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EUROSYSTEM

ANNUAL REPORT

2008 2009 2010 2011 2012

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Professor Hans-Helmut Kotz

Dr Hans Reckers

Professor Hermann Remsperger

We mourn the death
of the following members of our staff

Anne Slump	6 January 2008
Walter Nirschl	20 January 2008
Renate Fetzer	23 March 2008
Carmen Oehrke-Richter	24 March 2008
Roger Thomaschewski	21 April 2008
Rainer Landwehrkamp	4 May 2008
Herbert Schmid	31 May 2008
Hermann Frank	26 August 2008
Hannelore Müller	24 November 2008
Hendrik Neubauer	25 November 2008
Dr Christian Burckhardt	6 December 2008

We also remember the retired staff members of the Bank
who died in 2008.

We will honour their memory.

DEUTSCHE BUNDESBANK

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EUROSYSTEM

Annual Report
2008

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ISSN 0949-1090 (print edition)
ISSN 1861-5694 (online edition)

The *Annual Report* is published by the Deutsche Bundesbank, Frankfurt am Main, by virtue of section 18 of the Bundesbank Act. It is available to interested parties free of charge.

This is a translation of the original German-language version, which is the sole authoritative text.

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p	Provisional
r	Revised
e	Estimated
pe	Partly estimated
...	Figure available at a later date
.	Figure unknown, not to be published or not meaningful
0	Less than 0.5 but more than nil
–	Nil

Discrepancies in the totals are due to rounding.

Foreword by the President of the Deutsche Bundesbank

Foreword

Last year marked the tenth anniversary of the Eurosystem. The project of the single currency has been a notable success story in its first decade. The monetary union has experienced ten years of strong price stability in what was not always a benign price climate. Furthermore, it has promoted trade within Europe and contributed to the ongoing integration of the European financial markets. This means that, confounding the doubts harboured by some sceptics beforehand, the euro has fulfilled the major hopes rightly invested in it. As an integral part of the Eurosystem, the Bundesbank remains very much involved in creating and safeguarding a common stability culture. An unswerving commitment to a stable currency will remain the hallmark of the Bundesbank's work, not least in times of tough challenges for the real economy and financial markets.

The past year saw an abrupt end to a long period of dynamic growth in the world economy. Following a positive start to the year, the global economy slowed down somewhat over the summer months due to the ongoing sharp rise in energy and food prices up to that time and the corrections that had already taken place in some real estate markets. However, it was not until the financial crisis escalated dramatically in the fourth quarter that the incipient slowdown of global activity deteriorated into a severe recession. The emerging economies and the developing countries were unable to escape from the negative impulses stemming from the industrial nations. This pronounced synchronicity of the downturn across regions is a defining feature of the current conjunctural pattern worldwide. This also led to a marked reversal in price developments in the commodities markets. The sluggish external dynamics placed a considerable strain on the euro area. Not least given the more favourable inflation outlook owing to declining energy prices and the economic downturn, Eurosystem monetary policymakers made use of the resultant scope for cutting interest rates. After first raising the key interest rate slightly towards the middle of the year in line with the prevailing price risks at the time, they subsequently lowered it in several stages to 1.5%.

Whereas the German economy has benefited greatly in the past few years from the buoyant global economic momentum thanks to its greatly improved price competitiveness and its attractive range of export goods, it became increasingly caught up in the slipstream of the global economic slowdown in the course of 2008. It went through several contrasting cyclical phases as the year progressed. Following a positive start, the downward pull became ever stronger. Finally, towards the end of the year, the German economy slid into recession, which will also overshadow developments in 2009. Policymakers responded to this deterioration in the economic setting with an array of supportive measures. With the escalation of the financial crisis, they had to intervene to stabilise the German financial system. This kept the potential threat of systemic risk under effective control. The two government stimulus packages are, in turn, directed at the real economy and, in terms of their overall impact, will probably generate significant stimuli for reducing the downside risks. These stabilisation measures were considerably facilitated by Germany's favourable underlying fiscal position. An almost balanced budget was achieved last year. The measures taken mean that both the general government deficits and the debt level will rise substantially in the coming years, however. It is therefore imperative that reliable steps are initiated at the present juncture in order to restore sound general government budget positions. Confidence in the long-term sustainability of public finances and the effectiveness of fiscal rules for achieving these objectives is crucial. This applies, not least, both in view of the medium-term demographic strains and with regard to the hoped-for success of the short-term stimulus measures – in both the European and German context.

The events of the past year posed a challenge for the Bundesbank and its staff in many areas. The escalation of the financial crisis necessitated a rapid extension of the operational framework for monetary policy by introducing a whole range of liquidity policy measures. In its refinancing operations, the Eurosystem switched to a fixed-rate procedure with unlimited allotment. In addition, the collateral framework was enlarged for the time being in order to effectively counter looming liquidity shortages. These and other instruments made it possible to safeguard the supply of liquidity to the banking system even under very strained market conditions and thereby prevent the problems in the financial market from being exacerbated by liquidity-related factors. In addition, the Bundesbank played an active part in devising initiatives to stabilise the financial markets at the national level.

The events of the past few months have highlighted the need for international cooperation. In the informal forums of international cooperation – ie primarily at the G7, G10, G20 levels and within the International Monetary Fund – the Bundesbank is playing its part in improving the foundations for stable global economic development. The turmoil of the past 18 months has made it abundantly clear that a stable international financial system is a key prerequisite for this. The international forums and financial institutions are currently concerned principally with drawing the lessons from this crisis in their own respective areas of competence and with examining international standards with a view to their further improvement. The Bundesbank made a major contribution to work on the groundbreaking report of the Financial Stability Forum on enhancing the resilience of the international financial system. With the G20 global financial summit following the IMF quota reform in spring, the international community has taken a further crucial step towards involving major emerging market economies more closely and thus encouraging them to take on more responsibility.

Furthermore, the Bundesbank is collaborating on numerous other committees at the international and European levels, such as the Basel Committee on Banking Supervision and the Committee of European Banking Supervisors, that are examining the causes of the crisis and its propagation and is also involved in efforts to develop necessary countermeasures and adjustments to the regulatory framework. Thus, the Basel Committee revised its recommendations on liquidity management and published them under the title "Principles for Sound Liquidity Risk Management and Supervision" in September 2008. Further measures will follow, such as improving the quality of tier 1 capital, increasing capital requirements for structured financial products and trading book exposures, and strengthening international cooperation among banking supervisors.

In the year under review, the Bundesbank was also active in areas not directly affected by the financial market crisis. In the field of cash management, for example, the modernisation of banknote processing was concluded with the introduction of new multi-denomination banknote processing systems. This streamlined the procedure for making banknote lodgements, which has considerably enhanced the efficiency of the Bundesbank's cash payment operations for all its cash handling partners.

As from the beginning of the current year, the parties involved in cash handling can also make use of the new CashEDI facility. This allows the electronic exchange of cash-relevant data on lodgements and withdrawals based on international standards. Customers are making active use of this innovative service, which they rate very positively. The Bundesbank is therefore meeting its objective of making the cash cycle as efficient and secure as possible for all parties concerned.

With TARGET2-Securities (T2S), the Eurosystem is providing an integrated platform for the settlement of securities transactions in central bank money and giving key support to financial market integration. As a result, European securities settlement in central bank money is becoming more efficient and more cost-effective. On the basis of user requirements as well as commitments by the central securities depositories concerning the later use of T2S, the Governing Council of the ECB took a decision on 17 July 2008 to launch the T2S project and commissioned the Bundesbank and the national central banks of France, Italy and Spain with its development and operation. The aim of the current project phase is to draw up the specifications needed for the subsequent development phase. This will be followed by the testing and migration phases before T2S goes live, as scheduled, during the course of 2013.

The introduction of the SEPA credit transfer on 28 January 2008 brought the completion of a single European market in cashless payments a good deal closer. A further key step will follow in November 2009 with the introduction of the SEPA direct debit. At the political level, the Bundesbank is taking an active role nationally and internationally in overcoming the remaining challenges on the road to a single market in European payments. This also includes the conversion of the Bundesbank's own systems to SEPA procedures.

The Bundesbank's strategic cycle from 2008 to 2012 focused on "raising the Bank's profile – continuing the consolidation process" was launched successfully in the reporting year. Mention has already been made of major strategic developments in the core business areas, including milestones such as the nationwide deployment of multi-denomination banknote-processing machines in the field of cash management and the decision on implementing T2S in the field of cashless payment operations.

Highly qualified and motivated employees are absolutely essential to the achievement of our objectives. Particular thanks are therefore due to all of our members of staff. Their great commitment and dedication at all levels and in all business units has been instrumental in enabling the Bundesbank to cope successfully so far, not least with the very demanding challenges posed by the financial crisis. At the same time, this has vindicated the forward-looking human resources strategy which we have pursued over the past few years. This not only places great value on the development of our employees' personal skills through a broad range of further training options but also ensures that the necessary deep cuts in staff numbers are flanked by selective recruitment and in-depth training of new staff at all levels. The particular mix of professional expertise and experience required by a central bank is not readily available on the labour market. This insight will continue to inform our human resources strategy in the future.

Frankfurt am Main, March 2009

Professor Axel A Weber
President of the Deutsche Bundesbank

Monetary policy and economic developments

What had been a very dynamic global economic cycle came to an abrupt end in 2008. As the crisis on the international financial markets escalated dramatically, the associated retarding effects on the world economy intensified in the second half of the year. The sharp increase in energy and commodity prices also acted as a drag up until the third quarter. This pushed up euro-area inflation in the middle of the year to its highest level since the launch of monetary union. Longer-term inflation expectations likewise rose amid persistently strong monetary growth. The Eurosystem's monetary policymakers responded by again slightly tightening the policy stance at the beginning of July. However, the strong cooling of the global economy resulted in a much more favourable inflation outlook in the second half of the year. This allowed policymakers to cut interest rates swiftly in several steps.

The German economy was increasingly caught up in the recessionary global tendencies as the year progressed. While Germany's overall economic performance at the beginning of the year was still characterised by very strong growth – magnified by weather-related extraordinary effects – dampening influences subsequently came increasingly to bear. On the labour market, the economic slowdown was, throughout 2008, reflected mainly in a decline in the number of hours worked per employee and hardly in staffing levels. Policymakers responded to the growing risks by implementing a series of stabilisation measures. On top of initiatives aimed directly at bolstering the financial markets, they launched economic support programmes with an impact exceeding that of the automatic stabilisers. Whereas the public deficits had been trimmed back perceptibly in the preceding years and a largely balanced general government budget was achieved in 2008, both the deficit and the debt level will therefore increase noticeably. In the medium term, it is crucial that the budgetary burdens which this entails are reduced rapidly once economic conditions improve.

I International setting

1 Escalating financial crisis and marked cooling of the global economy

Financial crisis spilling over to world economy

The crisis of confidence on the financial markets, which emanated from the US mortgage market in the summer of 2007, intensified substantially in several waves over 2008. The retarding effects on the global economy became noticeably stronger as early as the first half of the year. These negative effects became significantly more pronounced in the fourth quarter, when new turmoil, triggered by the insolvency of the US investment bank Lehman Brothers, rocked the financial markets. Market segments which had previously emerged largely unscathed were also hit hard. Moreover, following the industrialised countries, emerging market economies and developing countries, in particular several central and east European states, were also sucked into the maelstrom of the crisis. Stock market prices worldwide tumbled, spreads on a number of countries' government bonds widened significantly and the currencies of many emerging market economies, particularly those with large current account deficits and high external debt, came under downward pressure as capital was withdrawn abruptly.

Domestic and external transmission channels

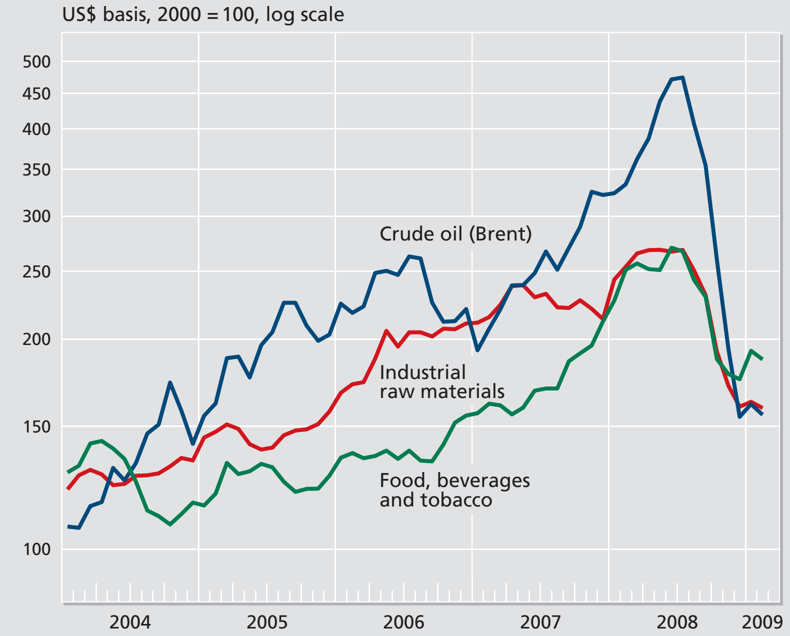
In the worst affected industrialised countries, notably the United States and the United Kingdom, which were already suffering from a substantial downward adjustment of real estate prices, the dislocations in the financial system were transmitted to the real economy via tighter financing conditions for enterprises and households as well as wealth losses; these effects were further amplified by negative expectations. At the same time, import demand weakened significantly. In Germany and Japan export business was dampened particularly by the slowing global investment momentum, while the emerging market economies in south and east Asia primarily felt the effects of the lower propensity to consume displayed by households in the industrialised countries. Oil and commodities exporting countries in the Middle East, Latin America and Africa were hurt by the sharp drop in demand and the significant price falls these markets experienced as a consequence. The outlook for the world economy deteriorated considerably during 2008; as the year drew to a close, prospects were worse than they had been in a long time.

Initial drag caused by rising energy and commodity prices, ...

In the first three quarters of 2008, steep energy and commodity price hikes acted as a brake on global economic activity. From their already elevated levels at the beginning of 2008, prices for Brent crude oil soared by as much as 51¼%

World market prices for crude oil, industrial raw materials and food, beverages and tobacco

Chart 1



Sources: Thomson Reuters and HWWI.

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to a new record high of US$146¾ per barrel in mid-July. In euro terms, the increase amounted to 40¼%. Looking at other commodities, prices for food, beverages and tobacco, and industrial commodities – as measured by the HWWA "world" price index in US dollar terms – had risen by 31¾% and 15½% respectively by the time they marked their respective highs around the middle of the year. The resulting pick-up in global inflation dented global economic growth both as a result of dwindling purchasing power and growing concerns that real incomes would continue to weaken in future. Against this backdrop, several central banks, particularly in the emerging market economies, raised their key interest rates in order to counteract the considerable increase in price pressures and unfavourable inflation expectations. However, real interest rates remained relatively low – in some cases, they were even negative.

... but marked easing of inflationary pressure since Q3

The upward price pressure on the markets for energy and other commodities has eased considerably since the third quarter, however. At the end of February 2009, crude oil prices, at US$43½ per barrel, were 69% down from the high they had touched in July 2008. Exchange rate movements meant that crude oil prices as measured in euro declined by a smaller extent (-62%). In the second half of the year, prices for industrial commodities and food, beverages and tobacco were down from their peaks by 42% and 37½% respectively. As a result, consumer price pressure has dropped significantly worldwide, and consumers' purchasing power, looked at in isolation, has increased significantly. The improved inflation outlook has allowed central banks, mainly in the industrialised countries, to cut key interest rates substantially. In addition, extensive government measures have been taken to support the ailing banking system.

Weaker global economic growth

IMF estimates indicate that global output – as measured by real gross domestic product (GDP) based on purchasing power parities – grew appreciably more slowly on an annual average in 2008, at 3½%, than in 2007, when it had expanded by 5¼%. The pace of growth was, moreover, distinctly below the 4% average recorded during the ten-year period 1998 to 2007. The global economy lost a lot of momentum especially in the second half of the year, with quarter-on-quarter global output probably experiencing its first decline in a long time in the fourth quarter of 2008. This can be attributed, in the main, to the sharp economic slump in the industrialised countries, where overall economic output fell by a seasonally adjusted 1¾% in the final three months of the year, having already contracted by ¼% in the third quarter. On an annual average, this group of countries still saw real GDP increase by ¾%, compared with 2½% a year earlier.

Emerging market economies still making relatively large contributions to growth

At 6¼%, growth in the emerging market economies and developing countries was 2 percentage points weaker than in 2007. In relative terms, however, the rate of expansion has held up better there. Overall, just one-sixth of global output growth was generated in the advanced economies in 2008, while the emerging market economies accounted for the remaining five-sixths. Almost one-third of global growth was created in China alone, where production increased by an average of 9% in 2008. The fact that growth in real global trade also slowed fairly significantly, from 7¼% in 2007 to 4% in 2008, is consistent with the gloomier economic picture. This owed much to distinctly subdued import dynamics in the industrialised countries. Overall, hopes that emerging market economies might decouple from the industrialised countries' business cycles have ultimately not been fulfilled.

Gloomy growth outlook for 2009

The magnitude of the negative impact which the turmoil on the financial markets is having on the global goods and income cycle, which was already clearly apparent in 2008, will only show up fully in the rates of change of real GDP in 2009. According to the forecast which the International Monetary Fund (IMF) published at the end of January 2009, global growth will slip by 3 percentage

Macroeconomic benchmark figures of selected industrialised countries — Table 1

	Real GDP		Consumer prices [1]		Current account balance		Unemployment rate [2]	
	2007	2008 pe	2007	2008	2007	2008 pe	2007	2008 pe
Countries	Annual percentage change				As a percentage of GDP		As a percentage	
OECD	2.7	[3] 1.4	2.5	3.6	– 1.7	[3] – 1.5	5.8	6.1
of which								
Euro area	2.6	0.8	2.1	3.3	0.4	– 0.7	7.4	7.5
United Kingdom	3.0	0.7	2.3	3.6	– 2.8	[3] – 1.9	5.3	[3] 5.5
United States	2.0	1.1	2.9	3.8	– 5.3	[3] – 4.9	4.6	5.8
Japan	2.4	– 0.7	0.0	1.4	4.8	[3] 3.8	3.8	4.0
Canada	2.7	0.5	2.2	2.3	0.9	[3] 0.4	6.0	6.1

Sources: ECB, OECD, BIS, national statistics. — **1** Cost-of-living index, OECD: private consumption deflator. — **2** Standardised unemployment rate, based on OECD and Eurostat calculations. — **3** OECD forecasts (Economic Outlook, December 2008).

