4.1	4.4	3.6
Malta	3.2	3.9	2.1

Source : EC.

(1) The euro area countries are ranked according to the size of their GDP in 2008.

The slowdown in economic activity also had an impact on the labour market. Job creation weakened steadily, reflecting primarily developments in construction. This branch of activity initially recorded a fall in job creation, followed from the second quarter by substantial job losses. The growth of employment also lost momentum in private services, such as financial and business services. The downward trend in unemployment therefore came to a halt in the second quarter of 2008: while the unemployment rate had reached a low point of 7.2 p.c. of the labour force at the beginning of 2008, it increased again to 7.8 p.c. in November.

The marked weakening of activity in Spain and Ireland led to an appreciable deterioration in the labour market situation in those countries. Taking account of the relatively high proportion of employment in housing construction, the downturn in that branch was accompanied by job losses overall, and a marked rise in unemployment. Thus, employment declined in both countries, whereas it had risen strongly in previous years. In Spain, unemployment rose even more sharply because that economy still has high levels of immigration: whereas, following an almost continuous fall for more than a decade, Spain had managed to cut its unemployment rate to 8.3 p.c. in 2007, that figure jumped to around 11 p.c. during the year under review, by far the highest rate for the euro area. In Italy, the number of jobs created was also insufficient to provide work for all new job seekers, although the rise in unemployment was more modest there. The other countries recorded an unemployment rate which was more or less stable or even still slightly down. Only Germany, where the economic slowdown was less marked than the average, recorded a more marked fall in unemployment after implementing a range of major reforms on the labour market in preceding years.

PRICES AND COSTS

Inflation in the euro area, measured by the harmonised index of consumer prices (HICP), increased sharply in the year under review, rising from 2.1 p.c. in 2007 to 3.3 p.c. From September 2007, inflation increased almost continuously to reach a peak of around 4 p.c. in July 2008, before subsiding to 1.6 p.c. in December. The inflation profile largely mirrored movements in commodity prices during the year under review. Thus, up to mid 2008, the course of energy prices generated a marked rise in the energy component of the HICP, followed by an appreciable deceleration. The food component followed a similar pattern, although movements were much smaller in scale than for energy products. Underlying inflation, i.e. the change in the HICP excluding unprocessed food and energy, also increased up to August before easing. However, the increase was much more modest than for the HICP as

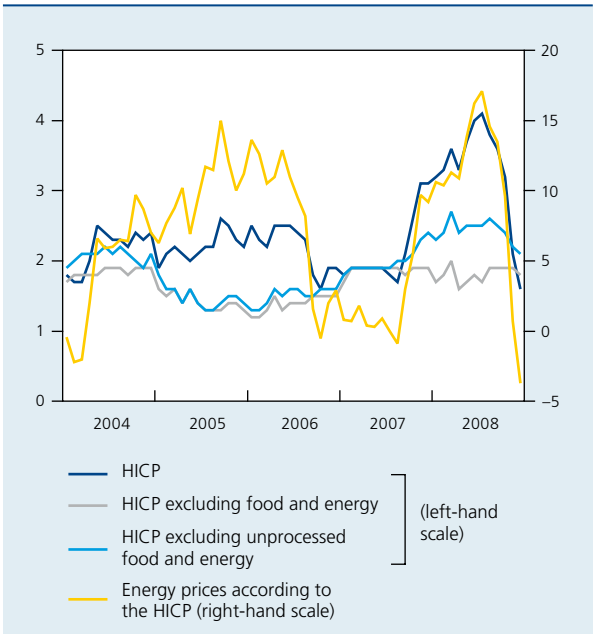
CHART 11 LABOUR MARKET IN THE EURO AREA

(percentage changes compared to the corresponding quarter of the previous year, unless otherwise stated)

Sources: EC, ECB.
(1) Ratio between the number of unemployed and the labour force, percentages.

CHART 12 INFLATION, UNDERLYING INFLATION RATE AND ENERGY PRICES IN THE EURO AREA

(percentage changes compared to the corresponding month in the previous year)



Source: EC.

a whole, averaging 2.4 p.c. over the year. In the case of the HICP excluding all food and energy, the rise remained practically unchanged during the year under review, at an average of 1.8 p.c. This situation is attributable to the stronger increase in prices of processed food as opposed to unprocessed food. In services, inflation remained relatively stable at close to its annual average of 2.6 p.c., while in the case of non-energy industrial goods inflation was moderate, hovering around 0.8 p.c.

Unit labour costs also increased much more strongly than in 2007, by 3.4 p.c. compared to 1.8 p.c. This acceleration was due partly to the rate of increase in labour productivity, which more or less stagnated after a further 0.8 percentage point deceleration during the year under review, but the faster increase in labour costs per worker was also a factor. Thus, in the private sector, labour costs per worker increased by 3 p.c., against 2.4 p.c. in 2007. Other indicators, such as total hourly cost of labour and contractual wages, also point to a stronger increase in wages.

FISCAL POLICY

The tendency towards improvement in the budget balance of general government in the euro area, which had begun in 2003, was halted in 2008, with the overall budget deficit rising from 0.6 to 1.7 p.c. of GDP. While the adverse economic conditions accounted for almost one-third of this deterioration, the principal reason lay in the discretionary fiscal policy stance in the member countries. Thus, the structural budget deficit increased by 0.7 percentage point to 2.3 p.c. of GDP.

However, the movement in the budget balance offers only a partial view of the deterioration in public finances during the year under review, since it takes little if any account of the impact of the safeguard measures which several governments were obliged to take in order to rescue various financial institutions afflicted by the financial crisis. As explained at the beginning of this chapter, most of these interventions took the form of capital injections or the provision of guarantees. According to the accounting rules governing the compilation of the public finance statistics (for more details, see box 13 in chapter 6 on public finances in Belgium), the government's acquisition of a stake in a company does not constitute public expenditure but the formation of a financial asset, so long as the transaction is effected at market price or at the fair value of the assets concerned, while the implicit liabilities corresponding to government guarantees are normally not entered in the accounts. As a result, the rescue plans have generally had no impact on the general government budget balance, but in 2008 they did add significantly to the consolidated gross public debt in a number of countries owing to the capital injections totalling around 1 percentage point of GDP in Germany, Austria, Spain and France, and over 5 percentage points in Belgium, Luxembourg and the Netherlands. The gross debt of general government in the euro area therefore came to 69 p.c. of GDP at the end of the year under review, compared to 66.4 p.c. in 2007.

In 2008, the mounting budget deficit was due to both an increase in primary expenditure and a reduction in revenues. Primary expenditure was up by 0.5 percentage point of GDP, in particular on account of higher unemployment benefit figures owing to the economic slowdown. Revenues declined by 0.7 percentage point. On the one hand, revenues reflected the impact of a growth composition effect, as the cyclical downturn generally affected domestic demand to a greater extent than foreign demand, which generates less tax revenue than the former. Also, the correction on the financial and property markets depressed revenues derived from activity on those markets.

According to the stability programmes submitted at the end of 2007 or early in the year under review, the public deficit should have averaged 0.9 p.c. of GDP in the euro area in 2008. That target was missed by 0.8 percentage point, essentially owing to a derailment in France and in the two countries worst affected by the bursting of the property bubble, namely Spain and Ireland. In a number of Member States, in response in particular to the EC proposal for a coordinated budget recovery plan, initiatives intended to support economic activity were announced at the end of the year, as part of the efforts to cushion the consequences of the international financial crisis : according to estimates produced by the EC in January, the euro area governments thus decided on recovery measures totalling the equivalent of 1 p.c. of GDP in 2009, though part of that had been previously planned.

Germany has continued to benefit from major fiscal consolidation efforts in recent years : according to the EC's interim economic forecasts in January 2009, the 2008 budget ended more or less in balance, whereas the stability programme still provided for a deficit of 0.5 p.c. of GDP. That improvement is due mainly to the good performance on the labour market : not only was there an increase in revenues derived from employment and wages, but expenditure on unemployment benefits also contracted. These favourable developments outweighed a number of measures which had a negative impact on the budget, such as the corporation tax reform, the reduction in the rate of contribution to unemployment insurance, and the increase in civil service pay and pensions.

TABLE 6 GENERAL GOVERNMENT BUDGET BALANCE IN THE EURO AREA COUNTRIES [1] [2]
(percentages of GDP)

	2004	2005	2006	2007	2008		
					Actual figures [3] [4]	Stability programme target [5]	Difference
Germany	–3.8	–3.3	–1.5	–0.2	–0.1	–0.5	0.4
France	–3.6	–2.9	–2.4	–2.7	–3.2	–2.3	–0.9
Italy	–3.5	–4.3	–3.4	–1.6	–2.8	–2.2	–0.6
Spain	–0.3	1.0	2.0	2.2	–3.4	1.2	–4.6
Netherlands	–1.7	–0.3	0.6	0.3	1.1	0.5	0.6
Belgium	–0.2	–2.6	0.3	–0.3	–1.1 e	0.0	–1.1 e
Austria	–4.4	–1.5	–1.5	–0.4	–0.6	–0.6	0.0
Greece	–7.5	–5.1	–2.8	–3.5	–3.4	–1.6	–1.8
Finland	2.4	2.9	4.1	5.3	4.5	3.7	0.8
Ireland	1.4	1.7	3.0	0.2	–6.3	–0.9	–5.4
Portugal	–3.4	–6.1	–3.9	–2.6	–2.2	–2.4	0.2
Slovenia	–2.2	–1.4	–1.2	0.5	–0.9	–0.9	0.0
Luxembourg	–1.2	–0.1	1.3	3.2	3.0	0.8	2.2
Cyprus	–4.1	–2.4	–1.2	3.5	1.0	0.5	0.5
Malta	–4.7	–2.8	–2.3	–1.8	–3.5	–1.2	–2.3
Euro area	–2.9	–2.5	–1.3	–0.6	–1.7	–0.9	–0.8
p.m. Idem, structural balance	*–3.0*	*–2.6*	*–1.8*	*–1.6*	*–2.3*		

Sources: EC, national stability programmes, NBB.
(1) The euro area countries are ranked according to the size of their GDP in 2008.
(2) Including, under the rules laid down for the excessive deficit procedure (EDP), net interest gains on certain financial transactions such as swaps or forward rate agreements (FRAs).
(3) According to the EC's interim economic projections in January 2009, except for Belgium, for which figures are based on the Bank's estimate.
(4) In principle, no account is taken of any direct effect on the budget balance of the measures adopted to bail out financial institutions, as their statistical treatment has to be examined by Eurostat, the EC Statistical Office, in order to ensure consistency at the level of all EU Member States.
(5) On the basis of the stability programme updates at the end of 2007 or the beginning of 2008.

In France, the deterioration in the economic situation accounts for two-thirds of the increase in the budget deficit, up from 2.7 p.c. of GDP in 2007 to 3.2 p.c. The target maximum deficit of 2.3 p.c. of GDP was therefore exceeded. The movement in both expenditure and revenue contributed to this derailment. As in previous years, social security expenditure significantly exceeded the forecasts. In addition, the surge in inflation during the year drove up the interest charges on the indexed public debt. Tax revenues fell as a result of the tax reforms adopted in preceding years, notably under the law passed in the summer of 2007 to promote labour, employment and purchasing power.

In Italy, the substantial fiscal consolidation effort made in 2007 had been much more effective than expected, cutting the borrowing requirement to 1.6 p.c. of GDP, its lowest level since the year 2000. However, the cyclical deterioration – further advanced in Italy than in the rest of the euro area – and expansionary measures such as the increase in civil service pay – caused the public deficit to rise again in 2008, to 2.8 p.c. of GDP. Consequently, the target of a budget deficit limited to 2.2 p.c. of GDP was not achieved.

In Spain, the budget balance recorded a much greater than expected deterioration in 2008. Starting with a comfortable surplus of 2.2 p.c. of GDP in 2007, that country closed its budget in 2008 with a deficit of 3.4 p.c. of GDP. The reason lay in fiscal easing which led to a reduction in the structural balance of around 4.9 percentage points of GDP. At the beginning of 2008, the Spanish government in fact implemented an economic recovery plan: the measures concerned both expenditure and revenue, with

in particular an increase in the family allowance for newborns and a personal income tax reform which included a reduction in direct taxes of 400 euro per employee, pensioner or self-employed worker. On top of that there were the effects of the cyclical slowdown during the year under review, combined with the collapse of the Spanish property market.

1.4.4 United Kingdom

The economic situation worsened significantly in the United Kingdom in 2008. Growth, which had still been very robust at the end of 2007, slowed sharply during the year to become negative from the third quarter. Over the year as a whole, GDP growth came to only 0.8 p.c. in 2008, compared to 3 p.c. in 2007.

The financial market turmoil was particularly acute in the United Kingdom, and – owing to the importance of the financial sector in the British economy – was largely responsible for the decline in growth, combined with the effect of the property market correction on investment in housing.

The government had to intervene on several occasions to avert the bankruptcy of commercial banks. Thus, the banks *Northern Rock*, *Bradford & Bingley* and *Royal Bank of Scotland* were nationalised. On 8 October, at the height of the international financial crisis, the government announced measures to recapitalise the banks and offered a State guarantee on some of their short- and medium-term debts. At the same time, the Bank of England supplied abundant liquidity on the money market and extended the Special Liquidity Plan whereby treasury bills could be substituted for illiquid mortgage-backed securities and other instruments held by the banking sector, while extending the list of securities eligible for its repo operations. The highly adverse financial climate further accentuated the tightening of conditions governing bank lending to households and businesses, apparent since the summer of 2007. In the case of businesses, tumbling share prices and the rising risk aversion on the markets also seriously inhibited their capacity to raise finance by issuing quoted shares or bonds.

The combined effects of tighter financing conditions and deteriorating demand prospects brought the gross fixed capital formation of businesses to an abrupt halt, while plummeting property prices were accompanied by a 16.1 p.c. slump in residential investment. In contrast, public investment and public consumption both remained buoyant. Private consumption continued to grow strongly until the first quarter of the year under review, thanks to the still slightly favourable movement in private disposable incomes and the continuing decline in the household savings ratio, which actually became negative. Subsequently, private consumption contracted sharply owing to the combined pressure of the adverse

TABLE 7 ECONOMIC DEVELOPMENTS IN THE UNITED KINGDOM

(percentage changes compared to the previous year, unless otherwise stated)

	2006	2007	2008
Expenditure (volume)			
Final domestic demand	2.6	3.4	0.7
Final consumption expenditure			
Households	2.1	3.0	1.8
General government	1.6	1.8	2.3
Gross fixed capital formation			
Housing	8.9	3.3	–16.1
Enterprises	–7.2	9.8	–2.2
Public sector (1)	273.5	1.7	4.7
Change in stocks (2)	0.0	0.2	–0.2
Net exports of goods and services (2)	0.1	–0.7	0.3
Exports	11.0	–4.5	1.2
Imports	9.6	–1.9	0.2
GDP	2.8	3.0	0.8
Labour market			
Employment	0.9	0.7	0.8
Unemployment (3)	5.4	5.3	5.7
Prices and costs			
Consumer prices (HICP)	2.3	2.3	3.6
Unit labour costs	2.0	1.1	2.8
Balance of payments and budget balance (4)			
Balance of current transactions	–3.4	–3.8	–1.9
Budget balance of general government			
Observed	–2.7	–2.7	–4.6
Structural (5)	–3.2	–3.7	–5.2
p.m. Private savings ratio (6)	*4.2*	*2.5*	*–0.2*
Gross debt ratio of general government (4)	*43.4*	*44.2*	*56.0*

Sources: EC, OECD.
(1) Including public enterprises.
(2) Contribution to the change in GDP, percentage points.
(3) Ratio between the number of unemployed and the labour force, percentage.
(4) Balance or outstanding amount as a percentage of GDP.
(5) Balance adjusted for the economic cycle and the effect of non-recurring measures.
(6) Net savings as a percentage of net disposable income.

wealth effect caused by falling asset prices, the tightening of conditions for access to bank lending, the deterioration in household disposable incomes and the gloomier outlook for the labour market. The latter began to show signs of weakness from the summer, with a fall in employment and a rise in the unemployment rate. Thanks to the increase in the first quarter, private consumption still expanded by 1.8 p.c. over the year as a whole.

Foreign trade made a small positive contribution to growth, owing to the marked deceleration in domestic demand and export expansion. The depreciation of the effective exchange rate of the pound sterling from September 2007 was a particular factor underpinning exports. Nonetheless, the current account balance remained in deficit, owing partly to the deterioration in the terms of trade following the increase in commodity and food prices.

These price increases, exacerbated by the pound's depreciation, sparked an acceleration in inflation measured by the HICP, with a peak of 5.2 p.c. in September 2008. The worsening conditions on the labour market contributed towards the moderation of wage demands following the rapid rise in prices. The abrupt commodity price correction from September helped to curb the rise in consumer prices, their rate of increase dropping to 3.1 p.c. at the end of the year.

By the autumn, the Bank of England's primary concern was no longer to control inflation expectations, which were showing clear signs of easing, but to revive activity. The easing of tension on the inflation front enabled it to make substantial cuts in its base rate from October onwards. The first reduction, of 50 basis points on 8 October, was followed by two further cuts on 6 November and 4 December, amounting to 150 and 100 basis points respectively and bringing the official rate down from 5 to 2 p.c. in the space of two months.

As in 2007, the fiscal policy stance was expansionary, with the structural public deficit increasing from 3.7 to 5.2 p.c. of GDP. This deterioration is due partly to the measures to reduce both direct and indirect taxation, with a temporary cut in the standard rate of VAT from 17.5 to 15 p.c., and partly to the decline in revenues caused in particular by the losses in the financial sector and the collapse in property market prices and trading. Moreover, higher inflation drove up interest charges on the Treasury's indexed bond debt. Taking account of the interventions to safeguard the financial system, general government debt jumped by almost 12 percentage points in 2008 to 56 p.c. of GDP.

1.5 Emerging economies

1.5.1 Asia

Overall, the macroeconomic fundamentals of emerging Asian economies improved, enabling the latter to cushion the repercussions of the international financial crisis. At the end of 2007, these countries were noted for their vigorous economic growth, with moderate inflation, current account surpluses and substantial foreign exchange reserves. In addition, following the Asian financial crisis in 1997, banks in these countries had reinforced their capital base and adopted a prudent investment strategy, while the authorities had only reluctantly taken measures to continue the liberalisation of the banking sector and to ease the restrictions on capital inflows and outflows. Although this meant that the international financial crisis had relatively minor repercussions on the Asian banking community, Asian stock markets were hard hit by the international flight into risk-free investments, which contributed towards increased downward pressure on most Asian currencies vis-à-vis the US dollar. Furthermore, lending conditions were also tightened up in Asia, and large firms had difficulty in raising funds via bond issues on the international markets.

In view of their high degree of integration into world trade and the fact that their growth is heavily slanted towards exports, emerging Asian economies are very vulnerable to a recession in advanced countries. In the year under review, economic activity therefore slowed in all these countries, and especially in the newly industrialised countries. The loss of dynamism in exports combined with the deterioration in the terms of trade owing to the high commodity prices and the depreciation of several Asian currencies after the summer caused a contraction of the current account surpluses in all countries. In Korea, the current account surplus became a deficit for the first time in many years, and Indonesia struggled to maintain a balance. Forecasts indicating a marked growth slowdown prompted the central banks of these countries to ease their monetary policy in the autumn, when the inflationary pressures had waned. Also, Japan, China, Korea and the members of ASEAN decided to set up a joint emergency fund in 2009, endowed with 80 billion US dollars (extension of the agreement relating to the Chiang Mai initiative), in order to help one another in the event of short-term financing problems.

The emerging Asian countries include a number of economies which suffer from structural weaknesses. In Korea, banks were seriously exposed to developments on international financial markets, as they were heavily

TABLE 8 MACROECONOMIC INDICATORS FOR EMERGING ASIA

(percentage changes compared to the previous year, unless otherwise stated)

	GDP in volume		Consumer prices		Current account balance[1]		General government budget balance[1]		Official foreign exchange reserves[2]
	2007	2008	2007	2008	2007	2008	2007	2008	2008
Newly industrialised countries									
Hong Kong	6.4	3.7	2.0	3.9	13.5	11.7	7.6	0.1	161
South Korea	5.0	4.1	2.5	4.7	0.6	–1.3	0.4	–1.3	212
Singapore	7.7	2.7	2.1	6.5	24.3	19.1	9.0	6.1	162
Taiwan	5.7	3.8	1.8	3.7	8.6	7.8	0.9	–0.1	278
China	11.9	9.7	4.7	6.2	11.3	9.5	1.0	0.8	1.912
India	9.3	7.9	6.4	10.1	–1.4	–2.8	–2.8	–3.8	258
ASEAN-4									
Philippines	7.2	4.4	2.8	9.8	4.4	2.4	1.7	–1.0	36
Indonesia	6.3	6.0	6.3	10.0	2.5	0.1	–1.2	–1.0	51
Malaysia	6.3	5.7	2.0	6.0	15.6	14.8	–3.2	–4.6	110
Thailand	4.8	4.5	2.2	5.6	6.4	3.1	–1.1	–0.5	102

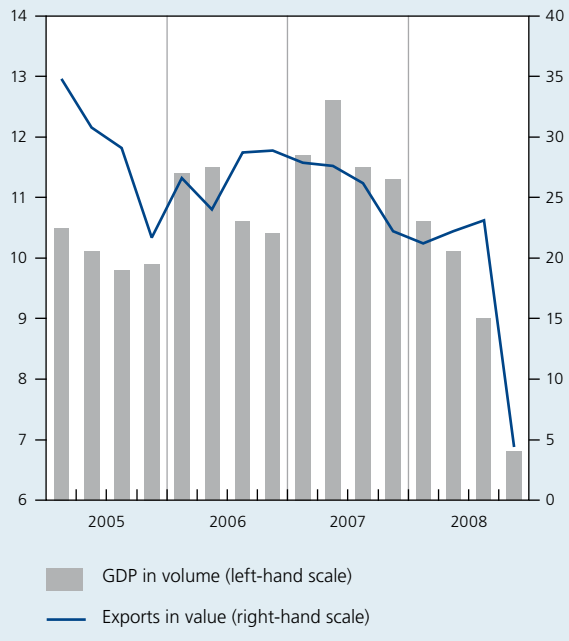
Source: IMF.
(1) Expressed as a percentage of GDP, tax year ending in March for India.
(2) Billions of US dollars, at the end of October.

involved in carry trade transactions which entail contracting short-term borrowings in low interest rate currencies with a view to investing locally or granting loans at high interest rates. In Indonesia, apart from the fact that growth was propelled by the rapid expansion of credit, the current account balance is highly sensitive to the prices of exported commodities, exposing the country to financing problems when prices fall. In the past two years, India has recorded deficits on current account and in public finances, so that the country has hardly any scope for supporting domestic demand.

From the point of view of the global economy, China merits special attention, be it in regard to its economic situation or its government policies. In fact, it is the second largest economy in Asia after Japan, and plays a vital role in the Asian production chain, while the government has appreciable budgetary scope to stimulate domestic demand. Towards the end of 2008, the less favourable international climate caused a fall in exports and a slowdown in industrial output, which had also suffered in the summer from the negative impact of the restrictions introduced during the Olympic Games. GDP growth thus dropped to 9.7 p.c., the weakest performance for years.

CHART 13 QUARTERLY PROFILE OF GDP AND EXPORTS IN CHINA

(non seasonally adjusted data, percentage changes compared to the previous year)



Sources: Thomson Financial Datastream, National Statistical Office (China).

This slowdown is also due partly to the movement in domestic demand. Thus, the growth of residential investment lost momentum as the housing markets cooled in a number of major cities following years of escalating prices. Conversely, private consumption expenditure remained buoyant overall, as the increase in incomes more than offset inflation, even though consumer confidence gradually declined.

Taking account of the prospect of an even sharper deceleration in economic growth, the government took measures to support exports and indicated its intention to adopt a proactive fiscal policy stance accompanied by a relatively easy monetary policy. On 9 November it announced a huge package of recovery measures amounting to 14 p.c. of GDP over about two years. These measures include major public investment projects in social housing, transport infrastructure, rural development and the reconstruction of areas affected by the May 2008 earthquake. There is also provision for increased transfers to the rural population, a cut in household taxation in the form of an increase in the minimum income and a reform of VAT (in future, the latter will be paid by consumers, not producers). The Chinese authorities aim not only to bolster growth but also to improve the income distribution among the population, hence the target of doubling rural incomes by 2020. Thus, they decided to permit the marketability of leases on arable land – which is still owned by the State – in order to encourage economies of scale and productivity gains in agriculture.

From mid September, the People's Bank of China eased its monetary policy on several occasions, e.g. when it decided to cut its interest rates on 8 October in the wake of the action taken by a number of the world's central banks. In all, the reference rates on loans and deposits at one year were cut respectively on five and four occasions, initially by 27 basis points at a time, and then on 26 November by 108 basis points, ending with a further cut of 27 basis points on 23 December. Meanwhile, the ratio of the reserve requirement for banks was reduced considerably, again in several stages, and administrative control over credit was lifted. Having appreciated gradually in during the first six months of the year, the exchange rate of the renminbi remained more or less steady against the US dollar in the second half of the year. In contrast to other Asian currencies, the renminbi did not depreciate against the dollar when the international financial crisis was at its height. On the other hand, it did record a slight fall in December.

China's foreign exchange reserves, derived mainly from current account surpluses, rose to a new record in the year under review, reaching 1,912 billion dollars at the end of October. Large trade surpluses still accumulated despite the slackening pace of expansion in the volume of exports. Since the latter consist partly of products assembled from imported components, the increase in the volume of imports also slowed down. Apart from direct investment, China also attracted speculative capital flows, principally in the first half of the year, motivated by the expected appreciation of the renminbi, but the scale of those flows is difficult to assess. The resulting unprecedented accumulation of foreign exchange reserves enabled China to lend financial assistance to Pakistan, hard hit by the international financial crisis, and to contribute to the Asian rescue fund mentioned earlier.

Box 2 – BRICs: a source of global economic growth?

In October 2003, *Goldman Sachs* published an article entitled *Dreaming with BRICs: The Path to 2050*. It invented the acronym BRIC from the initials for Brazil, Russia, India and China in order to refer to the four biggest emerging economies in the world, and predicted that this group of countries will overtake the G7 in terms of economic importance. The speed with which the Chinese and Indian economies are developing is almost unprecedented. Moreover, China and India both have a population of over one billion, so that the return of these countries to the international scene, bringing Brazil and Russia in their wake, will obviously have implications for the global economy. This box discusses the relative importance of the BRICs and examines to what extent they act as an "engine". This last question is particularly relevant in view of the circumstances during the year under review, more specifically the impact of the international financial crisis on the performance of the advanced countries in terms of growth.

In the past five years, the BRICs contributed for the first time more to global growth than the G3, comprising, the United States, Japan and the EU. In 2007, the share of the BRICs in global GDP expressed in terms of purchasing power parity equalled that of the United States, at 21.4 p.c. Conversely, on the basis of market exchange rates rather than purchasing power parities[1], the figure would be only 12.8 p.c. In the past fifteen years, the BRICs – led by China – have succeeded in expanding their share of trade in goods, at the expense of the major traditional trading nations. In 2007, the BRICs accounted for 15.5 p.c. of trade in goods, with China representing 10.2 p.c. compared to 3 p.c. in 1992[2]. Despite a gradual decline, the United States is still the main trading nation with a 17.2 p.c. share in 2007.

EXPORTS OF GOODS BY DESTINATION IN 2007

(percentages of the total exports of each country or group of countries)

Destination	Origin							
	United States	Japan	EU	Brazil	Russia	India	China[1]	Other emerging Asian countries[2]
G3	**26.6**	**35.2**	**23.8**	**40.1**	**57.6**	**38.6**	**56.8**	**45.6**
United States	–	20.4	20.4	14.1	4.8	15.0	23.2	17.0
Japan	5.4	–	3.4	3.1	2.6	2.5	9.7	11.3
EU	21.2	14.7	–	22.9	50.2	21.1	23.9	17.3
BRICs	**11.5**	**23.7**	**18.2**	**13.4**	**6.5**	**14.3**	**5.8**	**36.6**
Brazil	2.1	0.6	1.7	–	0.2	1.2	1.0	0.8
Russia	0.6	1.5	7.0	2.5	–	0.7	2.4	0.8
India	1.5	0.9	2.3	0.7	1.1	–	2.4	3.0
China[1]	7.3	20.7	7.2	10.2	5.2	12.4	–	32.0
Other emerging Asian countries[2]	10.8	26.6	7.9	4.5	2.3	17.5	18.7	–
Rest of the world	51.0	14.5	50.1	42.0	33.6	29.5	18.7	17.8

Source : IMF

(1) Including Hong Kong.

(2) Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand.

International trade is the main channel via which the BRICs can influence economic growth of other countries. However, they are not yet significant markets for the G3. The only exception is China, which was Japan's principal market in 2007. In contrast, over 40 p.c. of exports by the BRICs are destined for the G3. The EU is an important market for Russian exports, since Russia is a key player on the European energy market and has long maintained trade links with many countries in Central and Eastern Europe which are now members of the EU.

China is also a major market for Brazil, India and the other emerging Asian countries. The expansion of trade between China and the rest of emerging Asia reflects the country's rapid integration into the Asian production chain. A pattern of trade has been established in which China imports components from neighbouring countries

(1) While the prices of tradable goods tend to converge rapidly as a result of the law of one price, the same is not true of prices of goods produced and consumed on the domestic market. Thus, it is generally apparent that the prices of non-tradable goods in the less developed countries are lower than the prices of those products in the rich countries. Use of market exchange rates would therefore yield an under-estimation of the purchasing power of the poor countries. In order to avoid such a bias, the estimate is based on exchange rates in terms of purchasing power parity (PPP) which takes account of price differences between economies. The value of output is therefore measured by using a system of prices for a reference economy, generally that of the United States. In the context of the World Bank's International Comparison Program and the joint OECD-Eurostat programme, such exercises are conducted for many countries. The latest available data relate to 2005. For China and India, the ratios between the exchange rate in PPP and the market rate stood at 1.8 and 2.3 respectively in 2007. These ratios tend to fall as the countries develop.

(2) Trade is defined as the sum of imports and exports, and is adjusted for trade within the EU15.

including Japan, and commodities from all over the world, turning them into finished products and then exporting a large proportion of them to the G3. The Asian production chain therefore depends to a considerable degree on final demand in the United States and the EU. If that demand slumps, China experiences a marked slowdown in its exports and in its imports of components and commodities. A cyclical downturn in the G3 countries therefore triggers a decline in growth in the BRICs via trade, whereas the opposite is only true to a lesser extent.

The rise of China and the other emerging economies is part of the reason for the steady expansion of commodity consumption in the world in recent years. That increased demand has contributed to upward pressure on commodity prices, and hence changes in relative prices such as the terms of trade. This is the second channel through which the BRICs have an impact on incomes, expenditure and output in other countries.

The growth of global demand for food commodities was propelled mainly by the higher incomes in the emerging economies, including China. But in recent years this has been supplemented by demand for biofuels generated by the rich countries : in 2007, that component had exceeded China's contribution to total growth of demand. To curb domestic price rises, some emerging countries, including China, India and Russia, had adopted measures in 2007 to restrict exports of various food commodities, thereby accentuating the shortage on the global markets. This was most marked in the case of rice.

Global demand for oil remained at a high level until mid 2008. Its expansion is also attributable primarily to emerging economies where higher incomes have led to increased car ownership. In some emerging countries, such as China and India, the reaction of demand for oil to the market price is weakened by a policy of subsidies and price controls. Consumers there do not pay a price representative of the prevailing international market prices, and are therefore protected (temporarily) against any increases in those prices. In the spring, China and India increased the price of petrol at the pump by 18 and 10 p.c. respectively. However, in China consumption of oil is still moderate since the country relies mainly on coal for its energy needs.

Since 2002, global demand for metals has risen steadily year by year. That increase originates mainly from China. In the past five years, prices of most metals have displayed a close correlation with the expansion of industrial output in China. That was the case in particular for the price of nickel and zinc, two metals used as inputs in steel production. The construction projects in Beijing in connection with the Olympic Games also boosted demand for metals.

Conversely, China and the other emerging countries have possibly been responsible for a decline or deceleration in certain import prices in the advanced economies, more particularly in those categories of products for which their share of total imports is very high, such as textiles and technological products [1].

Finally, several emerging economies, including China and numerous oil-exporting countries, have recorded huge current account surpluses on their balance of payments in recent years, indicating undervaluation of their national currencies and an inappropriate exchange rate policy, and leading to an increase in their foreign exchange reserves. The allocation of those reserves is a third channel through which emerging countries may influence the global economy. Thus, these countries help to finance the United States' current account deficit. The savings glut which underpins the current account surplus in emerging countries has been a substantial factor behind the decline in global interest rates, particularly in the United States where it thus encouraged the formation of the housing market bubble and the strong growth of consumption expenditure via wealth effects.

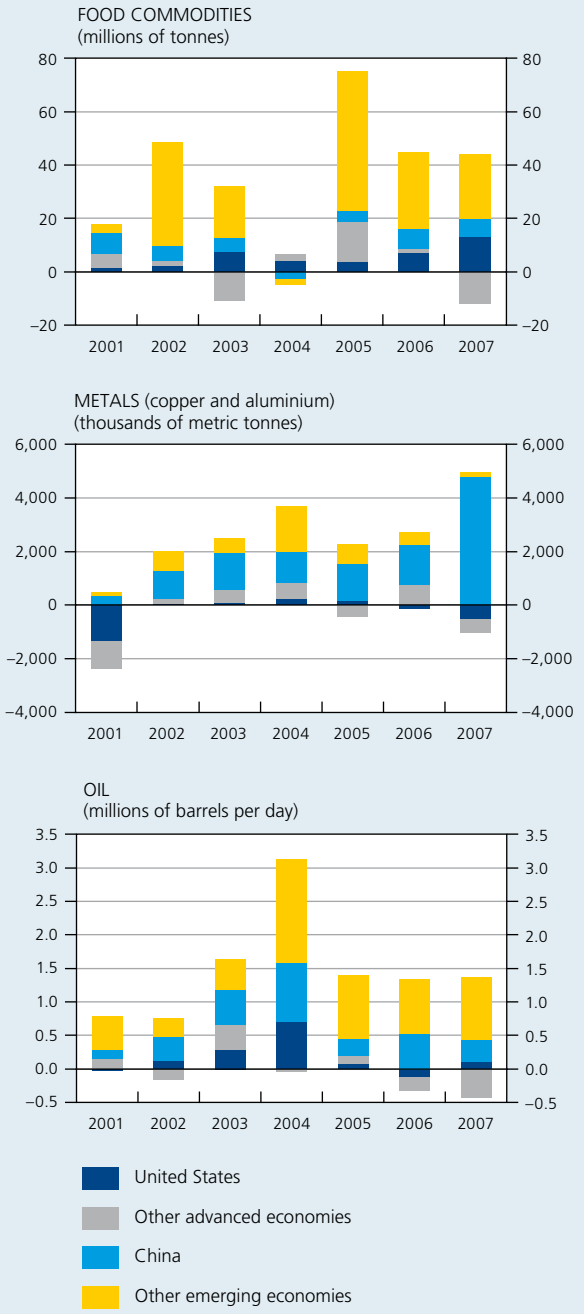
In conclusion, in recent years the BRICs have supported the global economy via the expansion of international trade and financial investments in the advanced countries. However, their domestic markets are not yet sufficiently robust to break the global economy's dependence on developments in the advanced countries. It is also undeniable that the BRICs have fostered the marked slowdown in global economic growth in the year under review by

(1) Cf. Boeckx J. (2006), *Globalisation and monetary policy*, NBB, Economic Review, September, pp. 7-22.

contributing to soaring commodity prices and – taking account of the role of some of these economies in the increasing global imbalances – to some of the developments which led to the outbreak of the international financial crisis in 2007.

DEMAND FOR COMMODITIES

(contributions to the change compared to the previous year)



Source : IMF.

1.5.2 Emerging countries belonging to the EU

During the first half of the year under review, economic growth remained vigorous in most of the new EU Member States of Central and Eastern Europe, mainly as a result of strong growth of investment and consumption, supported by the rapid expansion of domestic credit and wages.

Subsequently, the marked slowdown in foreign demand originating from other EU economies, the main trading partners of those countries, began to affect their exports. Moreover, from September 2008, the international banking and financial crisis spread to those countries, causing a reduction in capital inflows, tumbling share prices, rising risk premiums, a liquidity drought and tighter credit conditions which depressed investment and consumption. All the new Member States were affected by the financial crisis, but in varying degrees depending mainly on the scale of their internal and external imbalances.

Thus, Poland, the Czech Republic and Slovakia were largely sheltered from the effects of the financial crisis. They have enjoyed the most balanced growth of all the new EU members in recent years, underpinned by both domestic demand and exports in a relatively stable environment featuring control over inflationary pressures, an improving budget balance, a small current account deficit and modest use of credit in foreign currencies. As a result, their economic growth remained robust in 2008, though down slightly compared to the previous year, ranging from 4.2 p.c. for the Czech Republic to 7.1 p.c. for Slovakia. In these countries, the slowdown in the second half of the year is due mainly to the less dynamic export growth, while domestic spending stood up well as a result of the rise in earned incomes. In the Czech Republic, however, the raising of the minimum rate of VAT from 5 to 9 p.c. had an impact on private consumption.

In this context of sustained expansion of economic activity, the consolidation of public finances continued so that the excessive deficit procedures initiated in the case of the Czech Republic, Poland and Slovakia were abrogated in June and July 2008. At the same time, the EU Council authorised Slovakia to adopt the euro as its official currency on 1 January 2009 : the irrevocable conversion rate of the Slovak koruna was fixed at 30.1260 koruna to the euro, its central rate since May 2008, when it had been revalued by 17.6 p.c. following the steady improvement in the economic fundamentals.

With this prospect of definite, speedy entry into the euro area, the Slovak koruna was totally unscathed by the severe turbulence which from October, at the height of the international financial crisis, engulfed the foreign exchange markets for the various currencies of the new Central and East European Member States, including economies which nevertheless had sound fundamentals, such as the Czech Republic and Poland.

The Czech koruna and the Polish zloty followed a very similar pattern during the year under review, appreciating steadily against the euro between the autumn of 2007 and the end of July 2008, by 17 and 15 p.c. respectively at their peak against the average exchange rate of the previous year. They then depreciated by almost 8 p.c. up to mid September, as it became less likely that growth in those countries would be decoupled to some extent from that in the euro area, and as risk aversion increased on international financial markets. From October, there was a sudden accentuation in exchange rate volatility of these two currencies. In contrast to the Czech koruna, and probably owing to slightly less robust fundamentals in Poland, the zloty depreciated very rapidly to lose 15 p.c. of its value between 1 and 23 October, a victim of the contagion effect emanating from the Hungarian forint, which had depreciated by the same amount during that period. But while the forint then stabilised at a level 5 p.c. below its 2007 average, the zloty continued to depreciate against the euro, ending the year 10 p.c. down against the previous year's average.

Compared to these three countries, Hungary's economic fundamentals were less sound, although the country has made substantial progress in that regard. Thus, the government succeeded in slashing the public sector borrowing requirement from 9.3 p.c. of GDP in 2006 to 3.3 p.c. in 2008. In addition, leaving aside the rise in commodity prices, the Hungarian government managed to stabilise inflationary pressures. Consequently, the main source of concern was still the high level of gross foreign debt, accumulated by large current account deficits since the beginning of the 1990s : at the end of 2007, that debt equalled 112.8 p.c. of GDP.

In this fragile economic context, the rising risk aversion accompanying the international financial crisis had a severe impact on Hungarian financial markets. In particular, the high level of household debt in foreign currencies fuelled mistrust among foreign investors. From October, the freezing of the government bond market, the stock market crash and the sharp depreciation of the forint caused a liquidity crisis throughout the banking system. To remedy this emergency situation, on 16 October the ECB granted the *Magyar Nemzeti Bank* a credit facility of up to 5 billion euro. Nonetheless, on 22 October, the tension on the foreign exchange market forced that central bank to raise its interest rates substantially, increasing its main policy rate from 8.50 to 11.50 p.c. In addition, the

TABLE 9 ECONOMIC SITUATION IN 2008 OF THE NEW EU MEMBER STATES IN CENTRAL AND EASTERN EUROPE[1]

(percentage changes compared to the previous year, unless otherwise stated)

	GDP in volume	HICP	Annual change in property prices, end-2003 to end-2007	Domestic credit in 2007	Public finances		Balance of current transactions	Outstanding domestic credit in foreign currencies to the private sector, end of 2007
					Overall balance	Debt		
	(in p.c. of GDP)							
Poland	5.0	4.2	76.7	40.6	–2.5	45.5	–5.6	9.8
Czech Republic	4.2	6.3	–0.5[2]	30.9	–1.2	27.9	–0.9	4.3
Hungary	0.9	6.0	1.7	16.2	–3.3	71.9	–7.2	33.6
Slovakia	7.1	3.9	10.6	25.9	–2.2	28.6	–6.0	8.9
Romania	7.8	7.9	n.	50.2	–5.2	15.2	–12.9	18.4
Bulgaria	6.4	12.0	31.9	64.1	3.2	13.8	–24.7	32.8
Lithuania	3.4	11.1	35.7	43.2	–2.9	17.1	–12.6	36.0
Latvia	–2.3	15.3	36.9	34.4	–3.5	16.0	–14.9	82.1
Estonia	–2.4	10.6	24.6	33.6	–2.0	4.3	–10.1	74.8
p.m. Euro area	*1.0*[3]	*3.3*	*6.4*	*10.9*	*–1.7*	*69.0*	*–0.4*[3]	*4.6*

Sources: EC, OECD, ECB.
(1) The countries are ranked in groups according to the size of their GDP in 2008.
(2) Up to the end of 2006.
(3) Euro area, excluding countries which joined after 2006.

IMF, the EU and the World Bank jointly granted a loan of 20 billion euro to enable Hungary to cope with repayment of its short-term foreign debt. This aid was accompanied by measures designed to augment the sustainability of public finances and strengthen the financial sector. These decisions brought stability to the Hungarian financial markets and reduced the volatility of the forint, so that by the end of the year the *Magyar Nemzeti Bank* was able to cut its main policy rate in three stages to 10 p.c. in a context of a reduction in central bank base rates worldwide.

In the three Baltic states, domestic demand has mushroomed in recent years, propelled by general optimism following entry into the EU and the prospect of joining the euro area in the near future. This expansion has caused serious current account imbalances. It has been based partly on the expansion of credit, a large proportion of which has been granted in foreign currencies by subsidiaries of foreign banks, fuelling a property boom. Thus, at the end of 2007, outstanding bank loans in foreign currencies to the private sector totalled around 80 p.c. of GDP in Estonia and Latvia, with households accounting for almost half of that figure. Owing to the later arrival of foreign banks in Lithuania, credit in foreign currencies to the private sector was equivalent to only 36 p.c. of GDP in that country. In addition, serious labour market tensions in these three countries, heightened by considerable emigration of labour, caused rapid pay increases, further stimulating domestic demand and inflation. Finally, the policy of anchoring the national currency to the euro rendered monetary conditions decidedly pro-cyclical, with negative real interest rates which further accentuated the overheating. The scale of the resulting internal and external imbalances was already arousing concern among the banks in 2007, leading to tighter lending conditions and curbing the growth of lending.

The rising risk aversion on the international financial markets since the summer of 2008 amplified this trend, contributing to the fall in property prices after several years of strong increases. Equity markets experienced a sharp correction, coinciding with dwindling consumer and business confidence. The impact of the crisis was greater in Latvia and Estonia on account of their very high level of external debt. The loss of momentum in domestic demand, already perceptible in 2007, accelerated in 2008 and these two countries were unable to avoid a recession. The deceleration in the growth of economic activity was particularly abrupt, down from 10.3 p.c. in 2007 to –2.3 p.c. in Latvia and from 6.3 to –2.4 p.c. in Estonia.

The fall was less steep in Lithuania where GDP growth dropped from 8.9 to 3.4 p.c., partly thanks to a cut in the rate of tax on household incomes. All these countries recorded a deterioration in the unemployment rate and public finances. However, the contraction of domestic demand made it possible to start the essential correction of the large current account deficits, despite the impact on these countries' exports of the slower expansion of demand from the rest of the world. Thus, in 2008, net exports made a positive contribution to growth in Estonia and Latvia, thus helping to improve their trade balance.

It was in Latvia that the international financial crisis had the most severe repercussions, owing to problems afflicting its banking system, particularly *Parex*, its leading domestically owned bank and the second largest bank in the country. From August, *Parex* faced massive withdrawals of deposits in foreign currencies by non-residents (principally of Russian origin), while also struggling to raise finance on the international capital markets, which had become very mistrustful of risky debtors. The deposit withdrawals then spread to the banking system as a whole. Between August and November, the amount of deposits dropped by 10 p.c. throughout the banking sector, and by around 25 p.c. for the *Parex* bank on its own.

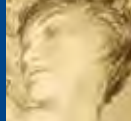
The banking crisis heightened fears relating to difficulties in financing the current account balance in the short term, and accentuated the tensions on the foreign exchange market, requiring massive interventions by the Latvian central bank to continue anchoring the national currency to the euro. The rapid erosion of the foreign exchange reserves and the burden of short-term debt repayments forced Latvia to seek international aid. At the end of December, the EU, the IMF, the World Bank and the Nordic countries jointly granted the country a loan of 7.5 billion euro. In return, Latvia undertook to make substantial reductions in its budget deficit (to be cut to 5 p.c. of GDP in 2009 compared to 12 p.c. without any corrective measures) and to consolidate its banking system, particularly by full nationalisation of the *Parex* bank. At the same time, foreign (particularly Swedish) banks operating in Latvia undertook to continue providing sufficient finance for their Latvian subsidiaries.

The convergence path of Romania and Bulgaria is similar to that of the Baltic states, as these two countries also benefited from strong economic expansion driven by the rapid growth of domestic demand, underpinned by abundant credit and by wage increases well in excess of productivity gains. Combined with the soaring prices of commodities and energy, this sparked accelerating inflation and a sizeable external deficit, especially in Bulgaria where the strict anchoring to the euro (via a currency board) prevented the central bank from conducting a more restrictive monetary policy. In contrast, this country recorded a marked budget surplus in 2008, while Romania conducted a decidedly pro-cyclical fiscal policy. Economic growth was stronger in 2008 than in 2007 in both Bulgaria and Romania, as the first half year's results and the labour market performance more than offset the slower growth of investment during the second half of the year.

The large, recurring current account deficits have made these two countries particularly dependent on external finance, mainly in the form of foreign direct investment and bank loans in foreign currencies. The rising risk aversion on financial markets from September 2008 put a brake on direct investment, and there is a danger that the unwinding of the imbalances will be less orderly – as in the case of the Baltic states. The exchange rate of the Romanian leu against the euro did not exhibit any clear trend up to the end of August, but the volatility of the leu became much greater once the international financial crisis reached its peak in the autumn. It then depreciated rapidly, ending the year 20 p.c. below its 2007 average.

Emile Vloors, detail of the allegorical figure of abundance on a design for the 1933 series of the 100 franc – 20 belga note, pencil, undated (circa 1930), National Bank of Belgium collection

The monetary policy of the Eurosystem



2.

2.1 Summary

The year 2008 presented the Eurosystem with the greatest challenges that it had ever faced since the start of stage 3 of Economic and Monetary Union (EMU) in 1999. In the first half of the year, commodity prices continued to strengthen, not only driving inflation up to 4 p.c. in June but also beginning to influence inflation expectations. At the same time, persistent problems on the financial markets generated great uncertainty over the repercussions on the real economy, as – combined with a potential contraction of the supply of bank lending – the tighter financing conditions resulting from the financial turbulence threatened to put a strain on economic activity. However, activity was maintained at a reasonable level at the beginning of the year, while bank lending to the non-financial private sector continued to expand strongly. In that context, in the first half of 2008, while recognising the downside risks to economic growth, the Governing Council drew attention to the existence of increasingly clear upside risks to price stability and eventually, on 3 July, decided to raise the key interest rate by 25 basis points to 4.25 p.c., whereas it had kept the rate on hold since June 2007. This measure was intended to ensure price stability in the medium term, in accordance with the task of monetary policy, particularly by anchoring inflation expectations.

During September, however, the financial market problems worsened with unprecedented speed and intensity. In a climate of deep mutual mistrust, the banks were no longer prepared to place their surplus liquidity on the interbank market with banks facing a liquidity deficit, as they preferred to keep their liquidity available in the form of reserves with the Eurosystem. Consequently, some banks which were already feeling the full effect of the writedowns which they had been obliged to make were also liable to face a liquidity deficit. In order to prevent the existence of such deficits from reinforcing the systemic risk, the Eurosystem substantially expanded its supply of liquidity to the banking sector in both euro and foreign currencies, and made significant adjustments to the corresponding rules. This averted the escalation of the problems on the interbank market, but the result was that the Eurosystem more or less took over the role of intermediation on that market. While the interbank market will have to be reactivated sooner or later, financial stability considerations had initially taken priority.

In principle, central banks can grant unlimited liquidity, even though they are required to ensure that the risks inherent in those operations can be kept under control. Within the framework of the implementation of monetary policy, credit institutions can therefore only obtain liquidity from the Eurosystem against appropriate collateral. In view of the exceptionally sudden deepening of the financial crisis, however, some institutions faced such massive liquidity need that they had to resort to Emergency Liquidity Assistance (ELA). This was the case in Belgium, for instance, as described in more detail in chapter 8 on financial stability. These operations do not come under monetary policy but are the responsibility of the national central banks (NCBs) which receive applications from the credit institutions concerned. However, even a massive injection of liquidity within the framework of monetary policy or ELA cannot provide the answer to the solvency problems confronting some banks. When the banks are unable to increase their own funds to the appropriate level by raising private capital, government intervention is the only way to contain the systemic risk. Apart from the recapitalisation of the banks, the authorities also adopted measures to alleviate the mistrust of credit institutions, particularly by offering them recourse to a State guarantee, in return for payment, to cover their issues of debt securities and by extending the deposit guarantee system. In principle, these measures should also help to allay the tension on the interbank market, even though there are few indications that this has already happened in the year under review.

Did this massive injection of liquidity by the Eurosystem not lead to excessive money creation, and in consequence, will it not ultimately drive up inflation? That appears highly unlikely since the credit institutions used the liquidity allocated to them in order to substantially increase the current account deposits held with the Eurosystem, so as to be able to absorb unexpected liquidity shocks. Performance of their role of intermediation with the non-

banking sectors therefore requires a higher level of central bank reserves than previously, and that corresponds to a reduction in the money multiplier. The provision of the requested liquidity is merely intended to compensate for that reduction and therefore helps to maintain lending activity, and hence normal money creation.

Regarding the monetary policy stance, it became clear from September 2008 that the real economy would not escape the financial crisis. In addition, commodity prices began falling in July, and that movement was reinforced as the economic growth prospects were sharply downgraded in the United States, Europe and – increasingly – the emerging countries. The upside risks to price stability, which had been identified previously, therefore waned rapidly as a result of both the direct impact of the declining commodity prices and the less optimistic outlook for economic activity in the euro area itself. Against that backdrop, the ECB Governing Council made speedy and significant cuts in the key interest rate, lowering it by 50 basis points in October and November and by 75 basis points in December, so that it was down to 2.50 p.c. at the end of the year under review. Following a further 50 basis point reduction on 15 January 2009, the key rate came down to 2 p.c. These interest rate adjustments were needed in order to prevent inflation from declining too sharply during the term relevant for monetary policy, the Governing Council having defined price stability as an annual increase in the HICP of the euro area of below – but close to – 2 p.c. in the medium term, so that a sharp fall in inflation and inflation expectations below that level may prompt an adjustment to the monetary policy stance in just the same way as if that level is exceeded.

2.2 The operation of the money market

The banking system as a whole depends on the Eurosystem to finance its structural liquidity deficit in euro. That deficit is due primarily to the liquidity absorbing effect of the "autonomous factors", i.e. factors independent of the monetary policy operations, such as the banknotes in circulation and the deposits which certain public authorities hold with the central banks. The credit institutions' liquidity need is augmented by the compulsory reserves which the banks are required to form by keeping deposits on current account with the NCBs. Thanks to the resulting increase in the liquidity deficit, the Eurosystem can be sure that the financial system will require refinancing; that allows monetary policy to steer money market interest rates more effectively by allocating the necessary liquidity. In order to avoid imposing costs on the banking system, these assets are remunerated at the marginal rate of the main refinancing operations, provided they do not exceed the amount of the reserve requirement. In addition, since the requirements have to be met on average over a reserve maintenance period of about one month, unexpected liquidity deficits or surpluses can be readily absorbed by short-term fluctuations of current account holdings. Any excess reserves – i.e. unremunerated assets which the banks hold in addition to the reserve requirements – form a final, but insignificant component of the refinancing need.

Liquidity management up to the end of the summer

The Eurosystem has relatively reliable estimates of the consolidated liquidity need of the banking system which, under normal circumstances, are sufficient to decide how much liquidity to allocate. However, with the eruption of the financial turbulence in August 2007, demand from individual banks far exceeded that consolidated liquidity need, because credit institutions wanted to hold more reserves with the Eurosystem in order to cope with liquidity shocks without recourse to the virtually paralysed interbank market. Taking account of the uncertainty over their own liquidity situation and the credit risk presented by their counterparties, credit institutions proved reluctant to lend their excess liquidity, preferring to let it accumulate on their current accounts with the Eurosystem. As soon as the financial turbulence broke out, the Eurosystem accommodated this increased demand for liquidity so that, on a consolidated basis, the amount of the reserve requirements was already attained relatively early in the reserve maintenance periods. In the absence of any easing of the money market tensions, this frontloading of the required reserves continued to the end of the summer.

The strong demand for liquidity was satisfied by allocating substantial volumes, well in excess of the benchmark amounts, in the weekly main refinancing operations. The benchmark amounts are calculated so as to enable the credit institutions to fulfil their reserve requirements in a balanced manner up to the settlement of the next main refinancing operation. Nonetheless, they are based exclusively on parameters relevant to the consolidated banking sector since, under normal market conditions, the interbank market can readily match up the liquidity supply and demand of operators facing a surplus or deficit respectively. However, in the presence of market tensions, and where the market operators do not trust one another, these benchmark amounts lose their relevance when it comes to assessing the total liquidity need.

To prevent downward pressure on the overnight interest rate, during each reserve maintenance period the Eurosystem gradually reduced the amounts allocated in the weekly main refinancing operations, and hence the corresponding current account holdings. Despite the gradual reduction in the amounts allocated in the main refinancing operations, the Eurosystem was regularly obliged to conduct substantial fine-tuning operations on the last day of the reserve maintenance period in order to achieve balanced liquidity conditions. Thus, between 15 January and 9 September 2008, on the last day of each reserve maintenance period an average of 18 billion euro was tapped from the market at the minimum bid rate of the main refinancing operations, except on 11 March when 9 billion euro had to be injected owing to a miscalculation of the liquidity need. The financial market tensions also caused the Eurosystem to grant occasionally additional liquidity via other fine-tuning operations. That was the case when, in response to the tensions accompanying the takeover of the American investment bank, *Bear Stearns*, an extra 15 billion euro was allocated for five days from 20 March, and at the end of the first quarter when the supply of liquidity again had to be increased by 15 billion euro, though only until the next day.

The policy introduced in 2007, to finance a larger part of the money market deficit via supplementary refinancing operations for a longer term of three months, continued in 2008. In addition, operations for a term of six months were introduced at the beginning of April. In fact, in the context of the worsening financial turbulence, demand for longer-term financing increased further, taking account of the greater certainty which that offers the financial institutions. Thus, on 3 April and 9 July, 25 billion euro was allocated for a period of six months. Conversely, on 22 May and 12 June, at the time of renewal of three-month refinancing operations, the predetermined amount to be allocated was cut from 60 to 50 billion euro, so that the total outstanding volume of the longer-term refinancing came to around 300 billion euro at the beginning of September, compared to 150 billion at the end of June 2007, i.e. before the outbreak of turbulence on the financial markets.

Despite an undeniable increase in the volatility of the Eonia, which is the effective overnight interest rate on the money market, the Eurosystem succeeded overall in maintaining that rate close to its key interest rate before the financial crisis intensified in September 2008, as it had done in the second half of 2007. Between 1 January and 9 September, the average differential between these rates was close to zero, even though the standard deviation – amounting to around 8 basis points – was rather large, especially in relation to the level prevailing before August 2007. Moreover, during this period, credit institutions' willingness to pay the Eurosystem in order to obtain refinancing remained high, as is evident from the differentials between the marginal or the weighted average rate and the minimum bid rates of the main refinancing operations, amounting respectively to 14.8 and 19.3 basis points. There was also some increase in the dispersion of the bid rates.

The Eurosystem's response to the deepening financial crisis

From mid September, the money market turbulence became unprecedentedly severe. On the morning of 15 September, this led to extreme upward pressure on the overnight interest rate and a contraction of the volumes traded on the very short-term segment of the money market. The Eurosystem therefore decided to conduct a fine-tuning operation which injected 30 billion euro into the market. The days that followed brought further fine-tuning operations intended to provide liquidity in addition to the substantial allotments effected via the main refinancing operations. In the last main refinancing operation of the reserve maintenance period in question, allocated on 30 September, the allotment was particularly sizeable in comparison with the volume of the outstanding refinancing operations. From 1 to 7 October, the Eurosystem therefore enabled credit institutions to deposit their excess liquidity with the central bank on favourable terms via a series of fine-tuning operations. It was also decided that, from 6 October, all credit institutions eligible to participate in the regular open market operations could also take part in the quick tenders conducted for the purpose of these fine-tuning operations, in order to ensure that smaller financial institutions had easy access to central bank liquidity.

During this period, however, some credit institutions preferred not to take part in these fine-tuning operations designed to absorb liquidity, and to hold liquidity by using the deposit facility, despite the associated cost. The deposit facility offers banks the opportunity to deposit liquidity with the central bank until the next day, but at a penalty interest rate, namely 100 basis points lower than the minimum bid rate. The marginal lending facility, which offers access to central bank liquidity for one day – again at a discouraging rate, since it was 100 basis points above the minimum bid rate – was also used to a great extent during the last week of that reserve maintenance period. The increased use of the marginal lending facility is similarly attributable to the banks' serious mutual distrust, which prevented the

efficient trading of liquidity surpluses and deficits. In the past, these standing facilities were used very little, and then almost exclusively on the last day of the reserve maintenance period.

The money market tensions proved persistent: the volume of trading on the overnight money market remained low, and on the longer-term segment activity was virtually non-existent. Very high bids were therefore recorded in the main refinancing operations: between 9 September and 7 October, the average differential between the marginal or the weighted average rate and the minimum bid rate of the main refinancing operations therefore increased to 35 and 49 basis points respectively, peaking at 45 and 74 basis points respectively on 7 October. This implied that, via the main refinancing operations, the banks were obtaining finance on terms which were decidedly less favourable than the central key rate, which acted as the minimum bid rate.

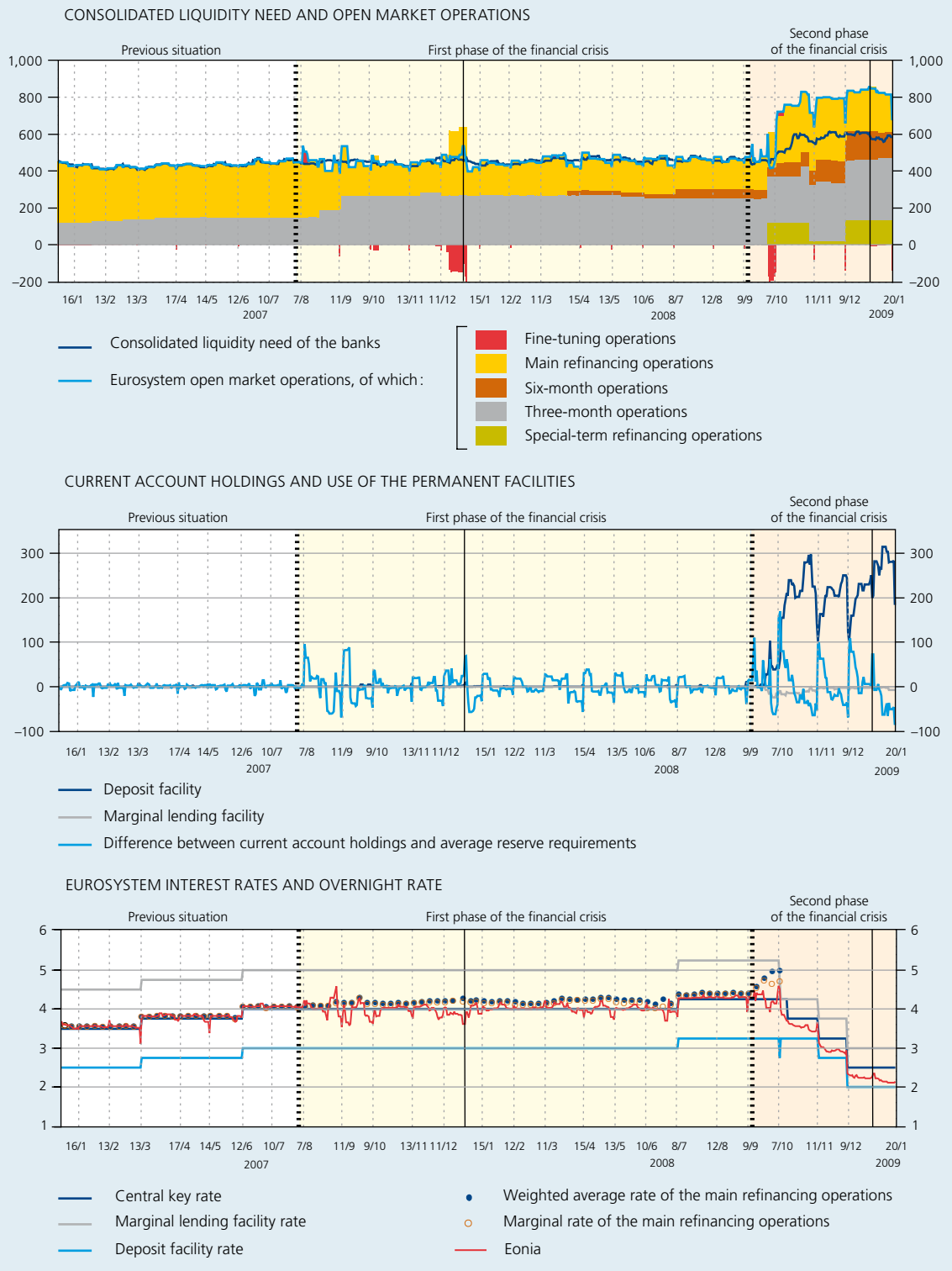
For that reason, from the reserve maintenance period commencing on 8 October, the Eurosystem played a greater role as an intermediary on the money market in euro. By supplying liquidity on favourable conditions to banks in need of it and offering them the opportunity to deposit their excess liquidity at advantageous rates, the Eurosystem tried to prevent the market paralysis from causing financing problems for the banks of the euro area. On 8 October, finding that the day before, during the first main refinancing operation of the new reserve maintenance period, high marginal and weighted average rates had again been paid, the ECB Governing Council decided not only to cut the rate on those operations by 50 basis points, as explained in section 2.3, but also – with effect from 15 October – to switch to a system of fixed rate tenders for the weekly main refinancing operations, applying the central key rate while fulfilling all the bids, so as to satisfy the whole of the demand for liquidity and avoid upward pressure on the rates actually paid to the Eurosystem. Provided they had sufficient appropriate collateral, credit institutions were therefore no longer dependent on the money market to cover their daily liquidity need. Furthermore, it was decided that, from 9 October, the spread between the interest rates of the marginal lending facility and the deposit facility would be reduced to 100 basis points, instead of the usual 200 basis points. That placed the banks in a more comfortable position, as they could use the standing facilities to finance their deficits, or deposit their surplus liquidity at a more favourable interest rate than before. The latter factor, that considerably lowered the cost associated with strong demand for liquidity in the refinancing operations, provided the main additional stimulus for the assumption by the Eurosystem of the intermediation function normally performed by the money market. The Eurosystem also announced that these measures would remain in force for as long as necessary, initially at least until the end of the reserve maintenance period spanning the end of the year, i.e. until 20 January 2009. Next, on 18 December it announced that the system of fixed rate tenders with full allotment would continue at least until the final tender in the third reserve maintenance period of 2009, fixed on 31 March. On 18 December, the Governing Council decided that the corridor formed by the rates of the standing facilities would be restored to 200 basis points from 21 January 2009, in order to encourage the banks to resume their interbank market activities.

The volume of the main refinancing operations therefore expanded strongly from 15 October. Moreover, the number of participants in these operations doubled in relation to the period preceding the intensification of the financial crisis. The most marked increase occurred in the case of small banks. In the past, they had obtained most of their finance on the interbank market, but the paralysis on that market forced them to turn to the Eurosystem, which had just introduced more favourable refinancing conditions.

In order to ensure that the banks could also obtain longer term financing, the Eurosystem decided to further expand the liquidity provided via its longer-term operations. It therefore announced a special-term refinancing operation on 29 September, with settlement the next day. This operation, whereby 120 billion euro was allocated up to 7 November, supplemented the current longer-term refinancing operations of three and six months. The volume of six-month refinancing was also further increased: on 9 October, on renewal of an operation, the amount allocated was doubled to 50 billion. On 15 October, it was stated that the special-term refinancing operation would be renewed at maturity, and that it would have a term of about one month, like the reserve maintenance periods. On that same day it was also announced that all longer-term refinancing operations would also be effected at a fixed rate, namely the central key rate, and that all bids would be fulfilled, at least until March 2009. In addition, a schedule of longer-term refinancing operations was published, indicating that two three-month operations, one six-month operation and one operation with a term of around one month would be conducted every month, in any case until March 2009. On average, between 30 September 2008 and 20 January 2009, the total volume of the longer-term refinancing came to 511 billion euro, representing a substantial increase compared to the figure of around 300 billion before the deepening of the financial crisis in September.

CHART 14 OPERATIONAL CONDUCT OF THE EUROSYSTEM MONETARY POLICY IN 2007 AND 2008

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



Sources: Thomson Financial Datastream, ECB.

The full allotment of all open market operation bids put an end to the gradual reduction of the consolidated liquidity surplus. From the third quarter, as the end of the reserve maintenance period approached, the thus consolidated liquidity surplus was increasingly placed in the deposit facility. For example, on 9 January 2009 a record 315 billion euro was deposited with the Eurosystem, whereas amounts in excess of 10 billion were totally exceptional before the outbreak of the financial crisis. The narrowing of the interest rate corridor in fact made it less expensive to use the deposit facility. Despite the abundant provision of liquidity on a consolidated basis, individual banks had to make greater use of the marginal lending facility, a further symptom of the money market paralysis. Thus, the amount borrowed came to 25 billion euro at the beginning of October, and use of the marginal lending facility remained at a high level during the ensuing reserve maintenance periods, so that on average 6.1 billion euro was borrowed between 8 October 2008 and 20 January 2009. On 11 November and 9 December 2008, and 20 January 2009, the final days of the reserve maintenance periods, a large quantity of liquidity was nevertheless absorbed by variable rate fine-tuning operations, concerning volumes of 80, 137 and 140 billion euro respectively.

Given the very ample provision of liquidity following the October modifications to the operational framework, the overnight interest rate tended to be lower than the rate of the main refinancing operations. The differential between the latter and the Eonia came to 27 basis points between 8 October 2008 and 20 January 2009, with a standard deviation of around 11 basis points. The fact that, despite the abundant liquidity on a consolidated basis, the overnight interest rate did not fall as low as the deposit facility rate also shows that the banks remained very reluctant to lend one another funds on the interbank market.

The open market operations and use of the marginal lending facility always took place against the provision of appropriate collateral, in order to safeguard the Eurosystem from financial risks. The "Single List" of eligible collateral comprises both marketable assets, including asset-backed securities (ABS), and non-marketable assets such as credit claims, and was therefore defined in broad terms from the start. On 4 September, on completion of its biennial review of the risk control measures, the Governing Council decided to make technical refinements to the rules on collateral from 1 February 2009, and further adjustments were introduced on 20 January 2009. For example, new "haircuts" – i.e. discounts applied to the market value of the securities posted, according to the risk associated with them – were set for ABS and for uncovered bank bonds, and the requirements concerning disclosure of the rating of the securities offered were upgraded.

However, the financial turbulence placed a strain on the entirety of instruments which banks may present as collateral for operations with the Eurosystem. First, the Eurosystem's increased role as a money market intermediary engendered a larger outstanding volume of open market operations, which all require the provision of appropriate collateral. Next, the granting of liquidity in foreign currencies, scaled up significantly in the fourth quarter, also put pressure on the availability of assets which the Eurosystem considers eligible. Finally, more stringent rules governing the required collateral were also imposed on the guaranteed loan market, exerting additional pressure on all the appropriate collateral. Some credit institutions may therefore have faced a shortage of eligible assets, which would have contributed to the weakening of their liquidity position. On 15 October, the Eurosystem therefore decided to extend the list of eligible assets accepted as collateral; that new list would continue to apply at least until the end of 2009. However, it emphasised that the relaxation of the criteria governing the eligibility of securities would be accompanied – as had previously been the case – by extreme vigilance on the part of the NCBs, which remain free to assess the appropriateness of the assets case by case, and to rule out any as necessary.

First, with effect from 22 October, the minimum rating for debt securities other than ABS was reduced from "A-" to "BBB-". However, an additional 5 p.c. haircut is applied to instruments with a "BBB-" rating. Next, a wider range of marketable debt instruments was accepted from 22 October, with application of additional haircuts. Finally, debt securities in US dollar, the pound sterling, and the Japanese yen, issued in the euro area, were also accepted with effect from 14 November.

To attenuate the difficulties encountered by banks in obtaining liquidity in foreign currencies, the provision of liquidity in foreign currencies initiated by the Eurosystem at the end of 2007 was considerably amplified during the year under review. Box 3 discusses these operations, and the other factors connected with the deepening financial crisis which have led to the substantial enlargement of the Eurosystem's balance sheet during the year under review.

Box 3 – Developments in the Eurosystem's balance sheet during the period of financial turbulence

The Eurosystem's balance sheet offers an overview of liquidity supply and demand, the items which increase the liquidity available to the banking sector and those which drain liquidity being recorded respectively under the assets and liabilities. During the period of acute financial turbulence, there was a marked increase in the Eurosystem's balance sheet total, owing to the behaviour of the public and factors over which the Eurosystem has no control. However, the main reason lay in specific measures adopted by the Eurosystem to take the place of the failing interbank market in both euro and foreign currencies. The balance sheet total thus increased from less than 1,500 billion euro in August 2008 to over 2,000 billion in November. Although considerable, this increase in the Eurosystem's balance sheet total is due solely to transactions with credit institutions, while the Federal Reserve also took on part of the role of intermediation with non-banking sectors.

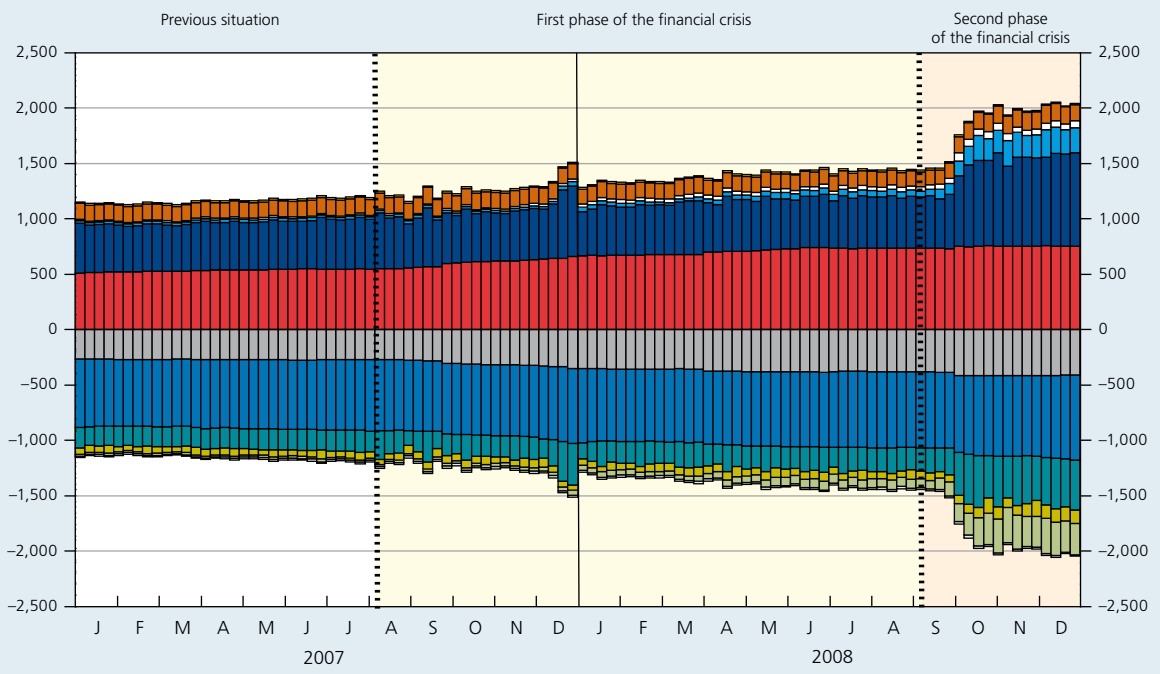
The lending in euro to euro area credit institutions related to monetary policy operations comprises the total of the open market operations intended to provide liquidity and the use of the marginal lending facility. These items increased strongly against the backdrop of the worsening financial tensions in September, following the amplification of the intermediary role performed by the Eurosystem on the money market. The expansion of current account holdings and increased use of the deposit facility, which account for most of the liabilities to euro area credit institutions related to monetary policy operations, were the counterpart to that.

The Eurosystem also granted more liquidity in euro because the liquidity-absorbing effect stemming from the autonomous factors increased considerably at the beginning of October. Between 1 October and 31 December 2008, that effect averaged 352 billion euro, compared to 249 billion in the first nine months of the year. The increased uncertainty over the survival of certain financial institutions, for example, generated increased demand for banknotes in October, leading to expansion of the banking sector's total liquidity need. The outstanding total of banknotes in circulation thus increased to an average of 730 billion euro between 1 October and 31 December, compared to an average of 670 billion in the first nine months of 2008. Deposits held by public authorities with the NCBs in some euro area countries also represent a liquidity need, and this was accentuated during the period of worsening financial turbulence.

The Eurosystem's foreign exchange operations also led to a marked expansion of its balance sheet. Owing to the persistent tensions on the international money markets, European financial institutions in fact experienced difficulty in financing their liquidity needs in foreign currencies, especially in dollar. The market in foreign exchange swaps, which used to be an important source of financing in foreign exchange for financial institutions, dried up. For that reason, credit institutions in the euro area were offered – via the Term Auction Facility, which is the result of coordinated action by central banks – the opportunity to obtain liquidity in dollar against collateral in the form of assets considered eligible by the Eurosystem. The two operations launched in December 2007, for a total of 20 billion dollars, were renewed in January but suspended at the beginning of March. However, these 28-day operations were resumed at the end of March, following new problems encountered by the euro area banks in obtaining liquidity in dollar so that, at the end of July, refinancing in foreign exchange totalled 50 billion dollars. On 30 July it was announced that, in addition to the 28 day operations, operations with a term of 84 days would be offered, though without any increase in the outstanding total. New measures were adopted during September and October to calm the rising tensions on the dollar financing market. Thus, the banks were able to obtain liquidity in dollar until the next day, while also one-week refinancing was introduced. After the volume of dollar financing had been gradually increased in September and October, fixed-rate dollar operations with full allotment were conducted from 16 October. From 23 October, the Eurosystem also conducted a second type of operation in dollar : euro area credit institutions were able to obtain dollars via currency swaps with the Eurosystem. The dollars necessary for these two types of operation were made available by the Federal Reserve via a swap agreement concluded in 2007. The Eurosystem and the Federal Reserve also agreed during the year under review to adjust the amounts of the swap agreement so as to satisfy the total liquidity need in dollars. The Eurosystem thus injected

THE EUROSYSTEM'S BALANCE SHEET

(weekly data, billions of euro)



Assets

- Lending to euro area credit institutions related to monetary policy operations, denominated in euro
- Other claims on euro area credit institutions denominated in euro (including ELA)
- Claims on euro area residents denominated in foreign currency (including ELA and the Term Auction Facility in US dollar)
- Claims on non-euro area residents denominated in euro (including loans to the central banks of Poland and Hungary)
- Claims on non-euro area residents denominated in foreign currency (including the swap agreement with the central bank of Denmark)
- Other assets

Liabilities

- Banknotes in circulation
- Liabilities to euro area credit institutions related to monetary policy operations, denominated in euro
- Liabilities to other euro area residents, denominated in euro (including government deposits)
- Liabilities to non-euro area residents, denominated in euro (including swap agreements with the Federal Reserve and the Swiss National Bank)
- Liabilities to non-euro area residents, denominated in foreign currency (including the ELA)
- Other liabilities

Source : ECB.

262 billion dollars, on average, between 16 October and 31 December, including an average of around 16 billion via the currency swaps. In addition, foreign exchange swaps in Swiss francs were set up from 20 October, whereby euro area credit institutions were able to exchange euros for Swiss francs with the Eurosystem for terms of 7 and 84 days, for an average volume of 14 billion euro between 20 October and 31 December. The Swiss francs were made available via a swap agreement between the Eurosystem and the Swiss National Bank.

Although these foreign exchange operations inflated the Eurosystem's balance sheet total, their direct impact on the liquidity need in euro was more limited, as the increase in euro-denominated liabilities to non-residents, in this case assets in euro held by the Federal Reserve and the Swiss National Bank on an account with the Eurosystem and resulting from swaps between the Eurosystem and those central banks, was largely offset by the increase in claims on euro area residents denominated in foreign currency. Conversely, the provision of liquidity in foreign currencies via foreign exchange swaps with euro area credit institutions – i.e. a proportion of the liquidity supplied in dollar and the whole of the Swiss franc transactions – causes a corresponding increase in the banking sector's need for liquidity in euro, because the foreign currency was provided to the European banking sector in exchange for euro, and not against eligible collateral as was the case for the other operations.

Since some credit institutions faced liquidity problems which threatened their survival in September and October, the NCBs of several Member States were forced to supply emergency liquidity assistance (ELA) in both euro and foreign exchange. While the foreign exchange operations conducted in this connection and financed by the swap agreement with the Federal Reserve, or by borrowings in foreign exchange from the BIS, had no direct effect on the net liquidity need in euro at the time of the routine monetary policy operations, the same cannot be said of the emergency loans which had to be granted in euro, as these provided liquidity in euro for credit institutions outside of those operations. However, the amounts allocated via the ELA in euro were relatively small, certainly in comparison with the Eurosystem's balance sheet total.

In October, credit institutions outside the euro area experienced problems in obtaining liquidity in euro, in just the same way as European banks were struggling to obtain dollars and Swiss francs. On 27 October, the Eurosystem therefore concluded a swap agreement with the Danish central bank whereby 12 billion euro could be exchanged for Danish kroner held by the Eurosystem on an account with that central bank. The Danish central bank supplied the euros to its domestic banking system. On 16 October and 21 November, the Eurosystem opened a credit line against collateral for the Hungarian and Polish central banks for a total of 15 billion euro, in order to ensure the provision of liquidity in euro in those countries. To the extent that these credit lines were mobilised, the resulting provision of liquidity in euro by foreign central banks had the effect of boosting liquidity in the euro area.

The structure of money market interest rates

Unsecured interbank interest rates at over one day (Euribor) declined during January once the usual year-end jitters associated with the closure of the annual accounts of the credit institutions had faded away. In the spring and summer, however, they began rising again, mainly for longer terms. This was due to expectations of an increase in the key rates as those expectations were also reflected in the interest rates for the same term against collateral (Eurepo). As is evident from the fact that unsecured rates increased more sharply than secured rates, there was also an additional risk premium offering compensation for the risk of default and the liquidity risk.