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points compared with 2008 to ½% in the current year. According to the Fund, the world economy is therefore in recession, defined as a rate of growth of less than 3%. However, according to current assessments, expansionary forces could regain the upper hand next year. They are likely to be boosted both by the substantial economic stimulus measures that have been announced and by the considerably improved global price climate. The IMF forecasts that the average rate of inflation will fall from 3.5% in 2008 to 0.3% in 2009 in the industrialised nations and from 9.2% to 5.8% in the emerging market economies.

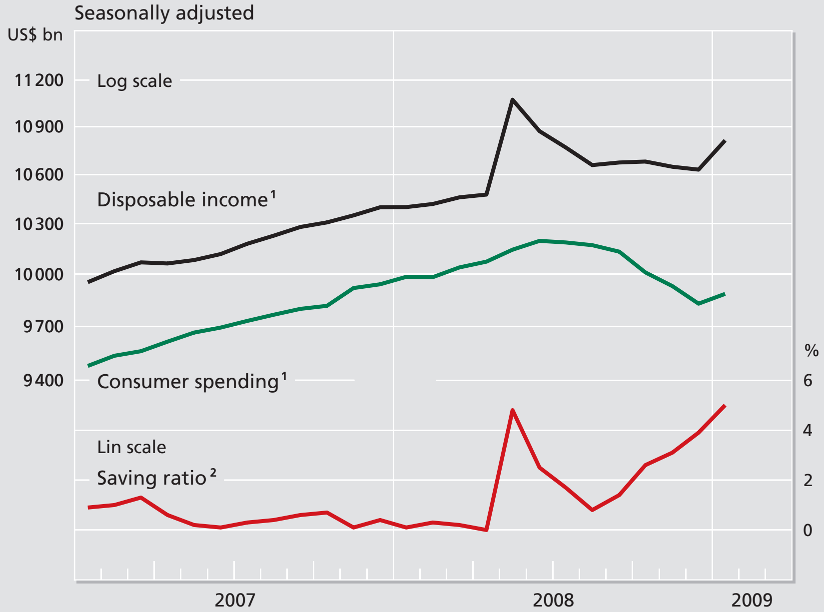
USA at the centre of international financial and economic crisis

The US economy has, in the view of the economic experts on the Business Cycle Dating Committee, been in recession since the end of 2007. Real GDP recorded average annual growth of just 1% in 2008. Having got off to a slow start to the year, economic developments briefly picked up slightly, largely thanks to strong export growth, which was buoyed in particular by the depreciation of the US dollar. The US administration's large-scale economic stimulus programme, launched in the second quarter of 2008, only briefly stimulated household demand somewhat. Households, who received the lion's share of the package in the form of tax rebates, used most of their additional disposable income to service debts or increase savings rather than for consumption purposes. As a con-

Disposable income, consumption and saving ratio of US households

Chart 2

Seasonally adjusted



1 Annualised. — 2 Saving as a percentage of disposable income. Source: Bureau of Economic Analysis.

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sequence, households' saving ratio jumped in the second quarter and remained well above the level of the fourth quarter of 2007/first quarter of 2008 even in the second half of the year. At 1¾%, the annual average saving ratio was higher than it had been since 2004. Overall, there is much evidence to suggest that the tendency towards greater saving by US households will continue.

In the second half of the year, all components of private final demand declined. In seasonally adjusted terms, private consumption was 1½% down on the previous period. The large loss in purchasing power caused mainly by the high energy prices was a contributory factor in the third quarter. At the end of 2008, the predominant factors were the retarding effects of restricted access to credit and the general recessionary influences. Consumer sentiment was particularly depressed by the negative labour market development. In the course of last year, 3 million jobs were axed and the unemployment rate rose by 2.3 percentage points to 7.2%. The negative effects this had were not noticeably mitigated by the considerable easing of price pressures. Thus the rate of inflation plummeted from 5.6% in July to 0.1% in December, largely owing to the fall in energy prices, averaging 3.8% for 2008 as a whole. The strong contraction in house building continued apace; in the fourth quarter of 2008, real investment in this sector was no less than 45% below the high it had reached three years previously. Given the ongoing drop in house prices, high supply overhangs for new and existing properties and more restrictive lending by banks, there is no indication that the US real estate market has bottomed out. Industrial investment, which held up fairly well until mid-2008, fell by a seasonally adjusted 3% in the second half of the year. Owing to the global economic slowdown, exports have no longer provided any positive stimuli of late. The Federal Reserve (the US central bank) lowered its target range for key interest rates to a corridor of between 0% and 0.25% in December. The federal budget deficit will amount to 8¼% of GDP in the 2009 fiscal year, according to US Congress forecasts. This does not include the *pro rata* spending on the second economic stimulus programme, which entered into force in February, totals around US$790 billion and is largely to be implemented this year and next.

Japanese economy hit hard by global economic downturn

Aggregate economic output in Japan has been on a clear downward path since the second quarter of 2008. On an annual average, it contracted by ¾%. The impact of the international financial crisis is evident, amongst other things, in the hefty stock market losses and generally worse financing conditions for companies. Industrial investment fell sharply in the course of 2008, as did exports, as a result not only of the global economic cooling but also of the perceptible appreciation of the yen in the second half of 2008. On average, private consumer demand rose by a mere ½% last year, chiefly because real labour income fell slightly. By international standards, the unemployment rate remained low, at 4¼%, despite the severe economic slump at the end of 2008. Consumer prices began to fall again in August, having previously increased sharply. Annual inflation averaged 1.4%, a level to which it had last risen in 1997. Excluding energy and food, prices remained unchanged in 2008. In mid-December, the central bank *de facto* returned to a zero interest rate policy. The budgetary leeway for an anti-cyclical fiscal policy is severely limited given gross government debt of some 200% of GDP.

UK in severe recession after long boom

The UK economy slipped into a severe recession last year, ending a period of high growth which had been witnessed since mid-1992. Looking through the average annual growth rate of ¾%, a perceptible positive seasonally adjusted GDP growth rate in the first half was followed by a hefty 1½% decline in the second half of the year. The main reason for the severity of the economic downturn was the strong correction in prices and demand for new housing in the real estate market following the marked exaggerations of the preceding boom years. In addition, the UK financial sector, which plays a major role in the overall economy, has been severely buffeted by the crisis of confidence. In 2007, this sector generated 7½% of total gross value added, compared with 4¼% in Germany. The standardised unemployment rate exceeded 6% in the fourth quarter of 2008 for the first time since the beginning of 1999. Consumer price inflation, which rose by 3 percentage points to 5.2% in the first nine months of the year, has since eased more slowly than in other major industrialised countries to stand at 3.0% in January 2009. This was partly attributable to the considerable depreciation of the pound sterling. The central bank has lowered interest rates by 5 percentage points to ½% since the beginning of 2008.

Mixed picture in the new EU member states

Economic momentum in the new EU member states (excluding Slovenia, Cyprus and Malta, which have now joined the euro area, but including Slovakia, which joined on 1 January 2009) also slackened considerably during 2008. Industry was particularly affected, with production 8% down on the year in the fourth quarter of 2008. Averaged over the year, real GDP still rose by an estimated 3%. In 2008, differences in growth increased somewhat within this group of countries as several countries were worse affected by the financial crisis than others. Countries with very high current account deficits, low foreign reserves and requiring large short-term capital inflows from abroad proved particularly vulnerable. Inflation slowed from 7.2% in July to 4.1% in December. On an annual average, the rate of price increases amounted to 6.3% in 2008, ranging from 3.9% in Slovakia to 15.2% in Latvia.

2 High volatility in the foreign exchange markets

Recovery of the US dollar...

The foreign exchange markets were last year at times marked by exceptionally high volatility. The main causes were the escalating tensions in the financial markets as well as the rapid global economic downturn in the second half of the year in an environment of initially still comparatively high global inflation. Events centred on the US dollar. Following years of losses, its effective exchange rate against 21 partner countries reached a new low in March 2008. However, high demand for dollar liquidity and portfolio shifts away from foreign securities with high risk premiums triggered a significant rebound of the US currency from July onwards. It was not until the introduction of the zero interest policy by the Federal Reserve in December that this was partially corrected. Over 2008 as a whole, the US dollar appreciated by almost 7%.

… reflected in euro exchange rate losses

The above developments also affected the euro-US dollar exchange rate. Against the background of the Federal Reserve's rapid interest rate cuts, the euro area's interest rate advantage initially widened, which helped the euro to achieve considerable gains, especially in February and March 2008. In mid-July, the euro reached a new record high of almost US$1.60. Subsequently, however, the economic picture in the euro area became more gloomy and it was evident that Europe – as well as other economies – would not be able to decouple from the economic slowdown in the USA. This hurt the euro as did the incipient fall in oil prices, which tended to reduce the capital the USA required to finance its high current account deficit. By the end of October, the euro had fallen to just under US$1.25, before the expansionary monetary and fiscal policy pursued by the USA temporarily paved the way for the single European currency to stage a recovery. At the end of the year, the euro stood at US$1.39, which was 5½% lower than a year earlier. Since then, however, the euro has again depreciated against the backdrop of falling euro-area interest rates.

Clear gains against the pound sterling…

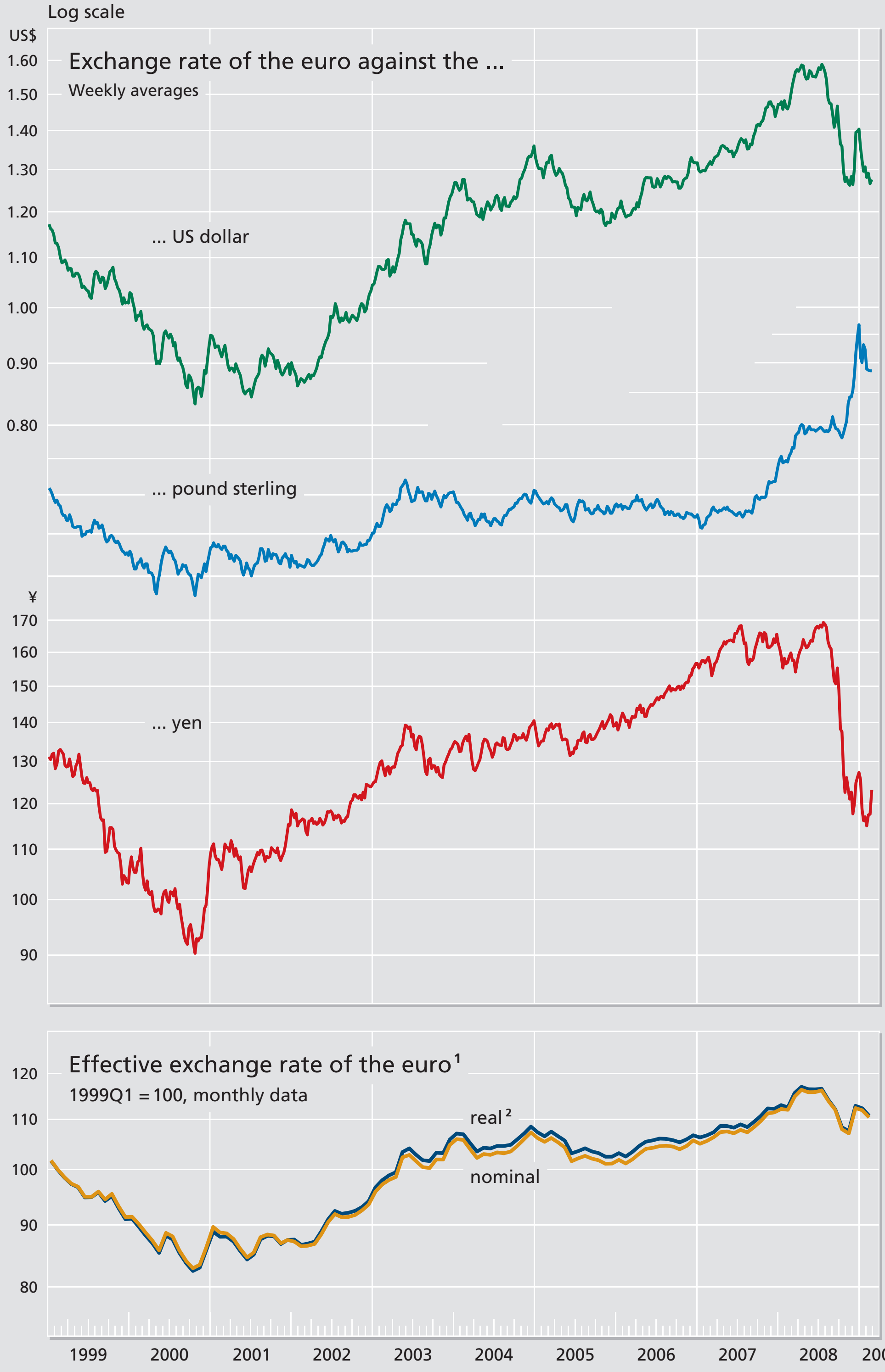
In the last quarter of 2008, the euro appreciated significantly against the pound sterling, following a period in which the euro-pound exchange rate had been largely trendless. Into October, high inflation rates in the United Kingdom prevented an easing of monetary policy, although a noticeably slower pace of economic activity had looked likely as early as the summer. In addition, it became clear that the United Kingdom, given the weakness of its real estate market and the importance of its financial sector, would be especially hard hit by the ongoing financial market turmoil. When, against this backdrop, the Bank of England finally cut its key interest rate by a total of 3 percentage points within a period of two months, the euro recorded a clear gain. At the end of the year, it stood at £0.95, which corresponds to a rally of 30% on the year. At the start of 2009, however, the European currency relinquished some of its gains against the pound sterling.

… with similarly high losses against the yen

In the light of the large interest rate advantage against Japanese assets, the euro appreciated somewhat against the yen in the first half of 2008; in July, it reached a new record high of almost ¥170. However, the increasing tensions in the global financial system subsequently led to a declining risk appetite on the part of investors and the above-mentioned high exchange rate volatility. Additionally, interest rate differences between Japan and other major economies started to narrow. All of this was reflected both in portfolio shifts by Japanese enterprises and households and in the unwinding of carry trades. This resulted in a marked depreciation of the euro against the yen, which did not cease until

Exchange rate of the euro

Chart 3



1 According to ECB calculations against the currencies of 21 countries. — **2** Based on consumer prices.

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the end of October. At the end of the year, the euro stood at ¥126, which corresponds to a drop of 23½% compared with the end of 2007. At the start of 2009, the euro temporarily traded lower again, but recovered against the backdrop of the exceptionally unfavourable cyclical development in Japan.

In effective terms, euro virtually unchanged on balance

The euro also recorded, in some cases, double-digit moves in its exchange rate against other currencies in the past year. However, the various bilateral exchange rate movements partly cancelled each other out. On a weighted average against 21 major trading partners, the value of the euro therefore only increased by a relatively small amount over the year with a net gain of 2½%. Especially in the first half of the year, the appreciation of the currency mitigated the effects of the increase in world market prices for energy and food, which was particularly pronounced at that time, on the domestic inflation rate. By itself, the still high effective external value of the euro hurts the price competitiveness of euro-area suppliers. However, enterprises' productivity growth and many years of cost discipline mean Germany is hardly affected.

3 Severe disruptions in the international capital markets

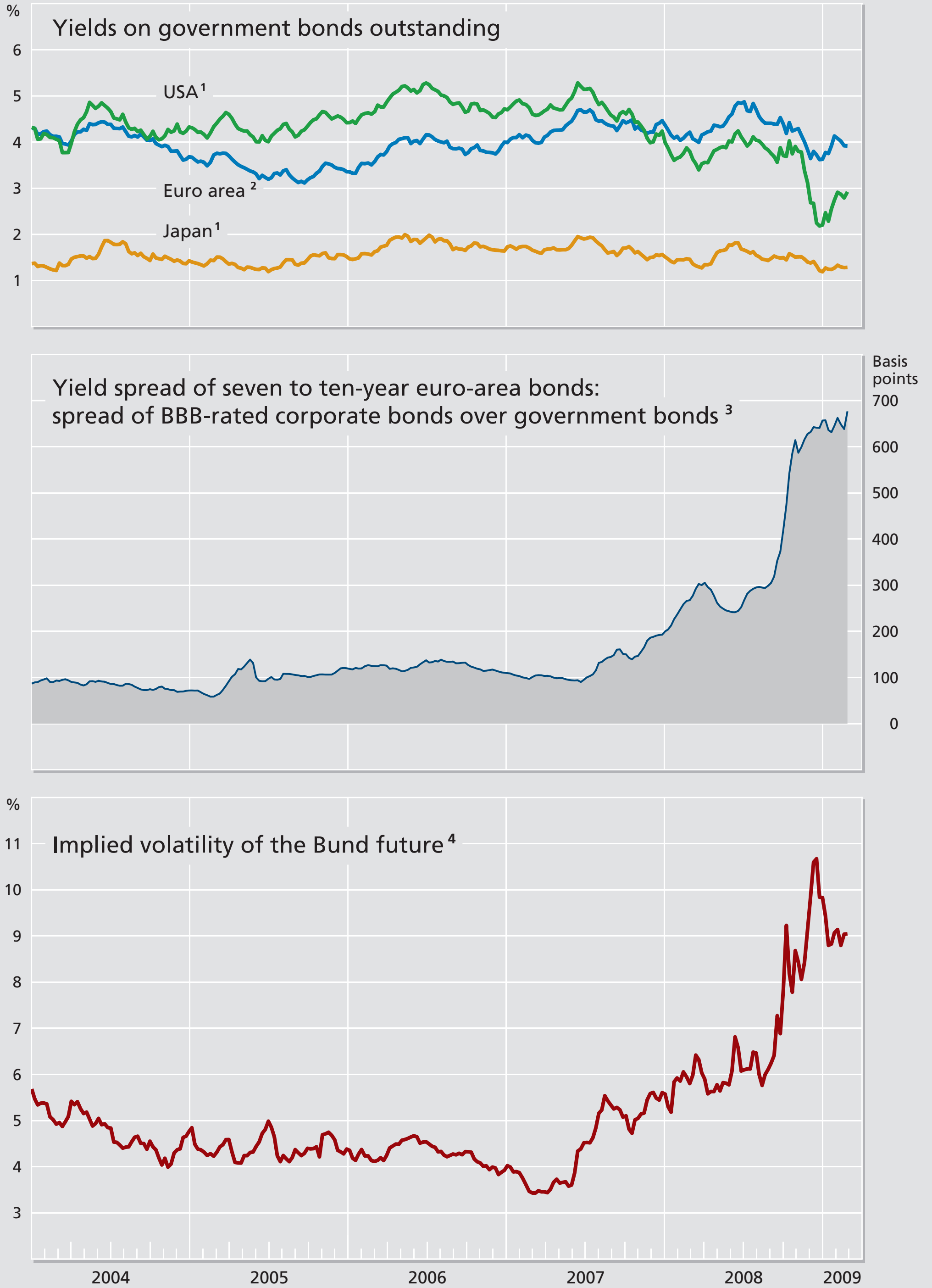
Financial market crisis sharply intensified

With the crisis on the international financial markets intensifying, market players' risk aversion and uncertainty regarding future market developments increased perceptibly following the insolvency of the US investment bank Lehman Brothers in September. International investors increasingly withdrew from risky illiquid assets and moved into highly liquid top-notch government bonds. Key segments of the capital markets were therefore no longer available as a source of financing for enterprises and banks, or only on considerably less favourable terms and conditions. In the international stock markets, the disruptions resulted in steep losses. At the same time, falling prices for securitised corporate debt and tensions on the money markets upped the pressure on financial institutions. Against this backdrop, the governments of numerous countries put together rescue packages, which include capital injections, guarantees and the acquisition of toxic assets. In addition, the entire financial sector was underpinned by means of extended guarantees for bank deposits, the provision of large amounts of liquidity and substantial central bank rate cuts. These measures, some of which transferred risks from the financial sector to the government sector, helped ease tensions in the capital markets somewhat.