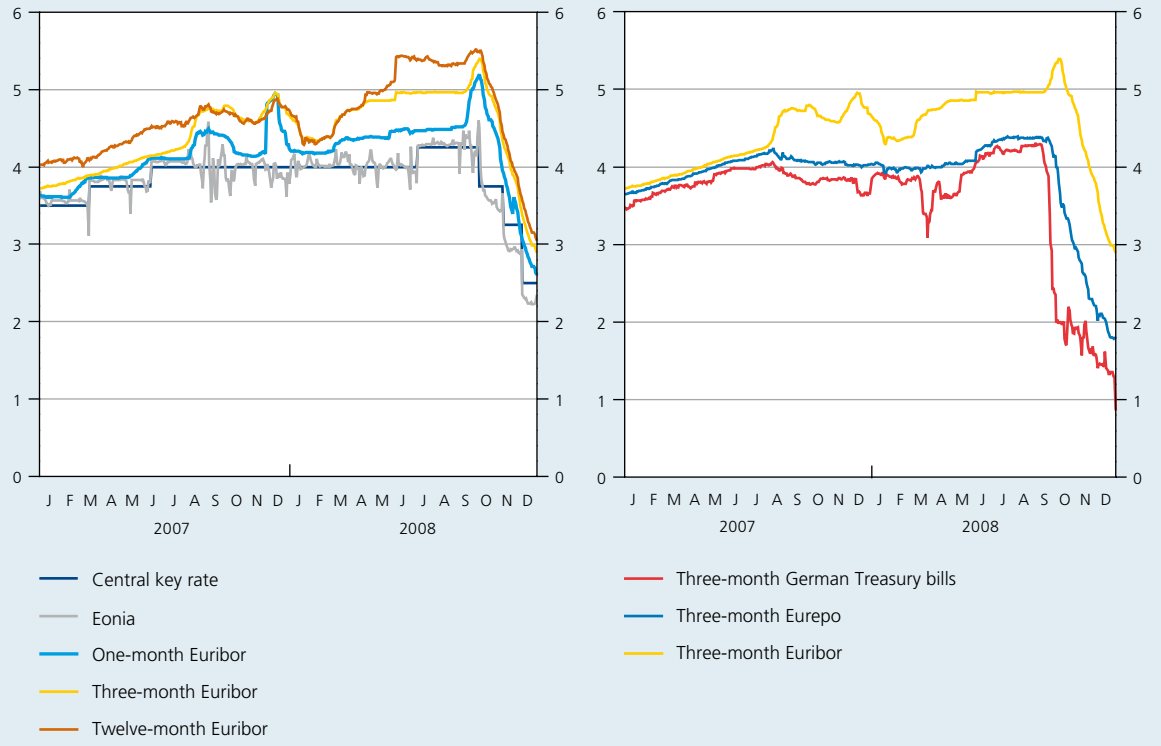
In the second half of September, rates on unsecured loans, i.e. without collateral, increased steeply, especially for the shorter maturities. That increase originated from a marked rise in the risk premium, evident from the reduction in secured interest rates over the same period, as expectations of future cuts in the key rate were progressively taken into account. As a result, on 10 October the spread between secured and unsecured interest rates at three months reached a record 184 basis points. In the first half of 2007, i.e. before the financial tensions erupted, it had averaged 7 basis points.

The successive reductions in the key interest rate and growing expectations of further rate cuts triggered a decline in money market interest rates during the autumn. That decline was steeper for unsecured interest rates than for secured rates, implying a narrower spread between the two types of loans, and therefore also a reduced default risk perception. However, at the end of the year, that spread was still around 110 basis points.

The latest episode of financial turbulence was accompanied by a very sizeable fall in yields on short-term government paper. Thus, the yield on three-month German Treasury bills dropped to around 1 p.c. at the end of December.

CHART 15 STRUCTURE OF MONEY MARKET INTEREST RATES IN THE EURO AREA

(daily data)



Sources : Bloomberg, Thomson Financial Datastream.

These large falls reflect changes in the monetary policy stance and the associated expectations, but they are equally due to the safe haven status of these securities in times of financial upheaval. Moreover, these assets were much in demand as collateral for secured loans, both with the Eurosystem and on the private market. As a result, for three-month maturities, the spread between interbank market interest rates on secured loans and the yield on German government securities peaked at 200 basis points on 3 October.

The central bank has no direct control over the risk premiums included in unsecured interest rates. In fact, these are based solely on the assessment of the counterparty default risk, while monetary policy can only steer risk-free interest rates. However, when the monetary policy stance is determined, account is taken of movements in interbank interest rates, since they serve as the benchmark for many financial contracts. An increase in the Euribor resulting solely from a higher risk premium therefore implies a tightening of financing conditions in the economy, independent of monetary policy. Without being able to exert any direct influence on the risk premium, monetary policy can nevertheless compensate for its impact if necessary, by reducing the key interest rates or increasing them less rapidly.

2.3 Decisions on the monetary policy stance

Just as it modified the provision of liquidity, the intensification of the international financial crisis in mid September also brought a radical change in the monetary policy stance.

From January to the end of the summer : increased upside risks to price stability

The data available at the beginning of the year under review indicated that the financial turbulence which had emerged in August 2007 had only had a minor effect on economic activity. Although quarterly GDP growth in volume had fallen in the final quarter of 2007, to 0.3 p.c. compared with 0.6 p.c. in the preceding quarter, most

of the short-term indicators were still at a relatively high level. The growth forecasts for 2008 and 2009 were therefore only downgraded slightly in the first half of the year. The ECB Governing Council considered that the euro area's economic fundamentals were still sound and that they were underpinned by the persistent vigour of foreign demand. The emergence of the new industrialised countries and the fact that the strong economic expansion was less export-based and was driven more by domestic demand actually supported the theory that global growth could be decoupled from the American cycle. Moreover, the high capacity utilisation rate and corporate profitability in the euro area looked set to continue supporting the expansion of business investment. At the same time, despite the marked increase in the price of commodities, private consumption appeared capable of contributing further to economic expansion, thanks to rising employment and the decline in unemployment to 7.2 p.c., the lowest rate for twenty-five years, these two factors in turn resulting not only from the favourable economic climate but also from the policy of structural labour market reforms and wage moderation. Finally, the sustained growth of lending to the private sector suggested that the financial market problems were not yet affecting the supply of credit.

However, the basic scenario described above was accompanied by great uncertainty and essentially downside risks. The main risks, which were identified by the Governing Council, were mostly connected with the problems on the financial markets. Those problems might not only persist, they could also have a greater impact on the real economy than according to the basic scenario. Furthermore, there were fears that the continued increase in the prices of commodities, particularly crude oil, might depress consumption and business investment. Finally, there was always the possibility that the emerging economies might experience a sharp slowdown in their economic growth, so that foreign demand would prove to be weaker than assumed in the basic scenario.

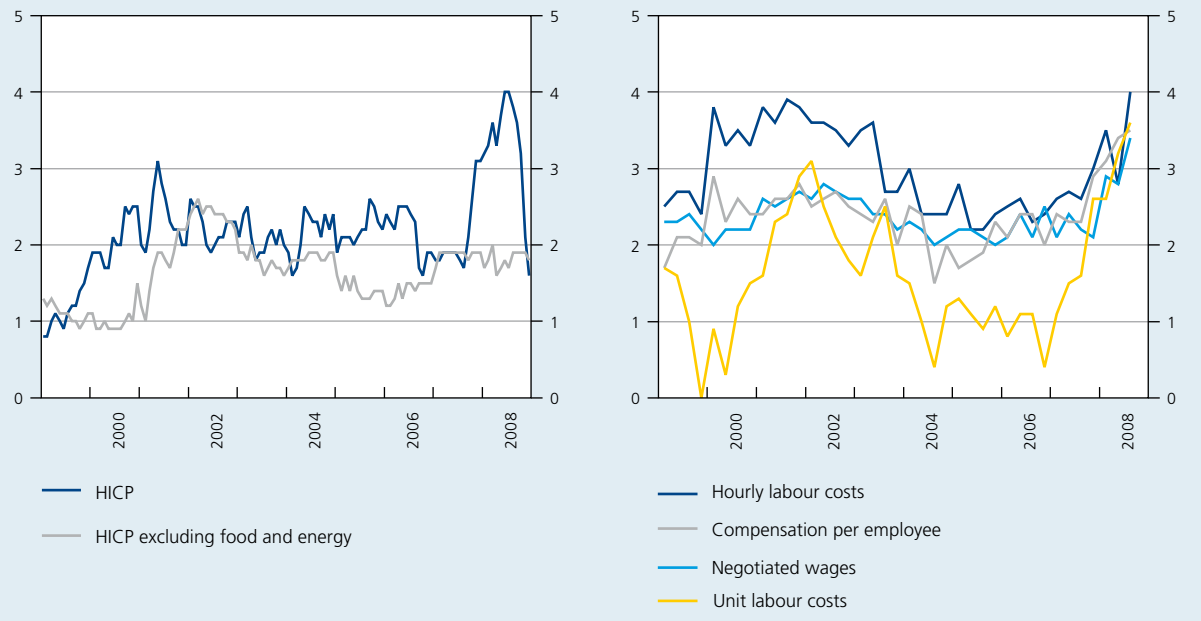
Despite the slight downward revision of the growth projections published by the Eurosystem at the beginning of March, the expansion of activity remained surprisingly vigorous in the first quarter of the year under review, with the euro area's volume of GDP growing by 0.7 p.c. However, that was due largely to temporary factors, namely benign weather conditions which sustained construction activity in the winter. The expansion of real GDP was therefore expected to decline in the second quarter, and from the start it was emphasised that the euro area's growth figures had to be viewed over the first half of 2008 as a whole. This was clearly reflected in the projections which the Eurosystem published at the beginning of June. The expected expansion of activity for 2008 was increased only slightly – it was predicted that growth in 2008 would come to between 1.5 and 2.1 p.c. –, while the growth outlook for 2009 was revised downwards somewhat, owing to the continuing rise in commodity prices. At that time, the 2009 growth forecasts were ranging between 1 and 2 p.c. In the first half of the year, leading international institutions and most professional forecasters produced similar projections for economic growth for 2008 and 2009.

In contrast to the picture relating to economic activity, the inflation outlook was a source of growing concern for the Governing Council. In the first half of the year, inflation measured by the HICP in the euro area reached a level not seen since 1999, well in excess of the upper limit of 2 p.c. fixed by the quantitative definition of price stability. The persistent vigour of demand for energy and food from the emerging economies, and – in the case of certain food commodities – negative, though essentially temporary, changes in supply led to substantial increases in commodity prices which rapidly had a sizeable impact on the energy and food components of the HICP. In the case of these components, the soaring prices may have been fuelled by a greater appetite for financial derivatives based on commodity prices. However, the transmission of these increases to the prices of other goods and services was limited, as reflected in the more or less steady rise in the HICP excluding food an energy, at a rate just below 2 p.c., and the continuing moderate rise in labour costs based on data available at the time, i.e. up to the final quarter of 2007.

This corroborated the assumption made in the Eurosystem projections, at least in the basic scenario, whereby the effect of the increased cost of commodities on overall inflation would be temporary, and there would be no widespread second-round effects. However, as the commodity price increases persisted – contrary to earlier predictions – and as inflation therefore remained above the initial forecasts, it became increasingly clear that it would be some time before inflation dropped back below 2 p.c. The Eurosystem's inflation projection for 2009 was therefore revised upwards both in March and in June, to within a range of [1.5;2.7] and [1.8;3.0] p.c. respectively. In addition, as the scale and expected persistence of the inflation surge intensified, the Governing Council drew greater attention to the risk of second-round effects in pricing and wage-setting. It therefore called on the parties concerned in both the private and the public sector to assume their responsibilities, particularly in ensuring that wage increases were matched by higher productivity. It also expressed its concern about the existence of schemes whereby nominal wages are indexed to the consumer

CHART 16 INDICATORS OF INFLATIONARY PRESSURE IN THE EURO AREA

(percentage changes compared to the corresponding period of the previous year)



Sources : EC, ECB.

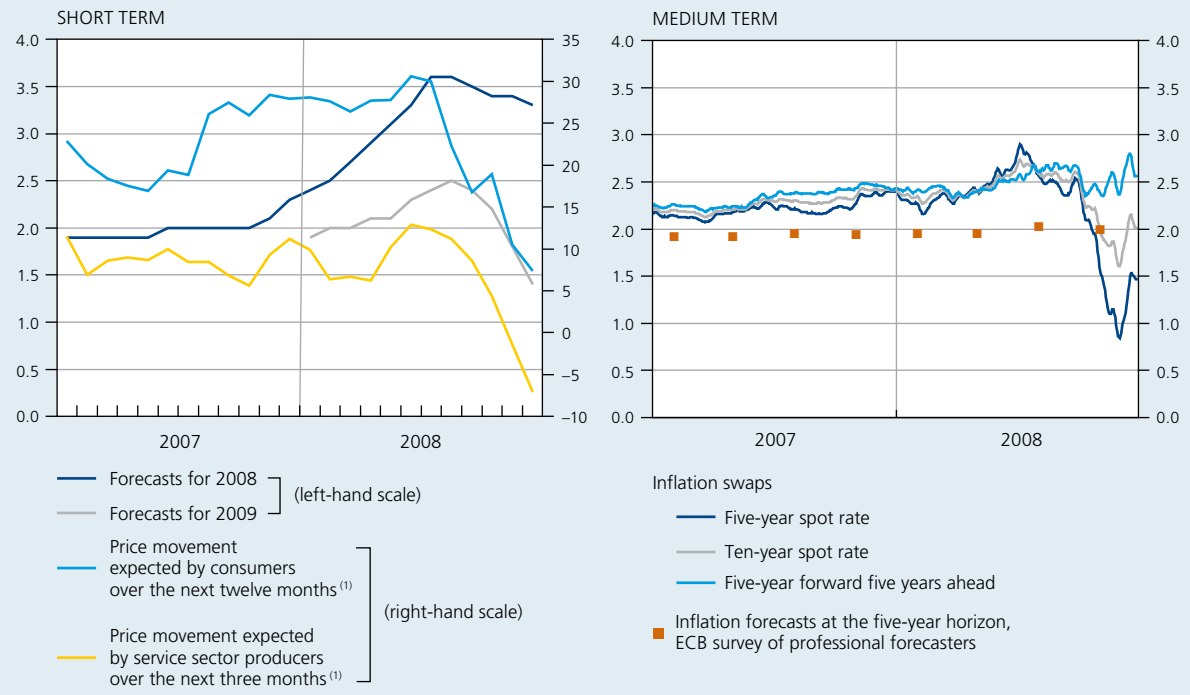
price index. At the same time, it systematically stressed the importance of firmly anchoring inflation expectations. In fact, as soon as they are formed, expectations relating to future inflation exert an influence on pricing and wage-setting so that they are of immediate significance for inflation itself. A worrying factor in the second quarter was not only that short-term inflation expectations were revised upwards in line with the Eurosystem projections, but medium-term inflation expectations were also raised. It is primarily the latter that offer information on the credibility of monetary policy in regard to the maintenance of price stability at a relevant time horizon. Both the small but nonetheless noticeable increase in five-year inflation expectations in the ECB survey of professional forecasters, and the increase in five-year inflation five years ahead based on inflation swaps, caused the Governing Council grave concern.

In the first half of 2008, monetary analysis confirmed the existence of upside risks to price stability in the medium and long term. Despite a slight slowdown which could be imputed to the tightening of monetary policy in 2006 and 2007, the annual expansion of M3 and that of lending to the private sector remained robust. Nonetheless, it should be pointed out that the Governing Council considered that the M3 growth figures probably overestimated the underlying growth of the money supply to some extent, partly owing to the relatively flat yield curve which prompted portfolio reallocations in favour of short-term investment instruments included in M3. Moreover, the substitution between components of M3 continued, owing to the rising short-term interest rates which increased the attractions of term deposits to the detriment of overnight deposits.

Lending also continued to expand strongly, thus bolstering the vigorous growth of the money supply. However, the short-term dynamics, namely the movement in quarterly growth, indicated a slight deceleration by the first quarter. Nevertheless, that appeared to be due essentially to a fall in demand for credit, resulting mainly from the increase in interest rates and the continued cooling on the housing market, rather than a reduction by the banks in their supply owing to problems encountered on the financial markets. In the short term, the financial turbulence actually exerted upward pressure on the growth rate of some components of lending; this was attributable to the re-intermediation caused by that upheaval, and certainly did not indicate any increase in the total financial resources available to the non-financial sector. There were three developments in that direction. First, the marked growth of lending to "other financial institutions" reflected the fact that special purpose vehicles, which faced problems in raising finance on the commercial paper and corporate

CHART 17 INFLATION EXPECTATIONS IN THE EURO AREA

(annual percentage changes, unless otherwise stated)



Sources: EC, Consensus Economics, Thomson Financial Datastream, ECB.
(1) Balance of replies to the monthly survey.

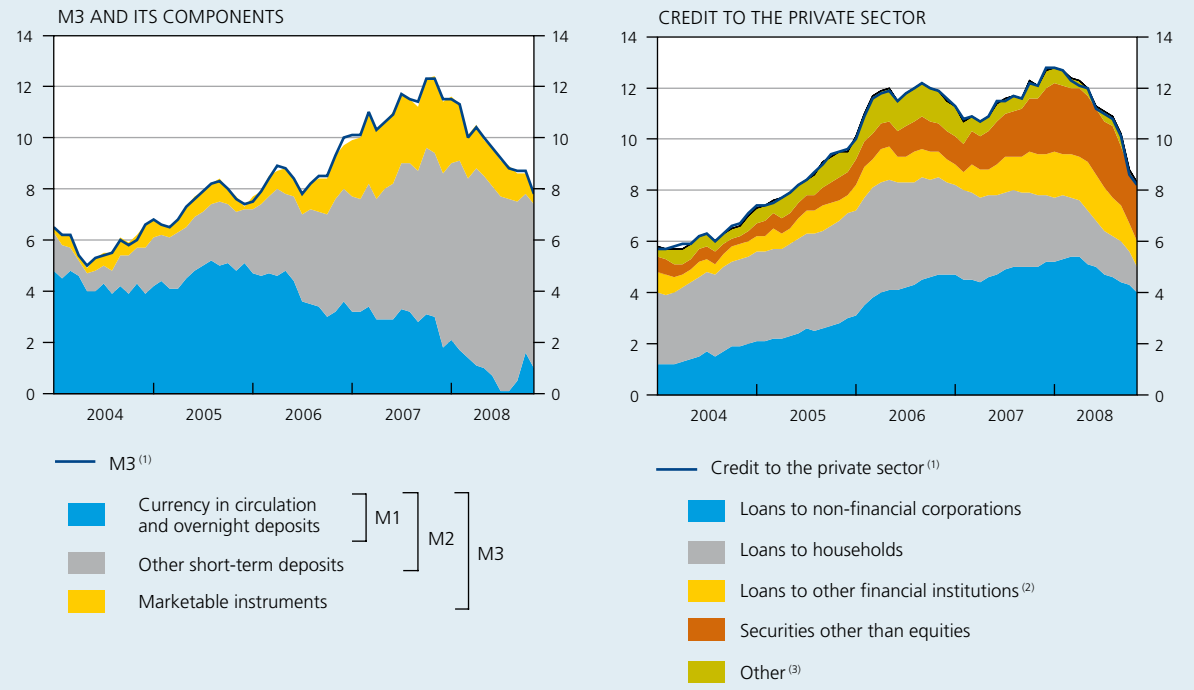
bond market, were forced to use the credit lines available from their associate banks. Next, the balance sheets of these vehicles were also lightened by the repurchase of securities, reflected in an increase in the "securities other than equities" item in the consolidated balance sheet of the MFI sector. The fact that the banks can use these securities as collateral for the Eurosystem's refinancing operations was another reason for recording them on their balance sheet. Finally, the expansion of lending to non-financial corporations was supported by a substitution effect, i.e. by a shift in the financing of non-financial enterprises from the market to the banks.

Having systematically drawn attention in the first half year to the upside risks to price stability, indicated by both economic and monetary analysis, on 4 July the Governing Council decided to raise the key interest rate by 25 basis points to 4.25 p.c., a decision which was, moreover, fully anticipated by the markets.

During the summer, the Governing Council continued to predict a modest growth slowdown, while also emphasizing the essentially downside risks which could affect growth. The existence of upside risks to price stability was also confirmed. In regard to economic activity, although the rising cost of energy and food would depress domestic demand, it was felt that the persistently vigorous foreign demand, particularly from the emerging economies, would continue to be a factor supporting growth. The 0.2 p.c. contraction of GDP in the second quarter therefore came as a surprise, even though a technical correction to GDP growth was expected. Furthermore, a number of confidence indicators were displaying an increasingly downward trend. Nonetheless, inflation remained exceptionally high, despite a 20 p.c. fall in oil prices expressed in euro between the beginning of July and the beginning of September. In August, inflation was still running at 3.8 p.c. compared to 4 p.c. in July. The Governing Council therefore remained vigilant in regard to the risk of second-round effects in wage-setting and pricing. The first data on labour costs for 2008, published during the summer, also indicated that those costs had risen considerably whereas labour productivity had slowed, causing a marked rise in unit labour costs. Finally, the expansion of the money supply and lending remained vigorous, but the short-term dynamics of these variables showed signs of moderation, and the new fall in the growth of M1 – the M3 component which is closest to demand for money for

CHART 18 MONETARY AGGREGATES AND CREDIT TO THE PRIVATE SECTOR IN THE EURO AREA

(contribution to the change compared to the corresponding period of the previous year, percentage points, unless otherwise stated)



Sources: EC, ECB.
(1) Percentage changes compared to the corresponding month of the previous year.
(2) Loans to non-monetary financial institutions, excluding insurance companies and pension funds.
(3) Equities and loans to insurance companies and pension funds.

transaction purposes – indicated that the slowdown in economic growth had perhaps not yet come to an end. These points confirmed that there were upside risks to price stability, but also seemed to suggest that the risks were no longer intensifying.

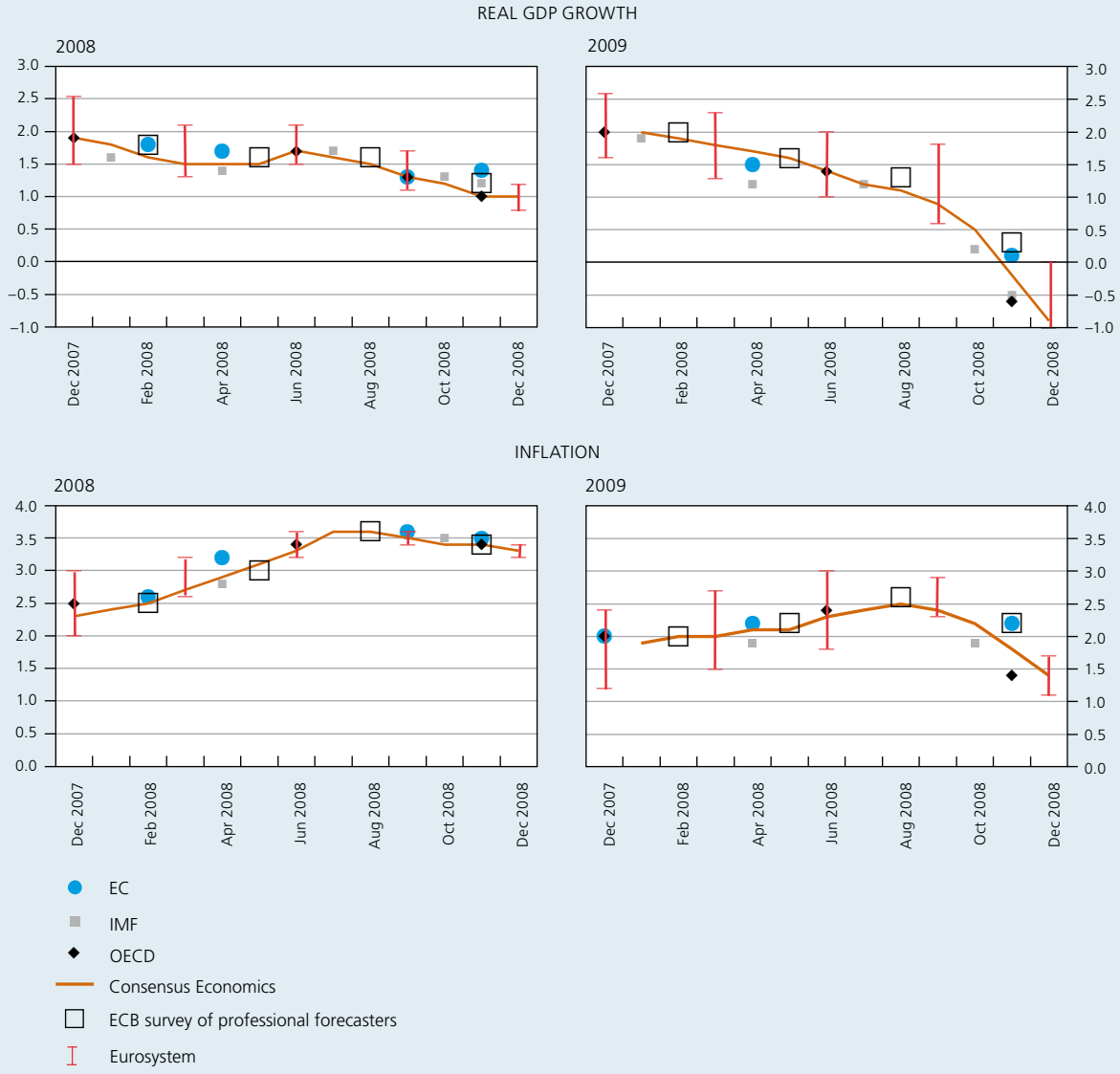
From mid September: deepening of the financial crisis and marked attenuation of the upside risks to price stability

During September, the financial market crisis entered a new phase. This presented new challenges to both financial stability and the maintenance of macroeconomic stability. More particularly, it was necessary to examine to what extent the GDP growth and inflation scenarios prevailing previously needed to be modified, and to ascertain the monetary policy implications of that adjustment. Just as it is crucial to recognise changes in the economic and financial climate in good time, and to quantify their impact as far as possible, it is essential to keep monetary policy on course, respecting its objective of maintaining price stability in the medium term and the associated analytical framework. This provides a clear anchorage point for economic players, something which is even more important in a period of great uncertainty. In the Eurosystem's case, the objective and the analytical framework are both sufficiently general, and were also designed symmetrically so that they remain relevant in the event of major downside shocks. In that context, the Governing Council confirmed on several occasions that everything would be done to ensure that medium-term inflation expectations were firmly anchored at a level below – but still close to – 2 p.c., thus making the optimum contribution not only to the attainment of economic growth and job creation sustainable in the medium term, but also to financial stability. In so far as the repercussions of the financial crisis on the real economy could be attributed principally to a demand shock, the pursuit of the objective of price stability should also do much to promote the stabilisation of short-term economic growth.

From the end of September, it quickly became apparent, particularly in the light of the sharp deterioration

CHART 19 PROJECTIONS FOR GDP GROWTH AND INFLATION IN THE EURO AREA

(annual percentage changes)



Sources: EC, IMF, OECD, Consensus Economics, ECB.

in the economic indicators, that the real economy was also going to be seriously affected. This contagion spreading to the real economy was due mainly to the rising cost of financing, the tightening of conditions for access to bank lending – which was also mentioned in the Eurosystem's bank lending survey –, negative wealth effects and crumbling confidence. Moreover, the financial crisis spread ever wider, so that foreign demand also suffered severely in turn. In line with this finding, euro area real GDP contracted further in the third quarter. All these factors lent credence to the assumption of a more marked, but in particular a more persistent, slowdown in economic activity. In that context, the Eurosystem made substantial downward adjustments to its economic growth projections in December, cutting them to [–1.0;0.0] in 2009 and expecting only a modest recovery in 2010, estimating GDP growth at that horizon at [0.5;1.5] p.c. Leading international institutions and most professional forecasters arrived at similar conclusions at the end of the year.

The ECB Governing Council considered that a number of downside risks previously identified had materialised, and that they would have a sizeable impact on economic

activity for a relatively long period. In addition, despite the revision of the basic scenario, the Governing Council still felt that the risks affecting the economic growth projections were clearly tending downwards, and that the uncertainty was much greater than it would be under more normal circumstances.

Apart from the effects on economic activity, it soon became apparent that the deepening international financial crisis would have implications for the risks to price stability. The decline which had already begun in prices of crude oil, and of other commodities, accelerated. As a result, inflation subsided to 1.6 p.c. in December, while a further marked deceleration was expected in the short term, partly as a result of base effects. In the medium term, too, the upside risks to price stability ebbed away, owing to the revision of the economic growth forecasts, so that – at a relevant horizon – it became likely that the level of inflation would correspond to the definition of price stability. This was reflected in the inflation projections published in December by the Eurosystem. These were revised downwards substantially for 2009, since they were cut to [1.1;1.7] p.c. whereas, according to these projections, inflation was expected to fall in the range of [1.5;2.1] p.c. in 2010.

The decline in inflation and the revision of the projections were also reflected in various measures of inflation expectations, even if those based on financial instruments need to be interpreted with greater caution since they may have been influenced by the financial crisis independently of genuine inflation expectations, as explained in box 4. Monetary analysis, being based on data up to November, corroborated the Governing Council's view whereby inflationary pressure was easing, as the growth of the money supply and lending was continuing to slow down. In that regard, it should be mentioned that the short-term dynamism of lending to both non-financial corporations and households declined sharply from October.

After the central banks had consulted one another on the provision of liquidity and arranged coordinated action in that sphere, it was decided on 8 October to adopt a coordinated decision on interest rates. In view of the seriousness of the economic crisis, six central banks of major advanced economies, namely the United States, the euro area, the United Kingdom, Sweden, Switzerland and Canada, simultaneously cut their main policy rates by 50 basis points, while the Bank of Japan gave its full support to these monetary policy decisions. After it had become clear that the impact of the financial crisis on the real economy was increasing, and that inflationary pressure was moderating considerably, the Eurosystem cut its key rate by a further 50 basis points in November and 75 basis points in December, reducing it to 2.50 p.c. at the end of the year. On 15 January 2009, a further 50 basis point cut in the key rate was approved, bringing it to 2 p.c.

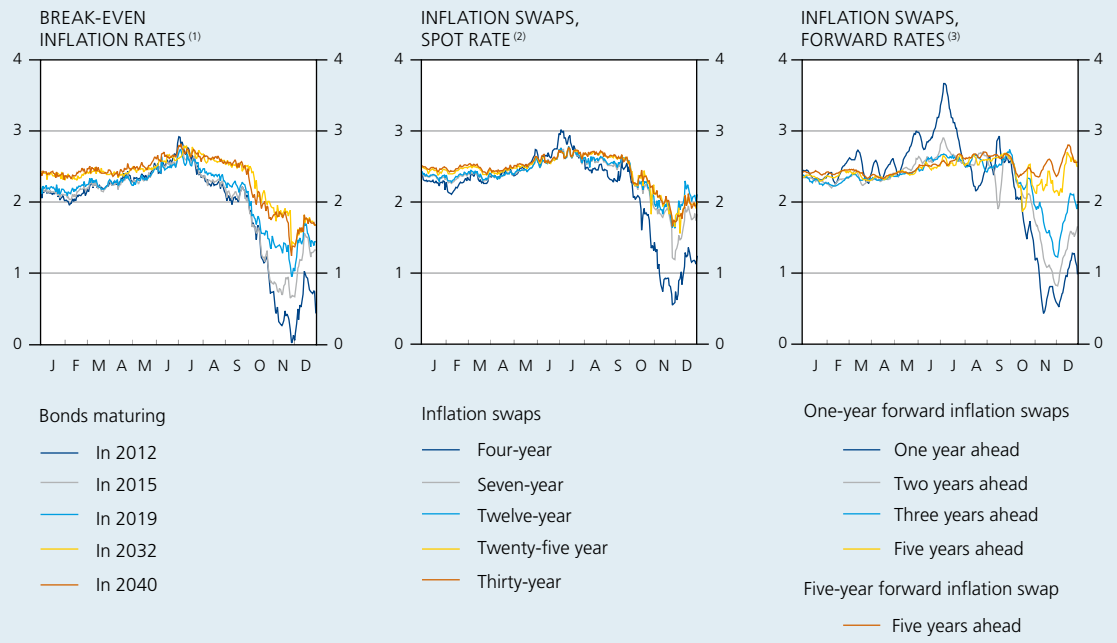
Box 4 – Interpretation of the measures of inflation expectations based on financial instruments during the financial crisis

Anchoring inflation expectations is vital for monetary policy, so that it is essential to have access to indicators which measure those expectations. Apart from surveys such as those conducted by the ECB or Consensus Economics among professional forecasters, there are various financial instruments which provide an indication of inflation expectations. This box examines those which are most relevant here, and the information deduced from them during the year under review in regard to the movement in inflation expectations.

Inflation-linked government bonds are one of those instruments. These are bonds on which the yield comprises an element corresponding to the inflation rate, in addition to the fixed component. Comparison of their yield with that of a fixed-rate government bonds with a similar maturity, referred to in the rest of this text as nominal bonds, indicates what is known as break-even inflation rate, i.e. the implicit inflation compensation which is included in the nominal yield of a fixed-rate bond and which, when deducted, reveals the real yield. Another product, inflation swaps, comprise a vast range of fixed maturities. These are contracts whereby the counterparties exchange the inflation-dependent part of their future cash flows, or speculate on inflation falling or rising. Compensation for inflation can be derived directly from the rate at which these contracts are traded.

MEASURES OF INFLATION EXPECTATIONS DERIVED FROM FINANCIAL INSTRUMENTS IN 2008

(percentages)



Source: Thomson Financial Datastream.

(1) Break-even inflation rates correspond to the difference between the nominal bond yield and the yield on indexed bonds originating from the same issuer and with similar maturity.

(2) The maturities, which are fixed in the case of inflation swaps, are comparable to the residual term of bonds on the basis of which break-even inflation rates are calculated.

(3) Moving average of the past five days.

The inflation measures deduced from these financial instruments are determined not only by actual inflation expectations but also by other factors, such as inflation risk premiums and liquidity premiums. The inflation risk premium, which compensates in a way for the uncertainty surrounding the inflation forecasts, is typically higher for longer maturities. The liquidity premium is higher for less liquid markets.

Thus, the spread between liquidity premiums on nominal and indexed bonds is of crucial importance for the break-even inflation rate, since the latter is derived from the yield differential between these two instruments. Since the nominal bond market is more liquid, there is in fact downward pressure on the break-even inflation rate. However, that effect has diminished very considerably over the years, as a result of the strong expansion of the inflation-linked bond market. Conversely, in the case of inflation swaps, the liquidity premium exerts a positive bias. As in the case of indexed bonds, that effect has declined over the years with the expansion of activity on the market where inflation swaps are traded so that, like inflation-linked bonds, these have become increasingly useful for measuring inflation expectations in the euro area.

If inflation and liquidity risk premiums are taken as a whole, their overall influence on the measure of inflation expectations under normal circumstances leads to overestimation of forecast inflation, whichever of the two said instruments is used, though slightly more so for inflation swaps, as these tend to record an inflation rate slightly higher than the corresponding break-even inflation rate. In addition, account should be taken of a certain level of volatility specific to the financial markets, which has some effect on these premiums. That has obviously been the

case since August 2007, and even more so since the financial crisis worsened in September 2008, so that it has become more complicated to interpret the break-even inflation rate and the rate indicated by inflation swaps.

Since August 2007, periods of increased volatility have occurred in rapid succession on the financial markets, necessitating a cautious interpretation of short-term fluctuations in the break-even inflation rate. Nevertheless, the latter was still a valuable input in the first half of the year under review. The movement in that inflation measure indicated that the risks to price stability had intensified. From February to July 2008, break-even inflation rates thus rose sharply at the various horizons, in accordance with the information derived from the movement in inflation swaps. That signal was also confirmed by the measures of inflation expectations obtained from surveys.

From the end of September 2008, however, break-even inflation was greatly influenced by the worsening of the international financial crisis, which seriously impaired its function as a signal of actual inflation expectations. Investors exhibited a clear preference for nominal government bonds (flight to liquidity), driving down the risk premium on the nominal government bond market and magnifying it considerably on the inflation-indexed bond market. The result was a marked fall in break-even inflation rates, unconnected with the movement in genuine inflation expectations, although these also diminished in the wake of the fall in commodity prices and the deteriorating outlook for economic activity. It is impossible to assess these two effects separately, so that the value of break-even inflation rates as an indicator of inflation expectations decreased in the closing months of the year under review.

Spot prices of inflation swaps also tended to fall from the end of September 2008, but to a lesser extent than break-even inflation at comparable horizons. The intensification of the financial crisis probably exerted some upward influence, even though these instruments are less exposed to the consequences of changes in volatility on the financial markets. The divergence between the two indicators – very substantial in historical terms – largely reflects the influence of the flight to liquidity.

In regard to the forward rates implicit in inflation swaps, not only did they decline at the very short-term level following the sharp fall in commodity prices, but they also remained well below the upper limit of the quantitative definition of price stability for one-year inflation rates one, two and three years ahead. The financial markets therefore seem to have anticipated a marked and persistent decline in inflation. Nonetheless, they continued to reckon on inflation gradually increasing again to approach 2 p.c. During the final months of the year under review, despite some volatility, both the one-year and the five-year implicit inflation swap five years ahead, which reflect medium-term inflation expectations and are therefore often used to assess the credibility of monetary policy, remained at levels which, given the existence of inflation risk and liquidity premiums, can be considered to be in line with price stability.

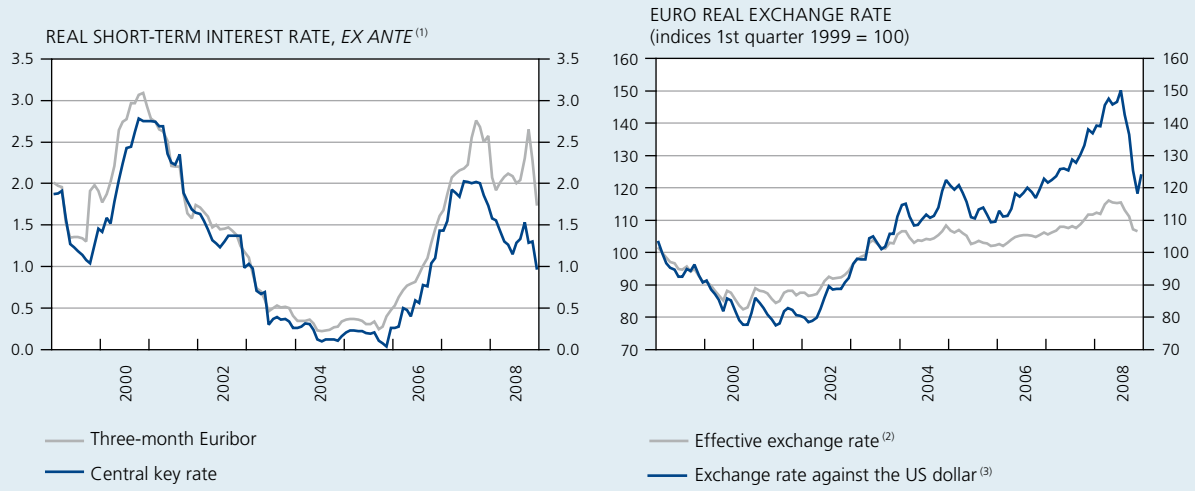
2.4 Monetary and financial conditions

Monetary conditions

Despite an interruption, in the second half of 2007 and the first half of 2008, in the upward phase of the cycle of the Eurosystem's key interest rate, the increase in real short-term interest rates which had begun in late 2005 persisted to some extent, owing to the increase in the risk premium incorporated in three-month rates on the unsecured interbank loan market. The upward trend in real short-term interest rates ended during the year under review. Initially, these rates came under downward pressure as a result of rising inflation expectations. However, the raising of the key interest rate at the beginning of July counteracted that. Later in the year, the sharp reductions in this rate were only partly reflected in the movement in real short-term interest rates, in the light of the marked fall in inflation expectations and the further increase in the risk premium on the interbank market.

Assuming that the interbank market returns to normal, thanks in particular to larger injections of liquidity, the government measures to support credit institutions, and the decision at the end of the year to restore to 200 basis points the corridor formed by the rates of the standing facilities, these cuts in the key interest rate could provide a valuable

CHART 20 MONETARY CONDITIONS IN THE EURO AREA



Sources: Consensus Economics, Thomson Financial Datastream, ECB.

(1) Interest rate deflated by a weighted average of the inflation expectations relating to the current year and the next year. The weight of the current (next) year is reduced (increased) during the year.

(2) Effective euro exchange rate against the currencies of the twenty-two main trading partners, deflated by the ratio between the CPIs.

(3) Euro exchange rate against the US dollar, deflated by the ratio between the CPIs.

impetus for the revival of economic activity. However, that is only possible if the banking community fulfils its responsibilities, to improve the operation of this market.

The strong appreciation of the real euro exchange rate in the first half of 2008 implied that the actual monetary conditions were more restrictive than suggested simply by the movement in real short-term interest rates. This upward trend was due largely to the difference between growth forecasts for the euro area and for the United States, and the associated divergence in monetary policies and the corresponding expectations. The euro then depreciated until the beginning of December, as it became clear that the financial crisis was going to affect the real economy in the euro area, too. Also, the risks of inflation began to wane, and the initially expected and later actual differential in relation to American short-term interest rates diminished. The marked easing of US monetary policy in December, however, halted the euro's depreciation against the US dollar. The euro also appreciated against the pound sterling throughout the year under review.

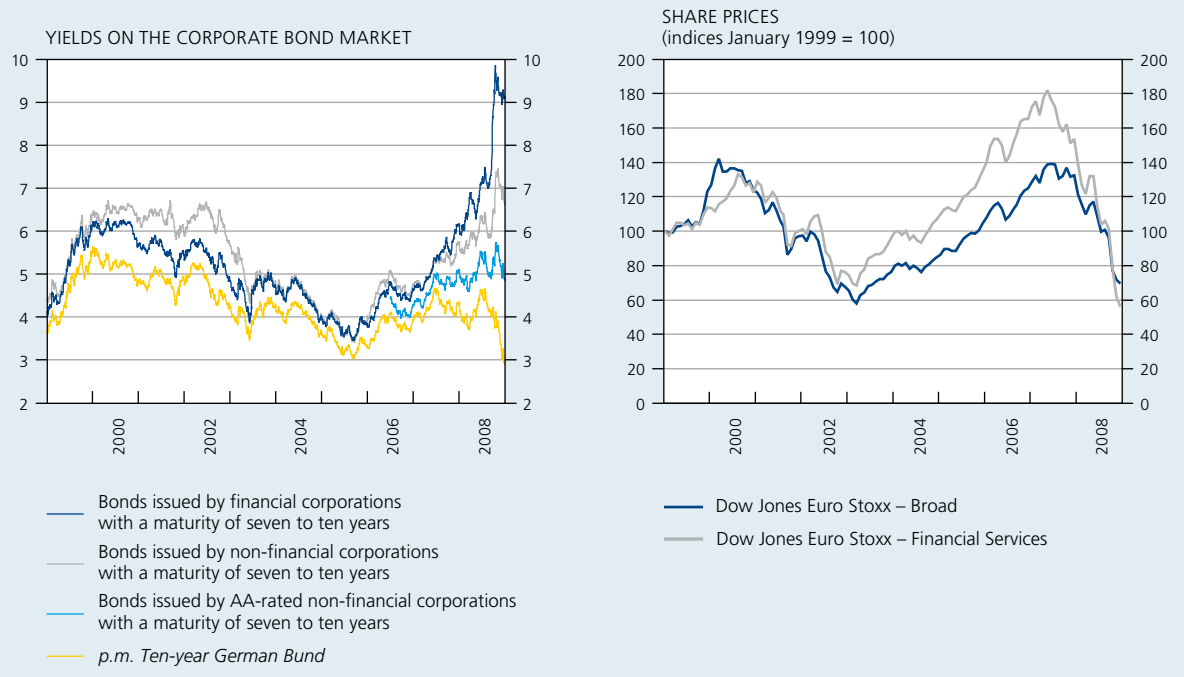
Financial conditions

Financing conditions continued to become tighter in 2008 in most sectors of the economy, in the case of both financing by the issuance of securities on the financial markets and financing via bank lending. The tighter conditions were due to the intensification of the financial crisis, which drove up risk premiums. Moreover, given the greater differentiation in the remuneration of the various risks, the tightening of financing conditions was particularly pronounced in some cases.

During the year under review, interest rates on top-quality long-term government bonds, namely the German Bund, initially increased to reach 4.6 p.c. in July, in a climate of growing concern about accelerating inflation. They then dipped sharply in the second half of the year, in the wake of the worsening financial crisis, not only owing to the gloomier economic outlook and the dwindling inflation risks, but also on account of the sharp rise in risk aversion and the resulting flight to quality and liquidity. German government securities in fact have the highest rating and generally enjoy better liquidity. At the end of 2008, interest rates on ten-year German government bonds thus dropped below 3 p.c. In the other euro area countries, the intensification of the financial crisis caused a marked widening of the yield differential between government bonds and the German Bund, so that the decline in long-term interest rates during the second half year was weaker there. Interest rates on the securities of certain sovereign issuers in the euro area actually continued to rise during that period.

CHART 21 CORPORATE FINANCING CONDITIONS ON FINANCIAL MARKETS IN THE EURO AREA

(daily data)



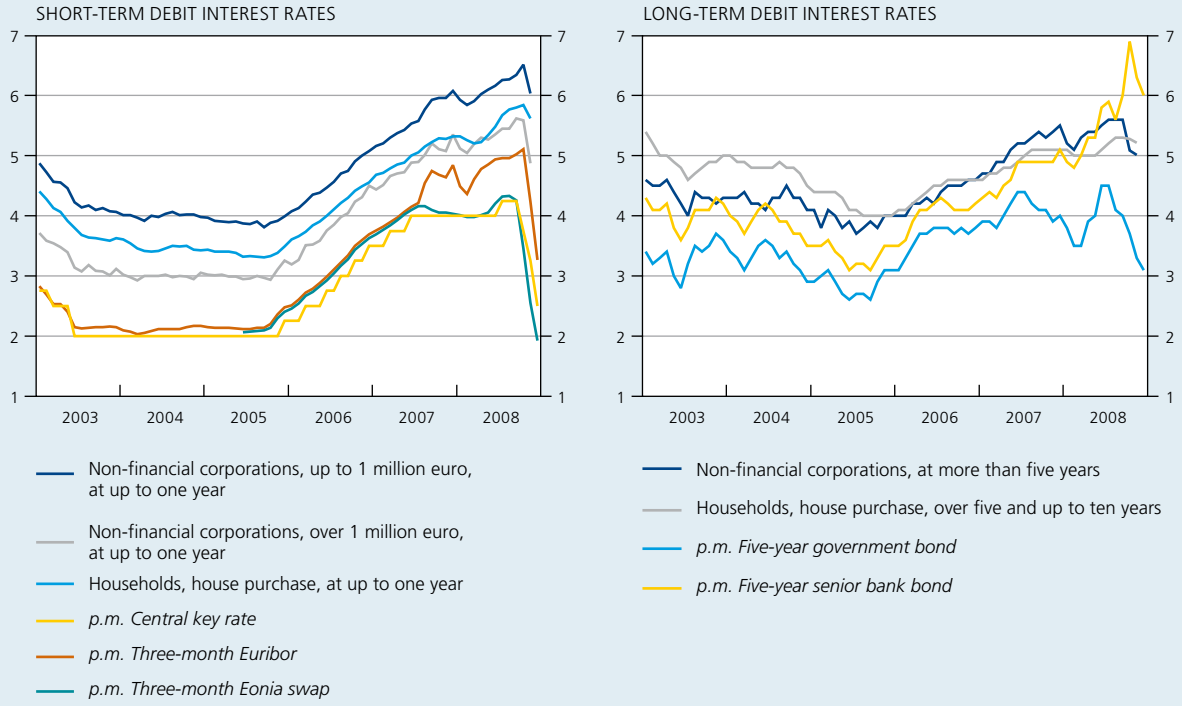
Source : Thomson Financial Datastream.

From the start, the financial turbulence had a pronounced impact on interest rates on bonds issued by financial institutions and on their share prices, given their substantial exposure to risky instruments. The deepening of the crisis in September considerably reinforced that effect, so that yields on bonds issued by financial institutions reached levels not seen for ten years. At the same time, stock market prices for the financial sector tumbled further. For non-financial corporations, too, this second phase of the financial crisis brought a sudden widening of the differential between yields on their bonds and those on government bonds, and a fall in their share prices. This shows that market participants increasingly anticipated that the financial crisis would infect the economy as a whole. The increased risk aversion even drove up risk premiums for good quality issuers. Obviously, that trend was still more pronounced in the case of non-financial corporations in general, since the risks considered more serious attracted a greater penalty. Moreover, the increase in the benchmark yields on corporate bonds of a given quality underestimates the real tightening of financing conditions, since it takes no account whatsoever of the downward revision of the ratings which accompanied the deterioration in the economic climate.

In the case of financing via bank lending, the interest rates on short-term loans to households and businesses moved in parallel with the unsecured three-month interbank rate, which under normal market conditions reflects the marginal cost of short-term financing for credit institutions. Although activity on the unsecured interbank market was almost totally paralysed during the year under review, the three-month Euribor still remained relevant for determining the short-term debit rates applicable to households and businesses. These in fact continued to increase until October, before falling sharply in November. That clearly indicates that the persistence of the tensions affecting the interbank market was actually a factor in the tightening of financing conditions for the non-financial sectors, even though the transmission of monetary policy impulses continued.

Since the long-term debit interest rates of credit institutions track the prices of bank bonds – which are a good indicator of banks' financing costs – rather than government bonds, they displayed an upward trend until October. This indicates that the financial crisis also affected the long-term segment of bank lending. However, long-term debit interest rates for non-financial corporations declined in November.

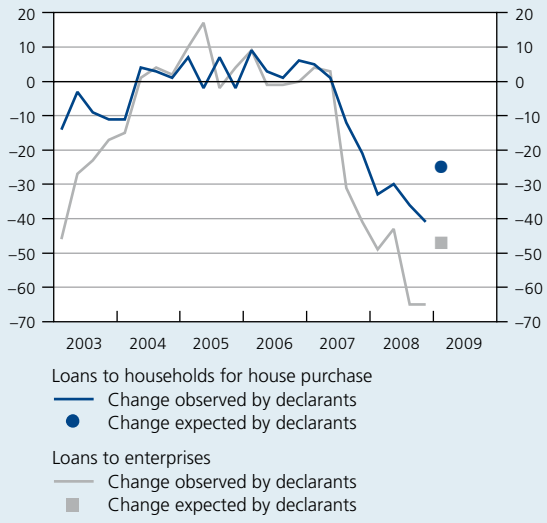
CHART 22 FINANCING CONDITIONS OF MONETARY FINANCIAL INSTITUTIONS IN THE EURO AREA



Sources: Thomson Financial Datastream, ECB.

CHART 23 CREDIT STANDARDS IN THE EURO AREA [1]

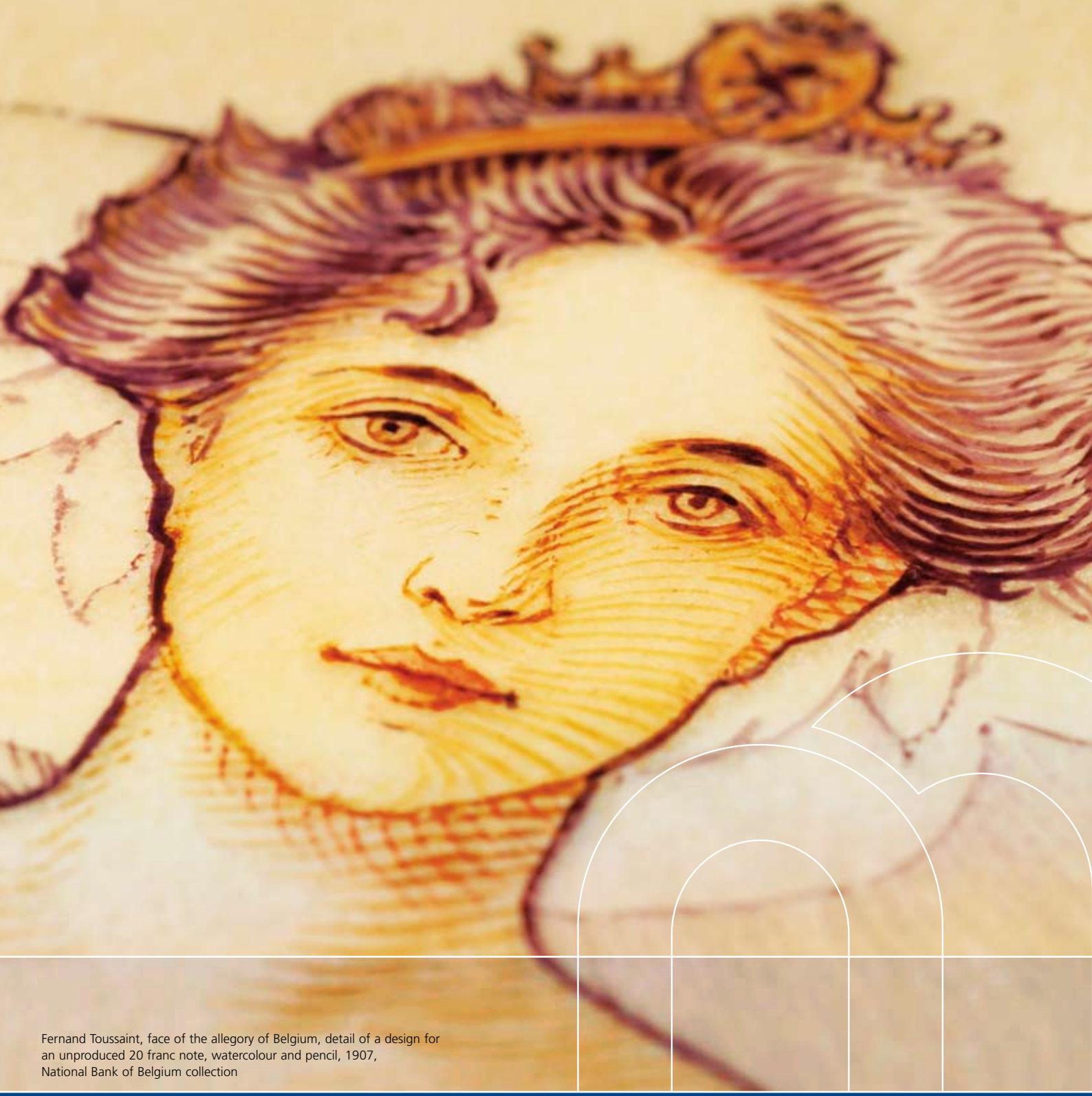
(quarterly data)



Source: ECB.

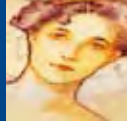
(1) Net (unweighted) percentage of responses by banks to the Eurosystem bank lending survey, indicating the degree of easing or tightening (–) of credit standards.

The quarterly Eurosystem bank lending survey also reveals a tightening of lending conditions. In the fourth quarter of the year under review, the net percentage of credit institutions stating that they had applied stricter criteria to their corporate and household loans had increased to 64 and 41 p.c. respectively of the total participating institutions. Conversely, a smaller net percentage of them expected a further tightening of lending conditions in the first quarter of 2009. While this tightening was attributable to factors directly linked to the precarious situation confronting the banks, with erosion of their capital and mounting problems in financing their liquidity position on the market, it was also increasingly the result of the deteriorating outlook for economic activity, be it for the economy as a whole or for particular branches or businesses.



Fernand Toussaint, face of the allegory of Belgium, detail of a design for an unproduced 20 franc note, watercolour and pencil, 1907, National Bank of Belgium collection

Output, expenditure and current transactions in Belgium



3.

3.1 Summary

In Belgium, the gradual slowdown in activity which had begun during 2006 accelerated in 2008. Thus, after having stayed close to or above the economy's potential growth for four years, the rate of GDP growth dropped from an average of 2.6 p.c. in 2007 to 1.1 p.c.

Although due largely to the same causes – in this instance, higher commodity prices, the loss of momentum in world trade and the euro's appreciation – the deterioration in activity was initially less marked in Belgium than in the euro area as a whole. In fact, in contrast to what was seen in the euro area, the quarterly change in GDP remained positive, albeit weak, in the second and third quarters of 2008. Calculated year-on-year, GDP growth still came to 1.2 p.c. in Belgium in the third quarter, compared to 0.6 p.c. in the euro area, the main factor being more vigorous domestic demand.

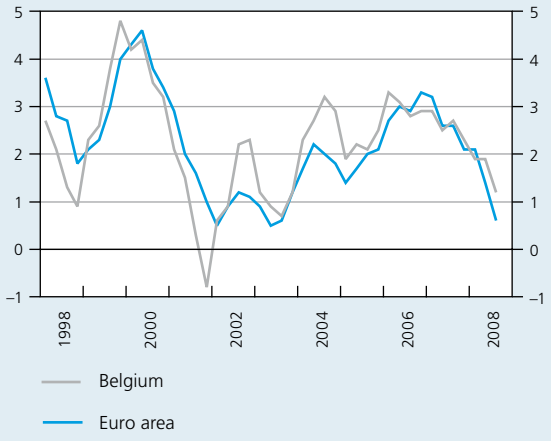
In the fourth quarter, however, like the other European economies, the Belgian economy felt the full impact of the very abrupt deterioration in general economic conditions, in the wake of the global financial tensions and their extreme escalation from mid September 2008. GDP dropped by 1.3 p.c. against the previous quarter : this was comparable to the quarter-on-quarter falls which occurred at the time of the sharp cyclical downturns in 1980-1981 and 1992-1993, and the plummeting business and consumer confidence indicators show no signs of a swift turnaround in the near future. The interim forecasts published by the Bank at the same time as this Report in fact assume that the decline in GDP will continue during most of 2009. In common with many advanced economies, Belgium will therefore have entered an economic recession phase.

While the robust GDP expansion recorded from 2004 to 2007 was broadly based, the various shocks which battered the economy eroded the foundations of growth in 2008. Exports of goods and services were the first to falter, owing to the combined effects of weaker foreign demand and the euro's appreciation. The surge in inflation during the first part of the year gradually inhibited private

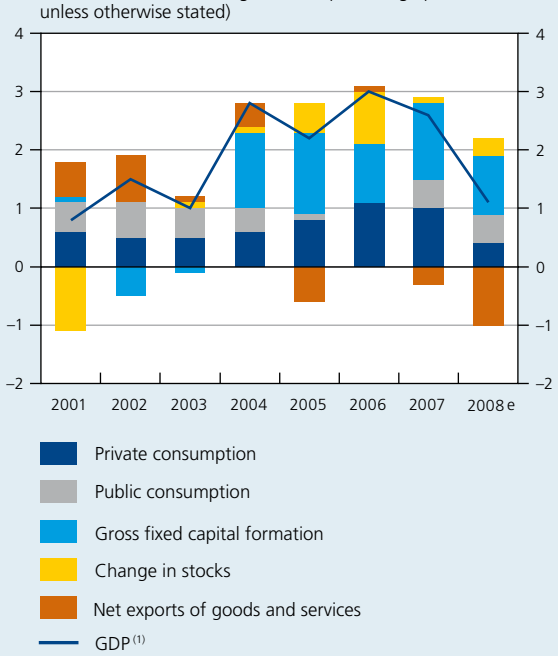
CHART 24 GDP AND MAIN EXPENDITURE CATEGORIES

(calendar adjusted volume data)

GDP IN BELGIUM AND IN THE EURO AREA
(seasonally adjusted data, percentage changes compared to the corresponding quarter of the previous year)



GDP AND MAIN EXPENDITURE CATEGORIES IN BELGIUM
(contribution to the change in GDP, percentage points, unless otherwise stated)

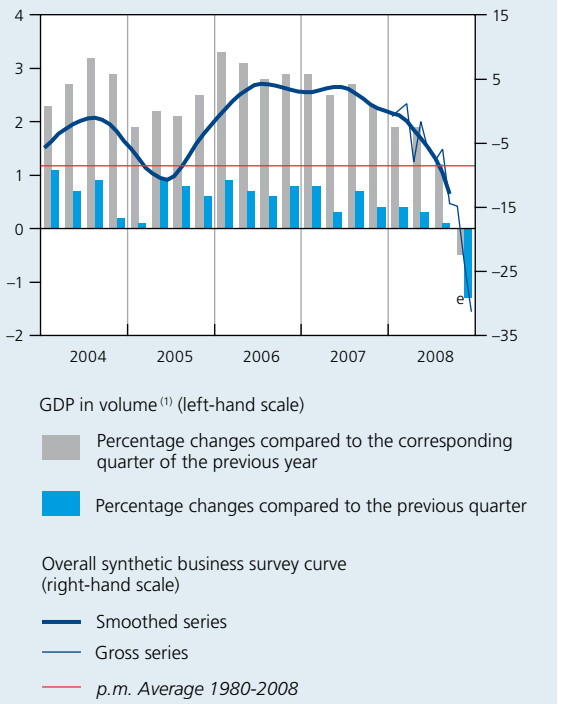


Sources : EC, NAI, NBB.
(1) Annual percentage changes.

consumption and contributed to the continuing deceleration in the growth of investment in housing, which had already begun in 2006. Conversely, business investment remained fairly dynamic in the initial months of 2008. From September, while the marked and rapid deterioration in the economic outlook, especially in the euro area, did reduce the pressure on inflation and the exchange rate, the effect of these movements in bolstering demand and activity was nowhere near sufficient to counteract the adverse repercussions of the financial crisis. Exerting an influence via various channels, as explained in section 1.2 of chapter 1 on the international environment, the crisis ultimately affected all private expenditure categories. In all, while the slight slackening of GDP growth in 2007 originated mainly from net exports, the sharper deceleration seen in 2008 can be attributed to all demand components except the change in stocks.

CHART 25 GDP AND BUSINESS SURVEY INDICATOR

(seasonally adjusted data)



Sources: NAI, NBB.
(1) Calendar adjusted data.

3.2 Activity

While activity had continued to expand at a rate close to 3 p.c. in 2006, a deceleration gradually became apparent thereafter in 2007, remaining moderate in the first half of the year under review. However, it subsequently became much more acute with the rising financial tensions and the weakening of international trade. During the year under review, the year-on-year change in GDP was thus converted from growth of 1.9 p.c. to a contraction of around 0.5 p.c.

The movement in the Bank's business survey indicator also shows that the slowdown occurred in two phases. The first eight months of 2008 brought further erosion of business confidence, which maintained the still moderate downward trend seen in the second half of 2007, but until August the gross indicator remained above its long-term average, and that was reflected in the still limited reduction in GDP growth. From September, however, the gross indicator fell sharply, dropping in December to its lowest level since the start of the period for which the indicators are calculated in their present form, namely 1980. Moreover, the scale and speed of the collapse of business confidence were totally unprecedented, since no deterioration comparable to that in the second half of the year under review had ever been seen in the space of just six months.

As is evident from box 5, the low level of business confidence is due largely to business leaders' extremely pessimistic assessment of the demand outlook. In that regard, the survey results were by far the worst since 1980. The collapse of business confidence in 2008 was widespread in the various branches of activity covered by the survey. It had an equally severe impact not only on manufacturing industry – the branch traditionally most sensitive to the international economic climate – and on trade, owing to the adverse effect of higher inflation and rising economic uncertainty at the end of the year, but also on companies providing business-related services. Conversely, in construction the deterioration during 2008 was on a lesser scale.

In parallel with the decline in business confidence, the growth of value added according to the national accounts slowed down in all market branches of activity during the first three quarters of 2008, while in the previous year the cyclical downturn had been confined to industry and construction.

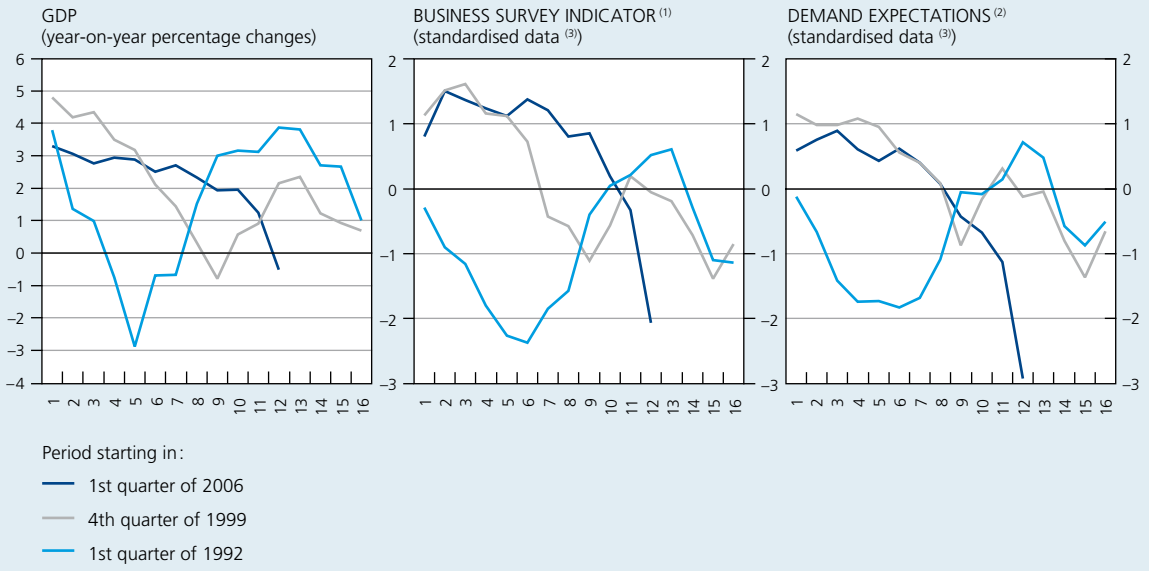
The deterioration was most pronounced in industry, where the volume growth of value added dropped to 0.6 p.c. in the first nine months of 2008, compared to the corresponding period of the previous year. Yet that average masks a decline in activity during the year, as value added contracted in the third quarter. According to the business survey, a marked decline in industrial activity was evident in all sub-branches. The worsening of the

Box 5 – The signalling function of demand expectations

Looking at developments between the first quarter of 2006 and the end of 2008, the slowdown in economic activity was relatively limited in comparison with that seen in previous business cycles. Conversely, it is evident that the shocks which occurred in the year under review had a more widespread impact on confidence and in particular on demand expectations, the latter having fallen to a historical low by the end of the period. The signalling function of the indicator relating to demand expectations in the business survey should not be underestimated. In the recent past, that indicator has in fact given an accurate and timely idea of the future trend in economic activity.

COMPARISON OF THE MOVEMENT IN ECONOMIC ACTIVITY, CONFIDENCE AND DEMAND EXPECTATIONS

(quarterly data, peak of year-on-year GDP growth in period 1)



Sources : NAI, NBB.
(1) Overall gross synthetic business survey indicator.
(2) Average of demand forecasts obtained from the monthly business survey in manufacturing industry, trade and construction.
(3) Original series reduced by their average and divided by their standard deviation.

The slackening of economic activity during 2008 occurred in the context of a cyclical downturn which, measured in terms of year-on-year GDP growth, had begun hesitantly in early 2006 and had emerged more clearly during 2007. Up to the first half of 2008, this phase featured a prolonged but gradual decline in the rate of expansion of activity, with annual GDP growth declining from 3.3 to 1.9 p.c. Although this trend clearly gathered speed in the second half of the year under review, the decline was still considerably slower and – so far – less deep than during previous episodes of significant cyclical downturn, such as those which followed the peaks in GDP growth in the first quarter of 1992 and the fourth quarter of 1999. In fact, after eleven quarters, year-on-year growth still exceeded the lowest figure recorded in those two periods.

By comparison with the decline in activity, business confidence was severely impaired in the second half of 2008. In contrast to activity, the overall synthetic business survey indicator in fact slumped below the low point recorded in the 1999 cycle, though as a quarterly average it was still close to the 1993 low.

This weak confidence is largely attributable to the partial indicators relating to demand expectations. At the end of 2008, the average of the demand forecasts in industry, trade and construction was at the lowest level ever recorded at any time in the period for which the indicators have been available in their present form, namely since 1980: it dropped well below the 1993 and 2001 low points. Demand expectations in business services, for which data have only been available since June 1994, also fell to an all-time low. The sharp deterioration in these expectations is perhaps attributable to the scale, diversity and speed of the shocks in 2008. It may also indicate that business leaders considered that these shocks would have a more prolonged impact on economic activity than in 1992 and 1999.

Expectations play a crucial role in the economy. For example, they influence decisions on hiring or dismissing labour, or on investment, as future income flows from expanding production capacity are compared with the costs entailed. The greater the expectations relating to the growth of activity and hence the return expected on the investment, the more businesses will be inclined to invest. In the opposite scenario, businesses will probably cancel investment decisions, thus curbing activity. Expectations may therefore be self-fulfilling to some extent, reinforcing cyclical movements. In contrast, at the time of the 1992 and 1999 downturns, demand expectations were relatively steady, probably exerting a stabilising effect.

BUSINESS CONFIDENCE

(quarterly averages, standardised data [1])

Source : NBB.

(1) Original series reduced by their average and divided by their standard deviation.

(2) Average of the partial indicators obtained from the monthly business survey in manufacturing industry, trade and construction, excluding sub-questions relating to demand forecasts and prices.

(3) Average of demand forecasts obtained from the monthly business survey in manufacturing industry, trade and construction.

The role and the predictive capability of the demand outlook in regard to future developments in economic activity vary over time, so that the marked deterioration in that outlook in 2008 must be interpreted with some caution. Nonetheless, the link with the future progress of economic activity has proved relatively close in recent times, since the sharp deterioration in the outlook in the first half of the year was followed by a comparably large downturn in the other components of the business survey indicator in the second half of the year, with an accompanying deceleration in activity.

Although exaggerated pessimism among business leaders may be a contributory factor, the decline in the indicator for the demand outlook clearly suggests a protracted and intense slump in economic activity.

economic climate was particularly abrupt in the branches of activity most sensitive to the international economic situation, where a boom phase was converted to a slump in the space of a few months. For instance, in March the gross synthetic curve in the iron and steel industry was at its highest level ever recorded, but by November it was approaching its lowest ebb.

Activity in the service sector, which generates around three-quarters of total value added in Belgium, recorded a more modest slowdown. In the first three quarters, growth in this sector came to 2.1 p.c., slightly down against the 2007 figure of 2.5 p.c. However, this loss of momentum became increasingly marked during the year. The main impact was on trade in the broad sense, where value added was declining from the third quarter owing to the slump in private consumption. Consumers were particularly reluctant to spend money on consumer durables, as is evident from the sharp contraction of the indicator relating to the movement in turnover in the monthly business survey covering the "passenger cars" and "electronic equipment" trade branches. In the second half of the year, the synthetic indicator fell to its lowest level since 1980 in these branches. Other market services, such as business-related services, also recorded slower growth in the year under review, largely as a result of the deterioration in industry, the branch to which most of their activity is related. Only non-market services did not contribute to the deceleration of economic activity in 2008, as is usually the case during a cyclical downturn: here the growth

TABLE 10 VALUE ADDED IN THE BRANCHES OF ACTIVITY

(calendar adjusted volume data; percentage changes compared to the previous year, unless otherwise stated)

	p.m. Weight[1]	2004	2005	2006	2007	2008 First three quarters[2]
Agriculture	*0.8*	5.2	–11.6	–4.3	3.4	2.9
Industry	*19.2*	2.9	0.3	3.6	2.5	0.6
Construction	*5.1*	2.9	4.7	8.5	3.5	1.7
Services	*74.9*	1.8	2.7	2.4	2.5	2.1
of which:						
Market services[3]	*51.8*	2.1	3.2	3.0	3.1	2.5
Non-Market services[4]	*23.0*	1.3	1.6	1.1	1.1	1.3
Total	***100.0***	**2.1**	**2.2**	**2.9**	**2.6**	**1.8**
p.m. GDP		*2.8*	*2.2*	*3.0*	*2.6*	*1.7*

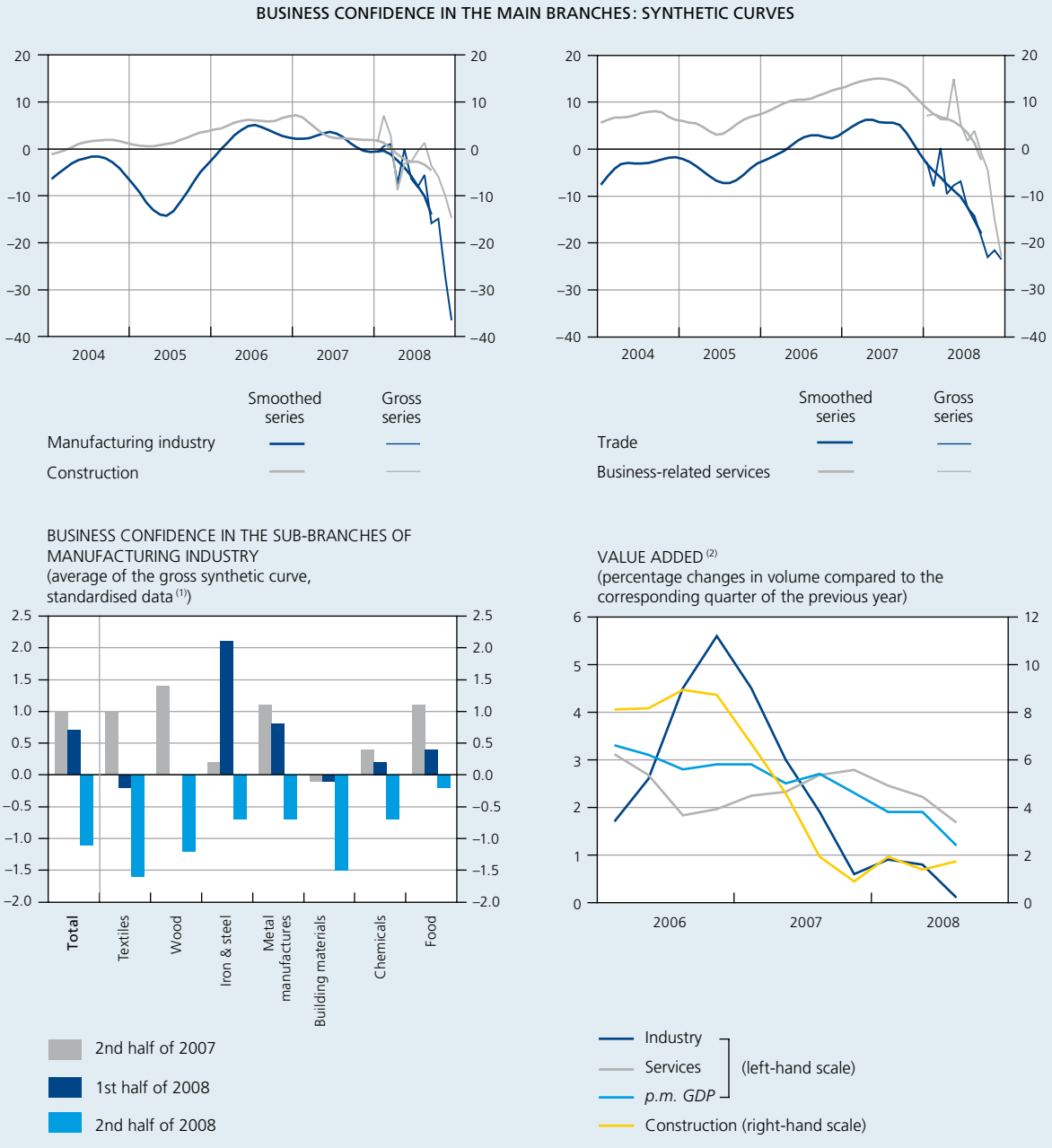
Source: NAI.
(1) Percentages of total value added in 2007.
(2) Percentage changes compared to the corresponding period in 2007.
(3) Trade and horeca, transport and communication, financial and insurance services, and real estate and business services.
(4) General government and education, and other services.

rate of value added remained stable during the year under review at around 1.3 p.c., compared to a rise of 1.1 p.c. in 2006 and 2007.

In the construction sector, growth also declined over the first three quarters of 2008 as a whole, falling to 1.7 p.c. after having reached 3.5 p.c. in 2007 and averaging over 6.5 p.c. in the two preceding years. On the basis of the quarterly profile, however, it is clear that the deceleration which had persisted throughout 2007, principally on account of housing construction, did not continue during the year under review. In particular, the slowdown seems to have been less pronounced than in 2007, as is evident from the smaller reduction in the number of

CHART 26 BUSINESS SURVEY INDICATORS AND VALUE ADDED IN THE MAIN BRANCHES OF ACTIVITY

(seasonally adjusted data, unless otherwise stated)



Sources : NAI, NBB.

(1) Original series reduced by their average and divided by their standard deviation.

(2) Calendar adjusted data.

building permits issued. Conversely, other construction segments, such as non-residential construction and civil engineering, slowed down this time. Overall, according to the survey, there was a steady loss of momentum in the construction industry, comparable in scale to the contraction between 2000 and 2002. In contrast to what happened at that time, however, value added continued to increase in 2008, so that the situation in Belgium was therefore much less adverse than in a number of euro area countries, particularly Ireland and Spain where the construction sector made a major contribution to the downturn in activity.

3.3 Real developments in the main sectors

Enterprises

Maintaining the vigour of the four preceding years, enterprises continued to expand their production capacity at the beginning of 2008 in terms of both capital stock and employment. Taking the year as a whole, they increased their gross fixed capital formation by 6.7 p.c. in real terms compared to the previous year. Far outpacing GDP growth, the rate of expansion in business investment was therefore only moderately below the 2007 figure of 8.5 p.c. However, this annual average conceals a loss of momentum during the year, since the growth rate was halved between the end of 2007 and the second quarter of the year under review, and subsequently became negative in quarterly terms.

This reduced propensity to invest on the part of enterprises was due to various factors, some of which can already be linked to the international financial crisis. Thus, in their investment decisions, firms were strongly influenced by the worsening prospects on their potential markets, since foreign demand slumped as a result of the slowdown in global growth and flagging international trade. While final domestic demand remained at a satisfactory level in the first quarter, it also gradually weakened thereafter. According to data from the VAT returns, manufacturing industry was the first to cut its investment, but in the third quarter the rate of investment expansion also faltered in the services sector. Moreover, following the worsening of the financial crisis at the end of the year, a rapid recovery of the demand prospects appeared increasingly unlikely, as was evident from the sharp deterioration in the component of the business confidence indicator relating to that question.

This is borne out by the fact that, according to the quarterly survey of manufacturing industry, the capacity utilisation rate declined dramatically at the end of the year. At the end of 2008, around 71 p.c. of firms mentioned insufficient demand as one of the main reasons for capacity under-utilisation, compared to only 44 p.c. in the second quarter of 2007.

TABLE 11 GDP AND MAIN CATEGORIES OF EXPENDITURE

(calendar adjusted volume data; percentage changes compared to the previous year, unless otherwise stated)

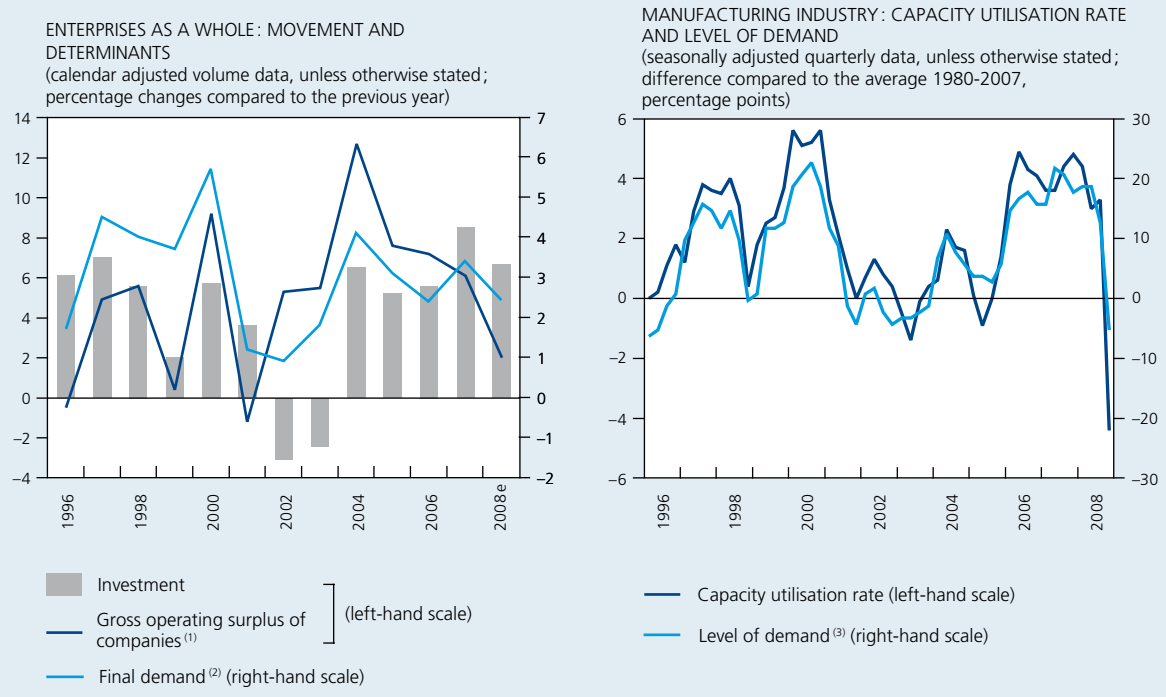
	2004	2005	2006	2007	2008 e
Final consumption expenditure of individuals	1.1	1.5	2.1	2.0	0.8
Final consumption expenditure of general government	1.8	0.4	0.1	2.3	2.1
Gross fixed capital formation	6.8	7.3	4.8	6.1	4.4
Housing	9.8	10.0	7.9	1.3	0.9
Enterprises	6.5	5.2	5.6	8.5	6.7
General government	0.5	15.5	–10.6	3.4	–3.2
p.m. Total final domestic expenditure	*2.4*	*2.4*	*2.2*	*3.0*	*1.9*
Change in stocks[1]	0.1	0.5	0.9	0.1	0.3
Exports of goods and services	6.1	3.9	2.7	3.9	3.0
Imports of goods and services	6.0	4.9	2.7	4.4	4.2
p.m. Net exports of goods and services[1]	*0.4*	*–0.6*	*0.1*	*–0.3*	*–1.0*
GDP	2.8	2.2	3.0	2.6	1.1

Sources: NAI, NBB.
(1) Contribution to the change in GDP, percentage points.

In addition to the fall in demand, the increase in financing costs also depressed investment. External financing costs surged during the past year, as explained in detail in chapter 7 of this Report. In response to the financial crisis and its impact on the real economy, share prices collapsed and, for other financing instruments also, investors required ever higher risk premiums, though admittedly those premiums had been unusually low during the period 2004-2006. This increase in risk premiums reflected partly an adjustment of the price for a given risk and partly a higher default risk in the context of the deterioration in the business climate. Overall, the biggest cost increase concerned equity financing, followed by financing via bond issues. Bank financing also became more expensive, albeit to a lesser extent. Nevertheless, during the year under review, it seems that the banks did not generally impose quantitative restrictions on their lending to non-financial corporations, although they did apply more stringent credit standards.

Moreover, firms were no longer able to compensate for the deterioration in external financing conditions by making greater use of internal resources, as they had done in the previous two years. In 2008, the gross operating surplus of firms in fact increased by only 2 p.c., whereas it had expanded by an average of 7.8 p.c. in the preceding five years. The dominant factor in this sharp deceleration was not so much a weakening of the growth of the volume of sales by firms, but rather a contraction of around 1.1 p.c. in their gross operating margin per unit of sales. In the first half of the year under review, the general surge in commodity prices, and especially oil prices, in fact caused a strong increase in the costs associated with imported goods and services. Increases in the costs of domestic origin, especially in unit labour costs, also accelerated. Apparent labour productivity dipped slightly, in the wake of the slowdown in business activity, while – as in 2007 – nominal hourly labour costs recorded a larger increase than in previous years, the rise in 2008 being due in particular to the strong inflationary pressure, in view of the automatic wage indexation mechanism. In the face of weakening final demand, firms were unable to pass on the whole of their cost increases in their selling prices, in contrast to previous years when final demand was still very buoyant.

CHART 27 INVESTMENT BY ENTERPRISES



Sources: NAI, NBB.

(1) Value data, not calendar adjusted.

(2) Excluding changes in stocks.

(3) Proportion of firms which did not mention insufficient demand as a factor explaining the under-utilisation of production capacity in the Bank's quarterly survey of manufacturing industry; data not seasonally adjusted.

TABLE 12 MAIN COMPONENTS AND DETERMINANTS OF THE GROSS OPERATING SURPLUS OF COMPANIES, AT CURRENT PRICES

	2004	2005	2006	2007	2008 e
Determinants of the gross operating surplus of companies (percentage changes compared to the previous year)					
Gross operating surplus	12.7	7.6	7.2	6.1	2.0
Gross operating margin per unit of sales (1)	7.3	4.5	4.2	2.1	–1.1
Unit selling price (1)	2.7	3.3	3.3	2.3	4.2
On the domestic market (1)	3.1	2.4	3.1	1.6	4.9
Exports	2.4	4.1	3.4	3.0	3.6
Costs per unit of sales (1)	2.0	3.1	3.1	2.4	5.1
Imported goods and services	2.8	4.4	4.1	2.6	6.7
Costs of domestic origin per unit of output (1) (2)	0.4	0.7	1.4	1.8	2.3
of which: unit labour costs	–0.7	1.0	1.6	3.1	3.6
Final sales in volume terms (1)	5.0	3.0	2.9	3.9	3.1
On the domestic market (1)	3.3	2.3	3.2	3.9	3.0
Exports	6.5	3.6	2.6	4.0	3.2
Main components of the companies account (percentages of GDP)					
Gross disposable income	14.6	14.5	14.8	14.9	14.8
Gross operating surplus	22.4	23.1	23.5	23.7	23.3
Other components of disposable income (3)	–7.7	–8.6	–8.7	–8.8	–8.5
Uses	12.5	10.0	13.4	13.7	16.0
Gross capital formation	12.9	12.9	14.0	14.4	16.4
Capital transfers (4)	–0.3	–2.9	–0.6	–0.6	–0.5
Financing balance	2.1	4.4	1.4	1.1	–1.2

Sources: NAI, NBB.
(1) Including changes in stocks.
(2) Apart from compensation of employees, this item covers indirect taxes net of subsidies and gross mixed income of households.
(3) Net property incomes and net current transfers, including changes in the net claims of households on pension funds.
(4) These are net amounts, i.e. the difference between transfers paid to other sectors and those received from other sectors, including net acquisitions of non-financial non-produced assets such as land or patents and goodwill.

The meagre increase in the gross operating surplus of companies was counterbalanced by the more favourable movement in the other components of their disposable income. Thus, companies paid less in taxes and social security contributions expressed as a percentage of GDP. It was therefore essentially the sizeable increase in their gross capital formation – including stock building – that depressed their financing balance, which became negative for the first time since 2001.

Box 6 – How are enterprises placed on the eve of a serious slowdown in global growth?

During the period 2004 to 2007, the Belgian economy recorded annual growth averaging 2.6 p.c., slightly higher than its potential growth. Enterprises were a key factor driving this dynamism, as is evident in particular from the fact that business investment contributed, on average, 0.8 percentage point to GDP growth during that period, clearly outstripping the average of 0.6 percentage point recorded since 1996. Another channel whereby firms fostered GDP growth is job creation, which in turn underpinned household purchasing power and consumption

expenditure. However, a turnaround occurred in 2008, as both investment growth and net job creation began to decline during the year, against the backdrop of the worsening financial crisis and the slowdown in global growth. The question is therefore to what extent enterprises are adequately equipped to cope with these adverse economic conditions, which are expected to persist for several quarters.

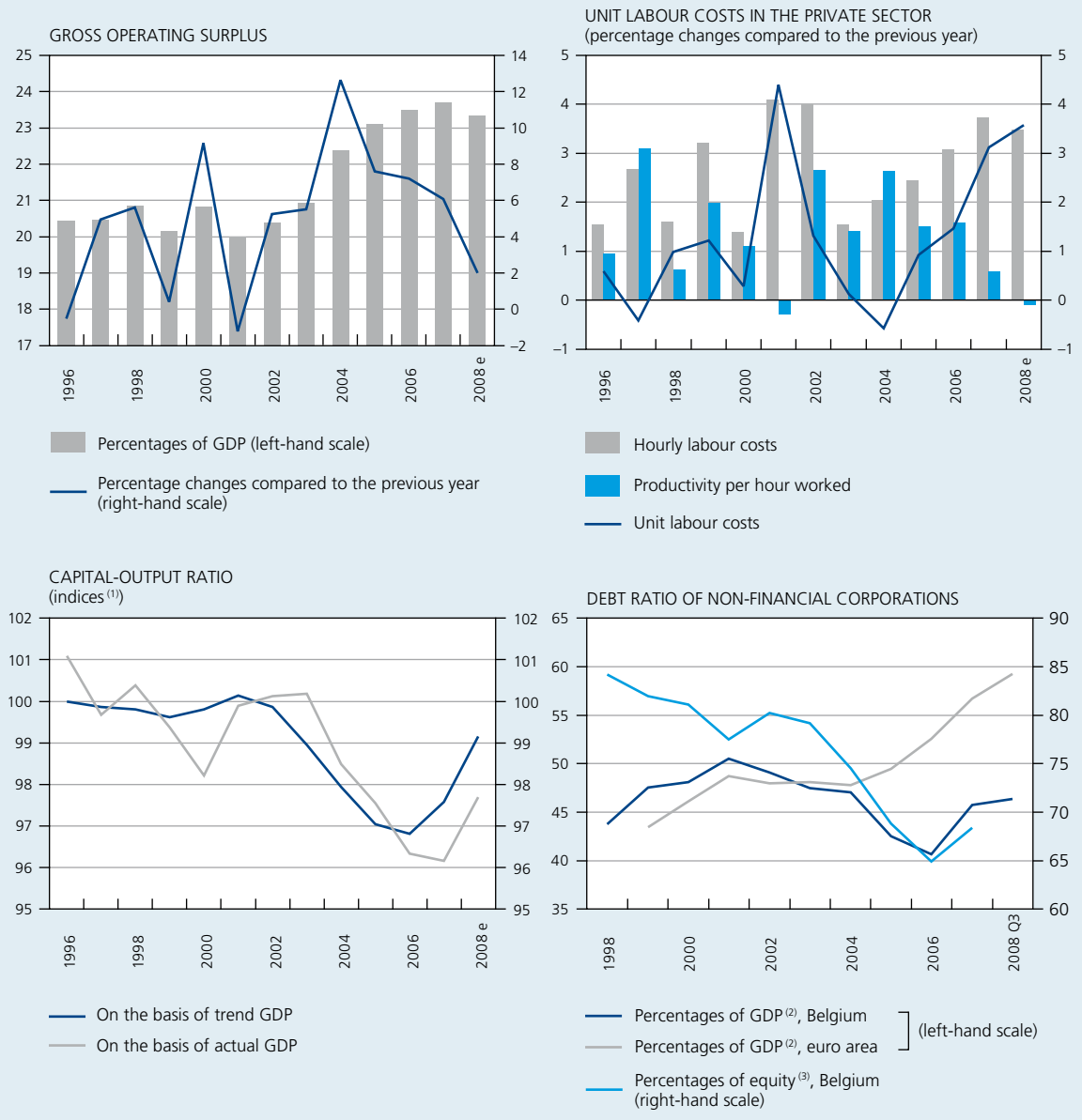
The profitability situation is a decisive factor in the resilience of enterprises. During the period 2004 to 2007, firms were able to achieve an exceptionally strong increase in their gross operating surplus, which is by far their principal source of income. This increase in profits was due both to the substantial expansion in their volume of sales and to the widening of the gross operating margin per unit of sales, in a context of sustained domestic and foreign demand. Up to 2006, that margin was boosted by the relatively limited rise in unit labour costs, as the cyclical growth of productivity gains partially cushioned the increase in hourly labour costs. In all, the gross operating surplus of companies went up from around 20.5 p.c. of GDP in the period 1995-2003 to 23.7 p.c. of GDP in 2007. While it did not keep pace with GDP growth during the year under review, it nevertheless maintained a level well above that seen from 1995 to 2003, indicating that in this respect firms were still in a relatively comfortable position.

However, the weakening of demand has already begun to erode that position, and as demand contracts further, firms are bound to have to make adjustments, particularly on the employment front. In the past two years, unit labour costs have risen at a faster pace, namely 3.1 p.c. in 2007 and 3.6 p.c. in 2008, compared to an average annual increase of 1.5 p.c. since 1995. This surge is due largely to the slackening of apparent labour productivity resulting from the strong expansion of employment in the private sector, and further reinforced in 2008 by the deterioration in the business climate. Moreover, hourly labour costs have risen constantly in the context of the pressure on some labour market segments in the wake of the boom phase and, specifically in 2008, the increased impact of wage indexation following higher inflation. Since firms could no longer pass on these extra costs in their selling prices, owing to the deterioration in the economic climate, their gross operating margin has been squeezed. They will therefore have to try to boost apparent labour productivity, initially by reducing the number of hours worked – via temporary lay-offs or, to a lesser extent, by cutting back on overtime – but also by scaling down their workforce. However, the protracted shortage of skilled labour prevailing on some labour market segments could moderate somewhat the downward impact on employment, to the extent that firms would want to retain a scarce production factor.

To complement their efforts to prune operating costs in order to maintain their operating results, and in the face of the deteriorating demand outlook, firms will need to make bigger cuts in their investment expenditure. However, the scale of the cuts will also depend on the movement in external financing costs which – as shown in chapter 7 on financial accounts – increased very rapidly in the year under review. Combined with a smaller contribution from internal financing sources, this increase in the cost of external financing will probably have a serious downward impact on firms' propensity to invest. Conversely, there is no evidence that firms had excess production capacity at the time of the eruption of the financial crisis. In particular, although the capital-output ratio – i.e. the ratio between the net capital stock and output – measured on the basis of trend GDP has risen in the past two years, it has remained below the level attained in the period 1996 to 2002, following the adjustment to business investment in 2002 and 2003. The relatively low level of the capital stock is even more apparent when compared with actual GDP. All other things being equal, the adjustment to investment should therefore be smaller than in the previous cyclical downturn, at the start of the millennium. The capacity utilisation rate in manufacturing industry remained relatively high, at around 83 p.c. during the first three quarters of 2008, though it fell sharply in the fourth quarter.

Apart from profitability, the financial position is also a key factor in the soundness of companies. The fact that firms have succeeded in accumulating financial resources provides at least a temporary cushion against the erosion of their profitability. Year after year, the strong increase in the gross operating surplus of enterprises during the period 2004 to 2007 resulted in a financing capacity which peaked at 4.4 p.c. of GDP in 2005. These surpluses led to a decline in the debt ratio of non-financial corporations. Thus, the total of their outstanding debts to credit institutions in the euro area and their liabilities in the form of fixed-income securities dropped from 50.5 p.c. of GDP in 2001 to 40.6 p.c. of GDP in 2006. For comparison, in that last year the debt ratio of non-financial

INDICATORS OF THE POSITION OF ENTERPRISES



Sources : EC, ECB, NAI, NBB.

(1) Capital-output ratio, on the basis of trend GDP, in 1996 = 100.

(2) Outstanding debts to credit institutions in the euro area and liabilities in the form of fixed-income securities, expressed as a percentage of GDP ; financial accounts data.

(3) Total outstanding financial debts, expressed as a percentage of equity ; corporate balance sheet data.

corporations in the euro area as a whole came to 52.6 p.c. of GDP, while it was at a level comparable to that in Belgium during the period 2001-2004. The ratio of debt (including financial debts to other non-financial corporations) to equity of non-financial corporations in Belgium also declined sharply from 2002 to 2006, as these firms reserved part of the profits made during that highly lucrative period for the purpose of consolidating their

balance sheets. Moreover, share issues became relatively more attractive than debt financing, partly on account of the excellent stock market performance. Finally, the introduction of the tax allowance for venture capital, via the notional interest mechanism, encouraged firms to boost their equity from 2005, triggering a reduction in the debt ratio, in contrast to what was happening at that time in the euro area.

However, this favourable situation has deteriorated somewhat in the past two years. As a result of the strong rise in gross fixed capital formation and the slower growth in the gross operating surplus, the financing capacity of firms was converted to a deficit of 1.2 p.c. of GDP in 2008. In the past two years, the debt ratio of non-financial corporations has risen again, partly as a result of the strong expansion of bank lending to firms. Also, average interest charges on financial debts have increased since 2006. As a result of these developments, firms have become more vulnerable to a tightening of bank lending standards. However, the debt ratio is still well below that for the euro area as a whole. Thus, Belgian firms can be expected to display greater resilience than their European counterparts during the difficult period ahead.

Overall, when the financial crisis escalated in September 2008, Belgian firms were in a sound starting position, because in recent years they had hardly accumulated any major imbalances which might require substantial corrections in the wake of the economic downturn. Nonetheless, given the deterioration in the economic situation at the end of 2008, they will certainly have to scale down the role which they have played recently of supporting activity via investment and job creation.

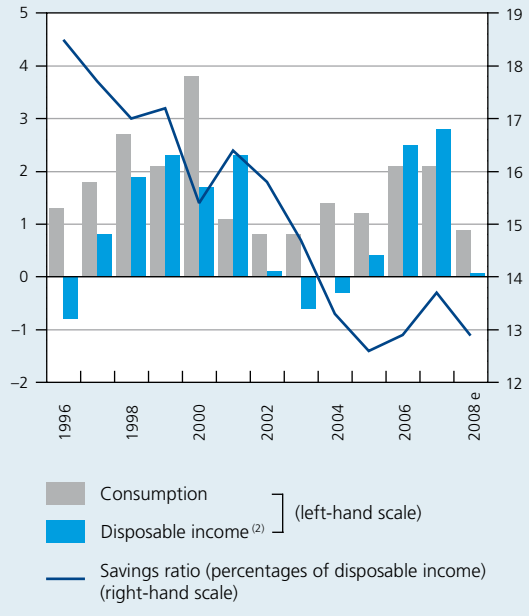
Individuals

In 2008, final consumption expenditure of individuals grew by 0.8 p.c. in real terms, compared to a rise of around 2 p.c. in 2006 and in 2007. This sharp deceleration is attributable mainly to the stagnation of households' real disposable income and, to a lesser extent, the reduction in their net financial assets, due to plummeting share prices during the second half of the year under review.

In all, real disposable income of individuals expanded by only 0.1 p.c., mainly as a result of the surge in inflation. True, considered as a whole, compensation of employees – which represents around 70 p.c. of the primary income of households – continued to increase relatively strongly, as it was also underpinned by sustained job creation, but the effect of the indexation of wages, like that of social benefits, lagged behind the actual movement in consumer prices. Indexation did not in fact compensate fully for the erosion of purchasing power caused by inflation, in view of the use of the health index as the benchmark for its application, the time lag inherent in the existing indexation mechanisms and, for some collective wage agreements, the existence of all-in clauses specifically designed to dampen the impact of unexpected inflation shocks. The income item comprising the gross operating surplus and the gross mixed income of individuals increased at a more modest pace than in previous years,

CHART 28 CONSUMPTION, DISPOSABLE INCOME AND SAVINGS RATIO OF INDIVIDUALS

(percentage changes in volume compared to the previous year [1], unless otherwise stated)



Sources: NAI, NBB.
(1) Non calendar adjusted data.
(2) Data deflated by the private final consumption expenditure deflator.

TABLE 13 DETERMINANTS OF THE GROSS DISPOSABLE INCOME OF INDIVIDUALS, AT CURRENT PRICES

(percentage changes compared to the previous year, unless otherwise stated)

	2004	2005	2006	2007	2008 e	*p.m. 2008 e, billions of euro*
Gross primary income	2.2	3.2	4.5	5.8	4.7	*255.5*
p.m. In real terms[1]	*–0.4*	*0.4*	*1.6*	*2.9*	*0.4*	
Compensation of employees	2.7	3.4	4.8	5.8	5.0	*180.9*
Number of employees	0.9	1.3	1.5	1.9	1.7	
Compensation per person	1.9	2.0	3.3	3.8	3.2	
Gross operating surplus and gross mixed income	1.9	4.3	4.3	5.8	3.9	*45.9*
of which : income from self-employed activity	3.6	2.0	2.2	4.6	4.2	*23.7*
Property income[2]	–0.2	0.5	3.0	5.8	3.8	*28.7*
Current transfers[2]	2.0	2.9	0.8	6.6	5.9	*–46.5*
Current transfers received	4.0	3.8	2.4	4.9	5.0	*73.7*
Current transfers paid	3.2	3.4	1.8	5.5	5.4	*120.2*
Gross disposable income	2.3	3.3	5.4	5.6	4.4	*209.0*
p.m. In real terms[1]	*–0.3*	*0.4*	*2.5*	*2.8*	*0.1*	
Final consumption expenditure	4.0	4.1	4.9	4.9	5.2	*184.2*
Savings ratio[3]	13.3	12.6	12.9	13.7	12.9	

Sources : NAI, NBB.
(1) Data deflated by the private final consumption expenditure deflator.
(2) These are net amounts, i.e. the difference between incomes or transfers received from other sectors and those paid to other sectors, excluding transfers in kind.
(3) Gross savings, as a percentage of gross disposable income, these two aggregates being taken inclusive of changes in the net claims of households on pension funds.

in the context of more moderate expansion of activity. In 2008, net property income felt the effect of the slower growth of dividends following the downturn in corporate profitability. Finally, taxes on incomes and assets increased more steeply than the primary income of individuals, in contrast to the two preceding years when they had risen more slowly thanks to the tax reform. Altogether, in nominal terms, the disposable income of individuals therefore recorded a slower rise than in the two preceding years.

However, individuals did not curb the growth of their consumption expenditure to a comparable degree. In fact, when faced with large, temporary changes in their disposable income, households tend to smooth their consumption expenditure to some extent. Thus, in 2006 and 2007, when their disposable income rose sharply, households had increased their consumption expenditure in a smaller proportion, and in doing so they had saved a larger percentage of their disposable income. That pushed their savings ratio up from 12.6 p.c. in 2005 to 13.7 p.c. in 2007. Conversely, in 2008, individuals responded to the stagnation of their real disposable income by reducing their savings.

This turnaround does not mean that the savings ratio has reverted to the downward trend recorded from 1994 to 2005. On the contrary, the movement in 2008 is in line with the previous four years when the savings ratio had in fact fluctuated within a narrow range around an average of 13 p.c. of disposable income. In addition, in the immediate future it seems likely that individuals will try to increase their savings, in view of the substantial losses incurred on their financial assets, particularly the value of their shareholdings, and the prospect of a protracted deterioration in the labour market. The slump in the consumer confidence indicator from October 2008, due mainly to decidedly greater pessimism regarding the unemployment outlook for the next twelve months, suggests that households have made downward adjustments to their income prospects, and that should prompt them to step up their precautionary savings.

Like the growth of consumption expenditure, the rise in investment in housing slowed down in 2008. In 2004-2006, individuals had increased their expenditure on housing construction and renovation by an annual average of 9.2 p.c., but that growth rate dropped to 1.3 p.c. in 2007 and 0.9 p.c. in 2008. Part of the reason lies in

the moderation of house price rises on the secondary market, which has increased the relative attractions of buying existing houses and apartments, and curbed the construction of new housing. In addition, mortgage interest rates have displayed an upward trend from 2006 onwards, after having fallen to an exceptionally low level during 2005. Moreover, since the disposable income of individuals stabilised in real terms in 2008, it has become more difficult to afford repayments on mortgage loans. Overall, the growth of investment in housing in Belgium slowed less sharply than in the euro area as a whole.

As a ratio of GDP, investment in housing in 2008 remained more or less at the same level as in 2007, and the reduction in gross savings is therefore the main factor explaining the decline in the financing balance of individuals, from 1.3 to 0.7 p.c. of GDP.

General government

In 2008, the final consumption expenditure of general government increased by 2.1 p.c. in real terms, a growth rate 0.4 percentage point above the average recorded since 1995. As in 2007, it was mainly social benefits in kind, especially health care expenditure, which increased strongly. However, it should be noted that in 2008 the increase was inflated by the inclusion of the "minor risks" for self-employed persons in the compulsory health care payments covered by the national institute for health and disability insurance. That expenditure is now recorded in the consumption expenditure of general government, rather than in private consumption.

Public investment declined by 3.2 p.c. in real terms in 2008. This fall was due mainly to local authority investment which was down sharply, as in 2007. However, since 2006 had been a local council election year, such a pattern is not unusual : in fact, while local authority investment expenditure generally expands strongly in the year preceding the local council elections, it usually declines in the two years following these elections.

Rest of the world

While the slowdown in domestic demand became progressively apparent during 2008, the deterioration in international trade had already affected exports by the end of the previous year. In fact, after exhibiting vigorous growth averaging around 7.6 p.c. per annum between 2004 and 2006 and 5.1 p.c. in 2007, the expansion of foreign markets dropped to 2.8 p.c. The volume of exports of goods and services expanded by only 3 p.c., compared to 3.9 p.c. in 2007.

Up to mid 2008, foreign demand gradually lost its dynamism, but in the second half of the year it appeared to collapse. The indicator obtained from the business surveys, relating to the opinion of entrepreneurs on the movement in foreign orders, was falling throughout the year, but the latest results showed a sharp decline from October. In all, if account is also taken of the negative effect of the euro's appreciation on price competitiveness for much of the year, exports stood up fairly well to the deterioration in demand in 2008. However, that finding for the year under review does not imply any permanent change in the structural tendency of Belgian exports to grow more slowly than those of other European countries.

The slower growth of both exports and private consumption had an impact on demand for imported goods. However, imports were still supported by the gross fixed capital formation of enterprises, especially in the first half of the year under review. In all, the annual growth of imports dipped slightly, falling from 4.4 p.c. in 2007 to 4.2 p.c. On balance, net exports of goods and services made a negative contribution to GDP growth of around 1 percentage point.

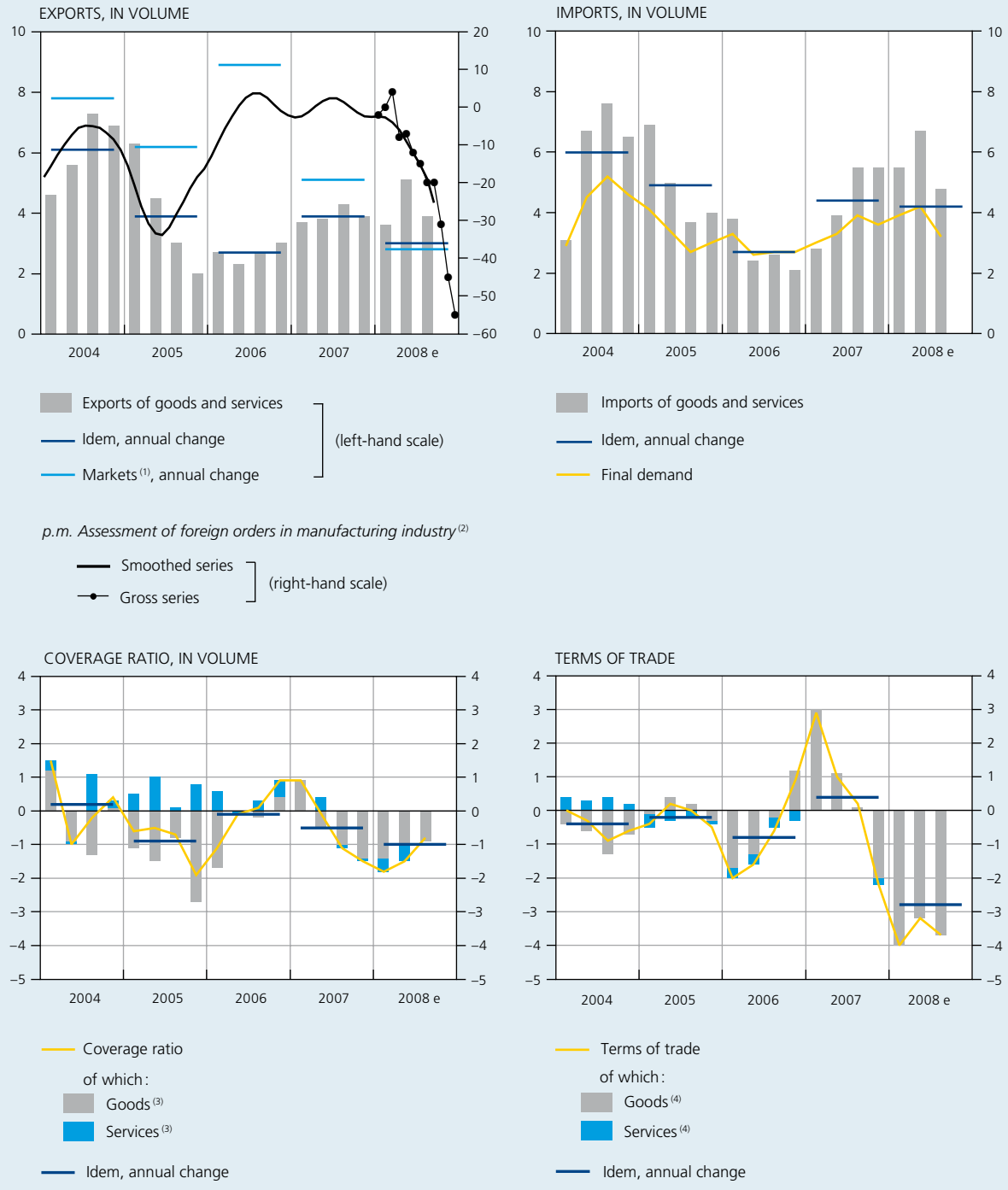
This negative effect due to changes in volume was compounded by a sharp deterioration in the terms of trade. They recorded a steep decline of 2.8 p.c. in 2008, mainly because of the movement in commodity prices during the first half of the year under review. In the fourth quarter, however, the fall in oil prices curbed the growth of the deflators, particularly the import one.

While the movement in the export and import deflators is greatly influenced by changes in commodity prices, the net effect of their increase in 2008 was very different from that in previous years. This divergent response in the terms of trade is largely attributable to whether or not producers can pass on the higher cost of inputs in their selling prices ; the response is therefore fundamentally dependent on market conditions.

Thus, prices of most commodities have risen very strongly since 2003, under the influence of a substantial increase in global demand, in a context of high capacity utilisation. For example, expressed in US dollar, the prices of Brent crude and metalliferous ores tripled between 2002 and 2007. In euro, the increase came to 100 and 118 p.c. respectively. From 2007, this movement stabilised in the case of ores, but oil prices continued to soar by over 40 p.c. in euro between the third quarters of 2007 and 2008.

CHART 29 EXPORTS AND IMPORTS OF GOODS AND SERVICES

(data adjusted for seasonal and calendar effects, percentage changes compared to the corresponding quarter of the previous year, unless otherwise stated)



Sources : EC, OECD, ECB, NAI, NBB.
(1) Export markets calculated as the weighted average of import growth in each trading partner.
(2) Seasonally adjusted data, levels.
(3) Contribution to the total change in the coverage ratio.
(4) Contribution to the total change in the terms of trade.

These increases were passed on fully in the prices of Belgian imports and exports of these products. Since Belgium is a net importer of these commodities, their higher prices had a negative effect on the terms of trade for the economy as a whole, reflecting the transfer of incomes to the producer countries.

Overall, the movement in the price of foreign trade in commodities made a negative contribution of 4 percentage points to the terms of trade for all goods over the period 2002 to 2007, with fuel accounting for 2.9 percentage points and other commodities representing 1.1 point. However, during this period, firms which use these commodities as inputs were largely able to pass on the increases in their selling prices, in a context of buoyant global demand, particularly for iron and steel products and plastics in their primary form.

True, taking account of the other cost factors involved – especially labour costs – firms' selling prices did not rise as fast as commodity prices. However, the increase of over 30 p.c. in the unit values of plastics exports and 60 to 70 p.c. in the case of iron and steel products far exceeded the average rise in foreign trade prices. Given Belgium's

TABLE 14 TERMS OF TRADE FOR GOODS

(percentage changes, unless otherwise stated)

	Export prices[1]	Import prices[1]	*p.m. Contribution to the change in the terms of trade*
	Cumulative change over the period 2002-2007		
Total	15.3	16.2	*–0.7*
Mineral fuels	64.2	66.3	*–2.9*
of which:			
Oil	88.5	94.4	*–2.8*
Gas	24.1	15.6	*–0.1*
Other commodities	26.7	44.3	*–1.1*
of which:			
Metalliferous ores	117.5	100.6	*–0.8*
All other products[2]	11.5	9.0	*3.2*
of which:			
Plastics	34.9	31.0	*0.9*
Iron and steel products	74.3	59.2	*1.7*
	Change between the third quarters of 2007 and 2008		
Total	5.4	10.1	*–4.3*
Mineral fuels	47.5	51.7	*–3.1*
of which:			
Oil	38.1	43.8	*–2.0*
Gas	72.0	69.1	*–0.9*
Other commodities	14.4	12.7	*–0.2*
of which:			
Metalliferous ores	23.7	8.5	*0.0*
All other products[2]	1.1	1.5	*–1.0*
of which:			
Plastics	5.5	6.5	*0.2*
Iron and steel products	3.9	20.1	*–0.5*

Source: NAI.
(1) Average unit values, foreign trade data according to the national concept.
(2) Contribution calculated as a net figure.

specialisation in these products, these price movements made a positive contribution to the total terms of trade: that contribution is estimated at 0.9 percentage point for plastics, but was even bigger for iron and steel products, at 1.7 percentage point, as the specialisation effect was reinforced by the intrinsic improvement in the terms of trade for that same category.

Apart from this positive effect, the euro's appreciation – of around 20 p.c. against the dollar in 2003, 10 p.c. in 2004 and nearly another 10 p.c. in 2007 – is also a contributory factor in the virtual stability of the terms of trade from 2002 to 2007, despite the marked rise in commodity prices. All other things being equal, the currency's appreciation in fact causes a short-term improvement in the terms of trade for all products. However, that is largely temporary, since exporters have to adapt their prices gradually in line with those of their competitors in order to maintain their market share.

On the other hand, the situation changed completely during 2007 and 2008, since it seems that national producers were no longer able to pass on the additional increases in the prices of gas, oil and to a lesser extent iron ores in their export prices for processed products. On the contrary, in a context of slackening global demand, the export prices of all manufactured goods came under pressure, which also contributed to the 4.3 p.c. deterioration in the terms of trade noticed in the foreign trade statistics between the third quarters of 2007 and 2008. For iron and steel products in particular, export prices increased by considerably less than import prices.

Balance of payments current account

As the deterioration in the terms of trade was added to the negative effect of volume changes, imports measured at current prices grew much faster than exports, causing a very substantial reduction in the balance of transactions in goods in 2008. In fact, Belgium's trade balance recorded a sizeable deficit of 10.5 billion euro in the year under review, in contrast to a surplus of 1.5 billion in 2007.

This deterioration is equally evident in the current account balance, which went into deficit for the first time in more than two decades. According to the estimates inferred from the BLEU balance of payments up to 1994 and the data for Belgium alone thereafter, the

TABLE 15 NET LENDING TO THE REST OF THE WORLD

(balances; billions of euro, unless otherwise stated)

					First nine months	
	2005	2006	2007	2008 e	2007	2008
1. Current account	7.9	6.3	5.6	–6.8	7.9	–3.3
Goods and services	8.7	7.6	6.3	–5.5	7.8	–3.2
Goods	4.7	2.6	1.5	–10.5	3.8	–7.5
Services	4.0	5.0	4.8	5.1	4.0	4.3
Incomes	4.2	4.0	4.3	4.1	3.7	3.7
Earned incomes	3.9	4.1	4.2	4.2	3.1	3.1
Incomes from direct and portfolio investments	0.3	–0.1	0.1	–0.2	0.7	0.5
Current transfers	–5.1	–5.2	–5.0	–5.3	–3.7	–3.7
Transfers of general government	–3.8	–4.3	–4.3	–4.7	–3.2	–3.3
Transfers of other sectors	–1.3	–1.0	–0.7	–0.7	–0.5	–0.4
2. Capital account	–0.7	–0.3	–1.1	–1.4	–0.5	–1.0
3. Net lending to the rest of the world (1 + 2)	7.1	6.0	4.5	–8.1	7.4	–4.2
p.m. Idem, percentages of GDP	*2.4*	*1.9*	*1.4*	*–2.3*	*3.0*	*–1.7*
Financing requirement (–) or capacity of the domestic sectors, according to the national accounts, percentages of GDP	*2.8*	*2.5*	*2.1*	*–1.5*		

Sources: NAI, NBB.

current balance was systematically positive from the mid 1980s, peaking at 5.5 p.c. of GDP in 1998. However, from 2002 to 2007, the current surplus declined steadily by 0.5 percentage point of GDP per annum, owing to the fall in the surplus on trade in goods. This trend accelerated in the final quarter of 2007 and in 2008, giving rise to a deficit estimated at 2 p.c. of GDP for the year as a whole.

Apart from transactions in goods, the other main components of the current account balance contributed overall to the deterioration in the balance, but to a much smaller degree. True, the surplus on transactions in services increased slightly during the year under review, thanks to the expansion of the surplus on business services, such as accounting, legal advice, advertising or engineering, and the reduction in the deficit on business travel. However, these movements were partly offset by the increase in expenditure on R&D conducted abroad by Belgian pharmaceutical firms, and the fall in the balance of merchanting and transport.

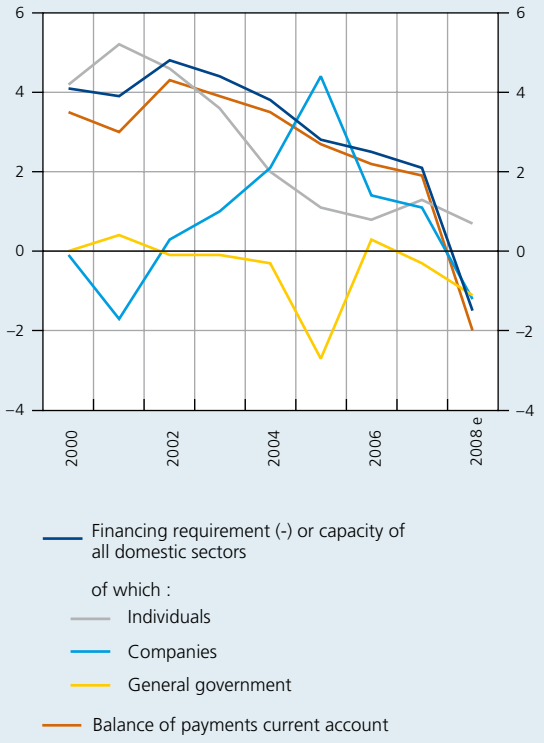
The balance of factor incomes narrowed slightly in 2008, mainly as a result of the disappearance of the modest surplus on income from portfolio and direct investments, which was converted to a small deficit. Expressed in euro, the average return on portfolio investments or interest-bearing loans thus increased more rapidly in the case of the liabilities of Belgian sectors vis-à-vis the rest of the world than for Belgian assets held abroad, the main factors being the rise in short-term interest rates and the euro's appreciation. The decline in net interest income received by Belgium was, however, partly counterbalanced by a reduction in the dividends paid to the rest of the world. The structural surplus on earned incomes, consisting mainly of wages paid by the EU to its staff resident in Belgium, remained unchanged.

Finally, the deficit on current transfers of general government also expanded. In particular, Belgium's contributions to the EU budget by way of both customs duties and VAT revenues and the GNI contribution increased while the market aid received by Belgian food producers declined as a result of the steadiness of agricultural product markets.

Apart from the deterioration in the balance of current transactions, the overall balance of the economy as a whole was also affected in 2008 by the worsening deficit on capital transactions. In the first nine months of the year, the deficit came to 1 billion euro owing to the results of the system of trading greenhouse gas emission quotas, established by the EU under the Kyoto agreement.

CHART 30 FINANCING REQUIREMENT (–) OR CAPACITY OF THE DOMESTIC SECTORS AND BALANCE OF PAYMENTS CURRENT ACCOUNT

(percentages of GDP)



Sources : NAI, NBB.

However, the economic slowdown at the end of the year contributed towards curbing the relatively substantial net purchases of emission rights by Belgian companies. Overall, Belgium's net lending to the rest of the world, which had come to 4.5 billion euro in 2007, was converted during the year under review into a borrowing requirement of around 8 billion. As a percentage of GDP, that represents a reduction of 3.7 percentage points, with the economy's financing surplus of 1.4 p.c. being converted at that juncture to a deficit of 2.3 p.c.

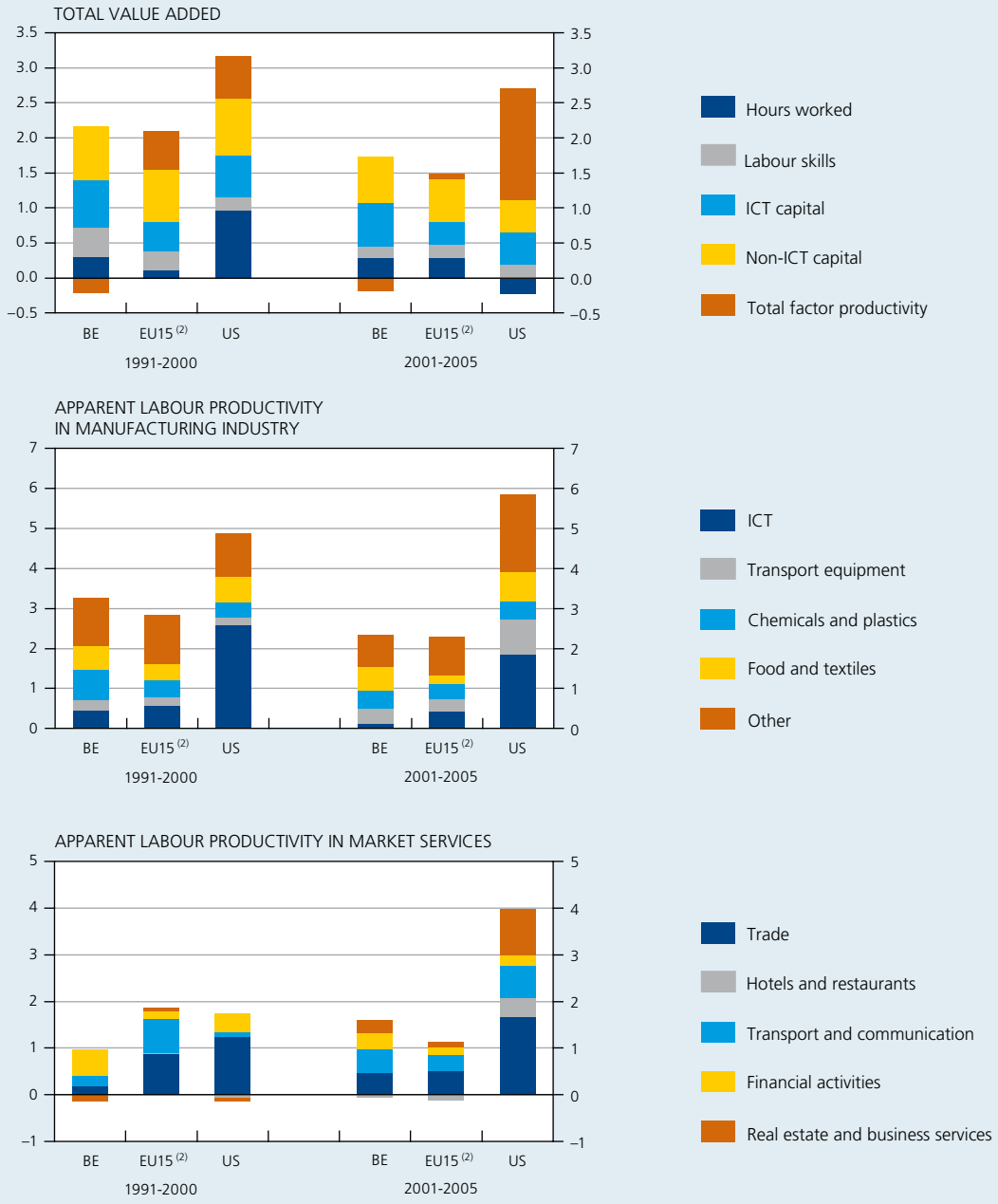
The national accounts statistics indicate that all the main sectors of the economy participated in the deterioration in the overall balance in 2008. The largest contraction concerned companies, as their gross capital formation exceeded their savings, while the general government borrowing requirement increased and the financing capacity of individuals contracted further. This last development is in line with the movement seen between 2002 and 2006, which had largely determined the decline recorded for the economy as a whole in recent years.

3.4 Structural developments

In the context of globalisation and fiercer competition between economies, the sources of growth for the advanced economies lie more than ever in their capacity for innovation. Ideally, that should concern all branches of activity in order to enhance their productive efficiency. In that regard, comparison of recent developments on either

CHART 31 DETERMINANTS OF ECONOMIC GROWTH (1)

(contributions to the average annual change in the total, percentage points)



Sources : EU KLEMS database, March 2008 ; Biatour B. and C. Kegels (2008), *Growth and productivity in Belgium*, BFP, Working Paper 17-08.

(1) The data on the growth breakdown come from the European EU KLEMS database. Apart from permitting a sectoral analysis, that breakdown has the specific characteristic of measuring the contributions of the production factors on the basis of the services which they provide rather than on the basis of the change in stocks, as is usual in most studies of growth sources. For that purpose, various employment and capital categories are identified, together with their respective marginal productivity figures. For employment, these categories are based on age, gender and level of education ; a "labour skills" factor then takes account of the effect of the changes in the structure of employment. In the case of capital, seven types of goods are identified, then grouped under technological capital and non-technological capital. Consequently, the contribution of the production factors may be different from the results obtained in other studies, as may that of TFP.

(2) Limited to the following countries : Belgium, Denmark, Germany, Spain, France, Italy, Netherlands, Austria, Finland and United Kingdom.

side of the Atlantic indicates that progress is possible in Europe and in Belgium.

In the past fifteen years, the expansion of activity has in fact proved far more dynamic in the United States than in the EU15 or in Belgium. Both from 1991 to 2000 and from 2001 to 2005, the growth differential in favour of the former economy equalled or even slightly exceeded an average of 1 percentage point per annum. According to the harmonised data compiled under the aegis of the EC as part of the EU KLEMS programme, America's dynamism was based in the first decade on relatively balanced contributions from the various explanatory factors, while the European economy's growth deficit was due mainly to a much smaller contribution from the volume of labour. Conversely, in the ensuing five years, the gap was mainly visible at the level of total factor productivity (TFP), which made a contribution to growth averaging 1.6 percentage point per annum in the United States, whereas it was barely positive in the EU15. In contrast, in Belgium TFP depressed economic expansion during the two periods considered.

TFP indicates the overall effectiveness with which the production factors – capital and labour – are combined; an increase reflects the feasibility of higher output using the same quantities of factors. In that respect, it is largely similar to innovation which, via technological progress and modifications in the way businesses are organised, for example, permits improvements to the production process and the launch of new products on the market. However, TFP also embodies institutional and regulatory factors influencing the general framework in which the economy operates. In practice, since it is usually calculated as a residual figure, it incorporates other elements, including cyclical effects and any measurement errors. Although the estimate should therefore be interpreted with caution, TFP nonetheless represents – alongside employment mobilisation policies – a vital source of growth for developed economies which are already heavily capitalised.

Together with the economy's capital intensity – the ratio between the capital stock and the volume of employment – and the skills of the labour force, TFP determines apparent labour productivity. Observation of the American data shows that the achievement of productivity gains via TFP potentially concerns all branches of activity in the economy, and not just manufacturing industry. In this last branch, the differentials between the two sides of the Atlantic originate largely – and from 1991 to 2000 almost exclusively – in the branches producing information and communication technologies (ICT). From 2001 to 2005, these branches contributed 1.9 percentage point to the average annual increase of 5.8 p.c. in apparent labour productivity in the United States; at the same time, their contribution was only 0.4 percentage point in the EU15 and 0.1 point in Belgium. The role of ICT is connected with the significant position which these industries have rapidly secured in the United States, and bears witness to the importance of an economy's ability to adjust to new and potentially dynamic activities. At the relatively aggregate level considered here, it would seem that total productivity gains originated mainly from developments within branches, as the effects of reallocation to more productive branches were relatively limited. In the more recent period, industrial branches other than ICT have also helped to widen the gap in favour of the United States, namely machinery and transport equipment.

However, it was market services that provided the principal support for the surge in apparent labour productivity in the United States from 2001 to 2005. In fact, those services represent almost half of the economy's value added. However, their decisive contribution is due mainly to the marked acceleration in their own productivity, which increased at an annual rate of 4 p.c. from 2001 to 2005. Moreover, except for financial activities, all the main service branches were involved in this movement, beginning with trade and business services.

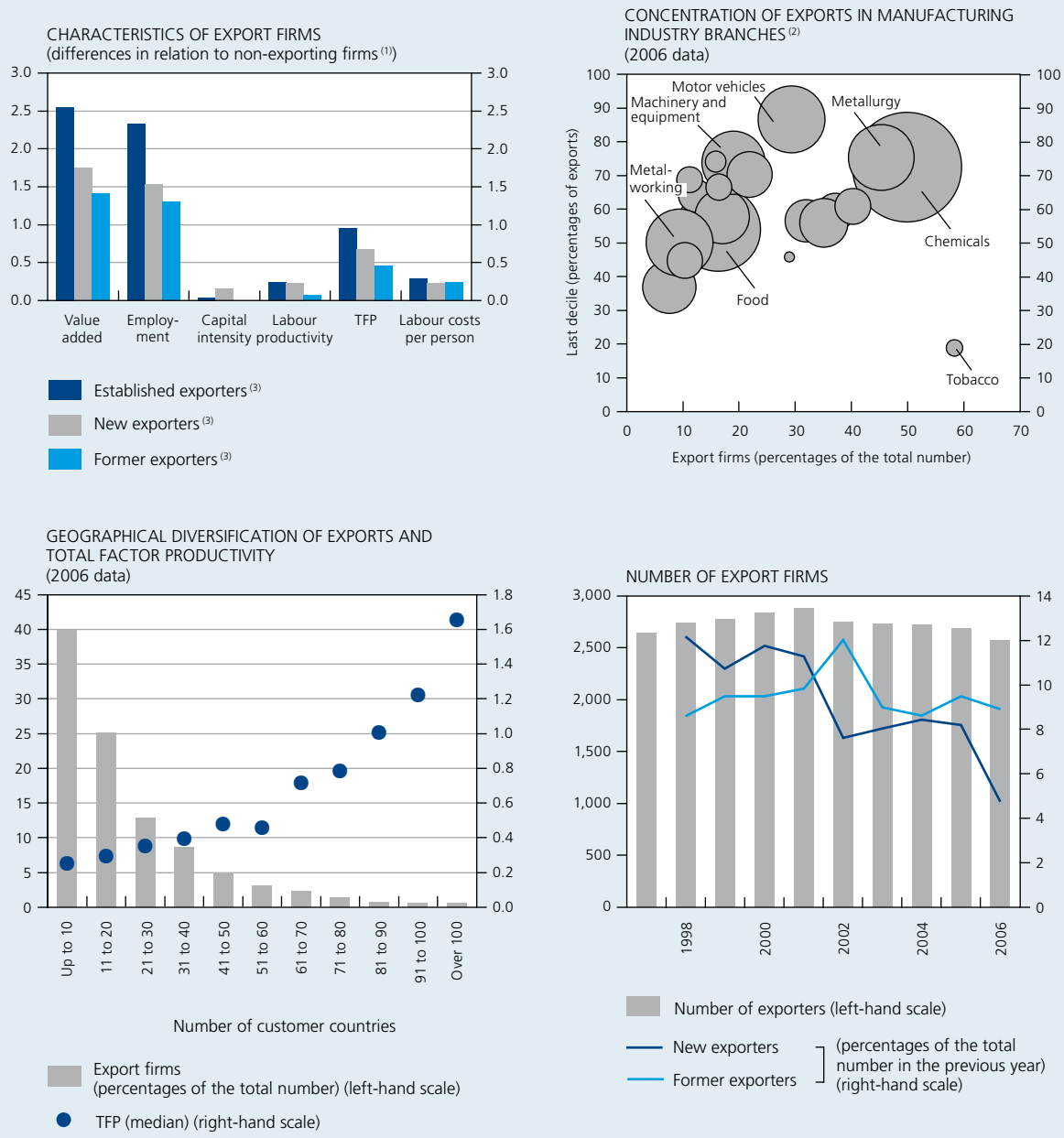
By their nature, manufacturing industry and services probably pursue different routes to achieve the productivity gains needed for their growth. They will therefore be discussed separately in the rest of this section. However, it should be borne in mind that these two types of activity are very closely connected.

Manufacturing industry

The fragmentation of the production chain is one of the characteristics of the current wave of globalisation. It is intended to boost total productivity by using the most efficient production unit at each stage. For the industrial branches of a small, open economy, this makes it necessary to have links with the rest of the world, either via trade or via direct investment, in order to be able to take advantage of specialised inputs or expertise and to expand the potential market.

Use of a database comprising individual data collected for Belgium by the Bank thus reveals that firms which have a long-term involvement in export activities are different in several respects from those which do not. First, they are generally larger, in terms of either value added or employment. Next, in contrast to the general decline

CHART 32 EXPORT FIRMS IN MANUFACTURING INDUSTRY



Source : NBB.

(1) Coefficients obtained from regressions over the period 1998-2006. Multiplied by 100, they can be interpreted as the percentage difference in relation to non-exporting firms.

(2) The area of the circles is proportionate to the share of the sub-branch in the value added of manufacturing industry.

(3) Status defined on the basis of the current year (t) and the previous year (t – 1). Established exporters were active in exports in t and t – 1, new exporters only in t and former exporters only in t – 1.

in industrial employment, the Belgian firms involved in foreign trade contributed to net job creation from 1998 to 2005, at the rate of almost 3,000 FTEs per annum. The staff turnover rate was also lower here. Finally, even after taking account of differences in size or branch of activity, these firms appear to be more productive, so that they can offer higher wages.

Empirical analyses have in fact shown that, both in Belgium and in other countries, in order to be active in exports, firms need to be sufficiently productive so that they can afford the sunk costs entailed in entering a foreign market (market research, setting up a distribution network, etc.). Conversely, a firm opened up to foreign trade may gain productivity, via technology transfers

– though in principle, such a process of learning-by-exporting applies more to economies which are catching up – or via subcontracting part of its production at lower cost, enabling the firm to concentrate on its core business. Similarly, firms which take the additional step of foreign direct investment have a still higher level of productivity than those which only export, as the costs inherent in direct investment are generally greater than those relating to foreign trade.

The need to wait until an adequate level of productivity has been achieved explains why exports always seem to be heavily concentrated, even in an economy such as Belgium where the macroeconomic indicators point to a high degree of openness. That concentration is evident at a number of levels, and first in terms of the number of enterprises concerned. Thus, in 2006, only 17.3 p.c. of Belgian industrial firms had a significant presence in exports – namely exports totalling at least 1 million euro per annum. In many branches, that figure ranged between 11 and 20 p.c., and except for tobacco production it was systematically below 50 p.c. The concentration is also clear from the distribution of export volumes between firms. Thus, in 2006, 10 p.c. of firms accounted for around three-quarters of the value of manufacturing industry exports. That was particularly true in the case of chemicals and metallurgy, branches which are, however, notable for having more export firms, namely almost 50 p.c. The concentration of exports is less in the food industry, although the last decile – the 10 p.c. of firms accounting for the highest volume of exports – still comprises just over half of the total, while it is greatest in the motor vehicle industry, at 86.7 p.c. for the last decile. Finally, the concentration of exports has a geographical dimension which is also linked to TFP. In fact, owing to the sunk costs incurred in entering each new market, the least productive firms are present in fewer markets. Altogether, almost 40 p.c. of industrial export firms serve fewer than ten countries. The three main neighbouring countries are, of course, the ones tackled first, by 84 to 90 p.c. of exporters in each case.

A firm's export status is not fixed over time but nevertheless displays some persistence. From 1998 to 2006, almost 10 p.c. of new exporters, on average, came on the scene each year while at the same time around 10 p.c. of exporters abandoned that activity, including around a quarter of those who had started exporting the year before. However, since the entry rate has tended to fall over time, dropping as low as 5 p.c. in 2006, whereas the exit rate has remained stable, the total number of industrial export firms contracted by 2.7 p.c. over the period considered as a whole. In general, it is uncommon to switch from purely local activity to exporting : only 7 p.c. of firms present exclusively on the domestic market in 1997 and still active in 2006 had become exporters.

Thus, Belgium's export figures are based on a relatively small number of large firms which have been present on foreign markets for some time. It is therefore important to provide an environment conducive to thriving new exporters, by ensuring the more widespread distribution of productivity gains in the economy, via the establishment of an efficient innovation system and encouragement for the entrepreneurial spirit.

At macroeconomic level, export growth depends primarily on the markets where Belgian firms operate. In general, in comparison with a group of twelve EU15 countries, Belgium's specialisation – both geographical and in terms of products – dampens the overall dynamism of its export markets. From the geographical angle, the fact that Belgium's exports are concentrated on the EU15 countries, and especially the neighbouring countries, means that its foreign markets expanded by only 8.1 p.c. per annum from 1996 to 2007, compared to 8.4 p.c. for the rest of the EU15. Finland and Germany had some of the most dynamic foreign markets : the first of these two countries benefited from the greater weight of Russia and Asian countries, while for the second it was the stronger focus on Central and East European countries. However, Belgium's foreign markets were more buoyant than those of Ireland, Spain or the Netherlands.

The favourable or unfavourable product structure of exports can be assessed according to the relative intensity of demand for the products in question. Thus, it is preferable to specialise in progressive products, for which foreign demand is above average, and to turn away from regressive products. However, the progressive or regressive character of a product must be considered with caution. For one thing, the product classes used in the statistical analysis for the purpose of this assessment are not uniform. Also, that character may vary over time : thus, motor vehicles have become regressive in recent times, in contrast to iron and steel products, both constituting major specialisations for Belgian industry. In all, taking the period 1996-2007 as a whole, the product structure of Belgian exports has been less favourable than in other countries : in fact, while the "product effect" – namely the marginal contribution of the product structure to export market growth in comparison with the markets calculated solely on a geographical basis – is positive at around 0.3 percentage point per annum, it is considerably lower than in most other European countries, particularly the three main neighbouring countries.

TABLE 16 EXPORT PERFORMANCE IN TERMS OF VALUE

(average annual percentage changes, unless otherwise stated, from 1996 to 2007)

	Markets[1]	*p.m. Product effect*[2]	Market shares[3]	Exports[4]
Belgium	**8.1**	***0.3***	**–2.3**	**5.6**
Other EU15 countries[5]: median	8.4	*0.8*	–1.5	6.9
Netherlands	7.7	*1.4*	1.3	9.2
Austria	8.7	*–0.4*	0.1	8.8
Ireland	7.4	*5.5*	0.9	8.4
Germany	8.9	*0.5*	–1.2	7.6
Spain	7.7	*0.3*	–0.5	7.2
Finland	9.3	*0.8*	–2.1	7.0
Sweden	8.4	*1.3*	–1.4	6.9
Portugal	8.1	*0.8*	–1.6	6.4
Italy	8.6	*–0.3*	–2.4	6.0
Greece	9.4	*–1.7*	–3.1	6.0
United Kingdom	8.2	*3.3*	–3.1	4.9
France	8.4	*0.9*	–3.5	4.6

Sources: EC, IMF, OECD, UNCTAD, NAI.
(1) Obtained by geographical weighting of global markets.
(2) Difference between growth of EU markets calculated by double weighting – geographical and by product – and growth of EU markets calculated by simple geographical weighting; contributions in percentage points.
(3) Gains or losses (–) of market share, measured by the ratio between the change in exports and the change in global markets weighted on a geographical basis only.
(4) Series expressed in ecu before 1999, in euro thereafter. Data according to the national concept for Belgium.
(5) Excluding Denmark and Luxembourg. Countries ranked in descending order of the average annual change in exports from 1996 to 2007.

Moreover, during the twelve years considered, the Belgian economy seems to have been losing market share in terms of value at a rate of 2.3 p.c. per annum, primarily in the recent period. That performance is worse than that of most other EU15 countries, which recorded a median loss of 1.5 p.c. per annum, although some countries such as France, Italy and the United Kingdom have suffered even bigger losses.

The combination of slightly less favourable markets and relatively large losses of market share explains why Belgium has achieved considerably slower export growth than other countries. From 1996 to 2007, the value of Belgian exports increased at an average annual rate of 5.6 p.c., against a median of 6.9 p.c. in the rest of the EU15. Only France and the United Kingdom recorded slower export growth.

Services

Service activities are not immune to the need for innovation and productivity gains. In market services, two branches have regularly been identified at EU level for their productivity deficit in comparison with the United States: trade and business services. These two branches, which are of considerable economic importance, were thus selected in the screening procedure conducted by the EC in order to identify the European economy's markets which were likely to be operating inefficiently. In principle, it is important for these branches to be capable of integrating ICT into their production process, especially as some knowledge-intensive activities come under business services, a branch which itself is very diverse. While it is difficult – as in the case of ICT producing industries – to define these activities precisely, one could say that they include IT services, R&D and legal and technical advice.

Trade and business services play a major role in the Belgian economy. In 2005, wholesale and retail trade represented 13.1 p.c. of value added, compared to

TABLE 17 PRODUCTIVITY, REGULATION AND INNOVATION IN TRADE AND BUSINESS SERVICES

	Trade			Business services[1]		
	Belgium	EU15	United States	Belgium	EU15	United States
Share of value added in 2005 (percentages of the total economy)	13.1	9.9	10.9	9.0	7.3	7.0
Growth of value added in volume (average annual percentage changes from 2001 to 2005)	2.2	1.5	3.9	3.7	2.5	2.8
of which:						
Contribution (percentage points):						
ICT capital	0.9	0.3	0.7	1.6	0.8	1.2
TFP	–0.5	0.5	2.9	–0.2	–1.3	0.9
Labour skills	0.3	0.1	0.3	0.0	0.3	0.6
Impact of regulations[2] (2003)	0.45	0.39	0.32	0.34	0.32	0.23
Retail regulations[3] (2003)	4.52	2.60	2.63	–	–	–
Innovation rate[4]: difference in relation to (percentage points)						
market services	3.2	–1.5	–	23.5	15.6	–
total economy	–2.9	–5.0	–	17.3	12.1	–

Sources: CIS 2006; EU KLEMS database, March 2008; OECD.

(1) Excluding real estate activities and confined where possible to knowledge intensive services, namely IT services, R&D and legal and technical advice.

(2) Repercussion, in trade and business services, of regulation in certain non-manufacturing branches (energy, transport, communication). The links between trade and business services on the one hand and these non-manufacturing branches on the other are derived from the input-output tables. The higher the indicator the greater the repercussions of restrictive regulations in these non-manufacturing branches (source: OECD).

(3) Synthetic indicator comprising barriers to entry, operational restrictions and price controls. By design, it has a value between 0 and 6, a higher value indicating greater barriers to competition (source: OECD).

(4) Number of firms which stated that they had introduced a product or process innovation between 2004 and 2006, expressed as a percentage of the total number of firms in the corresponding branch. Wholesaling only in the case of trade (source: CIS 2006).

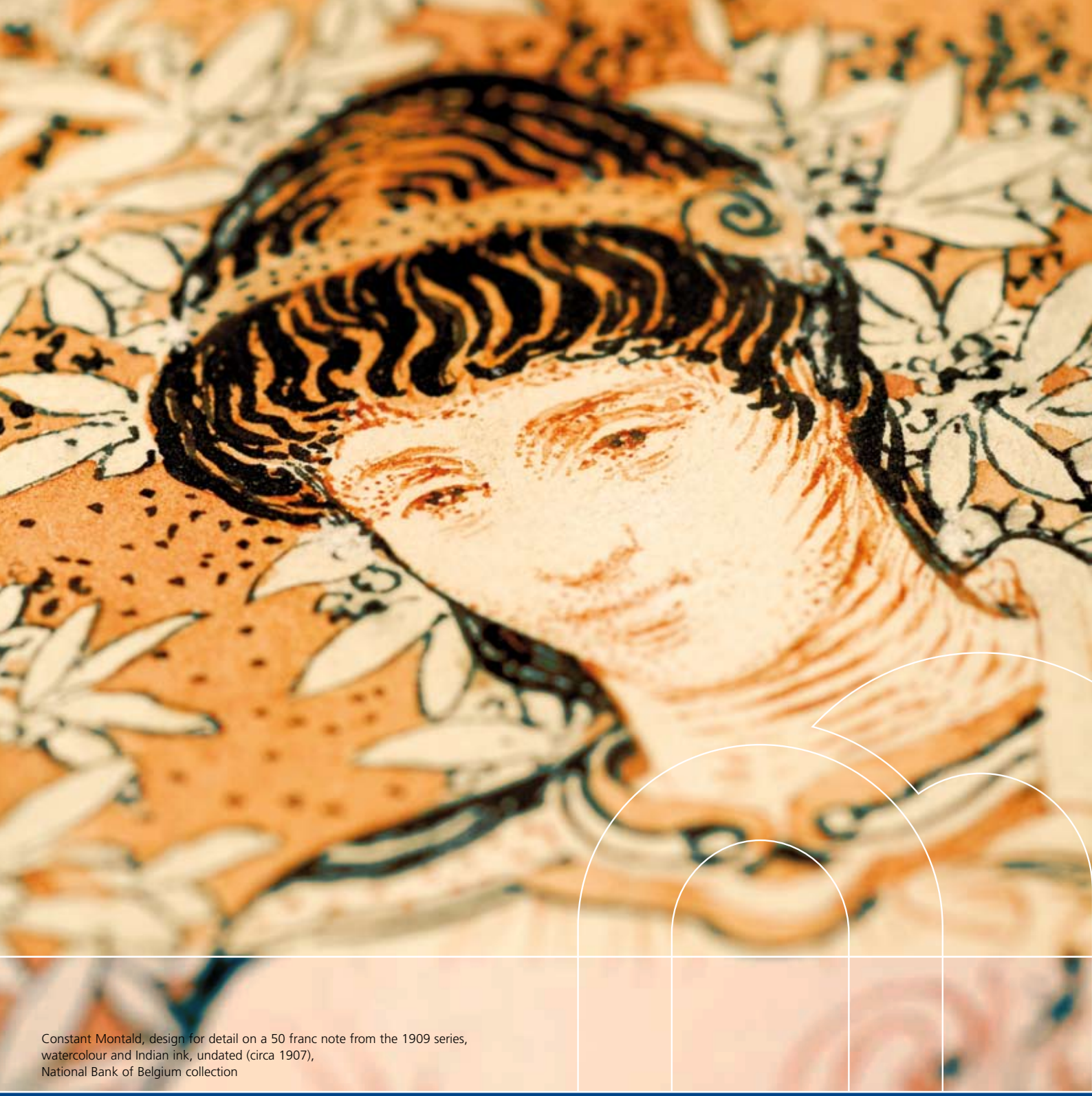
around 10 p.c. in the EU15 and the United States. From 2001 to 2005, activity expanded faster in Belgium than in the EU15, with annual growth of 2.2 p.c. compared to 1.5 p.c., though this was well below the expansion recorded in the United States. Knowledge-intensive business services accounted for 9 p.c. of value added in 2005, compared to around 7 p.c. in the EU15 and the United States, thus ranking second among the EU15 countries behind the United Kingdom. The recent expansion of business services, outpacing the average for the economy in all cases, was also considerably stronger in Belgium than elsewhere, accentuating the existing differential.

In Belgium, the growth of these two branches from 2001 to 2005 was based to a greater extent than elsewhere on ICT capital, which can be considered to be an innovation input. Its annual contribution averaged 0.9 percentage point in trade and 1.6 percentage point in business services. Conversely, TFP, which is a better indicator of the effects of innovation, depressed the expansion of the trade and business services branches by 0.5 and 0.2 percentage point per annum respectively, whereas in the United States it boosted growth, particularly in trade. As regards labour skills, indicating the ability of workers to assimilate technological progress, their growth contribution was 0.3 percentage point per annum in trade in Belgium, as in the United States, but was neutral in business services, whereas in the EU15 it was positive, on average, and even more so in the United States.

While there is no lack of production factors, particularly technological ones, there appears to be a problem in combining them efficiently. It is mainly the regulatory framework governing activity that appears to play a role here. On the basis of the few available indicators, dating from 2003, the position of Belgian trade seems unfavourable. According to an OECD indicator intended to measure the impact of the existing regulations in certain non-manufacturing branches on each branch of the economy, the repercussions of various regulations hampering competition are particularly marked in the case of trade in Belgium. In business services, the impact of the regulations is equivalent in Belgium and the EU15, but is more unfavourable than in the United States. Moreover,

on the basis of another series of indicators compiled by the OECD and relating solely to retail trade, Belgium's overall score is the worst in the EU15. For all the partial indicators, except registration in the commercial register, Belgium's scores are considerably inferior to those of the EU15, particularly in regard to operating permits, the protection of existing firms, and opening hours. Since 2003, a number of changes to the law have aimed to facilitate commercial activity in Belgium, be it in terms of the establishment of new stores or flexible opening hours. Moreover, in general, the time needed to set up a company has been reduced considerably, e.g. via the allocation of a single company number.

The innovative behaviour of Belgian firms active in trade or business services is not declining, in relation to other branches of activity or the EU15 average. According to the CIS 2006, 52.2 p.c. of all Belgian firms stated that, between 2004 and 2006, they had introduced a product or production process which was new to them or new to the market. That was the second best performance among the EU15 countries, behind Germany. The rate of innovation in the most innovative business services in Belgium exceeds the averages for market services and the economy as a whole by more than in the EU15. Although less innovative, the wholesale trade is also in a better position in Belgium than in the EU15.



Constant Montald, design for detail on a 50 franc note from the 1909 series,
watercolour and Indian ink, undated (circa 1907),
National Bank of Belgium collection

Labour market and labour costs

4.

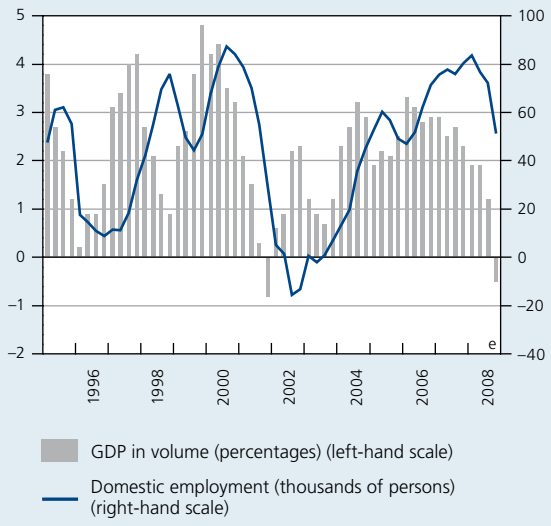
4.1 Labour market

Recent developments and labour market indicators

The expansion of domestic employment remained relatively stable at a historically high level throughout 2007 and at the beginning of 2008. It was not until the end of the year that it clearly lost momentum, when the downturn in economic activity began to have an impact on the labour market: in the first quarter, there were around 84,000 more jobs than twelve months earlier, an increase of 1.9 p.c., whereas in the final quarter the expansion was down to only 1.2 p.c. Apart from the fact that fluctuations in GDP growth do not ordinarily affect employment until after about three quarters, the slowdown in economic growth since the start of 2006 has in fact been more gradual overall than in previous episodes of slackening activity.

CHART 33 ACTIVITY AND LABOUR MARKET

(data adjusted for seasonal and calendar effects, change compared to the corresponding quarter of the previous year)



Sources: NAI, NBB.

As an annual average, the number of persons in work increased further by around 72,000 units in 2008, or only 6,000 fewer than in the previous year, which had seen the biggest increase since 2000. The harmonised employment rate continued to edge upwards in 2008. According to the estimates, on average 62.5 p.c. of the population of working age was in work, compared to 62 p.c. in 2007.

The deceleration in the rate of job creation in 2008 has its roots in the private sector. In the branches where activity is largely determined by the economic cycle, essentially industry, construction and market services, the rise in the number of employees was in fact smaller than in 2007, falling from 54,000 to 43,000 units on average. In the fourth quarter of 2008, the year-on-year increase was only 24,000 units. In industry, employment continued to decline at the beginning of 2008, though more slowly than in previous years, then stabilised in the second and third quarters. In the tertiary sector, employment continued to expand at a sustained rate until the third quarter, especially in the financial, real estate and business services branch, but there was some loss of momentum during the year in market services.

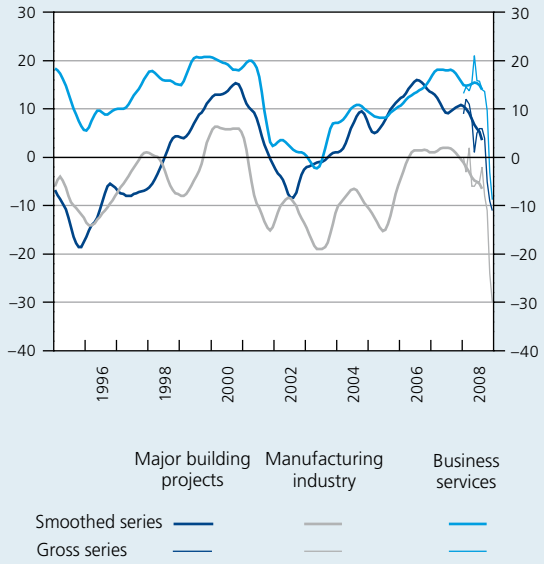
On the basis of the results of the Bank's monthly business survey, the expectations of business leaders concerning the trend in their labour force over the next three months have deteriorated. Taking all branches sensitive to the cycle, the end of the year brought a particularly acute downturn in sentiment regarding the outlook for employment. In industry, the smoothed curve declined during the second half of 2007 and the balance of responses deteriorated continually thereafter. In November, the gross indicator recorded the sharpest fall since 1980 and fell several points further in December to reach an all-time low. This was also the case in the business services subbranch, where the decline in November was the steepest since 2001. Finally, the contraction of the series relating to forecasts for employment in major building projects, which had begun in the second half of 2006, was briefly suspended, but by the beginning of 2008 the downward trend had resumed.

The service voucher scheme subsidies continued to support job creation. On average, another 12,000 jobs were created in market services under this scheme in 2008, while 11,000 had already been created in 2007 and 7,000 in 2006. These are the figures for net job creation, i.e. after deduction of the jobs which, according to the methodology used to compile the national accounts, correspond to the "regularisation" of persons previously employed in the informal economy. In order to ensure that the system is fiscally sustainable, certain additional measures were taken: on 1 May 2008, the service voucher price paid by the user was increased from 6.7 to 7 euro, and from 1 June 2008 the number of service vouchers was limited to 750 per user per calendar year (though the ceiling is higher for some user categories). Conversely, the tax reduction granted to users remained unchanged at 30 p.c. of the amount actually paid.

In the non-market sector other than general government and education, the number of employees continued to rise strongly, by 19,000 units, or at a stronger pace than in 2007. This growth is influenced by the government intervention, particularly via subsidy policies, to support the creation and preservation of jobs: this applies notably to firms in the health and social work branch, which represents the bulk of non-market services.

CHART 34 OUTLOOK FOR EMPLOYMENT

(balance of responses to the monthly survey, seasonally adjusted data)



Source: NBB.

TABLE 18 LABOUR SUPPLY AND DEMAND

(annual averages; year-on-year changes in thousands of persons, unless otherwise stated)

	2004	2005	2006	2007	2008 e	*p.m. 2008 e, level*[1]
Population of working age[2]	30	44	63	70	59	*7,070*
Labour force	69	75	52	23	44	*4,998*
National employment	30	55	61	78	72	*4,493*
Frontier workers	2	1	2	1	1	*57*
Domestic employment	28	55	58	77	71	*4,436*
Self-employed	0	8	7	8	7	*710*
Employees	28	47	51	69	64	*3,726*
Branches sensitive to the business cycle[3]	9	23	35	54	43	*2,346*
General government and education	10	14	7	2	2	*770*
Other non-market services[4]	10	10	9	13	19	*611*
Unemployment[5]	39	20	–8	–56	–28	*505*

Sources: BFP, DGSEI, NAI, NEO, NBB.

(1) Thousands of persons.

(2) Population aged from 15 to 64 years.

(3) The branches "agriculture, hunting, forestry and fishing", "industry", "construction", "trade, transport and communication" and "financial, real estate, renting and business activities". Service voucher jobs mainly come under this last branch of activity.

(4) The branches "health and social work", "community, social and personal services" and "private households with employed persons".

(5) Unemployed job seekers, comprising totally unemployed persons claiming benefits except older unemployed persons not seeking work, and other job seekers registered on a compulsory or voluntary basis.

The number of self-employed workers increased by around 7,000 units. After having declined for six consecutive years up to 2003, this category of workers expanded steadily from 2005, boosted notably by the registration of nationals from the new Member States as self-employed workers in Belgium. The transitional measures designed to limit the direct access of these persons to jobs on the payroll in Belgium were in fact extended until 2009.

The number of staff employed in general government and education expanded at the same rate as in 2007 by around 2,000 additional persons, whereas up to 2005 much larger increases had been recorded. This slowdown was seen in both government and education.

In the private sector, the rise in the volume of labour – i.e. the total number of hours worked – which depends more directly on developments in activity, dropped from 2.3 p.c. in 2007 to 1.4 p.c., a sharper fall than that recorded for the number of persons in work, where the growth rate dropped by only 0.2 percentage point over the period to 1.9 p.c.; this is because, in response to a slackening of economic growth, firms tend to start by cutting the volume of hours per person.

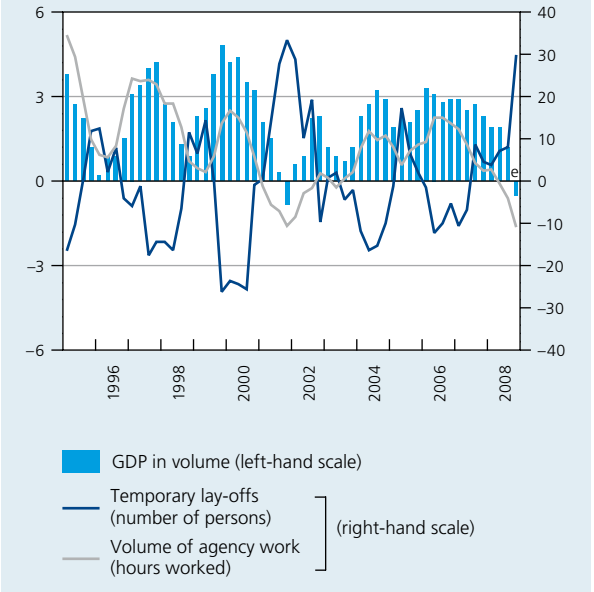
Thus, firms can use various systems of organisation, such as cutting overtime and resorting to temporary lay-offs, or changes in the work regime, to adjust their production capacity without necessarily making workers redundant. It is also apparent that adjustments to employment in line with slower economic growth are more often made by cutting recruitment than via redundancies, not only because of the cost of the latter but also in view of the expense and time entailed in recruiting skilled staff once the economic situation improves. In Belgium, these constraints play a particularly important role because, as will be demonstrated later, the labour market features structural mismatches between labour supply and demand, due in particular to a lack of geographical mobility on the part of job seekers, and insufficient or unsuitable qualifications.

Temporary lay-offs differ from the general unemployment insurance system in that the workers concerned remain bound by an employment contract to the employer whereas, under the general system, there is no such relationship, or not any longer. As a result, taking account of international statistical conventions, persons laid off temporarily, even full-time, are still considered to be employed on the labour market. Recourse to temporary lay-offs therefore does not imply any reduction in the number of jobs, but it does mean a reduction in the number of hours worked. It may be justified, for instance, by a technical problem putting the production plant out of action, inclement weather or, more commonly, economic reasons. It is clear from historical observation that there is a negative correlation between the movement in temporary lay-offs and activity. In 2006, there was a sharp fall in the number of temporary lay-offs, the decline peaking at 12 p.c. year-on-year in the second quarter. During the ensuing quarters, the fall slowed and, from the second half of 2007 gave way to a steadily steeper rise in parallel with the sharp deterioration in the economic situation, to reach 30 p.c. in the fourth quarter of the year under review. At that time, an average of around 157,000 persons had this status full time or part time, representing around 4.2 p.c. of paid employment.

Reduced use of agency staff and non-renewal of fixed-term contracts are other ways in which employers can adjust the volume of labour to the work without resorting to redundancies; these measures do lead to a reduction in the number of persons included in the employment statistics. In fact, activity in the recruitment agency sector is closely linked to the business cycle. Thus, having reached a peak in the second quarter of 2006, the year-on-year increase in total hours worked by agency staff declined steadily and became negative from the second quarter of 2008. This fall was evident for both white-collar and blue-collar workers, but in the case of the latter the impact of the cyclical slowdown was sharper. The number of hours

CHART 35 ACTIVITY, AGENCY WORK AND TEMPORARY LAY-OFFS

(seasonally adjusted data, percentage changes compared to the corresponding quarter of the previous year)



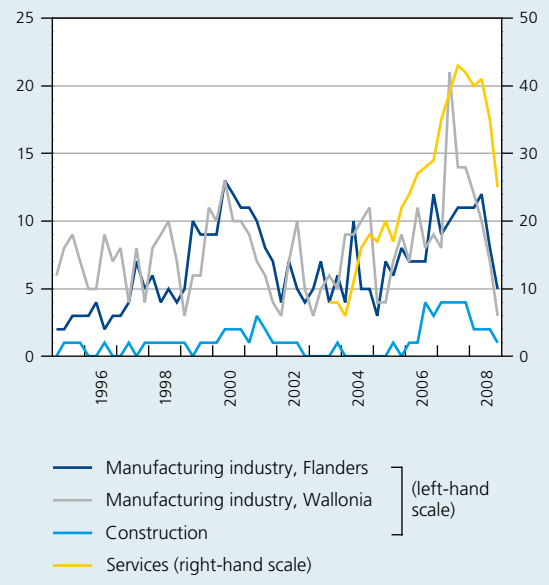
Sources: Federgon, NAI, NEO.

worked by manual agency workers has in fact fallen continuously since the last quarter of 2007, and that trend has accelerated steadily; the year-on-year fall at the end of 2008 was the biggest recorded since the early 1990s. The rate of increase in the number of hours worked by white-collar agency staff has been slowing continuously since the end of 2006.