Bond market

Chart 4

Weekly averages



1 Government bonds with approximately ten-year residual maturity. — 2 Average yield of ten-year euro-area government bonds outstanding (GDP-weighted). — 3 Sources: Merrill Lynch and Bloomberg. — 4 Expected future volatility for constant three-month maturity, calculated from prices of options on the Bund future. Sources: Bloomberg and Bundesbank calculations.

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Clear fall in European and US yields

In this environment, capital market interest rates in the major industrialised countries fell sharply in 2008. At the end of the year, ten-year euro-area government bonds were yielding slightly more than 3½%, while their US counterparts were trading at 2¼%, some ¾ percentage point and more than 1¾ percentage points, respectively, lower than at the beginning of 2008. In the first half of the year, capital market yields initially rose as inflation expectations picked up. However, given the looming danger of insolvency on the part of the two largest US mortgage providers as well as various banks, a trend reversal set in on both sides of the Atlantic in the third quarter. The initially moderate drop in interest rates was only temporarily halted by the government interventions in the financial sector in mid-October. The dramatic worsening of the real economic outlook and the strong decline in inflation rates caused a renewed acceleration in the downward movement in November and December. Interest rate cuts by the Eurosystem and the US Fed further helped to push down capital market interest rates.

Growing yield spreads in euro area

In the euro area, German government bonds (Bunds) were a principal beneficiary of the higher demand for safe and liquid investments. Their yield discount against comparable debt issued by other euro-area countries increased considerably in the course of the year; at the end of 2008, it stood at almost 100 basis points in the ten-year segment. Last year also saw the repatriation of funds invested abroad. Thus, on balance, German investors reduced their foreign securities holdings by around €86 billion between September and December.

Spiralling spreads on European and US corporate bonds

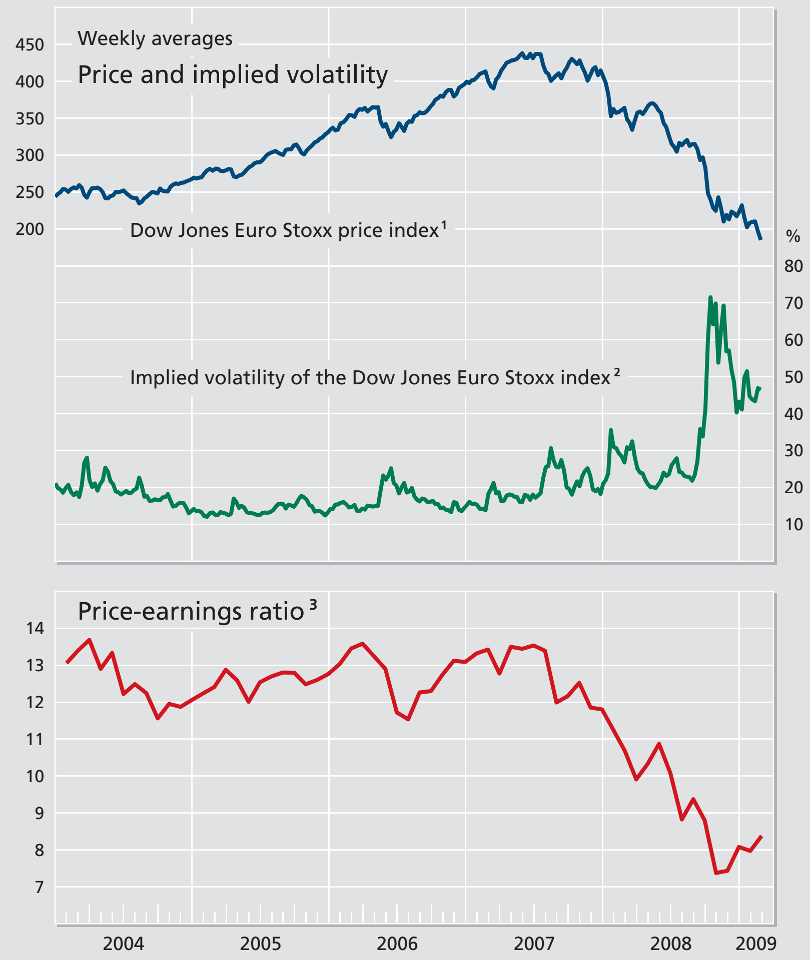
Irrespective of the decline in government bond yields, long-dated corporate bonds issued by BBB-rated enterprises on both sides of the Atlantic were yielding around 10% at the end of 2008, which was approximately 4 percentage points more than at the beginning of the year. These bonds thus saw their yield spreads rise from around 2 to approximately 7 percentage points over twelve months. Capital market financing conditions for corporates therefore deteriorated considerably, particularly as investors’ low risk appetite caused the markets for corporate bonds to dry up across a broad front. While the wider spreads can doubtless be explained partly by the extremely low market liquidity as a consequence of the crisis, the much gloomier economic outlook additionally prompted the markets to factor in higher default risks for corporates.

Steep stock market slump in second half of year

Last year, the international stock markets recorded massive net losses. Prices fell in several waves – at the beginning of the year, in the summer and, following the above-mentioned collapse of Lehman Brothers, in September, in each case

Equity market

Chart 5



Source: Thomson Reuters. — **1** 31 December 1991 = 100. — **2** Expected future volatility, calculated from prices of options on the Dow Jones Euro Stoxx index. — **3** End-of-month levels; respective market value of shares in the Dow Jones Euro Stoxx price index in relation to average expected earnings per share over the next 12 months according to I/B/E/S analyst estimates.

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interrupted by short phases of stabilisation. All in all, the broad stock price indices in Europe and Japan closed the year down by more than 40%, while their US counterpart ended 38% lower. Although financial enterprises on either side of the Atlantic were hardest hit, suffering share price losses of almost 60%, enterprises in other sectors also lost a lot of their market value over the year. This demonstrates that the financial crisis has increasingly spilled over to the real economy and that market players are taking a much more negative view of the earnings situation not only of financial institutions but of all other sectors, too. This is borne out by the massive downward revision of analysts' earnings forecasts from September. However, the fall in share prices was steeper than the earnings decline forecast by analysts. This lowering of the underlying stock valuation level – as measured by the price-earnings ratio, for example – indicates that investors are demanding a higher risk premium for holding shares in an environment characterised by high uncertainty and nervousness. Although the stock markets grew somewhat calmer in December, the ongoing development of share prices remains subject to considerable uncertainty. Since the beginning of 2009, share prices on many stock markets have posted appreciable further falls in response to the much gloomier outlook for the real economy.

II Economic and monetary developments in the euro area

1 Marked deterioration in economic conditions throughout 2008

Strong retarding effects follow good start

After buoyant growth in the first quarter of 2008, overall output in the euro area decreased by a total of 2% in the three subsequent quarters, with the fall in the fourth quarter of 2008 being particularly marked at 1½%. Although annual average growth of ¾% was achieved, this was significantly below the potential rate. The differences in growth rates between the individual member states changed very little in 2008; the weighted standard deviation in the growth rates was still approximately 1 percentage point. The economic downturn in 2008 was due partly to gross fixed capital formation, which, after recording a significant increase in the first quarter, subsequently decreased considerably in seasonally adjusted terms. The decline in housing investment was particularly marked. This decline was largely attributable to the strong contractionary developments in the real estate markets in Spain and Ireland as well as to a reduction in construction activity in France and Italy. In addition, industrial investment has shown a marked downward trend of late. Another factor was that exports stagnated in the second and third quarters and then decreased sharply in the fourth quarter. Owing to the good start to the year, however, the annual average was still positive at 1½%. Overall, the contribution of foreign trade to growth was largely neutral. Private consumption remained virtually unchanged in the first nine months of the year and then declined significantly in the final quarter.

Economic performance in the euro area

Table 2

Country	Real GDP 2007	Real GDP 2008	Consumer prices [1] 2007	Consumer prices [1] 2008	Unemployment rate [2] 2007	Unemployment rate [2] 2008
	Annual percentage change				As a percentage	
Euro area	2.6	0.8	2.1	3.3	7.4	7.5
Belgium	2.8	[3] 1.3	1.8	4.5	7.5	7.1
Germany	2.5	1.3	2.3	2.8	8.4	7.3
Ireland	6.0	[3] 2.0	2.8	3.1	4.6	6.3
Greece	4.0	[3] 2.9	3.0	4.2	8.3	[3] 8.3
Spain	3.7	[4] 1.2	2.8	4.1	8.3	11.3
France	2.2	[4] 0.8	1.6	3.2	8.3	7.7
Italy	1.5	[4] – 1.0	2.1	3.5	6.1	[3] 6.7
Cyprus	4.4	[3] 3.6	2.2	4.4	4.0	3.8
Luxembourg	5.2	[3] 1.0	2.7	4.1	4.1	4.4
Malta	3.9	[3] 2.1	0.7	4.7	6.4	5.8
Netherlands	3.5	2.0	1.6	2.2	3.2	2.8
Austria	3.1	1.8	2.2	3.2	4.4	3.8
Portugal	1.9	[3] 0.2	2.4	2.7	8.1	7.7
Slovenia	6.8	[3] 4.0	3.8	5.5	4.9	4.5
Finland	4.2	0.9	1.6	3.9	6.9	6.4

1 Harmonised Index of Consumer Prices (HICP). — **2** Standardised unemployment rate according to Eurostat calculations (ILO definition). — **3** European Commission projections (Interim Forecast, January 2009). — **4** Calculated using quarterly data.

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Downward slide of euro-area economy continues into 2009

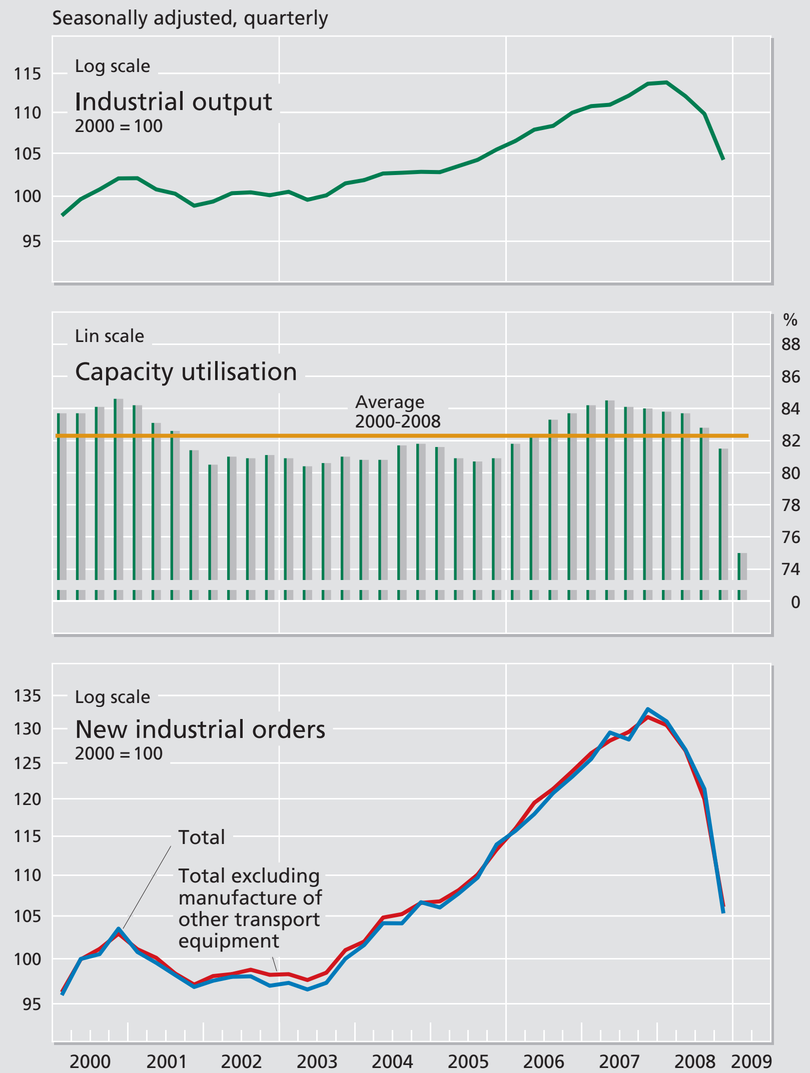
According to the indicators currently available, the economic decline in the euro area continued apace after the turn of 2008-09. The European Commission forecast of January 2009 states that economic improvement is not likely until next year. An annual average decline of around 2% in overall output is expected for 2009. This estimate takes account of both the December 2008 European Council agreement, which states that, in the EU, measures to boost the economy totalling €200 billion or 1½% of GDP should be implemented, and the German Federal Government's second economic stimulus package.

Labour market shows clear tendency to weakness

The economic downturn in the euro area is also clearly reflected in the labour market. The slowdown in employment growth, which began in mid-2007, continued in the first half of 2008. In the third quarter, the latest period for which data are available, the seasonally adjusted number of employed persons decreased – albeit only slightly – for the first time in a long while. On an average of the first nine months, there was still an increase of 1¼% on the year. After recording a low in March, the standardised unemployment rate had increased by 0.8 percentage point to 8.0% by December. The significant job losses in Spain and Ireland were the main contributory factors. Seasonally adjusted hourly

Selected indicators of industrial activity in the euro area

Chart 6



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labour costs in the euro area increased by 3.3% in the first three quarters of 2008, a noticeably larger increase than in the preceding year (+2.6%).

Price pressures rise sharply in H1 before easing again

In the wake of the sharp increase in crude oil prices and prices for agricultural products in the international markets, consumer prices in the euro area continued to rise strongly in the first half of 2008. Year-on-year inflation as measured by the Harmonised Index of Consumer Prices (HICP) increased to 4.0% in June and July. These were the highest rates of inflation since the introduction of the euro in 1999. In the second half of the year there were sharp price corrections in the international commodity markets, a development which caused the rate of inflation to drop to 1.6% by the end of 2008. On an annual average, consumer prices increased by 3.3% overall. The rate of inflation was therefore substantially above the Eurosystem's medium-term price norm. The increases in prices for energy (+10.3%) and food (+5.1%) were particularly significant. Other goods increased by 0.8% and services by 2.6%. In both instances the increases were much more moderate and no sharper than in the preceding year. The easing of prices continued in the first few months of 2009. By February, the HICP inflation rate had decreased to 1.2%.

2 Monetary policy and money market developments

Mid-year interest rate hike owing to increased inflation risks

After the monetary policy stance of the ECB Governing Council remained unchanged in the first half of 2008 – caught in the delicate balance between increasing price risks and continued turmoil in the money and credit markets –, the Governing Council decided to slightly increase the key interest rates in the Eurosystem at the beginning of July against the background of a significant rise in risks to price stability, reflected in higher inflation expectations and dynamic monetary and credit growth. The minimum bid rate for the main refinancing operations in the form of variable-rate tenders and the interest rates for the marginal lending facility and the deposit facility were each raised by ¼ percentage point to 4.25%, 5.25% and 3.25%, respectively.

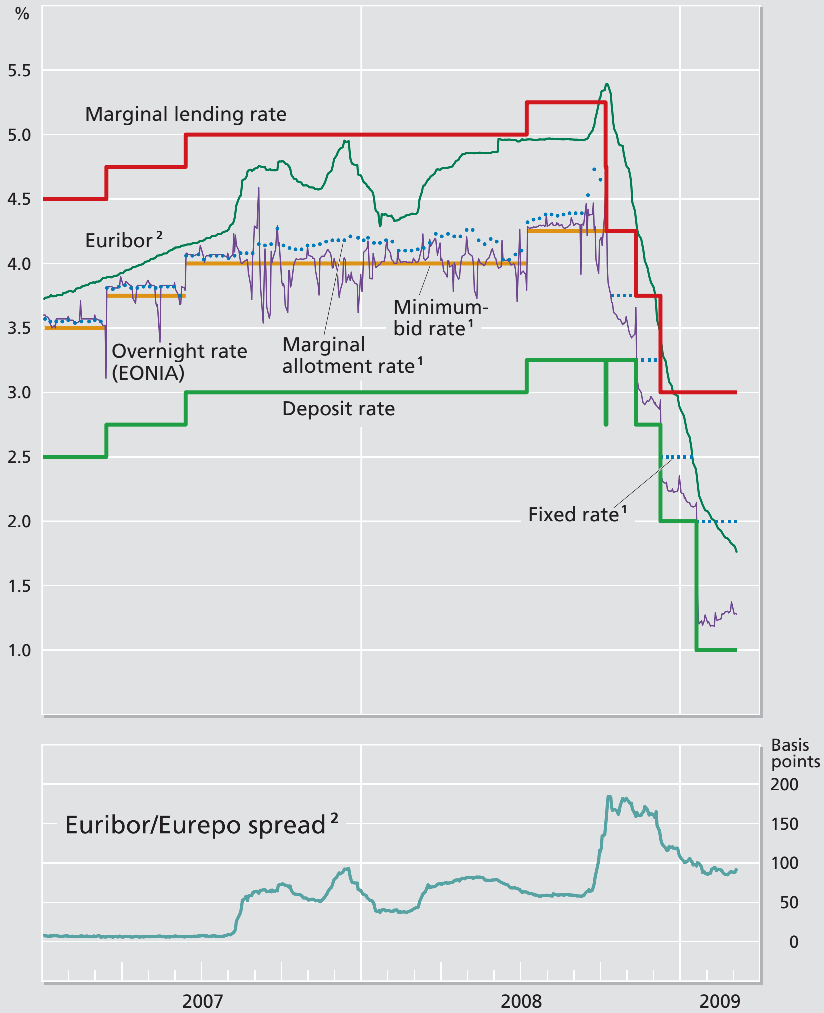
Continued key interest rate cuts in the fourth quarter...