The changes in the use which firms are making of such forms of adjustment indicate an easing of the tensions on the labour market. The Bank's business survey, which includes a question on impediments to activity due to a shortage of skilled labour, provides further confirmation. In the branches concerned, owing to the deceleration of economic growth, the constraints on output due to staff shortages generally diminished during the year under review. The indicator for Wallonian manufacturing industry has fallen constantly since mid 2007. That fall occurred later in Flanders, from the third quarter of 2008. In construction, the tensions which had emerged in 2006 and persisted in the following year eased by the beginning of 2008. In services, the labour shortage which had worsened almost continuously since the beginning of 2004 became less acute at the end of 2007, and still more so in 2008, whereby, in the fourth quarter, the indicator showed the largest fall since it became available.

CHART 36 IMPEDIMENTS TO ACTIVITY DUE TO A SHORTAGE OF SKILLED LABOUR

(quarterly data, proportion of firms stating that they face these difficulties (1))



Source: NBB.

(1) Weighted according to the relative size of the firms, measured on the basis of turnover or employment.

Just as the change in the number of unemployed persons provides an indication of the unfulfilled supply of labour, the statistics on the number of vacancies reported by the regional public employment services may offer information on the scale of unsatisfied demand for labour. However, as a substantial proportion of jobs are offered otherwise than via these services – e.g. via informal channels – and are therefore not generally recorded, the resulting picture is only partial, and depends not only on the market share of the said services but also on how it changes over time. Moreover, each of these public services uses its own methodology to record vacancies.

Among the job offers received, some are ultimately neither filled nor cancelled. At the end of 2008, Actiris thus recorded 2,270 outstanding vacancies, FOREM 4,287 and VDAB 38,661. To overcome the problems most likely to affect the regional comparability of the data on vacancies or to distort the total, these figures exclude jobs offered by the temporary employment agency sector as well as those relating to employment policy measures, offers from abroad, or those resulting from exchanges between public employment services. This represents a substantial potential reservoir of jobs, but – as suggested by the Bank's business survey indicators – that source could tend to dry up in the near future for certain occupations in branches sensitive to fluctuations in economic activity.

Some vacancies are harder to fill than the average, and the regional public employment services draw up an annual list of "critical" jobs, based among other things on criteria relating to the percentage of vacancies filled and the length of time that they remain open. The structural factors at the root of the mismatch between the labour supply and demand may be quantitative, qualitative or connected with unfavourable working conditions; usually, a combination of factors applies. A quantitative labour shortage is reflected in a lack of candidates for a given occupation, which may be due to the decline in certain training courses, the fact that the content taught does not correspond to firms' requirements, or the negative perception of certain sectors. A qualitative labour shortage is due to the candidates' lack of skills, e.g. because the candidates do not have the required experience, technical expertise, language skills or personality characteristics. Unfavourable working conditions may also discourage the pursuit of certain occupations: these may relate to such factors as non-standard hours, unattractive pay, the arduous nature of the work or the distance between home and the place of work. It is essential to identify the recruitment problems, because the potential solutions depend on the causes.

Unemployment and activation policy

In 2008, the labour force expanded by 44,000 units. This was less than the increase in employment, so that the number of unemployed job seekers continued to fall, dropping by 28,000 units. On average, some 500,000 unemployed job seekers were thus recorded in the year under review. The harmonised unemployment rate came to 7.1 p.c., compared to 7.5 p.c. in 2007.

In 2007, the unemployment figures were already affected by the cyclical downturn. Whereas in the first semester, year-on-year decline in the number of unemployed persons – which had begun in mid 2006 – had still accelerated, in the final quarter it had begun to slacken pace, and that trend continued during the year under review. But it was not until the end of 2008 that the number of unemployed persons exceeded the figure recorded twelve months earlier : in December, the increase came to 2,000 units year-on-year.

Conversely, the number of job seekers out of work for less than a year had already stopped falling from the beginning of 2008. Short-term unemployment is in fact more sensitive to the business cycle : during a downturn in economic activity not only is the "inflow" greater since more people lose their job and young people have more difficulty in finding work on completion of their education, but the "outflow" is also less because a smaller number of unemployed persons succeed in finding work. Thus, more unemployed persons reach the limit of one year's unemployment, so that the "outflow" of short-term unemployed implies to a larger degree an "inflow" into long-term unemployment. Over time, the number of persons out of work for more than one year therefore increases. This increase is reinforced as – without any recent experience on the labour market – those people have less chance of finding a job. There is therefore a danger that they may be trapped in unemployment even when activity revives.

At the end of the year under review, the number of unemployed job seekers increased on an annual basis in Flanders, whereas a small decline was still recorded in Wallonia and Brussels. Owing to a larger proportion of private sector jobs, particularly in industry, unemployment is more sensitive to the business cycle in Flanders : not only are the year-on-year changes bigger, but the turning points generally occur sooner than in the other two regions.

With its employment policy, the government has a powerful instrument for influencing the labour market, particularly by creating the conditions and incentives necessary to encourage the transition of unemployed persons into work.

CHART 37 UNEMPLOYED JOB SEEKERS

(change compared to the corresponding month of the previous year, thousands of persons)

Source : NEO.

(1) Unemployed job seekers out of work for less than one year. The data have only been available in this form since January 2006.

Launched in July 2004, the programme to encourage active job seeking, which combines assistance in seeking work with monitoring of compliance with the criteria according entitlement to unemployment benefits, has been gradually extended, and since July 2006 it has applied to all wholly unemployed persons claiming benefits who are under the age of 50 years. It was agreed that the desirability of including those over the age of 50 would be examined later. This programme aims to monitor job seekers individually, to help them in their efforts to find work or to initiate a vocational training scheme to permit their (re)integration into the labour market. To supplement the information supplied by the regional public employment services on participation in the actions which they organise, NEO invites job seekers to one or more personal interviews in order to assess their efforts to find a job. If their efforts are deemed inadequate, an action plan is imposed. This takes account of the unemployed person's specific circumstances such as age, level of education, aptitude, feasibility of travel and the situation on the labour market in the sub-region where the person lives. The person is expected to respond to a specified number of job offers or submit spontaneous applications to potential employers. In cases of non-compliance with the plan, the activation programme entails penalties in the form of the reduction or suspension of benefits.

From July 2004 to December 2008, NEO had sent out around 389,000 invitations to an initial interview, namely 221,000 to job seekers in Wallonia, 100,000 in Flanders and 68,000 in Brussels. Half of the addressees were under 30 years old, 32 p.c. were aged between 30 and 39, and 18 p.c. were aged between 40 and 49. This age breakdown does not reflect the age structure of the unemployed persons, but is a consequence of the phased introduction of the programme and the timing, which varies according to the age of the persons concerned. Persons under the age of 25 are in fact monitored sooner to prevent them becoming trapped in long-term unemployment.

On average, 56 p.c. of persons attending the first interview had made adequate efforts to find work. At 58 p.c., this percentage was slightly higher in Wallonia, whereas in Flanders it was lowest, namely 52 p.c. In all regions, the percentage of positive assessments clearly declines with age.

From July 2004 to December 2008 inclusive, a total of around 64,000 penalties were imposed: in roughly two-thirds of cases, these were revocable penalties for failure to attend interviews without good reason (Article 70).

The other penalties were imposed following negative assessments during the procedure: 15,000 unemployed persons had their benefits suspended for four months, and 8,000 persons were permanently disqualified from receiving unemployment benefits under these rules. As in the case of the invitations, Wallonia records the largest number of penalties of all kinds. However, in relative terms, if the number of irrevocable penalties is viewed as a ratio of the number of job seekers potentially attracting penalties, the penalty percentage in Flanders is comparable to that in Wallonia, at something over 5 p.c. in each case, whereas in Brussels the figure is less than 4 p.c.

Moreover, if they remain unemployed, job seekers whose efforts to find work were deemed adequate are sent another invitation, after a certain period of time, for a new procedure. At the end of December 2008, 15,034 unemployed persons were participating in a third procedure and 17 in a fourth.

In October 2008, NEO published a report evaluating the programme over the period up to 30 June 2008. According to this agency, introduction of the programme contributed to a significant reduction in unemployment

TABLE 19 ENCOURAGEMENT OF ACTIVE JOB-SEEKING: SITUATION AT THE END OF DECEMBER 2008

(thousands of units, unless otherwise stated)

	Brussels	Flanders	Wallonia	Belgium
Number of invitations by NEO to an initial interview	68	100	221	389
Under 30 years of age	30	50	115	196
30 to 39 years of age	25	31	69	124
40 to 49 years of age	13	19	37	69
Percentage of unemployed persons immediately making an adequate effort	55.1	52.0	58.5	56.3
Under 30 years of age	57.1	55.5	60.6	58.8
30 to 39 years of age	55.9	49.8	58.1	55.7
40 to 49 years of age	48.8	46.1	52.4	50.1
Number of penalties (up to December 2008 included)(1)	12	18	33	64
Partial four-month suspensions(2)	2	4	10	15
Exclusions(3)	1	2	5	8
Suspensions under Article 70(4)	9	12	19	40
p.m. Penalty percentage(5)	*3.8*	*5.6*	*5.1*	*5.0*

Source: NEO.

(1) The number of unemployed persons concerned is smaller, since some of them may have incurred more than one penalty during the procedure.

(2) Cohabitants or school-leavers, either receiving a negative assessment at the first interview and refusing to sign the agreement (whereby they undertake to follow an action plan), or receiving a negative assessment at the second interview and then signing the agreement.

(3) Unemployed persons receiving a negative assessment at their second interview and refusing to sign the agreement, or receiving a negative assessment at the third interview.

(4) Suspension after an unemployed person has failed to attend an interview without good reason or has failed to respond to an invitation to conclude an agreement. This suspension may be lifted if the person reports to NEO.

(5) Number of irrevocable penalties (four-month partial suspension and exclusion) as a percentage of the potential number of unemployed persons attracting penalties. The data relate to the period between July 2004 and June 2008.

in all the age groups covered. Conversely, the number of unemployed persons aged 50 and over – who are not covered – increased sharply, partly because of the obligation introduced some years ago whereby new unemployed workers between the ages of 50 and 58 must remain available on the labour market. Finally, the report concludes that the legislation is applied uniformly in the three regions.

Structural disparities between regions and geographical mobility

The labour market situation varies considerably from one region of the country to another. According to the results of the labour force survey in 2007, Belgium has the highest regional dispersion of unemployment rates anywhere in the EU15. Belgium is now ahead of Italy which – owing to the wide disparities between the north and south of the country – had topped the ranking until 2006. This indicator must be interpreted with caution because, though Belgium is notable for the size of the variations in unemployment rates between the provinces, the average unemployment rate is lower than that in Germany, France, Spain, Portugal and Greece, countries with a more balanced territorial dispersion of unemployment.

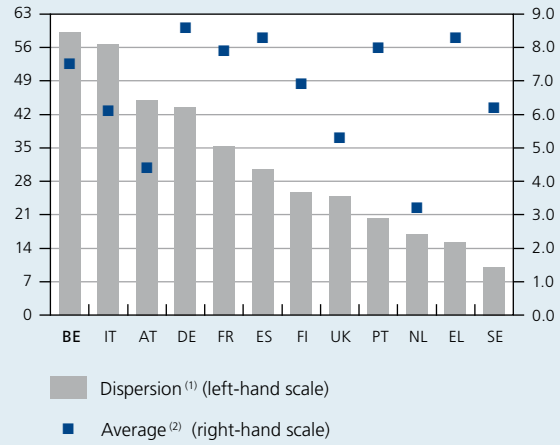
In Belgium, the disparities in unemployment rates are not only apparent between the regions and the provinces, there are also significant variations within the latter. By way of illustration, an unemployment rate concept is used here which can be calculated down to a very detailed geographical level on the basis of the ratio between the number of persons unemployed, in administrative terms, and the population of working age; this concept differs from that used in the rest of this Report, where the unemployment rate is calculated according to a methodology which ensures international comparability and which corresponds to the ratio between the number of unemployed job seekers according to the ILO definition and the labour force. During the first eleven months of the year under review, the administrative unemployment rate thus defined averaged 5.6 p.c. in Belgium, while at regional level it came to 3.3 p.c. in Flanders, 8.5 p.c. in Wallonia and 9.7 p.c. in Brussels. The detailed statistics also show that the intraregional dispersion in unemployment is also much smaller in Flanders than in Wallonia: thus, at district level, the unemployment rate was between 2 and 4.3 p.c. in Flanders and between 4.4 and 12 p.c. in Wallonia.

This picture of the regional labour market situation in Belgium changes fairly radically if the various regions are considered according to the jobs recorded in their area, rather than on the basis of the labour market situation of their residents. Indeed, Brussels has the largest number of jobs in relation to the population of working age. In 2006, the latest year for which these data are available, there was on average almost one job per Brussels resident of working age. In Flanders and Wallonia, the ratio of jobs to the population aged between 15 and 64 years was much smaller, since it averaged around 62 and 51 p.c. respectively. In Wallonia, it varied between 35.5 and 62.7 p.c. according to the district; in Flanders, it fluctuated between 41.8 and 72.2 p.c. Ten of the twenty-two Flemish districts had a job ratio higher than that in the best-performing Wallonian district, namely Mouscron, while five of the twenty Wallonian districts had a ratio below that of Tongeren, the Flemish district with the lowest score.

The correlation between the unemployment rate and the job ratio at district level (including Brussels) does not differ significantly from zero, which indicates that there is no statistical link between the availability of jobs at local level and the unemployment rate of the district's population.

CHART 38 HARMONISED UNEMPLOYMENT RATES IN THE EU15 COUNTRIES IN 2007: AVERAGE AND DISPERSION

(persons aged 15 years and over)



Source: EC.

(1) The dispersion indicator, expressed as a percentage, corresponds to the ratio between the square root of the variance (weighted according to the regional labour force's percentage of the total labour force) of the regional harmonised unemployment rates at the NUTS2 level of aggregation (which in Belgium corresponds to the provinces) and the total unemployment rate. It therefore indicates the extent to which the unemployment rate varies between the administrative subdivisions of a given country. Since these data are not available for Denmark, Ireland and Luxembourg, those countries are not included in the chart.

(2) Ratio between the number of unemployed persons according to the ILO definition – i.e. persons out of work, actively seeking work and available on the labour market – and the labour force, as a percentage.

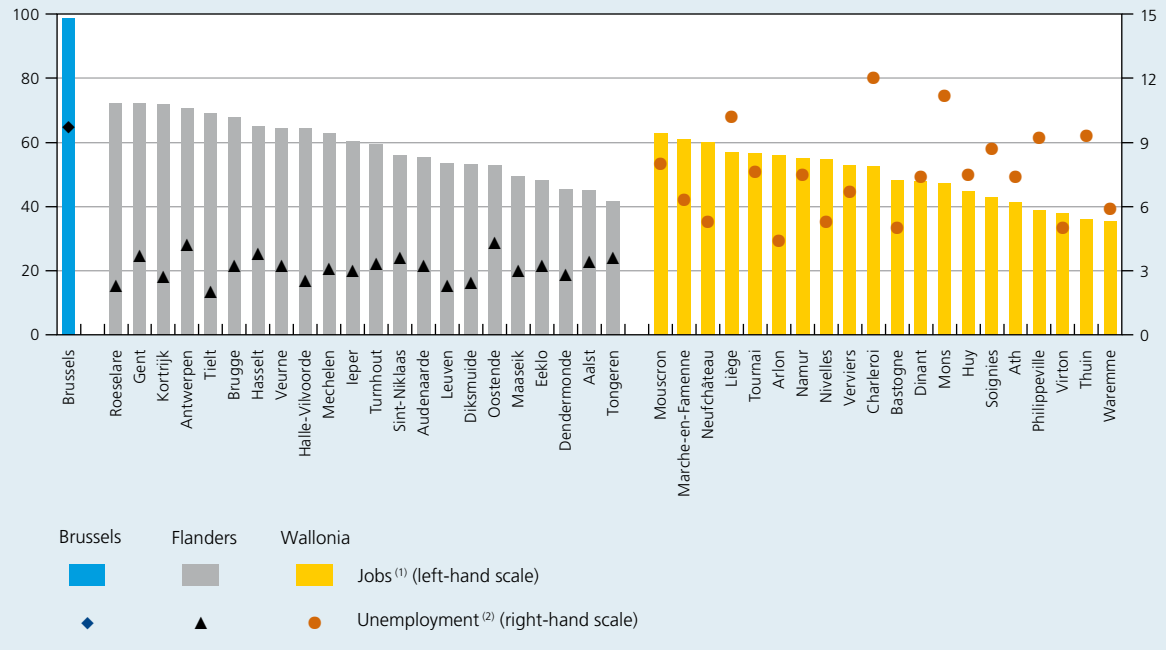
These two indicators therefore offer a strikingly different picture of the labour market situation, especially for Brussels: there are many jobs there, but the unemployment rate is very high. This paradox is due partly to the fact that, in Brussels, a substantial proportion of the jobs are connected directly (civil servants working at the various levels of government) or indirectly (staff of firms which locate their head office in the capital or close to the central government) with its status as a regional, national and European capital. These tend to be jobs for skilled workers, whereas a large section of the population resident in Brussels presents a different profile. In addition to this problem of skills, Brussels also has a sizeable resident population of foreign origin, people who do not necessarily meet the vacancy criteria in terms of nationality or language skills. These various factors contribute to the particularly acute mismatch between labour supply and demand in Brussels.

Many jobs in Brussels are therefore filled by workers living elsewhere in the country, who commute to the capital on a daily basis. These journeys can be quantified on the basis of the information on commuting obtained from the 2007 labour force survey. The percentage of commuters is higher for residents of the provinces closest to Brussels: thus, around 19 p.c. of the population of working age in the two Brabant provinces have a job in Brussels. That explains why these provinces record the highest provincial employment rates in Flanders and Wallonia respectively, while having the lowest share of local employment. But every day a large number of people also commute to Brussels from East Flanders and from the provinces of Namur and Hainaut.

In the majority of cases, commuting to a destination other than the capital concerns the other provinces in the worker's region of residence. Thus, barely 1.8 p.c. of persons of working age living in Wallonia work in Flanders, even though the labour market situation is very different in the two regions. In that regard, the mobility allowance offered to the long-term unemployed who accept a job entailing lengthy absences from home seems to have little effect in encouraging commuting between regions. An inadequate working knowledge of Dutch amongst unemployed residents of Brussels and Wallonia still seems to be a major obstacle to filling vacancies in Flanders. To increase mobility between regions, the regional public employment

CHART 39 REGIONAL LABOUR MARKET SITUATION

(percentages of the corresponding population of working age at 1 January in the year concerned)



Sources: DGSEI, NAI, NEO.

(1) Number of persons (employees and self-employed) working in the administrative district in question. The data relate to 2006, i.e. the latest year for which they are available.

(2) Number of unemployed persons (NEO definition) per administrative district. The data concern the first eleven months of 2008.

TABLE 20 GEOGRAPHICAL BREAKDOWN OF EMPLOYMENT IN BELGIUM IN 2007

(percentages of the population of working age of the region or province concerned)

Place of residence	Workers[1]	working in:						*p.m. GDP per capita*[2]
		their own NUTS2 subdivision	another NUTS2 subdivision (commuters)	of which:				
				Brussels	Other provinces of:		Abroad	
					Flanders	Wallonia		
Brussels	54.8	46.0	8.8	–	5.7	2.4	0.7	*58.3*
Antwerp	64.9	56.7	8.2	2.3	4.5	n.r.	1.3	*35.4*
Flemish Brabant	67.9	38.6	29.4	19.1	8.5	1.3	n.r.	*31.6*
Limburg	62.9	50.3	12.6	1.0	6.4	n.r.	4.3	*24.6*
West Flanders	67.7	60.1	7.6	1.5	5.0	0.6	n.r.	*28.1*
East Flanders	66.9	50.7	16.2	6.4	8.8	n.r.	0.6	*27.0*
p.m. Flanders[3]	*66.1*	*51.9*	*14.2*	*5.8*	*6.5*	*0.6*	*1.3*	*30.0*
Walloon Brabant	62.7	33.8	28.9	18.9	4.6	4.7	n.r.	*29.4*
Hainaut	53.8	41.8	11.9	5.0	2.0	4.2	0.7	*19.7*
Liège	56.4	48.8	7.5	2.1	1.2	2.3	1.9	*21.8*
Luxembourg	61.6	40.7	20.9	n.r.	n.r.	4.1	15.4	*20.7*
Namur	60.2	39.5	20.6	5.4	n.r.	13.8	n.r.	*20.7*
p.m. Wallonia[3]	*57.0*	*42.7*	*14.3*	*5.4*	*1.8*	*5.0*	*2.2*	*21.6*

Sources: DGSEI, NAI, NBB.
(1) Harmonised employment rate per region or per province.
(2) GDP per capita of the provinces and regions in 2006, at current prices, in thousands of euro per person.
(3) Weighted average of the five provinces.

services have therefore concluded cooperation agreements since 2006, concerning in particular the exchange of job offers and language courses.

According to the data from the labour force survey, in both Flanders and Wallonia around 14 p.c. of persons aged between 15 and 64 years had a job outside their province of residence in 2007. The difference of around 9 percentage points between the employment rates of the two regions is therefore due entirely to the degree to which people have a job in their own province: in Flanders, that proportion averaged around 52 p.c., against 43 p.c. in Wallonia. This difference is due partly to the higher level of economic activity: in 2006, GDP per capita in Flanders was almost 40 p.c. higher than the figure for Wallonia.

In addition to the policies designed to promote economic activity, to improve the quality of the education system and to make the labour market more efficient, eliminating the disparities on the labour market entails boosting mobility, particularly between the regions. Employers also have a crucial role to play: continuous training of their employees provides an internal source of the skills essential to meet their changing needs in terms of staff, thus helping to ease the tensions on the labour market and the constraints on the development of new activities. On the basis of data obtained from the social balance sheets, box 7 examines the situation of the branches of activity in regard to formal training provided by firms, and how it is affected by the business cycle.

Box 7 – Extent of the formal training provided by firms according to the business cycle and by branch of activity

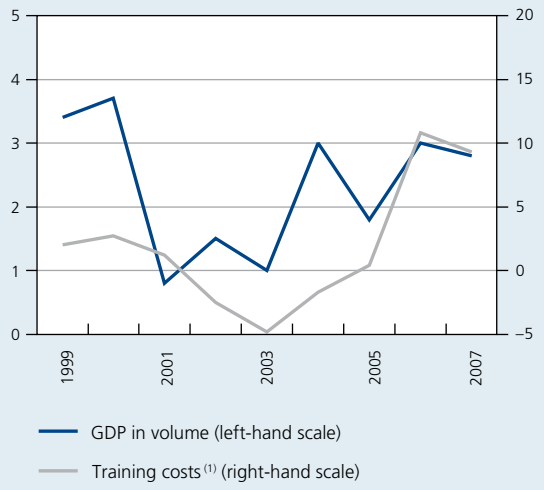
Basic education and continuous training are important tools for leveraging economic growth, particularly via the innovation and productivity gains implied by the use of new technologies in the production process. In this connection, vocational training also plays a role in the spread of knowledge. It helps to prevent the workers' skills from becoming outdated, and improves those skills and hence the workers' employability.

Aware of the importance of this issue, the social partners in Belgium have long since set training targets for all private sector firms, targets which were included in the Generation Pact negotiated at the end of 2005. Thus, training costs were to represent 1.9 p.c. of the labour costs borne by all firms in the private sector in 2006, and by 2010 one worker in two is to receive training each year.

There is still a long way to go to achieve these targets. According to the social balance sheet data relating to the 2006 financial year[1], training costs represented less than 1.2 p.c. of the wage bill, and the number of workers with access to training was 35.2 p.c. of the total workforce. These results give an idea of how much remains to be done. The provisional data for 2007 are based on changes compared with the previous year in a constant reduced population comprising the social balance sheets of 44,718 firms, of which 4,102 had completed the table relating to formal training[2]. They indicate a very small increase in the two indicators which, if applied to the results for the total population in 2006, would raise the proportion of labour costs spent on training to 1.22 p.c. and the participation rate to 35.3 p.c. in 2007.

CYCLICAL SENSITIVITY OF TRAINING BUDGETS

(percentage changes year-on-year)



Sources : NAI, NBB (social balance sheets).

(1) The increase in the training budgets for 2000 was adjusted to eliminate the impact of the inclusion of the BNRC in the analysis population for the first time in that year, in view of the relative size of that company. The 2007 figures are based on a reduced population of firms.

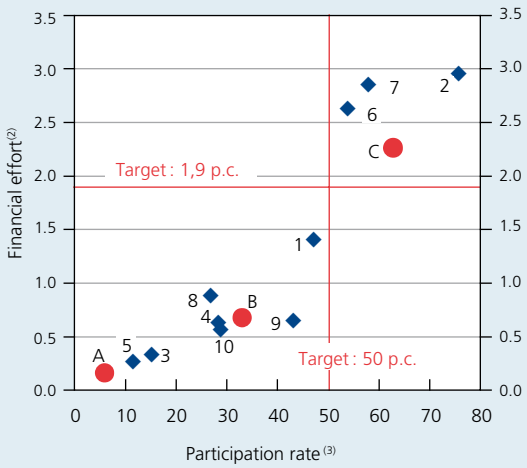
(1) Some private sector firms are not included in the analysis population used. For instance, companies with less than one FTE or those ending their financial year on a date which does not coincide with the end of the calendar year are excluded.

(2) The training indicators obtained for 2007 are based on a reduced population in which large firms are over-represented, which may imply a bias since they generally report their investment in training more systematically than SMEs.

This increase is encouraging, but it must be said that it occurred in a favourable economic context. Expenditure on training in fact has a pro-cyclical effect, as the correlation coefficient between the growth of that expenditure and GDP growth stood at 0.5 over the period from 1999 to 2007. The cyclical downturn which began at the end of 2007 may therefore compromise any further rise in the financial training indicator in 2008. At the time of the previous downturn in the cycle, the budgets spent on training thus declined for three consecutive years.

POSITION, IN 2007, OF THE BRANCHES OF ACTIVITY [1] IN REGARD TO THE TRAINING TARGETS

(percentages, reduced population)



1. Manufacturing industry
2. Energy and water
3. Construction
4. Trade and repairs
5. Hotels and restaurants
6. Transport and communication
7. Financial services and insurance
8. Real estate and business services
9. Health care and social work
10. Community, social and personal services

A. Firms with up to 50 FTEs
B. Firms with 50 to 250 FTEs
C. Firms with over 250 FTEs

Source : NBB (social balance sheets).

(1) Agriculture and mining and quarrying were disregarded on account of their low relative importance.

(2) Training costs, percentages of staff costs.

(3) Number of workers participating in training, percentages of average employment.

In parallel with the macroeconomic targets applicable to the private sector as a whole, the Generation Pact provides for assessment of the training efforts at sectoral level and penalties in the form of a special contribution earmarked for the financing of the "training leave" scheme for the sectors whose efforts prove to be inadequate. This sectoral assessment of training efforts cannot be implemented in full until the financial years ending from 1 December 2008 onwards, for which a new social balance sheet form has been introduced, collecting much more comprehensive data on the training policy of firms. However, it is possible to offer an idea of the relative

position of the various branches of activity in regard to the targets on the basis of the information available from the existing social balance sheets.

While investments and access to training increase the bigger the firm, the training policy also depends very largely on the specific needs of the various branches of activity. Thus, some branches long ago set up training initiatives accessible to a large proportion of their staff. In 2007, three-quarters of workers in the "energy and water" branch received training. In the "financial services and insurance" and "transport and communication" branches, that proportion was also well in excess of the overall target of 50 p.c. set for 2010, while coming close to that figure in manufacturing industry. In contrast, workers employed in the "hotel and restaurant" and "construction" branches were much less likely to benefit from such an initiative, as only 11 and 15 p.c. of them respectively had access to training. In terms of financial effort, the ranking of the branches and their position in relation to the overall target are very similar. Thus, the same three branches perform best for both indicators: they allocated over 2.5 p.c. of their staff costs to training, while in the branches which invested the least, such as the construction industry or the hotel and restaurant trade, less than 0.5 p.c. of the wage bill was spent on staff training. The "health and social work" branch is different from the others: while the participation rate (43 p.c.) was well above the average (39 p.c.), the resources allocated to training (only 0.65 p.c. of the wage bill) were well below the average (1.42 p.c.). In this branch, the preferred policy is therefore to provide training accessible to the maximum number of workers, but at relatively low cost and of short duration.

Risk groups

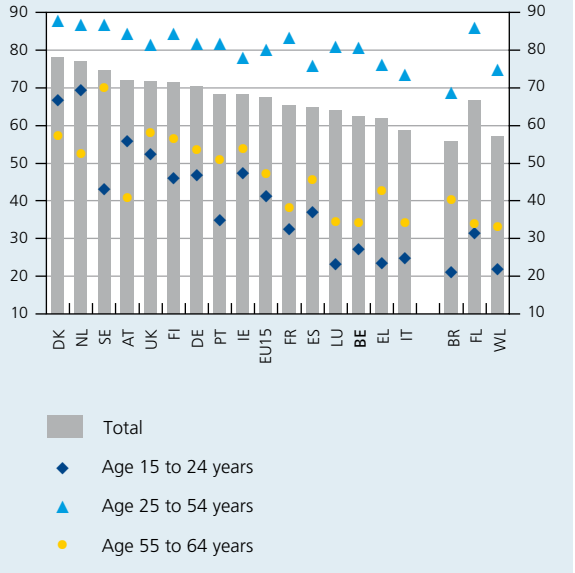
A number of groups are under-represented in employment in Belgium, particularly the young, people aged 55 and over, and persons of foreign origin. It is essential to make greater use of this untapped labour source, especially since – as shown in box 8 – these are precisely the groups of persons which will expand in the future.

The employment rate of persons aged between 25 and 54 in Belgium tallies with the EU15 average: in the first three quarters of 2008, just over 80 p.c. of persons in this age group had a job. Conversely, there are far fewer young people and seniors working in Belgium. In the case of young people, the employment rate is actually tending to decline slowly owing to the larger proportion attending higher education or to the extension of these studies. Among the EU15 countries, Italy, Greece and Luxembourg are the only countries where the proportion of young people in employment is lower than in Belgium, where it comes to only 27 p.c. In the case of persons between the ages of 55 and 64, only one in three is employed in Belgium, the lowest proportion in the EU15.

The countries with the highest employment rate for persons aged between 55 and 64 are also the ones which perform best in terms of employing young people. Moreover, this apparent complementarity can be extended to all age groups. In most countries, the employment rate of persons aged 55 and over is relatively higher than that of young people, but that is because a large group of young people are still students and do not combine studying with a job, even part time.

CHART 40 EMPLOYMENT RATE IN THE EU15 COUNTRIES AND IN THE REGIONS OF BELGIUM IN 2008: BREAKDOWN BY AGE GROUP

(average of the first three quarters, percentages of the corresponding population of working age)



Sources: EC, DGSEI.

TABLE 21 PRE-PENSIONS, OLDER UNEMPLOYED PERSONS AND TIME CREDITS

(number of beneficiaries aged from 55 to 64 years, annual averages, unless otherwise stated)

	Older unemployed persons, exempt from seeking work	Full-time pre-pensions	Full-time time credits [1]	*p.m. Population aged from 55 to 64 years (thousands)*
2000	85,558	105,759	1,432	*1,044*
2001	92,561	102,793	1,773	*1,062*
2002	99,132	100,403	2,150	*1,089*
2003	105,285	101,462	2,934	*1,115*
2004	108,749	102,630	3,882	*1,139*
2005	108,885	102,914	4,976	*1,167*
2006	108,784	106,290	4,849	*1,205*
2007	106,943	110,027	4,305	*1,246*
2008 [2]	100,828	111,793	3,719	*1,281 e*

Sources: DGSEI, FPB, NEO.

(1) These figures cover those taking a complete career break and, from 2003, also those receiving a full-time time credit.

(2) Average of the first eleven months.

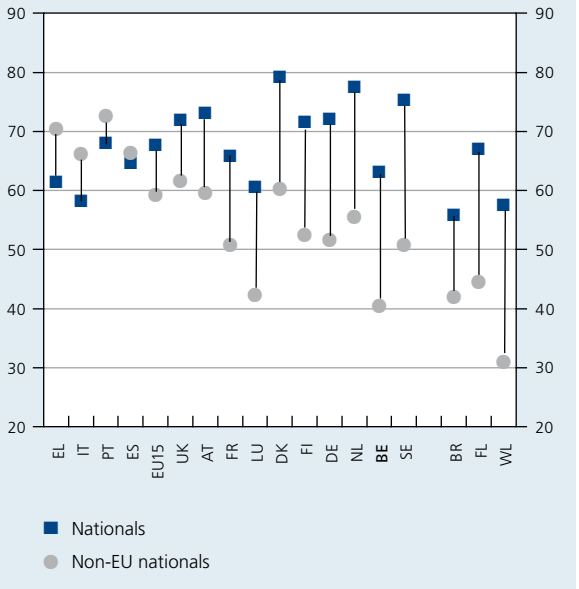
At the Belgian regional level, too, there is generally a positive link between the employment rates of the various age groups. In Flanders, the difference between the employment rates of seniors and young people is very small, owing to a much higher proportion of young people performing paid work in one form or another. Conversely, in Brussels it is very large, since 40 p.c. of persons aged between 55 and 64 were working in the first three quarters of 2008, by far the highest employment rate for this age group in the three regions, while only one in five of young Brussels residents were working.

Although only a third of persons aged 55 and over are in work in Belgium, that proportion has risen considerably since the beginning of the decade, by around 8 percentage points. This increase was due in particular to the implementation of a series of measures intended to prevent early departure from the labour market. Thus, the statutory retirement age for women has been raised gradually since 1997: in January 2009, it went up from 64 to 65 years, the same age as for men. The age at which persons can claim the status of unemployed exempt from seeking work was also raised: since 2004 it has been set at 58 years, subject to a few exceptions relating to the length of the person's career. In addition, the Generation Pact adopted in December 2005 limited the scope for taking pre-pension, and since 2007 persons who remain in work after the age of 62, or following a career of at least 44 years, are entitled to a bonus in the calculation of their pension. In December 2008, around 29,000 pensioners received such a bonus.

The impact of these measures is reflected partly in the pattern of use of the various schemes for early withdrawal from the labour market, namely the scheme for older unemployed persons, pre-pensions and time credit. Although the number of full-time conventional pre-pensions has increased again in recent years, the proportion of pre-pensioners in the population aged between 55 and 64 years declined from 10.1 to 8.7 p.c. between 2000 and 2008. The drop in the number of older unemployed persons exempt from seeking work – which had begun in 2006 – continued in the year under review. Following steady growth until 2005, the number of persons taking full-time time credits (including total career breaks in the public sector) diminished thereafter. While the general time credit system is still successful, older workers are making more use of schemes for reducing their working time. Over the first eleven months of 2008, NEO recorded 53,020 persons aged from 55 to 64 years who had opted for a part-time time credit or career break,

CHART 41 EMPLOYMENT RATE IN THE EU15 COUNTRIES AND IN THE REGIONS OF BELGIUM IN 2008: BREAKDOWN BY NATIONALITY [1]

(average of the first three quarters, percentages of the corresponding population of working age)



Sources: EC, DGSEI.

(1) No data according to nationality are available for Ireland. Countries are ranked in ascending order of the difference between the employment rate for nationals and non-EU nationals.

representing almost a third of the total taking advantage of these schemes.

Like young people and seniors, foreign nationals are under-represented on the Belgian labour market. According to the data available from the labour force survey – in which, since the breakdown is based on nationality, foreigners who have been granted Belgian nationality are counted as Belgians – only four out of ten non-EU nationals resident in Belgium, on average, were in work during the first three quarters of 2008, compared to 63 p.c. of Belgians. This is the lowest employment rate for foreigners among the EU15 countries; moreover, the only country with a larger discrepancy in comparison with the rate for nationals is Sweden.

The unfavourable situation of this group on the labour market is also clear from the unemployment statistics: in the first three quarters of 2008, in Belgium on average 27.4 p.c. of the non-EU national labour force was seeking work, a proportion four times higher than the overall unemployment rate. However, the situation of these persons is far from homogeneous, as is evident from a recent OECD study which shows that the position on the labour market of immigrants resident in Belgium for less than five years is relatively more favourable than that of residents who arrived during earlier migrations.

The low proportion of foreigners employed on the labour market in Belgium cannot be attributed solely to their lower educational level since, whether the persons concerned have a low, average or high level of skills, the employment rate for non-EU nationals is at least 10 points percentage points below the corresponding rates for Belgians. That gap actually increases the higher the educational level: in the first three quarters of 2008, among persons who had completed higher education, 84 p.c. of Belgians were working, compared to only 58 p.c. of foreigners; the employment rate of the latter was thus around 10 percentage points below the figure for Belgians with average skills. The benefits of studying thus appear to be considerably less for non-EU nationals, indicating a poor use of the resources available on the labour market and the likelihood of discrimination.

The situation of foreign nationals on the labour market is particularly unfavourable in Wallonia where, at 31 p.c., their employment rate was little more than half that of Belgians. In Brussels and Flanders, the employment rate of foreigners was much higher and fairly comparable, at over 40 p.c., but the gap in relation to Belgians differed considerably at 14 and 22 percentage points respectively.

TABLE 22 HARMONISED EMPLOYMENT RATES IN BELGIUM IN 2008: BREAKDOWN BY EDUCATIONAL LEVEL AND NATIONALITY

(average of the first three quarters of 2008, percentages of the corresponding population of working age; in brackets, percentage of the various educational levels per nationality group)

	Belgians	Non-EU nationals
No more than lower secondary education	39.7 (32.9)	29.6 (52.8)
No more than higher secondary education	68.0 (38.7)	48.3 (24.7)
Higher education	83.6 (28.4)	57.8 (22.5)

Source: DGSEI.

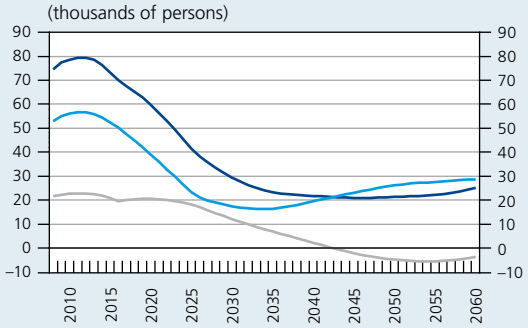
Box 8 – Demographic prospects

The low employment rate among persons under 25, persons aged 55 and over, and foreign nationals is inhibiting the potential development of economic activity in Belgium, especially as there is little scope for mobilising more people between the ages of 25 and 54, since their participation rate is already very high. This problem will become yet more acute in the future, according to the demographic projections produced by the Federal Planning Bureau (FPB) and the Directorate General of Statistics and Economic Information (DGSEI), updated in the spring of 2008.

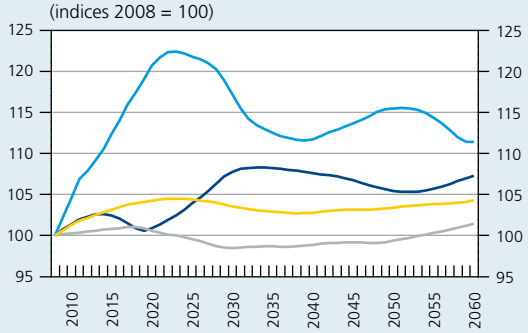
By 2025, the population of Belgium is forecast to increase by over 10 p.c. to around 11,800,000 persons. Only one-third of this growth is due to the natural balance of births and deaths, while the remaining two-thirds will come from net immigration. Around 50,000 new residents are expected each year up to 2015. After that, the influx is projected to slow down, stabilising at around 20,000 per annum from 2025. The positive contribution of

NEW DEMOGRAPHIC PROSPECTS FOR BELGIUM

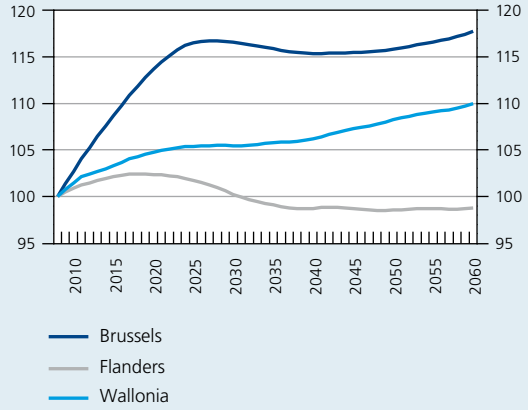
DETERMINANTS OF DEMOGRAPHIC TRENDS
(thousands of persons)



POPULATION OF WORKING AGE, BY AGE GROUP
(indices 2008 = 100)



POPULATION OF WORKING AGE, BY REGION
(indices 2008 = 100)



Source : Population forecasts 2007-2060, FPB-DGSEI.

the natural balance is projected to decline steadily thereafter, becoming negative from the 2040s. Further increases in the population of Belgium beyond that date are expected to consist only of net immigration.

All other things being equal, even though the employment rate of new arrivals is higher than that of the foreign population already established in Belgium, the country's fundamental demographic pattern presents a challenge for the development of the economy's growth potential.

The population of working age, i.e. between 15 and 64 years, is expected to continue expanding slowly over the next ten years or so, and then to remain stable. Nonetheless, its structure in terms of age groups will change significantly, a cause for concern if the employment rate of those age groups were to remain at its present level, because in the years ahead the numbers in the 25 to 54 age group – which is the most active – will stagnate, and will even decline from 2025. In the 2030s, their number will fall by 1.5 p.c. and will remain below the current level until the 2050s. The age groups which are currently the least active are the ones which are likely to expand over the projection horizon as a whole. The ageing of the population of working age will be particularly pronounced in the next 15 to 20 years, with an increase of over 20 p.c. between now and 2025 in the group aged 55 to 64 years. After that, the baby boom cohorts will gradually depart from the scene. The rise in the numbers aged between 15 and 24, many of whom are still students, is expected to be relatively moderate over the next ten years, but then to accelerate steadily until the end of the 2030s.

While, on the scale of Belgium as a whole, the most striking feature is the change in the structure of the population of working age, on a regional scale it is also the level in absolute terms that commands attention. In Brussels, thanks mainly to a younger population and a large contribution from external migration, the population aged between 15 and 64 years is set to expand by almost 17 p.c. by 2025 and will remain at that level thereafter. In Wallonia, the increase will be smaller but virtually continuous over the whole projection period. In contrast, in Flanders the expansion of the population of working age is expected to reach a maximum of 2 p.c. between now and 2015, before diminishing. From the 2030s, the Flemish Region is actually expected to have a smaller population between the ages of 15 and 64, in absolute terms, than it has today.

4.2 Labour costs in the private sector

Recent developments and determinants

In 2008, hourly labour costs in the private sector increased by 3.5 p.c., slightly below the 2007 figure of 3.7 p.c. The strong acceleration in automatic indexation was entirely offset by a smaller contribution from the wage drift. The impact of the social security contributions paid by employers was slightly positive, for the first time since 2003. The other employers' contributions had a moderating effect, in contrast to 2007 when they had exerted upward pressure. As in the previous year, real agreed adjustments remained very moderate.

The wage increase resulting from the automatic mechanism linking wages to consumer prices came to 2.9 p.c. in 2008, the biggest contribution ever seen since the entry into force of the 1996 law on the promotion of employment and the safeguarding of competitiveness. That rise reflects the significant increase in the health index from the fourth quarter of 2007. The surge in inflation had a marked impact on wages throughout 2008 and even at the beginning of this year. There is in fact a time lag before wages are adjusted in line with the health index; this depends on the indexation procedures applied, which may differ widely from one branch of activity to another, according to the collective agreements in force. However, these procedures are all based on the change in a moving four-month average of the health index. The broad range of indexation methods applied can be divided into two types of mechanisms. In the first – which, according to the November 2008 Technical Report of the Secretariat of the Central Economic Council (CEC), concerned 42.5 p.c. of private sector workers for the 2007-2008 agreement period – the indexation takes place after the moving average of the health index has passed a central index, normally set at 2 p.c. For 57.5 p.c. of workers, a percentage which has risen in recent years, the indexations take place at fixed intervals, every one, two, three, four, six or twelve months, depending on the case: intervals of one

TABLE 23 LABOUR COSTS IN THE PRIVATE SECTOR

(calendar adjusted data; percentage changes compared to the previous year, unless otherwise stated)

	2003	2004	2005	2006	2007	2008 e	*p.m. 2007-2008 e*
Gross wages per hour worked	1.5	2.4	2.6	3.4	3.4	3.7	*7.2*
Collectively agreed wages[1]	1.8	2.4	2.5	2.3	1.9	3.4	*5.4*
Real agreed adjustments	0.4	1.0	0.4	0.5	0.3	0.5	*0.7*
Indexations	1.5	1.4	2.0	1.8	1.6	2.9	*4.6*
Wage drift[2]	–0.3	–0.1	0.3	1.0	1.5	0.2	*1.7*
Employers' social contributions[3]	0.0	–0.3	–0.2	–0.3	0.4	–0.2	*0.2*
Social security	–0.1	–0.1	–0.1	–0.2	0.0	0.2	*0.2*
Other contributions[4]	0.1	–0.2	–0.1	–0.1	0.4	–0.4	*0.0*
Labour costs per hour worked	1.5	2.0	2.4	3.1	3.7	3.5	*7.3*
p.m. Including the effects of the reductions in payroll tax[5]	*1.5*	*2.0*	*2.4*	*2.8*	*3.4*	*3.2*	6.8
Labour productivity[6]	1.4	2.6	1.5	1.6	0.6	–0.2	*0.4*
Unit labour costs	0.1	–0.6	0.9	1.5	3.1	3.7	*6.9*

Sources: FPS Employment, Labour and Social Dialogue; General notes on the budget; NAI; NOSS; NBB.

(1) Wage increases fixed by joint committees.

(2) Increases and bonuses granted by enterprises over and above those under central and sectoral collective agreements, wage drift resulting from changes in the structure of employment and errors and omissions; contribution to the change in labour costs, percentage points.

(3) Contribution to the change in labour costs resulting from changes in the implicit contribution rates, percentage points.

(4) Actual social contributions which are not paid to the government, and imputed contributions.

(5) This concerns the part of the reductions in payroll tax granted to private sector firms. According to the national accounts methodology, the ESA 95, these should be recorded as a subsidy and not as a direct reduction in charges. They therefore cannot be taken into account in calculating labour costs.

(6) Value added in volume, per hour worked by private sector employees and by self-employed persons.

year are by far the most common since, according to the CEC, the wages of two in five private sector employees are indexed with that frequency. Thus, for almost 26 p.c. of all workers in this sector, that annual indexation took place on 1 January or 1 February this year. This means that the wages of just over half a million employees were not adapted until the beginning of 2009 in line with the high inflation recorded in 2008.

During the year under review, the impact of indexation on labour costs was also tempered by the fact that almost a quarter of private sector employees come under a sectoral collective labour agreement comprising an all-in clause. This type of clause makes the size of the agreed increases dependent on the actual wage indexations. Like the indexation mechanisms, the all-in clauses vary from one sectoral committee to another. In the commonest form – applicable in 66 p.c. of cases – called "balance agreements", when the last real increase of the two-year period is granted, a check is done to verify whether the actual indexations have exceeded the forecasts used at the time of the sectoral negotiations. If they have, the difference is deducted from the real increase, on the understanding that the latter cannot be negative. In a

TABLE 24 METHODS OF INDEXATION APPLIED IN THE PRIVATE SECTOR

Method	Number of joint committees	Percentage of total employment covered by the joint committees
Exceeding the central index	130	42.5
Every twelve months	22	37.9
of which:		
in January or February	13	25.8
Every six months	4	3.6
Every four months	1	0.2
Every three months	24	9.6
Every two months	9	5.1
Every month	4	1.1
Total	**194**	**100.0**

Source: CEC.

small number (7 p.c.) of cases, the all-in clause specifies that the excess is deducted from the wage norm to be negotiated in the next agreement period. In the remaining 27 p.c. of cases, the nominal sectoral norm is considered an absolute maximum, and a check is done on the occasion of each intermediate increase to see whether it has been exceeded. If the norm has been used up, no further real increase is granted and the indexation is applied only partly, if at all.

The already relatively moderate real agreed adjustments provided for by the sectoral agreements were thus restrained in some sectors by the effect of these all-in clauses. During the year under review, this kept their increase down to 0.5 p.c. It should also be noted that these adjustments do not incorporate the whole of the real correction resulting from the all-in clauses, as a number of sectoral agreements explicitly distinguish between the basic wage and actual pay. The all-in correction mechanism applies only to actual pay in excess of the basic pay scales, and does not concern workers receiving the basic wage. However, the agreed wage index of the Federal Public Service Employment, Labour and Social Dialogue, which forms the basis for calculating the real agreed adjustments, includes only the movement in the scales. It therefore underestimates the influence of the all-in adjustments actually made.

Apart from the effect of indexation and real agreed adjustments, gross wages are affected by a series of factors known by the umbrella term "wage drift". A temporary factor, namely the earlier date for submitting holiday pay declarations to the NSSO on termination of an employment contract, increased the wage drift by 0.4 percentage point in 2007 and reduced it by the same amount in 2008. This factor partly explains the smaller contribution of the wage drift to the rise in labour costs, compared to 2007. The slackening pace of economic activity during the year under review also had a moderating effect.

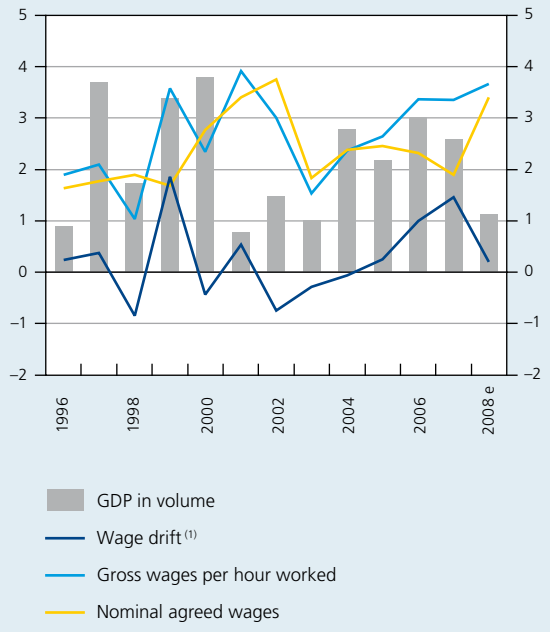
Nonetheless, leaving aside the impact of the temporary factor mentioned above, the positive contribution of the wage drift to the rise in hourly labour costs was still substantial, owing to the persistent shortage of skilled labour in certain segments of the labour market and in certain regions. There is still a significant mismatch between supply and demand for skilled staff, which continues to exert pressure on wages.

The agreements concluded at enterprise level, which supplement the sectoral agreements, in particular by the payment of allowances and bonuses not included in the agreements, or via extra pay for overtime work, thus often introduce a more direct link between the movement in wages and changes in the economic context in which firms operate. A survey of wage-setting, conducted by the Bank in the autumn of 2007 and covering over 1,400 enterprises, shows that such agreements were concluded in just over a quarter of participating firms. This survey was conducted in connection with the Wage Dynamics Network (WDN), a network of researchers from the European System of Central Banks (ESCB) commissioned by the Governing Council to study the characteristics of wage dynamics in general and the possible existence of wage rigidities in particular. Box 9 presents other results for the Belgian component of the work done via this network.

The weakening of economic activity combined with the persistent net job creation also amplified the slowdown in labour productivity, already perceptible in 2007. Owing to the rapid increase in hourly labour costs, this led to a marked rise in unit labour costs – of 3.1 p.c. in 2007 and 3.7 p.c. in 2008 –, in comparison with an average annual increase of 0.5 p.c. during the period 2003-2006.

CHART 42 WAGE DRIFT IN THE PRIVATE SECTOR

(calendar adjusted data; percentage changes compared to the previous year, unless otherwise stated)



Sources: FPS Employment, Labour and Social Dialogue; NAI; NBB.

(1) Increases and bonuses granted by enterprises over and above those under central and sectoral collective agreements, wage drift resulting from changes in the structure of employment and errors and omissions; contribution to the change in labour costs, percentage points.

Box 9 – Wage dynamics: results of the work done by the Bank in connection with the Wage Dynamics Network

The Wage Dynamics Network (WDN) is a network of researchers from the European System of Central Banks (ESCB) which studies the characteristics of wage dynamics. It was set up by the Governing Council following the work of the ESCB's Inflation Persistence Network (IPN), which had revealed, in particular, that the frequency of price changes was lower in the sectors where labour costs represent a large percentage of total costs. A more detailed study of wage rigidity was therefore considered desirable. The WDN, launched at the end of 2006, conducts both microeconomic and macroeconomic research. For that purpose, it uses surveys and data obtained from administrative sources, and a survey organised specifically for the purpose covering a large sample of firms. The Bank participates in the various research activities of this network, and a number of its economists have produced numerous contributions in that connection, which have already been published or will be published shortly(1).

Wage dynamics depend, among other things, on the institutional context. A study conducted for the WDN thus showed that wages are subject to collective agreements in the great majority of European countries, at various negotiating levels. Usually, there is one or other form of general directive decided at national level combined with more specific pay negotiations organised at an intermediate level – sector, region or occupational category –, in some cases supplemented by more decentralised negotiations at enterprise level.

This hierarchical model, typical of many European countries, is formalised in Belgium by the wage norm fixed at central level – which defines a national guideline –, by sectoral pay negotiations conducted by joint committees – the dominant level – and by supplementary agreements concluded within firms. The Bank's survey of wage-setting in firms revealed that almost all workers come under a sectoral joint committee, and that just over a quarter of them are also covered by collective pay agreements concluded in the firm. Like the negotiations which may be conducted at the level of the individuals themselves, such local agreements explain why the wages actually paid, especially in the case of clerical workers and highly skilled manual workers, as well as in large firms, may exceed the sectoral pay scales. The wage indexation mechanism also plays a key role. According to the survey results, the wages of the majority of private sector workers are indexed at fixed intervals, rather than in fixed tranches at variable intervals, as is the case in public authorities.

In Belgium, the importance of the collective wage negotiation process at national and sectoral level does not in any way prevent wage differentiation. The WDN study conducted on the basis of the survey of the structure and breakdown of wages in the Directorate General of Statistics and Economic Information (DGSEI) indicates, in

(1) Babecký J., Ph. Du Caju, D. Kosma, M. Lawless, J. Messina and T. Rõõm (2008), *Wage rigidity and alternative margins of adjustment: Survey evidence from European firms*, mimeo WDN.

Christoffel K., J. Costain, G. de Walque, K. Kuester, T. Linzert, S. Millard and O. Pierrard (2008), *Inflation dynamics with labour market matching: Assessing alternative specifications*, mimeo WDN.

De Walque G., O. Pierrard, H. Sneessens and R. Wouters (2008), *Sequential bargaining in a New-Keynesian model with frictional unemployment and staggered wage negotiation*, mimeo WDN.

Druant M., S. Fabiani, G. Kezdi, A. Lamo, F. Martins and R. Sabbatini (2008), *How are firms' wages and prices linked? Survey evidence in Europe*, mimeo WDN.

Druant M., Ph. Du Caju and Ph. Delhez (2008), *Results of the Bank's survey of wage-setting in Belgian firms*, NBB, Economic Review, September, pp. 49-73.

Du Caju Ph., C. Fuss and L. Wintr (2007), *Downward wage rigidity for different workers and firms: An evaluation for Belgium using the IWFP procedure*, NBB, Working Paper 124.

Du Caju Ph., C. Fuss and L. Wintr (2008), *Understanding sectoral differences in downward real wage rigidity: Workforce composition, institutions, technology and competition*, NBB, Working Paper 156.

Du Caju Ph., E. Gautier, D. Momferatou and M. Ward-Warmedinger (2008), *Institutional features of wage bargaining in 23 EU countries, the US and Japan*, NBB, Working Paper 154.

Du Caju Ph., G. Katay, A. Lamo, D. Nicolitsas and S. Poelhekke (2008), *Inter-industry wage differentials in EU countries: What do cross-country time varying data add to the picture?*, mimeo WDN.

Du Caju Ph., F. Rycx and I. Tojerow (2008), *Rent-sharing and the cyclicality of wage differentials*, IZA Discussion Paper, n° 3844.

Fuss C. (2008), *How do firms adjust their wage bill in Belgium? A decomposition along the intensive and extensive margin*, NBB, Working Paper 127.

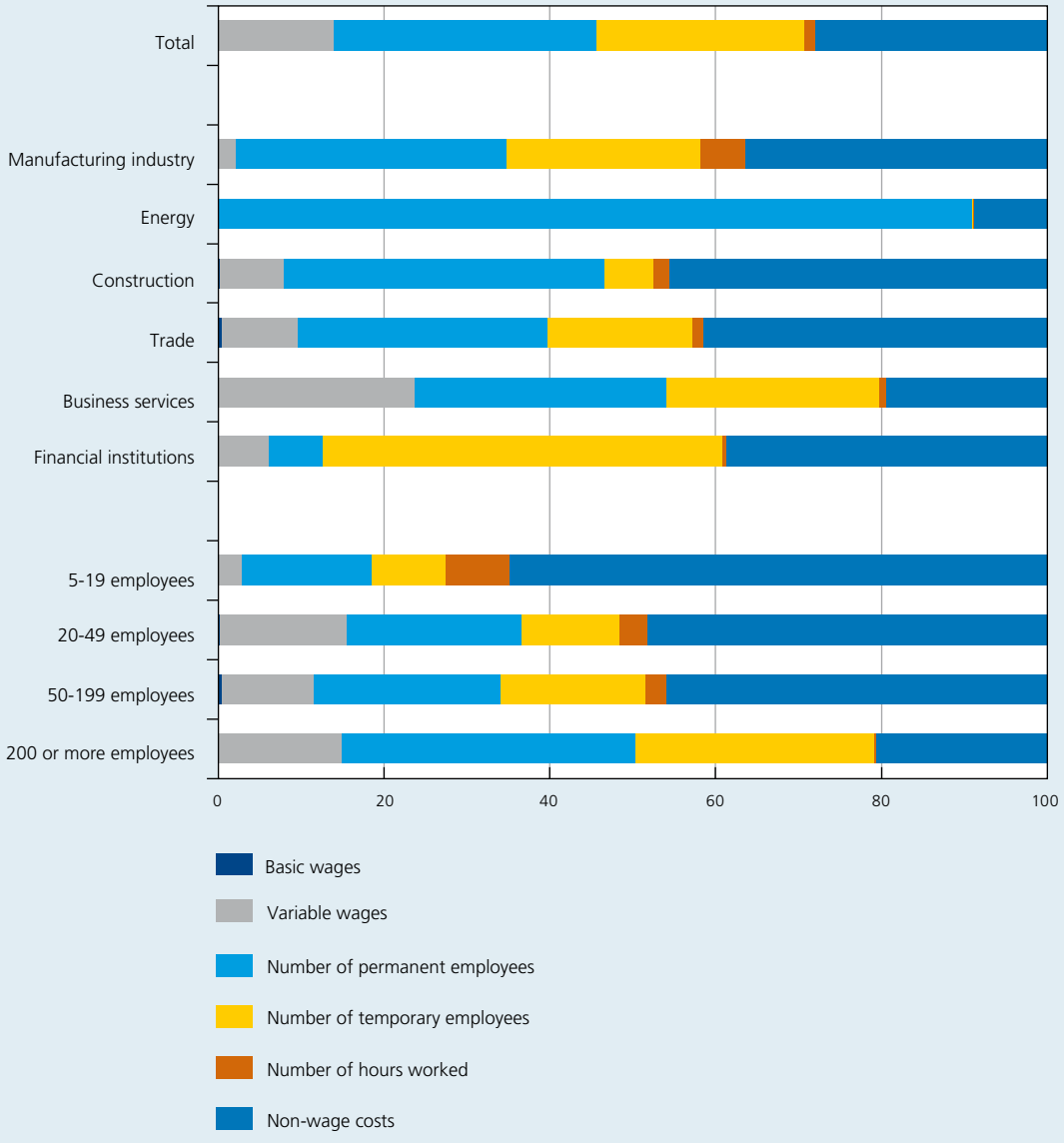
Fuss C. and L.Wintr (2008), *Rigid labour compensation and flexible employment? Firm-level evidence based on productivity for Belgium*, mimeo WDN.

Messina J., Ph. Du Caju, C. Filipa Duarte, M. Izquierdo and N. Lynggård Hansen (2008), *The causes and consequences of nominal and real wage rigidity: A sectoral approach*, mimeo WDN.

particular, that there are considerable pay differentials which depend on training, experience, firm size and branch of activity. Pay differentials between branches of activity are due partly to rent sharing by profitable firms, whereby workers may be offered higher wages. Wage differentials between branches of activity in Belgium are comparable to those in a country such as Germany, and smaller than in Southern and Eastern European countries.

STRATEGIES FOR REDUCING COSTS IN RESPONSE TO ADVERSE SHOCKS [1]

(average reaction to three shocks (demand, labour costs and costs of intermediate inputs), percentages of the total)



Source : Druant M., Ph. Du Caju and Ph. Delhez (2008), *Results of the Bank's survey of wage-setting in Belgian firms*, NBB, Economic Review, September, pp. 49-73.
(1) Results weighted on the basis of employment and rescaled by excluding missing answers.

The existence of varying wage structures for different workers, firms or sectors need not imply a capacity to adjust wages in line with economic developments. In particular, the phenomenon of downward rigidity means that wages are not cut, or only very slightly, in situations where adverse shocks would actually justify that from a purely economic viewpoint. The WDN study, based on a methodology developed by the International Wage Flexibility Project and using administrative statistics obtained from social security, reveals very strong downward rigidity in real wages in Belgium. That is hardly surprising, given the widespread system of indexation. The real wages of manual workers, employees receiving high wages and workers aged 55 or over are relatively less rigid, as are those of the staff of firms which have concluded their own supplementary wage agreement. The same is true to some extent for struggling firms. Many of these findings are borne out by the results of the Bank's survey of wage-setting.

When it is difficult, if not impossible, for firms to respond to an adverse economic shock by reducing their employees' wages, they have to adopt other strategies. The survey conducted for the WDN shows that, while Belgian companies do adjust their prices, margins and output levels in response to an adverse shock affecting demand, the level of labour costs, or the cost of the intermediate inputs, they make most of the necessary adjustment at the level of their costs.

Wages are rarely if ever reduced via basic wages, but in some cases (14 p.c.) a reduction may be made in the variable pay component, such as shares in the profits, or bonuses based on performance, especially in larger firms and in the business services sector. When times are hard, firms employing over 200 workers frequently cut their workforce, by curbing recruitment or reducing their existing staff. In all, 32 p.c. of companies adopt this strategy for permanent staff and 25 p.c. for temporary staff, the latter option being used mainly in the financial sector. The total volume of labour is only adjusted to a very limited extent by cutting the number of hours worked per employee. This strategy is relatively more common in manufacturing industry, which has a larger number of manual production workers, and in small companies which have greater difficulty in cutting their workforce. Small firms mainly try to reduce their other costs. According to the information obtained from the social balance sheets, it thus seems that firms generally economise on training costs when the economic situation is unfavourable.

An econometric study using the companies' annual accounts data also reveals that the average labour cost at firm level displays only a very moderate response to shocks affecting total factor productivity, especially when those shocks are temporary. Moreover, wages are more sensitive to shocks affecting a whole sector of activity than to those specific to a firm, which once again highlights the influence of the sectoral wage agreements in Belgium. The information derived from the annual accounts also shows that the wage bill in companies mainly varies as a result of adjustments to employment. In fact, a decline in the wage bill is often accompanied by a reduction in the number of workers recruited or a rise in the number leaving, while at the same time the average wage per employee continues to increase.

The impact of employers' social security contributions on the rise in labour costs was slightly positive during the year under review and reflected developments concerning the government's moves to reduce the social contributions. The reductions granted to employers are non-indexed, fixed amounts, and during the year under review, no new measure came into force. While the supplementary reduction for workers aged 55 and over, introduced in the second quarter of 2007 under the Generation Pact, produced its full effects, an ever-decreasing number of young workers – typically situated at the bottom of the pay scales – qualified for the reduction for target groups on the labour market, because the lower limit of wages is not indexed.

In contrast, the payroll tax reductions, the effect of which is recorded in the national accounts - in accordance with the ESA 95 – as a subsidy and not as a direct reduction in labour costs, became more significant during the year under review. Initially, these measures were intended to promote research and development, innovation and specific forms of working, such as shift work and night work, and overtime. Since October 2007, all firms have received a wage subsidy, namely a general 0.15 p.c.

TABLE 25 LABOUR CHARGE REDUCTIONS GRANTED TO FIRMS

(totals, millions of euro)

	2003	2004	2005	2006	2007	2008 e	*p.m. Change 2007-2008 e*
Reductions in employers' social security contributions	3,451	4,063	4,544	4,725	5,109	5,290	*181*
of which:							
Structural reductions	2,944	3,420	3,822	3,898	4,045	4,133	*88*
Target groups	0	220	364	492	738	811	*73*
of which:							
Young workers	0	0	0	0	125	85	*–40*
Older workers	0	98	105	116	243	297	*54*
p.m. Percentages of the private sector wage bill	*3.2*	*3.6*	*3.9*	*3.9*	*4.0*	*3.9*	*–0.1*
Reductions in payroll tax[1]	0	25	110	409	789	1,098	*309*
of which:							
General reduction	0	0	0	0	50	186	*137*
Shift work and night work	0	25	95	328	584	660	*76*
Scientific research and innovation	0	0	4	47	87	141	*55*
Overtime	0	0	11	23	32	36	*3*
p.m. Percentages of the private sector wage bill	*0.0*	*0.0*	*0.1*	*0.3*	*0.6*	*0.8*	*0.2*

Sources: General notes on the budget, NAI, NSSO, NBB.
(1) Except the reductions granted to universities, colleges or other public institutions.

reduction in labour costs approved under the 2007-2008 central agreement. This takes the form of non-payment of part of the payroll tax, amounting to 0.25 p.c. of gross salary. As the full effects of this measure were felt during the year under review, it contributed almost half of the increase of over 300 million euro in the total support granted in the form of payroll tax reductions. Overall, this support represented 1,098 million euro in 2008, or 0.8 p.c. of the wage bill, compared to 0.6 p.c. in 2007. If this type of reduction in charges had been taken into account in calculating labour costs per hour worked, their increase would have been 0.3 percentage point less in 2008, at 3.2 p.c.

As in the case of the wage drift, in 2007 and in 2008 the other employers' social contributions felt the effects – which were respectively positive and negative – of a non-recurring factor amounting to 0.3 percentage point. This concerned the payment in 2007 of redundancy money in the context of restructuring in the motor vehicle sector; according to the ESA 95, these payments are treated as imputed contributions. If this exceptional factor is disregarded, the effect of the other employers' social contributions on labour costs was more or less neutral, as in 2007.

Wage norm and indexation

The cumulative movement in private sector labour costs over the years 2007-2008 must be assessed in the light of the indicative norm relating to the rise in nominal hourly labour costs, which had been agreed by the social partners at the end of 2006 under the central agreement for that period. Calculated on the basis of the expected movement in labour costs in the three main neighbouring countries, this norm had been set at 5 p.c., but hourly labour costs increased by a total of 7.3 p.c. according to the Bank, and 7.7 p.c. according to the CEC Secretariat.

In order to respect the nominal wage norm, the social partners have to take account of the effect of the indexations expected by the CEC at the time of the negotiation of the real agreed wage increases by the joint committees. Nevertheless, if inflation is higher than expected during the agreement period, the automatic and retrospective character of the indexation mechanisms means that it will be reflected in nominal wages; albeit after a certain time lag and with some attenuation by the activation of any all-in clauses. Consequently, an unexpected surge in inflation due to adverse economic shocks or inefficient

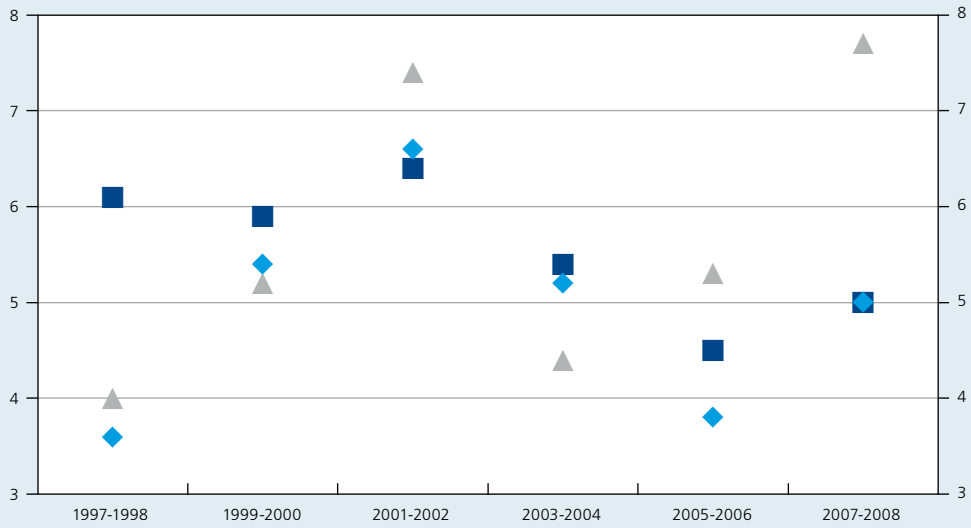
product markets may cause the nominal wage norm to be exceeded, even if the real wage increases agreed by joint committees, and in some cases by firms, had originally kept within that margin.

Since the introduction of the wage norm mechanism by the 1996 law, there have been six successive two-year periods for which a maximum or indicative margin was defined in terms of the movement in labour costs. During the periods 1997-1998, 1999-2000 and 2003-2004, the rise in labour costs remained below the accepted margin, and the actual indexation was less than expected by the CEC. Conversely, during the periods 2001-2002, 2005-2006 and 2007-2008, the actual indexation was greater than expected, and the rise in nominal hourly labour costs exceeded the accepted margin. The central agreement for the period 2001-2002 assumed that indexation would come to 3.1 p.c., whereas it actually amounted to 4.8 p.c. The central agreement for 2005-2006 had allowed for indexation of 3.3 p.c., whereas the eventual figure was 3.9 p.c. For the period 2007-2008, inflation was well in excess of the expected 3.9 p.c., and the actual indexation represented 4.6 p.c. over the two years, despite the moderating effect exerted, in particular, by the all-in clauses included in a number of agreements. Nonetheless, it must be said that the delay mechanisms incorporated in the various indexation systems mean that part of the recent inflation surge was not reflected in wage increases until the beginning of 2009.

During episodes of accelerating inflation, it is more vital than ever to define the wage norm on the basis of the latest information concerning the expected movement in prices, and to be able to make any adjustments during the actual period to which the wage agreement relates, as most all-in clauses permit. Constant monitoring of the adjustment of wages in line with inflation, in order to prevent second-round effects and maintain competitiveness, is particularly necessary in Belgium because consumer

CHART 43 HOURLY WAGE INCREASES UNDER THE CENTRAL AGREEMENTS

(cumulative percentage changes compared to the previous year)



	1997-1998	1999-2000	2001-2002	2003-2004	2005-2006	2007-2008
Expected inflation (health index)	4.2	3.1	3.1	3.0	3.3	3.9
Actual inflation [1]	2.7	2.6	4.8	2.9	3.9	4.6

Sources : CEC ; FPS Employment, Labour and Social Dialogue ; NBB.
(1) Calculations based on data from FPS Employment, Labour and Social Dialogue.

prices there are more sensitive to crude oil price fluctuations than in the rest of the euro area, and because – except for Cyprus and Luxembourg – it is the only Member State in which general, automatic indexation is applied to wages.

Regardless of the existence of this mechanism, inflation plays a more or less important role in the wage policy of firms in most European countries. Two studies conducted by the WDN, namely the survey of wage-setting in firms and the analysis of the institutional characteristics of wage negotiation mechanisms, shed more light on this subject for fifteen European countries, including Belgium's main trading partners, with the exception of Germany.

This survey shows that, on average, one-third of firms in the countries examined, in both the EU and the euro area, have set up an internal wage policy designed to adapt basic wages in line with the movement in consumer prices. Altogether, in half of the cases, that adjustment is effected by an automatic link mechanism. In the other half, there is no formal rule. In the euro area countries for which information is available, it is automatic indexation mechanisms that are the most common. These systems essentially take account of actual inflation, while wage adjustments based on expected inflation are found less frequently. Moreover, there are notable differences between European countries, including those belonging to the euro area. Thus, the adjustment of wages in line with price movements is very frequent in Belgium and Spain: in these two countries,

TABLE 26 WAGE POLICY WHEREBY BASIC WAGES ARE ADJUSTED IN LINE WITH ACTUAL OR EXPECTED INFLATION: SUMMARY FOR FIFTEEN EU COUNTRIES[1]

(percentages of the total, unless otherwise stated)

	Information specific to the firm[2]					Information specific to the country: coverage rate of institutional indexation clauses[3]
	Automatic link between wages and inflation		No formal rule, but inflation is taken into account		Total	
	Actual	Expected inflation	Actual	Expected inflation		
Belgium	**98**	**0**	**0**	**0**	**98**	**High**
Spain	38	16	11	5	70	High
Slovenia	20	3	32	5	60	Faible
Czech Republic	7	5	28	24	59	Zero
Estonia	3	2	35	21	54	Zero
Portugal	3	6	13	29	52	Zero
Lithuania	7	4	24	13	48	n.
Greece	15	5	12	11	43	Zero
France	9	2	21	8	33	Very low
Hungary	7	4	14	6	31	Zero
Poland	5	2	17	6	31	Very low
Ireland	6	3	19	10	30	Zero
Austria	9	1	9	3	22	Very low
Italy	1	0	3	1	6	Very low
Netherlands	0	0	0	0	0	Zero
Total	**12**	**4**	**12**	**6**	**33**	
of which: euro area[4]	15	4	9	5	31	

Sources: Druant M., S. Fabiani, G. Kezdi, A. Lamo, F. Martins and R. Sabbatini (2008), *How are firms' wages and prices linked? Survey evidence in Europe*, mimeo WDN and Du Caju Ph., E. Gautier, D. Momferatou and M. Ward-Warmedinger (2008), *Institutional features of wage bargaining in 23 EU countries, the US and Japan*, NBB, Working Paper 154.

(1) Countries ranked according to the closeness of the link between wages and inflation. Since some firms use a number of different methods of adjustment for inflation, the total may not be equal to the sum of the four methods.

(2) Results weighted on the basis of employment and rescaled by excluding missing answers.

(3) Very low: 1 – 25 p.c., low: 26 – 50 p.c., average: 51 – 75 p.c., high: 76 – 100 p.c.

(4) Confined to the ten countries covered by the survey.

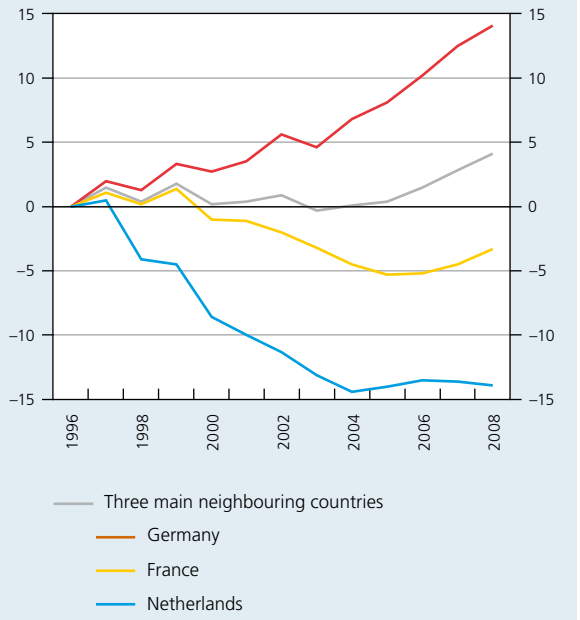
automatic wage indexation mechanisms are the most common. At the other extreme come the Netherlands and Italy, where the wage policy takes little if any account of the movement in inflation. In all other countries, there is at least a partial link between wages and price movements; in most cases the link is informal.

On the basis of the analysis of the institutional features of wage negotiation mechanisms, it is possible to assess the role played by prices in wage-setting. This study also takes account of the importance of the other determinants considered in the negotiations, such as labour productivity, competitiveness, and changes in taxation or social contributions. It permits the calculation of the coverage rate of workers to whom a formal indexation clause applies. According to this source, such a mechanism applies in only seven countries. The coverage rate is highest in Belgium and Spain, at over 75 p.c. It is low, between 26 and 50 p.c., in Slovenia and very low, i.e. 25 p.c. or less, in France, Poland, Austria and Italy. These findings corroborate the conclusions of the wage-setting survey, which examined not only the formal indexation mechanisms but also the broader concept of a wage policy which takes account of inflation. Thus, in the Czech Republic, Estonia, Portugal, Greece, Hungary and Ireland, no indexation clause applies, but the movement in prices is an informal factor in the wage negotiations. In most countries, price movements in fact play a leading role, even if there is no specific wage policy on the subject.

Finally, the results of the wage-setting survey reveal that inflation is the main reason for wage adjustments. While 55 p.c. of firms adjust wages at least once a year in line with the movement in prices, wage adjustments based on seniority or other criteria are considerably less frequent.

CHART 44 HANDICAP IN TERMS OF LABOUR COSTS PER HOUR WORKED IN BELGIAN FIRMS, ACCORDING TO THE CEC

(percentage differences in relation to the index for the three main neighbouring countries)



Source: CEC.

Labour cost handicap

The competitive position of Belgian firms in terms of costs is determined by the actual movement in labour costs in Belgium not in relation to the wage norm adopted *ex ante*, but in relation to the change in labour costs recorded *ex post* in the three main neighbouring countries, namely Germany, France and the Netherlands. While hourly labour costs in Belgium increased more or less in parallel with the average for the three neighbouring countries from 1996 to 2004, apart from a few fluctuations during that period, a labour cost handicap subsequently emerged: the cumulative total since 1996 came to 4.1 p.c. at the end of 2008. This handicap is due mainly to the particularly modest rise in labour costs in Germany; until 2004, the effect of this on the competitiveness of Belgian firms was offset by relatively larger wage increases in France, and particularly in the Netherlands. Subsequently, labour costs in those two countries increased at more or less the same pace as in Belgium, leaving aside the period 2007-2008 for France where, probably because of the relaxation of the thirty-five-hour working week, a fairly moderate movement was recorded. In contrast, hourly labour costs in Germany continued to rise more slowly. One of the reasons for this weaker increase is the relatively dynamic creation of low-paid jobs (mini-jobs) under the reforms implemented by that country to enhance the efficiency of its labour market (*Hartz* reforms: for more details, see box 2 in the 2004 Report), which increased the labour cost handicap to the detriment of Belgian firms.

In its technical report, published on 4 November 2008, the CEC considered that, on the basis of the expected movement in the three main neighbouring countries, there was a margin of 5.1 p.c. available for the rise in nominal hourly labour costs during the period 2009-2010. Despite the expected fall in inflation, the CEC assumes that the average indexations will be of the same order of magnitude, taking account – as explained above – of the effect of the

existing indexation mechanisms in delaying the adjustment from 2008 to 2009.

In the agreement concluded on 22 December 2008 with a view to the negotiations at sectoral and enterprise level for the period 2009-2010, the social partners agreed to set the scope for negotiation at a maximum of 250 euro per worker over the two-year period, without extra charges for the employer, on top of the application of indexation and scale increases. For the year 2009, a maximum of 125 euro may be granted, chargeable to the said scope or non-recurring. The social partners also agreed on simplification of the employment plans, mainly by the dismantling of the measures in favour of target groups, in order to increase the structural reduction in contributions, and especially those in favour of low wages. The government approved this restructuring of the employment plans, and also acceded to the request by the social partners to increase the general partial exemption from the payment of payroll tax, to be raised from 0.25 to 0.75 p.c. of gross salary on 1 June 2009, then to 1 p.c. from 1 January 2010, to increase the reduction in charges for shift work and night work, where the percentage will be raised from 10.7 to 15.6 p.c. of gross salary, and to double the ceiling on the number of hours' overtime carrying entitlement to a reduction in payroll tax, from 65 to 130 hours per calendar year.

Jean Mayné, detail from a design for an unproduced 1,000 franc note,
Indian ink and watercolour, undated (circa 1910),
National Bank of Belgium collection

Prices

5.

5.1 Summary

Inflation measured by the harmonised index of consumer prices (HICP) increased from 1.8 p.c. in 2007 to 4.5 p.c. Consequently, Belgium recorded one of the highest inflation rates in the euro area, after Slovenia and Malta. In the euro area, inflation averaged 3.3 p.c. during the year under review. In Belgium, as in the rest of the euro area, inflation surged from mid 2007, reaching 5.9 and 4 p.c. respectively in July 2008. Such high inflation rates had not been recorded since the mid 1980s. However, in the second half of the year inflation declined sharply. Thus, in December it dropped to 2.7 p.c. in Belgium and to 1.6 p.c. in the euro area. Both the strong rise in inflation and the marked fall in the second half of the year are largely attributable to the movement in prices of crude oil and food commodities.