Owing to the considerable intensification of the financial market turmoil and the fact that, from mid-September, money market tensions spilled over into the overnight money market following the collapse of the US investment bank, Lehman Brothers, as well as the serious liquidity and solvency problems experienced by numerous other banks, the Governing Council of the ECB and five other central banks took concerted action on 8 October, in which the ECB cut the interest rate for main refinancing operations in the Eurosystem by ½ percentage point to 3.75%. This monetary policy move was justified by falling commodity prices and a marked deterioration in the macroeconomic outlook. The sharp improvement in the inflation outlook enabled the Governing Council to continue easing its monetary policy stance at the last two monetary policy meetings of 2008. It thus cut the interest rate for main refinancing operations by an additional ½ percentage point to 3.25% in November; in December, it reduced the interest rate by a further ¾ percentage point to 2.50%. Subsequent cuts of 50 basis points in each case followed in January and March.

Key interest rates and money market rates

Chart 7

Daily data



1 Interest rate for main refinancing operations. As of 15 October 2008, fixed rate. — **2** Maturity of three months.

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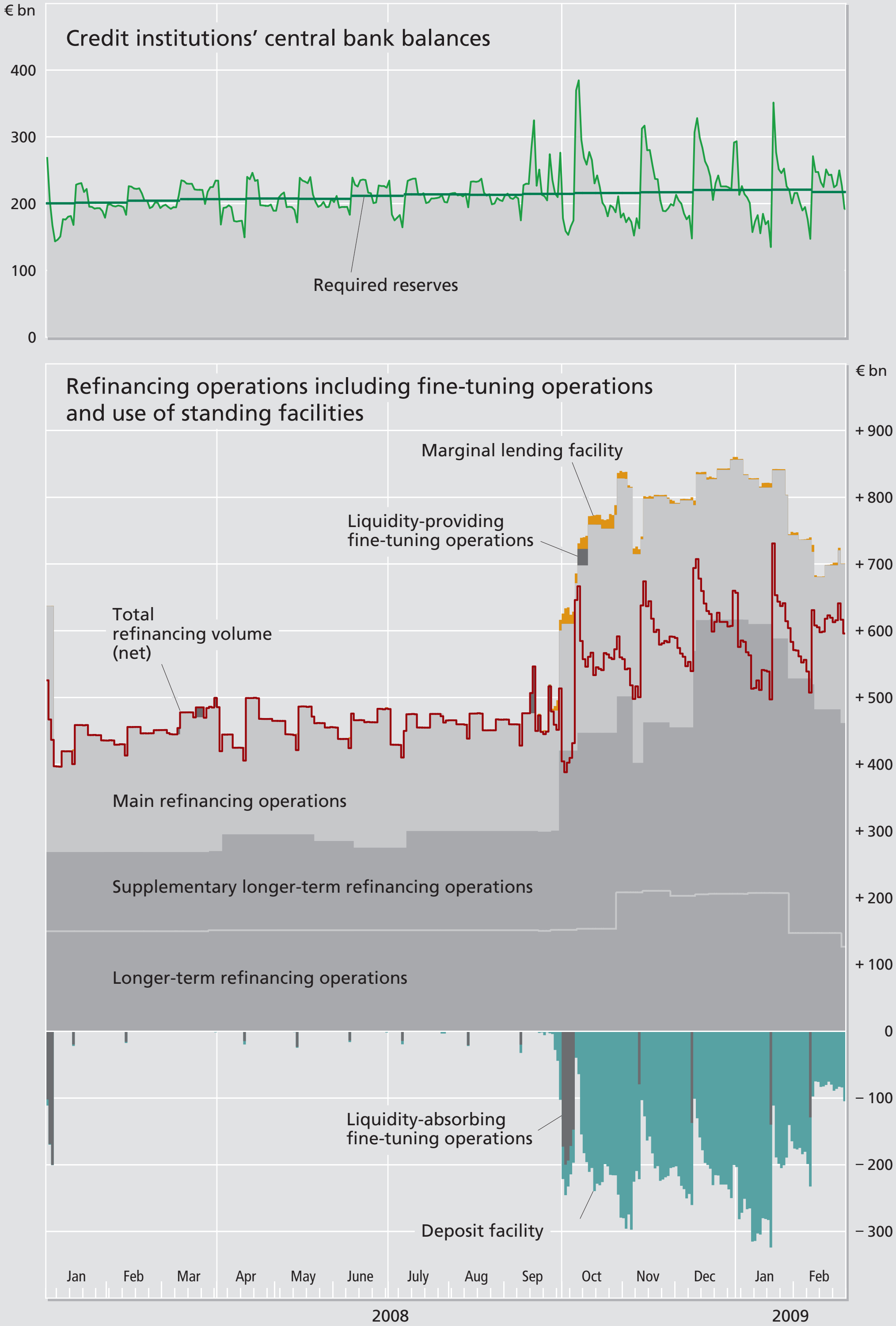
... and temporary adjustments to the monetary policy framework

At the same time, the Governing Council decided at its meeting on 8 October to make temporary changes to the monetary policy framework in order to effectively address the liquidity policy impact of the intensified financial market turmoil. Since then, for a limited period ending 31 March 2009, the main refinancing operations have been carried out as fixed-rate tenders with full allotment of all bids. The longer-term refinancing operations conducted from 30 October 2008 onwards have also temporarily taken the form of fixed-rate tenders with full allotment. At the same time, the range of eligible collateral which credit institutions can submit was expanded to prevent potential liquidity bottlenecks. Moreover, on 8 October, the Governing Council decided to reduce the

Liquidity management of the Eurosystem

Chart 8

Daily data



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Money market management and liquidity needs

Owing to the sustained – and, as of mid-September 2008, more intense – money market tensions, the Eurosystem's money market management was focused mainly on supporting the functioning of the money market. To this end, the Eurosystem carried out additional refinancing operations, changed the mix of maturities of the operations and provided a generous supply of liquidity. All in all, 2008 saw the largest refinancing measures since the start of monetary union. Money market management remained true to the aim of keeping the short-term money market rate close to the interest rate of the main refinancing operations; however, it was also necessary to safeguard banks' access to liquidity. The aim was to ensure that the monetary policy stance of the Governing Council of the ECB was reflected accurately in the overnight money market. By switching to fixed-rate tenders with full allotment from mid-October onwards, the amount of liquidity provided was based solely on individual demand from credit institutions.

Growing tension and the Eurosystem's responses

After tensions had eased at the end of the first half of the year and the key interest rate had been adjusted (upwards, to 4.25%), there were signs of a certain calming of the money market in July and August 2008, as evidenced by the halt in the trend rise of the allotment rates, the relative stability of EONIA and shrinking money market spreads. However, in the September-October reserve period, the insolvency of the US investment bank Lehman Brothers resulted in a sudden significant tightening of the conditions on the money market. The mutual mistrust already present among banks increased considerably. This intensified the banks' hoarding behaviour, further reduced credit limits in interbank business and exacerbated the problem of exceptionally low turnover in the longer-term money market segment. Overnight loans were also increasingly affected; at times, EONIA turnover reached lows of around €30 billion, compared with a daily average of €55 billion in August 2008. In order to curb the strong increase in the overnight money rate, the Eurosystem carried out liquidity-providing fine-tuning operations, sharply increased the above-benchmark allotments[1] in the main refinancing operations and announced an additional longer-term 38-day refinancing operation. Excess liquidity was absorbed through fine-tuning operations. While these measures provided the banks with more security for their own liquidity management, they also led to increased fluctuations in the EONIA (between 3.92% and 4.60%). In addition, average daily recourse to the marginal lending facility and to the deposit facility in the September-October reserve maintenance period increased to around €7½ billion and €20 billion, respectively. The fact that redistribution on the money market was heavily restricted was also reflected in the growing number of bidders in tender operations and in rising allotment rates. Furthermore, the growth in turnover on the Eurex Repo platform's Euro GC Pooling indicated a strong preference for secured O/N transactions in times of crisis.

Further Eurosystem measures

At the beginning of October 2008, alongside a key interest rate cut of 50 basis points (bp) coordinated with other major central banks, the ECB announced a number of steps to mitigate the tensions in the money markets. This mainly entailed temporarily switching to fixed-rate tenders with full allotment in the main refinancing operations – and subsequently also in the longer-term refinancing operations – and narrowing the corridor of standing facilities from 200 bp to 100 bp (ending 20 January 2009). Prior to this, the ECB Governing Council had already announced that it would carry out additional operations with three and six-month maturities in addition to individual operations for which the maturity is aligned with the length of the reserve maintenance period. Since the beginning of October, all counter-

1 A main refinancing operation benchmark allotment amount is the amount which will prospectively enable the credit institutions to fulfil their minimum reserve requirements smoothly during the term of the main refinancing operation. See European Central Bank, Publication of the benchmark allotment in the main refinancing operations, Monthly Bulletin, April 2004, pp 16-18.

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Money market management and liquidity needs (cont'd)

parties eligible for standard tenders have also been allowed to participate in fine-tuning operations. Furthermore, the execution time for fine-tuning operations was changed from 10.00 to 15.00 in order to reduce banks' liquidity uncertainties during bidding. Liquidity-absorbing fixed-term deposit tenders were subsequently carried out as variable-rate tenders with a maximum bid rate. In addition, the list of eligible assets was lengthened noticeably. The joint operations with the Federal Reserve, which had been initiated in December 2007 in order to provide US dollar liquidity to Eurosystem counterparties, were continued and expanded with the aim of improving the conditions for US dollar funding to credit institutions (against euros or eligible assets). Here again, it was mostly fixed-rate tenders with full allotment that were used, and the range of maturities was broadened. Additionally, refinancing in Swiss francs was offered. The usual liquidity shortages feared at Christmas and New Year did not arise owing to the extremely generous supply of liquidity. On the whole, the monetary policy framework of the Eurosystem demonstrated that it was capable of responding effectively and flexibly even in special liquidity situations.

Short and longer-term money market rates

Following the outbreak of the financial market crisis in August 2007, the unsecured money markets, in particular, ceased to operate smoothly. However, the liquidity conditions for the shortest maturities appeared to be improving at the beginning of September 2008; the EONIA rates remained broadly stable at close to the minimum bid rate. Here again, however, there were large fluctuations as the financial market crisis worsened; volatility, measured as the standard deviation of the spreads between the EONIA and the minimum bid rate, increased from 9 bp to 17 bp. At the same time, the full allotments for fixed-rate tenders caused the EONIA to fall below the key interest rate. The longer-term euro money market rates, which peaked at the beginning of October 2008, subsequently decreased substantially amidst sharp key interest rate cuts (of 275 bp up to March 2009). The one-month Euribor fell by 380 bp between early October 2008 (5.20% on 8 October) and early March 2009. The three-month Euribor/Eurepo spread – as one of the gauges of uncertainty in the money market – narrowed from 184 bp at the height of the crisis to around 90 bp as this report went to press. However, it was still very broad compared with the pre-crisis spread of 8 bp. The segmentation of the money market into, on the one hand, banks with a strong credit rating that were able to borrow overnight money at rates below the EONIA and, on the other, banks with a poorer credit rating that had to borrow at significantly higher rates or were solely dependent on liquidity provided by the Eurosystem was reflected, among other things, in the broad trading margins of up to 40 bp on unsecured overnight money. All in all, it remains to be seen whether the recent decline in risk premiums actually signifies the beginnings of a trend towards a recovery in the interbank market.

Development of the factors determining bank liquidity

As well as taking numerous measures to support the money market, money market management in 2008 was also faced with the task of refinancing an increase in credit institutions' liquidity needs stemming from the rise in the minimum reserve requirement (of €23.5 billion) and in autonomous factors (of €22.6 billion) to an annual average of €485.3 billion (see table on page 35). The additional needs arising from autonomous factors were caused mainly by growth in the volume of banknotes in circulation and the increase in general government deposits. By contrast, there were net inflows of €50.6 billion into the market via the remaining autonomous factors. This was primarily due to the fact that the Eurosystem significantly increased its holdings of euro-denominated securities by €68.0 billion. Banknotes in circulation gave rise to the greatest liquidity needs, with a sharp rise of €55.7 billion. The demand for cash experienced particularly strong growth following the escalation of the financial market crisis in autumn 2008. On 26 December 2008, the volume of banknotes in circulation peaked at €765 billion. At around 9%, its average growth rate in 2008 was still strong and remained virtually unchanged com-

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Money market management and liquidity needs (cont'd)

pared with the previous year. Amidst heightened volatility, liquidity needs arising from general government deposits with the Eurosystem rose considerably over the course of the year by €17.5 billion. At €50.9 billion, the volatility of the autonomous factors as a whole was up significantly on the year (€11.7 billion in 2007), exemplifying the forecasting difficulties experienced in the year of the crisis.

In order to refinance the increased liquidity needs stemming from autonomous factors, the minimum reserve requirement and the heightened demand for liquidity due to the crisis, the Eurosystem sharply increased its monetary policy operations by an annual average of €92.4 billion (€24.5 billion in 2007). The expansion was effected through longer-term refinancing operations; as in 2007, by contrast, the volume of the main refinancing operations was reduced substantially. Although the share of (mostly one-day) fine-tuning operations increased from mid-September onwards, their percentage share in total refinancing was small.

On an annual average of 2008, credit institutions' current accounts were up €23.3 billion on the year, roughly reflecting the increase in the minimum reserve requirement. At 12.0%, the rise in the reserve requirement was somewhat less dynamic than in 2007.

All in all, the Eurosystem's money market management in 2008 once again proved reliable in implementing the ECB Governing Council's monetary policy stance in an extremely eventful environment and ensured largely balanced conditions in the euro money market of the euro area. The integration of Slovakia into the euro area went smoothly in terms of liquidity management.

Factors determining bank liquidity

Year-on-year changes in annual average values, in € billion

Item	2007	2008
I Provision (+) or absorption (–) of central bank balances owing to changes in autonomous factors		
1 Banknotes in circulation (increase: –)	– 51.6	– 55.7
2 Government deposits with the Eurosystem (increase: –)	+ 3.1	– 17.5
3 Net foreign assets[1]	– 5.3	+ 91.5
4 Other factors[1]	+ 59.9	– 41.0
Total	+ 6.0	– 22.6
II Monetary policy operations of the Eurosystem		
1 Open market operations		
(a) Main refinancing operations	– 43.4	– 61.1
(b) Longer-term refinancing operations	+ 67.8	+ 153.5
(c) Other operations	– 5.4	+ 0.8
2 Standing facilities		
(a) Marginal lending facility	+ 0.1	+ 2.0
(b) Deposit facility (increase: –)	– 0.3	– 49.3
Total	+ 18.8	+ 45.9
III Change in credit institutions' current accounts (I + II)	+ 24.9	+ 23.3
IV Change in the minimum reserve requirement (increase: –)	– 23.6	– 23.5

1 Including liquidity-neutral valuation adjustments at the end of the quarter.

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spread between the interest rates for both the marginal lending facility and the deposit facility and the main refinancing operations from 1 percentage point to 50 basis points in each case. This measure was in place until 20 January 2009. The usual interest rate corridor of 200 basis points was reinstated with effect from 21 January 2009.

Difficult money market environment …

The overall conditions for liquidity management in the Eurosystem were very challenging in 2008. Since the financial market turmoil began in August 2007, the Eurosystem has stabilised the European money market by generously providing liquidity above and beyond benchmark allotment, thus enabling banks to fulfil their minimum reserve requirements in good time (frontloading). In the early stages, these measures were accompanied by the use of liquidity-absorbing fine-tuning operations at the end of the maintenance period. At the same time, the Governing Council also tried to stabilise the longer-term maturity segments of the money market by introducing refinancing operations with a maturity of six months owing to the continued weakness of interbank trading activities in these segments. In addition to euro money market operations, the Eurosystem also carried out measures in conjunction with the Fed and the Swiss National Bank, which made it easier for banks in the euro area to access US dollars and Swiss francs.

… with the financial market turmoil intensifying in the overnight segment, too

From mid-September 2008, however, as the crisis intensified, the yield spread between secured and unsecured quarterly liquidity in the interbank market peaked at more than 1.8 percentage points. Owing to the renewed sharp increase in banks' mistrust, the overnight money market also suffered heavily. EONIA turnover fell perceptibly while the banks' bid rates for the main refinancing operations increased noticeably and, in some cases, drew closer to the interest rate for the marginal lending facility. Adjustments to liquidity policy are unavoidable under such circumstances. The transition to fixed-rate tenders with full allotment of all bids thus ensured that all banks received the liquidity they needed, based on the collateral available to them, at an acceptable interest rate. Furthermore, the rise in the interest rate for the deposit facility also ensured that the EONIA – despite the considerable liquidity injection to the banking sector – did not deviate more significantly from the main refinancing rate. The EONIA has, nonetheless, been consistently lower than the main refinancing rate since the changes to the instruments.

The situation in the euro money market has gradually restabilised, probably not least as a result of the liquidity policy action, but also because of the measures

Refinancing and eligible assets

In 2008, the implementation of monetary policy operations was strongly influenced by the financial market crisis. The banks' massive demand for liquidity, together with the policy of full allotment pursued since October, led to the outstanding refinancing volume rising to €860 billion on 31 December (compared with €637 billion at the start of 2008).

The share of the main refinancing operations in overall refinancing fell from 59% in 2007 to 38% in 2008. However, this decline was accompanied by a marked rise in the number of participants in the main refinancing operations. Since the changeover to the fixed-rate tender procedure, the number of participants in the Eurosystem has more than doubled, going up from an average of 354 to over 740. On an annual average, 443 bidders in the Eurosystem took part in main refinancing operations. About 70% the of bidders placed their bids through the Bundesbank; however, their share in the relevant allotments showed a slight fall on the year to just under 40%.