In its monetary policy stance, the Eurosystem aims to maintain price stability in the euro area as a whole. Its policy is geared to the macroeconomic situation of the entire area, disregarding any inflation differentials between Member States. In fact, the Eurosystem has no instrument which could influence any such differentials. It is therefore the Member States recording price increases significantly different from the euro area average which should identify whether these differentials are undesirable and adopt appropriate measures, if necessary. Such an analysis is certainly needed in the case of Belgium, since the country's inflation gap in relation to the euro area in 2008 averaged 1.2 percentage point. Significant but smaller differentials had already been apparent since 1999, though this did not mean that inflation in Belgium tended to deviate permanently from that in the euro area :

TABLE 27 HARMONISED INDEX OF CONSUMER PRICES FOR BELGIUM

(percentage changes compared to the previous year)

	Total	*p.m. Euro area*	Energy	Unprocessed food [1]	Underlying trend in inflation [2]	Processed food	Non-energy industrial goods	Services	*p.m. Health index* [3]
2002	1.6	*2.2*	–3.6	3.2	2.1	1.5	1.7	2.6	*1.8*
2003	1.5	*2.1*	0.2	1.7	1.7	2.8	1.0	1.9	*1.5*
2004	1.9	*2.1*	6.6	0.9	1.4	2.2	0.3	2.1	*1.6*
2005	2.5	*2.2*	12.7	1.7	1.4	2.0	0.3	2.1	*2.2*
2006	2.3	*2.2*	7.3	3.3	1.6	2.1	0.9	2.1	*1.8*
2007	1.8	*2.1*	0.2	3.0	1.9	4.7	0.9	1.9	*1.8*
2008	4.5	*3.3*	19.8	2.8	2.7	7.8	1.3	2.3	*4.2*
p.m. 2008, euro area			*10.3*	*3.5*	*2.4*	*6.1*	*0.8*	*2.6*	–

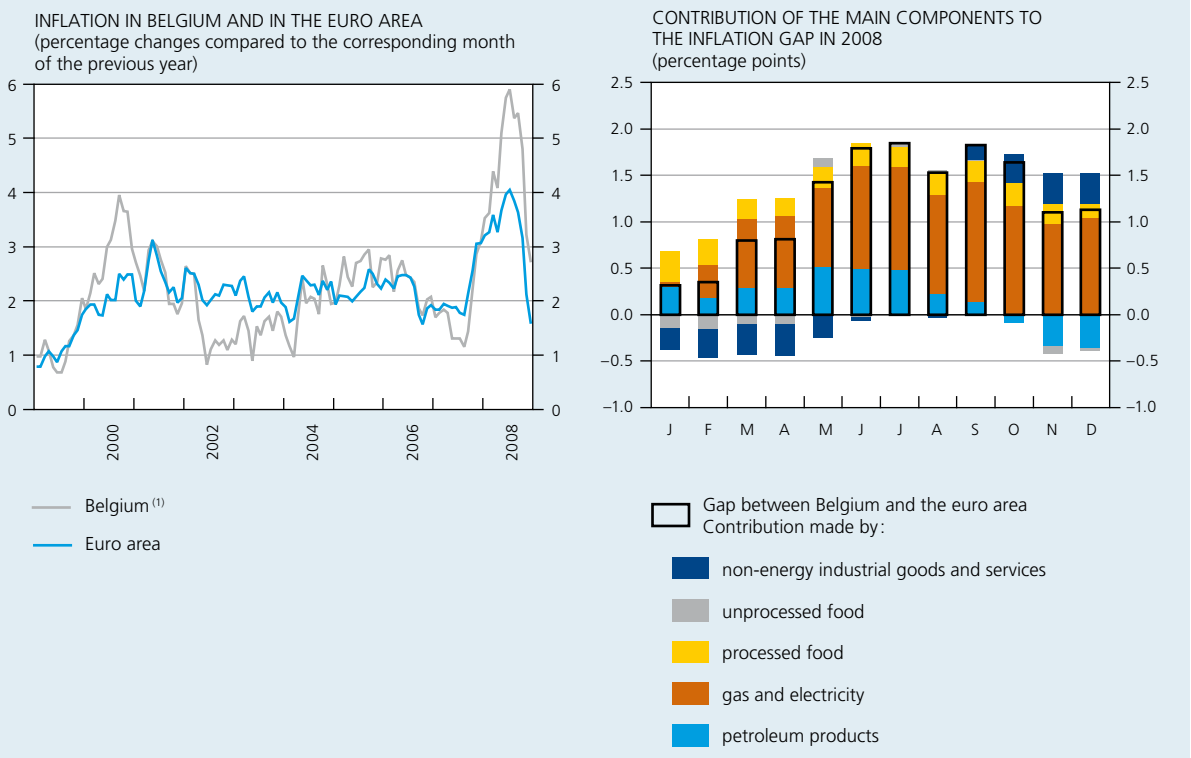
Sources: EC, DGSEI.

(1) Fruit, vegetables, meat and fish.

(2) Measured by the HICP excluding unprocessed food and energy.

(3) National CPI, excluding products considered harmful to health, namely tobacco, alcohol, petrol and diesel.

CHART 45 INFLATION GAP BETWEEN BELGIUM AND THE EURO AREA



Sources : EC, NBB.
(1) Excluding the estimated effect, in January and July 2000, of the fact that prices discounted in sales have been taken into account in the HICP since 2000.

in fact, during the first nine years of monetary union, inflation in Belgium averaged 2 p.c., compared to 2.1 p.c. in the euro area.

Examination of the contribution of the main HICP components to the inflation gap in relation to the euro area yields two major findings.

First, the dominant, and originally even exclusive, reason for this gap is the increased contribution to inflation in Belgium attributable to petroleum products, gas and electricity, and processed food, which together account for around a quarter of consumption expenditure. These are precisely the products for which energy and food commodities constitute a significant intermediate input. The nature of these products and the speed with which they recorded a positive inflation differential in relation to the euro area indicate that automatic wage indexation in Belgium played only a minor role here. In fact, it can be assumed that increases in prices of food and energy commodities are only passed on more gradually by this route, and tend to have more impact on other components of inflation, particularly services where labour costs represent the highest proportion of total expenses. Thus, the inflation gap in relation to the euro area primarily raises questions concerning price-setting in the food and energy branches, even though the positive contribution to inflation made by these product categories, and particularly petroleum products, started to diminish at the end of the year under review, when commodity prices collapsed. The operation of market mechanisms and the actual degree of competition appear insufficient, particularly in the case of gas and electricity and despite the total liberalisation of the residential market segment. To gain a clear idea of price-setting in Belgium, the government announced the creation of a Price Observatory, under the aegis of the National Accounts Institute. The legislative process concerning the actual establishment of this observatory should be completed early in 2009.

Also, the rise in prices of non-energy industrial goods, and, even more so, service prices, accelerated in 2008, the increase in Belgium outpacing that in the euro area. Since September, these product categories have made a positive contribution to the inflation gap in relation to the

euro area, whereas their contribution had been negative in the first half year. Consequently, the acceleration in inflation observed in the second half of 2007 and the first half of 2008 seems to have spread more to other product categories in Belgium than in the euro area, perhaps indicating the presence of greater propagation effects, both indirect and second-round. The risk of second-round effects is greater in Belgium owing to the use of indexation, which is more common than in other countries, not only in the wage-setting context but also in regard to actual price-setting. From the monetary policy angle, second-round effects should be avoided as they may jeopardise price stability by triggering price-wage spirals and affecting the medium- and long-term anchoring of inflation expectations. Moreover, at the level of the countries belonging to monetary union, they may generate persistent inflation gaps leading to real appreciation in relation to the rest of the euro area, and consequently, as a rule, to a loss of competitiveness.

5.2 Factors behind the surge in inflation and its deceleration

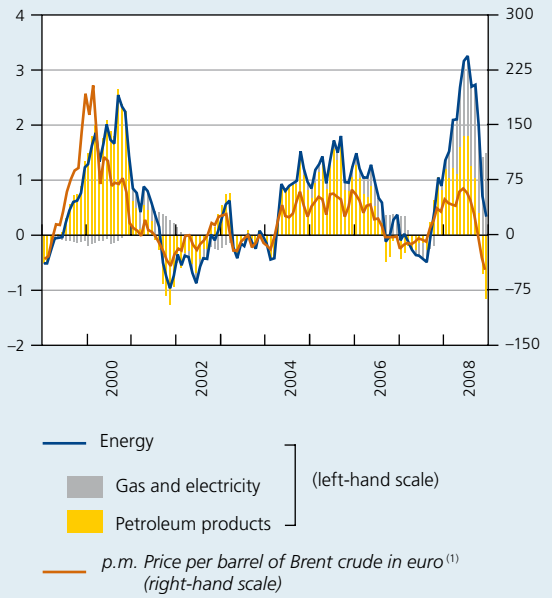
Energy

In the year under review, the inflation profile was determined largely by the movement in energy prices. While the inflation contribution of these products had climbed to over 3 percentage points in mid 2008, it shrank in the second half year to 0.3 percentage point in December. The movement in petroleum product prices was the main factor reducing that contribution to inflation at the end of the year under review, in parallel with the fall in crude oil prices. In fact, unlike consumer prices of petroleum products which are affected almost immediately by the impact of price fluctuations on the international markets, consumer prices of gas and electricity display a less direct link with those fluctuations.

While the contribution of energy to inflation is greater in Belgium than in the euro area – averaging 1.1 percentage point during the year under review – that is partly because energy has a more important position in consumption patterns in Belgium. In fact, energy products represent almost 11 p.c. of the Belgian consumer price index. Petroleum products (petrol, diesel and heating oil) account for just over half of that percentage, with gas and electricity representing one quarter and one fifth respectively. Owing to the higher weighting of heating oil and gas, the total weight of energy products in Belgium is more than 1 percentage point higher than in the euro area. The greater sensitivity of Belgian inflation to fluctuations in energy prices is also due to the fact that those fluctuations are stronger in Belgium than in the euro area, as explained in more detail below.

CHART 46 ENERGY

(contribution to inflation; percentage points, unless otherwise stated)



Sources: EC, Thomson Financial Datastream, NBB.
(1) Percentage changes compared to the corresponding month of the previous year.

TABLE 28 WEIGHT OF ENERGY PRODUCTS IN THE HICP IN 2008

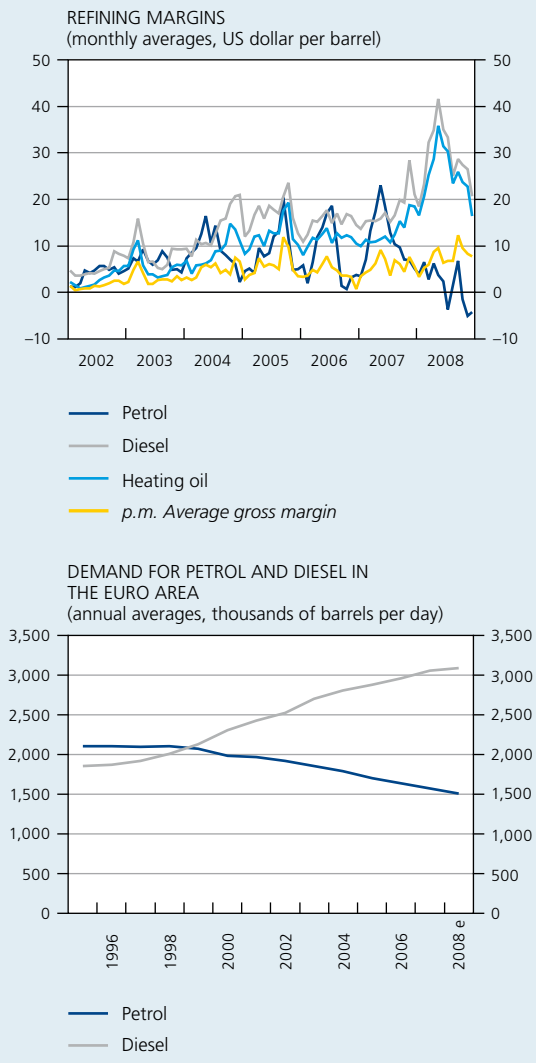
(percentages)

	Belgium	Euro area
Petroleum products	6.0	5.5
Road fuel	4.5	4.6
of which:		
Petrol	2.2	n.
Diesel	2.1	n.
Heating oil	1.5	0.9
Other energy products	4.8	4.3
Gas	2.6	1.5
Electricity	2.2	2.2
Other	0.1	0.6
Total	**10.9**	**9.8**

Sources: EC, DGSEI.

The pattern of consumer prices of petroleum products is largely determined by the movement in prices of the corresponding refined products on the international markets, which in turn is dictated by fluctuations in both crude oil prices and refining margins for the various products. Overall, expressed in US dollar, the average gross refining margin – calculated as the weighted average of the margins for each product category handled by a refinery – has increased more than five-fold since 2002. This rising trend is due essentially to the fact that about half of the refining costs originate from the consumption of oil by the refineries themselves in the course of processing. Another factor exerting upward pressure on the refining margin was the saturation of refining capacity in the face of particularly vigorous global demand. In that context, any incident which reduced refining capacity, even temporarily, had a substantial immediate effect on prices. This was the case following the invasion of Iraq (at the beginning of 2003), hurricanes Katrina and Rita (2005) and, more recently, strikes at a Scottish refinery (spring 2008). Furthermore, technical requirements concerning the environment – e.g. in relation to the sulphur content – and quality requirements have become increasingly strict in recent years, driving up refineries' costs.

CHART 47 REFINED PETROLEUM PRODUCTS



Sources: EC, OECD, Thomson Financial Datastream, DIREM, DGE.

Examination of the refining margin on the petroleum products relevant to consumer prices clearly shows that the margins on diesel and heating oil have increased in recent years while the margin on petrol has fallen, and even became negative at the end of the period. Diesel and heating oil prices therefore systematically exceeded petrol prices on the international markets, which had not previously been the case. The reason is that there have been major changes in relative demand in favour of diesel and heating oil, while on the supply side there is little scope for adjusting output capacity. On average, a typical European refinery extracts from each barrel of crude 35 p.c. gasoil (diesel and heating oil), 20 p.c. petrol, 16 p.c. heavy gasoil, 7 p.c. kerosene, 2 p.c. LPG and 13 p.c. other derivatives. A further 1 p.c. is turned into electricity and 6 p.c. is needed for the actual refining process. When supply is inelastic, any shift in relative demand for the products triggers a substantial adjustment in their relative prices.

At global level, there was a massive increase in demand for gasoil owing to the dynamism of orders from the fast-growing Asian countries, especially China. During the year under review, the floods in China temporarily boosted demand for gasoil, owing to the need to maintain electricity supplies in the affected regions. Moreover, demand for diesel increased not only because of the steady expansion in road freight but also because in Europe there was a marked rise in the number of diesel-powered cars. This can be explained by the lower fuel consumption of diesel engines and the often more favourable tax treatment of this fuel. Demand for petrol fell sharply in the United States during the year under review, owing to the combined effects of the higher price of this product and the economic crisis.

In view of the international character of crude oil price fluctuations and the relative movement in the refining margins of the various products derived from crude oil, one would in principle expect to see a symmetrical impact on inflation in the various economies. However, there are divergences caused by exchange rate movements in relation to the US dollar, which is the currency in which petroleum products are priced on the international markets.

The euro's appreciation against the dollar thus tempered the inflationary effect in the euro area. Furthermore, there could be differences between euro area countries, partly because the elasticity of consumer prices to fluctuations in the prices of refined products on the international markets is greater in countries with lower levels of excise duty, and partly because the ultimate impact on inflation also depends on the weight of each product in the consumption basket. These two factors are important for understanding why Belgium stood out from the rest of the euro area, having regard to the lower level of excise duty on petroleum products and the higher level of their consumption. The impact of these differences is all the greater in that they specifically concern the products which recorded the steepest price increases on the international markets, namely diesel and heating oil. Box 10, which comments on these factors in more detail, also highlights the role of the "programme contract" in the greater sensitivity of Belgian inflation to petroleum product price fluctuations. Yet that stronger reaction is symmetrical in that it has both an upward and a downward effect on the inflation gap in relation to the euro area, as was the case respectively in the first half of 2008 and at the end of the year under review, when petroleum product prices increased and then declined.

Apart from the impact of international market prices, changes in indirect taxation also influence prices of petroleum products. At the end of 2007, the federal government had decided to reactivate the reverse ratchet system. As a result of this mechanism, introduced in May 2005, every increase in VAT revenues generated by a rise in prices under the "programme contract" is totally offset by a reduction in excise duty, provided the prices set under the "programme contract" exceed the thresholds of 1.1 euro per litre for diesel and 1.5 euro per litre for petrol. Via this mechanism, excise duty on diesel had been reduced overall by around 5 euro cents per litre between July 2005 and August 2006. It was reduced further on 5 December 2007 so that the minimum threshold set by the EC for the amount of excise duty, namely 30.2 euro cents per litre, was reached in the case of mixed diesel. Further reductions in excise duty on this product were therefore no longer possible. Conversely, for petrol this system was applied on nine occasions during the year under review, so that the excise duty on this product declined by 3.5 euro cents per litre overall.

Taking account of all these factors, road fuel prices increased by an average of 10.8 p.c. in 2008 compared to 2007, while heating oil prices were up by 32 p.c. on average. By December, the sharp fall in Brent prices at the end of the year brought road fuel prices down by 17.1 p.c. year-on-year, while heating oil prices dropped by 24.4 p.c. over the same period. The fluctuations are greater for heating oil because this product is more sensitive to the movement in world prices, owing to the lower level of excise duty charged.

During the year under review, the movement in prices of natural gas and electricity contributed on average 0.9 percentage point to the inflation gap in relation to the euro area, representing around three-quarters of the total gap. Although it is due partly to the higher level of gas consumption in Belgium, the main reason is that gas prices also increased more sharply than in the euro area. Thus, electricity prices in Belgium increased by an average of 16.5 p.c., and natural gas was up by 36.5 p.c., while the corresponding price increases in the euro area came to 5.1 and 11.5 p.c. respectively.

Since January 2007, the residential segment of the gas and electricity market in Belgium has been totally liberalised. Therefore, both for gas and for electricity, several suppliers are active, and they are entirely free to set their prices as they wish. Largely adhering to the method of setting prices on the previously regulated market, most suppliers use rate-setting formulas in which prices are adjusted automatically each month in line with two indices, one being considered to reflect the movement in prices of the energy component of natural gas and electricity, and the other deemed to cover the movement in the non-energy costs entailed in the production and distribution of natural gas and electricity. The various suppliers are free to select the reference indices themselves and to define the parameters used in their rate-setting formulas. In principle, these formulas are fixed for a long period, but suppliers can adapt them when they wish. Recently, some gas and electricity suppliers have also begun offering fixed-price contracts for a specified period, whatever the changes in the underlying cost factors. However, this is far less widespread than the practice of offering prices which are adjusted automatically. Although it is possible to view the available rate-setting formulas on the suppliers' websites, it is not easy for consumers to interpret them or to estimate their impact, since they are relatively technical and there is no lengthy historical series for all the reference indices used. This makes it difficult for consumers to gain some idea of their intrinsic volatility. Moreover, the reasons for using the chosen reference indices are never clearly stated, and the factors underlying the setting of the parameters are not adequately explained either. However, the websites of the respective regional regulators do offer a comparative overview of the prices prevailing at any particular time, though a historical record of such price comparisons is not systematically available. On top of the prices set by the gas and electricity suppliers, transport costs and distribution charges are added.

Box 10 – Does the pricing of petroleum products in Belgium differ from that in neighbouring countries ?

This box aims to identify the factors behind the high sensitivity of inflation in Belgium to fluctuations in petroleum product prices on the international markets, and to examine the extent to which intrinsic differences in price-setting, due for example to the "programme contract" in force in Belgium, play a role. The "programme contract" is an agreement between the State and the petroleum sector whereby maximum prices are fixed for petroleum products by means of predetermined indexation formulas, on the understanding that service stations have the option of charging lower prices. The potential impact of the "programme contract" may be manifest at two levels. First, this contract may influence the intensity and speed of the transmission to consumer prices of impulses originating from the international markets, but the direction in which that effect is exerted is not easy to determine at first sight. Thus, by stipulating that consumer prices are not adjusted until certain thresholds have been exceeded, the "programme contract" may hamper the transmission process. Conversely, once it is able to act in practice as a kind of coordination mechanism, the "programme contract" could reinforce that process. Second, it sets margins intended to cover costs of domestic origin, particularly transport and distribution costs, so that the maximum prices are higher than the prices prevailing on the international markets. Again, it is not easy to predict how the "programme contract" will affect margins.

Regarding the process of transmission of impulses generated by international market prices for petrol, diesel and heating oil, it is evident from bivariate VAR[(1)] models that, for each of these product categories, an increase (reduction) in the price of the refined product on the Rotterdam market totalling, say, 10 cents per litre, also leads to an average increase (reduction) in the consumer price before tax of 10 cents per litre, both in Belgium and in Germany and France. Moreover, the temporal profile of this transmission is more or less the same in the three countries : it is relatively speedy, albeit only partial, in the first month, and then appears to exceed the initial impulses for a time during the second and third months. Together, all these points suggest that the intensity and speed of the transmission process in Belgium are much the same as in Germany and France, so that the "programme contract" has played only a minor role here in practice.

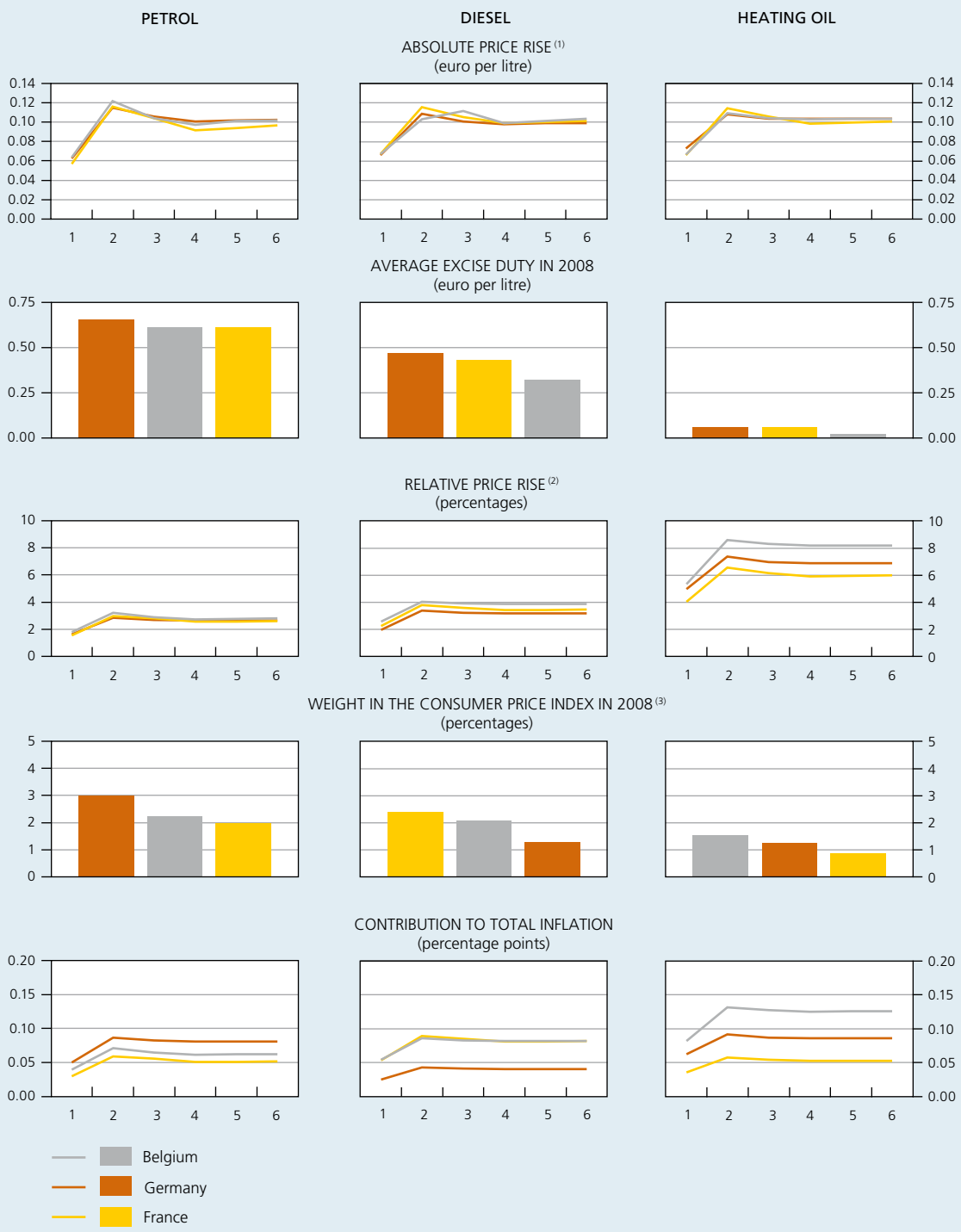
Since inflation is generally measured as a change in prices expressed as a percentage, and not in absolute terms, VAR models of the same type were also estimated for percentage price changes. These models show that there are differences, both between products and between the countries considered. In fact, the scale of a percentage price change is tempered by the level of excise duty, since the latter is a flat-rate tax. Higher (lower) excise duties reduce (increase) the percentage change in the consumer price index, including taxes. As a result, in all countries, the percentage increase in the consumer price following a 10 p.c. increase in the price of the refined product on the international markets is smallest for petrol, as that is the product which attracts the highest excise duty everywhere, and largest for heating oil, since the excise duties on that product are lowest in all countries. Moreover, there are disparities between the three countries owing to differences in their respective levels of excise duty : since the duty on diesel and heating oil is lower in Belgium than in France and Germany, the size of a percentage change in the prices of these products is greater in Belgium, even though the absolute change is virtually the same. The lower level of excise duty in Belgium therefore results in lower prices but renders inflation very sensitive to fluctuations in petroleum product prices on international markets.

Differences in consumption patterns may also tend to accentuate the disparities between countries. Thus, consumption of heating oil is much higher in Belgium than in the neighbouring countries and the respective composition of the HICP in the countries in question reflects this different consumption profile. In Belgium, inflation is therefore more sensitive to movements in the price of this product, especially in view of the said relatively large percentage reaction. Combining the results of the VAR exercise with the weightings of the various products in the consumer price index shows that a 10 p.c. increase (reduction) in the prices of the refined products

(1) Vector autoregression models (VAR) using monthly data to estimate the dynamic relationship between refined product prices on the Rotterdam market and consumer prices before tax in Belgium, France and Germany respectively for the period January 1999-June 2008.

IMPULSE-RESPONSE FUNCTIONS OF CONSUMER PRICES OF PETROLEUM PRODUCTS AND INFLATION FOLLOWING A CHANGE IN PETROLEUM PRODUCT PRICES ON THE INTERNATIONAL MARKETS

(difference in relation to the base level (left-hand axis) from one to six months after the impulse, unless otherwise stated)



Sources : EC, DESTATIS, INSEE, DGSEI, ECB, NBB.

(1) Increase in prices of refined petroleum products of 10 cents per litre.

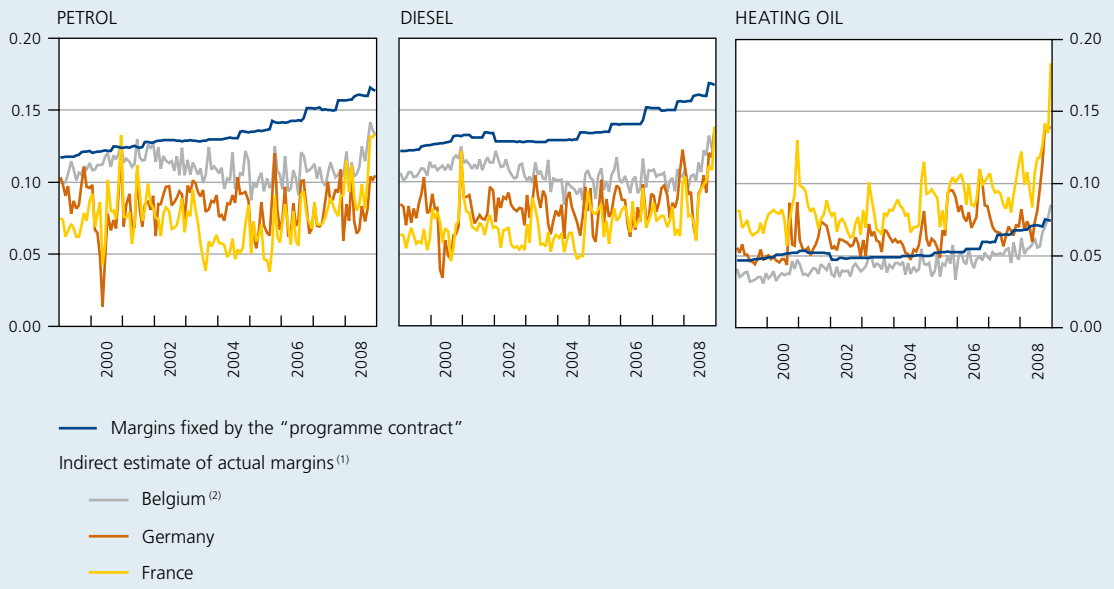
(2) Increase in prices of refined petroleum products of 10 p.c.

(3) The petrol and diesel weightings were estimated on the basis of detailed data obtained from the respective national consumer price indices.

on the international markets exerts an effect of 0.27 percentage point on inflation in Belgium, whereas in France and Germany that effect averages only 0.2 percentage point. Every 10 p.c. increase (reduction) therefore causes a positive (negative) inflation gap of almost 0.1 percentage point in relation to those two countries, which represent almost half of the HICP for the euro area. Since the average increase in the price of refined products in euro was around 25 p.c. during the year under review, it is hardly surprising that the average contribution made by petroleum products to inflation in 2008 was around 0.2 percentage point higher in Belgium than in the euro area. The symmetrical character of this greater sensitivity is clear from the negative contribution which petroleum products made from October to the inflation gap in relation to the euro area.

MEASURES OF COSTS OF DOMESTIC ORIGIN FOR PETROLEUM PRODUCTS

(euro per litre)



Sources : EC, DGE, NBB.

(1) Approximated by the difference between the final price before tax and the price of the refined product.

(2) Excluding the cost of compulsory storage and contributions to the Soil Decontamination Fund and the Heating Oil Fund.

Not only does the "programme contract" regulate the process of transmission of world market prices to consumer prices in the case of petroleum products but, as already stated, it also determines the margins deemed to cover costs of domestic origin. Those margins are adjusted twice yearly, according to such factors as the change in hourly wages per worker in the petroleum sector, the index of industrial producer prices, fluctuations in interest rates and adjustments to maximum prices. The principle of automatic indexation of margins places this sector in a comfortable position. In December 2008, the margins set by the "programme contract" came to around 16 cents per litre for petrol and diesel and 7 cents for heating oil. By comparison with the margins applied in France and Germany, which can be approximated by the difference between the consumer price before tax and the corresponding price of the refined product on the international markets, the margins defined in the programme contract seem large for petrol and diesel, but not for heating oil. They have increased considerably in recent years, mainly because of their indexation on the basis of industrial producer prices and maximum prices. However, it must be remembered that pump prices may be below the maximum prices so that, on the basis of the prices actually paid, the effective

margins in Belgium are much lower than those based on the programme contract, particularly in recent years when service stations have tended to grant ever bigger discounts. Nonetheless, even on that basis, the margins in Belgium still exceed those prevailing in France and Germany for diesel and petrol. On the other hand, they are relatively low for heating oil.

Regarding the process of transmission of fluctuations in international prices of petroleum products, it is therefore evident that the greater sensitivity of inflation in Belgium is due mainly to the low level of excise duty on these products and their greater importance in consumption in Belgium. This shows that the "programme contract" plays a generally minor role in this process. Finally, the margins applied to petrol and diesel are relatively high, while the reverse is true for heating oil, perhaps because there is some cross-subsidisation between the various products covered by the "programme contract".

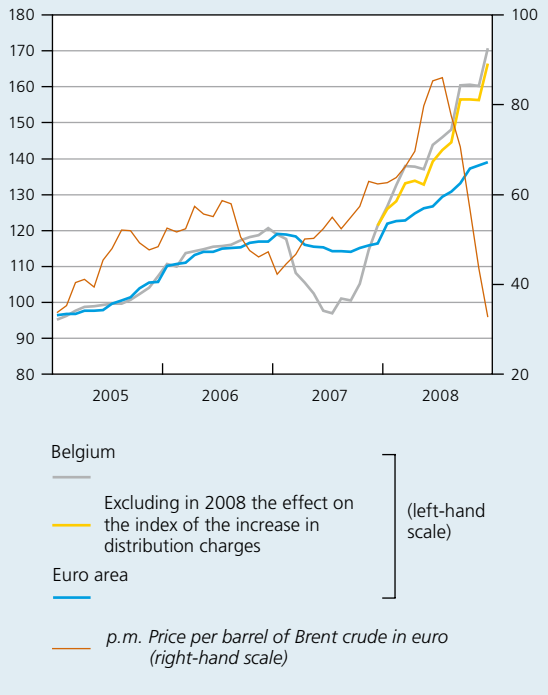
Since this market segment is still a monopoly, the items invoiced in this connection are subject to the control of the Commission for Electricity and Gas Regulation (CREG). Finally, consumer prices of gas and electricity also include VAT and a number of specific taxes and levies.

During the year under review, the main deciding factors were the movement in the indices relating to the costs of the actual energy component, and transport costs and distribution charges. Nonetheless, the movement in the indices used to track non-energy costs also made a contribution, while the role of taxes and other levies was more or less neutral.

Regarding the energy component of consumer prices of natural gas, all the rate-setting formulas provide for a price adjustment based on the movement in heating oil prices, smoothed after a certain time lag, and – since the beginning of 2007 – on the basis of the movement in the spot price of gas, i.e. the reference price of natural gas in Zeebrugge. Consideration of the spot price speeds up the transmission of fluctuations in energy commodity prices to the consumer price of natural gas, while also making the latter price more volatile. Before 2007, the reference index used for the energy component did not in fact include the spot price of natural gas but tracked a moving average of petroleum product prices. Thus, the consumer price of natural gas in Belgium first declined much more sharply than in the euro area in the first half of 2007, in the context of the temporary dip in crude oil prices and the reference price of natural gas in Zeebrugge. The subsequent marked resurgence of those two prices up to mid 2008 meant that the consumer price of gas increased much more steeply in Belgium than in the euro area. This upward movement was further reinforced by the modification made by the leading gas supplier to one of the parameters of the reference index for energy costs in October 2007. Following the collapse of the natural gas price at the beginning of 2007, that supplier decided to increase the constant term in the corresponding indexation formula. That revision of the rate-setting formula was followed by similar, albeit smaller, adjustments on the part of the other suppliers. This resulted in a price increase which can be considered permanent, whatever the future level of oil prices or the reference price of natural gas in

CHART 48 CONSUMER PRICES OF GAS

(indices 2005 = 100, unless otherwise stated)



Sources: EC, DGSEI, NBB.

Zeebrugge. That therefore limits the scope for a reduction in the consumer price of natural gas, even though the simultaneous fall in the oil price and the reference price of natural gas in Zeebrugge in the closing months of the year under review should have a more pronounced effect on consumer prices in Belgium than in the euro area. Taking account of the usual time lag between changes in the oil price and changes in the gas price, however, reductions will only be evident in the price index from March 2009. Moreover, in the absence of any clear and transparent reasons for the formulas used, there is still the question of which economic factor accounts for the greater variability of the consumer price of natural gas in relation to both the pre-2007 period and the euro area.

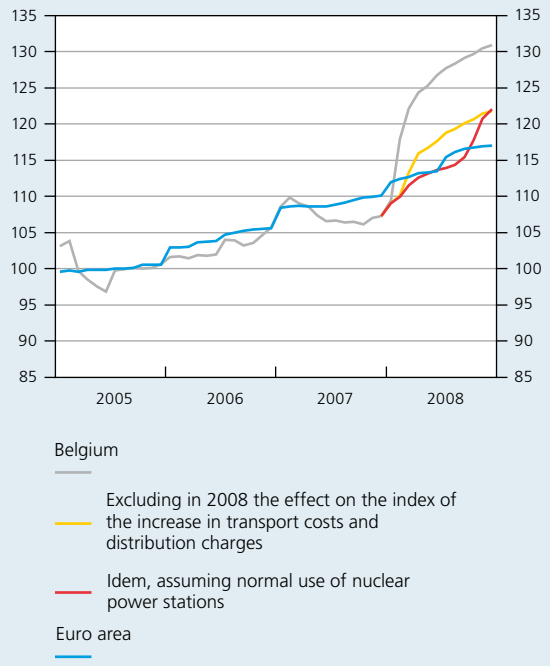
The increase in the price of electricity is also due mainly to the rise in the reference index chosen to reflect the movement in the cost of the energy component proper. Given the greater significance of non-energy costs in electricity production, however, that influence is less than in the case of natural gas. The reference index for the energy cost of electricity increased sharply, echoing – after a delay of several months – the movement in prices of diesel, natural gas and coal. The electricity price rise connected with that movement was all the steeper since the weight given to these energy sources in the indexation formula was increased temporarily in 2008, to take account of the reduced use of Belgium's nuclear facilities owing to major maintenance work at the nuclear power stations. In these circumstances, the current indexation formula provides for an automatic increase in the index weightings relating to other forms of energy. As in the case of gas, it is also difficult to determine whether the indexation formulas applied to electricity are entirely in line with the real movement in the underlying cost factors.

Moreover, there was a marked increase in electricity transport costs and distribution charges at the beginning of 2008. Gas distribution charges also went up, but the impact of this rise was much smaller than in the case of electricity. These increases in transport costs and distribution charges followed the reductions previously imposed by the CREG. At the time, the reason for those reductions had been that the rates charged were considered unjustifiable. However, the arguments supporting that view had been challenged in the courts, which ruled against the CREG at the end of 2007. Consequently, the rates were increased significantly at the beginning of 2008, in practice negating the reductions imposed previously. That factor alone accounted for almost 0.3 percentage point of inflation in Belgium, or around one-third of the total contribution of gas and electricity to the inflation gap in relation to the euro area in 2008.

In 2008, the impact of the factors leading to the marked rise in gas and electricity prices in Belgium was aggravated by a change in the way in which those factors are incorporated in the consumer price index. Thus, at the beginning of 2007, a fundamental change was made to the method of recording those prices in the HICP, the national CPI and the health index, since gas and electricity charges are now recorded month by month on the basis of the actual figures rather than on the basis of the annual invoices paid by consumers. As a result, the above factors had an immediate impact on inflation, which has therefore become more volatile, while their impact according to the old recording method would have been more gradual and, moreover, temporary shocks would have been smoothed out. In the short term, this change of methodology clearly drove up inflation in 2008, adding an average of 0.7 percentage point. In the specific context of Belgium where, owing to the indexation of wages and of some prices, past movements in inflation also affect the future pattern of prices, such a change is not necessarily neutral over the medium and long term whereas, in principle, it should be. Without that change, the impact on inflation of the increase in the price of gas and electricity would simply have been diluted over time. However, in view of its size and the fact that it was combined with

CHART 49 CONSUMER PRICES OF ELECTRICITY

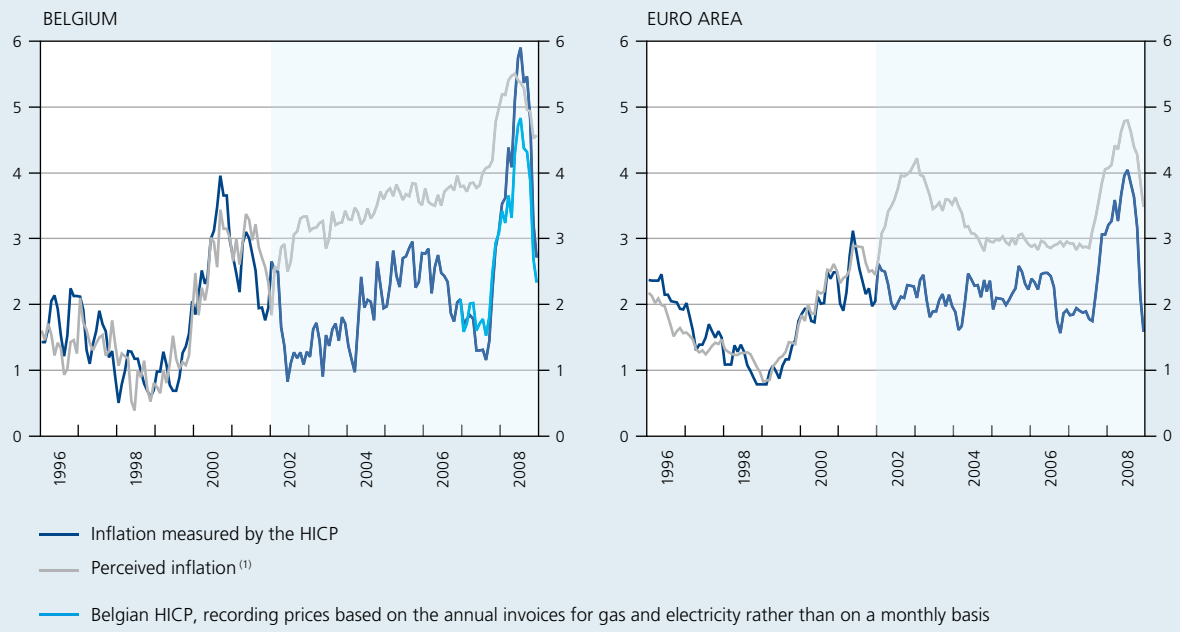
(indices 2005 = 100)



Sources: EC, DGSEI, NBB.

CHART 50 INFLATION AND INFLATION PERCEPTIONS

(percentage changes compared to the corresponding month of the previous year)



Sources: EC, NBB.

(1) Balance of the replies to the EC survey, converted to an inflation indicator comparable to the HICP according to the standardisation procedure described in Aucremanne L., M. Collin and T. Stragier (2007), *Assessing the gap between observed and perceived inflation in the euro area: Is the credibility of the HICP at stake?*, NBB, Working Paper 112.

other inflationary shocks within a short timescale, it could conceivably have contributed to the emergence of more significant second-round effects.

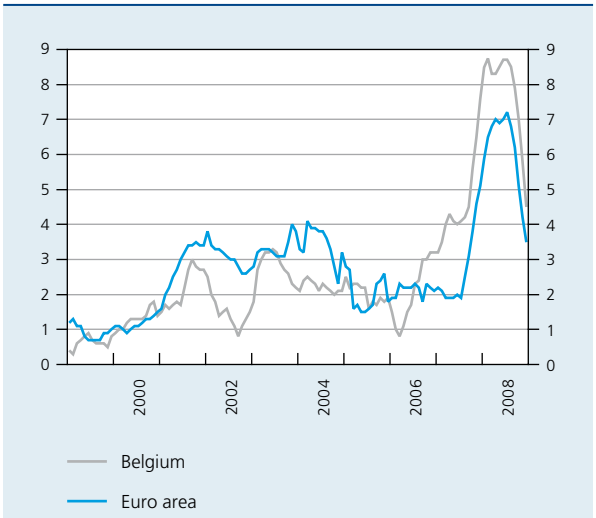
Another question in this context is which recording method is more appropriate from a strictly methodological angle. On the one hand, price changes should clearly be recorded as soon as the consumer encounters them: the application of this principle can therefore be invoked to justify price recording based on monthly rates. On the other hand, consumers never pay their invoices monthly, nor can they establish a direct link between the amount invoiced and the individual monthly rates since, apart from the interim invoices which are generally for a fixed amount, they only receive once a year a final statement covering both the amounts consumed and the rates invoiced over the whole of the past year. It tallies better with that practice if figures are recorded in the index of consumer prices on the basis of the annual invoices. Moreover, in this connection, it is worth mentioning that the actual method of invoicing may explain why, in recent years, the inflation perceptions of Belgian households have been more in line with an approach to inflation calculated on the basis of the annual invoices rather than a method based on monthly recording: the current invoicing system in fact implies that households are not fully aware of the monthly movements in gas and electricity prices. Thus, it seems that consumers did not perceive the full extent of either the 2007 fall in natural gas prices or the particularly sustained rise in inflation during 2008. Furthermore, since mid 2007, the pattern of perceived inflation in both Belgium and the euro area has seemed to correspond more closely to reality again, although part of the perception gap which appeared after the introduction of the euro banknotes and coins has clearly persisted.

Food prices

Food is the second component which had a major impact on inflation during the year under review. Prices of processed foods increased particularly sharply, rising by 7.8 p.c., compared to 4.7 p.c. in 2007 and 2.1 p.c. in 2006. Since that increase came to 6.1 p.c. in the euro area, the rise in these prices contributed 0.2 percentage point to the inflation gap in relation to the euro area in the year under review. The steepest price increases concerned "milk, cheese and eggs", "oils and fats" (including butter), and "bread and cereals" (including pasta): these were due primarily to soaring food prices on international markets.

CHART 51 CONSUMER PRICES OF PROCESSED FOOD

(percentage changes compared to the corresponding month of the previous year)



Source : EC.

In historical terms, the impact of the latter on consumer prices in Belgium and, more generally, in Europe, was exceptionally great, the reason being the changes in the role of the EU's common agricultural policy (CAP) in the past few years. Owing to the very steep increases in food commodity prices on the international markets, those prices exceeded the CAP intervention thresholds which had themselves been reduced in the course of the various policy reforms. Consequently, world prices influenced prices on the European market for the first time without any attenuation mechanism, whereas previously that market had been largely protected from such price fluctuations, though admittedly at the cost of more expensive food for European consumers than in the absence of barriers. Nonetheless, at the end of the year under review the rise in processed food prices subsided to 4.5 p.c.

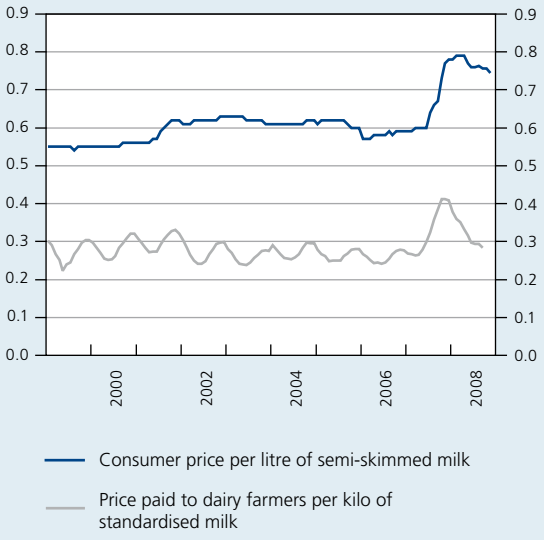
At the beginning of the year under review, when processed food prices were rising particularly strongly – with an increase of 8.7 p.c. in February – the federal government asked the Bank to conduct a study analysing the pattern of inflation in Belgium. In regard to these products, it emerged that it was mainly the price of "bread and cereals" that had risen more strongly than in the euro area, and that this was not due entirely to the increased commodity prices. In addition, a more marked rise in cost had already been seen for this group of products in earlier years. Moreover, composition effects had contributed to the emergence of the positive inflation gap in relation to the euro area for processed foods; for instance, butter – which had also risen sharply in price – is more central to the pattern of consumption in Belgium than in the euro area where, on average, more olive oil is consumed. Finally, the role of these products in the widening overall inflation gap in relation to the euro area was greater because of their relatively higher weight in Belgium's HICP.

In the phase of rapidly rising prices, from the second half of 2007 to the beginning of 2008, the increase in prices of "milk, cheese and eggs" and "oils and fats" in Belgium was among the highest in the euro area. It is not easy to draw conclusions from this isolated fact, because the strong transmission of upward pressure on costs may equally indicate uncompetitive pricing or the opposite : in a highly competitive environment, it is not easy for the various links in the chain – from producers and processing firms to retailers – to refrain from passing on cost increases to consumers, because in principle their margins are already small. From that angle, the downward phase recorded in the second half of the year under review is worth analysing. During that phase, prices in Belgium continued to rise faster than in the euro area, reflecting an asymmetry between the upward and downward phases, and hence perhaps a sign of less competitive pricing in Belgium.

The recent movement in milk prices is a good example. The price paid to farmers by the milk industry reflected fairly closely the successive upward and downward trends

CHART 52 MILK PRICES

(euro per litre or per kilo)



Source : DGSEI.

in milk prices on world markets. The increase was passed on fairly promptly to consumer prices of milk, whereas the downward trend in 2008 led to only modest price reductions for the consumer. It is evident from analyses by FPS Economy, SMEs, Self-employed and Energy, conducted by an ad hoc working party set up by the federal government on price transparency in the milk sector, and on the basis of data up to September 2008, that the biggest price cuts were made on the more competitive market segment, namely that for the cheapest milk, while prices of the most expensive types of milk fell only very slightly. The dairy industry and retailers seem able to charge high prices for certain types via product differentiation. Although consumers have the option of cheaper products, they therefore seem willing, at least to some extent, to pay higher prices.

5.3 Non-energy industrial goods and services: indirect and second-round effects

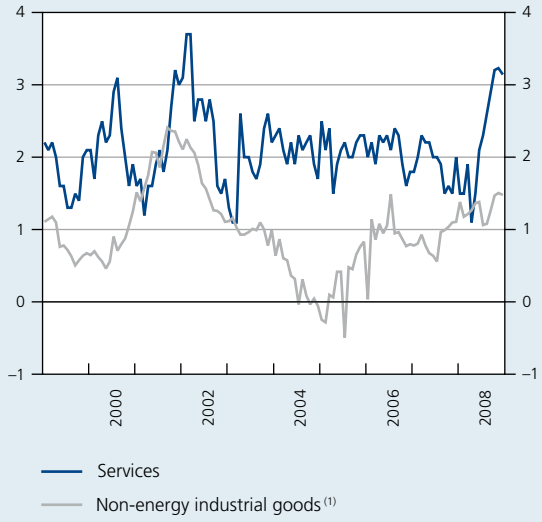
The rise in the HICP excluding food and energy was very modest in the first half of 2008, as in the previous year. However, it gathered momentum from May onwards for both services and non-energy industrial goods. While the increase in inflation remained limited overall in the case of the latter, rising from 1.3 p.c. in the first five months of 2008 to 1.5 p.c. in December for this category, there was a dramatic surge in inflation in services, where prices increased by 3.1 p.c. in December, against 1.5 p.c. in the first five months of 2008. After having been negative during that period, the contribution of non-energy industrial goods and services to the inflation gap in relation to the euro area increased steadily: a negative figure of 0.25 percentage point in May was converted to a positive contribution of 0.33 point in December. This reversal reflects partly the indirect impact of the rising cost of energy and food on the service categories where these products are a major intermediate input, and partly the second-round effects connected with the indexation of both wages and certain prices.

It is not always easy to distinguish between indirect effects and second-round effects. However, it can be said that indirect effects are manifested mainly at the level of goods and services for which energy and food commodities are a significant intermediate input, such as airline tickets, travel, and hotels and restaurants. During the year under review, these indirect effects took the form, in particular, of fuel surcharges imposed on foreign package tours or air travel. In the hotel and restaurant branch, the price of holiday accommodation in Belgium also increased sharply. This factor had a greater impact on the HICP than on the national index, since the harmonised index is compiled according to the domestic territory concept and therefore accords greater weight to this consumption category, as the expenditure of other euro area residents in Belgium has to be taken into account whereas it is not included in the national CPI. The price increases in the said branches represented 0.3 percentage point, or about half of the increase recorded between May and December for the contribution of non-energy industrial goods and services to the inflation gap in relation to the euro area, pointing to marked indirect effects. Nonetheless, the question is why such indirect effects are more pronounced in Belgium than in the euro area and whether the inflation recorded for these product groups is not therefore due also in part to second-round effects.

In certain service categories, the movement in prices is determined at least to some degree by a tradition of price indexation. That applies, in particular, to residential rents. These may be freely fixed when a lease is renewed, but during the term of the lease the law restricts any increases to annual indexation based on the health index. Although rents can therefore be index-linked, they recorded only a modest rise during the year under review, below what might have been expected in the light of the increase in the health index. Public transport charges are another example. The management contracts of some public

CHART 53 CONSUMER PRICES OF NON-ENERGY INDUSTRIAL GOODS AND SERVICES

(percentage changes compared to the corresponding month of the previous year)



Source: EC.

(1) Excluding the estimated effect, in January and July 2000, of the fact that prices discounted in sales have been taken into account in the HICP since 2000.

TABLE 29 CONTRIBUTION OF NON-ENERGY INDUSTRIAL GOODS AND SERVICES TO THE INFLATION GAP IN RELATION TO THE EURO AREA

(difference in relation to May 2008, percentage points)

	June	July	August	September	October	November	December
Passenger transport by air [1], travel, hotels and restaurants	0.11	0.13	0.12	0.23	0.32	0.28	0.31
Categories of services with one or other form of price indexation	0.00	0.03	0.04	0.03	0.03	0.04	0.04
Other services and non-energy industrial goods (including unidentified second-round effects)	0.10	0.10	0.06	0.13	0.20	0.26	0.22
Total	**0.21**	**0.25**	**0.22**	**0.40**	**0.55**	**0.58**	**0.57**

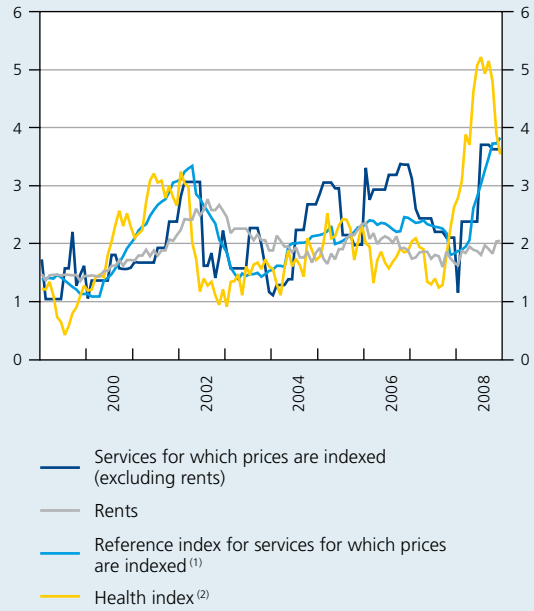
Sources: EC, DGSEI, NBB.
(1) In euro area countries other than Belgium, this category also includes passenger transport by water.

enterprises in fact stipulate that inflation is one of the elements which may be taken into account in calculating the annual adjustments to charges. Thus, substantial increases in the prices of postal services and rail transport at the beginning of 2009 were announced in the second half of the year under review, partly owing to the increase in inflation, and partly on account of the higher cost of energy. A link with inflation can also be identified for other service categories where indexation is based on more specific reference indices. Fire insurance policies and civil-law notaries' fees are adjusted in that way on the basis of the ABEX index, which measures the movement in costs in the construction industry. Overall, prices for around a quarter of services, representing about 10 p.c. of the HICP, are subject to more or less formal indexation, but in many cases it is impossible to determine the degree to which that indexation is due exclusively to the indexation of wages, which are a major component of costs in the service sector, or whether it is due to a more intrinsic form of price indexation. In contrast to rents, prices of other services subject to one or other form of indexation rose more steeply during the summer of 2008, in line with the reference indices relevant for those services. Overall, taking account of the moderate increase in rents, the total amount that products subject to some form of price indexation contributed to the positive inflation gap in relation to the euro area was fairly small in the second half of 2008.

It is also evident that non-energy industrial goods and categories of services other than those mentioned above have recorded bigger price increases in Belgium than in the euro area. Even though it appears, as shown by box 11, that the overall risk of second-round effects has diminished significantly since the 1970s, that probably reflects the impact of less explicit price indexation or the transmission of labour costs increases corresponding to wage indexation.

CHART 54 PRICE INDEXATION PRACTICES IN THE SERVICE BRANCH

(percentage changes compared to the corresponding month of the previous year)



Sources: DGSEI, NBB.
(1) Weighted average of the various relevant reference indices for services for which prices are indexed (excluding rents).
(2) National CPI excluding products considered harmful to health, namely tobacco, alcoholic beverages, petrol and diesel.

Box 11 – Second-round effects in the 1970s and today

Between mid 2007 and mid 2008, the global economy faced the biggest oil price rise since the 1970s. It was mainly after the first oil shock in 1973-1974, but also after the second shock in 1979-1980, that inflation became excessive in Belgium and in many other countries, particularly as a result of indirect and second-round effects. This box examines the various facets of the macroeconomic environment which may influence the emergence and intensity of second-round effects, and makes a comparison between the current situation and that in the 1970s for both Belgium and the other OECD countries.

Indirect effects concern the potential impact of the surge in oil prices on the production costs of firms, resulting from the use of petroleum products, and their repercussions on firms' selling prices. Second-round effects are associated with the impact on consumer prices of income increases whereby economic agents attempt to protect themselves from the loss of purchasing power caused by the increased cost of petroleum products.

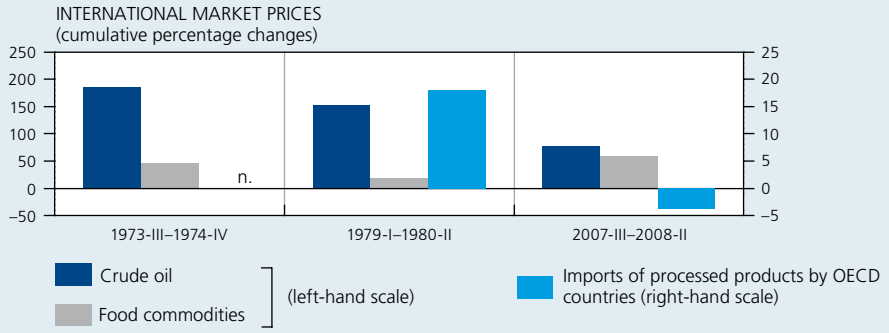
The risk of excessive inflation depends primarily on the scale, nature and persistence of the oil price rise. Thus, between the third quarter of 2007 and the second quarter of 2008, that increase came to 78 p.c., whereas in the first and second oil shocks of the 1970s the price had jumped by around 190 and 150 p.c. respectively in the space of a few quarters. These two oil shocks are generally explained by restrictions on oil supplies and, more specifically, the influence of the OPEC cartel on pricing, as well as geopolitical tensions in the Middle East. Conversely, the recent surge in oil prices was due to demand, and is often linked to globalisation of the economy, and especially the vigorous growth of emerging economies such as China and India. This development has also had a major impact on demand for food, so that the rise in oil prices in the second half of 2007 and the first half of 2008 was accompanied by an equally strong increase in food commodity prices. Conversely, this same globalisation has enabled the OECD countries to import cheap manufactured goods from low-cost countries. Therefore, while the risk of second-round effects has increased recently owing to rising prices of food worldwide, it has also been tempered by the fall in prices of imported manufactured goods.

In all, the direct impact on inflation in 2007 and 2008 was considerable, but in absolute terms it was less marked overall than at the time of the first and second oil shocks. It is generally acknowledged that the risk of indirect effects has diminished because global production has become less dependent on petroleum products. Moreover, compared to the oil shocks of the past, the recent surge in oil prices was much less persistent. In the second half of 2008, commodity prices fell sharply and at the end of the year the crude oil price was below its mid 2007 level. In cases where these fluctuations were expected to be temporary, the effect on consumer prices and wage-setting was smaller from the start. However, even if that was not the case, the current decline could potentially curb the upward trend resulting from any second-round effects.

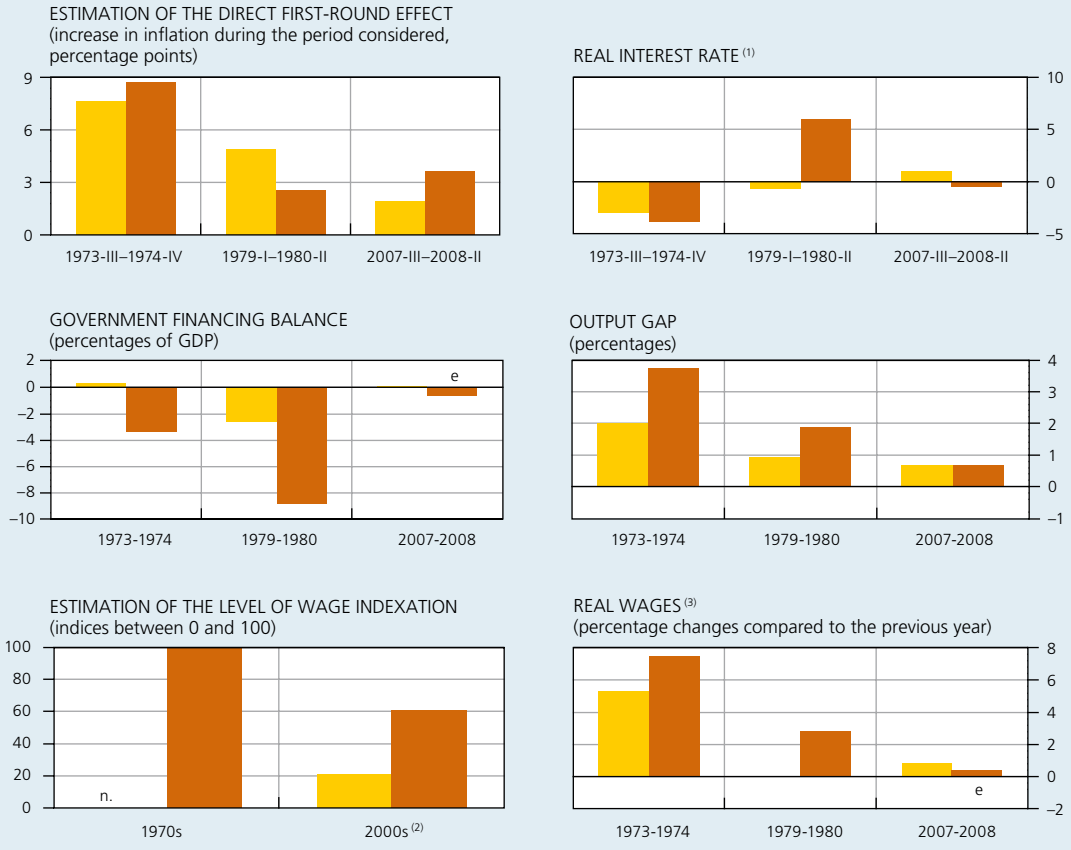
The risk of second-round effects also depends largely on the macroeconomic policy pursued. During the recent period, the monetary policy stance in both the euro area and the other OECD countries was clearly intended to maintain price stability. In practice, the pursuit of such an objective specifically entails avoiding the emergence of second-round effects, particularly by anchoring inflation expectations. In contrast, at the time of the first oil shock, monetary policy was particularly accommodating, a situation attributable partly to the lack of independence for most central banks and an erroneous perception of the factors underlying the slowdown in economic activity seen at the time. In fact, the authorities had too long believed that the downturn in activity was due predominantly to the demand side of the economy, and that an expansionary monetary policy would therefore be the answer, whereas in reality growth potential was under structural pressure as a result of the increased price of petroleum products and the slackening of productivity growth. Afterwards, it was noted that, contrary to the initial view, the output gap was decidedly positive at the time of the first oil shock, and had therefore contributed to inflationary pressure.

FACTORS AFFECTING THE PROBABILITY OF THE EMERGENCE OF SECOND-ROUND EFFECTS

SCALE AND NATURE OF THE COMMODITY PRICE RISE



MACROECONOMIC ENVIRONMENT



Sources : IMF, OECD, DGSEI, NAI, NBB.

(1) Interest rate deflated by the movement in consumer prices; average for the period considered.

(2) Average based on Du Caju Ph., E. Gautier, D. Momferatou and M. Ward-Warmedinger (2008), *Institutional features of wage bargaining in 23 European countries, the US and Japan*, NBB, Working Paper 154. The indexation indicator for Belgium for the 2000s takes account of the moderating effect resulting from use of the health index in the case of oil shocks. The calculations are based on the relative importance in 2006 of the energy component in the health index compared to the national CPI.

(3) Change in nominal wages per hour worked in the economy as a whole, deflated by the movement in consumer prices; average for the period considered.

At the time of the second oil shock, the output gap was again noticeably positive both in Belgium and in the other OECD countries. In fact, while monetary policy was less accommodating, and in Belgium's case was actually highly restrictive taking account of the exchange rate policy at that time, in contrast, fiscal policy was clearly expansionary and thus contributed to the overheating of the economy. Today, fiscal policy is generally geared more to stability than in the period of the oil shocks of the 1970s. In the EU, it is thus governed by the principles defined in the Stability and Growth Pact. However, it should be pointed out that, even though government finances were close to balance in 2007 and 2008 in the OECD countries, the steady deterioration in the primary balance in recent years may have stimulated demand. Overall, the output gap in 2007 and 2008 was much less positive in those economies than at the start of the first two oil shocks.

Finally, the operation of the product and labour markets also plays a key role. All other things being equal, a rise in oil prices leads to collective impoverishment of the economy, to be borne by the two production factors : labour and capital. The deterioration in the terms of trade causes a divergent movement between the value added deflator, which measures the remuneration of the national production factors, and consumer prices, which come under additional upward pressure owing to the higher cost of imports. The remuneration of the two production factors must therefore lag behind the increase in consumer prices, i.e. it must fall in real terms. Efficient labour and product markets facilitate that adjustment. Conversely, a delay in that adjustment triggers a price-wage spiral. The ensuing inflationary process in turn depresses corporate profitability and employment.

A lack of competition on the product markets may lead to price increases in excess of a simple, proportionate reflection of the first-round effects, so that – following an increase in nominal terms – profit margins do not shrink in real terms. It is generally considered that competition on the product markets has increased since the 1970s. However, the very steep increase in electricity and gas prices in Belgium in 2008 raises questions concerning the degree of competition in certain sectors.

Rigidities at the level of wage-setting, and more specifically resistance to any adjustment to real wages, are another source of second-round effects. Wage indexation mechanisms are a factor hampering the adjustment of real wages, but resistance may nevertheless be present even without wage indexation. While many industrial countries abolished indexation in the 1980s and 1990s, Belgium retained it with modifications designed to attenuate its impact. Thus, in 1994 the introduction of the health index (which excludes petrol and diesel, in particular) as the reference index was intended to reduce vulnerability to oil shocks. In fact, the effective degree of indexation in the event of an oil shock has been reduced considerably in Belgium, while the formal degree of indexation has not diminished. However, since the 2007 and 2008 oil shock coincided with strong increases in food prices and gas and electricity tariffs, use of the health index did not prevent a considerable increase in nominal wages. The provisions of the 1996 law on the promotion of employment and the safeguarding of competitiveness should, in principle, help to prevent an oil shock from triggering pay rises in Belgium in excess of those in neighbouring countries, because that law requires the social partners to take account of the consequences of indexation when determining real wage increases in order to reconcile indexation with moderate increases in nominal labour costs. In contrast to the 1970s, the rise in real wages in Belgium did not exceed that recorded in the other OECD countries in 2007 and 2008. Nonetheless, the weaker increase in real wages did not immediately offset the whole of the upward effect of indexation during those two years. In fact the institutional framework of wage-setting in Belgium implies that such an adjustment is essentially the subject of negotiation when the next biennial central agreement is concluded, or in this case the wage agreement relating to the period 2009-2010 which the social partners signed at the end of the year under review.

Overall, there is little danger that the higher oil prices recorded between mid 2007 and mid 2008 will trigger widespread second-round effects. That is due not only to the specific characteristics of this price rise episode, particularly its weaker persistence than at the time of the first two shocks, and the sharp downturn in activity which has since occurred. The intrinsic risk of such effects has also declined as a result of changes in macroeconomic policy and more efficient product and labour markets.

The more widespread application of indexation in Belgium than in the other euro area countries, not only at the level of wage-setting (in this connection, see chapter 4 on the labour market and labour costs) but also in actual price-setting, increases the risk of second-round effects. However, the absence of indexation mechanisms does not protect a country against such a risk if, for example, against the background of rising inflation, workers try to compensate for the resulting loss of purchasing power when negotiating their wages. A surge in inflation may also have a persistent effect on inflation expectations, and hence eventually on wages and prices. However, such effects are less automatic than in the case of indexation, and their scale depends to a greater extent on the macroeconomic environment in general, and the monetary policy stance in particular.

In the case of Belgium, a number of provisions governing wage-setting temper the risk of second-round effects. First, the automatic link between wages and consumer prices is based on the health index, which excludes the movement in prices of tobacco, alcoholic beverages, petrol and diesel. During the year under review, this index increased by slightly less than inflation, rising by 4.2 p.c. compared to 4.5 p.c. Next, the pay negotiations must abide by the framework fixed by the 1996 law on the promotion of employment and the safeguarding of competitiveness. This aims to align the nominal movement in wages in the private sector in Belgium with that in the three main neighbouring countries : Germany, France and the Netherlands. The social partners therefore have to take account of the consequences of wage indexation when negotiating the margin available for wage increases additional to indexation. Nonetheless, inflation – and hence indexation – may exceed the figures expected when the central and sectoral agreements were concluded. In that regard, however, the law provides that any excess pay increase in Belgium compared to the reference countries must be taken into account in the next round of wage negotiations. Moreover, in order to remedy the consequences of an erroneous inflation forecast, a number of collective agreements – which in 2008 covered a quarter of private sector workers – include a clause whereby unexpectedly rapid indexation is offset in the real increases granted during the actual period for which they were agreed. A more detailed description of these "all-in" agreements may be found in chapter 4 of this Report. As that chapter states, the larger than expected rise in inflation in 2008 led to wage increases well in excess of the indicative norm fixed by the 2007-2008 central agreement, despite these all-in clauses.

In general, all these mechanisms imply that the effects of automatic indexation on the relative movement in labour costs in Belgium compared to the three main neighbouring countries are largely neutralised, as a rule, at least in the medium term. Nevertheless, in the shorter term, they cannot prevent the emergence of differentials, particularly in the event of major shocks to the terms of trade or productivity.

Jean Mayné, detail from a design for a 20 franc note,
not produced, watercolour and gouache, undated (circa 1910),
National Bank of Belgium collection

Public finances

6.

6.1 Revenue, expenditure and overall balance

In 2008, the general government accounts closed with a deficit of 1.1 p.c. of GDP. The target of a balanced budget set by the April 2008 stability programme was therefore not achieved. This disappointing result is due partly to the less favourable than expected economic situation, although the impact of weaker economic growth was partly offset by that of much higher than expected inflation. In fact, since the payroll tax scales are indexed only according to the previous year's inflation figure, this factor drove revenues higher. In other respects, the fiscal policy stance was not sufficiently rigorous, all other things being equal, to make up for the derailment which had begun in 2007, a year which had already closed with a deficit of 0.3 p.c. of GDP.

In recording another – and sizeable – deficit in 2008, the government has deviated further from the budget path advocated by the High Council of Finance in March 2007. According to that path, it should have started creating a budget surplus in 2007 in order to ensure that Belgian public finances would be sustainable in the context of population ageing, and that surplus should have reached 0.5 p.c. of GDP during the year under review. Moreover, in the case of the initial years, that budget path incorporated the targets set by the stability programme which the Belgian government had introduced in December 2006, but the April 2008 stability programme had already relaxed those targets.

As part of the European initiative to cope with the real consequences of the international financial crisis, a recovery plan was launched at the beginning of December. Although this is projected to result in a further increase in the deficit in 2009, the federal government has stated that it intends to restore a balanced budget as soon as more normal economic growth returns, and to create surpluses thereafter.

Revenue

During the year under review, the fiscal and parafiscal revenues of general government increased by 0.1 percentage point to 43.4 p.c. of GDP. This rise is due solely to the strong expansion in levies on earned incomes, of

TABLE 30 TARGETS FOR THE FINANCING REQUIREMENT (–) OR CAPACITY OF BELGIAN GENERAL GOVERNMENT[1]
(percentages of GDP)

	2004	2005	2006	2007	2008	2009	2010	2011
Stability programme and successive updates								
December 2004	0.0	**0.0**	0.0	0.3	0.6			
December 2005		0.0	**0.0**	0.3	0.5	0.7		
December 2006			0.0	**0.3**	0.5	0.7	0.9	
April 2008				–0.2	**0.0**	0.3	0.7	1.0
p.m. Actual figures	*–0.2*	*–2.6*	*0.3*	*–0.3*	*–1.1 e*[2]			

Sources: FPS Finance, NAI, NBB.

(1) According to the methodology used in the framework of the excessive deficit procedure (EDP). That methodology differs from that of the ESA 95 which was adapted in 2001 to exclude from the calculation of the overall balance the net interest gains on certain financial transactions, such as swaps and forward rate agreements (FRAs). The EDP methodology is also used in the other tables and charts in this chapter.

(2) For 2008, no account is taken of any direct effect on the overall balance of the measures adopted to bail out the Belgian financial institutions hit by the financial crisis, since their statistical treatment has to be examined by Eurostat, the Statistical Office of the European Union, as do similar intervention measures by other EU countries, in order to ensure consistency.

TABLE 31 REVENUE OF GENERAL GOVERNMENT[1]

(percentages of GDP)

	2004	2005	2006	2007[2]	2008 e[2]
Fiscal and parafiscal revenue	44.4	44.3	43.8	43.3	43.4
Levies weighing chiefly on earned income	26.3	25.9	25.2	25.0	25.6
Personal income tax[3]	12.0	11.9	11.4	11.2	11.4
Social contributions[4]	14.3	14.0	13.8	13.9	14.2
Taxes on company profits[5]	3.2	3.4	3.7	3.6	3.4
Levies on other incomes and on assets[6]	3.6	3.7	3.6	3.7	3.6
Taxes on goods and services	11.3	11.3	11.3	11.0	10.8
of which:					
VAT	6.8	6.9	7.0	7.0	6.9
Excise duties	2.4	2.4	2.2	2.2	2.0
Non-fiscal and non-parafiscal revenue[7]	4.7	5.1	4.9	4.8	4.8
Total revenue	49.1	49.4	48.7	48.1	48.2

Sources: NAI, NBB.

(1) In accordance with the ESA 95, total revenue of general government does not include the proceeds of fiscal revenue which the government transfers to the EU.

(2) In 2007, the reform of the method of paying pensions to former BNRC Group staff increased parafiscal levies by around 0.05 p.c. of GDP. In 2008, social contributions paid by self-employed persons increased by 0.1 p.c. of GDP following the inclusion of "minor risks" in the compulsory sickness insurance.

(3) Mainly withholding tax on earned income, advance payments, assessments and the proceeds of additional percentages on personal income tax.

(4) Total social contributions, including the special social security contribution and the contributions of persons not in work.

(5) Mainly advance payments, assessments and withholding tax on corporate income from movable property.

(6) Mainly withholding tax on income from movable property of individuals, withholding tax on income from immovable property (including the proceeds of additional percentages), inheritance taxes and registration fees.

(7) Income from property, imputed social contributions, current transfers and capital transfers from other sectors, plus sales of goods and services produced.

0.6 percentage point. It was largely offset by a decline in the other tax revenue categories, mainly owing to adverse results in the final quarter of the year under review, caused by the sharp downturn in economic activity. Non-fiscal and non-parafiscal revenues were also up by 0.1 percentage point.

The strong rise in levies on earned incomes contrasts with the continuous fall which they had recorded since 2003. This applied to both personal income tax and social contributions, and was largely due to the sizeable increase in the share of earned incomes in GDP, amounting to 0.7 percentage point. Combined with the progressive character of the tax, this factor more than offset the effect of the discretionary measures which contributed overall towards reducing the burden of taxes and parafiscal levies by 0.3 percentage point of GDP.

Personal income tax revenues increased by 0.3 percentage point. Apart from the larger percentage of earned incomes, this increase was due to the surge in inflation, which drove up payroll taxes faster than earned incomes, since the annual indexation of the scales used to calculate the payroll tax is based on the average increase in consumer prices during the preceding year. Consequently, the acceleration in inflation had the effect of increasing payroll tax revenues by around 500 million euro. However, the advance indexation of those scales in October 2008 did attenuate that effect by a total of 120 million euro.

As in previous years, the structural measures taken by the government had a negative influence on personal income tax revenues, although the effect amounted to only 0.1 p.c. of GDP. At federal level, this concerned on the one hand the increase in the tax-free allowance for low and middle incomes, effective from 1 July 2008, which reduced that tax yield by 75 million euro, and on the other hand, the introduction for firms' employees of the system of a non-recurring performance-related bonus of up to 2,200 euro per person. The advantageous fiscal and parafiscal treatment of this system – it only attracts an employer's contribution of 33 p.c. – meant a revenue reduction totalling around 100 million euro. In addition, in the case of personal income tax, the federal government has in recent years reformed and extended the system of tax relief for the cost of mortgages on personal homes and the allowance for expenditure on energy saving, measures which have entailed an extra cost to the budget of 66 and 79 million euro respectively. Furthermore, the standard reduction in payroll tax which

TABLE 32 MAIN FISCAL AND PARAFISCAL MEASURES[1]

(millions of euro, changes compared to the previous year)

	2006	2007	2008
Structural fiscal measures	–1,529	–523	–644
Federal government and social security	–1,408	–324	–519
Personal income tax	–1,331	–335	–320
Taxes on companies[2]	–357	–40	17
Taxes on goods and services	–225	51	–216
Levies on other incomes and on assets	505	0	0
Communities and regions	–50	–187	–50
Local authorities	–71	–11	–75
Structural parafiscal measures	–457	–458	–228
Employers' contributions	–105	–458	–181
Employees' contributions	–352	0	–48
Non-recurrent measures	764	–1,282	–70
Impact of securitisation operations	–106	–734	208
Corporation tax assessments	900	–900	0
Tax-exempt reserves	0	245	–245
Social contributions due at the end of an employment contract	0	233	–233
Tax payable by the nuclear power supply company	0	0	250
Other	–30	–125	–50
Total	**–1,223**	**–2,262**	**–943**
p.m. Percentages of GDP	*–0.4*	*–0.7*	*–0.3*

Sources: Budget documents, NBB.

(1) This generally concerns the assumed impact of the measures according to the budget documents. It may differ from the actual impact. No account is taken of measures to control tax evasion and promote more efficient collection.

(2) This item covers the effect of the introduction of the risk capital tax allowance. According to a study conducted by the Bank (see Burggraeve K., Ph. Jeanfils, K. Van Cauter and L. Van Meensel (2008), *Macroeconomic and fiscal impact of the risk capital allowance*, NBB, Economic Review, September, pp. 7-47), the budgetary cost of that allowance was between 140 and 430 million euro for the 2007 tax year (2006 incomes). The table shows the average of these two amounts for 2006, namely 285 million. In contrast, for 2007 and 2008, the figures are taken from the budget documents which indicate an additional cost of 58 and 68 million respectively; however, they only include the impact of the increase in the allowance percentage, and therefore do not necessarily correspond to the actual effect on public finances.

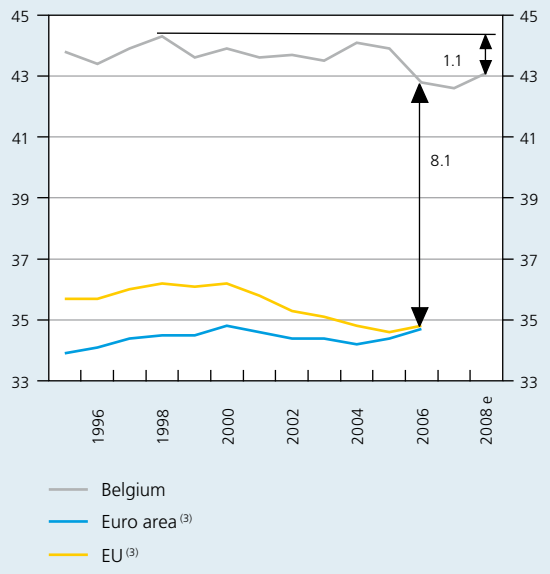
the Flemish Region has granted to residents since 2007, subject to certain conditions, was increased slightly, depressing personal income tax revenues by another 50 million euro.

In view of the higher percentage of wages in GDP, the parafiscal burden on labour increased by around 0.3 percentage point. However, a series of measures helped to reduce employers' contributions. Thus, the implementation on 1 April 2007 of an additional reduction in employers' social contributions for workers aged over 50 further curbed the increase in these levies. Moreover, the amount of the allowance and the ceiling fixed for the reduction in personal social security contributions for low wage earners, known as the "work bonus", were increased and an initial step was taken towards the gradual dismantling of the solidarity contribution on pensions. Furthermore, revenues were no longer driven up as in 2007 by the non-recurrent increase resulting from the fact that, since then, social contributions have been due immediately on holiday pay which employers pay out in advance on termination of an employment contract. Social contributions paid by self-employed workers increased sharply, following the inclusion of "minor risks" in their compulsory sickness insurance.

Taking account of these developments, the implicit rate of levies on earned incomes – i.e. the fiscal and parafiscal levies expressed as a percentage of the wage bill as calculated according to the national accounts – increased by 0.5 percentage point. The latest statistics available from the EC show that the burden on labour in Belgium was still 8.1 percentage points above the euro area average in 2006. Despite the decline in this rate in Belgium over the past ten years, amounting to a total of 1.1 percentage point, a substantial difference still persists.