In the case of longer-term refinancing operations, too, a majority of the bidders (73 of 154 on an annual average) placed their bids through the Bundesbank. However, the share of the Bundesbank's counterparties in the allotted volume of longer-term refinancing operations dropped significantly from 62% to just under 40%.

Increasing use was also made of quick tenders for fine-tuning purposes in 2008. In total, 25 fine-tuning operations were conducted (12 of these on the last day of a minimum reserve period), eight of which provided liquidity to the market and 17 of which withdrew liquidity from the market. In addition to these fine-tuning operations, the eligible counterparties made greater use of the standing facilities for liquidity adjustment in 2008. The marginal lending facility was used to an amount of about €2.3 billion on an annual average in the Eurosystem (Germany: €627 million). The deposit facility totalled €49.8 billion on an annual average, €21.3 billion of which came from counterparties of the Bundesbank.

As in 2007, an increased volume of submitted eligible assets was noticeable in connection with the turbulence in the financial markets. Against this background and with a view to the counterparties' liquidity situation, the Eurosystem, in October 2008, agreed on temporary measures (until the end of 2009) to expand the collateral framework. This temporary expansion comprises the acceptance of BBB-rated debt instruments (with the exception of asset-backed securities (ABS)) and debt instruments denominated in US dollar, pound sterling and yen. Moreover, subordinated assets carrying an adequate guarantee as well as uncovered bank bonds traded on the non-regulated markets accepted by the ECB were authorised. By the end of 2008, German counterparties had submitted about €37 billion of additional eligible assets on the basis of the temporary expansion of the collateral framework.

The total value of assets submitted by counterparties to the Bundesbank went up from €664 billion in 2007 to €802 billion in 2008 (end-of-year levels). Of this, €401 billion was accounted for by assets held in custody in other member states and, therefore, mobilised on a cross-border basis for refinancing at the Bundesbank.

At the end of 2008, 44% of eligible assets submitted to the Bundesbank were uncovered bank debt securities, 19% were covered bank debt securities (Pfandbriefe) and 12% were government bonds. The share of ABS was 10% and was thus unchanged on the year. Other marketable assets had a share of 7%. Non-marketable assets, ie credit claims, had a share of 8%.

Following the insolvency of Lehman Brothers in mid-September 2008, the Eurosystem acted increasingly as an intermediary in the interbank money market, which was reflected in a clear extension of the balance sheet. Since the interbank money market was playing only a restricted role in fulfilling its function of offsetting the banks' differing liquidity positions, the Eurosystem safeguarded the equilibrium via its balance sheet. On the one hand, counterparties with a liquidity deficit were granted very generous amounts of liquidity in the open market operations. On the other hand, counterparties with liquidity surpluses were able to lodge these with the Eurosystem, mainly via the deposit facility. In some cases, liquidity was also absorbed by counterparties, which had placed very high bids in terms of volume in the open market operations, in order to hold a liquidity buffer in reserve. Furthermore, the Eurosystem, via its security framework, also offered banks the opportunity of refinancing a broad range of financial assets at the central bank. This constitutes a further aspect of expanded central bank intermediation.

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Money market remains unstable despite trend towards easing of tensions

introduced by the governments in the euro area to support the national financial systems. For instance, the risk premium for unsecured three-month money fell by around 1 percentage point to roughly 90 basis points at the end of the period under review since reaching an all-time high at the beginning of October 2008. In historical terms (less than ten basis points), however, this is still extremely high. Trust among banks remains at a low level.

3 Declining trends in monetary and credit growth

Falling M3 growth

Monetary growth in the euro area declined perceptibly over the course of 2008 despite the continued rather robust overall expansion of M3. The 12-month growth rate of M3 fell from 11.5% in December 2007 to 7.5% in December 2008. The inverse yield curve seen until the interest rate cut in December boosted, above all, the dynamic expansion of short-term time deposits. They grew by 23.3% in 2008, following an increase of 41.4% in 2007. In addition, there was a sharp rise in repurchase agreements with euro-area non-banks (+16.0%). In the wake of the financial market turmoil, the holdings of money market fund shares/units grew only slightly (4.8%); the volume of short-term bank debt securities transacted outside of the euro-area banking sector contracted by an annual rate of as much as 10.9%. Growth in overnight deposits, which tend to earn little interest, and in short-term savings deposits was, at most, muted in 2008. By contrast, there was a strong upsurge in the volume of currency in circulation, which experienced exceptionally strong growth in October when the financial market crisis reached its initial peak.

Monetary growth still indicates upside price risks despite deceleration

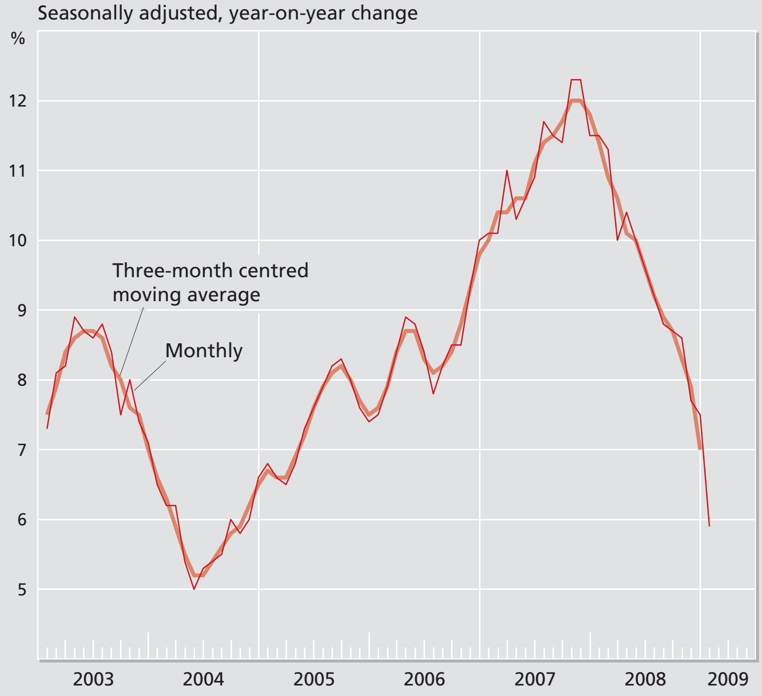
The inverse yield curve and the financial market crisis boosted monetary growth in 2008. It is therefore likely that the current M3 growth rate will tend to overstate the underlying monetary dynamics, which are relevant to inflation, although year-on-year monetary growth remains comparatively buoyant. Nevertheless, given the weakening monetary dynamics seen at the end of the year, the monetary aspect of the longer-term stability policy outlook has, *per se*, come within close range of the Eurosystem's definition of price stability.

Weakening growth in lending to the private sector

Of the counterparts of M3, loans to the domestic private sector were again the dominant determinant of monetary expansion in the euro area. They increased by 5.8% over the course of 2008, following a rise of 11.2% in 2007. The more subdued trend in overall lending was due mainly to weaker growth in loans to households, particularly lending for house purchase, which rose by only 1.5% in

M3 growth in the euro area

Chart 9



2008, compared with 7.1% in 2007. Voluminous securitisation transactions in the euro area were another factor that weakened lending growth. Such liabilities are assumed by special-purpose vehicles (SPVs), precluding the need for banks to record them as loans on their own balance sheets. Loans to financial enterprises increased by 9.1% in 2008 and thus at a considerably slower pace than in 2007 (+24.2%). By contrast, growth in lending to non-financial enterprises fell comparatively moderately; they expanded at a rate of 9.5% in 2008, compared with 14.5% in 2007. The dampening effect of the financial market turmoil on the funding of non-financial enterprises in the euro area thus remained fairly limited throughout 2008 despite a substantial tightening in banks' credit conditions.

Development in other lending business also more sluggish

Banks' other lending business also grew significantly more sluggishly than in 2007, which, *per se*, curbed M3 growth. In particular, euro-area banks acquired noticeably fewer securities from resident private issuers, even though banks once again bought back their special-purpose vehicles' securities in connection with the aforementioned securitisations. Furthermore, euro-area banks' net claims on non-euro-area residents declined steeply. Although lending to euro-

Monetary developments in the euro area

Table 3

Changes in the course of the year 1

Item	2007	2008
	as a percentage	
I Growth of the monetary aggregates		
M1 2	3.9	3.3
M2 3	10.1	8.2
M3 4	11.5	7.5
	€ billion	
II Money stock and its counterparts		
M3 (=1+2–3–4–5)	891.1	656.6
Currency in circulation and overnight deposits	145.4	127.4
Other shorter-term bank deposits	525.4	479.7
Marketable instruments	220.3	49.5
Balance sheet counterparts		
1 Total credit to non-MFIs in the euro area	1,309.9	819.4
Credit to general government	– 60.0	73.8
Credit to private-sector non-MFIs in the euro area	1,369.9	745.6
2 Net claims on non-euro-area residents	13.4	– 118.5
3 Central government deposits	– 13.8	130.2
4 Longer-term financial liabilities to other non-MFIs in the euro area	489.3	123.4
5 Other counterparts of M3 5	– 43.3	– 179.1

1 Seasonally adjusted. — **2** Currency in circulation and overnight deposits held by euro-area residents with MFIs in the euro area. — **3** M1 plus other short-term bank deposits held by euro-area residents with MFIs in the euro area (deposits with an agreed maturity of up to two years and deposits with an agreed notice period of up to three months). — **4** M2 plus marketable instruments held by euro-area residents (repurchase agreements concluded by MFIs with non-MFIs in the euro area, money market fund shares/units and debt securities issued with a maturity of up to two years by MFIs in the euro area). — **5** Calculated as a residual.

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area general government grew perceptibly, only holdings of domestic securities were increased in net terms by credit institutions.

Subdued monetary capital formation

The year 2008 saw not only weakening monetary growth but also a clear reduction in monetary capital formation. Banks' longer-term liabilities rose by only 2.1%, following an increase of 9.0% in 2007. The inverse yield curve and, above all, the worsening financial market crisis led to a sharp slowdown in monetary capital formation; the volume of longer-term bank debt securities in circulation outside of the euro-area banking sector contracted slightly by 1.5% in 2008 after having risen by 6.3% in 2007. Growth in longer-term time deposits (with an agreed maturity of more than two years) dwindled to as little as around 15% of its rate in 2007. On balance they grew by a mere 1.0%; savings deposits redeemable at notice of over three months likewise increased only marginally (by 0.6%). By contrast, capital and reserves expanded significantly in 2008 due, among other things, to state recapitalisation measures.

III Economic trends in Germany

1 Upswing ends, labour market still robust

Underlying trends

The German economy expanded, on an annual average, by 1.3%, or 1.0% after adjustment for working-day variations, in 2008. Growth therefore remained below the expansion in potential output for the first time in two years. On an annual average, however, overall capacity utilisation still exceeded its normal level, and employment rose significantly again.

It was also a year of very marked contrasts. The economy initially grew very sharply, partly as a result of weather-related effects on the construction sector. This was followed by a period of economic slowdown which was still comparatively moderate until the summer months. The main reason for this was that industry was able to keep output at a high level owing to exceptionally well-filled order books even though, from as early as the turn of 2007-08, the volume of new orders had been declining from its previous high level, which had also been due to numerous large orders. Against the backdrop of the rapid deterioration in the world economy and the renewed escalation of the international financial crisis, this was then followed in the fourth quarter by an accelerated downturn in the number of new orders from both domestic and foreign customers. Large segments of the German economy then restricted their activities dramatically; in the production sector, enterprises extended their usual plant shutdowns over the Christmas holiday period. The acute disruptive factors, which originated primarily from foreign trade, brought an end to the economic upswing which had prevailed since the middle of 2003 before private consumption was able to take off. Given the favourable labour market developments over the past few years, the conditions were actually already in place for this. For example, the number of regular employees subject to social security contributions had been on the increase during most of 2008. Furthermore, employees achieved comparatively large wage increases in the reporting period. The greater scope for expenditure resulting from this was severely curtailed by developments on the price side. According to the national consumer price index, price inflation, at 2.6% on an annual average, was again higher than in previous years. As this report went to press, however, the annual rate of increase, at 1.0%, was again within the stability corridor.

Export demand declines during year

The main reason for the cyclical turnaround in Germany was the absence of stimuli from exports since the second quarter of 2008, as these stimuli had been of particular importance for the cyclical upswing. This was connected with the fact that, as time went on, the real economic repercussions of the financial market crisis were becoming more and more regionally dispersed and, as a result of the many different trading and financial links, were gradually affecting virtually all economic areas. The high degree of co-movement in the globalised economy associated with this prevented German exporters from expanding activities in the euro area as well as in emerging market economies and in the transition countries of eastern Europe to compensate for declining business transactions with American and British customers. An additional factor was that the financing of investment projects was made more difficult for Russia and some Latin American countries following the end of the rise in commodity prices. This also meant that an important business area for German enterprises became less significant. Given that growth in German exporters' sales markets in 2008 was weaker than at any time since the end of the last global growth dip in 2001-02, the increase in exports, at 2.7% in price-adjusted terms, was still well below the pace of expansion of the past few years.

Imports influenced by sharply fluctuating commodity prices

Import growth, at 4.0%, clearly exceeded the increase in exports in the reporting period, with the result that, on an arithmetical basis, net exports had a dampening effect on growth performance for the first time since 2003. The sharp deceleration in production in the course of the year initially had only a comparatively small impact on domestic demand for foreign goods. One positive impact in the second half of 2008 was that, in response to the very sharp decline in energy and commodity prices, enterprises built up their inventories of primary products and households stocked up on heating oil. Despite the marked turnaround on the international crude oil markets, the sharp rise in the price of imported energy in the first half of the year led to a loss in domestic real income of €16¼ billion or ¾% of GDP for the reporting year as a whole.

Key economic variables in Germany

Table 4

Annual percentage change

Item	2005	2006	2007	2008
Growth (real) [1]				
Private consumption	+ 0.2	+ 1.0	– 0.4	– 0.1
Government consumption	+ 0.4	+ 0.6	+ 2.2	+ 2.0
Machinery and equipment	+ 6.0	+ 11.1	+ 6.9	+ 5.9
Premises	– 3.0	+ 5.0	+ 1.8	+ 3.0
Other investment	+ 4.9	+ 8.0	+ 8.0	+ 6.6
Domestic demand	0.0	+ 2.1	+ 1.1	+ 1.7
Exports [2]	+ 7.7	+ 12.7	+ 7.5	+ 2.7
Imports [2]	+ 6.5	+ 11.9	+ 5.0	+ 4.0
Gross domestic product	+ 0.8	+ 3.0	+ 2.5	+ 1.3
Contribution to GDP growth in percentage points				
Domestic demand (excluding inventories)	+ 0.4	+ 2.1	+ 1.0	+ 1.1
Changes in inventories	– 0.4	0.0	+ 0.1	+ 0.5
Net exports	+ 0.7	+ 1.0	+ 1.4	– 0.3
Employment				
Employed [3]	– 0.1	+ 0.6	+ 1.7	+ 1.4
Average working time per employed person	– 0.5	– 0.2	+ 0.1	– 0.1
Total number of hours worked	– 0.6	+ 0.5	+ 1.8	+ 1.3
Unemployed (in thousands) [4]	4,861	4,487	3,776	3,268
Western Germany	3,247	3,007	2,486	2,145
Eastern Germany	1,614	1,480	1,291	1,123
as a percentage of the civilian labour force	11.7	10.8	9.0	7.8
Western Germany	9.9	9.1	7.5	6.4
Eastern Germany	18.7	17.3	15.1	13.1
Prices				
Consumer prices	+ 1.5	+ 1.6	+ 2.3	+ 2.6
Producer prices of industrial products [5]	+ 4.6	+ 5.5	+ 2.0	+ 6.0
Construction prices [6]	+ 1.2	+ 2.4	+ 6.7	+ 3.4
Import prices	+ 4.3	+ 5.2	+ 1.2	+ 5.2
Export prices	+ 1.3	+ 2.3	+ 1.8	+ 2.1
Terms of trade	– 2.9	– 2.7	+ 0.5	– 2.8
GDP deflator	+ 0.7	+ 0.5	+ 1.9	+ 1.5
Productivity and labour costs				
GDP per hour worked by employed persons [1]	+ 1.4	+ 2.5	+ 0.6	– 0.0
Compensation per hour worked by employees [3]	+ 0.6	+ 1.2	+ 1.0	+ 2.1
Labour costs per unit of value added in real terms in the economy as a whole [7]	– 0.8	– 1.2	+ 0.4	+ 2.1

Sources: Federal Statistical Office; Federal Employment Agency. — **1** At previous year’s prices, chain-linked (2000=100). — **2** Balance of transactions in goods and services with the rest of the world. — **3** Domestic concept. — **4** As defined by the Federal Employment Agency. — **5** Domestic sales. — **6** Calculated by the Bundesbank on the basis of Federal Statistical Office data. — **7** Gross compensation generated in Germany per hour worked by employees divided by real GDP per hour worked by employed persons.

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Enterprises increasingly cautious about investment

Corporate investment eased in the course of 2008 after three years of strong growth. Not only were large amounts of machinery and equipment delivered at the beginning of the year, a large number of industrial construction projects were also completed, not least as a result of the rather mild weather during the winter months. Enterprises' investment planning began to be increasingly characterised by caution in the second quarter of 2008. Owing to the decline in demand, there was no longer any need to take immediate steps to expand production capacity. At the same time, there was a further significant deterioration in the external financing conditions for large enterprises. For example, the strongly contracting global stock markets made it difficult to raise capital, and the escalation of the financial market crisis in September meant that borrowing new funds by issuing bonds became more expensive. Added to this was the fact that banks were charging higher refinancing costs. In Germany, however, there were never any signs of general supply-side credit constraints in the form of a credit crunch. Despite the sharp decline at the end of the year, enterprises' investment in machinery and equipment went up by an average of 5.9% on the year in 2008. The growth rate was as much as 7.2% in the case of industrial construction.

Non-commercial construction still subdued

Despite additional state revenue, the public sector did not speed up the implementation of infrastructure measures in the period under review. For example, in 2008, government construction investment went up by 2.6% on the year, compared with a year-on-year increase of 4.6% in 2007. Furthermore, only very little momentum came from housing construction. Despite relatively favourable income developments and the favourable financing conditions, new building construction was still tending to be weak; construction costs went up quite sharply, however. Furthermore, the rise in housing rents was rather subdued in many places. By contrast, the partly government-sponsored extension and renovation measures in the real estate market had a stabilising effect.