CHART 55 IMPLICIT RATE OF LEVIES ON EARNED INCOMES [1] [2]

(percentages of labour costs)



Sources : EC, NAI, NBB.

(1) Calculated on the basis of the national accounts.

(2) Defined as the total levies on earned incomes collected by general government, divided by the wage bill. It excludes the various reductions in payroll tax which are regarded as subsidies to firms, in accordance with the ESA 95 methodology.

(3) Unweighted average.

Taxes on corporate profits were down by 0.2 percentage point to 3.4 p.c. of GDP. The main reason for this fall is that, in 2007, those taxes had been driven higher by non-recurrent revenues generated by the option which firms were offered of distributing or investing some of their tax-exempt reserves at a reduced rate. The structural measures were more or less neutral, as the proceeds from the measure whereby the tax deduction for company cars is dependent on the rate of CO_2 emissions was neutralised by the increase in the percentage used to calculate the risk capital allowance. In 2008, the movement in levies on corporate profits thus lagged behind the increase in the reference macroeconomic base, although the latter decelerated sharply. The impact of the international financial crisis and the economic slowdown gradually made itself felt during the year under review, leading to a marked fall in advance payments, primarily from financial institutions, in the second half of the year.

Expressed as a percentage of GDP, levies on other incomes and on assets decreased slightly during the year under review. It was mainly registration fees and the tax on stock market transactions that declined, though these falls were largely negated by the favourable movement in the withholding tax on income from movable property.

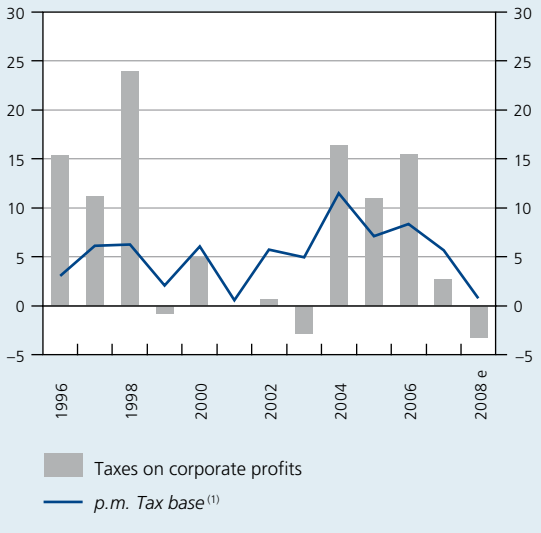
Taxes on goods and services were down by 0.2 percentage point owing to the weakness of private consumption at the end of the year. The overall effect of the discretionary measures on revenues was more or less neutral, since the negative impact of the reverse ratchet system and the gradual abolition of the excise compensatory levy was offset by the payment of 250 million euro by the nuclear power supply company.

To obtain an idea of the resources which come under the fiscal powers of each general government sub-sector, it is sufficient to examine their breakdown exclusive of mutual transfers between these sub-sectors. Conversely, those transfers have to be taken into account to obtain an indication of the resources which each level of power can allocate to its own policies.

The federal government has extensive fiscal powers in relation to total Belgian public revenues, as it is in charge of VAT and most personal income tax. During the year under review, its revenues totalled 26.7 p.c. of GDP. After adjustment for transfers to other levels of power, the resources available to the federal government were considerably lower, at 10.3 p.c. of GDP. Conversely, for the other levels of government, the transfers have a positive impact. In the past two years, the resources which the federal government has been able to use to conduct its own policy have diminished considerably by a total of

CHART 56 CORPORATE TAX REVENUES

(percentage changes compared to the previous year)



Sources : NAI, NBB.

1 Defined by approximation, according to the macroeconomic approach, as the gross operating result plus net interest received.

TABLE 33 PUBLIC REVENUES PER GENERAL GOVERNMENT SUB-SECTOR
(percentages of GDP)

	Before transfers between sub-sectors			After transfers between sub-sectors		
	2006	2007	2008 e	2006	2007	2008 e
Entity I	40.9	40.2	40.7	30.5	29.8	30.0
Federal government	27.2	26.5	26.7	11.3	10.6	10.3
Social security	13.7	13.7	14.0	19.2	19.2	19.7
Entity II	7.8	7.8	7.5	18.2	18.3	18.3
Communities and regions	4.5	4.4	4.4	11.7	11.7	11.6
Local authorities	3.4	3.4	3.2	6.6	6.6	6.7

Sources: NAI, NBB.

around 1 percentage point. That fall is attributable to the reduction in the revenues which come under its own fiscal powers, but also to a large extent to an increase in the transfers to the other general government sub-sectors. Here, it is mainly social security that has received additional resources.

Primary expenditure

The primary expenditure of general government, i.e. excluding interest charges, increased sharply in comparison with 2007, up from 44.5 to 45.6 p.c. of GDP. This rise was due mainly to the fact that price increases affecting government expenditure outpaced the increase in the GDP deflator, as real expenditure rose by only slightly more than real GDP, namely 1.4 p.c.

However, this fluctuation is not necessarily representative of the structural profile of primary expenditure, as it may be seriously distorted by a number of factors whose influence has to be eliminated in order to obtain a more accurate idea of the fundamental trend. These include temporary factors, operations which inflate both revenue and expenditure while being neutral for the budget, the influence of the business cycle on expenditure and, finally, differences between inflation and the impact on wages or social benefits of indexation in line with consumer prices.

In 2008, temporary or fiscally neutral factors curbed the volume growth of primary expenditure by 0.2 percentage point, a much smaller effect than in previous years. In fact, primary expenditure was no longer augmented by such factors to the same extent as in 2007, substantial tax rebates having been payable at that time. One source of a temporary increase during the year under review was the health insurance against "minor risks", which has become compulsory for self-employed persons, increasing both the contributions received by social security and that authority's expenditure.

The primary expenditure growth rate is also subject to cyclical variations owing to the movement in unemployment benefits, which tracks the economic cycle after a certain time lag. Thus, the upward phase in that cycle since 2004 had meant that the cyclical character of unemployment expenditure contributed to the moderation of expenditure from 2006. The gradual slowdown in economic activity since the end of 2007 limited the influence of that factor to some extent in 2008, as unemployment expenditure – which had fallen by 6.2 p.c. in real terms in 2007 – declined by a further 3.6 p.c. in 2008, thus helping to restrain the increase in expenditure by 0.2 percentage point.

The indexation mechanisms for social benefits and civil service pay are a third external factor which influences the real movement in primary expenditure. Thus, social benefits and wages, which account for over 60 p.c. of that expenditure, are linked to the movement in the health index of consumer prices. In 2008, that increase was 0.3 percentage point smaller than the rise in the HICP, which is used to deflate expenditure. Also, taking account in particular of the smoothing systems and the threshold applicable under those indexation mechanisms, there was a delay before the acceleration in inflation was reflected in indexation, and only part of the impact was therefore felt in the year under review. Overall, the indexation method therefore helped to contain the real increase in expenditure by 0.4 percentage point.

TABLE 34 PRIMARY EXPENDITURE OF GENERAL GOVERNMENT

(deflated by the HICP, percentage changes compared to the previous year, unless otherwise stated)

	2004	2005	2006	2007	2008 e	Average 1998-2008 e
Level recorded (1)	44.6	47.8	44.4	44.5	45.6	44.4
Real growth recorded	0.7	8.8	–4.2	3.5	1.4	2.5
Influence of non-recurrent or fiscally neutral factors (2)	–2.3	6.9	–5.9	1.3	–0.2	0.1
Influence of cyclical factors (2)	0.2	0.0	–0.1	–0.4	–0.2	0.0
Indexation effect (2) (3)	–0.4	–0.1	–0.5	–0.2	–0.4	–0.2
Real growth adjusted for cyclical and non-recurrent or fiscally neutral factors and for indexation effect	3.1	2.1	2.2	2.9	2.3	2.6

Sources: EC, NAI, NBB.
(1) Percentages of GDP.
(2) Contribution to real recorded growth of primary expenditure.
(3) Effect caused by the difference between the actual indexation of public sector wages and social security benefits and the rise in the HICP.

After adjustment for the effect of these various factors, primary expenditure expanded by 2.3 p.c. in 2008, which was less than its average growth rate since 1998, but slightly higher than the trend growth of GDP.

In 2008, the adjusted primary expenditure of the federal government expanded by 3.6 p.c. in real terms, compared to 4.2 p.c. in the previous year. This slower increase was due partly to the turbulent political situation in late 2007 and early 2008. Thus, the absence of a budget and the application of provisional twelfths at the beginning of the year exerted a major restraining effect. However, that effect would have been still more pronounced if the traditional postponement of year-end payments had not been drastically reduced in 2008. Most of the expenditure categories expanded more slowly in 2008 than in 2007. The payroll tax reductions – which are recorded as business subsidies in accordance with the ESA 95 – showed a much smaller increase than in previous years, despite the introduction in the final quarter of 2007 of a general reduction applicable to all workers employed by firms. Their contribution to expenditure growth fell sharply, dropping to 0.8 percentage point, compared to 1.3 point in 2007. The expenditure categories which expanded

TABLE 35 ADJUSTED PRIMARY EXPENDITURE BY GENERAL GOVERNMENT SUB-SECTOR (1) (2)

(deflated by the HICP, percentage changes compared to the previous year)

	2004	2005	2006	2007	2008 e	Average 1998-2008 e	*p.m. 2008 e, not adjusted*
Entity I	3.0	2.0	1.7	3.8	3.2	2.6	*2.3*
Federal government	3.4	2.8	2.0	4.2	3.6	2.6	*1.5*
Social security	2.8	1.7	1.6	3.6	3.1	2.6	*2.7*
Entity II	3.2	2.2	3.2	1.2	0.5	2.6	*0.1*
Communities and regions	5.8	–1.0	3.8	2.6	0.8	2.5	*0.4*
Local authorities	–0.6	6.9	2.3	–0.8	0.1	2.8	*–0.4*
General government	3.1	2.1	2.2	2.9	2.3	2.6	*1.4*

Sources: NAI, NBB.
(1) The expenditure of the general government sub-sectors does not include mutual transfers.
(2) Real growth adjusted for the influence of cyclical and non-recurrent or fiscally neutral factors, and for indexation effects.

more strongly than in the previous year include current purchases of goods and services, which were paid for more promptly at the end of the year, a sound move in the current context. Payments of current transfers to the rest of the world – comprising international cooperation and a part of the European budget funding – and to a lesser extent current transfers to households were also speeded up.

The volume growth of adjusted social security expenditure decelerated slightly in 2008, to 3.1 p.c. This was due mainly to the relatively moderate rise in health care expenditure, totalling around 2.5 p.c., or 1 percentage point less than in 2007. Owing to its significant size – at over one-third of total social spending – and volatility, health care expenditure generally has a decisive influence on the movement in social security spending. Taking account of intervention in favour of self-employed persons in respect of "minor risks", health care expenditure grew by 4.1 p.c. in real terms in 2008.

Expenditure on pensions recorded a stronger rise in 2008 than in latter years. For one thing, there was a particularly sharp increase in the number of pensioners, due in particular to general demographic trends and especially the baby boom following the Second World War. Also, the government took a series of social measures which benefited certain pensioners and totalled around 350 million euro, mainly by way of adjustments in line with prosperity, in order to counteract the spontaneous decline in the relative wealth of the oldest pensioners, and increases in certain minimum amounts.

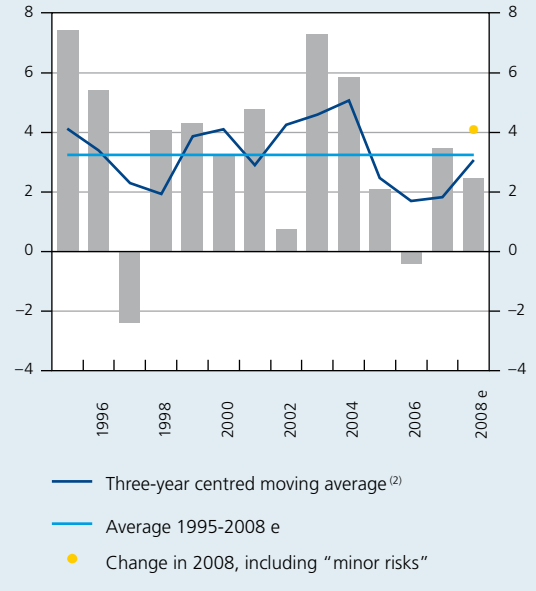
Practically all other social spending categories also recorded real – adjusted – growth which was slightly below the 2007 figure. That moderation occurred despite new social measures which came into effect in 2008. Many types of benefits – family allowances, unemployment benefits, incapacity benefits – were increased by a total of around 150 million euro.

Finally, the subsidies paid to businesses by social security recorded a further sharp increase, principally as a result of service voucher scheme activities. The total budget allocated to this scheme increased by more than 200 million euro, to almost 900 million. That figure disregards the tax allowances also granted to users of these vouchers.

The volume growth of the adjusted primary expenditure of the communities and regions slowed even more sharply than in 2007, amounting to just 0.8 p.c. This marked deceleration was due among other things to a limited rise in wages – excluding indexation – in this sub-sector;

CHART 57 PUBLIC HEALTH CARE EXPENDITURE (1)

(deflated by the HICP, percentage changes compared to the previous year)



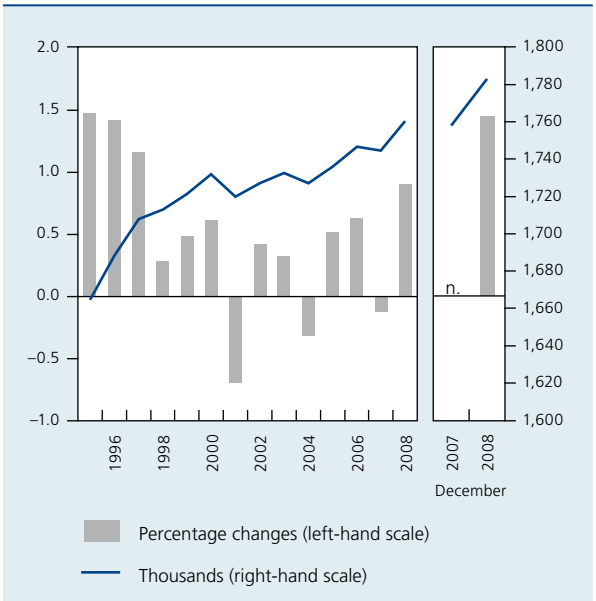
Sources : NAI, NBB.

(1) Public spending on health care, excluding sickness and invalidity benefits, benefits for the disabled, transfers to institutions caring for the disabled, and spending on long-term care insurance.

(2) For 2009, the real growth figure was assumed to be equal to the average for 1995 to 2008.

CHART 58 PRIVATE SECTOR PENSIONERS

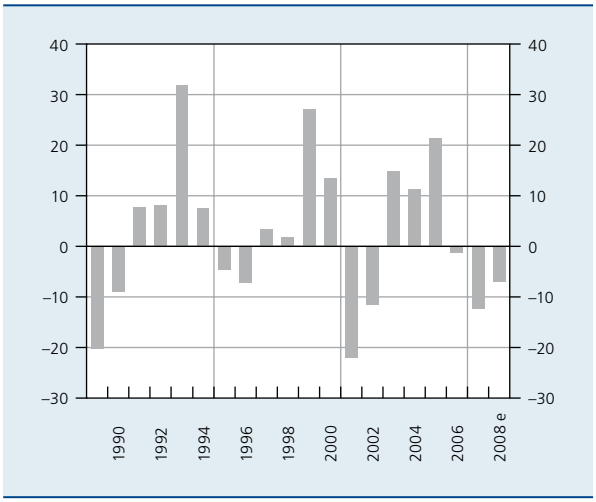
(as at 1 January in each year, unless otherwise stated)



Sources : NPO, NBB.

CHART 59 INFLUENCE OF THE ELECTORAL CYCLE ON GROSS FIXED CAPITAL FORMATION OF LOCAL AUTHORITIES [1] [2]

(percentage changes in volume compared to the previous year, excluding property sales)



Sources : NAI, NBB.

(1) The vertical grey lines indicate the end of the local authority legislative terms.

(2) Deflated by the prices of gross fixed capital formation of general government.

practically all other expenditure categories recorded a moderate increase.

The pattern of the real primary expenditure of local authorities is greatly influenced by the impact of the electoral cycle on their investment. Thus, investment generally expands strongly in the run-up to the local elections – last held in 2006 – while declining in the two post-election years. These changes of tempo are reflected in the total local primary expenditure, which increased by only 0.1 p.c. in 2008.

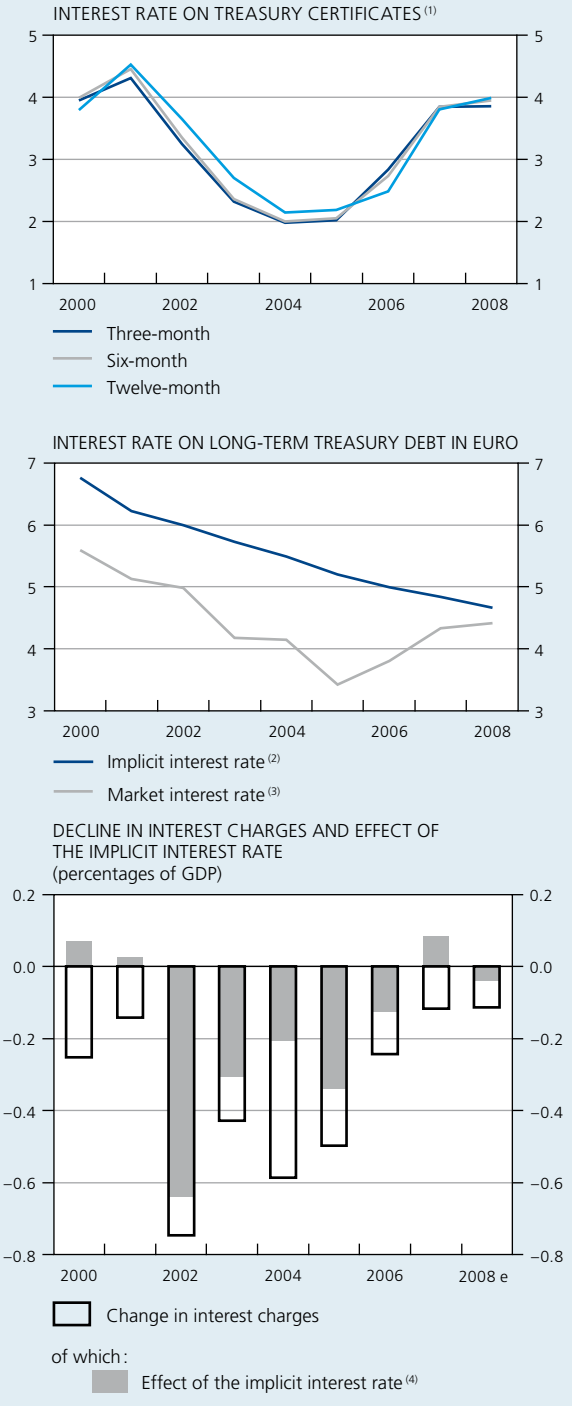
Interest charges of general government

Since reaching a peak of 11.6 p.c. of GDP in 1990, the interest charges of general government have declined, falling to 3.7 p.c. of GDP during the year under review. The reduction in these charges, averaging 0.4 percentage point of GDP per annum, is due largely to the fall in the implicit interest rate on the public debt, although the systematic decline in the debt ratio from its peak attained in 1993 is also a factor.

The decline in interest charges came to only 0.1 percentage point of GDP in 2008. As explained in box 13, the general government debt ratio escalated in the final quarter of the year under review, owing to the government's injections of capital into a number of Belgian financial

CHART 60 BREAKDOWN OF THE CHANGE IN INTEREST CHARGES

(percentages, unless otherwise stated)



Sources : FPS Finance, NAI, NBB.

(1) Average implicit rate on treasury certificates.

(2) Ratio between interest charges (including issue premiums) and the average monthly outstanding debt.

(3) Average interest rate on ten-year government bonds.

(4) Ratio between interest charges in the current year and debt at the end of the preceding year. Adjustments were made for the calculation of the implicit rate in 2005 and 2008, in order to allow for the respective effects of the incorporation of the RIF in general government and the capital injections by the government in a number of financial institutions on account of the financial crisis.

institutions in the context of the financial crisis. Those interventions did not take place until the end of 2008, so that the additional interest charges entailed were fairly limited overall in that year.

The further decline in interest charges is therefore due to the fall in the debt ratio which preceded the financial system rescue operations, and to the small contraction in the implicit interest rate. The latter continued to fall despite the effect of the slight rise in short-term interest rates (the implicit rate on twelve-month treasury certificates having increased from 3.8 p.c. in 2007 to 4 p.c. in 2008), which was more than offset by the further fall in the implicit interest rate on the long-term debt. The difference between the interest rate on new issues of long-term securities, which make up the bulk of the total public debt, and the implicit interest rate on the long-term debt, in fact remained favourable, though it was very narrow at less than 25 basis points. The scope for refinancing debts at lower interest rates in the future as they reach maturity therefore seems considerably reduced, and will depend on future movements in market interest rates. Consequently, it is far from certain that the previous downward trend in the implicit interest rate on the public debt will be maintained in the years ahead.

Overall balance of general government sub-sectors

The movement in the budget balance of general government is the outcome of developments which vary between sub-sectors. The deficit recorded during the year under review resulted from a deficit in Entity I, comprising the federal government and social security, which was partly offset by a small surplus in Entity II, comprising the communities and regions plus the local authorities.

The federal government saw its deficit expand to 1.5 p.c. of GDP, a deterioration of 0.5 percentage point compared to 2007. This was due mainly to the steady growth of expenditure, although the reduction in revenues was also a factor. That reduction is attributable to the strong expansion of tax revenues transferred to the other general government sub-sectors. The increase in public spending is due in particular to the impact of rising inflation and the acceleration in the rate of paying invoices at the end of the year.

Social security recorded a surplus for the third year running, though it was down from 0.5 to 0.4 p.c. of GDP. Both revenue and expenditure increased sharply. Social contributions rose faster than GDP, owing to the increased share of wages in the latter. Also, "alternative funding", which is based on transferring to social security a share of the tax revenues collected by the Treasury, showed a

TABLE 36 OVERALL BALANCE OF GENERAL GOVERNMENT, AND PER SUB-SECTOR

(percentages of GDP)

	2004	2005	2006	2007	2008 e
Primary balance	4.5	1.6	4.3	3.5	2.7
Entity I	4.2	1.4	4.1	3.1	2.4
Federal government	4.3	1.5	3.8	2.6	2.1
Social security	0.1	0.0	0.4	0.5	0.4
Entity II	0.3	0.3	0.2	0.5	0.3
Communities and regions	0.3	0.4	0.3	0.4	0.1
Local authorities	0.0	–0.1	–0.1	0.1	0.2
Interest charges	4.7	4.2	3.9	3.8	3.7
Overall balance	–0.2	–2.6	0.3	–0.3	–1.1
Entity I	–0.1	–2.5	0.4	–0.5	–1.2
Federal government	–0.1	–2.5	0.0	–1.1	–1.5
Social security	0.1	0.0	0.4	0.5	0.4
Entity II	–0.1	0.0	–0.1	0.2	0.1
Communities and regions	0.1	0.2	0.2	0.3	0.0
Local authorities	–0.2	–0.3	–0.3	–0.1	0.1

Sources: NAI, NBB.

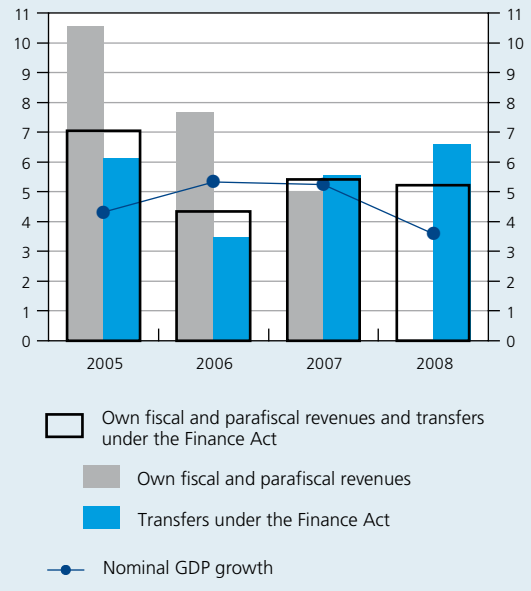
sizeable increase, though it was not as large as expected owing to the exhaustion of the transferable VAT revenues. The steady expansion of expenditure is due mainly to the impact of rising inflation on social benefits. Private sector pensions recorded a marked increase, partly as a result of the adjustments to pension benefits in line with prosperity, and the rising number of pensioners.

While the communities and regions had recorded a continuous budget surplus since 2004, their operating balance deteriorated by 0.3 percentage point of GDP in 2008, closing with a balanced budget. Regional taxes stagnated during the year under review, in contrast with the steep rise in previous years. Registration fees were actually down against the 2007 figure, owing to the cooling of the property market. That decline was particularly pronounced in the Brussels Capital Region. However, the smaller increase in regional taxes was more than offset by the very strong rise in the share of personal income tax and VAT allocated to the federated entities by the federal government under the Finance Act. The large increase in the financial resources transferred to them is derived, in particular, from the balance remaining after the final settlement for 2007. That balance was positive because, in 2007, the expansion of economic activity, which largely determines the volume of these transfers, exceeded the forecast. The transfers were also augmented by the impact of much higher than expected inflation which was already taken into account in the transfers paid in 2008. Since the revenue structure varies considerably from one entity to another – the Brussels Capital Region having a particularly high percentage of own tax revenues – these developments had a variable impact on the total revenues of these entities. The communities and regions also recorded a very steep rise in their expenditure, partly owing to the assumption by the Flemish Region of part of the debt of the municipalities in its territory, amounting to around 600 million euro.

The local authority balance was converted from a deficit of 0.1 p.c. of GDP in 2007 to a 0.1 p.c. surplus. This improvement is due to the substantial increase in local revenues resulting from the debt assumption described above, while local expenditure hardly changed in relation to GDP.

CHART 61 REVENUES OF THE COMMUNITIES AND REGIONS [1]

(percentage changes compared to the previous year)

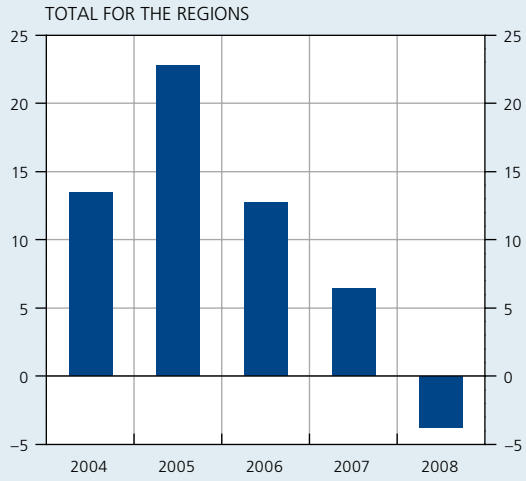


Sources : NAI, NBB.

(1) The data have been adjusted to take account of the change in Aquafin's funding, which is no longer based on the revenues generated by water charges but on the fees paid by the Flemish Region water supply companies.

CHART 62 REGISTRATION FEES

(percentage changes compared to the previous year)



CHANGE IN 2008 :

Brussels Capital Region	–10.6
Flemish Region	–2.7
Walloon Region	–1.8

Sources : NAI, NBB.

6.2 Cyclically adjusted and structural budget balances

Analysis of the fiscal policy stance cannot be based exclusively on the apparent movement in budget aggregates. It is necessary to make an adjustment for the effect of

the economy's automatic stabilisers and the impact of temporary factors. For this purpose, the ESCB uses a harmonised method of eliminating cyclical influences from the budget balances. Following an additional adjustment for temporary factors, it is possible to ascertain the level of the general government structural financing balance and changes in that balance. These concepts have to be treated with some caution since, for the recent period, the data are subject to sometimes substantial revisions.

Indicators constructed on that basis show that the structural financing balance deteriorated by 0.6 percentage point of GDP in 2008. Since interest charges were down slightly, that change is due exclusively to the decline in the structural primary surplus.

The less marked deterioration in the structural financing balance compared to the actual balance is due to the adverse impact on the latter of the automatic stabilisers of public finances.

Thus, the cyclical slowdown exerted a negative effect estimated at 0.4 percentage point of GDP. Activity growth remained below its trend rate, and the negative influence of the business cycle was reinforced by composition effects unfavourable to public finances. In fact, the real expansion of some of the revenue and expenditure components which, such as earned incomes and private consumption, have a very marked influence on the general government account, remained below their trend growth to an even greater degree than GDP. It should be noted that this approach based on composition effects differs from that used at the beginning of this chapter, where the analysis is based on nominal changes in GDP and its components.

Temporary factors had a favourable influence on the movement in the budget balance. While they had caused it to deteriorate by 0.2 percentage point of GDP in 2007, their net effect on the accounts in the year under review was neutral.

When the Stability and Growth Pact was reformed in 2005, the structural budget balances became more important for the assessment of fiscal policy under the European surveillance procedures. The reformed pact in fact stipulates that the budget outcomes must be adjusted for cyclical and temporary factors when compared with the medium-term objective set for public finances, and with the budget path required to achieve it. Under the European budgetary rules, the method of cyclical adjustment differs from that used by the ESCB; this method, applied by the EC, is based on the concept of potential, rather than trend, GDP and excludes on an annual basis the composition effects of economic growth. The concepts of potential and trend GDP both aim to ascertain the fundamental trend in economic growth, leaving aside cyclical fluctuations: the first is based on the use of a production function which takes account of the available stocks of labour and capital and the movement in TFP, while the second is based on exclusive use of a method of statistical smoothing (*Hodrick-Prescott* filter). Moreover, the non-recurrent measures taken into account are not necessarily the same in the two adjustment methods.

TABLE 37 MOVEMENT IN THE STRUCTURAL BUDGETARY POLICY

(change compared to the previous year, percentage points of GDP, unless otherwise stated)

	2005	2006	2007	2008 e
Recorded overall balance	–2.4	2.9	–0.6	–0.8
Cyclical component [1]	–0.3	0.6	0.9	–0.4
Non-recurrent factors	–2.8	2.8	–0.9	0.2
Structural overall balance	0.7	–0.5	–0.6	–0.6
p.m. Level of the structural overall balance [2]				
According to the NBB methodology	*–0.1*	*–0.6*	*–1.1*	*–1.7*
According to the EC methodology	*–0.9*	*–1.4*	*–1.4*	*–1.7*
Interest charges	–0.5	–0.3	–0.1	–0.1
Structural primary balance	0.3	–0.7	–0.6	–0.6

Sources: EC, NAI, NBB.

(1) According to the methodology described in Bouthevillain C., Ph. Cour-Thimann, G. van den Dool, P. Hernández de Cos, G. Langenus, M. Mohr, S. Momigliano and M. Tujula (2001), *Cyclically adjusted budget balances: an alternative approach*, ECB, Working Paper 77. A less technical explanation of this methodology is presented in box 6 entitled *Cyclically adjusted budget balances: method of calculation used by the ESCB* in the NBB's 2003 Report (Part 1), pp. 83-84.

(2) Percentages of GDP.

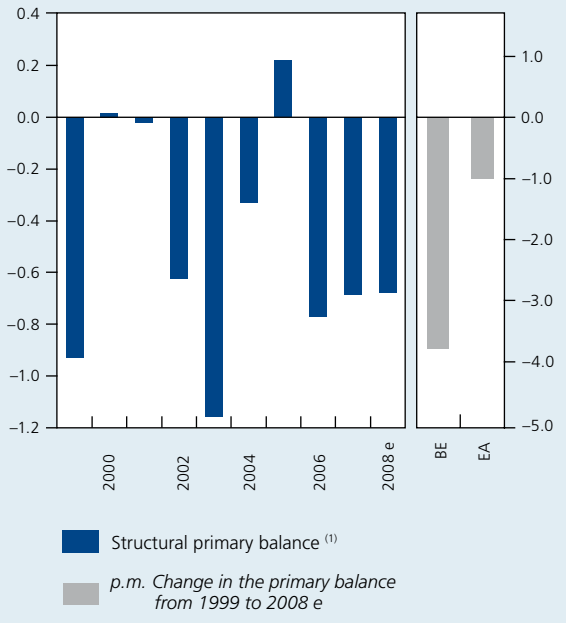
Box 12 – Belgian public finances since the introduction of the euro : a structural easing

In 1999, Belgium was among the first wave of countries to adopt the euro, as it satisfied the convergence criteria set by the Maastricht Treaty. By 1997, the budget deficit had fallen below the reference value of 3 p.c. of GDP, and although the public debt was still well above the reference value of 60 p.c. of GDP, it had declined sufficiently in the run-up to monetary union. This was due to the substantial budgetary efforts made since the definition of the convergence criteria. The structural primary balance, which indicates the fiscal policy stance, had in fact improved by around 5 percentage points of GDP between 1992 and 1998.

In the initial years following the introduction of the euro, the Belgian authorities undertook to continue the consolidation of public finances. Thus, in 2000, following the elimination of the budget deficit, they had decided in that year's stability programme to set themselves for the first time the target of gradually creating a structural surplus, in order to prepare public finances for the budgetary cost of population ageing, which will mainly have an impact from 2010. This target, which implied achieving a surplus of 0.7 p.c. of GDP in 2005, was in line with the recommendations made at the time by the "Public Sector Borrowing Requirement" section of the High Council of Finance, which considered such a budget path essential to ensure the sustainability of public finances. It was also in this context that the Ageing Fund was set up, the intention being to accumulate reserves, mainly via

BELGIAN FISCAL POLICY SINCE THE INTRODUCTION OF THE EURO

(change compared to the previous year, unless otherwise stated ; percentage points of GDP)



Sources : EC, NAI, NBB.

(1) Adjusted for the influence of cyclical and temporary factors. The methodology used to assess the cyclical component is described in Bouthevillain C., Ph. Cour-Thimann, G. van den Dool, P. Hernández de Cos, G. Langenus, M. Mohr, S. Momigliano and M. Tujula (2001), *Cyclically adjusted budget balances : An alternative approach*, ECB, Working Paper 77. A less technical explanation of this methodology is presented in box 6 entitled *Cyclically adjusted budget balances: method of calculation used by the ESCB* in the NBB's 2003 Report (Part 1), pp. 83-84.

budget surpluses, in order to cater for the expected consequences of population ageing. Moreover, such a policy is needed in order to prevent essential budget adjustments from being postponed disproportionately to future generations.

In reality, the structural implementation of this strategy was constantly postponed, and the budget targets were not achieved, or were systematically relaxed. During the year under review, a budget deficit was recorded which even exceeded that of 1998. In fact, the budgetary scope derived from the sizeable fall in interest charges since the introduction of the euro was not reserved for more rapid debt reduction, but instead was used for a substantial easing of fiscal policy. Since 1999, the primary balance has been eroded in almost every year, deteriorating by 3.8 percentage points of GDP – almost 5 points in structural terms – over the ten years following the introduction of the euro, thus almost totally wiping out the improvement achieved between 1992 and 1998. The relaxation of fiscal policy over the past ten years is attributable to both revenue and primary expenditure.

On the revenue side, mention should be made of the large reductions in personal income tax and social contributions. These reductions in charges for households were only partly offset by increases in other levies, such as certain consumption taxes, and by other factors such as the automatic increase in the tax burden resulting from the progressive character of personal income tax. Expressed as a percentage of trend GDP, public revenues have therefore clearly displayed a structural decline in recent years, partly on account of the policy designed to boost the economy's potential by reducing the charges on the factor labour.

The real structural growth of primary expenditure averaged 2.6 p.c. per annum during the period 1998-2008. Since this growth considerably outpaced the trend growth of activity, structural primary expenditure increased significantly in relation to trend GDP. The main expenditure categories which grew faster than trend GDP were health care expenditure, subsidies (an item which records expenditure relating to service vouchers and certain reductions in charges) and, to a lesser extent, civil service pay and current purchases of goods and services.

A relaxation of budget discipline connected with what is sometimes called "post-Maastricht fatigue" was seen not only in Belgium but also in the rest of the euro area, on average. Nonetheless, the deterioration in the primary balance since the introduction of the euro in 1999 was much smaller in the euro area than in Belgium, indicating that the relaxation of fiscal policy was much less marked in the other euro area countries.

The systematic attenuation of the stated budget targets cannot be ascribed to the business cycle. In the last ten years, the economic climate has tended to be favourable, since economic activity expanded by an average of 2.2 p.c. per annum, i.e. slightly in excess of trend growth. In that context, it is worth pointing out the importance of the quality of the fiscal procedures for controlling public finances. In that regard, the "Public Sector Borrowing Requirement" section of the High Council of Finance stated in the opinion which it issued in June 2008 that fiscal policy must be based on plausible assumptions. For example, a credible budget should incorporate only measures which are sufficiently detailed and which, barring exceptional circumstances, will actually be implemented. Moreover, the estimate of public revenues must be realistic, and preferably cautious. The "Public Sector Borrowing Requirement" section stated in this connection that the methods used to estimate tax revenues when the budget is drawn up should be subjected to an in-depth appraisal.

The credibility of fiscal policy may also play a role in the determination of the financial market interest rates on the public debt. In this connection, it should be noted that – as explained in chapter 7 on the financial accounts of individuals, enterprises and general government – the spread between the benchmark rates on ten-year Belgian and German government bonds has widened significantly, increasing by around 80 basis points between mid 2007 and the end of 2008. While that is due largely to the international financial crisis, it is also more generally a sign that investors are allowing for the fact that securities issued by some countries are riskier and less liquid than those issued by others. The latest developments indicate that it is essentially in the case of countries with a high public debt or substantial actual or expected deficits that the risk premiums have been revised upwards. In that context,

a credible fiscal policy geared to a rapid reduction in the debt and pre-financing of a large part of the cost relating to population ageing, via the gradual creation of a structural surplus in accordance with the undertakings given at European level, is the best way of ensuring a reduction in the cost of financing the Belgian public debt. Once economic activity has resumed a more normal growth rate, it will be desirable to return promptly to the budget path recently advocated by the "Public Sector Borrowing Requirement" section of the High Council of Finance. However, that will only be possible if public revenues are collected correctly, and above all, if the trend towards rising primary expenditure is halted.

Despite these differences of methodology, the EC's assessment of the structural financing balance recorded in 2008 is the same as the Bank's estimate. According to both approaches, the year under review ended with a structural deficit of 1.7 p.c. of GDP.

6.3 Debt of general government

In 2008, the debt of general government amounted to 88.7 p.c. of GDP. It was thus 4.8 percentage points of GDP higher than in the previous year. That is the first increase in the debt ratio since 1993, the year when it

TABLE 38 CONSOLIDATED GROSS DEBT OF GENERAL GOVERNMENT

(percentages of GDP, unless otherwise stated)

	1993	Average 1994-2004	2005	2006	2007	2008 e	Change between 1993 and 2008 e
Debt level (end of period)	133.5		92.1	87.8	83.9	88.7	
p.m. Idem, euro area	*65.1* [1]	*70.7* [1]	*70.2*	*68.5*	*66.4*	*69.0*	
Change in the debt		–3.6	–2.2	–4.3	–3.9	4.8	–44.9
Endogenous change [2]		–2.9	–1.3	–5.0	–4.1	–1.8	–43.4
Primary balance required to stabilise the debt [2]		2.6	0.3	–0.7	–0.5	0.9	
Implicit interest rate on the debt [3] [4]		6.2	4.8	4.7	4.7	4.8	
Nominal GDP growth [3]		3.9	4.3	5.3	5.2	3.5	
Actual primary balance		5.5	1.6	4.3	3.5	2.7	
Change resulting from other factors		–0.7	–0.8	0.7	0.2	6.6	–1.6
Transactions with the NBB (including capital gains on gold)		–0.4	0.0	0.0	0.0	0.0	
Equity investments [5]		–0.2	–0.1	0.2	0.4	4.9 [8]	
Loans [6]		–0.2	–0.1	–0.1	0.0	1.4 [8]	
Changes to sectoral classifications		0.1	–0.4	0.0	0.0	0.0	
Other [7]		0.0	–0.2	0.6	–0.2	0.2	

Sources: EC, NAI, NBB.

(1) Excluding countries which joined the euro area after 2006.

(2) The endogenous change in the public debt is indicated by the difference between the primary balance required to stabilise the debt – i.e. the balance equal to the difference between the implicit interest rate on the debt and the nominal GDP growth rate, multiplied by the ratio between the debt at the end of the previous year and the GDP of the period considered – and the actual primary balance.

(3) Percentages.

(4) Adjusted to neutralise the impact of FISIM on interest charges.

(5) Net equity investments, excluding transactions with the NBB.

(6) Net lending.

(7) Principally the net formation of other financial assets, the impact of foreign exchange differences and issue and redemption premiums, and statistical variations.

(8) Owing to the decision by the Brussels Court of Appeal on 12 December 2008 to suspend the sale of *Fortis*' Belgian activities to *BNP Paribas*, the acquisition of a stake in the defeasance structure created to take over the *Fortis Bank Belgium* structured product portfolio, named *Royal Park Investments*, and the loans in its favour could not be effected before the end of the year under review. Nonetheless, the Federal Participation and Investment Corporation, which forms part of the general government sector, borrowed funds for that purpose totalling 5.8 billion euro.

had peaked at 133.5 p.c. of GDP. Between that peak and 2007, the debt had fallen at an annual average rate of 3.5 percentage points of GDP.

The surge in general government debt is due primarily to exogenous factors giving rise to new borrowings amounting to 6.6 percentage points of GDP. Those factors having an impact on the debt but not on the overall balance essentially comprise the capital injections arranged for a number of institutions in the context of the crisis which engulfed the financial sector towards the end of the year under review. Between September and December, the rescue operations thus conducted by the Belgian government in respect of that sector augmented the debt by 6.3 percentage points of GDP. The practical arrangements for these government interventions are described in detail in box 16 of chapter 8 on financial stability, while their treatment in the public finance statistics is examined in greater depth in box 13 of this chapter.

The endogenous movement in the public debt made a contribution to the reduction in the general government debt of 1.8 percentage points. However, that was much less than in 2006 and 2007 : not only did the actual primary surplus deteriorate by 0.9 percentage point of GDP, but also the – lower – nominal GDP growth fell short of the implicit interest rate, whereas it had exceeded that figure in the preceding two years. In 2008, the primary surplus remained sufficient to prevent a repeat of the 'snowball effect' caused by interest charges on the public debt, but it must be said that the surplus has shrunk significantly over the years.

Box 13 – Impact on public finances of government interventions on account of the financial crisis

In response to the financial crisis, governments – in Belgium as in many other countries – took various measures, such as providing funds for financial institutions in the form of equity investments or loans, or offering a State guarantee. In chapter 8 on financial stability, box 16 gives a detailed description of the practical arrangements for these interventions, but to ensure a clearer understanding of the implications for public finances it seemed necessary to explain the statistical rules governing their recording in the real and financial national accounts. In order to ensure the international harmonisation of economic statistics, the compilation of these accounts is governed by the methodologies developed and coordinated by a number of international institutions, namely the United Nations, the World Bank, the EC, the IMF and the OECD. In the EU, the accounting rules applicable are determined by the European System of National and Regional Accounts, more commonly known by the acronym ESA 95.

Government investments in the equity of companies are recorded in the national accounts as financial transactions with no effect on the overall balance, provided the governments receive in exchange for their contribution a financial asset of the same value, potentially generating dividends and/or capital gains. To that end, the transaction value of a financial deal must correspond to the market price or fair value of the financial assets concerned. The part of the capital injection which exceeds the fair value must be treated as a capital transfer with a negative impact on the overall balance. These transactions increase the general government debt by the amount of the borrowings contracted to finance the purchase of the shares and other equity. New financial assets are recorded at the price paid in the financial accounts of general government, to the extent that the price does not exceed their fair value.

In the case of repurchase of an asset or investment in a special purpose vehicle – an intervention method often used in financial restructuring, as a means of separating toxic assets – the statistical treatment also depends on the value of the transaction. If it is recorded at fair value, the financial transaction will only affect the financial accounts, both debts and outstanding assets. If the price which the government pays exceeds the fair value of the assets, the difference is treated as a capital transfer and therefore creates a debit in the real accounts.

The government may also inject funds into a company in the form of a loan. If the loan is granted on market conditions, and if the firm is obliged to repay the principal and is charged interest, that is a financial transaction. It therefore does not affect the overall balance of general government, but does affect the financial accounts,

either because the government has to borrow to finance the granting of the loan, or because the loan takes the place of other financial assets.

If the government decides to hand over to the former shareholders part of the gains or dividends realised on its shares, that is treated as a gift from the statistical point of view, and must be recorded as a transfer of capital.

Another government intervention mechanism is the granting of guarantees, to cover savers' deposits, interbank loans, loans by central banks to financial companies, etc. The granting of guarantees which are unlikely to be invoked has no immediate impact on either the overall balance or the debt of general government, as these guarantees are regarded as off balance sheet operations in the national accounts. If the guarantee is invoked, a capital transfer has to be recorded in the sum of the amount claimed, with a negative effect on both the overall balance of general government and the financial accounts. Any commission relating to the grant of the guarantee is treated as revenue from the sale of services.

DIRECT IMPACT IN 2008 ON THE CONSOLIDATED GROSS DEBT OF BELGIAN GENERAL GOVERNMENT OF THE RESCUE OPERATIONS FOR FINANCIAL INSTITUTIONS

(capital injections, billions of euro unless otherwise stated)

Fortis	
Capital injections	9.4
Defeasance structure[1]	5.8
Dexia[2]	1.5
KBC	3.5
Ethias	1.5
Total	**21.7**
p.m. Idem, percentages of GDP	6.3

Source: NBB.

(1) Owing to the decision by the Brussels Court of Appeal on 12 December 2008 to suspend the sale of *Fortis*' Belgian activities to *BNP Paribas*, the acquisition of a stake in the defeasance structure created to take over the *Fortis Bank Belgium* structured product portfolio, named *Royal Park Investments*, and the loans in its favour could not be effected before the end of the year under review. Nonetheless, the Federal Participation and Investment Corporation, which forms part of the general government sector, borrowed funds for that purpose totalling 5.8 billion euro.

(2) The Flemish Region's contribution totalling 500 million euro is disregarded as it was made by drawing on that entity's reserves.

Overall, from the end of September to the end of the year under review, the capital contributions by the federal government and the regions to financial institutions within their jurisdiction represented 22.2 billion euro. Almost all of that had to be financed by borrowing, so that the increase in the consolidated gross public debt following these operations came to 21.7 billion, or 6.3 p.c. of GDP. As the counterpart to that debt, the government formed new financial assets for practically the same amount.

When this Report went to press, Eurostat – the Statistical Office of the EC – was still considering the exact interpretation of the accounting rules, to ensure that they are applied consistently in all the EU Member States. Pending Eurostat's final conclusions, due to be published in March 2009, the estimation of the overall balance of Belgian general government in 2008 takes no account of any direct effect of the measures adopted to bail out the Belgian financial institutions stricken by the financial crisis.

Charles Camille Chazal, face of the allegory for Hainaut, detail of a design for the security background of an unproduced banknote, and featuring the allegories from Belgium's nine provinces, undated (circa 1870), National Bank of Belgium collection

Financial accounts of households, enterprises and general government

7.

7.1 Principal effects of the financial crisis

The financial crisis had a massive impact on the financial operations of Belgian households, enterprises and general government. The effects were most apparent in the closing months of last year, but the analysis which follows can generally only consider developments during the first three quarters, as the financial accounts were only available for that period when this Report went to press.

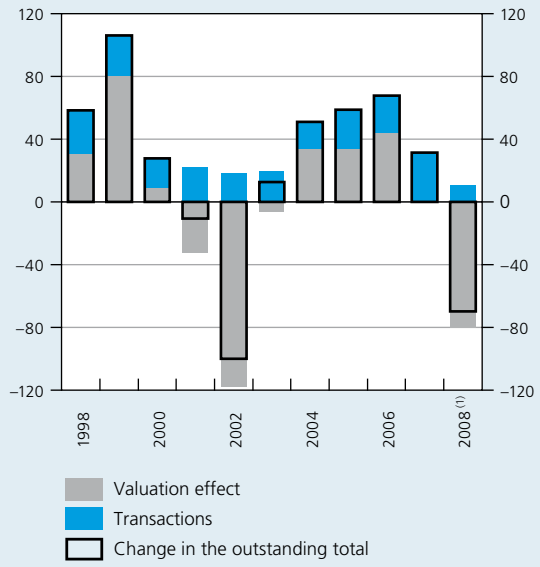
Thus, in 2008, the outstanding total of the financial assets held by households exhibited substantial valuation effects, mainly reflecting asset price changes and, to a lesser extent, exchange rate fluctuations. Owing to the collapse of share prices, losses totalling 80 billion euro were recorded in the first nine months of 2008, essentially on investments in shares and UCI units. Taking the year under review as a whole, losses could amount to approximately 150 billion euro, thus exceeding those recorded in 2002 – totalling 118 billion – after the bursting of the technology stocks bubble. This decline in assets of around 17 p.c. formed one of the channels through which the international financial crisis infected the real economy.

Apart from their financial assets, Belgian households have substantial real estate assets which have risen considerably over the past ten years: estimated at 355 billion euro at the end of 1997, they came to 900 billion ten years later. Property wealth has therefore usurped the place of financial wealth in their total net assets: the share of real estate increased from 41 p.c. at the end of 1997 to 58 p.c. by mid 2008.

Nonetheless, the value of the real estate owned by households began to decline by the last quarter of 2007, in the wake of slackening activity and lower price increases in the secondary property market. The real estate portfolio is estimated on the basis of the number of existing homes recorded by the land registry and the average price of property transactions. Since the total number of homes tends to grow only slowly, the movement in property assets mirrors very closely the movement in property prices. Having reached over 10 p.c. per annum from 2004 to 2006, the property price rise gradually slowed in 2007 and 2008. In contrast to the abrupt correction seen in some EU countries, the deceleration in the rate of these price increases measured on the basis of transactions was quite gentle: in the first half of 2008, prices continued to rise by 5.7 p.c. year-on-year, but the short-term dynamism measured by changes in the price index from one half year to the next slowed sharply to 1 p.c. This figure conceals divergences according to the type of property sold, as house prices fell while prices of apartments continued to rise. When valuing real estate assets, it is necessary to take account of their actual structure which may differ from the underlying transaction structure: in 2007, apartments represented 28 p.c. of sales whereas they accounted for only 21 p.c. of the Belgian housing stock. On that basis, in view of the adverse movement in house prices, it can be

CHART 63 BREAKDOWN OF THE CHANGE IN THE OUTSTANDING TOTAL OF FINANCIAL ASSETS HELD BY HOUSEHOLDS

(billions of euro)



Source: NBB.
(1) Data for the first nine months.

estimated that real estate assets in fact declined slightly, falling from 909 billion euro at the end of 2007 to 901 billion as at 30 June 2008.

The net total assets of households - defined as the sum of their financial and real estate assets less the value of their liabilities – therefore declined in the first six months of the year. As at 30 June 2008, the figure came to 1,564 billion euro, about 86 billion less than on 31 December 2007.

Another direct and readily measurable effect of the financial crisis is the rise in the financing cost confronting non-financial corporations. Since the outbreak of financial turbulence in August 2007, the total cost of external financing for non-financial corporations – calculated by weighting the nominal cost of the various sources of funding according to their respective outstanding amounts – increased by around 40 p.c. From the third quarter of 2008, Belgian firms therefore faced financing costs which initially equalled and later far exceeded the peak reached in 2002, at the time of the previous cyclical downturn. It should be remembered that, during that period, corporate financing conditions had already been particularly bad owing to a highly uncertain economic climate.

Measured year-on-year, the average level of the external financing costs of firms was around 16 p.c. higher in 2008 than it had been in 2007. That rise is largely attributable to the higher cost of raising market finance by issuing shares or debt securities, reflecting the growing risk premiums demanded by investors as the financial crisis worsened and spread to the real economy. Conversely, interest rates on bank loans increased only slightly during the past year, thus making only a small contribution to the increase in the overall cost of business financing in 2008. In real terms, that cost increased more steeply as inflation expectations showed a marked fall in the second half of the year.

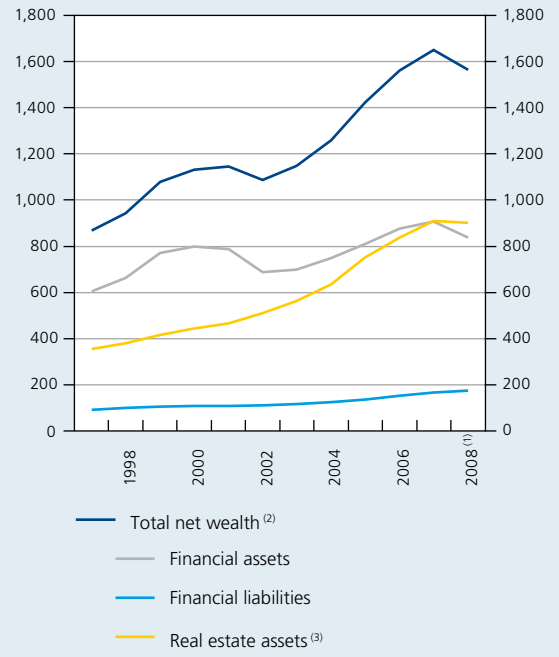
The rates charged on bank loans depend on the costs which banks incur in raising their finance. Usually, those costs depend largely on the current and expected level of the Eurosystem's key policy interest rate, as any change in that rate is, in principle, transmitted to the money market and thus influences the costs borne by credit institutions in obtaining finance, notably via the short-term interbank market.

Since the financial crisis erupted, banks have enjoyed considerable support from the abundant liquidity which the Eurosystem injected without charging risk or liquidity premiums, to alleviate the virtual paralysis of the interbank market. Consequently, the increased cost of their sources of funding on the financial markets, owing to the risk premium demanded of them by investors or the liquidity conditions on some of those markets, had only a moderate impact on the interest rates which the banks charged on business loans. Moreover, the successive cuts in the key policy rate during the last three months of the year began to have an effect on debit interest rates by November. Thus, in December 2008, short- and medium-term credit interest rates for businesses were respectively 120 and 90 basis points lower than those prevailing a year earlier, while for long-term loans the rate dropped to practically the same level.

Analysis of bank interest rates and/or margins is not enough to define the lending policy of banks, as the latter also have other instruments available for restricting the supply of credit, if appropriate. In particular, when the economic outlook deteriorates sharply and borrower quality proves very difficult to assess, banks may prefer to ration credit rather than increase their rates, so as to

CHART 64 HOUSEHOLD WEALTH

(billions of euro)



Sources : DGSEI, Stadim, NBB.

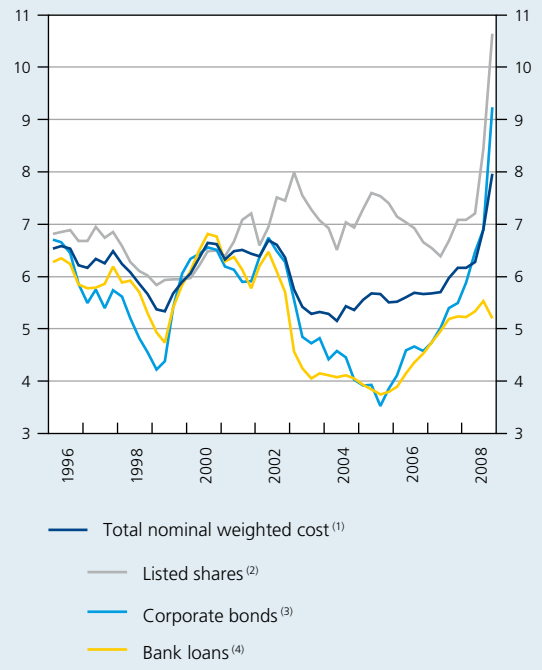
(1) Data as at the end of June for real estate assets and total net wealth; as at the end of September for financial assets and liabilities.

(2) Sum of the financial and real estate assets of households, less the value of their liabilities.

(3) Estimate based on the number of houses and apartments recorded by the land registry in the three regions of Belgium. The housing stock is valued on the basis of the average prices of property transactions (houses and apartments) and per region. The value of building plots and other real estate (castles, rental property, etc.) is not included in the estimate, neither is the value of any property in other countries. Conversely, the estimate is based on the assumption that all the housing recorded in national territory belongs to resident households.

CHART 65 EXTERNAL FINANCING COSTS OF NON-FINANCIAL CORPORATIONS IN BELGIUM

(quarterly averages, percentages)



Sources : Thomson Financial Datastream, NBB.

(1) Obtained by weighting the cost of financing by share issues, corporate bond issues and bank loans according to their respective share in the total of these financial liabilities.

(2) Estimated on the basis of a dividend discount model.

(3) Yield on a euro-denominated bond with a maturity of five to seven years, BBB rating.

(4) Weighted average applied by Belgian banks to business loans. The weighting is based on the respective outstanding amount of the various types of credit. The interest rates are derived from two separate surveys (RIR until 2002, MIR from 2003), causing a break in the series in 2003.

minimise adverse selection problems. Their responses to the Eurosystem's bank lending survey indicate that the banks gradually tightened their corporate credit terms from mid 2007.

Apart from obtaining bank finance, enterprises – and especially the largest ones – can raise funds directly on the financial markets by issuing listed shares or debt instruments. These financing channels dried up and became much more expensive in 2008.

In nominal terms, the cost of financing by issuing debt securities increased significantly in 2008. As in the previous year, all issuers were affected and the sharpest increases occurred in the case of the issuers with the weakest profiles. Thus, the yield on BBB corporate bonds denominated in euro with a maturity of five to seven years reached 9.5 p.c. at the end of 2008, whereas it had stood at 5.8 p.c. a year earlier. For bonds with similar characteristics but an AAA rating, the rise was much smaller, as the yield increased from 4.7 to 4.9 p.c. over the same period. In relation to the movement in the yield on five-year bonds issued by the Belgian State – which declined sharply in the second half of 2008 as investors switched to 'safe haven' assets – the increase came to over 450 basis points for BBB bonds and just under 120 points for AAA bonds.

The cost of offering shares on the stock market also increased sharply in the year under review. In this Report, it is estimated on the basis of a dividend discount model : according to that model, discussed in more detail in box 19 of the 2005 Report, the cost falls (rises) following an increase (decline) in stock market prices and rises (falls) in response to an increase (reduction) in dividends (not only those actually paid, but also – and above all – the expected dividends). The continuing collapse of share prices, which accelerated further in the third and fourth quarters of 2008, is thus the reason behind the marked increase in the cost of financing via share issues. If, as hypothetically implied by the said model, discounted dividends are relatively inert in relation to stock market prices, the cost of this financing method would have been 25 p.c. higher on average, taking 2008 as a whole, than in 2007. However, it is highly likely that firms will make substantial cuts in their shareholders' remuneration in response to the expected deterioration in their profitability, which will attenuate the scale of this cost increase.

7.2 Households

In the first nine months of the past year, households formed financial assets totalling 10.2 billion euro, well below the figure for the corresponding period of 2007 (17.3 billion). The formation of financial assets by Belgian households nevertheless slightly exceeded their new liabilities : the latter totalled 8.7 billion euro during the period considered, against 8.3 billion during the corresponding period of the previous year.

Formation of financial assets

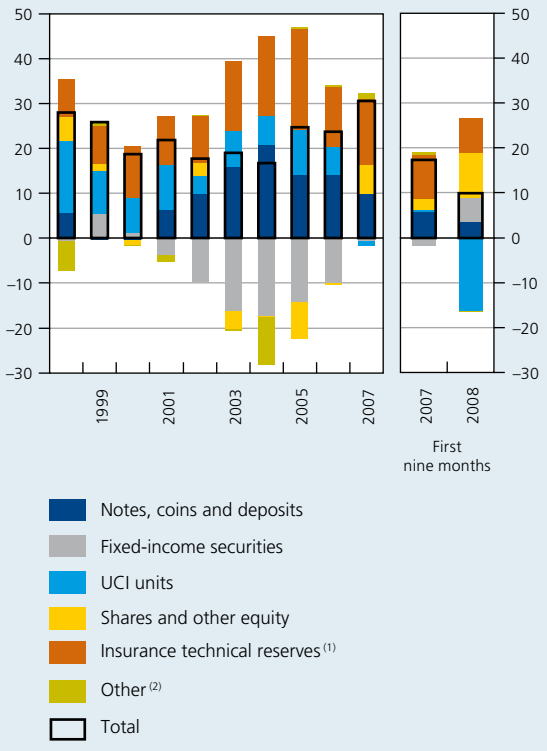
The financial turbulence seriously eroded consumer confidence in the banking system. At the height of the crisis in the early autumn, the first signs of destabilisation appeared, when households wanted to withdraw their deposits from a number of credit institutions.

To reassure savers and discourage large-scale withdrawals, the federal government decided, by a royal decree published in the Moniteur/Staatsblad on 17 November 2008,

to raise the deposit guarantee ceiling. Previously, the amounts deposited with Belgian banks were guaranteed up to 20,000 euros. From now on, in the event of the failure of a credit institution or investment firm, every depositor is entitled to compensation of up to a maximum of 100,000 euro. This applies to all assets in euro held in current accounts, savings accounts and term deposits, but also savings notes, bonds and other dematerialised debt instruments issued by the failed bank. The protection is also extended to insurance products sold to the same group of investors, namely individual life insurance contracts offering a guaranteed yield (class 21). However, unlike the banks, insurance companies are not obliged to join the system: protection only covers contracts with member companies. Moreover, the reform does not affect the protection mechanism for other financial instruments held with a failing institution if the latter is unable to redeem them: in that case, the ceiling still stands at 20,000 euro.

CHART 66 FORMATION OF FINANCIAL ASSETS BY HOUSEHOLDS

(billions of euro)



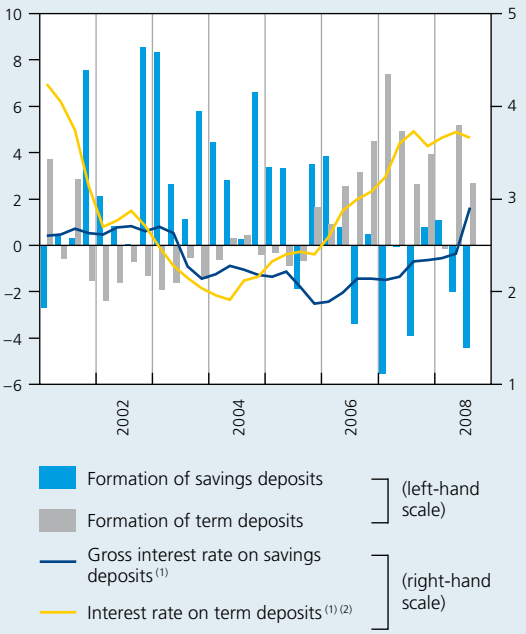
Source: NBB.

(1) This item essentially comprises the net claims of households on life insurance technical reserves and pension funds.

(2) This item comprises, so far as they could be recorded, trade credit and miscellaneous assets on general government and financial institutions.

CHART 67 REGULATED SAVINGS DEPOSITS AND TERM DEPOSITS OF HOUSEHOLDS

(billions of euro, unless otherwise stated)



Source: NBB.

(1) Implicit interest rate as indicated by the profit and loss accounts of credit institutions; quarterly averages.

(2) Less the 15 p.c. withholding tax.

Individuals formed bank deposits amounting to 2.5 billion euro during the first three quarters, bringing their total outstanding deposits to 241 billion as at 30 September 2008. The preference for term deposits – which had emerged in the previous year – continued during the year under review: over the first nine months of 2008, term deposits recorded an inflow of 7.7 billion euro, while savings deposits declined by 5.3 billion euro. It is true that term deposits carried higher interest rates, even after deduction of the withholding tax, but this gap narrowed during the past year, since savings deposit interest rates increased, as discussed in more detail in box 14.

For the first time since 2000, households bought more fixed-income securities than they sold. Regarding bonds and other savings certificates, purchases and subscriptions thus exceeded sales and redemptions by 5.3 billion euro. In the first nine months of 2007, households had continued to effect net disposals totalling 1.7 billion euro. Household investments in bonds were probably sustained by the investors' mistrust of the equity markets, which had become highly volatile at the beginning of 2008. This flight to defensive securities, broadly common to all

Box 14 – The status of regulated savings accounts

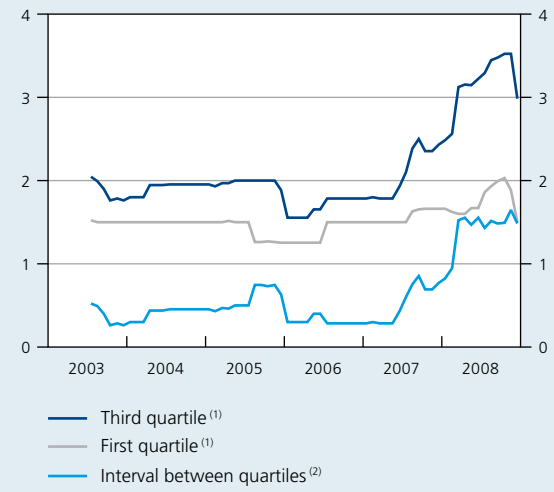
Up to now, the interest paid on savings deposits has qualified for exemption from the withholding tax (up to a maximum of 1,660 euro during the year under review), subject to a number of criteria, the main ones being:

- the account must be denominated in euro;
- it must satisfy certain conditions relating to transfers and withdrawals;
- it must offer remuneration consisting exclusively of a basic interest rate (subject to a maximum fixed by royal decree) plus a loyalty premium and/or a growth premium, but these must not exceed 50 p.c. of the maximum basic interest rate.

Under these rules, savings deposits have long offered rigid interest rates which are only a very partial reflection of market conditions. Some banks wishing to gain a position on the Belgian financial market nevertheless began offering interest rates which were well above the average. From mid 2007, these tactics became steadily more widespread, although the big banks – counting on the inertia of savers – were late to respond. It was not until 2008 that competition between credit institutions intensified. As on-line banks offering generous remuneration won market share, big institutions were forced to increase their savings deposit rates in turn, though some of them reserved these terms for internet accounts. These increases became all the more necessary as households represented a crucial source of finance in the context of extreme mistrust prevailing on the interbank market. This veritable "interest rate war" culminated in a situation where – at the start of the summer in 2008 – many banks were offering a basic rate of 4 p.c., the maximum permitted to qualify for exemption from withholding tax on the interest paid.

DISPERSION OF INTEREST RATES ON HOUSEHOLD DEPOSITS REDEEMABLE AT LESS THAN THREE MONTHS

(monthly data, percentages, unless otherwise stated)



Source: NBB.

(1) The quartiles are taken from the ranking of interest rates offered by credit institutions taking part in the monthly MIR survey (MFI Interest Rates). Each rate is an average of the rates applied by a credit institution to the various categories of deposits redeemable at up to three months, weighted by the amounts deposited during the month in each category.

(2) Difference in percentage points between the first and third quartiles.

The federal government chose this moment to raise the statutory ceiling to 4.25 p.c. from 5 August in the year under review. That increase was justified by the desire to protect households against the erosion of their savings caused by rising inflation, the aim being to revive competition which had been inhibited by a maximum limit that was too low in relation to the Eurosystem's key policy interest rate. However, in view of the small size of the increase, some banks quickly aligned their basic rate with the new statutory maximum. This was before the ECB Governing Council decided, on three occasions in the fourth quarter, to cut the level of its key interest rate, rendering the new ceiling obsolete and restoring the need for more fundamental reform of regulated savings.

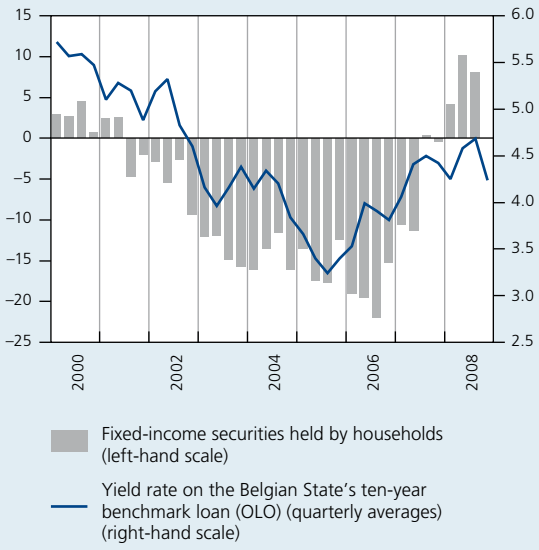
During the year under review, the government decided to conduct an in-depth review of the legislation on regulated savings accounts. The old system made no provision for any automatic adjustment of the ceiling on the basic interest rate paid on regulated savings accounts. It was determined on an ad hoc basis by royal decree, without necessarily reflecting money market conditions. With effect from 1 April 2009, the basic interest rate on savings deposits cannot exceed the higher of the following two rates, namely 3 p.c. or the Eurosystem's key policy interest rate prevailing on the 10th of the month preceding the current calendar half-year. On 10 December in the year under review, that rate stood at 2.50 p.c., so that the 3 p.c. ceiling will continue to apply at least until 30 June 2009. The reform also concerns the premiums supplementing the basic rate. The growth premium will be abolished, leaving only the loyalty premium, paid on amounts held in the same account for twelve consecutive months, or per calendar year on amounts held in the same account for at least eleven consecutive months in that same calendar year. The rate of this premium may be set at between 25 p.c. of the basic rate offered and 50 p.c. of the maximum basic rate.

categories of investors, drove up prices and triggered a fall in yields on government bonds in the first quarter. Subsequently, the upward movement in interest rates resumed when the financial markets were temporarily reassured about the outlook for economic activity, a trend which convinced some households. However, in the fourth quarter the yields on long-term government bonds subsided again, weakened by the preference for risk-free and liquid securities in response to the extreme tensions on the capital markets.

The amount of shares and other equity owned by households fell sharply in 2008, from 234 to 185 billion euro in the first nine months. During that period, losses on the household share portfolio following the collapse of share prices came to 59.5 billion euro. The decline in the outstanding total of portfolio shareholdings would therefore have been much greater if households had not continued to invest in equities. Thus, the amount invested in shares and other equity peaked at 10.3 billion euro in the first nine months of 2008. Overall, therefore, households certainly did not panic and sell off their shares on a massive scale : far from it. On the contrary, they were inclined to take advantage of falling prices to buy listed shares which they hoped would prove cheap in the long term. In addition, households subscribed to a sizeable volume of unlisted shares issued by Belgian companies ; as stated in section 7.3, those issues were substantial.

CHART 68 FIXED-INCOME SECURITIES HELD BY HOUSEHOLDS AND LONG-TERM YIELD RATES

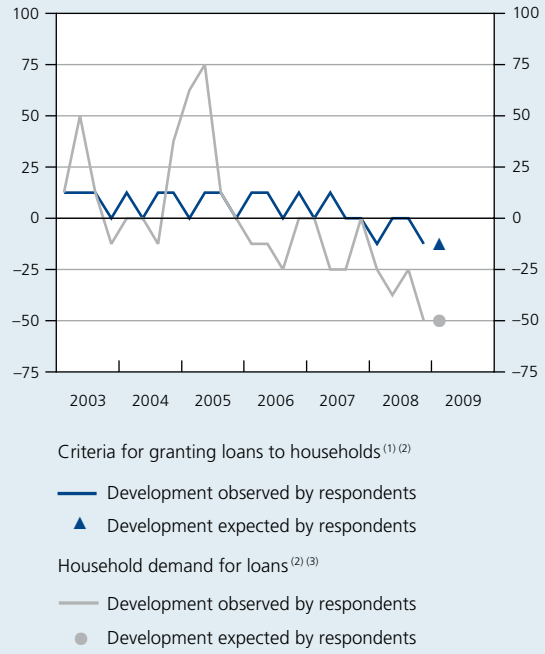
(percentage changes compared to the corresponding quarter of the previous year, unless otherwise stated)



Source : NBB.

CHART 69 RESULTS OF THE EUROSYSTEM BANK LENDING SURVEY: MORTGAGE LOAN SUPPLY AND DEMAND IN BELGIUM

(quarterly data)



Source: NBB.

(1) Weighted net percentages of responses by credit institutions to the Eurosystem's bank lending survey indicating the degree to which lending criteria were eased or tightened (–).

(2) The responses are weighted according to the distance from a "neutral" response: mention of a "considerable" change in the lending criteria or demand for loans is accorded double the weighting of the mention of a "slight" change.

(3) Weighted net percentages of responses by credit institutions to the Eurosystem's bank lending survey indicating the degree of increase or decrease (–) in demand for credit.

As in the case of shares, the outstanding total of UCI units held by households fell sharply in 2008, dropping from 130 to 96 billion euro in the first nine months. The collapse in the prices of many of the securities in the fund portfolios logically depressed the value of the units held by households, which dropped by 17.5 billion euro. Their transactions further reinforced that effect: redemptions far exceeded subscriptions, the difference amounting to 16.1 billion euro. A considerable proportion of these movements was due to the entry into force, on 1 January of the year under review, of the extension of the withholding tax to all gains on the bond element of capitalisation UCIs holding a European passport and investing at least 40 p.c. of their assets in fixed-income securities. That is clear from the net withdrawals from bond and mixed UCIs, responsible for almost half of household withdrawals from investment funds during 2008.

Net investment flows in the case of insurance companies and pension funds represented 7.6 billion euro in the first nine months of last year, slightly less than the figure recorded during the same period of 2007 (9.9 billion). The maintenance of these net subscriptions at a high level confirms the structural position which these tax-efficient investments have secured in the formation of financial assets.

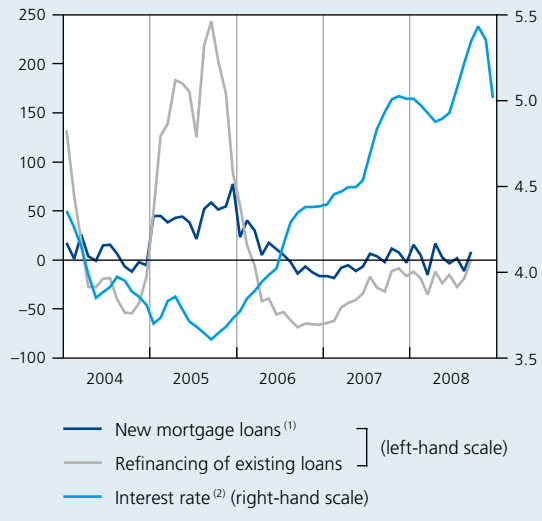
New financial liabilities

Net subscriptions to mortgage loans made up the bulk of the new financial liabilities of households: loans granted in the first three quarters of the year under review exceeded redemptions by 7.8 billion euro, a net figure more or less equivalent to that recorded in the corresponding period of 2007. This stabilisation is due to the simultaneous fall in the amount of redemptions and new loans.

According to the results of the bank lending survey, banks apparently tightened their mortgage loan criteria somewhat during the year under review. However, the Belgian legislation on mortgage loans has always encouraged credit institutions to be cautious. They therefore probably saw no need for excessive tightening of the already strict

CHART 70 NEW MORTGAGE LOANS TO HOUSEHOLDS, REFINANCING AND INTEREST RATES

(percentage changes compared to the amounts lent in the corresponding month of the previous year, unless otherwise stated)



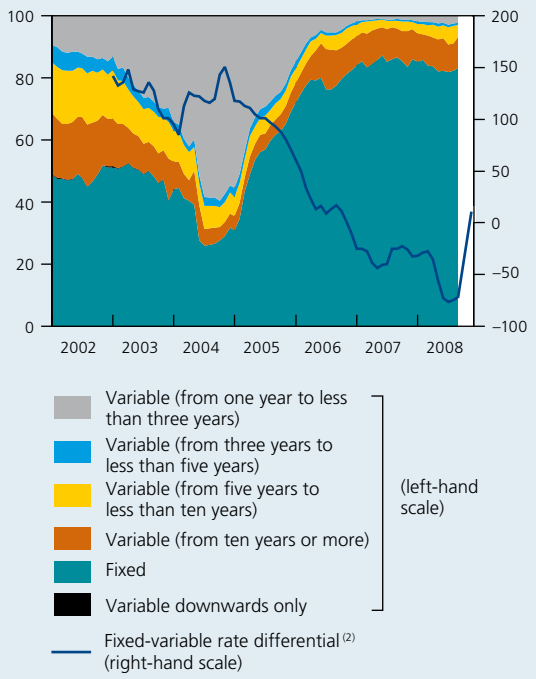
Sources: PLU, NBB.

(1) Excluding the refinancing of existing loans.

(2) Average of the rates charged on the main categories of mortgage loans, weighted by the amounts of new loans contracted in each of those categories.

CHART 71 RATE DIFFERENTIAL AND BREAKDOWN OF NEW MORTGAGE CONTRACTS BY TYPE OF INTEREST RATE [1]

(monthly data, percentages of the total, unless otherwise stated)



Source : PLU.

1 For the variable rates, the term mentioned corresponds to the initial fixed-rate period.

2 Difference in basis points between the interest rate on new loans granted to households with an initial fixed-rate period of over ten years and the interest rate on new loans with an initial fixed-rate period of one year.

criteria which prevented the excesses seen in a number of other countries, especially as mortgage loans are still an efficient tool for securing potential customers for various related banking products or insurance contracts.

The main factor slowing the pace of mortgage lending concerns the marked weakening of demand from households. According to the banks questioned, there was a decline throughout the year under review. The fall in demand for loans did not affect all mortgage loans uniformly, as the increase in mortgage interest rates – reflecting the yield on government securities and the margins added by credit institutions – was primarily detrimental to the refinancing of existing loans, which displayed a downward trend in the first nine months of 2008. The total amount of new mortgage loans, excluding refinancing, remained steady overall in relation to the previous year. For these loans, the rate increase may have been easier for households to afford via extension of the loan period, since the average amount granted remained virtually the same in 2008 as in 2007, as did the number of new loans. According to the data from the Central Individual Credit Register, 24 p.c. of new mortgage loans recorded in 2008 were concluded for periods in excess of twenty-five years, compared to 23 p.c. in 2007.

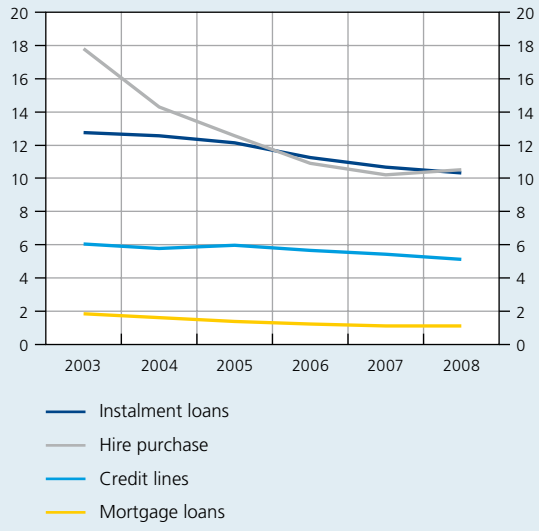
Households continued to display a strong preference for fixed-rate mortgage formulas during the year under review. However, formulas offering interest rates which may vary over time made some progress compared to the previous year, representing 17 p.c. of the number of mortgage loans granted in the first nine months of 2008.

The Central Individual Credit Register statistics do not indicate any deterioration in households' ability to repay their mortgages. As at 31 December 2008, non-regularised defaults represented only 1.1 p.c. of the total number of loans recorded. In the case of consumer credit, the proportion of non-regularised defaults declined for the fifth consecutive year, though the fall was less marked than in 2007, owing to the slight increase in the percentage of hire purchases. Taking all loans together, a total of 7,903,687 contracts were recorded by the Central Individual Credit Register at the end of December 2008, of which 415,890 presented a non-regularised default.

Overall, consumer credit continued to expand steadily in the first six months of 2008. The amounts granted in the form of credit lines and instalment loans or hire purchase

CHART 72 NON-REGULARISED DEFAULTING LOANS

(data as at 31 December, percentages of total current loans)



Source : NBB.

were 4.6 p.c. higher than in the corresponding period of the previous year, when consumer credit had already reached a peak. This new expansion is due to a large increase in the average amount of the loans, since the number of new loans has declined.

7.3 Non-financial corporations

In the first nine months of 2008, non-financial corporations – referred to in this chapter equally as companies or firms – saw their net liabilities decline by 3.8 billion euro. On the one hand, this was due to an increase in their financial asset formation, which came to 81.4 billion euro, compared to 62.9 billion during the corresponding period of the previous year. At the same time, firms contracted new financial liabilities totalling 77.5 billion euro, exceeding the previous year's figure of 62.7 billion. The global figures for the first nine months cover contrasting developments from one quarter to another: thus, the formation of both assets and new financial liabilities recorded strong growth in the first quarter, though the pace slackened considerably thereafter. A significant proportion of the increase in corporate assets and liabilities is due to several very large-scale transactions conducted by a resident firm in relation to a foreign sister company in the first quarter of 2008.

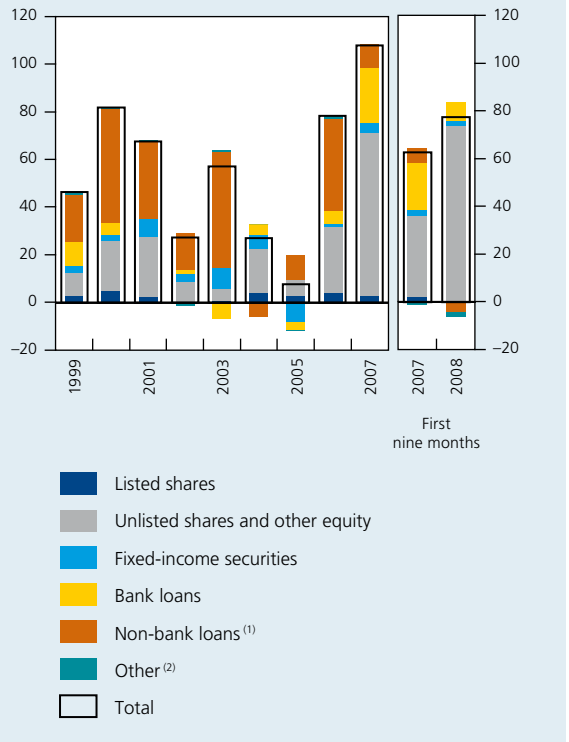
The downturn in the business cycle combined with the rising cost of external finance exerted downward pressure on corporate demand for funds. Firms gradually scaled down their investment plans. Thus, the annual growth rate of corporate gross fixed capital formation, which was 12.1 p.c. at the start of the year, fell to 5 p.c. in the third quarter. Demand for finance in connection with mergers and acquisitions also subsided noticeably during the year.

Supply-side financial conditions also deteriorated, not only because of the higher cost but also owing to the more difficult access to certain sources of finance. As a result, it became extremely expensive to raise finance by resorting to the markets in fixed-income securities or listed shares. Moreover, from mid 2007, according to their responses to the Eurosystem survey, credit institutions were more circumspect in granting loans to firms, and the trend towards tighter credit conditions persisted until the end of the year under review.

Recourse to the stock market was seriously hampered by the deteriorating financial market conditions, with listed share issues raising barely 0.3 billion euro, far less than in the corresponding period of 2007 (2.2 billion). Issues of fixed-income securities remained fairly modest in historical terms, as firms raised only 2.2 billion euro by that means

CHART 73 NEW FINANCIAL LIABILITIES OF NON-FINANCIAL CORPORATIONS: BREAKDOWN BY INSTRUMENT

(billions of euro)



Source: NBB.

(1) Mainly loans granted by Belgian and foreign non-financial corporations, also referred to as inter-company loans.

(2) Includes technical reserves of non-autonomous pension funds and transitory items.

in the first nine months of 2008. However, since direct finance obtained from the financial markets represents only a small fraction – around 10 p.c. – of the external resources of Belgian firms, the impact of the contraction of this method of financing on total corporate resources should not be overestimated.

Bank lending slowed from the spring of 2008, after two years of steady expansion. In the first nine months, the increase in bank loans to Belgian firms thus came to 7.8 billion euro which, though admittedly less than the 19.9 billion drawn in 2007, was still reasonably high in historical terms. While 5.9 billion had been raised in this way in the first nine months of 2007, inter-company loans – which form another important source of funding for Belgian firms – recorded net redemptions totalling 4.6 billion.

As in the two preceding years, however, Belgian firms were able to make use of large volumes of issues of unlisted shares and other equity. These issues more than

doubled, representing 73.5 billion euro in the first nine months of 2008, against 34.2 billion in the corresponding period of 2007.

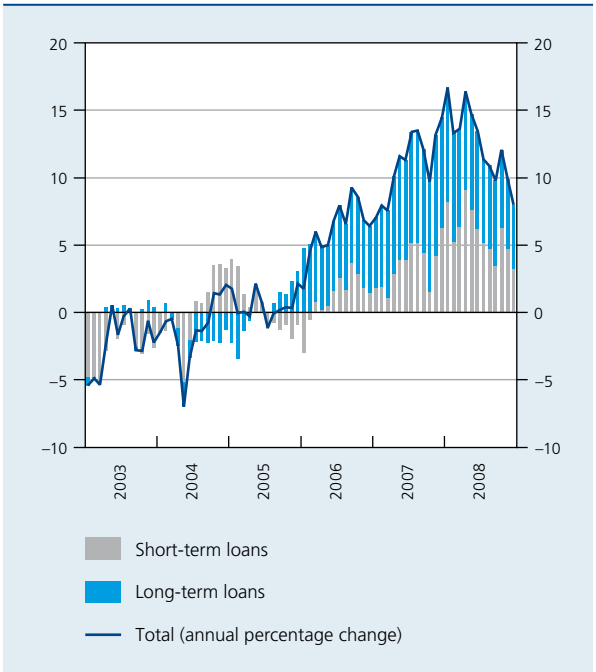
Box 6 in chapter 3 illustrates, on the basis of various indicators, the degree of resilience which Belgian firms are expected to exhibit in the face of the financial crisis and the cyclical downturn. The overall picture is fairly reassuring. While the corporate debt ratio and the corresponding financial charges have risen in the past two years, and the gross operating surplus has been seen to decline, taking a historical view and in relation to the situation prevailing before the previous cyclical trough, Belgian firms seem to have relatively low debt levels and more substantial own funds, which should make them better equipped to cope with external financing problems.

Bank lending

Bank lending to firms, which remained buoyant in the first quarter, slowed sharply thereafter. The annual growth of lending by resident banks – which represents around three-quarters of all corporate bank debts – thus declined from 16.8 p.c. in January to 8 p.c. in December. In 2008, Belgian banks granted Belgian firms loans amounting to 7.7 billion euro, a figure which – though less than that for 2007 (12.3 billion) – is still high in historical terms. The inflow of funds from foreign banks based in other euro area countries – for which data are only available for the first nine months of 2008 – declined even more, totalling 0.6 billion euro during that period, compared to 3.2 billion in 2007.

CHART 74 LOANS GRANTED BY BELGIAN BANKS TO RESIDENT NON-FINANCIAL CORPORATIONS : BREAKDOWN BY LOAN TERM (1)

(monthly data ; contribution to total lending growth, unless otherwise stated)



Source : NBB.

(1) Short-term loans have a maturity of up to one year, long-term loans have a maturity of over one year.

When the volume of new lending declines, it is difficult to distinguish between the effects due to a reduction in supply and those resulting from a fall in demand. Of course, in the face of a worsening outlook for growth, banks are less inclined to lend, but firms also tend to prune their investments, or at least postpone them. As illustrated by box 15, the results of the surveys conducted by the Bank or by the Eurosystem among credit institutions and firms can supply some useful information here, regarding the forces which contributed to the deceleration in lending during the recent period.

Confronted by less favourable and highly volatile financing conditions and tighter liquidity constraints, the banks tend in principle to prefer granting short-term loans, so that they can more readily adapt the redemption costs and achieve greater flexibility in the volume of lending. Deterioration in the economic prospects, which has a detrimental effect on borrower quality, also encourages banks to reduce their long-term lending in order to minimise the risks of default. But a reduction in the average maturity of the debt makes firms more vulnerable to interest rate fluctuations and reinforces the uncertainty over the availability of funds in the future, which tends to make their financial situation more fragile.

In the first phase of the international financial crisis and until April 2008, short-term lending remained highly dynamic. However, the outstanding total stabilised from the summer. The pace of long-term lending began to slow by the end of 2007. Less volatile than short-term lending, it is more closely linked to corporate investment plans, which were steadily scaled down during the year, as the growth prospects deteriorated. Overall, taking the year as a whole, the contribution of lending to annual growth was more or less equivalent for long-term and short-term lending. Consequently, the share of short-term debt in total corporate bank debts remained stable, at 38 p.c.

The statistics collected by the Central Credit Register permit more detailed analysis of credit developments according to the size of the borrower firms. However, they are not entirely comparable with the statistics compiled on the basis of the accounting records of credit

Box 15 – Corporate loan supply and demand: lessons drawn from the surveys

The financial crisis afflicting the global economy since mid 2007 has caused and continues to cause some concern over the scale of its repercussions on the availability of credit for the private sector. In particular, the possibility of a credit crunch has often been mentioned. A credit crunch is defined as a rather long period of drastic cuts in the credit available to firms and households. It generally follows a period of unbridled, cheap credit, and is sometimes – though not always – accompanied by a liquidity crisis.

At first, banks encounter balance sheet problems following losses incurred on their asset portfolio or a shortage of capital owing to heightened risks. Afraid that their balance sheet might weaken further, banks become very mistrustful, and their default risk perception deteriorates by more than is justified in the light of developments in the economic situation. In general, banks then use all the instruments at their disposal to reduce the supply of funds: increasing debit interest rates, limiting volumes, reducing the term of loans, imposing stricter collateral requirements, etc. During a credit crunch, even solvent borrowers cannot obtain credit (or only on very unreasonable terms). In such a context, the slowdown in lending is magnified beyond the level attributable to the actual developments in the economic situation, and may also amplify the deterioration in that situation in view of the impact of credit rationing on aggregate demand.

When corporate lending decelerates as it has done since the spring of 2008, it is very difficult to distinguish between the effects due to the supply of funds and the demand-side effects. Actual statistics show the balance on the credit market in terms of quantity, but they do not permit the identification of any imbalances between supply and demand. Possibly part of the demand cannot be satisfied, either because the banks ration the volumes granted, or because part of the demand disappears as the cost of credit is deemed too high. The survey data, which are generally qualitative, are very useful here: by questioning banks and firms directly about their credit perception, the surveys provide a clearer picture of the influence of the forces at work.

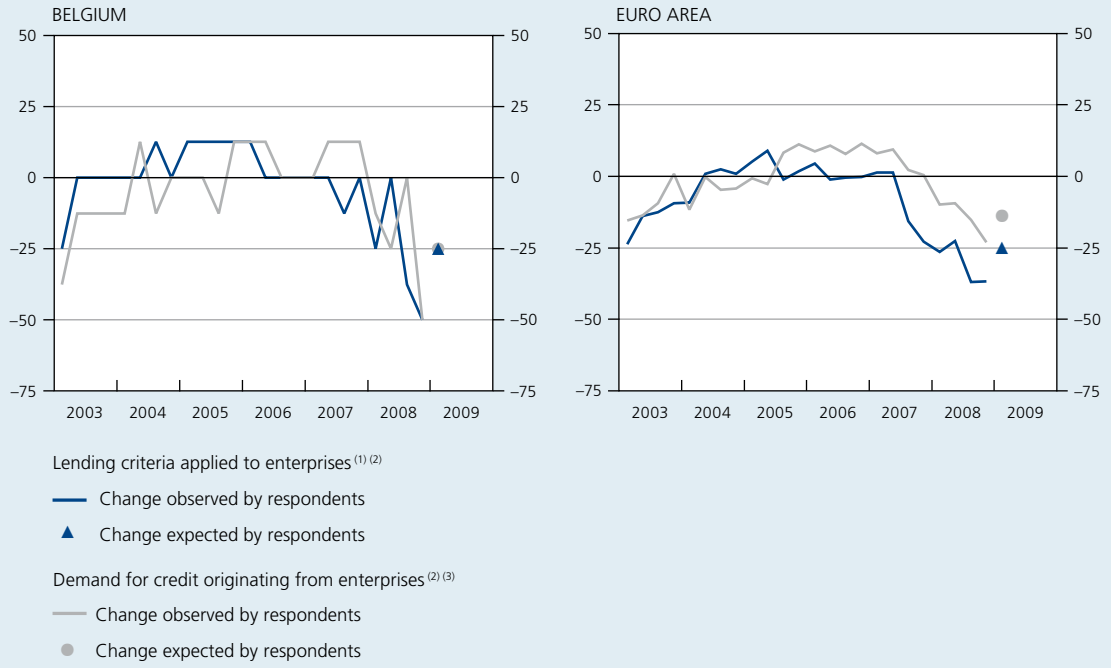
The bank lending survey conducted among Belgian banks shows that the eruption of the financial crisis, in August 2007, occurred in a context of strong corporate demand for credit. That demand continued to rise until the end of 2007, driven by gross fixed capital formation and by the financing of stocks and working capital. It was not until the first quarter of 2008 that banks reported the first signs of a slowdown in demand for loans, which was accentuated in the next quarter, and then very strongly at the end of the year. Initially, it was mainly large firms that cut their demand for credit, particularly their requests for long-term loans. In the final quarter of the year under review, the fall in demand for credit extended to SMEs and short-term loans.

The tightening of lending criteria had already begun earlier, in the third quarter of 2007. The supply of credit was first tightened more in the case of large firms and long-term loans, mirroring the trend in loan demand. From the third quarter of 2008, the tightening of lending criteria spread to SMEs and short-term loans.

The movement in supply and demand in the case of loans to enterprises reported by Belgian banks is similar to that observed by banks in the euro area since the start of the financial turbulence. Considered over a slightly longer perspective, the tightening which occurred from mid 2007 is the most marked ever recorded in Belgium and in the euro area since the survey was launched in 2003.

There are two main factors behind the tightening of lending criteria in Belgium. One is the deterioration in the banks' risk perception, which began in mid 2007 and has intensified steadily ever since. Also, the rise in banks' financing costs and their liquidity problems, combined – in the case of some institutions – with balance sheet problems have compounded the restrictive effects due to the deterioration in the economic situation in 2008.

RESULTS OF THE EUROSYSTEM BANK LENDING SURVEY: SUPPLY AND DEMAND FOR LOANS TO ENTERPRISES



Sources : ECB, NBB (Eurosystem bank lending survey).

(1) Weighted net percentages of responses by credit institutions to the Eurosystem bank lending survey indicating the degree to which lending criteria were eased or tightened (–).

(2) The responses are weighted according to the distance from a "neutral" response: mention of a "considerable" change in the lending criteria or demand for loans is accorded double the weighting of the mention of a "slight" change.

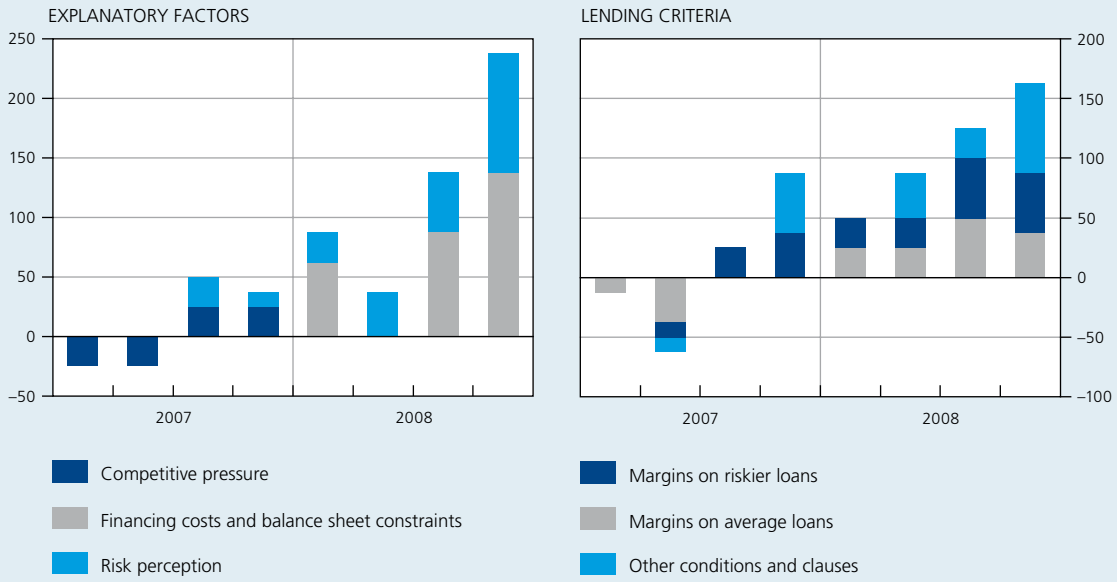
(3) Weighted net percentages of responses by credit institutions to the Eurosystem bank lending survey indicating the degree of increase or decrease (–) in demand for credit.

The banks used various methods of restricting the supply of credit. Initially, they increased the margins on riskier loans before extending that policy to all loans. Boosting margins was undeniably the preferred option used by banks to curb their lending. From the fourth quarter of 2007, banks reported a gradual tightening of other lending criteria, particularly loan amounts and charges associated with arranging new loans; as time went by, that trend became increasingly pronounced.

The Bank's survey of business investment also indicates the tightening of bank lending policy. In a survey conducted in November 2008, 48 p.c. of firms in manufacturing industry, the construction sector and business services considered that conditions for access to bank finance were unfavourable, whereas only 13 p.c. had taken that view a year earlier. The percentage of firms considering conditions to be favourable had slumped to 8 p.c. in November, compared to 23 p.c. in the previous year. Firms took a far more negative view of credit access conditions at the end of the year under review than at the time of the previous tightening, in 2002.

Regarding the various criteria, it was on interest rates that firms expressed the most dissatisfaction in November 2008, with a net figure of over 55 p.c. of firms regarding the level of rates as unfavourable. However, their assessment of interest rates had already deteriorated sharply at the time of the 2006 and 2007 surveys, and was only slightly worse in 2008. In contrast, firms' perception of the other conditions, particularly collateral requirements and loan amounts, degenerated significantly between November 2007 and November 2008.

TIGHTENING OF LENDING CRITERIA APPLIED TO ENTERPRISES IN BELGIUM: MAIN EXPLANATORY FACTORS AND LENDING CRITERIA CONCERNED (1)



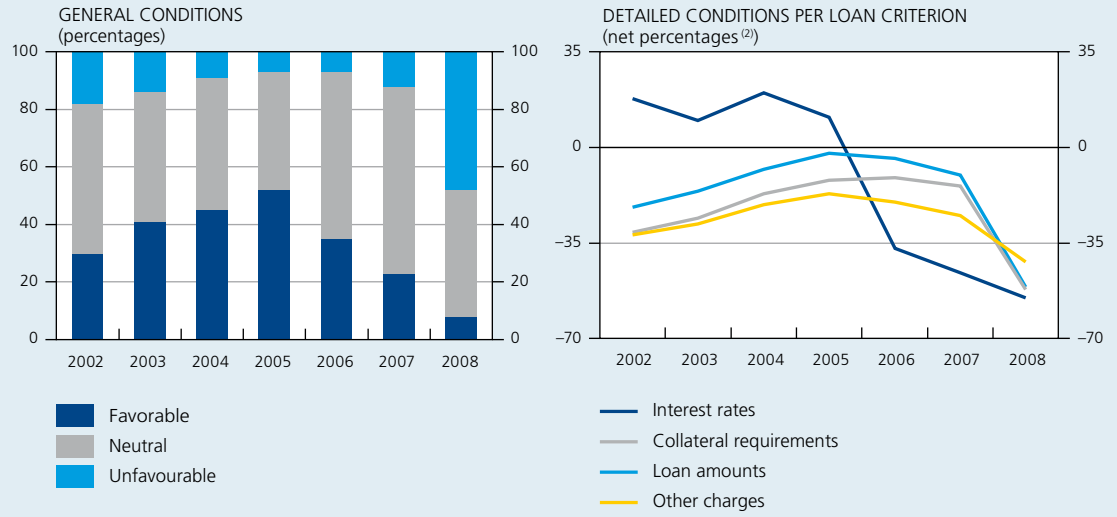
Source : NBB (Eurosystem bank lending survey).

(1) Weighted net percentages of responses by credit institutions questioned about the explanatory factors and lending criteria. A positive (negative) percentage corresponds to a factor which has contributed to a tightening (easing) of credit conditions or a criterion reflecting that tightening (easing). The responses are weighted according to the distance from a "neutral" response: mention of a "considerable" change in the explanatory factors or lending criteria is accorded double the weighting of the mention of a "slight" change.

The breakdown of the survey responses by firm size also indicates that, overall, large firms take a less favourable view than SMEs. That finding also emerges from surveys by the Belgian Knowledge Centre for SME financing (BeCeFi) on a representative sample of Belgian SMEs in July and then in November 2008. Questioned about their access to bank finance, 79 p.c. of SMEs still reported in November that they had experienced little or no difficulty in obtaining finance during the recent period (in July the figure was 83 p.c.).

To sum up, according to the survey results, the slowdown in bank lending to businesses, a phase which began in the spring of 2008, is due to a contraction in both the supply and demand for credit. There are some indications that this weakening will become more acute in the future. On the one hand, firms are likely to see a sharp fall in their need for funding, particularly since – as indicated by the Bank's forecasts published at the same time as this Report – the volume of gross fixed capital formation is set to diminish in 2009. Also, where the banks are concerned, financing constraints and balance sheet problems are tending to compound the restrictive effects of the deteriorating economic situation. In view of the latter, the banks might also impose tighter restrictions on their lending conditions, in particular by reducing the average amounts lent or by stricter collateral requirements, as well as increasing their margins. SMEs, which are traditionally the most dependent on bank credit, seem to have been less affected than large firms by the restrictions on access to credit.

FIRMS' ASSESSMENT OF BANK CREDIT ACCESS CONDITIONS [1]



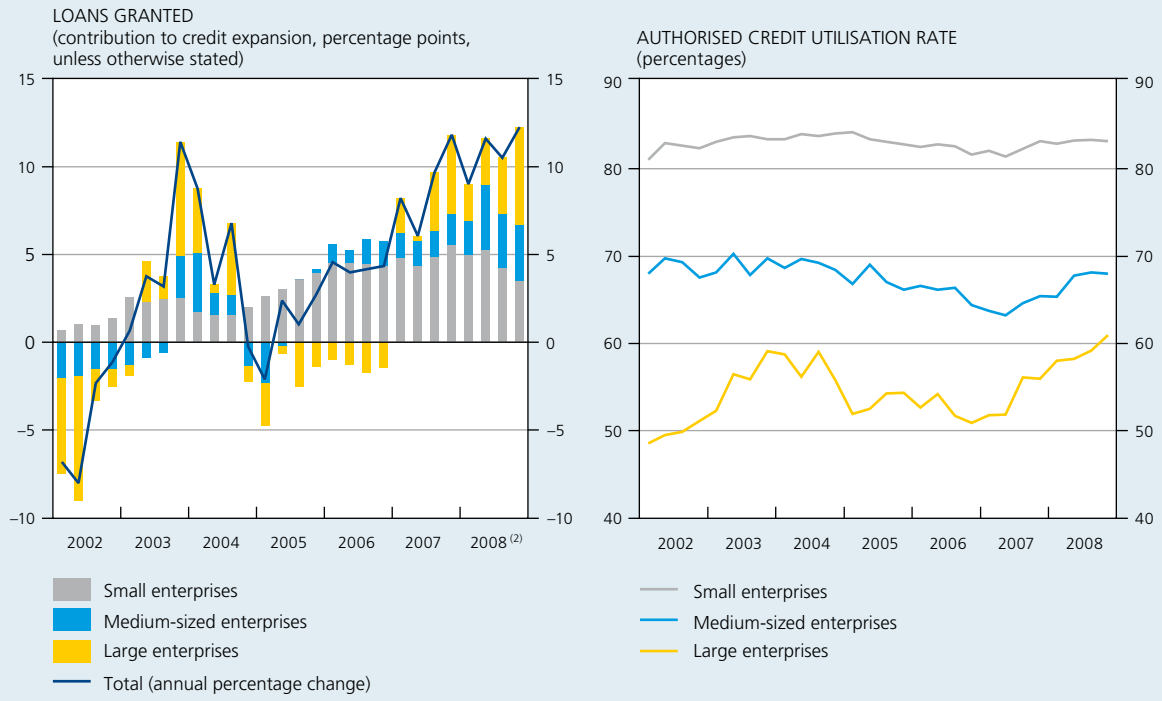
Source : NBB (November business investment survey).
(1) Sample of firms in manufacturing industry, construction and business services.
(2) Net percentage of responses by firms questioned indicating a favourable or unfavourable (–) assessment of access conditions.

institutions, notably because their coverage is limited to loans of an individual value of more than 25,000 euro. Taken together, regardless of size, firms made a positive contribution to the overall growth of bank lending in 2008. Around two-thirds of the loan expansion can be attributed to SMEs, compared to one-third for large firms. The weakening rate of expansion of lending during the year was evident in all types of firms.

On the basis of information reported by banks to the Central Credit Register, it is possible to calculate the credit utilisation rate, showing the degree to which firms draw on their credit lines. During the past year, that increased for all types of firms : at the end of November, the utilisation rate was 83 p.c. for small firms, 68 p.c. for medium-sized firms and 61 p.c. for large firms. It is large firms that have recorded the most pronounced increase since mid 2007. The reason could be that large firms are resorting to bank credit in the face of problems in raising finance by issuing securities on the financial markets. It could equally reflect a more cautious attitude on the part of banks, wishing to limit their exposure to high-value loans. That finding may also be compared with the results of the bank lending survey, which indicate that the credit squeeze has had a greater impact on large firms than on smaller enterprises, both in Belgium and in the rest of the euro area.

There have been various initiatives at different levels of power to rectify any scarcity in the supply of credit for businesses, particularly for SMEs. At European level, the EIB decided to give a substantial boost to its assistance for SMEs in Europe, by allocating 15 billion euro over the period 2008-2009 to loans for them through commercial banks, within a budget of 30 billion euro up to 2011. Use of this budget will be encouraged by making the available instruments simpler and more flexible. In Belgium, the federal government decided on 23 October to set up a new type of loan via the Participation Fund. With this new product, launched on 1 December and called *Initio*, SMEs seeking credit can apply directly to the Participation Fund, and then contact their bank, with the backing of the Fund, to complete the arrangements for their loan. Finally, the governments of the three regions decided to increase the amounts allocated to the finance and guarantee companies (Sowalfin, Brussels Guarantee Fund, Waarborgbeheer) for their activities in supporting SMEs, at the same time easing the criteria for granting these guarantees.

CHART 75 CREDIT VOLUME AND UTILISATION RATE ACCORDING TO THE CENTRAL CREDIT REGISTER: BREAKDOWN OF FIRMS BY SIZE (1)



Source : NBB

(1) Companies which filed their annual accounts in the abridged format are deemed to be small enterprises. Those which filed full-format accounts are regarded as large or medium-sized depending on whether or not their turnover exceeded 37.2 million euro for two consecutive years.

(2) Fourth quarter estimated on the basis of actual figures for October and November.

Fixed-income securities

Belgian firms issued fixed-income securities totalling 2.2 billion euro during the first nine months of 2008. Net issues of short-term securities in the form of commercial paper came to 1.4 billion, while the amounts raised by issues of long-term securities brought in 0.8 billion euro. These figures – which are relatively low in historical terms – are due to the difficulties in issuing securities in a context featuring, among other things, a very steep rise in the cost of this method of financing and a scarcity of funds, which mainly affected large firms.

Shares

During the first nine months of 2008, net issues of unlisted shares by Belgian companies came to a record 73.5 billion euro, far exceeding the 34.2 billion raised in the corresponding period of the previous year. It was mainly in the first quarter that the issue volume was very substantial (48.4 billion), as the pace of new issues subsequently moderated. The *ArcelorMittal* group conducted various financial operations, resulting in a net capital increase of 26 billion euro. The counterpart to this operation was the formation of financial assets in the rest of the world, for more or less the same amount, including 14 billion in the form of intra-group loans and 12 billion in investments in unlisted shares.

The copious issues of unlisted shares in the past two years, encouraged by the introduction of the tax rule on the risk capital allowance, known as the notional interest deduction, have therefore continued. This measure again led to a large inflow of foreign capital into Belgium, in the form of equity investments in Belgian companies. The foreign counterparties are mainly other associated non-financial enterprises or firms linked with the target company via a participating interest.

As already mentioned, firms made very little use of the stock market. The collapse of share prices and the increased preference of investors for low-risk assets in fact made it very expensive to issue listed shares. In the first nine months of 2008, this source of finance thus dried up, and net issues came to only 0.3 billion. In December,

however, the *Anheuser-Busch InBev* company successfully conducted an issue totalling 6.4 billion euro, in order to finalise its merger.

On the basis of the monthly data, the price index for all listed Belgian companies excluding enterprises in the financial sector dropped by 41 p.c. between December 2007 and December 2008. The similar index compiled for firms in the euro area slumped by 47 p.c. Since its June 2007 peak, the Belgian index of non-financial stocks has thus lost 47 p.c. of its value, exceeding the fall recorded when the technology bubble burst over a five-year period from 1999 to 2003.

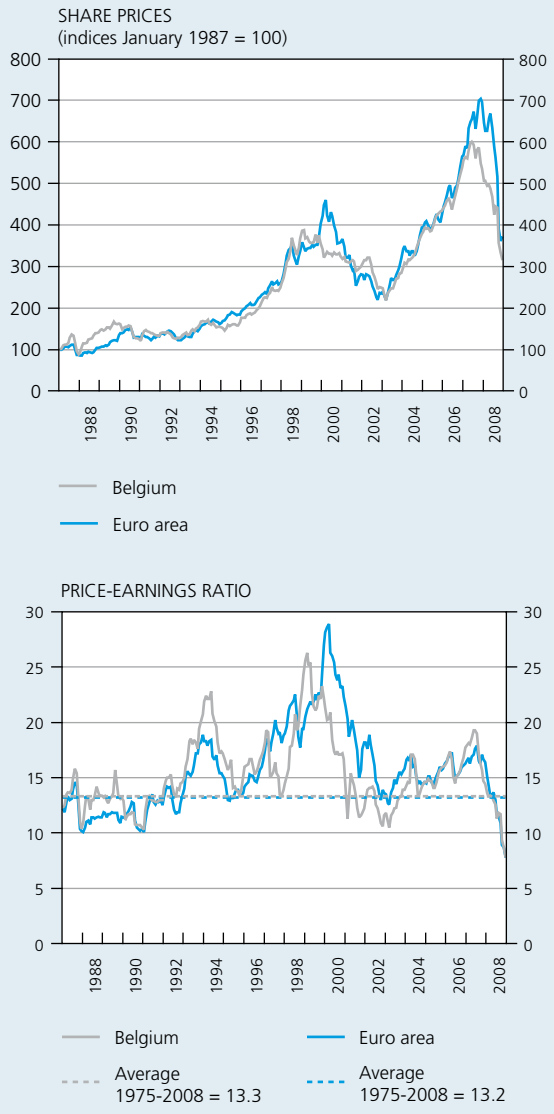
The stock market crash since 2007 is therefore much more dramatic than the previous one. Also, share prices began falling at a time when the price-earnings ratio – which gives an indication of the appropriateness of share valuations – had deviated over a long period from its average value to a much smaller extent than in the late 1990s: in July 2007, for listed companies, that ratio thus stood at 19 in Belgium and 18 in the euro area, or around 5 percentage points higher than the historical average. For comparison, in 1999-2000, it had risen to 26 in Belgium and 29 in the euro area.

The number of Belgian companies – excluding *bancassurance* groups – listed on the various *Euronext* markets increased from 159 units as at 31 December 2007 to 164 a year later. Despite the very gloomy stock market context, 11 Belgian companies were launched while 6 were delisted. As in the two preceding years, more than half the newcomers were listed on the unregulated *Euronext* Brussels markets, which – with simplified admission criteria – are specifically intended for SMEs. In all, 6 SMEs made their debut on the Free Market, while there was one newcomer on *Alternext*.

Of course, the net increase in the number of listed companies did not compensate for the loss of value resulting from the share price collapse: the total market capitalisation of Belgian companies – excluding *bancassurance* groups – thus fell by 35 p.c. in 2008, from 152 to 99 billion euro at the end of the year.

CHART 76 STOCK MARKET PRICES AND PRICE-EARNINGS RATIO IN BELGIUM AND IN THE EURO AREA (1)

(monthly averages)



Source: Thomson Financial Datastream.

(1) Indices covering all listed companies on each market, except financial corporations.

7.4 General government

During the first nine months of the year under review, the financial accounts of general government deteriorated, recording a deficit of 6.1 billion euro compared to 4.3 billion in the corresponding period of 2007. Since the Treasury did not feel the need, as in 2007, to expand its portfolio of OLOs in order to finance redemptions in the near future, this deterioration is reflected in a decline in the formation of financial assets which outweighed the fall in new financial liabilities.

New Treasury issues

Net issues of euro-denominated securities by the Treasury continued to represent the bulk of the new financial liabilities of general government: these issues reached a

TABLE 39 FINANCIAL ASSETS AND LIABILITIES OF GENERAL GOVERNMENT

(billions of euro)

							First nine months	
	2003	2004	2005	2006	2007	2008	2007	2008
Formation of financial assets[1]	–4.5	3.3	0.6	1.0	12.5	n.	9.6	–1.3
New financial liabilities	–4.7	3.6	8.0	0.4	13.0	n.	14.0	4.8
Securities denominated in euro	–2.2	–1.6	3.7	–1.3	10.2	n.	17.7	4.5
of which:								
Treasury	–0.9	–1.6	3.1	–0.8	12.6	18.6	19.6	3.9
At up to one year	–0.3	–0.2	0.8	0.1	4.1	14.3	9.2	6.9
At over one year	–0.6	–1.4	2.3	–0.9	8.5	4.3	10.5	–3.0
Other liabilities denominated in euro[1]	–1.3	6.5	4.2	1.9	3.3	n.	–3.7	0.1
Treasury liabilities denominated in foreign currencies	–1.3	–1.4	0.1	–0.1	–0.5	3.8	0.0	0.3
Financial balance	0.3	–0.3	–7.5	0.6	–0.5	n.	–4.3	–6.1

Source: NBB.
(1) Including "Ageing Fund Treasury Bonds".

cumulative total of 18.6 billion euro at the end of 2008, against 12.6 billion a year earlier.

Leaving aside the interventions needed at the end of the year to rescue a number of financial institutions, the Treasury's financing programme for the year under review presented a higher than usual gross requirement to be covered, owing to three major redemptions scheduled in 2008. Despite the difficult financial conditions, the Treasury's usual financing instruments were sufficient to meet most of its borrowing requirement. In the medium- and long-term segment, the Treasury issued three new benchmark loans during the year under review. At the beginning of the year, the usual ten-year benchmark loan was placed via a consortium. In February, a new line of three-year benchmark OLOs was issued by tender, and not by a consortium, in response to market demand for short maturities. Finally, a new benchmark bond with a term of five years was placed by a consortium in April.

During the year, the existing OLO lines were topped up by five tenders. In the long-term segment, the benchmark fifteen-year loan issued in 2006 and the thirty-year loan launched in 2004 were offered again. These lines attracted interest from institutional investors, who subscribed a total of 2.3 billion euro.

In July, however, the Treasury diversified its sources of finance to some extent: it inaugurated a new programme of Euro Medium Term Notes by issuing a loan for 2 billion US dollars.

In October, the escalating financial crisis prompted the government to intervene in the case of several large Belgian banks or insurance companies and to recapitalise them, as explained in more detail in chapter 8 on financial stability. In order to finance these rescue operations, which required the federal government to mobilise a total of around 20 billion euro, the Treasury issued more short-term securities than planned in 2008. However, it was possible to issue these additional short-term bonds, too, at interest rates well below the corresponding interbank rates. They did not augment the refinancing risk or interest rate risk. Some of them will probably be refinanced by placing long-term securities during 2009.

Issues of State notes, a public debt instrument intended for private investors, came to 0.7 billion euro in 2008. While interest in this product was very modest in the first three subscription periods, this type of investment became particularly popular at the time of the final issue which closed at the beginning of December, revealing a change of behaviour on the part of individuals, who are seeking safe haven investments.

Management of the Treasury debt

Primarily because of the acquisition of shareholdings and other interventions in financial institutions, the Treasury ended its 2008 operations with a budget deficit on a cash basis which significantly exceeded that in the previous year.

TABLE 40 FINANCING REQUIREMENTS AND RESOURCES OF THE FEDERAL STATE

(billions of euro)

	2007	2008
Gross balance to be financed	29.6	57.3
Gross financing requirements	24.5	54.0
Budget deficit or surplus (–)[1]	3.6	27.5
Medium- and long-term debt maturing during the year	20.9	26.5
In euro	20.9	26.0
In foreign currencies	0.0	0.5
Redemptions and exchanges (securities maturing the next year or later)	4.9	3.3
Other financing requirements	0.2	0.1
Medium- and long-term funding resources	29.4	33.8
Issues in euro	29.4	32.4
Linear bonds (OLOs)[2]	28.9	31.8
State notes	0.5	0.7
Issues in foreign currencies	0.0	1.4
Net change in the short-term debt in foreign currencies	–0.5	4.3
Net change in the outstanding amount of Treasury certificates	3.4	11.1
Net change in other short-term debt in euro and in financial assets	–2.8	8.1

Source: FPS Finance.

(1) Excluding transfers to the Ageing Fund. The budget balance is calculated on a cash basis and, among other things, takes account of financial transactions which are not included in the overall balance of general government which, in accordance with the ESA 95, is calculated on a transaction basis.

(2) Including structured products.

Only a small part of the resulting increase in the gross balance to be financed was covered by medium- and long-term issues, so that the Treasury's short-term debt in euro increased and its outstanding financial assets were reduced.

Redemption of loans maturing during the past year represented 26.5 billion euro, or significantly more than in the previous year. The volume of Treasury redemptions of securities maturing in 2009 or later came to 3.3 billion euro, which was less than in 2007.

The Debt Agency has always made a point of appealing to international investors. Holdership of the Belgian public debt is therefore very diverse: in September of the year under review, 56 p.c. of OLOs were held abroad, as were 78.5 p.c. of Treasury certificates.

In a context of significantly widening spreads between Belgian and German government bonds, the Treasury made further attempts to boost the liquidity of OLOs by listing its securities on a number of electronic platforms.

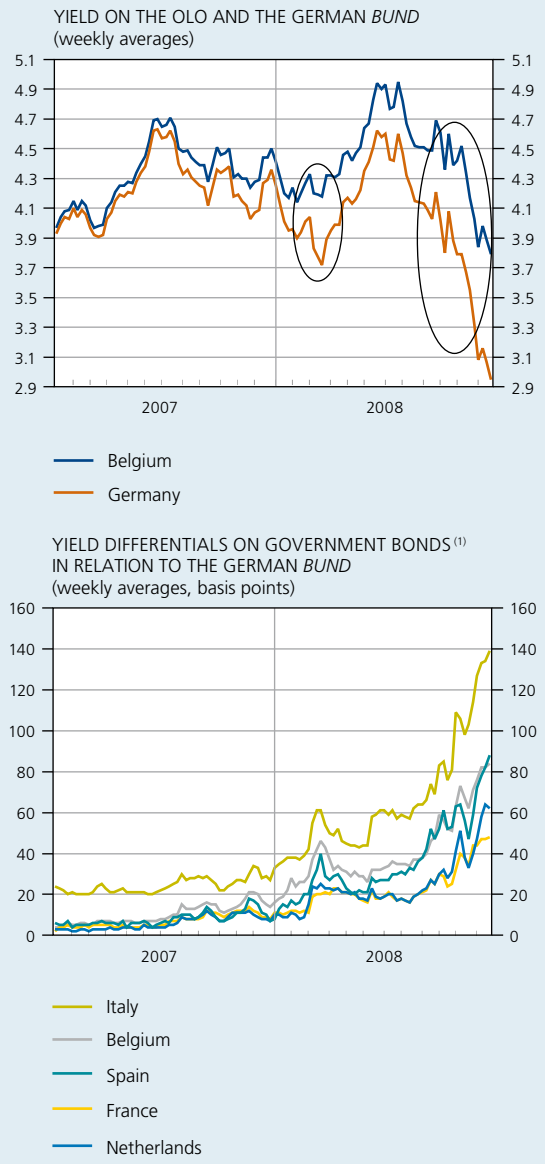
Since April 2008, it has in fact been possible for bond dealers to choose from three trading platforms for dealing in Belgian government bonds: *MTS, Broker'Tec* (platform owned by *ICAP*, the biggest interdealer broker) and *BGC Partners*. The Treasury's aims here were twofold: to enable primary dealers to conduct their transactions where they wish, and to gain access to a larger market, as increased competition on the intermediation market may encourage innovation and bond liquidity.

While the financial crisis made the Treasury more vigilant in regard to counterparty credit risk, the various risks inherent in the management of the public debt continued to be managed as in previous years. Despite a sharp increase against the previous year, the exchange rate risk incurred by the Treasury remained low, as the proportion of the debt denominated in foreign currencies came to 1.46 p.c. at the end of 2008. This development was due to the government's undertaking to intervene via the Federal Participation and Investment Corporation in financing the portfolio of structured loans denominated in foreign currencies, contained in the defeasance structure created when the *Fortis* group was restructured at the end of 2008, as explained in box 16 in chapter 8 on financial stability.

The maximum limits for the twelve-month and five-year refinancing risk remained unchanged in 2008, at 22.5 and 60 p.c. of the portfolio respectively. This risk, defined as the possibility that the costs and interest charges will be higher than expected owing to excessive financing requirements in a short period of time, increased in the second and third quarters, exceeding the twelve-month limit between April and August. The twelve-month refinancing risk then reverted to levels close to its limit, reaching 22.3 p.c. in December, while the five-year risk came to 56.1 p.c.

The interest rate risk indicates the percentage of the portfolio subject to an interest rate review during a particular period. The limits for the twelve-month and five-year risks are set at 25 p.c. and 65 p.c. respectively of the euro-denominated debt. Although it also increased between March and August last year, the twelve-month interest rate risk was always below its limit and stabilised at 21.3 p.c. at the end of the year, while the five-year risk came to 58.8 p.c. For 2009, the twelve-month maximum limits for the financing risk and the interest rate risk have been increased by 2.5 percentage points, at 25 and 27.5 p.c. respectively.

CHART 77 YIELD ON TEN-YEAR GOVERNMENT BONDS (1)



Source : BIS.
(1) For Belgium, secondary market yield on government benchmark loans (OLOs).

The spread between the yield on the Belgian government's ten-year benchmark loan and that of the German *Bund* with a similar maturity increased significantly during the year under review. In the second half of 2007, that differential had begun to widen owing to the financial turbulence relating to the American subprime mortgage market, and also, in the second place, on account of the political problems in Belgium. That context had encouraged investors to switch to risk-free and highly liquid investments, the German *Bund* being the prime example in Europe. At the same time as the international financial crisis was unfolding, this trend became more acute during the year under review, as Belgian government securities felt the effects of both a flight-to-quality and a flight-to-liquidity, two reactions which frequently accompany one another in the wake of financial market upheavals.

The preference for liquidity can be defined as a phenomenon specific to periods of financial market tension. It is not necessarily connected with a problem of declining value, but more specifically with liquidity differences between instruments. It may occur in parallel with a flight-to-quality, a phenomenon which is spread over a longer period, featuring substantial capital movements : for example, on the occasion of a stock market crash, capital is switched into more secure investments which are also generally more liquid, such as government bonds.

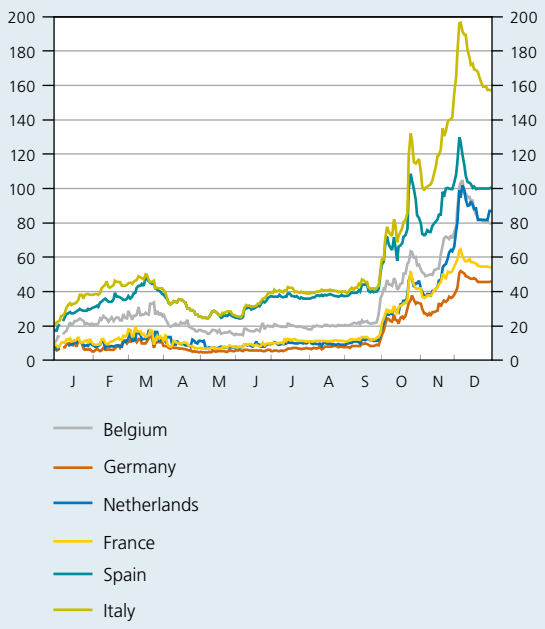
The appetite for liquidity certainly played a major and continuous role in the increasing yield differentials between sovereign securities in the past two years. German debt securities, more liquid owing to the volume traded and, in particular, the influence of *Bund* futures, thus encountered massive demand, primarily from institutional investors, which contributed towards a reduction in the yield compared to Belgian debt securities.

Yield differentials between German government bonds and those of other euro area countries first spiked between February and mid March 2008, when the problems concerning the *Bear Stearns* investment bank first exacerbated the financial tensions. This increase was very marked in countries which still have high levels of public debt, namely Belgium and Italy, and in Spain. Conversely, in France and the Netherlands, two countries with the same rating as Germany, the jump was smaller. This widening of the spreads partly reflects a reassessment of the sovereign credit risk by investors, as indicated by the increase in premiums on credit default swaps (measuring the risk of default on government bonds). In March the lamentable stock market performance triggered an abrupt increase in risk aversion and a switch to sovereign bonds. This drove down the yield on those bonds, particularly in Germany. In contrast, in Belgium the concern over the political tensions and the uncertainty surrounding the outcome of the budget audit may have discouraged investors.

Following the steep rise in the spring, spreads reached new peaks in September and October in the climate of financial market panic following the collapse of *Lehman Brothers*. The flight-to-quality resumed in September when the international financial crisis culminated in the restructuring of a large number of banks in advanced

CHART 78 PREMIUMS ON FIVE-YEAR CREDIT DEFAULT SWAPS (CDS) IN 2008

(daily data, basis points)

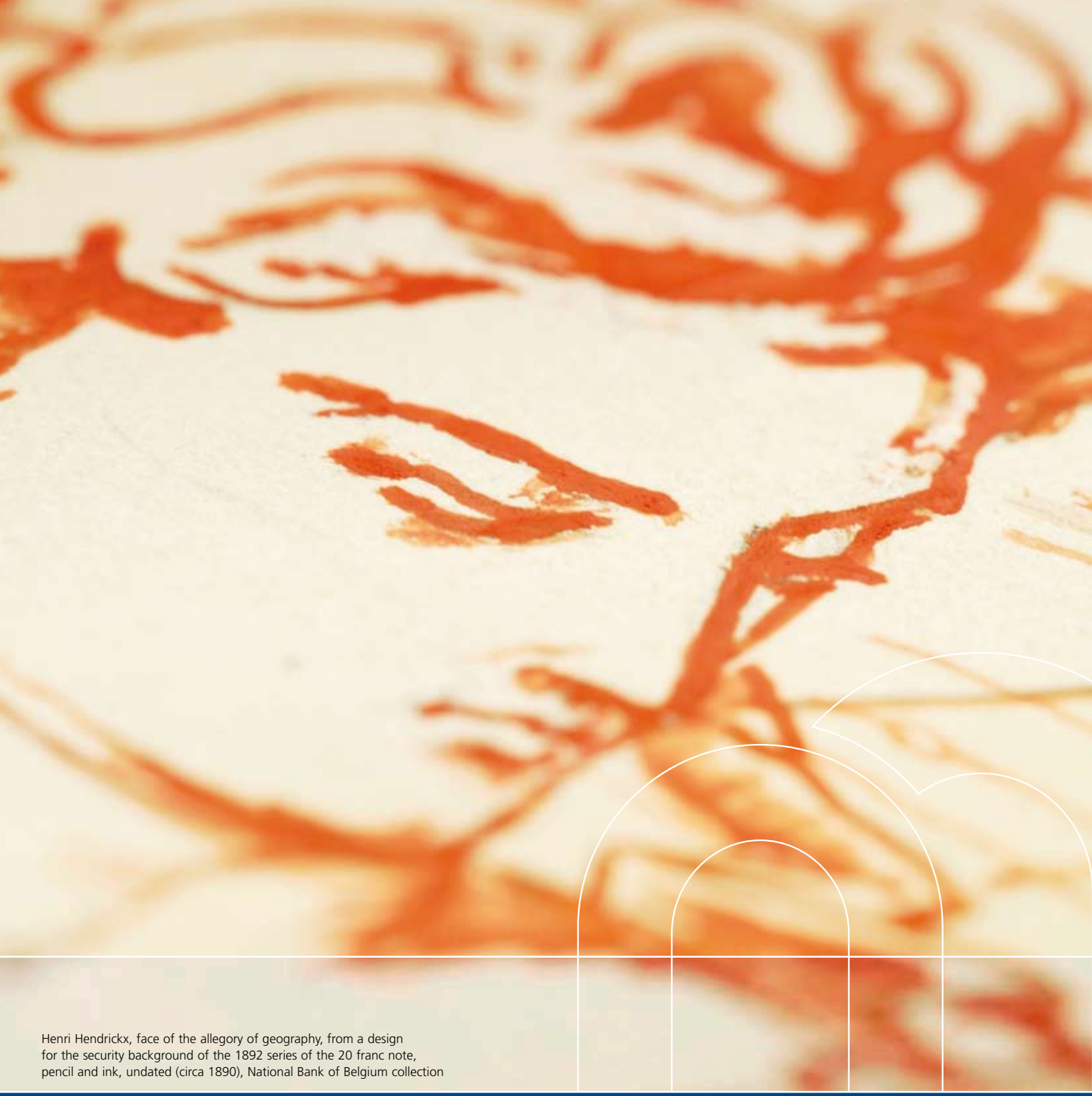


Source : Bloomberg.

economies. With the October announcement of the launch of rescue plans, this switch into risk-free securities increased in spasms, driven partly by fears that in many of the countries concerned the government would be unable to afford to repay the massively increased debt entailed in financing the recapitalisations.

On average, during 2008, the spread between the Belgian ten-year benchmark loan and the German bond with the same maturity came to 43 basis points, compared to 11 points in 2007. At the end of the year, this spread had widened to 84 basis points.

The Dutch and French benchmark loans exhibited smaller spreads, at 24 and 25 basis points respectively, though these were much larger than in 2007 (7 and 9 basis points). The Spanish government loan also saw a large increase in its yield differential in relation to the *Bund* compared to 2007, from 9 to 38 basis points, as did that of the Italian government, from 28 to 70 basis points. At the end of the year, the spreads between Dutch and French loans, on the one hand, and the German *Bund* on the other stood at 60 and 45 basis points respectively, while the yield differentials on Spanish and Italian securities came to 91 and 156 basis points respectively.



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.

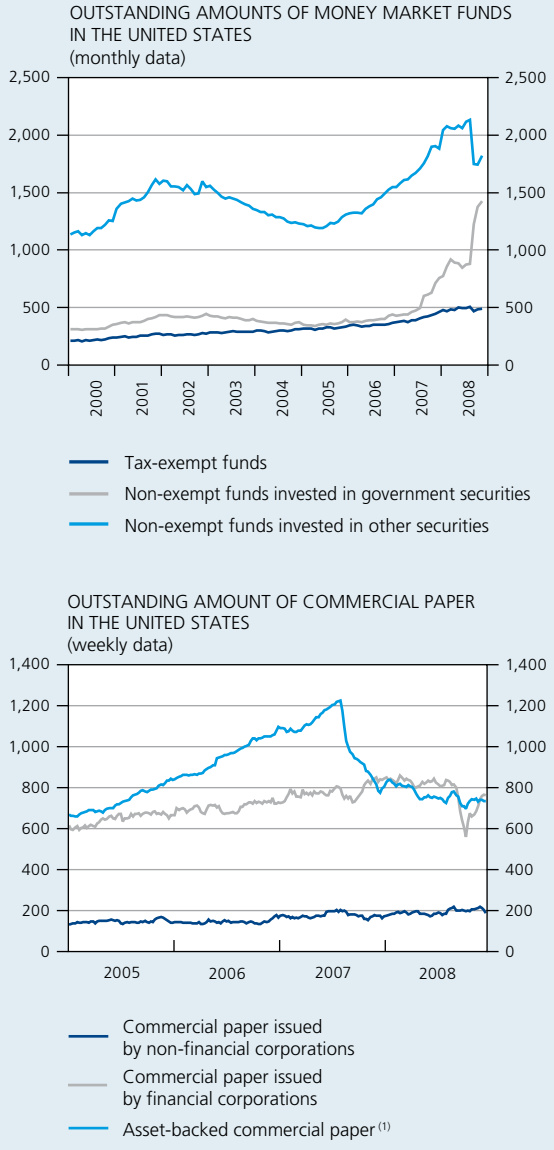
The markets in commercial paper, where the money market funds traditionally form the principal group of investors, were the first to be affected by these large-scale fund reallocations. Contrasting with the profile seen in the initial phase of the crisis, in the summer of 2007, both unsecured commercial 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.

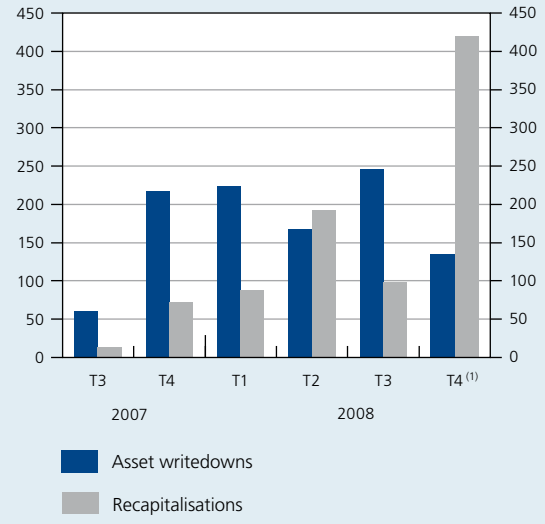
Faced with the prospect that heightened balance sheet pressures in the banking system would prompt banks to cut back on lending to corporations and fuel a negative feedback loop between the financial sector and the real economy, equity market indices thus saw their losses accelerate after mid-September. 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

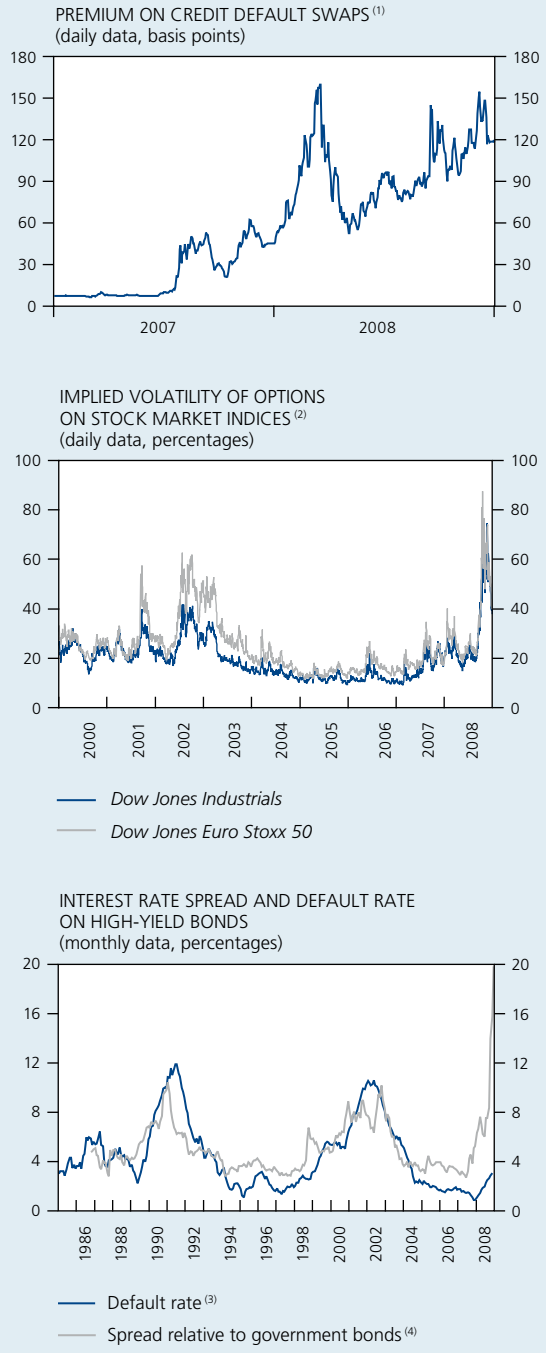
(billions of dollars)



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.

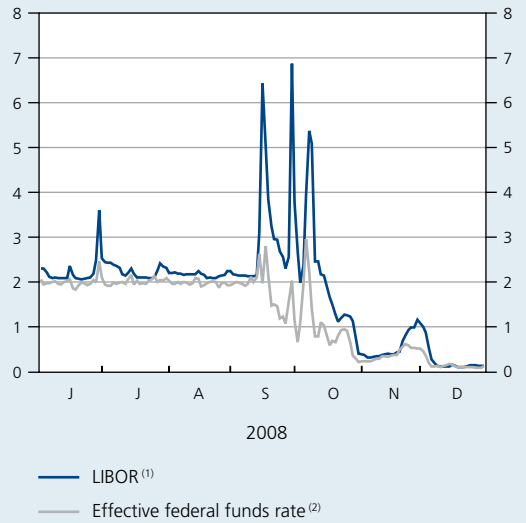
With banks no longer willing to provide financing to other banks, even on an overnight basis, due to perceived counterparty risks, the global money markets became completely dislocated in the days following the default of *Lehman Brothers*. The yield on three-month US Treasury Bills, considered to be 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.

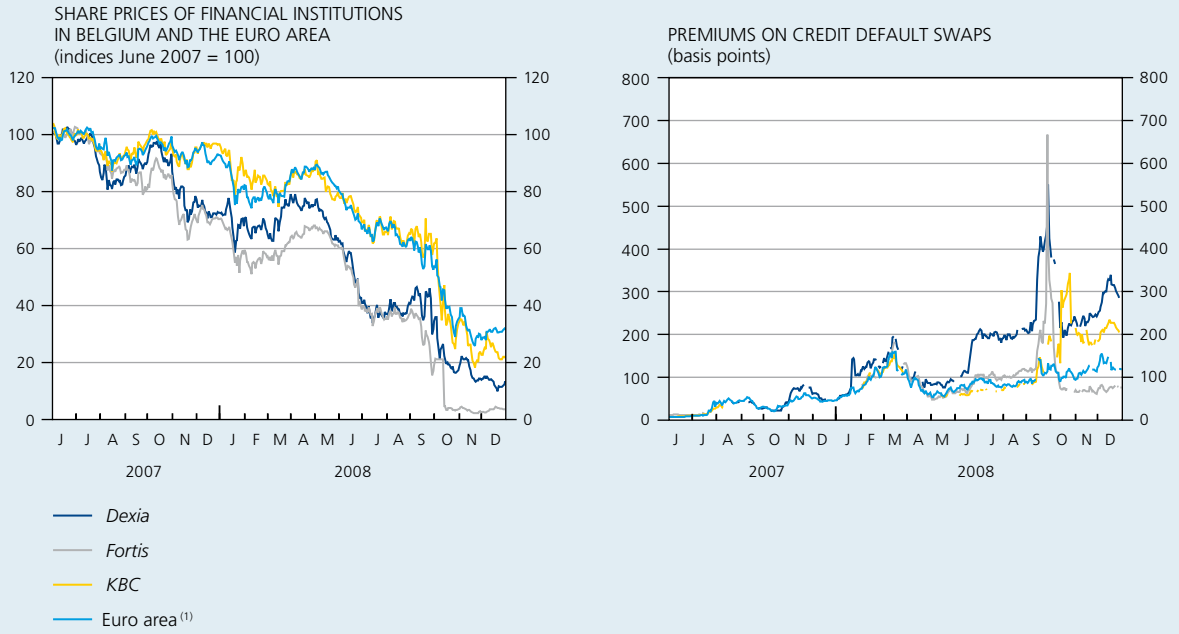
8.2.1 Developments in the main *bancassurance* groups

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 A*BN 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

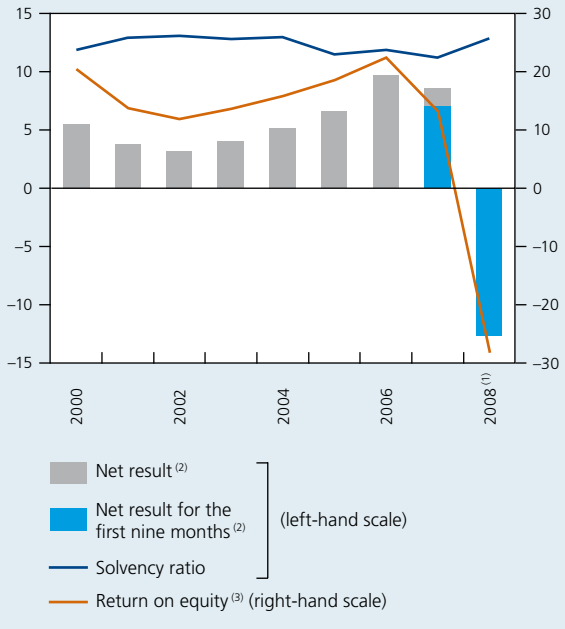
The Royal Decree of 14 November implementing the law of 15 October 2008 raises the cover offered to deposit holders from 20,000 to 100,000 euro, and offers insurance companies, on a voluntary basis, the opportunity to guarantee class 21 products in a similar way. For this purpose, the government set 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	–
p.m. Profit or loss (net)	*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.

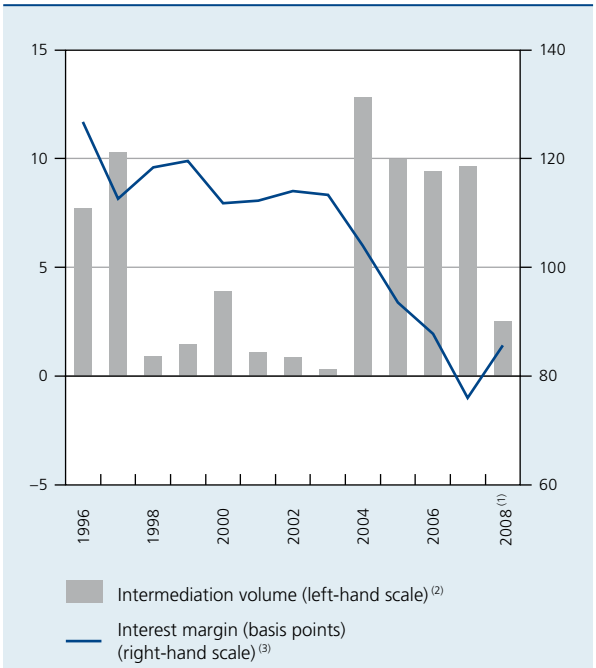
Leaving aside the exceptional losses related to the sale by *Fortis* of its participation in the *RFS* consortium, the Belgian banks' traditional banking activities generated losses of 2 billion euro during the first nine months of 2008, a deterioration of over 10 billion compared to the corresponding 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)

			First nine months	
	2006	2007	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.

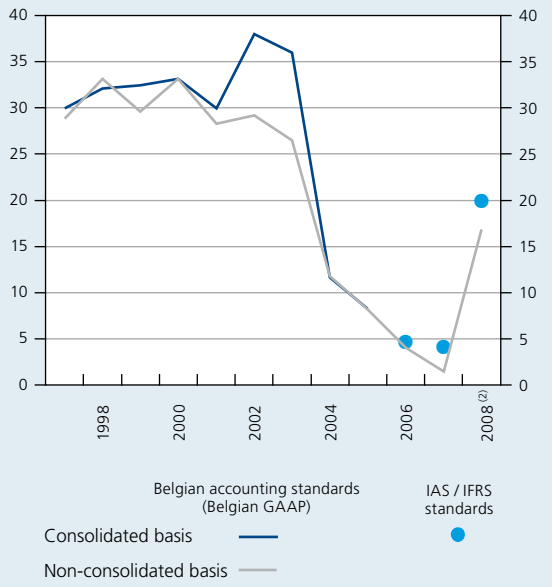
There are two types of losses here. If they correspond to probable losses on these instruments, relating either to debtor default or to reductions in value which can be considered permanent, they must be entered under the profit and loss account item comprising total impairments and provisions. Impairments 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.

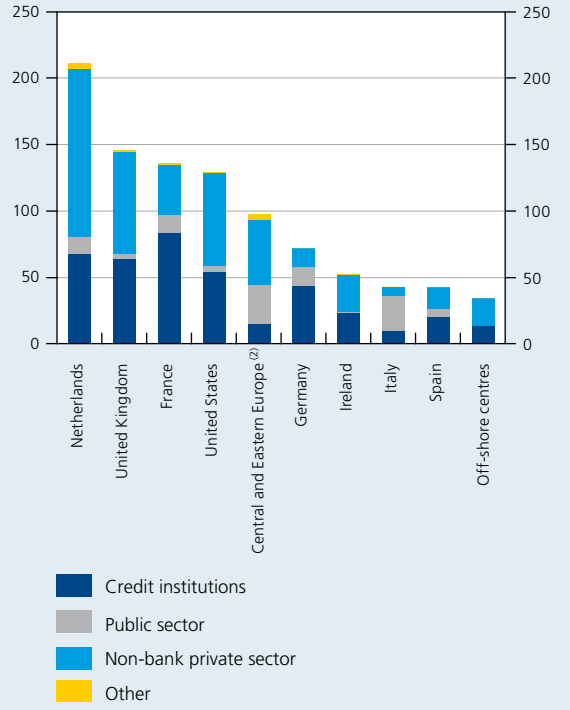
By using a different set of statistics – though the coverage is broader since they include exposures in the form of both loans and bonds – it is possible to analyse the Belgian banking sector's claims on the rest of the world by country.

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 slowdown 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 intragroup 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)

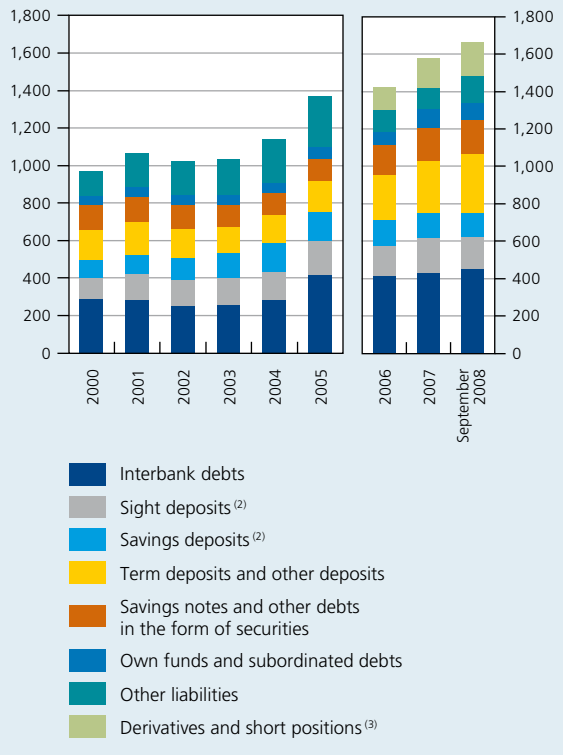
	2006	2007	September 2008	Breakdown in 2008 by counterparty residence (percentages of the total)			Total
				Belgium	Euro area	Rest of the world	
Credit institutions	285.7	320.8	291.1	2.2	15.4	11.3	28.9
Corporations	260.9	313.5	371.8	10.2	11.3	15.4	36.9
Retail	260.1	276.2	287.3	15.0	10.7	2.9	28.6
Central 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.

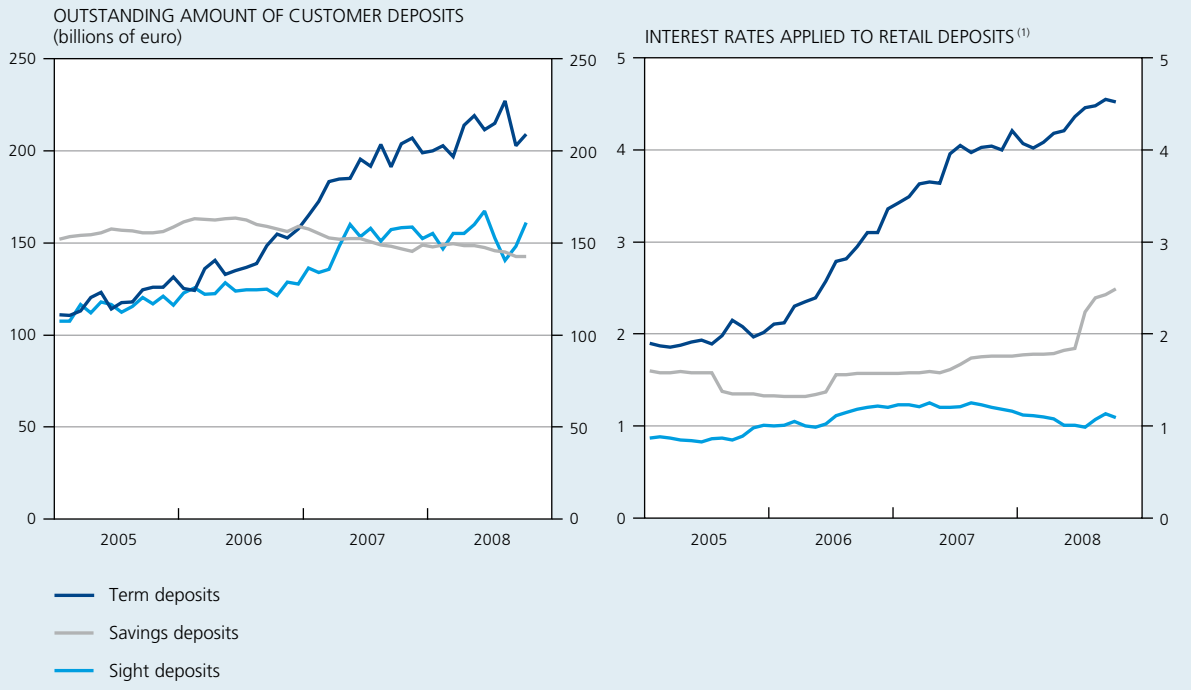
(3) Derivatives recorded at market value.

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.

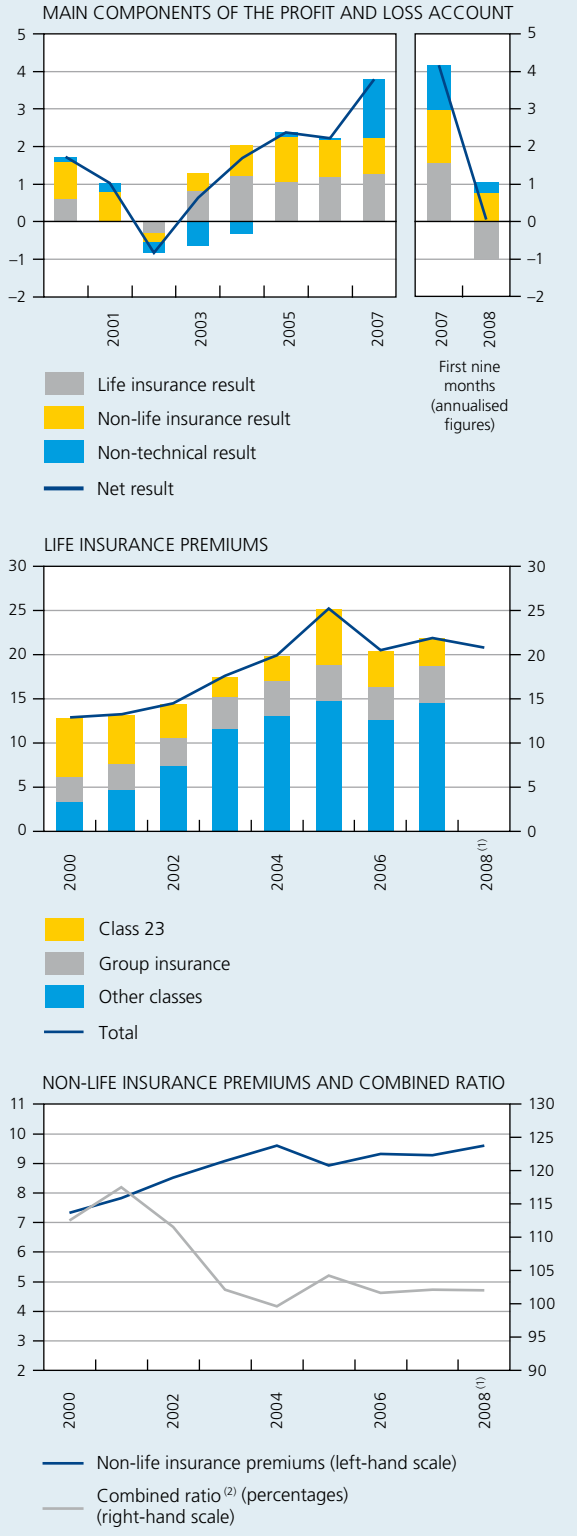
The serious deterioration in profitability can hardly be explained by a downturn in the volume of business, as measured by premium income in the life and non-life sectors, even if the deteriorating conditions on the international financial markets did contribute to some deceleration in premium income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

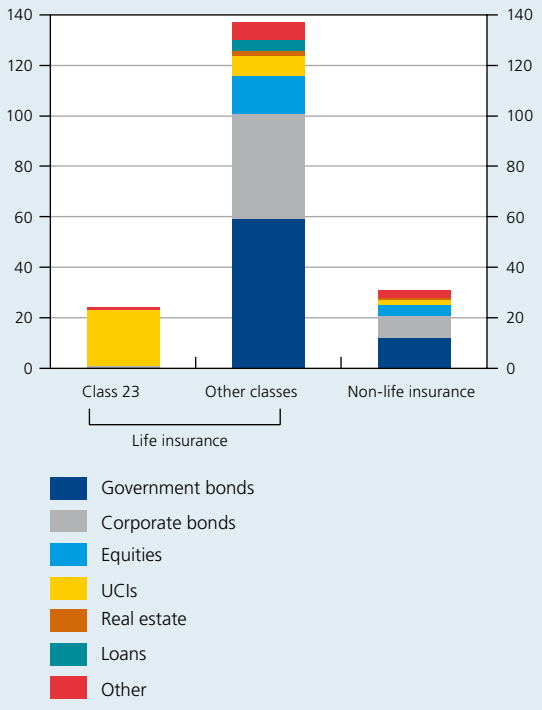
To limit their exposure to fluctuations in financial asset prices, companies sell life insurance contracts which transfer that risk to the policyholder. Thus, life insurance policies with variable capital, better known as class 23 products, entail no market risk for the companies even though the corresponding 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.

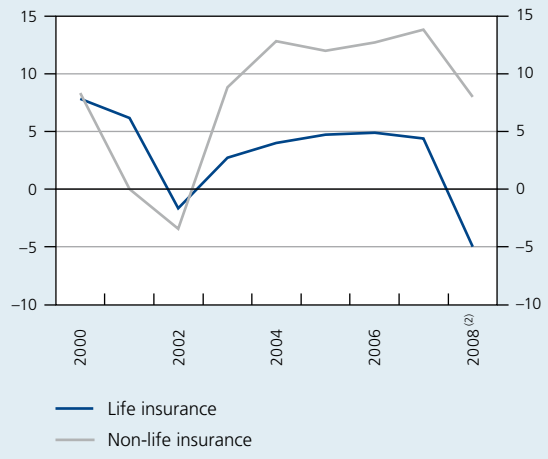
mainly of government and corporate bonds, which represented 43.6 and 30.6 p.c. respectively of the portfolio at the end of 2007. Equities, including participations in (associated) companies, accounted for only 11 p.c. of the covering assets, while loans and real estate investments represented a fairly 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 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.

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.

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**

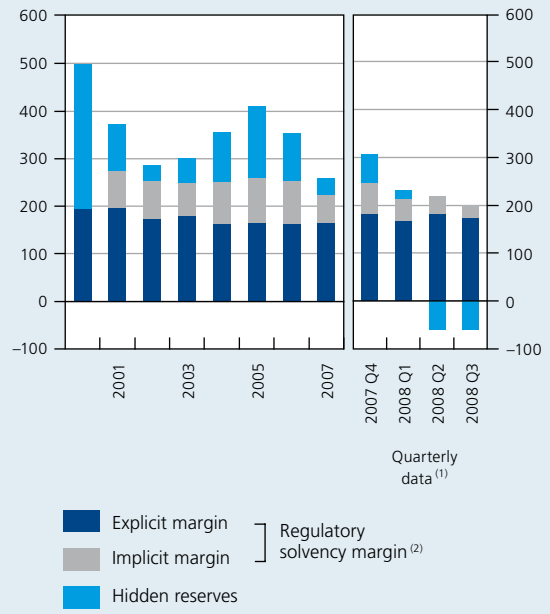
Sources: CBFA, NBB.

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 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)

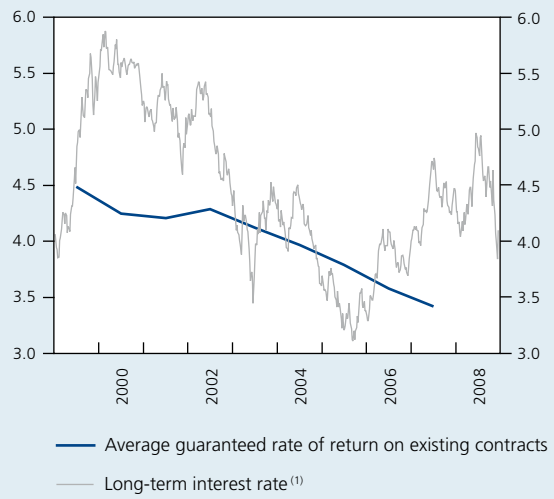
(data as at the end of June 2008, percentage of the available regulatory capital)

	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

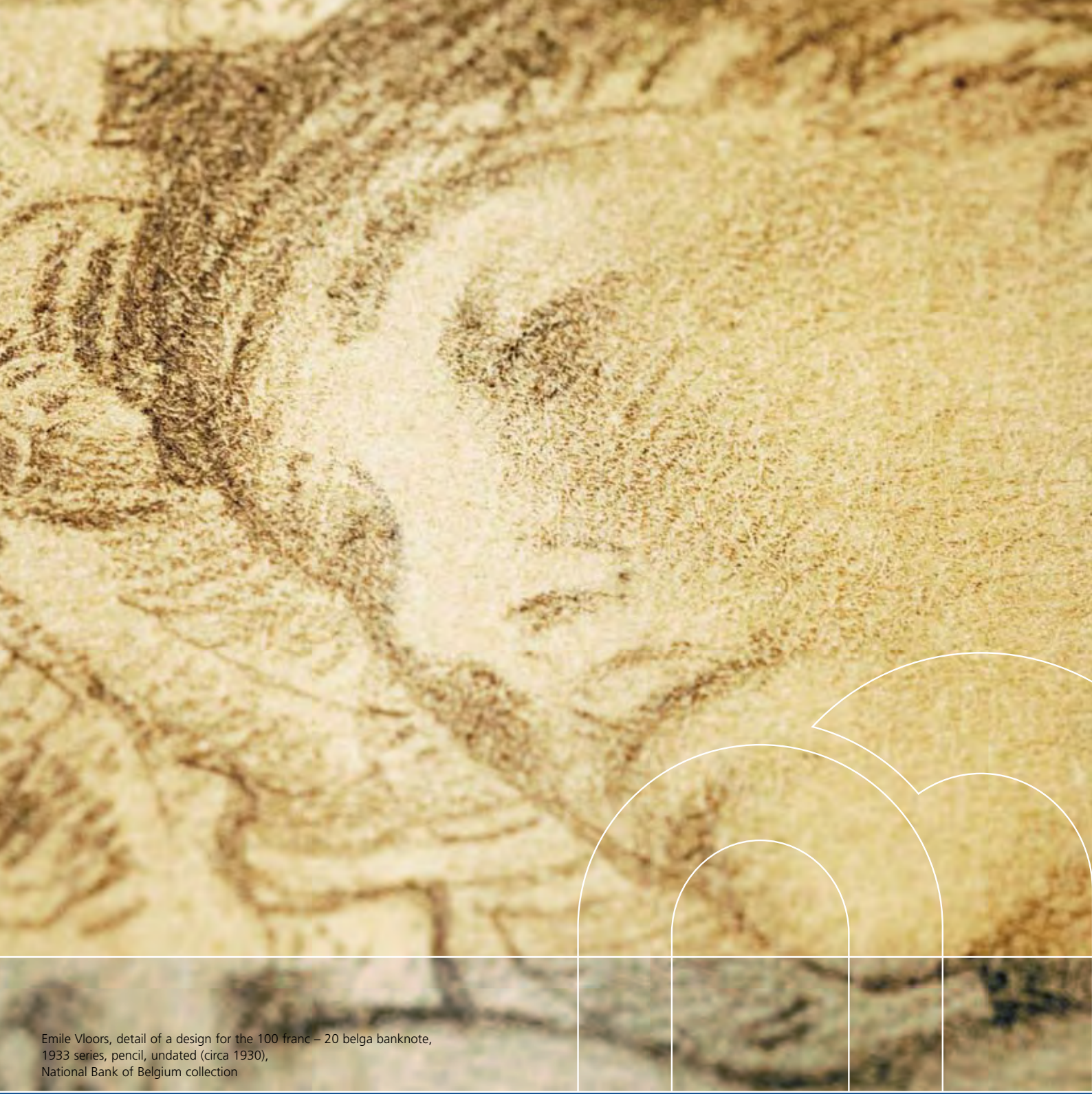


Sources: CBFA, NBB.