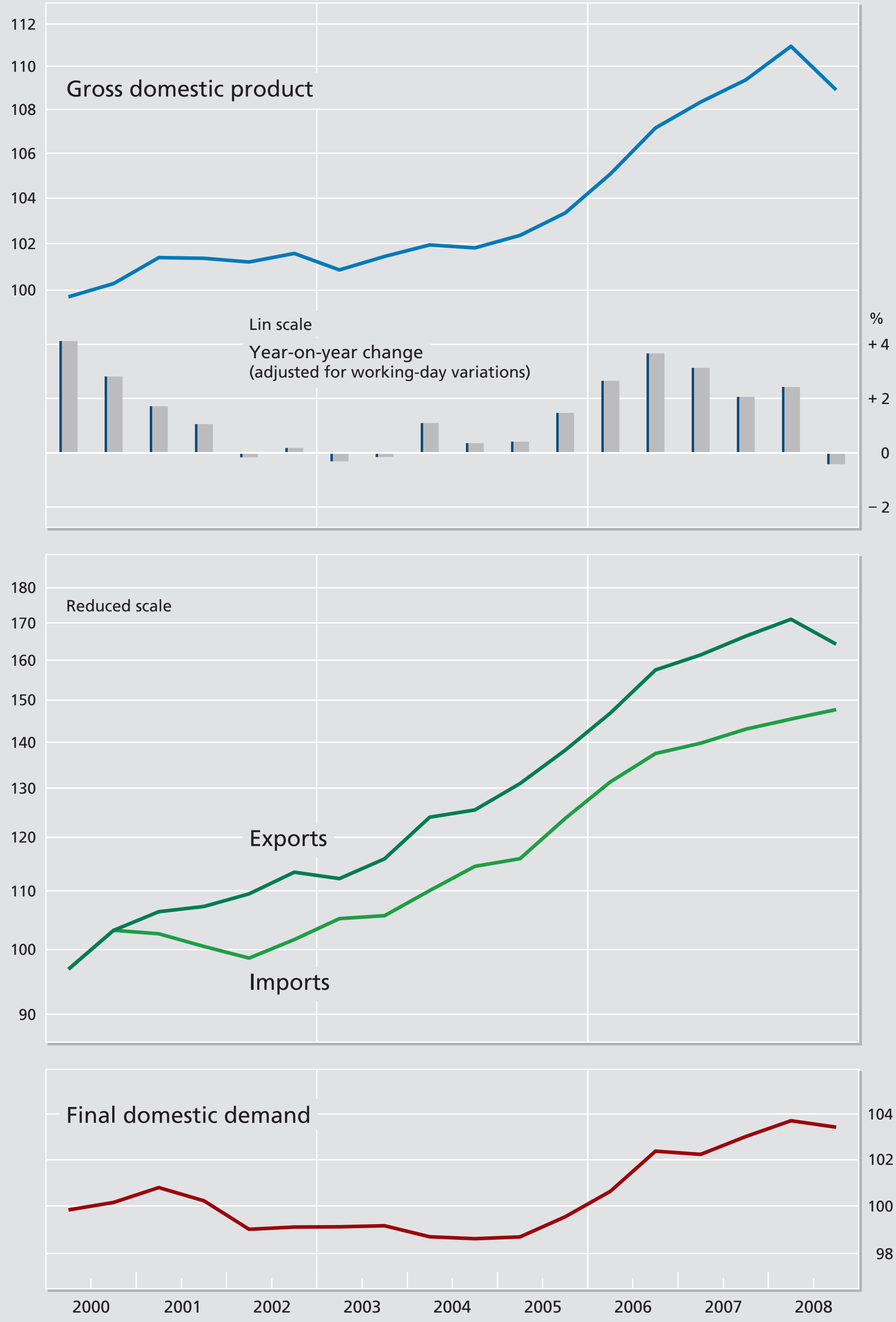
Consumer climate initially hampered by price shocks, then by loss in confidence

Private consumption expenditure in 2008 just about matched the level of the previous year in real terms, a level which had been detrimentally affected by the automatic counterswing to the advanced purchases ahead of the increase in VAT on 1 January 2007. Despite the considerable growth in the nominal disposable income of households, there were a number of disruptive factors preventing private consumption from taking off. The consumer climate was adversely affected by the high energy and food prices in the first half of the year whereas in the second half of the year it was increasingly the emergence of confidence problems and, in some cases, also wealth effects following the intensification of

Gross domestic product and
selected expenditure components

Chart 10

Price-adjusted, 2000 = 100, seasonally adjusted, half-yearly, log scale



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the financial market turbulence that was an issue. Concerns about the economy also emerged in the wake of the marked downturn. Against this backdrop, household savings increased somewhat more sharply than in previous years and, on an annual average, reached 11.5% of disposable income. The saving ratio was therefore almost ¾ percentage point higher than in the previous year.

Employment still comparatively robust

Despite the retarding cyclical factors, employment had virtually been on the increase throughout 2008. Employment growth did not come to a halt until the end of the year. In addition to the government-assisted short-time working arrangements, to which recourse was taken on a larger scale for the first time since the downturn after the New Economy boom, the measures to promote paid employment such as reintegration grants also had a stabilising effect. Moreover, less overtime was worked and working time accounts were offset. The number of persons in work went up, on an annual average, by 562,000 on the year, or 1.4%, which was not much less than in 2007 when the growth rate had stood at 1.7%. By contrast, owing to a decline in the average number of hours worked (1.0% after calendar adjustment), the increase in the annual total number of hours worked in the overall economy was significantly weaker than in the previous year (2.0%). The main beneficiaries of this overall expansionary trend in the labour market were regular employees subject to social security contributions (increase of 554,000), whereas other forms of employment recorded only minimal growth. This applies in particular to persons working exclusively in low-paid part-time jobs. The number of one-euro jobs (top-up earnings for benefit recipients) did not change much either. At the sectoral level, the business services sector became increasingly important. Unlike in the past, the hiring-out of labour, which is also recorded in this sector, accounted for a significant proportion of the gains in employment.

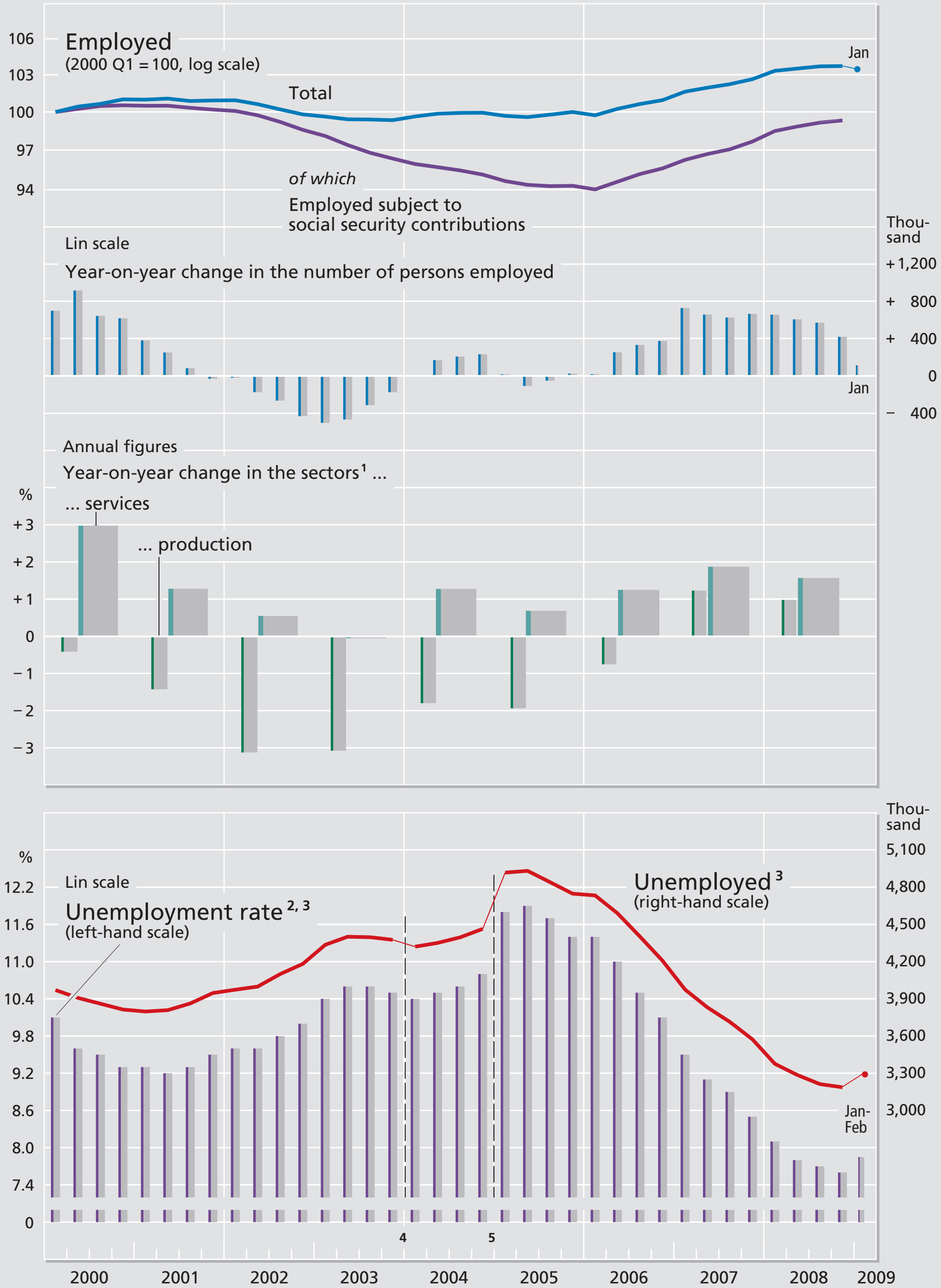
Unemployment declines

In line with the positive trend in employment, there was a further decline in unemployment to 3.27 million in 2008. This was 508,000 fewer than in the previous year when the number of unemployed persons had declined by 711,000. While the decline in 2007 was mainly in job seekers receiving unemployment benefits under the statutory unemployment insurance scheme, in 2008, it was accounted for to a greater extent by job seekers receiving the basic welfare allowance, who were therefore no longer recorded in the unemployment statistics. Short-term unemployment, which is primarily attributable to persons receiving benefits under the statutory unemployment insurance scheme, reached a cyclical minimum in mid-2008. Those individuals who are more difficult to place in work, primarily job seekers receiving the basic welfare allowance, also bene-

Labour market

Chart 11

Quarterly, seasonally adjusted



1 Column width proportional to the total number of persons employed. — **2** Unemployed as a percentage of the civilian labour force. — **3** As defined by the Federal Employment Agency. — **4** From January 2004, unemployed excluding participants in aptitude testing and training schemes. — **5** Increase influenced by inclusion of persons receiving social assistance who are able to work.

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fited from the improved labour market situation. The demographically related decline in the labour force and labour market policy measures are likely to have played a role in this. By contrast, estimations by the Federal Employment Agency indicate that, following the discontinuation of the regulation which enabled older employed persons to draw unemployment benefit without being available for work and therefore without being registered as seeking employment, the number of such persons has increased, statistically, by around 10,000 per month and by 65,000 on an annual average. In 2008, the average unemployment rate, at 7.8%, was 1.2 percentage points down on the year. In the first two months of 2009, the total number of persons officially registered as unemployed was up by just under 100,000 (seasonally adjusted) on the figure for December. The unemployment rate stood at 7.9% in February.

Normalisation of wage developments

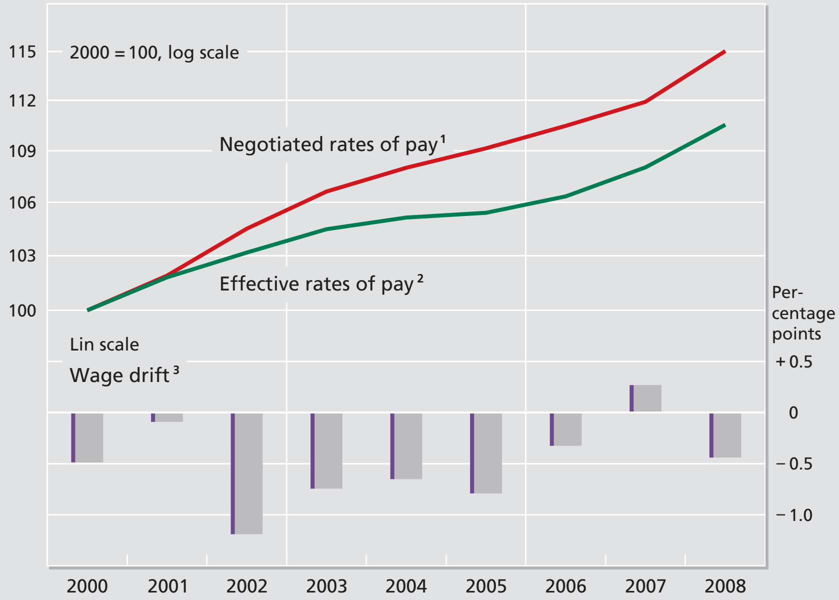
Following the clear acceleration in wage growth in the export-oriented industry in 2007, an industry which has particularly benefited from the economic upturn, the more domestically-oriented sectors, the public sector in particular, followed suit in 2008. At the same time, one-off lump sum payments were replaced to a greater extent by permanent percentage increases in basic rates of pay. Only in the public sector was there a further compression of the qualification-based wage structure. All in all, on a monthly basis the negotiated rates of pay went up by 2.8% in 2008. This was double the rate of increase in 2007. According to an estimate by the Federal Statistical Office, the rise in actual earnings, at 2.3%, was somewhat weaker. One reason was that, for cyclical reasons, there was a slight reduction in the actual number of hours worked per person, if not in the contractually agreed number of working hours. Despite the decline in social security contributions by employers, labour costs – measured in terms of average compensation per employee – went up much more sharply, at 2.0%, than in previous years. Owing to the cyclically induced stagnation in labour productivity, the rise in unit labour costs went up to 2.1%. As firms were unable to expand their profit margins for the first time in a number of years, the increase in the value added deflator was restricted to 1.5%.

Sharpest rise in consumer prices in 14 years

Despite the sharp rise in negotiated rates of pay, the disposable income of employees was barely able to keep pace with the price increases. Consumer price inflation (CPI), at 2.6% on an annual average, was far higher than the average of the previous few years. The corresponding figure for the Harmonised Index of Consumer Prices (HICP) was as much as 2.8%. An inflation rate of a similar magnitude has not been recorded in Germany since 1994. Whereas, at that time, practically the entire basket of goods was affected, the increase in 2008

Labour income

Chart 12



1 Level of negotiated wages and salaries calculated on a monthly basis. — **2** Wages and salaries per employee. — **3** Deviation in rates of change between effective rates of pay and negotiated rates of pay.

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focused on only a few components. The sharp rise in crude oil prices on the international markets, which continued right up to mid-2008, drove up the cost of petrol and heating oil immediately and, albeit with a time lag, also that of gas and electricity. The indirect effects of the sharp rise in crude oil prices were especially apparent in the area of transport services. The sustained strength of global demand and weather-related supply disruptions initially resulted in a further rise in food prices. One contributory factor in this was the growing use of renewable resources for energy production, which added a demand-side component to the cost-side link to energy prices. Excluding food and energy, consumer price inflation in Germany, at 1.4%, was relatively subdued. Nevertheless, it was significantly higher than in 2005 and 2006, when it had stood at 0.7% in both cases. This was due, not least, to the sharp rise in wage costs in Germany. By contrast, the even sharper rise in consumer price inflation (excluding energy and food) in 2007, at 1.9%, was due primarily to the increase in the standard rate of VAT from 16% to 19% on 1 January 2007. During the course of 2008, consumer price inflation accelerated to as much as 3.3% by mid-year. After the price corrections in the international energy and commodity markets, this figure had gone down to 1.1% by the end of the year. At the beginning of 2009, the rate of inflation fell to just under 1%.

Prices at various levels of the economy

Table 5

Annual percentage change

Item	2007 Q4	2008 Q1	Q2	Q3	Q4
Import prices	3.2	5.7	7.5	8.7	– 1.2
Energy	21.8	35.9	44.2	44.0	– 8.7
Animal feed	12.3	1.7	– 0.3	0.1	– 2.3
Vegetable and animal oils and fats					
Dairy products	25.8	24.6	18.3	4.2	– 9.3
Bread and cereals	8.3	9.0	11.5	10.8	7.2
Basic metals and semi-finished products	– 0.8	– 0.2	– 2.0	1.0	– 9.1
Other	– 0.6	0.1	0.6	1.7	1.9
Industrial producer prices	2.2	3.8	6.0	8.5	5.8
Energy	2.1	7.0	15.2	23.1	16.4
Animal feed	31.4	31.1	31.8	17.2	– 4.5
Vegetable and animal oils and fats					
Dairy products	25.0	26.1	21.3	10.3	– 7.5
Bread and cereals	11.4	13.1	14.1	10.4	1.1
Basic metals and semi-finished products	1.3	2.0	2.9	8.3	2.8
Other	2.4	2.8	3.0	3.3	2.2
Construction prices	6.2	3.0	3.1	4.0	3.4
Residential buildings	5.9	2.6	2.8	3.3	2.7
Agricultural producer prices	18.6	17.2	12.1	1.3	– 13.5
Milk, eggs and oil-bearing plants	43.1	38.3	20.8	– 2.1	– 21.8
Cereals	67.9	65.5	40.7	– 13.0	– 45.1
Consumer prices	3.0	2.9	2.9	3.1	1.7
Energy	8.4	9.3	12.4	13.5	3.5
of which					
Refined petroleum products	0.8	0.1	– 0.4	– 0.3	0.1
Gas	– 2.2	– 1.4	4.6	10.8	22.0
Electricity	8.3	7.2	7.3	6.8	6.2
Food products	7.0	8.0	7.6	7.3	2.8
of which					
Dairy products and eggs; Edible fats and oils	18.9	22.4	19.7	14.0	– 1.5
Bread and cereals	5.7	8.1	8.9	8.7	5.9
Industrial goods (excluding energy)	1.4	0.8	0.8	0.9	0.8
Services (excluding rents)	3.3	2.7	1.4	1.8	1.8
of which					
Transport services	4.6	4.2	4.0	5.0	4.9
Housing rents	34.4	34.7	5.8	4.1	– 3.8

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Sharp rise in construction prices, subdued rise in house prices and rents

According to the construction price index of the Federal Statistical Office, residential construction prices went up by 2.9% in 2008, following an increase of 6.7% in the previous year. Nevertheless, according to Bundesbank calculations based on data from BulwienGesa AG, the price rise for newly constructed property, at approximately 1%, was modest. Price developments in the case of housing rents were also subdued. According to consumer price statistics, which primarily reflect movements in existing rents, the rise in net housing costs was somewhat more pronounced, at 1.3%, than in previous years. Given the fact that ancillary costs (excluding energy) went up less sharply, however, there was no acceleration in gross rents. According to information from BulwienGesa AG, rents for new lettings in 2008 rose as sharply as existing rents, both in the case of new and older buildings.

2 Government budgets more or less balanced

General government budget again close to balance in 2008

Despite the economic downturn, there was hardly any change in the public finance situation from the second quarter of 2008. After the revised data for 2007 showed only a slight deficit, this deficit shrank even further. In structural terms, however, the deficit was a little higher.

Revenue ratio and …

In 2008, the general government revenue ratio amounted to 43.8% and therefore fell slightly on the previous year. On the one hand, the exceptionally sharp rise in revenue from profit-related taxes (adjusted for legislative changes) continued. Furthermore, the revenue-yielding category total gross wages and salaries increased faster than GDP for the first time since 2000, while the relatively large growth in average actual earnings yielded significant progression-related additional tax receipts. On the other hand, the business tax reform and the lowering of social contribution rates (which was also substantial in net terms) gave rise to sizeable revenue shortfalls.

… expenditure ratio down slightly

At 43.9%, the general government expenditure ratio in 2008 was likewise slightly below the prior-year level as spending grew at a slower pace than nominal GDP. Given the declining number of unemployed persons, labour market-related spending decreased further. Moreover, the moderate wage growth recorded in recent years continued to have a dampening effect due to the time-lag before many government expenditure categories are adjusted to the general wage development. By contrast, strong expenditure growth was recorded for government investment, operating expenditure and the healthcare sector.

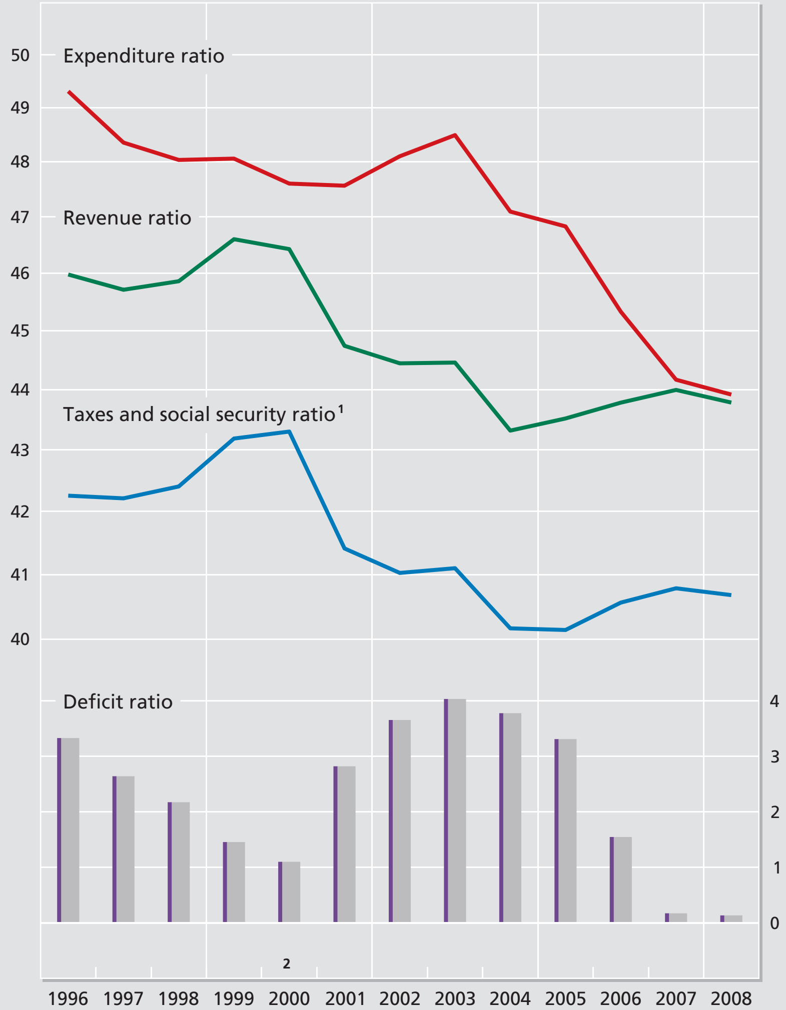
Deficit for central, state and local government

Following a marginal surplus in 2007, the combined deficit of central, state and local government, as defined in the government budget accounts, is likely to have reached approximately €8 billion in 2008. Significant positive balances for local government and – to a much lesser extent – for state government contrasted with the substantial central government deficit of €12 billion. Despite lower-than-anticipated proceeds from asset realisations and extraordinary transfers to the government promotional bank KfW in connection with the financial market crisis, the central government deficit contracted by a somewhat larger margin than was planned (-€3 billion as opposed to the planned -€2½ billion), which

General government fiscal ratios*

Chart 13

As a percentage of GDP



* As defined in the national accounts. — **1** Tax and social contributions plus customs duties and EU share in VAT. — **2** Excluding proceeds from the UMTS auction.

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was predominantly attributable to lower interest expenditure and lower contributions to the EU. In comparison with the previous year, revenue was boosted by sharply rising tax receipts and the fact that the reintegration payment received from the Federal Employment Agency was higher than the corresponding compensatory amount levied previously. Expenditure increased primarily in connection with payments to the post office pension fund. The deficit of the central government subsidiary budgets tripled to €6 billion. This was predominantly due to initial outflows of funds from the newly established Financial Market Stabilisation Fund, which was not fully offset by the resumption of central government payments to the post office pension fund.

General government as defined in the national accounts *

Table 6

Item	2006	2007	2008 pe	2006	2007	2008 pe
				Year-on-year change		
	€ billion			as a percentage		
Expenditure	1,052.3	1,070.1	1,094.4	0.2	1.7	2.3
of which						
Social benefits	597.9	596.7	606.9	0.1	– 0.2	1.7
Compensation of employees	167.5	168.0	171.5	– 0.7	0.3	2.1
Interest	65.3	67.4	69.0	4.7	3.2	2.4
Gross capital formation	32.6	35.6	38.0	5.3	9.2	6.7
Memo item						
Old-age provision 1	288.7	291.0	295.4	– 0.1	0.8	1.5
Healthcare 2	151.0	157.1	164.7	2.5	4.1	4.8
Revenue	1,016.4	1,065.9	1,091.1	4.1	4.9	2.4
of which						
Taxes	530.5	576.3	593.2	7.6	8.6	2.9
Social contributions	399.9	399.9	407.8	0.9	0.0	2.0
				€ billion		
Balance	– 35.9	– 4.2	– 3.3	38.3	31.8	0.8
Memo item						
As defined in the Maastricht Treaty				as a percentage		
Debt level	1,569.0	1,577.2	...	3.1	0.5	...
	as a percentage of GDP			in percentage points		
Debt ratio	67.6	65.1	...	– 0.3	– 3.7	...
Deficit 3	1.5	0.2	0.1	– 1.8	1.4	0.0

***** In accordance with ESA 95. — **1** Expenditure of the statutory pension insurance scheme and on civil servants' pensions. — **2** Expenditure of the statutory health insurance scheme and on government assistance towards civil servants' medical bills. — **3** In contrast to the budget balance in the national accounts, the Maastricht deficit is calculated taking into account interest payments from swap transactions and forward rate agreements.

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Surplus of social security funds much lower

In 2008, the social security funds recorded a surplus of €6½ billion. Their financial situation thus deteriorated perceptibly in comparison with 2007 despite the fact that contribution receipts were buoyed by the underlying macroeconomic conditions. This is predominantly due to the lowering of the contribution rate to the Federal Employment Agency from 4.2% to 3.3% at the start of 2008. In the statutory health insurance scheme, the surplus was much lower than recorded in 2007 amid a sharp rise in spending on benefits. However, despite the *ad hoc* increase in the pension adjustment from 1 July 2008, pension expenditure grew at a perceptibly slower pace than income subject to compulsory contributions, meaning that, on balance, the statutory pension insurance scheme increased its surplus considerably. The public long-term care insurance scheme recorded a surplus for the first time since 1998 as the rise in the general contribution rate from 1.7% to 1.95% in mid-2008 initially generated more additional revenue than was required to cover the increased outlays resulting from the reform.

Deterioration of public finances in 2009

The public finance situation will deteriorate substantially in 2009, resulting in a renewed high deficit. The macroeconomic slowdown will lead to revenue shortfalls and additional expenses, although their magnitude will depend in part on the precise pattern of economic development. In addition, the extensive eco-

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1 January 2008
Malta and Cyprus become the 14th and 15th member states of the EU to introduce the euro.

The 2008 business tax reform enters into force. The tax rate for corporations' profits is reduced to around 30%, particularly as a result of lowering the corporation tax rate by 10 percentage points to 15%. For non-corporations, a preferential rate for retained profits is introduced, among other things, and this is also taxed at around 30%. The lower tax rates are counter-financed partly by measures to broaden the tax assessment bases. These include the "interest deduction limit" which breaks with the important net principle of taxation by limiting deductible debt interest. The reform envisages net relief amounting to €5 billion over a whole year, but larger shortfalls in tax revenue are expected in the first few years.

The contribution rate to the Federal Employment Agency is reduced from 4.2% to 3.3%. The period of entitlement to unemployment benefit I for older recipients is extended to up to 24 months for persons aged 58 and over. The preferential treatment given to older unemployed persons of being able to receive wage substitutes without having to be available for work ended on 31 December 2007.

Energy supply companies receive one-tenth less free CO_2 emission allowances until 2012. Central government will sell 40 million certificates per year at market prices, from 2010 at the latest by auction.

23 January 2008
In its Annual Economic Report, the Federal Government expects growth of 1.7% in real gross domestic product (GDP) in 2008. The number of unemployed persons is expected to fall by a further 330,000, while the number of people in work is expected to rise by 280,000. Growth in employment and higher wage increases than in recent years will subsequently strengthen private consumption. The report states that the world economy will grow less strongly than in the previous year, not least as a result of the financial market turmoil. Furthermore, the high oil price and low US dollar exchange rate are putting a strain on German exports. Consequently, the external contribution to GDP growth is expected to fall to a mere 0.4 percentage point.

28 January 2008
The European banking industry starts the stage-by-stage establishment of the

Single Euro Payments Area (SEPA).

13 February 2008
The Federal Constitutional Court rules that the existing legal arrangements for the special income tax allowance for contributions to private health and long-term care insurance schemes are unconstitutional insofar as the maximum allowance deductible is insufficient to ensure that contributions for insurance protection equal to that provided by social assistance are tax-free. A new provision must enter into force by 2010 at the latest.

15 February 2008
The Federal Ministry of Finance informs the Bundestag about the authorisation of an extraordinary payment of €1.2 billion to the KfW Group as compensation for the disadvantages arising from the support provided to IKB bank.

21 February 2008
The new Prudential Supervisory Guideline (*Aufsichtsrichtlinie*) pursuant to section 7 (2) of the German Banking Act (*Kreditwesengesetz*) enters into force. This guideline redefines the cooperation between the Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) and the Deutsche Bundesbank in banking supervision.

11 March 2008
The Bundesbank presents its annual accounts for 2007 and transfers a profit of €4,285 million to central government (€3,500 million to the Federal budget and €785 million for repaying debts to the Redemption Fund for Inherited Liabilities) compared with €4,205 million in the previous year.

The Governing Council of the ECB decides, in conjunction with the US central bank and in the context of the Term Auction Facility, to offer funding amounting to US$15 billion to Eurosystem counterparties for 28 days.

2 May 2008
The Governing Council of the ECB decides, in conjunction with the US central bank and in the context of the Term Auction Facility, to increase the amount of liquidity provided to the counterparties of the Eurosystem to US$25 billion in each auction (now held once a fortnight).

8 May 2008
The Bundestag approves the 2008 Pension Adjustment Act (*Rentenanpassungsgesetz 2008*). As a result of suspending the moderating factors within the adjustment formula, the pension increase will be just over 0.6 percentage point higher in 2008 and again in 2009. The suspended adjustment limit is to be made good in 2012 and 2013.

16 May 2008
The North Rhine-Westphalian state parliament adopts a supplementary budget for 2008. The state government is authorised to set up a risk shield for losses incurred by a special-purpose vehicle, in which the impaired assets of WestLB are hived off with a nominal value of €23 billion. The guarantee line comprises €5 billion.

1 July 2008
The public long-term care insurance scheme reform enters into force. To finance the extension of benefits, the most important of which is the automatic adjustment of long-term care benefit rates, the contribution rate is being raised from 1.7% to 1.95% (plus a special contribution of 0.25% to be paid by childless persons).

2 July 2008
The Federal Cabinet approves the draft Federal budget for 2009 and the medium-term financial plan until 2012. Only a moderate reduction of €1½ billion in net central government borrowing, vis-à-vis the 2008 target, to €10½ billion is planned

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for 2009. At the same time, however, one-off proceeds from privatisation are estimated to be €6½ billion lower than in 2008. However, it is planned to use all of the additional receipts – €3 billion more than in the 2007 medium-term financial plan – to finance an increase in expenditure. The aim of zero central government net borrowing from 2011, which was approved in the summer of 2007, is maintained.

The Financial Planning Council expects a balanced general government budget in both 2008 and 2009. Given the foreseeable burdens resulting from demographic developments and the uncertain macroeconomic outlook, the council regards it essential that public sector budgets are consolidated by limiting expenditure growth.

3 July 2008
The Governing Council of the ECB raises the minimum bid rate on the main refinancing operations by ¼ percentage point to 4.25%, starting from the operation to be settled on 9 July. The interest rates on the marginal lending facility and the deposit facility are likewise increased by ¼ percentage point to 5.25% and 3.25% respectively, both with effect from 9 July.

4 July 2008
The Pensionable Real Estate Act (*Eigenheimrentengesetz*) is passed by the Bundesrat. This makes the building or purchasing of owner-occupied housing eligible for inclusion in government subsidies provided within the framework of the Riester supplementary pension.

18 September 2008
The Eurosystem, the central banks of Canada, the United Kingdom, the United States, Switzerland and Japan announce coordinated action to limit the effects that the insolvency of the US investment bank Lehman Brothers on 15 September 2008 will have on the international money markets. In this context, the Governing Council of the ECB decides to add an overnight maturity to its operations providing funding to Eurosystem counterparties and to increase the liquidity provided in US dollars within the framework of the Term Auction Facility.

28 September 2008
To avert a liquidity shortage that would endanger the existence of the HypoRealEstate Group, central government provides a guarantee in the amount of €26½ billion. The Bundesbank then makes a loan of €20 billion available.

29 September 2008
The Governing Council of the ECB and the Federal Open Market Committee of the US central bank decide to double their temporary reciprocal currency arrangements (swap lines) from US$120 billion to US$240 billion. The resulting larger facilities make it possible to provide more liquidity in US dollars in the euro area.

30 September 2008
Deficit and debt level figures are transmitted to the European Commission under the European budgetary surveillance procedure. In accordance with a decision by Eurostat, the measures taken by KfW to support IKB bank are now allocated to the government sector, meaning that, following the reporting of a small surplus in March, the 2007 fiscal balance now posts a deficit (-0.2% of GDP). At 65%, the debt ratio remains virtually unchanged.

5 October 2008
The Federal Government issues an informal government guarantee for private bank deposits in Germany without imposing an upper limit.

8 October 2008
As part of their concerted action, the central banks in the euro area, the United States, the United Kingdom, Sweden, Switzerland and Canada each reduce their key interest rates by ½ percentage point. A main refinancing rate of 3.75% applies to the main refinancing operations in the euro area, starting from the operation to be settled on 15 October. Furthermore, the Governing Council of the ECB decides to carry out the main refinancing operations through a fixed-rate tender with full allotment at this interest rate, also starting from the operation to be settled on 15 October. This measure will apply until 20 January 2009.

In addition, with effect from 9 October, the Governing Council of the ECB reduces the corridor formed by the standing facility rates from 200 basis points to 100 basis points. Thereafter, the interest rate on the marginal lending facility stands at 4.25% and the interest rate on the deposit facility stands at 3.25%. The narrowing of the corridor will apply until at least 20 January 2009.

Furthermore, the Governing Council of the ECB raises the allocation volume of the additional longer-term refinancing operation with a maturity of six months that was provided on 8 October from €25 billion to €50 billion.

12 October 2008
The 15 member states of the euro area agree together with the United Kingdom, the ECB and the European Commission to provide financial institutions with government aid.

15 October 2008
The ECB and the Swiss National Bank come to an agreement under which the ECB can access liquidity in Swiss francs, thereby allowing commercial banks in the euro area to refinance themselves on a short-term basis.

16 October 2008
The ECB and the Hungarian central bank, the Magyar Nemzeti Bank (MNB), reach an agreement which enables the MNB to receive loans of up to €5 billion from the ECB.

18 October 2008
The Financial Market Stabilisation Act (*Finanzmarktstabilisierungsgesetz*) enters into force. The Financial Market Stabilisation Fund (*Sonderfonds Finanzmarktstabilisierung, SoFFin*) is founded to implement and finance the stabilisation measures. All financial sector enterprises domiciled in Germany can apply for assistance by virtue of the stabilisation measures. The Fund can draw on three possible stabilisation instruments. These are granting guarantees, recap-

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italisation and risk assumption. These instruments can be applied for until 31 December 2009. Under the ruling on granting guarantees, the Fund is authorised to grant guarantees of up to a maximum of €400 billion for any debt instruments issued by financial sector enterprises and other liabilities which they incur between 18 October 2008 and 31 December 2009. The recapitalisation tool enables the Fund to acquire additional shares, silent participations or other capital components of enterprises in exchange for an injection of capital. Under the ruling on the assumption of risk, the Fund is authorised to temporarily acquire risk exposures – particularly receivables, securities and financial derivative instruments (together with the corresponding collateral) – which were purchased by financial sector enterprises prior to 13 October 2008 in exchange for a transfer of debt instruments issued by the Federal Republic of Germany.