(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.



Emile Vloors, detail of a design for the 100 franc – 20 belga banknote,
1933 series, pencil, undated (circa 1930),
National Bank of Belgium collection

Annexes

Statistical annex

TABLE I GDP AND MAIN CATEGORIES OF EXPENDITURE, BY VOLUME

(percentage changes compared to the previous year, calendar adjusted data)

	2001	2002	2003	2004	2005	2006	2007	2008 e
Household final consumption expenditure	1.1	0.9	0.9	1.1	1.5	2.1	2.0	0.8
Housing	–4.3	–0.7	3.8	9.8	10.0	7.9	1.3	0.9
Gross fixed capital formation by enterprises	3.6	–3.1	–2.4	6.5	5.2	5.6	8.5	6.7
Expenditure of general government	1.2	2.7	2.0	1.7	1.4	–0.7	2.4	1.8
Final consumption	2.4	2.9	2.1	1.8	0.4	0.1	2.3	2.1
Gross fixed capital formation	–11.6	0.7	0.9	0.5	15.5	–10.6	3.4	–3.2
p.m. Total gross fixed capital formation (1)	*0.4*	*–2.2*	*–0.7*	*6.8*	*7.3*	*4.8*	*6.1*	*4.4*
Change in stocks (2)	–1.1	0.0	0.1	0.1	0.5	0.9	0.1	0.3
Total domestic expenditure	0.1	0.8	0.9	2.5	2.9	3.1	3.0	2.2
Exports of goods and services	1.1	1.2	3.0	6.1	3.9	2.7	3.9	3.0
Total final expenditure	0.6	0.9	1.9	4.2	3.4	2.9	3.4	2.6
Imports of goods and services	0.3	0.3	3.0	6.0	4.9	2.7	4.4	4.2
p.m. Net exports of goods and services (2)	*0.6*	*0.8*	*0.1*	*0.4*	*–0.6*	*0.1*	*–0.3*	*–1.0*
GDP	0.8	1.5	1.0	2.8	2.2	3.0	2.6	1.1

Sources: NAI, NBB.

(1) Housing, gross fixed capital formation by enterprises and gross fixed capital formation by general government.

(2) Contribution to the change in GDP.

TABLE II GNI AND MAIN CATEGORIES OF EXPENDITURE, BY VOLUME

(percentage changes compared to the previous year, data not adjusted for calendar effects)

	2001	2002	2003	2004	2005	2006	2007	2008 e
Household final consumption expenditure	1.1	0.8	0.8	1.4	1.2	2.1	2.1	0.9
Housing	–4.3	–0.7	3.8	9.8	10.0	7.9	1.3	0.9
Gross fixed capital formation by enterprises	3.3	–3.0	–2.5	7.0	4.6	5.5	8.6	7.3
Expenditure of general government	1.2	2.7	2.0	1.7	1.4	–0.7	2.4	1.8
Final consumption	2.4	2.9	2.1	1.8	0.4	0.1	2.3	2.1
Gross fixed capital formation	–11.4	0.5	1.1	0.6	15.5	–10.6	3.4	–3.2
p.m. Total gross fixed capital formation (1)	*0.2*	*–2.2*	*–0.7*	*7.1*	*6.9*	*4.7*	*6.2*	*4.7*
Change in stocks (2)	–0.9	0.1	0.1	0.2	0.1	0.9	0.3	0.2
Total domestic expenditure	0.3	0.7	0.9	2.8	2.2	3.1	3.3	2.2
Exports of goods and services	0.9	1.2	2.9	6.5	3.6	2.6	4.0	3.2
Total final expenditure	0.5	0.9	1.8	4.5	2.9	2.9	3.6	2.7
Imports of goods and services	0.2	0.2	2.9	6.6	4.1	2.7	4.6	4.4
p.m. Net exports of goods and services (2)	*0.5*	*0.8*	*0.1*	*0.3*	*–0.3*	*0.0*	*–0.4*	*–0.9*
GDP	0.8	1.5	1.0	3.0	1.8	3.0	2.8	1.2
Trade surplus or deficit (–) resulting from the change in the terms of trade (3)	0.1	0.5	–0.4	–0.3	–0.2	–0.6	0.4	–2.7
Net primary incomes received from the rest of the world (3)	–0.7	–0.2	0.1	–0.5	–0.4	0.2	–0.1	0.0
GNI	0.2	1.7	0.7	2.1	1.2	2.6	3.1	–1.4

Sources: NAI, NBB.

(1) Housing, gross fixed capital formation by enterprises and gross fixed capital formation by general government.

(2) Contribution to the change in GDP.

(3) Contribution to the change in GNI.

TABLE III DEFLATORS OF GNI AND THE MAIN CATEGORIES OF EXPENDITURE

(percentage changes compared to the previous year, data not adjusted for calendar effects)

	2001	2002	2003	2004	2005	2006	2007	2008 e
Household final consumption expenditure	2.3	1.3	1.6	2.6	2.9	2.8	2.8	4.3
Housing	4.2	4.5	1.2	4.7	3.2	5.3	3.8	3.7
Gross fixed capital formation by enterprises	–0.5	–2.3	1.3	1.8	0.8	2.8	1.5	2.6
Expenditure of general government	2.5	3.7	2.6	2.5	4.0	3.3	1.9	4.3
Final consumption	2.6	3.9	2.7	2.5	4.2	3.1	1.8	4.4
Gross fixed capital formation	0.6	0.5	1.2	2.2	0.8	5.5	2.5	2.7
p.m. Total gross fixed capital formation (1)	*0.6*	*–0.6*	*1.3*	*2.6*	*1.4*	*3.7*	*2.2*	*3.0*
Total domestic expenditure (2)	2.0	1.5	1.8	2.6	2.9	3.1	2.4	4.0
Exports of goods and services	2.1	–0.5	–2.2	2.4	4.1	3.4	3.0	3.6
Total final expenditure (2)	2.1	0.6	–0.1	2.5	3.4	3.2	2.7	3.8
Imports of goods and services	2.0	–1.2	–2.0	2.8	4.4	4.1	2.6	6.7
p.m. Terms of trade	*0.1*	*0.7*	*–0.2*	*–0.4*	*–0.3*	*–0.7*	*0.5*	*–2.9*
GDP	2.0	1.9	1.6	2.4	2.4	2.3	2.4	2.2
GNI	1.9	1.4	2.0	2.7	2.6	2.8	2.0	5.0

Sources: NAI, NBB.

(1) Housing, gross fixed capital formation by enterprises and gross fixed capital formation by general government.

(2) Excluding changes in stocks.

TABLE IV GNI AND THE MAIN CATEGORIES OF EXPENDITURE AT CURRENT PRICES

(millions of euro, data not adjusted for calendar effects)

	2001	2002	2003	2004	2005	2006	2007	2008 e
Household final consumption expenditure	140,300	143,227	146,763	152,641	158,951	166,819	175,029	184,154
Housing	11,392	11,818	12,409	14,270	16,199	18,405	19,351	20,246
Gross fixed capital formation by enterprises	37,076	35,126	34,700	37,827	39,879	43,278	47,728	52,557
Expenditure of general government	60,777	64,749	67,760	70,655	74,495	76,420	79,748	84,611
Final consumption	56,378	60,303	63,212	65,981	69,054	71,287	74,310	79,203
Gross fixed capital formation	4,399	4,446	4,549	4,674	5,441	5,133	5,439	5,408
p.m. Total gross fixed capital formation (1)	*52,867*	*51,389*	*51,657*	*56,770*	*61,519*	*66,815*	*72,518*	*78,211*
Change in stocks	180	62	810	1,828	1,353	3,506	3,077	7,330
Total domestic expenditure	249,724	254,981	262,442	277,220	290,878	308,427	324,933	348,898
Exports of goods and services	219,555	220,969	222,528	242,700	261,658	277,694	297,419	317,986
Total final expenditure	469,279	475,950	484,970	519,920	552,535	586,121	622,351	666,884
Imports of goods and services	210,396	208,298	210,244	230,291	250,423	267,898	287,434	320,205
p.m. Net exports of goods and services	*9,159*	*12,672*	*12,284*	*12,408*	*11,235*	*9,796*	*9,984*	*–2,220*
GDP	258,883	267,652	274,726	289,629	302,112	318,223	334,917	346,679
Net primary incomes received from the rest of the world	3,922	3,384	3,804	2,616	1,421	2,094	1,827	2,070
GNI	262,806	271,036	278,530	292,244	303,533	320,318	336,744	348,748

Sources: NAI, NBB.

(1) Housing, gross fixed capital formation by enterprises and gross fixed capital formation by general government.

TABLE V VALUE ADDED OF THE VARIOUS BRANCHES OF ACTIVITY, BY VOLUME

(percentage changes compared to the previous year, data not adjusted for calendar effects)

	2001	2002	2003	2004	2005	2006	2007	*p.m. Percentages of the 2007 GDP*
Agriculture, hunting, forestry and fisheries	–5.5	4.3	–7.6	5.3	–11.6	–4.3	3.4	*0.7*
Industry	0.0	–0.8	–1.2	2.9	0.1	3.6	2.6	*17.1*
Mineral-extracting industry	–11.4	–5.1	0.1	3.2	7.3	10.2	5.0	*0.1*
Electricity, gas, water	–1.7	–1.9	–0.8	–1.5	–3.2	9.7	2.2	*1.9*
Manufacturing industry	0.3	–0.7	–1.3	3.6	0.5	2.9	2.6	*15.1*
of which :								
Non-metallic minerals	3.5	–1.3	–3.4	0.1	–2.0	0.2	–0.5	*0.8*
Iron, steel and non-ferrous metals	1.8	0.4	–2.4	4.4	–7.6	1.7	9.1	*2.3*
Metal-working industry	–1.4	–4.4	–2.7	1.1	3.4	2.7	–2.1	*3.4*
Paper, printing, publishing	1.8	–1.7	1.7	5.1	1.0	4.4	4.3	*1.1*
Chemicals and rubber	0.4	2.2	–0.4	6.2	0.0	4.2	–4.3	*3.7*
Textiles, clothing and footwear	–0.3	–1.5	–8.9	0.6	–5.6	5.6	6.4	*0.6*
Food, beverages, tobacco	2.2	1.9	2.2	2.8	0.6	1.4	6.6	*1.9*
Construction	1.0	–1.5	0.9	3.5	3.7	8.4	3.6	*4.5*
Market services	2.2	2.3	2.2	2.3	2.7	2.7	3.1	*54.4*
Trade and repairs	3.7	4.3	4.9	3.6	–4.1	0.3	7.8	*11.4*
Financial services	–0.7	10.2	–5.7	8.3	3.2	8.2	–1.4	*5.1*
Real estate, renting and business services	2.5	0.9	3.1	1.4	6.6	4.2	3.2	*20.4*
Transport and communications	3.2	0.5	2.1	–0.4	3.8	0.8	0.7	*7.5*
Health and social work	3.0	1.2	1.9	1.4	1.4	0.7	2.8	*6.1*
Hotels and restaurants and miscellaneous services to households	–2.0	–1.2	1.4	1.4	2.4	2.0	0.5	*3.8*
Non-market services	0.5	1.6	1.3	1.1	1.4	1.0	0.4	*12.3*
Value added of branches, at basic prices	1.3	1.4	1.2	2.4	1.9	2.9	2.7	*89.0*
Taxes net of subsidies on products[1]	–0.4	0.3	–0.1	0.9	0.2	0.4	0.4	*11.0*
GDP	0.8	1.5	1.0	3.0	1.8	3.0	2.8	*100.0*

Source : NAI.

(1) Contribution to the change in GDP.

TABLE VI LABOUR MARKET

(annual averages, thousands of units)

	2001	2002	2003	2004	2005	2006	2007	2008 e
Population of working age[1]	6,743	6,774	6,805	6,835	6,879	6,942	7,012	7,070
Labour force	4,670	4,686	4,735	4,804	4,879	4,932	4,954	4,998
National employment	4,200	4,194	4,197	4,227	4,283	4,343	4,422	4,493
Frontier workers (balance)	50	50	51	53	53	56	57	57
Domestic employment	4,150	4,144	4,146	4,175	4,229	4,287	4,365	4,436
Self-employed	690	684	679	680	687	695	703	710
Employees	3,460	3,461	3,467	3,495	3,542	3,593	3,662	3,726
Branches sensitive to the business cycle[2]	2,227	2,204	2,183	2,191	2,214	2,249	2,303	2,346
Public administration and education	713	725	735	744	759	765	768	770
Other non-market services[3]	519	532	550	559	570	578	592	611
Unemployment[4]	470	492	538	577	596	588	533	505

Sources: DGSEI, FPB, NAI, NEMO, NBB.

(1) Persons aged 15 to 64.

(2) The branches "agriculture, hunting, forestry and fisheries", "industry", "construction", "trade, transport and communication" and "financial, real estate, renting and business services".

(3) The branches "health and social work", "community, social and personal services" and "domestic services".

(4) Unemployed job-seekers, consisting of wholly unemployed persons receiving benefits, excluding older unemployed persons not seeking work, and other compulsorily or voluntarily registered job-seekers.

TABLE VII EMPLOYMENT RATE

(percentages of the corresponding labour force aged 15 to 64[1], annual averages)

	2001	2002	2003	2004	2005	2006	2007	Average of the first three quarters 2007	Average of the first three quarters 2008
Total	59.9	59.9	59.6	60.3	61.1	61.0	62.0	61.8	62.4
According to sex									
Women	51.0	51.4	51.8	52.6	53.8	54.0	55.3	54.9	56.2
Men	68.8	68.3	67.3	67.9	68.3	67.9	68.7	68.7	68.5
According to age									
15 to 24	29.7	29.4	27.4	27.8	27.3	27.6	27.5	27.2	27.2
25 to 54	76.6	76.5	76.5	77.3	78.3	78.4	79.7	79.5	80.5
55 to 64	25.1	26.6	28.1	30.0	31.9	32.0	34.4	34.1	34.3
According to region									
Brussels	53.9	54.5	53.2	54.1	54.8	53.4	54.8	54.6	55.9
Flanders	63.4	63.5	62.9	64.3	64.9	65.0	66.1	65.9	66.6
Wallonia	55.4	54.9	55.4	55.1	56.1	56.1	57.0	56.7	57.0
According to educational level									
Lower secondary education or less	42.1	41.7	41.2	40.5	40.4	40.1	40.5	40.4	39.6
Upper secondary education	65.0	64.9	63.9	64.7	65.5	65.1	65.9	65.8	67.4
Higher education	83.3	82.5	82.2	82.5	82.8	82.4	83.7	83.2	82.8

Source: DGSEI.

(1) These employment rates are calculated on the basis of the harmonised data taken from the labour force survey.

TABLE VIII UNEMPLOYMENT RATE

(percentages of the corresponding labour force aged 15 to 64[1], annual averages)

	2001	2002	2003	2004	2005	2006	2007	Average of the first three quarters 2007	Average of the first three quarters 2008
Total	6.6	7.6	8.2	8.5	8.5	8.3	7.5	7.6	7.1
According to sex									
Women	7.5	8.7	8.9	9.6	9.6	9.4	8.5	8.7	7.6
Men	6.0	6.7	7.7	7.6	7.7	7.5	6.7	6.8	6.7
According to age									
15 to 24	16.9	17.7	21.8	21.2	21.5	20.5	18.8	19.3	18.0
25 to 54	5.6	6.6	7.1	7.4	7.4	7.2	6.6	6.7	6.2
55 to 64	3.2	4.1	3.0	3.9	4.4	4.8	4.2	4.4	4.5
According to region									
Brussels	13.0	14.7	15.8	15.9	16.5	17.7	17.2	17.5	16.2
Flanders	4.0	4.9	5.7	5.4	5.5	5.0	4.4	4.5	4.0
Wallonia	9.9	10.6	10.9	12.1	11.9	11.8	10.5	10.6	10.1
According to educational level									
Lower secondary education or less	10.0	11.7	12.5	13.3	14.1	14.0	13.0	13.0	12.9
Upper secondary education	6.6	7.4	8.4	8.5	8.5	8.2	7.6	7.7	6.7
Higher education	3.5	4.1	4.4	4.7	4.5	4.5	3.8	3.9	3.8

Source : DGSEI.

(1) These unemployment rates are calculated on the basis of the harmonised data taken from the labour force survey.

TABLE IX HARMONISED INDEX OF CONSUMER PRICES

(percentage changes compared to the corresponding period of the previous year)

	Total	Energy	Unprocessed food[1]	Underlying trend in inflation[2]	Processed food	Non-energy industrial goods	Services	*p.m. National consumer price index*	*p.m. Health index*[3]
2001	2.4	1.4	6.9	2.1	2.2	2.0	2.0	*2.5*	*2.7*
2002	1.6	–3.6	3.2	2.1	1.5	1.7	2.6	*1.6*	*1.8*
2003	1.5	0.2	1.7	1.7	2.8	1.0	1.9	*1.6*	*1.5*
2004	1.9	6.6	0.9	1.4	2.2	0.3	2.1	*2.1*	*1.6*
2005	2.5	12.7	1.7	1.4	2.0	0.3	2.1	*2.8*	*2.2*
2006	2.3	7.3	3.3	1.6	2.1	0.9	2.1	*1.8*	*1.8*
2007	1.8	0.2	3.0	1.9	4.7	0.9	1.9	*1.8*	*1.8*
2008	4.5	19.8	2.8	2.7	7.8	1.3	2.3	*4.5*	*4.2*
2008 January	3.5	13.3	1.4	2.5	8.5	1.4	1.5	*3.5*	*2.8*
February	3.6	15.0	1.2	2.5	8.7	1.2	1.5	*3.6*	*3.1*
March	4.4	20.7	2.3	2.6	8.3	1.2	1.9	*4.4*	*3.9*
April	4.1	20.7	1.6	2.2	8.3	1.3	1.1	*4.2*	*3.7*
May	5.1	26.4	4.7	2.5	8.5	1.4	1.5	*5.2*	*4.6*
June	5.8	31.2	3.5	2.8	8.7	1.4	2.1	*5.8*	*5.1*
July	5.9	31.4	4.4	2.8	8.7	1.1	2.3	*5.9*	*5.2*
August	5.4	26.6	3.9	2.9	8.5	1.1	2.6	*5.4*	*4.9*
September	5.5	26.6	3.5	3.0	7.9	1.3	2.9	*5.5*	*5.1*
October	4.8	19.2	3.0	3.1	7.0	1.5	3.2	*4.7*	*4.8*
November	3.2	6.5	1.6	2.9	5.8	1.5	3.2	*3.1*	*3.9*
December	2.7	3.1	2.2	2.7	4.5	1.5	3.1	*2.6*	*3.5*

Sources: EC, DGSEI.

(1) Fruit, vegetables, meat and fish.

(2) Measured by the HICP excluding unprocessed food and energy.

(3) National CPI excluding the prices of products considered harmful to health, namely tobacco, alcoholic beverages, petrol and diesel.

TABLE X INCOMES OF THE VARIOUS SECTORS AT CURRENT PRICES[1]

(millions of euro)

	2001	2002	2003	2004	2005	2006	2007	2008 e
Households								
Gross primary income	205,226	208,125	209,178	213,854	220,771	230,727	244,127	255,483
Wages and salaries[2]	138,074	143,425	146,277	150,283	155,420	162,903	172,372	180,948
Property incomes[3]	29,721	27,795	25,240	25,192	25,311	26,080	27,601	28,652
Gross mixed income	24,613	24,116	24,639	25,235	25,915	26,598	27,841	28,985
Gross operating surplus	12,818	12,789	13,022	13,144	14,126	15,146	16,313	16,898
Current transfers[3]	–38,981	–39,588	–38,920	–39,712	–40,866	–41,175	–43,902	–46,511
Transfers received	55,678	58,444	60,554	62,949	65,310	66,865	70,117	73,651
Transfers paid (–)	–94,660	–98,032	–99,474	–102,661	–106,177	–108,039	–114,018	–120,162
Gross disposable income	166,245	168,537	170,258	174,142	179,905	189,553	200,225	208,972
p.m. In real terms[4]	*185,650*	*185,858*	*184,782*	*184,183*	*184,976*	*189,553*	*194,778*	*194,938*
(percentage changes compared to the previous year)	*(2.3)*	*(0.1)*	*(–0.6)*	*(–0.3)*	*(0.4)*	*(2.5)*	*(2.8)*	*(0.1)*
Companies								
Gross primary income	38,040	40,797	45,963	51,807	54,253	58,919	61,728	62,329
Gross operating surplus	51,805	54,528	57,539	64,823	69,765	74,785	79,330	80,912
Property incomes[3]	–13,765	–13,732	–11,576	–13,016	–15,512	–15,866	–17,602	–18,584
Current transfers[3]	–6,480	–6,549	–6,370	–7,567	–8,559	–9,901	–9,431	–8,511
Gross disposable income	31,561	34,248	39,593	44,240	45,695	49,018	52,297	53,817
General government								
Gross primary income	19,539	22,114	23,389	26,583	28,509	30,672	30,889	30,937
Current transfers[3]	42,972	43,348	41,553	43,278	45,486	47,228	49,648	51,023
Gross disposable income	62,511	65,462	64,942	69,862	73,994	77,900	80,537	81,960
Rest of the world								
Gross disposable income	2,490	2,789	3,738	4,000	3,939	3,848	3,685	3,998
GNI	262,806	271,036	278,530	292,244	303,533	320,318	336,744	348,748

Sources: NAI, NBB.

(1) The data in this table are calculated in gross terms, i.e. before deduction of consumption of fixed capital.

(2) Remuneration (excluding that of owner entrepreneurs), including social security contributions and civil service pensions.

(3) These are net amounts, i.e. the difference between incomes or transfers received from other sectors and those paid to other sectors, excluding transfers in kind.

(4) Data deflated by means of the household final consumption expenditure deflator.

TABLE XI SUMMARY OF THE TRANSACTIONS OF THE MAIN SECTORS OF THE ECONOMY AT CURRENT PRICES[1]

(millions of euro)

	2001	2002	2003	2004	2005	2006	2007	2008 e
1. Households								
1.1 Gross disposable income	166,245	168,537	170,258	174,142	179,905	189,553	200,225	208,972
p.m. Gross adjusted disposable income	*200,453*	*204,543*	*208,470*	*214,586*	*222,322*	*233,260*	*245,955*	*257,783*
1.2 Change in net equity of households in pension funds reserves	1,607	1,541	1,716	1,857	2,009	1,959	2,517	2,427
1.3 Final consumption expenditure	140,300	143,227	146,763	152,641	158,951	166,819	175,029	184,154
p.m. Actual final consumption	*174,507*	*179,233*	*184,975*	*193,085*	*201,368*	*210,526*	*220,758*	*232,965*
1.4 Gross savings (1.1 + 1.2 – 1.3)	27,553	26,851	25,210	23,358	22,963	24,692	27,714	27,245
p.m. Percentages of gross disposable income[2]	*16.4*	*15.8*	*14.7*	*13.3*	*12.6*	*12.9*	*13.7*	*12.9*
p.m. Percentages of gross adjusted disposable income[2]	*13.6*	*13.0*	*12.0*	*10.8*	*10.2*	*10.5*	*11.2*	*10.5*
1.5 Capital transfers[3]	–569	–338	–819	–1,100	–1,307	–1,296	–1,384	–1,574
1.6 Gross capital formation	13,543	14,228	14,478	16,595	18,429	20,787	22,066	23,104
1.7 Overall balance (1.4 + 1.5 – 1.6)	13,440	12,286	9,913	5,664	3,227	2,609	4,265	2,568
2. Companies								
2.1 Gross disposable income	31,561	34,248	39,593	44,240	45,695	49,018	52,297	53,817
2.2 Change in net equity of households in pension funds reserves	–1,606	–1,540	–1,721	–1,853	–2,008	–1,956	–2,516	–2,426
2.3 Gross savings (2.1 + 2.2)	29,954	32,708	37,872	42,387	43,687	47,062	49,782	51,391
2.4 Capital transfers[3]	803	897	–1,801	1,004	8,638	1,890	2,108	1,607
2.5 Gross fixed capital formation	34,839	32,613	32,531	35,401	37,551	40,797	44,910	49,454
2.6 Change in stocks	270	160	905	1,932	1,448	3,601	3,175	7,571
2.7 Overall balance (2.3 + 2.4 – 2.5 – 2.6)	–4,351	832	2,636	6,058	13,326	4,554	3,804	–4,027
3. General government								
3.1 Gross disposable income	62,511	65,462	64,942	69,862	73,994	77,900	80,537	81,960
p.m. Gross adjusted disposable income	*28,303*	*29,456*	*26,730*	*29,418*	*31,577*	*34,192*	*34,808*	*33,149*
3.2 Change in net equity of households in pension funds reserves	–1	–1	5	–4	–1	–3	–2	–1
3.3 Final consumption expenditure	56,378	60,303	63,212	65,981	69,054	71,287	74,310	79,203
p.m. Actual final consumption	*22,170*	*24,297*	*25,000*	*25,537*	*26,637*	*27,579*	*28,580*	*30,392*
3.4 Gross savings (3.1 + 3.2 – 3.3)	6,132	5,158	1,735	3,877	4,939	6,610	6,226	2,757
3.5 Capital transfers[3]	–703	–1,008	2,437	–61	–7,648	–604	–1,898	–1,229
3.6 Gross fixed capital formation	4,399	4,446	4,549	4,674	5,441	5,133	5,439	5,408
3.7 Change in stocks	–4	4	5	–4	3	3	5	5
3.8 Overall balance according to the ESA 95 (3.4 + 3.5 – 3.6 – 3.7)	1,033	–300	–381	–855	–8,153	871	–1,116	–3,885
p.m. Overall balance according to the EDP[4]	*1,173*	*–123*	*–170*	*–532*	*–7,750*	*1,093*	*–966*	*–3,727*
4. Total of domestic sectors								
4.1 Overall balance (1.7 + 2.7 + 3.8)	10,122	12,818	12,168	10,867	8,400	8,034	6,953	–5,344

Sources: NAI, NBB.

(1) The data in this table are calculated in gross terms, i.e. before deduction of consumption of fixed capital.

(2) Disposable income, including changes in the net equity of households in pension funds reserves.

(3) These are net amounts, i.e. the difference between transfers received from other sectors and those paid to other sectors, including net acquisitions of non-financial non-produced assets and net acquisitions of valuables.

(4) The ESA 95 methodology was adapted in 2001 to exclude from the calculation of the overall balance the net interest gains on certain financial transactions, such as swaps and forward rate agreements (FRAs). However, this adjustment is not taken into account for the purpose of the excessive deficit procedure (EDP) or for the EC's assessment of the stability programmes.

TABLE XII REVENUE, EXPENDITURE AND OVERALL BALANCE OF GENERAL GOVERNMENT

(millions of euro)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008 e
Revenue[1]	118,134	123,720	128,489	133,267	140,405	142,321	149,175	155,007	160,947	167,219
Fiscal and parafiscal revenue	106,585	111,764	115,064	119,519	121,410	128,619	133,835	139,453	145,023	150,512
Levies weighing chiefly on earned income	63,598	66,837	70,102	72,689	73,740	76,270	78,347	80,078	83,874	88,835
Personal income tax[2]	29,032	31,131	32,712	33,440	33,677	34,900	36,058	36,142	37,385	39,598
Social security contributions[3]	34,566	35,706	37,390	39,249	40,063	41,370	42,288	43,936	46,489	49,237
Taxes on profits of companies[4]	7,702	8,089	8,091	8,142	7,912	9,211	10,223	11,808	12,123	11,734
Levies on other income and in respect of property[5]	7,982	8,526	8,700	9,052	9,518	10,422	11,147	11,542	12,245	12,569
Taxes on goods and services	27,304	28,312	28,171	29,637	30,241	32,717	34,118	36,025	36,781	37,374
Non-fiscal and non-parafiscal revenue[6]	11,549	11,956	13,425	13,749	18,995	13,702	15,340	15,554	15,924	16,706
Expenditure excluding interest charges	103,226	107,076	110,609	118,114	126,073	129,262	144,260	141,406	149,075	158,011
Social insurance benefits	51,680	53,737	56,506	59,654	63,109	66,398	68,965	70,947	74,651	79,854
Replacement incomes	30,023	30,748	32,120	34,291	35,812	37,331	38,702	39,939	42,131	44,818
Pensions	20,250	20,968	21,866	22,942	23,812	24,799	25,777	26,735	28,625	30,694
Private sector pensions	14,149	14,549	15,110	15,722	16,253	16,686	17,344	17,843	18,496	19,891
General government pensions	6,101	6,418	6,757	7,220	7,559	8,113	8,433	8,893	10,129	10,804
Old persons' guaranteed income	227	249	258	258	264	283	276	269	340	361
Early retirement pensions	1,215	1,163	1,153	1,144	1,184	1,239	1,257	1,301	1,359	1,423
Unemployment benefits	4,504	4,381	4,637	5,356	5,747	6,024	6,121	6,097	5,825	5,866
Career breaks and time credit	197	236	274	352	432	488	556	590	647	704
Sickness and disability insurance benefits	2,722	2,840	3,023	3,208	3,366	3,485	3,636	3,840	4,152	4,552
Industrial accidents and occupational diseases	485	486	489	495	494	495	503	504	501	501
Integration allowance	424	426	420	536	514	517	575	604	683	717
Other social insurance benefits[7]	21,657	22,989	24,386	25,364	27,297	29,067	30,264	31,008	32,519	35,036
of which:										
Health care	13,208	13,999	15,027	15,372	16,745	18,053	18,896	19,255	20,287	22,061
Family allowances	4,261	4,324	4,433	4,564	4,637	4,731	4,850	5,023	5,162	5,466
Other primary expenditure	51,547	53,339	54,103	58,459	62,964	62,864	75,294	70,459	74,425	78,157
Compensation of employees	28,032	29,039	30,326	32,532	33,833	34,659	36,423	37,858	39,273	41,190
Current purchases of goods and services	7,775	8,193	8,688	10,099	10,291	10,608	10,890	11,440	11,831	12,837
Subsidies to enterprises	3,046	3,199	3,335	3,345	3,818	3,539	4,955	5,603	6,543	7,388
Current transfers to the rest of the world	2,018	2,006	2,167	2,427	2,787	3,077	3,230	3,287	3,250	3,431
Other current transfers	2,879	2,871	3,044	3,177	3,484	3,789	4,013	4,147	3,854	4,182
Gross fixed capital formation	4,658	4,934	4,399	4,446	4,549	4,674	5,441	5,133	5,439	5,408
Other capital expenditure	3,139	3,097	2,144	2,435	4,202	2,517	10,342	2,992	4,234	3,722
Net amount excluding interest charges	14,908	16,644	17,880	15,154	14,332	13,059	4,916	13,601	11,872	9,208
Interest charges	16,332	16,709	16,847	15,454	14,713	13,914	13,068	12,731	12,988	13,093
Overall balance according to the ESA 95	–1,424	–64	1,033	–300	–381	–855	–8,153	871	–1,116	–3,885
p.m. Overall balance according to the EDP[8]	*–1,407*	*41*	*1,173*	*–123*	*–170*	*–532*	*–7,750*	*1,093*	*–966*	*–3,727*

Sources: EC, NAI, NBB.

(1) In accordance with the ESA 95, general government revenues do not include the tax revenues transferred to the EU.

(2) Mainly withholding tax on earned income, advance payments, assessments and proceeds of additional percentages on personal income tax.

(3) Total social contributions, including the special social security contribution and the contributions of non-active persons.

(4) Mainly advance payments, assessments and the withholding tax on income from movable property payable by companies.

(5) Mainly the withholding tax on income from movable property payable by households, the withholding tax on income from immovable property (including proceeds of additional percentages), inheritance taxes and registration fees.

(6) Property incomes, imputed social security contributions, current and capital transfers from other sectors and sales of produced goods and services.

(7) Apart from the two main sub-categories mentioned in the table, this item also includes mainly allowances to handicapped persons and transfers to the institutions accommodating them, payments by subsistence funds and pensions to war victims.

(8) The ESA 95 methodology was adapted in 2001 to exclude from the calculation of the overall balance the net interest gains on certain financial transactions, such as swaps and forward rate agreements (FRAs). However, this adjustment is not taken into account for the purpose of the excessive deficit procedure (EDP) or for the EC's assessment of the stability programmes.

TABLE XIII OVERALL BALANCE OF GENERAL GOVERNMENT, BY SUB-SECTORS

(millions of euro)

	Entity I			Entity II			General government	
	Federal government	Social security	Total	Communities and regions	Local authorities	Total	According to the ESA 95	*p.m. According to the EDP*[1]
1999	–3,781	1,554	–2,227	921	–118	803	–1,424	*–1,407*
2000	–1,165	1,345	181	610	–855	–245	–64	*41*
2001	–2,385	1,795	–591	1,953	–329	1,624	1,033	*1,173*
2002	–684	1,360	676	–382	–594	–976	–300	*–123*
2003	754	–737	17	26	–424	–398	–381	*–170*
2004	–649	154	–496	152	–511	–359	–855	*–532*
2005	–8,005	–11	–8,016	721	–858	–137	–8,153	*–7,750*
2006	–150	1,267	1,117	622	–868	–247	871	*1,093*
2007	–3,742	1,824	–1,918	993	–191	802	–1,116	*–966*
2008 e	–5,481	1,255	–4,225	137	203	340	–3,885	*–3,727*

Sources: EC, NAI, NBB.

(1) The ESA 95 methodology was adapted in 2001 to exclude from the calculation of the overall balance the net interest gains on certain financial transactions, such as swaps and forward rate agreements (FRAs). However, this adjustment is not taken into account for the purpose of the excessive deficit procedure (EDP) or for the EC's assessment of the stability programmes.

TABLE XIV CONSOLIDATED GROSS DEBT OF GENERAL GOVERNMENT[1]

(end-of-period outstanding amounts, millions of euro)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1. Official debt of the Treasury	246,755	251,061	257,163	262,752	263,018	265,518	269,160	270,601	285,226	310,215
In euro	236,314	242,455	250,085	257,288	259,295	263,074	267,420	269,145	284,288	305,700
At up to one year	36,553	33,310	34,851	31,115	30,222	30,355	31,036	32,243	37,891	54,162
At over one year	199,762	209,144	215,234	226,173	229,073	232,719	236,384	236,902	246,397	251,539
In foreign currencies	10,441	8,606	7,079	5,464	3,724	2,444	1,740	1,456	937	4,515
2. Components of the official debt of the Treasury not included in the consolidated gross debt[2]	4,595	5,429	4,572	3,996	3,459	0	0	0	0	0
3. Other federal government liabilities[3]	12,982	11,533	14,034	14,286	8,886	8,039	12,781	12,086	9,496	n.
4. Consolidation between federal government units[4]	3,792	4,189	7,745	12,974	17,358	21,246	22,649	21,454	30,718	n.
of which: Ageing Fund assets[5]	–	–	374	1,087	4,266	12,492	13,504	14,661	15,494	16,183
5. Consolidated gross debt of federal government (1 – 2 + 3 – 4)	251,351	252,975	258,881	260,067	251,088	252,312	259,292	261,232	264,003	n.
6. Consolidated gross debt of communities and regions	18,376	17,165	16,800	16,776	15,305	14,875	13,100	12,642	12,142	n.
7. Consolidated gross debt of local authorities	12,163	13,213	14,179	14,446	14,860	15,677	15,747	16,410	16,861	n.
8. Consolidated gross debt of social security	1,429	1,237	0	103	90	52	428	0	0	n.
9. Consolidation between the general government sub-sectors[6]	12,640	13,300	14,032	14,263	10,128	9,742	10,175	10,817	12,048	n.
10. Consolidated gross debt of general government[1] (5 + 6 + 7 + 8 – 9)	270,679	271,291	275,827	277,130	271,215	273,173	278,392	279,467	280,958	307,584 e

Sources: FPS Finance, NBB.

(1) Concept of debt as defined in Council Regulation (EC) No 3605/93 of 22 November 1993 on the application of the Protocol on the excessive deficit procedure annexed to the Treaty establishing the European Community.

(2) Mainly Treasury certificates presented to the IMF.

(3) Mainly the debudgeted Treasury debt, the debts of the *Caisse des dépôts et Consignations – Deposito- en consignatiekas*, SHLAF (up to 2006), CREDIBE (until 2002) and the RIF (from 2005), as well as coins in circulation.

(4) Federal government debt, the counterpart of which is an asset of a federal government unit.

(5) Including the capitalised interest on "Ageing Fund Treasury Bonds".

(6) Debt of a general government sub-sector, the counterpart of which is an asset of another general government sub-sector.

TABLE XV CURRENT AND CAPITAL TRANSACTIONS ON A TRANSACTION BASIS

(millions of euro)

	2006			2007			First nine months 2008		
	Credits	Debits	Balances	Credits	Debits	Balances	Credits	Debits	Balances
1. Total current transactions on a transaction basis	337,489	331,170	6,319	371,955	366,361	5,594	312,200	315,469	–3,269
Goods and services	271,349	263,771	7,578	293,747	287,466	6,281	243,388	246,612	–3,224
Goods	223,967	221,385	2,582	236,103	234,647	1,456	196,685	204,228	–7,543
General merchandise	209,556	209,306	250	220,533	222,612	–2,079	185,257	194,294	–9,037
Goods for processing	12,114	10,786	1,328	13,773	10,782	2,991	9,962	8,572	1,390
Repairs to goods	320	242	78	454	226	228	179	248	–69
Purchases of goods in ports	1,604	611	993	1,258	880	378	1,254	911	343
Non-monetary gold	373	440	–67	85	147	–62	33	203	–170
Services	47,382	42,386	4,996	57,644	52,819	4,825	46,703	42,384	4,319
Transport	12,467	10,386	2,081	18,106	14,878	3,228	13,931	11,833	2,098
Travel	8,199	12,370	–4,171	7,939	12,583	–4,644	6,638	10,015	–3,377
Communication	1,623	1,270	353	2,819	2,280	539	1,926	1,450	476
Construction	1,771	748	1,023	789	580	209	713	497	216
Insurance	737	436	301	730	530	200	891	762	129
Financial services	2,877	2,751	126	2,677	1,973	704	2,105	1,707	398
Data-processing and information services	2,288	1,581	707	2,193	1,653	540	1,803	1,289	514
Royalties and licence fees	1,228	859	369	1,194	1,365	–171	590	1,086	–496
Other services to enterprises	13,913	10,902	3,011	16,658	13,485	3,173	14,536	11,215	3,321
of which: merchanting (net)	1,408	–	1,408	4,580	–	4,580	3,540	–	3,540
Personal, cultural and recreational services	444	396	48	267	372	–105	313	320	–7
Services provided or received by general government, not included elsewhere	1,835	687	1,148	1,633	144	1,489	1,248	139	1,109
Services not allocated	–	–	–	2,639	2,976	–337	2,009	2,071	–62
Income	59,128	55,161	3,967	71,870	67,581	4,289	62,782	59,121	3,661
Earned income	5,761	1,698	4,063	6,155	1,978	4,177	4,565	1,443	3,122
Income from direct and portfolio investment	53,367	53,463	–96	65,715	65,603	112	58,217	57,678	539
Current transfers	7,012	12,238	–5,226	6,338	11,314	–4,976	6,030	9,736	–3,706
General government	2,388	6,641	–4,253	2,145	6,443	–4,298	1,731	5,028	–3,297
Other sectors	4,624	5,597	–973	4,193	4,871	–678	4,299	4,708	–409
2. Total capital transactions	768	1,104	–336	397	1,463	–1,066	527	1,498	–971
Capital transfers	179	572	–393	220	476	–256	308	315	–7
Acquisitions and sales of non-produced non-financial assets	589	532	57	177	987	–810	219	1,183	–964
3. Net lending to the rest of the world (1 + 2)	338,257	332,274	5,983	372,352	367,824	4,528	312,727	316,967	–4,240

Source: NBB.

TABLE XVI FORMATION OF FINANCIAL ASSETS AND NEW FINANCIAL LIABILITIES OF HOUSEHOLDS

(millions of euro)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	First nine months 2007	First nine months 2008	*p.m. Outstanding amount at the end of September 2008*
Formation of financial assets	25,793	18,654	21,874	17,735	18,935	16,720	24,697	23,697	30,474	17,294	10,223	*837,696*
At up to one year	–600	8	7,773	9,577	14,372	21,643	15,516	12,258	9,374	5,333	1,720	*260,544*
Notes, coins and sight deposits	3,775	2,117	–3,606	4,383	3,537	6,752	6,050	1,208	–67	498	1,297	*54,402*
Savings deposits	3,422	–5,129	5,554	11,543	17,934	14,180	8,335	1,740	–8,774	–9,542	–5,338	*136,312*
Time deposits	–7,138	3,247	4,204	–5,541	–4,909	93	420	11,083	17,508	13,730	4,508	*63,055*
Fixed-income securities	–135	252	575	–1,258	–357	–244	–113	238	739	707	856	*2,228*
Units of monetary UCIs	–524	–479	1,046	450	–1,832	862	824	–2,011	–32	–59	398	*4,548*
At over one year	25,350	18,803	15,817	8,031	4,907	5,790	8,762	11,072	19,778	11,483	8,988	*567,005*
Time deposits	–279	–467	223	–503	–627	–371	–637	35	1,329	1,159	3,186	*7,571*
Fixed-income securities	5,605	975	–4,084	–8,383	–15,727	–17,019	–13,962	–10,084	–1,285	–2,391	4,475	*73,554*
Shares and other equity	1,650	–1,347	12	2,950	–4,123	–215	–8,265	–537	6,189	2,439	10,279	*184,905*
Units of non-monetary UCIs	10,143	8,079	9,036	3,589	9,879	5,772	9,106	8,363	–1,141	384	–16,525	*91,711*
Insurance technical reserves[1]	8,232	11,562	10,630	10,379	15,504	17,623	22,519	13,295	14,687	9,892	7,574	*209,264*
Other assets[2]	1,042	–157	–1,716	127	–344	–10,713	419	367	1,322	478	–485	*10,148*
New financial liabilities	5,355	2,121	–167	4,137	5,501	6,317	11,901	12,356	14,301	8,341	8,693	*174,443*
Loans at up to one year	1,601	–659	–1,203	280	–998	–167	811	–54	154	118	603	*6,681*
Loans at over one year	3,040	3,191	2,557	4,331	6,505	5,864	11,419	11,867	13,260	9,162	9,336	*159,604*
Mortgage loans	5,473	2,360	2,394	4,947	6,165	6,333	10,037	10,748	11,949	8,027	7,836	*130,510*
Instalment loans	326	588	354	325	–208	–481	648	278	1,388	1,182	1,055	*15,354*
Other	–2,759	243	–191	–941	548	12	735	841	–77	–47	446	*13,741*
Other liabilities[3]	714	–410	–1,521	–474	–5	620	–329	543	887	–939	–1,246	*8,158*
Financial balance[4]	20,437	16,533	22,041	13,598	13,434	10,404	12,796	11,341	16,173	8,953	1,530	*663,253*

Source: NBB.

(1) This item essentially comprises the net claims of households on insurance technical reserves and on pension funds.

(2) This item comprises other accounts receivable within the meaning of the ESA 95, namely trade credit and miscellaneous assets on general government and financial institutions, including in particular interest accrued and not due.

(3) This item comprises other accounts payable within the meaning of the ESA 95, such as taxes or contributions due but not yet paid, or interest accrued and not due.

(4) The balances of the financial accounts of the domestic sectors do not correspond to the net financing capacities or requirements as recorded in the real accounts, owing to the differences between the dates of recording of the transactions in these two accounts, statistical adjustments or errors and omissions. Thus, for example, the financial accounts cannot, for lack of data, record most of the trade credits and advances.

TABLE XVII FORMATION OF FINANCIAL ASSETS AND NEW FINANCIAL LIABILITIES OF NON-FINANCIAL CORPORATIONS

(millions of euro)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	First nine months 2007	First nine months 2008	*p.m. Outstanding amount at the end of September 2008*
Formation of financial assets	39,232	79,088	55,983	27,021	56,669	27,870	13,641	75,631	96,168	62,907	81,368	*1,123,006*
At up to one year	30,675	49,768	46,009	–4,349	36,143	–10,275	13,189	37,383	41,963	16,005	48,239	*404,135*
Notes, coins and sight deposits	865	156	502	805	1,916	1,346	2,128	4,997	2,970	2,755	–1,151	*38,320*
Other deposits	8,180	–2,372	3,336	–395	–3,792	1,773	–3,650	16,079	14,109	1,867	8,324	*66,175*
Other (1)	21,629	51,984	42,171	–4,760	38,019	–13,394	14,711	16,307	24,884	11,384	41,066	*299,641*
At over one year	8,494	34,092	12,459	18,573	25,385	30,820	14,995	36,068	53,793	29,471	28,776	*701,225*
Shares and other equity (2)	1,022	19,417	5,057	–2,971	2,408	18,694	12,478	–682	44,005	25,891	18,497	*495,374*
Fixed-income securities	–329	–928	–154	2,042	–1,546	–1,236	1,472	–2,061	1,034	534	–550	*5,985*
Other (1)	7,801	15,603	7,557	19,502	24,523	13,362	1,046	38,810	8,754	3,046	10,830	*199,866*
Other assets and statistical adjustments (3)	64	–4,772	–2,485	12,797	–4,859	7,326	–14,543	2,181	412	17,431	4,352	*17,646*
New financial liabilities	46,479	81,934	67,764	27,366	57,199	27,114	7,783	78,456	108,074	62,667	77,547	*1,404,934*
At up to one year	19,354	39,417	25,663	–4,665	22,522	–11,795	2,962	20,873	28,299	20,879	1,759	*256,641*
Loans granted by credit institutions	5,441	590	–1,276	–449	–2,100	2,513	–6,437	2,659	16,761	13,760	3,288	*69,260*
Other loans (1)	12,480	35,682	25,433	–5,021	23,509	–13,442	11,377	19,092	7,570	3,877	–2,936	*178,045*
Fixed-income securities	1,433	3,146	1,506	805	1,113	–866	–1,978	–878	3,968	3,242	1,407	*9,336*
At over one year	25,585	42,166	41,495	33,371	33,838	38,696	5,128	56,332	80,036	43,450	77,471	*1,144,105*
Loans granted by credit institutions	4,191	4,572	1,531	1,863	–4,562	2,026	2,965	2,884	6,402	6,151	4,486	*71,663*
Other loans (1)	7,154	12,442	6,536	20,354	24,850	7,611	–1,010	19,500	2,109	2,052	–1,640	*155,540*
Shares and other equity (2)	12,805	25,747	27,798	8,892	5,478	22,590	9,215	31,475	71,276	36,323	73,783	*889,089*
Fixed-income securities	1,436	–595	5,631	2,261	8,072	6,469	–6,042	2,473	249	–1,075	843	*27,814*
Other liabilities (4)	1,540	350	606	–1,340	840	213	–307	1,250	–260	–1,662	–1,682	*4,187*
Financial balance (5)	–7,247	–2,846	–11,781	–345	–530	756	5,858	–2,824	–11,906	239	3,820	*–281,927*

Source: NBB.

(1) Including intrasectoral loans of non-financial corporations.

(2) Including reinvested profits made on foreign direct investments.

(3) This item comprises miscellaneous assets on financial institutions, including in particular interest accrued and not due. In addition, it covers errors and omissions on Belgium's financial account vis-à-vis the rest of the world which, for consistency between the accounts, are regarded as unrecorded capital movements.

(4) This item comprises the technical reserves of non-autonomous pension funds and other accounts payable within the meaning of the ESA 95, such as taxes or contributions due but not yet paid, or interest accrued and not due.

(5) See note 4 to table XVI.

TABLE XVIII FORMATION OF FINANCIAL ASSETS AND NEW FINANCIAL LIABILITIES OF GENERAL GOVERNMENT

(millions of euro)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	First nine months 2007	First nine months 2008	*p.m. Outstanding amount at the end of September 2008*
Formation of financial assets	1,582	942	4,801	4,254	–4,462	3,322	593	972	12,477	9,631	–1,281	*89,517*
Deposits, loans and securities other than shares	1,575	1,496	3,290	5,228	–3,965	3,832	1,400	–1,063	11,294	8,619	–6,143	*44,630*
With general government	516	1,154	4,400	5,556	1,682	3,625	1,815	–510	10,499	992	–8,345	*34,709*
With other sectors	1,059	342	–1,111	–328	–5,648	207	–416	–553	795	7,628	2,202	*9,921*
Other assets[1]	7	–555	1,512	–974	–496	–510	–807	2,035	1,183	1,012	4,861	*44,887*
New financial liabilities	2,686	2,076	5,392	6,017	–4,722	3,593	8,045	395	13,020	13,958	4,842	*342,644*
In euro	2,791	3,926	6,769	7,232	–3,440	4,954	7,930	544	13,550	13,983	4,543	*340,578*
At up to one year	–5,445	–4,607	–322	115	–467	–2,005	1,166	973	6,844	6,362	8,187	*63,243*
of which:												
Treasury certificates	–6,807	–3,483	1,383	57	–840	–143	853	99	3,422	6,989	3,840	*34,235*
Other securities	–259	–772	–1,761	–72	473	–457	–185	103	975	2,794	3,618	*6,776*
At over one year	8,236	8,532	7,091	7,117	–2,972	6,959	6,764	–429	6,706	7,621	–3,643	*277,335*
of which:												
Linear bonds	14,455	15,073	12,570	11,628	7,790	4,968	4,125	–14	6,679	9,096	–2,645	*218,258*
Other securities	–5,415	–6,427	–6,596	–5,778	–9,604	–5,929	–1,072	–1,536	–842	–1,203	–334	*13,335*
In foreign currencies	–105	–1,849	–1,377	–1,214	–1,282	–1,361	115	–149	–530	–25	298	*2,066*
At up to one year	1,517	–397	372	–164	–762	–50	–329	–77	–460	7	867	*898*
At over one year	–1,622	–1,452	–1,748	–1,050	–520	–1,310	444	–72	–69	–32	–569	*1,168*
Financial balance[2]	–1,104	–1,135	–591	–1,763	260	–271	–7,452	577	–543	–4,327	–6,123	*–253,127*

Source: NBB.

(1) Shares and other equity, UCI units, financial derivatives and other accounts receivable within the meaning of the ESA 95.

(2) See note 4 to table XVI.

TABLE XIX FORMATION OF FINANCIAL ASSETS AND NEW FINANCIAL LIABILITIES OF MONETARY FINANCIAL INSTITUTIONS[1]

(data on a territorial basis, millions of euro)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	First nine months 2007	First nine months 2008	*p.m. Outstanding amount at the end of September 2008*
Formation of financial assets												
Interbank claims	5,672	–47,874	317	15,680	59,190	48,115	58,245	47,903	129,719	59,994	125,572	*652,115*
Belgian MFIs	4,118	–26,509	–5,436	–6,903	8,112	7,093	15,998	2,901	32,007	–4,537	75,253	*174,577*
Foreign MFIs	1,554	–21,366	5,753	22,583	51,078	41,022	42,248	45,003	97,713	64,531	50,319	*477,538*
Loans[2]	15,448	12,484	14,280	21,091	14,943	19,465	51,718	31,170	40,886	25,279	22,887	*439,010*
of which:												
Households	4,999	2,051	2,076	3,284	5,625	6,734	13,367	12,129	7,634	4,617	–5,730	*127,093*
Non-financial corporations	5,472	2,293	–749	–1,695	–7,373	–1,263	1,189	505	18,119	13,876	6,627	*99,965*
Fixed-income securities	14,142	–12,309	28,201	–11,607	1,859	9,005	10,179	–8,142	7,341	–7,044	17,688	*254,646*
of which:												
General government	–12,560	–18,540	–9,405	–8,062	–8,255	–5,654	–545	–4,717	–13,352	–8,423	1,411	*50,509*
Rest of the world	25,291	5,917	38,209	–2,423	9,753	14,409	11,489	–3,678	19,002	–336	308	*181,158*
Other assets	9,466	9,238	4,381	–1,535	8,383	29,471	7,864	21,770	44,763	22,700	13,644	*199,541*
Total	44,727	–38,462	47,180	23,629	84,374	106,056	128,007	92,701	222,710	100,929	179,792	*1,545,311*
Households	5,265	1,803	223	3,082	5,665	6,718	13,345	12,274	8,016	4,804	–5,765	*129,026*
Non-financial corporations	5,552	3,447	–908	–4,537	–6,100	–1,995	1,096	2,165	21,181	15,583	7,220	*105,259*
General government	–12,768	–19,237	–10,858	–9,123	–8,175	–6,396	–965	–4,279	–13,815	–7,824	1,153	*77,001*
Financial institutions	10,500	–22,902	–4,507	–5,477	22,944	27,972	13,859	34,072	63,399	22,218	113,470	*366,437*
Rest of the world	36,177	–1,572	63,230	39,684	70,040	79,757	100,673	48,469	143,929	66,148	63,714	*867,589*
New financial liabilities												
Interbank liabilities	17,513	–57,890	17,583	786	57,646	48,231	89,244	74,571	110,732	25,429	103,074	*699,910*
Belgian MFIs	4,118	–26,509	–5,436	–6,903	8,112	7,093	15,998	2,901	32,007	–4,537	75,253	*174,577*
Foreign MFIs	13,394	–31,381	23,019	7,689	49,534	41,138	73,246	71,670	78,726	29,966	27,821	*525,333*
Cash and deposits[2]	16,814	4,808	28,182	22,917	21,775	40,030	47,655	7,115	49,265	39,771	40,524	*534,987*
of which:												
Households	3,927	303	5,820	7,219	10,622	15,513	13,739	9,828	7,681	4,793	2,095	*219,050*
Non-financial corporations	2,141	–395	2,151	4,994	1,415	–373	1,045	10,151	9,365	3,180	1,848	*75,066*
Fixed-income securities	–602	4,792	–5,777	–4,119	–8,900	–5,499	–9,558	–409	13,970	9,791	11,389	*76,653*
Savings notes	–5,905	–3,051	–4,790	–4,033	–6,976	–7,357	–7,280	–2,863	1,358	403	383	*29,920*
Other fixed-income securities	5,303	7,843	–987	–86	–1,924	1,858	–2,278	2,454	12,612	9,388	11,006	*46,734*
Other liabilities and statistical adjustments[3]	11,003	9,828	7,191	4,044	13,853	23,294	667	11,425	48,743	25,938	24,805	*233,761*
Total	44,727	–38,462	47,180	23,629	84,374	106,056	128,007	92,701	222,710	100,929	179,792	*1,545,311*
Households	1,660	–2,362	569	3,735	1,604	8,935	5,749	6,527	11,531	9,761	6,493	*267,988*
Non-financial corporations	10,800	–1,887	3,563	8,508	2,228	–5,802	351	13,771	6,524	2,728	–8,936	*79,170*
General government	–998	212	–36	–1,187	–214	–251	–50	–616	829	2,374	6,253	*20,142*
Financial institutions	13,924	–19,056	–1,697	–7,469	22,648	37,039	20,476	11,545	66,114	18,148	90,855	*343,554*
Rest of the world	19,342	–15,368	44,780	20,042	58,108	66,135	101,481	61,475	137,712	67,918	85,126	*834,457*

Source: NBB.

(1) Credit institutions, monetary UCIs and monetary authorities.

(2) Other than those included in interbank transactions.

(3) Statistical adjustments are due to the equalisation of the total of financial assets and liabilities, Belgian MFIs being treated as pure financial intermediaries.

TABLE XX FORMATION OF ASSETS AND NEW LIABILITIES OF FINANCIAL INTERMEDIARIES OTHER THAN MONETARY INSTITUTIONS

(millions of euro)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	First nine months 2007	First nine months 2008	*p.m. Outstanding amount at the end of September 2008*
Non-monetary UCIs												
Formation of financial assets	14,850	18,524	12,110	3,886	4,029	6,240	6,492	7,935	–1,851	3,844	–6,216	*95,174*
Deposits	5,291	1,264	2,041	2,957	2,390	1,994	1,860	–655	–6,996	–4,260	–3,520	*18,098*
Fixed-income securities	2,023	4,281	1,529	203	–487	4,728	–1,123	3,130	7,450	6,271	277	*30,225*
Shares and other equity[1]	5,768	9,630	5,444	1,753	338	–2,465	414	–1,222	–4,250	–3,109	159	*24,116*
UCI units	2,255	3,334	1,962	–2,653	204	–5	5,856	5,058	–141	623	–3,385	*15,041*
Other assets	–487	15	1,134	1,627	1,583	1,988	–515	1,624	2,086	4,319	253	*7,694*
New financial liabilities	14,850	18,524	12,110	3,886	4,029	6,240	6,492	7,935	–1,851	3,844	–6,216	*95,174*
UCI units held by Belgian households	11,944	11,046	8,820	5,237	5,905	4,265	1,077	5,515	–3,194	–2,550	–6,199	*62,962*
UCI units held by other investors	2,906	7,478	3,290	–1,350	–1,876	1,975	5,415	2,420	–75	3,304	–102	*28,342*
Other assets	–	–	–	–	–	–	–	–	1,419	3,090	85	*3,870*
Financial balance[2]	0	0	0	0	0	0	0	0	0	0	0	*0*
Insurance companies and pension funds												
Formation of financial assets	9,222	8,994	9,971	10,508	16,405	20,418	22,480	15,473	17,503	19,762	8,807	*226,695*
Deposits	599	296	420	1,748	3,311	2,589	63	–1,009	–929	5,137	–1,119	*9,714*
Fixed-income securities	4,171	363	3,115	1,733	11,729	14,867	16,002	14,953	12,123	10,554	5,160	*128,920*
Loans	87	157	551	376	–87	–104	–649	315	173	1,330	1,605	*12,178*
Shares and other equity	–36	514	518	3,470	–1,250	76	2,127	–1,371	4,264	909	3,638	*28,430*
UCI units	4,048	7,168	4,431	2,978	2,206	2,538	4,250	2,330	1,852	1,762	–2,130	*36,729*
Other assets	354	497	935	203	495	452	688	255	20	70	1,653	*10,724*
New financial liabilities	9,179	11,067	10,676	10,774	16,382	20,396	23,965	16,634	15,540	18,634	10,418	*237,280*
Net claims of households on life insurance reserves and pension funds reserves	7,422	9,387	9,315	8,585	13,027	15,121	20,210	11,328	13,746	9,646	7,174	*172,992*
Other insurance technical reserves	527	557	637	1,069	1,580	2,197	1,838	1,757	341	439	745	*29,061*
Other liabilities	1,230	1,123	725	1,119	1,775	3,078	1,917	3,549	1,454	8,549	2,499	*35,226*
Financial balance	43	–2,073	–706	–265	23	22	–1,485	–1,161	1,963	1,128	–1,610	*–10,585*
Other[3]												
Formation of financial assets	16,649	6,211	5,026	7,612	5,778	–4,036	4,773	29,600	45,710	17,544	23,808	*172,545*
Deposits	848	150	711	–299	3,587	95	1,768	299	–109	723	–1,252	*4,296*
Loans	103	2,156	1,250	3,200	1,595	267	805	14,575	8,819	5,527	20,996	*77,006*
Shares and other equity	16,102	3,131	2,099	3,671	–1,619	–2,461	1,907	3,515	29,375	2,918	117	*61,571*
Other assets	–405	775	965	1,040	2,215	–1,936	293	11,212	7,624	8,375	3,947	*29,672*
New financial liabilities	16,498	6,483	3,866	6,020	6,798	–3,993	6,091	29,499	44,443	16,063	26,243	*180,915*
Loans	1,337	2,253	3,450	799	8,313	–3,880	1,497	9,157	9,748	6,621	7,025	*50,215*
Shares and other equity	12,938	4,624	1,177	2,901	–68	–63	4,165	18,977	31,715	6,345	2,060	*96,155*
Other liabilities	2,223	–394	–761	2,319	–1,447	–51	429	1,365	2,981	3,097	17,158	*34,545*
Financial balance	150	–272	1,159	1,593	–1,020	–43	–1,317	101	1,266	1,482	–2,435	*–8,370*

Sources: Belgian Association of Pension Institutions, BEAMA, CBFA, NBB.

(1) Including real estate certificates.

(2) Non-monetary UCIs are treated as pure financial intermediaries, with no financial balance.

(3) Financial holding companies, real estate investment funds with fixed capital (Sicafi), private closed-end equity funds (Pricaf), undertakings for investment in claims, mortgage companies, regional social housing companies, finance companies, investment firms and UCI management companies.

TABLE XXI NET ISSUES OF SECURITIES[1] BY FINANCIAL[2] AND NON-FINANCIAL CORPORATIONS AND GENERAL GOVERNMENT

(millions of euro)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	First nine months 2007	First nine months 2008	*p.m. Outstanding amount at the end of September 2008*
Fixed-income securities	4,125	9,409	6,258	5,621	–4,241	–2,251	–12,968	1,590	29,667	31,633	32,775	*416,806*
Financial and non-financial corporations	2,938	6,844	1,333	999	–776	667	–16,804	3,087	19,961	13,981	27,998	*142,137*
Securities at up to one year	5,851	7,759	–1,212	1,048	–265	679	–3,184	–1,513	4,257	4,390	8,016	*27,064*
Securities at over one year	–2,913	–916	2,545	–49	–510	–12	–13,620	4,600	15,704	9,592	19,982	*115,073*
General government	1,187	2,565	4,925	4,622	–3,466	–2,918	3,836	–1,497	9,706	17,652	4,777	*274,670*
Securities at up to one year	–6,232	–4,629	699	–178	–1,132	–646	339	125	3,939	9,791	8,325	*41,909*
Securities at over one year	7,418	7,194	4,226	4,800	–2,334	–2,272	3,497	–1,622	5,768	7,860	–3,548	*232,761*
Shares	26,416	30,824	29,257	12,367	4,177	22,804	13,382	53,607	122,963	44,689	81,784	*1,040,603*
Listed shares	9,367	7,939	5,711	1,048	818	4,182	5,407	5,646	11,371	3,010	1,395	*153,126*
Unlisted shares and other equity[3]	17,049	22,885	23,547	11,319	3,360	18,623	7,975	47,961	111,592	41,679	80,389	*887,477*
p.m. Recourse by financial and non-financial corporations to the securities market	*29,354*	*37,668*	*30,590*	*13,366*	*3,402*	*23,471*	*–3,422*	*56,694*	*142,924*	*58,670*	*109,782*	*1,182,740*

Sources: CBFA, Euronext Brussels, NBB.

(1) Excluding derivatives and units of UCIs.

(2) Excluding the Eurosystem.

(3) Including reinvested profits on direct investments effected in Belgium by foreign companies.

TABLE XXII INTEREST RATES

(end of quarter, annual percentages)

	Yield on the interbank market		Yield on the Belgian secondary market in securities issued by Belgian general government				
	Overnight[1]	Three-month[2]	Three-month Treasury certificates	Linear bonds			Rates of the ten-year benchmark linear bond
				At one year	At two years	At five years	
2004 I	2.06	1.96	1.87	1.89	2.23	3.16	4.10
II	2.13	2.12	2.03	2.28	2.72	3.68	4.44
III	2.09	2.15	2.02	2.28	2.59	3.36	4.06
IV	2.21	2.16	2.00	2.23	2.47	3.07	3.68
2005 I	2.12	2.15	2.03	2.24	2.48	3.09	3.73
II	2.17	2.11	2.00	1.98	2.08	2.53	3.22
III	2.15	2.18	2.03	2.20	2.35	2.72	3.19
IV	2.42	2.49	2.27	2.68	2.80	3.04	3.32
2006 I	2.62	2.82	2.62	3.04	3.25	3.59	3.82
II	2.89	3.06	2.82	3.33	3.55	3.87	4.09
III	3.10	3.42	3.17	3.55	3.56	3.59	3.69
IV	3.69	3.73	3.49	3.82	3.87	3.92	3.99
2007 I	3.90	3.92	3.78	4.01	4.02	4.02	4.11
II	4.14	4.18	4.01	4.35	4.50	4.54	4.63
III	4.16	4.79	3.93	4.04	4.18	4.26	4.49
IV	3.92	4.68	3.79	4.13	4.11	4.22	4.47
2008 I	4.16	4.73	3.81	3.82	3.78	3.92	4.31
II	4.27	4.95	4.22	4.64	4.79	4.87	4.87
III	4.17	5.28	3.78	3.71	3.82	4.22	4.61
IV	2.35	2.89	1.76	1.99	2.51	3.32	3.77

Sources: ECB, NBB.

(1) The weighted average interest rate on the interbank market of the euro area for unsecured overnight transactions (i.e. transactions not backed by securities) in euro (Eonia).

(2) Average interest rate offered on the interbank market of the euro area for unsecured three-month transactions in euro (Euribor).

TABLE XXIII MAIN INTEREST RATES OF THE EUROSYSTEM

(annual percentages)

Dates of announcement of changes	Rate on the main refinancing operations[1]	Rate on the marginal lending facility	Rate on the deposit facility
1998 22 December	3.00	4.50[2]	2.00[2]
1999 8 April	2.50	3.50	1.50
4 November	3.00	4.00	2.00
2000 3 February	3.25	4.25	2.25
16 March	3.50	4.50	2.50
27 April	3.75	4.75	2.75
8 June	4.25	5.25	3.25
31 August	4.50	5.50	3.50
5 October	4.75	5.75	3.75
2001 10 May	4.50	5.50	3.50
30 August	4.25	5.25	3.25
17 September	3.75	4.75	2.75
8 November	3.25	4.25	2.25
2002 5 December	2.75	3.75	1.75
2003 6 March	2.50	3.50	1.50
5 June	2.00	3.00	1.00
2004 –			
2005 1 December	2.25	3.25	1.25
2006 2 March	2.50	3.50	1.50
8 June	2.75	3.75	1.75
3 August	3.00	4.00	2.00
5 October	3.25	4.25	2.25
7 December	3.50	4.50	2.50
2007 8 March	3.75	4.75	2.75
6 June	4.00	5.00	3.00
2008 3 July	4.25	5.25	3.25
8 October	3.75	4.25	3.25
6 November	3.25	3.75	2.75
4 December	2.50	3.00	2.00

Source: ECB.

(1) Until the operation settled on 21 June 2000, fixed rate of the weekly allotments of two-week credits. For the transactions settled on 28 June 2000 and 14 October 2008, minimum bid rate at the tenders for the credit allotments. For transactions settled from 15 October 2008, fixed rate of the weekly one-week credit allotments.

(2) Except for the period from 4 to 21 January 1999, during which the rate for the marginal lending facility was 3.25 p.c. and that for the deposit facility 2.75 p.c. The purpose of this narrower "corridor" (50 basis points) was to facilitate the transition of market operators to the new system.

TABLE XXIV EXCHANGE RATES

(national monetary units per euro, annual averages)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
US dollar	1.066	0.924	0.896	0.946	1.131	1.244	1.244	1.256	1.370	1.471
Japanese yen	121.3	99.5	108.7	118.1	131.0	134.4	136.9	146.0	161.3	152.5
Swiss franc	1.600	1.558	1.511	1.467	1.521	1.544	1.548	1.573	1.643	1.587
Korean won (1)	1,267.3	1,043.5	1,154.8	1,175.5	1,346.9	1,422.6	1,273.6	1,198.6	1,273.0	1,606.1
Hong Kong dollar (1)	8.269	7.198	6.986	7.375	8.808	9.688	9.677	9.755	10.691	11.454
Singapore dollar (1)	1.806	1.592	1.604	1.691	1.970	2.102	2.070	1.994	2.064	2.076
Canadian dollar	1.584	1.371	1.386	1.484	1.582	1.617	1.509	1.424	1.468	1.559
Norwegian krone	8.310	8.113	8.048	7.509	8.003	8.370	8.009	8.047	8.017	8.224
Australian dollar	1.652	1.589	1.732	1.738	1.738	1.691	1.632	1.667	1.635	1.742
Pound sterling	0.659	0.610	0.622	0.629	0.692	0.679	0.684	0.682	0.684	0.796
Swedish krona	8.807	8.445	9.255	9.161	9.124	9.124	9.282	9.254	9.250	9.615
Danish krone	7.435	7.454	7.452	7.431	7.431	7.440	7.452	7.459	7.451	7.456
Czech koruna	36.88	35.60	34.07	30.80	31.85	31.89	29.78	28.34	27.77	24.95
Estonian kroon	15.65	15.65	15.65	15.65	15.65	15.65	15.65	15.65	15.65	15.65
Hungarian forint	252.8	260.0	256.6	243.0	253.6	251.7	248.1	264.3	251.4	251.5
Bulgarian lev			1.9482	1.9492	1.9490	1.9533	1.9558	1.9558	1.9558	1.9558
Romanian leu (2)	16,345	19,922	26,004	31,270	37,551	40,510	3.6209	3.5258	3.3353	3.6826
Lithuanian litas (1)	4.264	3.695	3.582	3.459	3.453	3.453	3.453	3.453	3.453	3.453
Latvian lats (1)	0.626	0.559	0.560	0.581	0.641	0.665	0.696	0.696	0.700	0.703
Polish zloty	4.227	4.008	3.672	3.857	4.400	4.527	4.023	3.896	3.784	3.512
Slovak koruna (1)	44.12	42.60	43.30	42.69	41.49	40.02	38.60	37.23	33.78	31.26
p.m. Effective euro exchange rate (3) (index 1st quarter 1999 = 100)	*96.2*	*87.0*	*87.7*	*90.1*	*100.6*	*104.4*	*103.3*	*103.6*	*107.7*	*112.7*

Source: ECB.

(1) As the ECB has only provided official reference rates since 2001, the rates shown in the table for the period prior to that date are indicative.

(2) From 2005, new Romanian leu.

(3) Data compiled on the basis of the weighted averages of the bilateral euro exchange rates. The weightings are calculated from the trade in manufactured products during 1995-1997 and 1999-2001 with the trading partners (including China) whose currencies appear in the table, and take account of the effects of third markets.

Methodological note

Unless otherwise indicated, when data are compared from year to year, they all relate to the same period of the years in question. In the tables, the totals shown may differ from the sum of the items owing to rounding.

In order to provide an update on various key economic data relating to Belgium in the year 2008 as a whole, it was necessary to make estimates, as the statistical material for that year is inevitably sometimes still very fragmentary. In the tables and charts, these estimates, which were finalised at the end of January 2009, are marked "e". They represent mere orders of magnitude intended to demonstrate the trends which already seem to be emerging. For the years prior to 2008, the data in the Report are those of the official national accounts. The comments on the international environment and the international comparisons are based on the data from international institutions, published respectively in October 2008 by the IMF, in November 2008 by the OECD and in January 2009 by the EC.

The monetary unit used in the Report for the data concerning the euro area member countries is the euro. On 1 January 1999, it became the currency of most of those economies, while countries such as Greece, Slovenia, Cyprus, Malta and – finally – Slovakia joined later, at the beginning of 2009 in the case of the last country mentioned. The amounts relating to the periods prior to its introduction are converted at the irrevocable euro conversion rates. Except in the chapters on monetary policy and prices, where the definition coincides with the historical reality, the euro area is defined wherever possible in this Report as consisting of all the EU countries which adopted the single currency, excluding Slovakia. Apart from Belgium, the area therefore consists of Austria, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and, unless otherwise stated, Slovenia, Cyprus and Malta. For convenience, the term "euro area" is also used to designate this group of countries for periods prior to the start of Stage 3 of EMU.

Since 1999, the NAI, in accordance with the obligation imposed by Eurostat, has applied the ESA 95 methodology for compiling the national accounts, instead of the ESA 79 methodology. The ESA 95 gives a more accurate and complete picture of economic developments[1]. It also provides a better guarantee of the international comparability of the macroeconomic data. As far as possible, the Report incorporates the definitions and methods resulting from ESA 95. However, it still expresses the data in gross terms, as under the ESA 79, although this new system presents the main aggregates derived from the national accounts in the form of net results for consumption of fixed capital. Gross data have the advantage of reducing the problem connected with the valuation of depreciation, which is based on the assumption of perfect knowledge of the stock of fixed

(1) For fuller information concerning the ESA 95, see the NAI publication entitled *Comptes nationaux 1998 – Partie 1 : Estimation des agrégats annuels*. The changes caused by the switch to the ESA 95 for the account of general government are specified in more detail in another publication from the same source, entitled *Comptes nationaux 1998 – Partie 3 : Comptes des administrations publiques*.

capital. Furthermore, gross data make it easier to interpret certain movements such as those of the gross operating surplus. For simplicity, the sectoral breakdown groups together, under the heading "individuals", households and non-profit institutions serving households, which constitute separate sectors according to the ESA 95 methodology. Nevertheless, the terms "individuals" and "households" are used as synonyms. The terms "corporations" and "enterprises" are also most frequently used as synonyms, whereas in the commentary from the GDP expenditure angle, "enterprises" also covers self-employed persons, who are included under households in the real and financial sectoral accounts.

The Belgian national accounts, like those of other European countries, underwent a series of important methodological revisions in 2005 and 2006, affecting the basic data and/or the methods of calculation for the majority of the aggregates (value added, consumption, investment, compensation, etc.), and the breakdown of price and volume effects.

One of the main methodological adjustments in 2005 was the change in the treatment of financial intermediation services indirectly measured (FISIM). Before this revision, the FISIM output was recorded, by convention, as intermediate consumption of a notional branch, and was therefore not taken into account for the calculation of GDP. Following the entry into force of a new European Regulation, in January 2005, the FISIMs are now divided among the user sectors, reclassifying part of the interest payments as service payments. This reclassification had a considerable impact on the value of certain aggregate flows of goods and services: the output of financial corporations, intermediate and final consumption, imports and exports. This has affected the value added of the various branches of activity and sectors, as well as GDP.

The 2006 revisions concern the volume estimates and cover three aspects: adjustments to the deflators underlying the series relating to output, intermediate consumption and value added, in order to improve the quality of the national accounts; modification of the methodology used for the volume estimates of the output of non-market educational establishments, those estimates now being based on a direct volume indicator (number of pupil hours per type of education and per region) rather than on the deflators specific to each component of production costs (intermediate consumption, salaries, fixed capital consumption); and the conversion of the series at prices of a fixed base year (2000, in the 2005 edition of the national accounts) into series at the preceding year's prices. This conversion makes it possible to "chain" the volume change in the aggregates or sub-aggregates. According to this method, their volume growth between two consecutive periods is calculated systematically by reference to the previous year's prices and weights. The changes between consecutive periods are linked together (cumulated) to give a chained index. When the chained index of an aggregate or sub-aggregate is applied to the amount (level) of a *reference year*, such as 2006, as in the official national accounts published in October 2008, that provides a measure of the volume change in "*chained euros (reference year 2006)*". The choice of the reference year has no effect on the growth profile of the series. The introduction of chained indices improves the accuracy of the measure of economic growth and increases the international comparability of the data. However, in using chained level series, it is necessary to allow for the fact that this chaining leads to a loss of additivity in regard to the volume levels (except for the figures relating to the reference year and the year immediately following it). Non-additivity implies, for example, that in the case of chained level series, GDP is not equal to the sum of its components (final consumption, investment, change in stocks and net exports).

A more detailed explanation of the changes made to the national accounts methodology was supplied by the NAI in the publications entitled *Comptes nationaux – Partie 2 : Comptes détaillés et tableaux 1995-2004* and *Comptes nationaux – Partie 2 Comptes détaillés et tableaux 1995-2005*, issued in December 2005 and November 2006 respectively.

When this Report went to press, the revised national accounts were available only for the period 1995-2007, so that, to gain a longer historical perspective, it was necessary to make estimates by retropolation, e.g. for the calculation of the ratio of the consolidated public debt to GDP.

In the chapter devoted to the international environment, the presentation is also consistent with the ESA 95 or its equivalent, the System of National Accounts published jointly by the United Nations, the World Bank, the EC, the IMF and the OECD (SNA 1993). Nevertheless, the statistics from the sources to which reference is made in the Report, principally the EC and the OECD, are not uniform, because the period for which the methodological revision or the conversions from one ESA system to the other have been carried out still varies greatly from one country to another.

The breakdown of the financial accounts between individuals and corporations is largely based on data from Belgian credit institutions. The information making it possible to break down the other financial transactions of the private sector, especially transactions with foreign countries or purchases of securities, is much more fragmentary. The main statistics which can be used for this purpose, namely the globalisation of the annual accounts of enterprises compiled by the Bank's Central Balance Sheet Office, are in fact partial, are produced only annually and are available only after a time lag of several months. It has therefore been necessary to introduce some assumptions and make various estimates.

Conventional signs

–	the datum does not exist or is meaningless
e	estimate by the Bank
n.	not available
n.r.	not representative
p.c.	per cent
p.m.	pro memoria

List of abbreviations

Region or country

BE	Belgium
DE	Germany
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
CY	Cyprus
LU	Luxembourg
MT	Malta
NL	Netherlands
AT	Austria
PT	Portugal
FI	Finland
SI	Slovenia
EA	Euro area
EU15	European Union excluding the countries which joined after 2003
US	United States
BR	Brussels Capital Region
VL	Flemish Region
WL	Walloon Region

Other

ABEX	Belgian Association of Surveyors
ABS	Asset-backed security
Actiris	Regional public employment office, formerly ORBEM
AIP	Central agreement
ASEAN	Association of Southeast Asian Nations

BEA	Bureau of Economic Analysis
BEAMA	Belgian Asset Managers Association
BeCeFi	Belgian Knowledge Centre for SME Financing
BIS	Bank for International Settlements
BLEU	Belgian-Luxembourg Economic Union
BLS	Bureau of Labor Statistics
BNRC	Belgian National Railway Company
BRIC	Brazil, Russia, India and China
CAP	Common agricultural policy
CBFA	Banking, Finance and Insurance Commission
CBS	Central Bureau of Statistics
CDO	Collateralised debt obligation
CDS	Credit default swap
CEC	Central Economic Council
CIS	Community Innovation Survey
CLO	Collateralised loan obligation
CPI	Consumer Price Index
CREDIBE	former Central Office for Mortgage Loans
CREG	Commission for Electricity and Gas Regulation
DESTATIS	Statistiches Bundesamt Deutschland
DGE	Directorate General for Energy (FPS Economy, SMEs, Self-employed and Energy)
DGSEI	Directorate General of Statistics and Economic Information (FPS Economy, SMEs, Self-employed and Energy)
DIREM	Directorate General of Energy and Commodities
EC	European Commission
ECB	European Central Bank
Ecofin	European Council of Ministers of Economic Affairs and Finance
EDP	Excessive deficit procedure
EESA	Emergency Economic Stabilization Act
EIB	European Investment Bank
ELA	Emergency Liquidity Assistance
EMBI	Emerging Market Bond Index
EMU	Economic and Monetary Union
Eonia	Euro overnight index average
ESA	European System of Accounts
ESCB	European System of Central Banks
EU	European Union
Eurepo	Euro repurchase agreement
Euribor	Euro interbank offered rate
FDIC	Federal Deposit Insurance Corporation
Federgon	Federation of HR Partners
FISIM	Financial intermediation services indirectly measured
FOREM	Community and regional training and employment office
FPB	Federal Planning Bureau
FPS	Federal Public Service
FRA	Forward rate agreement
FSA	Financial Security Assurance

G20	Group of Twenty
G7	Group of Seven
GAAP	Generally Accepted Accounting Principles
GDP	Gross domestic product
GMT	Greenwich Mean Time
GNI	Gross national income
HICP	Harmonised Index of Consumer Prices
HWWI	Hamburgisches Welt-Wirtschafts-Institut
IAS	International Accounting Standards
ICAP	Garban - Intercapital plc
ICT	Information and Communication Technologies
IFRS	International Financial Reporting Standards
ILO	International Labour Office
IMF	International Monetary Fund
INAMI/RIZIV	National Institute for Health and Disability Insurance
INSEE	National Institute for Statistics and Economic Studies
IPN	Inflation Persistence Network
LIBOR	London interbank offered rate
LPG	Liquefied petroleum gas
MBS	Mortgage-backed security
MFI	Monetary financial institution
MIR	Monetary financial institutions interest rates
MTS	Mercato telematico dei titoli di Stato
NAI	National Accounts Institute
NBB	National Bank of Belgium
NCB	National Central Bank
NCPI	National Consumer Price Index
NEO	National Employment Office
NPO	National Pensions Office
NSSO	National Social Security Office
OECD	Organisation for Economic Cooperation and Development
OIS	Overnight index swap
OLO	Linear bond
OPEC	Organisation of Petroleum Exporting Countries
PLU	Professional Lenders' Union
PPP	Purchasing power parity
Pricaf	Private equity sicaf (private closed-end equity fund)
R&D	Research and development
RBS	Royal Bank of Scotland
RIF	Railway Infrastructure Fund
RIR	Retail interest rates
RMBS	Residential mortgage-backed security

SHLAF	Social Housing Loan Amortisation Fund
SICAFI	Société d'investissement à capital fixe immobilier (real estate investment fund with fixed capital)
SME	Small and medium-sized enterprises
SNA	System of National Accounts
STADIM	Belgian real estate research and advice bureau
TFP	Total factor productivity
UCI	Undertaking for collective investment
UNCTAD	United Nations Conference on Trade and Development
VAR	Vector autoregression
VAT	Value Added Tax
VDAB	Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding (Flemish employment exchange and vocational training service)
WDN	Wage Dynamics Network

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