27 October 2008
The ECB and the national bank of Denmark, Danmarks Nationalbank, agree to work together to improve liquidity in euro money markets. The agreement provides for a reciprocal currency arrangement (swap line) for an amount of €12 billion.

3 November 2008
Commerzbank announces that it will receive a silent participation in the amount of €8.2 billion from SoFFin. Furthermore, a guarantee line of €15 billion is agreed.

6 November 2008
The Governing Council of the ECB lowers the interest rate on the main refinancing operations by ½ percentage point to 3.25%, starting from the operation to be settled on 12 November. The interest rates on the marginal lending facility and the deposit facility are likewise reduced by ½ percentage point to 3.75% and 2.75% respectively, both with effect from 12 November.

7 November 2008
The Act on the Evolution of the Organisational Structures of the Statutory Health Insurance Scheme (*Gesetz zur Weiterentwicklung der Organisationsstrukturen in der gesetzlichen Krankenversicherung*) is passed by the Bundesrat. Thus, the health insurance institutions become eligible for insolvency and, as a general rule, are subject to accounting principles based on the Commercial Code (*Handelsgesetzbuch)* (including the formation of pension reserves).

12 November 2008
In its 2008-09 Annual Report, the German Council of Economic Experts forecasts real GDP stagnation in 2009. The Federal Government's measures to revive the economy, which it has planned in the meantime, have not yet been included in the forecast. The report states that growth will be supported mainly by private consumption. Government consumption is also expected to increase. By contrast, investment in machinery and equipment is expected to decline sharply, while construction investment is forecast to fall only slightly. The continued weakening of the world economy is expected to further hamper exports, with the result that, at 0.4%, they will grow somewhat less strongly than imports, which, owing to strengthening domestic consumption, are forecast to increase by 0.5%. The report states that foreign trade will thus make virtually no contribution to growth. The registered unemployment rate is expected to rise by 1.1 percentage points to 7.9%.

The Bundestag adopts the Act on the Reorganisation of Service Regulations (*Dienstrechtsneuordnungsgesetz*) under which differences in Federal civil servants' pay are to depend more heavily on performance. Furthermore, the sustainability factor, which has a curbing effect on pension increases, and the gradual rise in the statutory retirement age to 67 years are adopted with the same effect in central government's civil servants' pension scheme.

19 November 2008
The Financial Planning Council expects a surplus of €5 billion in the overall general government budget in 2008. According to the council, central government will be able to keep its deficit more or less at the planned level of €12 billion, while it expects state and local government budgets to record marked surpluses. However, a deficit is now expected again for 2009. Structural consolidation of government budgets is set as the primary objective of fiscal policy. To safeguard the consolidation progress that has been made over the past few years, calls for a tighter constitutional borrowing limit are reinforced.

28 November 2008
The Bundestag adopts the 2009 Federal budget. After the final redrafting, the budget includes not only the tax estimate, which signals revenue shortfalls of just over €2 billion, but also the package of measures "Securing Jobs by Strengthening Growth" (*Beschäftigungssicherung durch Wachstumsstärkung*) passed by the Federal Cabinet on 5 November. These measures will lead to burdens of €2½ billion as a result of tax shortfalls and additional expenditure, especially on investment in infrastructure. Furthermore, the estimated proceeds from privatisation are reduced by almost €2½ billion vis-à-vis the summer draft. Net borrowing goes up by a total of €8 billion to €18½ billion.

4 December 2008
The Governing Council of the ECB lowers the interest rate on the main refinancing operations by ¾ percentage point to 2.50%, starting from the operation to be settled on 10 December. The interest rates on the marginal lending facility and the deposit facility are likewise reduced by ¾ percentage point to 3.00% and 2.00% respectively, both with effect from 10 December.

5 December 2008
The Bundesrat approves the Act on the Implementation of the Tax Provisions of the Package of Measures "Securing Jobs by Strengthening Growth" (*Gesetz zur Umsetzung steuerrechtlicher Regelungen des Maßnahmenpakets „Beschäftigungssicherung durch Wachstumsstärkung"*). This means *inter alia* that in 2009 declining-balance depreciation for mov-

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able assets is to be reintroduced for a period of two years, tax relief on craftsmen's services extended and motor vehicle tax on new vehicles as well as on particularly fuel-efficient vehicles that have already been registered suspended for up to two years.

Furthermore, the Bundesrat passes the Inheritance Tax Reform Act (*Erbschaftsteuerreformgesetz*). A new regulation on inheritance tax was required following a decision by the Federal Constitutional Court on 7 November 2006 to the effect that, owing to systemically lower valuation for some types of asset, the existing law was unconstitutional. The purpose of the reform is to guarantee constitutionality, limit the tax burden on asset transfers within very close family circles and make preferential treatment of business assets constitutional. Overall, tax shortfalls are expected to remain moderate.

9 December 2008
The Federal Constitutional Court rules that the restrictions on the standard travel allowance for commuters that were introduced in 2007 are unconstitutional and that, for the time being, the previous legal ruling is to apply. It is announced that any excess tax paid (a total of around €2½ billion in one assessment year) is to be reimbursed without delay. The Federal Government states that no new regulation is planned before 2010.

16 December 2008
The Bavarian state parliament adopts the second supplementary budget for 2008. The state government is thereby authorised to inject €10 billion in capital into BayernLB, which is affected by the financial crisis. Furthermore, the bank is largely relieved of risks from impaired assets. In addition to a guarantee of just over €3 billion, the state government budget also includes a commitment appropriation of just over €1½ billion to cover currently foreseeable losses arising from this portfolio. To finance the capital increase, a corresponding borrowing authorisation is granted. The application of the provisions of Article 18 of the State Budgetary Rules, which envisage a widespread ban on net new borrowing, is suspended.

18 December 2008
The Governing Council of the ECB decides that, with effect from 21 January 2009, the corridor formed by the interest rates on the standing facilities will be symmetrically extended from 100 basis points to 200 basis points.

The Bundestag approves the Reform Act on Hospital Financing (*Krankenhausfinanzierungsreformgesetz*). Thus, the health insurance fund takes a share of the additional costs arising from wage agreements for hospital sector employees. Furthermore, the creation of new jobs in the long-term care sector and training are to be encouraged. This involves additional expenditure of €2½ billion.

19 December 2008
The Governing Council of the ECB agrees with the central banks of the United States, the United Kingdom, Japan and Switzerland to continue conducting US dollar liquidity-providing operations at terms of 7, 28 and 84 days. The operations will take the form of repurchase operations against ECB-eligible collateral and be carried out as fixed-rate tenders with full allotment.

The Bundesrat also adopts other Acts. The Fifth Act Amending the Second Book of the Social Security Code (*Fünftes Gesetz zur Änderung des SGB II*) endorses the reduction in central government's share of the accommodation costs for recipients of unemployment benefit II in 2009. Against the backdrop of increased energy prices, the First Act Amending the Housing Allowance Act (*Erstes Gesetz zur Änderung des Wohngeldgesetzes*) raises the housing allowance with retroactive effect from 1 October 2008. The Family Benefit Act (*Familienleistungsgesetz*) provides, above all, for an increase in child benefit and child tax allowance from 2009. The 2009 Annual Tax Act comprises a range of new tax rules from 2009. In particular, a factor procedure is introduced for married couples, through which the splitting advantage is to be distributed as equally as possible between the partners as soon as wage tax is deducted.

1 January 2009
Slovakia becomes the 16th member state of the EU to introduce the euro.

The withholding tax for private capital income (interest, dividend payments, capital gains from the sale of securities) enters into force. As a general rule, the tax liability is settled by deducting the investment income tax at source at a rate of 25% plus the solidarity surcharge and, where applicable, church tax. If the investor's personal income tax rate is lower, a refund is claimable in his or her tax assessment. Income-related expenses are taken into account only for standardised amounts. Furthermore, the Inheritance Tax Reform Act (*Erbschaftsteuerreformgesetz*) enters into force. Child benefit increases for the first two children by €10 a month to €164; for the third child it rises by €16 to €170 and for subsequent children by €16 per child to €195. The child tax allowance is raised by €216 to €3,864 and is therewith adjusted in line with the recalculation of the minimum subsistence level.

The health insurance fund revises the financing system of the statutory health insurance scheme. The uniform contribution rate is 15.5% (compared with an average of 14.9% in 2008). The health insurance institutions receive risk-adjusted insurance premiums from this fund and can, furthermore, demand non-income-related additional contributions, provided these do not exceed €8 per month; they can also reimburse members' contributions. The sharp increase in the contribution rate is not due to the health insurance fund itself but, instead, to the generally sharp rise in healthcare expenditure and to special additional spending on hospitals and outpatient treatment decreed by parliament.

The contribution rate to the Federal Employment Agency is reduced from 3.3% to 2.8%. It is planned to put the rate back up to 3.0% in mid-2010.

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8 January 2009
Commerzbank announces that it will receive a further €10 billion of capital from SoFFin, mainly in the form of a silent participation. At the same time, SoFFin assumes a stake of 25% plus one share in Commerzbank.

15 January 2009
According to the provisional figures, the 2008 Federal budget records net borrowing of €11.5 billion. Despite lower privatisation proceeds and extraordinary payments to support IKB Bank and a ruling of the European Court of Justice which cancelled a subsidy repayment by the post office, net borrowing was €0.4 billion below the budget target.

The Governing Council of the ECB lowers the interest rate on the main refinancing operations by ½ percentage point to 2.00%, starting from the operation to be settled on 21 January 2009. The interest rates on the marginal lending facility and the deposit facility are fixed at 3.00% and 1.00% respectively, both with effect from 21 January. Thus the corridor around the interest rate on the main refinancing operations formed by the interest rates on the standing facilities is extended to 200 basis points.

27 January 2009
The Federal Cabinet approves the draft of a supplementary Federal budget for 2009. This covers tax shortfalls of €11 billion from the poor macroeconomic development which is forecast, the court ruling reinstating the commuting allowance and a second fiscal stimulus package. Additional expenditure of €7½ billion is envisaged, in particular for grants to the health insurance fund, for the long-term unemployed and for guarantees. Net borrowing, which at €37 billion has doubled since the previous budget plan, exceeds total investment expenditure (€29 billion). This is justified by invoking the exemption clause that it serves to avert a disruption of the macroeconomic equilibrium. Furthermore, a special "Investment and Repayment Fund" will be set up, which is to finance measures to support the economy in the amount of €17 billion up to the end of 2011 by means of further borrowing. From 2010, the debts are to be redeemed from parts of the Bundesbank's profit distributions.

28 January 2009
In its Annual Economic Report, the Federal Government expects a fall in real GDP of 2¼% in 2009. At around ½% in real terms, world trade, according to the report, will

grow much less strongly than in 2008, not least owing to the international financial market turbulence. The forecast is based on the assumption that the financial crisis will not deteriorate further. Lower commodity prices are expected to have a strong dampening effect on the increase in consumer prices and thus raise purchasing power. However, this is forecast to be offset by a fall in employment of 0.7%, ie around 280,000 persons. The report states that private consumption will go up by 0.8% in real terms, also as a result of the fiscal stimulus packages. By contrast, investment is forecast to drop markedly, and the external sector is also expected to make a negative contribution to growth.

12 February 2009
The Federal Reform Commission II agrees on a new regulation on constitutional borrowing limits for central and state government. Central government's structural new borrowing is to be limited to no more than 0.35% of GDP from 2016 and state governments are to be prohibited from borrowing at all from 2020 onwards. Exceptions (with a redemption plan) can be made in the case of particularly severe economic crises or, for example, natural disasters. Subject to conditions, from 2011 to 2019, the federal states of Bremen and Saarland, which face particular budgetary problems, as well as Berlin, Saxony-Anhalt and Schleswig-Holstein, will receive financial assistance amounting to €800 million per year from central and state government. A Stability Council is to monitor observance of the rules.

20 February 2009
With the supplementary Federal budget for 2009 and the Act Safeguarding Employment and Stability in Germany (*Gesetz zur Sicherung von Beschäftigung und Stabilität in Deutschland*), central elements of the second fiscal stimulus package are passed by the Bundesrat. It is expected that, with funding of around €50 billion, the economic slump will be mitigated, particularly in 2009 and 2010. In addition to extensive additional public investment, in particular, subsidies in the form of business guarantee programmes, research and development promotion and an "environment premium" for replacing old cars with newer cars are provided for. The basic tax allowance is extended, the bottom tax rate is lowered and the tax scale readjusted to provide income tax relief. Increased Federal grants make it possible to finance a reduction in the contribution rate to the statutory health insurance scheme (to 14.9% in mid-2009) as well as to postpone putting the contribution rate to the Federal Employment Agency back up to 3.0% until the beginning of 2011. In particular, short-time working benefits are made more attractive by reducing the employer's share of social contributions payable during periods of short-time working. More funds are made available for active labour market policy measures. There is a one-off increase of €100 in child benefit and the standard basic allowance rate for children from disadvantaged households is increased until the end of 2011.

5 March 2009
The Governing Council of the ECB lowers the interest rate on the main refinancing operations by ½ percentage point to 1.50%, starting from the operation to be settled on 11 March 2009. The interest rates on the marginal lending facility and the deposit facility are likewise reduced by ½ percentage point to 2.50% and 0.50% respectively, both with effect from 11 March.

10 March 2009
The Bundesbank's profit distribution to central government amounts to €6,261 million.

General government finances *

Table 7

Item	2006 pe	2007 pe	2008 pe	2006 pe	2007 pe	2008 pe
	€ billion			Year-on-year change		
Central, state and local government				as a percentage		
Expenditure	631.5	643.5	676	0.6	1.9	5
of which						
Central government	282.9	292.1	304	0.5	3.3	4
State government	259.5	266.7	277	0.0	2.8	4
Revenue	591.0	644.4	668	3.6	9.0	3.5
of which						
Taxes	488.4	538.2	561.5	8.0	10.2	4.5
				€ billion		
Balance	– 40.5	0.9	– 8	16.4	41.4	– 9
of which						
Central government	– 28.2	– 14.7	– 12	3.3	13.5	3
State government	– 10.4	9.3	1.5	11.7	19.7	– 8
Social security funds				as a percentage		
Expenditure	466.3	465.6	477.5	– 1.0	– 0.1	2.5
Revenue	486.3	474.9	484	3.9	– 2.3	2
				€ billion		
Balance	20.0	9.3	6.5	23.2	– 10.8	– 2.5
of which						
Statutory pension insurance scheme	7.3	0.9	3.5	11.5	– 6.4	2.5
Statutory health insurance scheme	1.7	1.8	0.5	0.0	0.1	– 1.5
Federal Employment Agency	11.2	6.6	1.5	11.2	– 4.6	– 5

* The budgetary definition used here differs from the definition of the government account within the national accounts.

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nomic stabilisation measures will entail hefty burdens. Additional policy decisions – including a further cut in the contribution rate to the Federal Employment Agency to 2.8% – will likewise result in revenue shortfalls or additional expenditure. Moreover, revenue from profit-related taxes, which has probably increased to distinctly above-average levels in recent years, is now expected to record a much weaker development. Lastly, financial strains are anticipated in connection with support provided to financial institutions, although they are very hard to quantify at the current time.

Updated stability programme with high deficits

Germany's updated stability programme presented at the start of December 2008 was very soon overtaken by events as the economic outlook took another turn for the worse and central government adopted additional stimulus measures, and was therefore updated again at the end of January 2009. Central government expects real GDP to contract by 2¼% in 2009 and then to increase again by 1¼% in 2010. The deficit ratio is expected to rise to 3% (as defined in the national accounts) in 2009. An additional jump in the deficit ratio to 4% is forecast for 2010 because the budgetary burdens caused by the economic stimulus measures will expand further and, in addition, revenue shortfalls will ensue from the higher income tax allowances for contributions to the health and long-term care insurance schemes. The deficit ratio is subsequently expected to decline somewhat in 2011 and 2012, owing to an improved macroeconomic setting, and to fall below the 3% ceiling. However, the consolidation measures which central government deems necessary in the next few years have not yet been factored into the equation.

3 Investment and financing

Basic structures of financial flows in 2008

The real economic and fiscal developments of the reporting year are reflected in corresponding investment and financing activities that were conducted through the banking sector and the financial markets. Data on the precise composition of the financial relations among the various sectors – which are captured in the financial accounts – are not yet fully available for the whole of 2008. Major structural features and the ranges of figures can be derived from the data available so far, however.

Marked increase in financial investment

According to the available financial accounts figures, there was a marked increase in the financial investment of the German non-financial sectors in the first three quarters of 2008. It amounted to €242½ billion, compared with €176½ billion in the same period a year earlier. This was due mainly to the accumulation of financial assets in the corporate sector (€139½ billion, compared with €82 billion in the first three quarters of 2007), which was driven by heavy equity investment. These figures were statistically affected by two major corporate takeovers, in particular. Households' financial investment stood at €92½ billion, up by just over €4 billion on the year. At €10½ billion net, general government increased its financial assets by €4½ billion year on year. This was because more funds were allocated to bank deposits.

Bank deposits up sharply once again

Deposits with domestic banks accounted for a key percentage of financial investment in 2008 as well. These deposits grew by €173 billion, or 6.9%, compared with €177½ billion, or 7.6%, a year earlier. Short-term time deposits were once again the preferred instrument owing to their attractive remuneration rates. This had a particularly negative impact on overnight deposits and savings deposits. Overnight deposits were depleted mainly in the spring and summer months, especially because of the attractive terms of short-term time deposits. The intensification of the financial market crisis in the autumn and the resultant noticeable rise in investors' uncertainty, however, led overnight deposits to rebound strongly in the fourth quarter; at the end of 2008, they were up by 5.0% on the year. Longer-term savings deposits were reduced considerably on the whole during the reporting year despite benefiting from a revival of investors' interest in the fourth quarter. Time deposits with an agreed maturity of over two years attracted muted interest throughout the year. Domestic non-monetary financial institutions in particular upped their longer-term time deposits with German banks.

Purchase of securities

A large percentage of domestic non-banks' investment was focused on shares in the past year. They were the sole purchasers here (€51 billion); the purchases – which were, as mentioned earlier, largely enterprises' equity acquisitions – consisted solely of domestic instruments, on balance. Moreover, domestic non-banks increased their holdings of mutual fund shares by €23 billion. This contrasted, however, with voluminous sales of debt securities, which were acquired, on balance, mainly by foreign investors.

Rise in demand for external financing

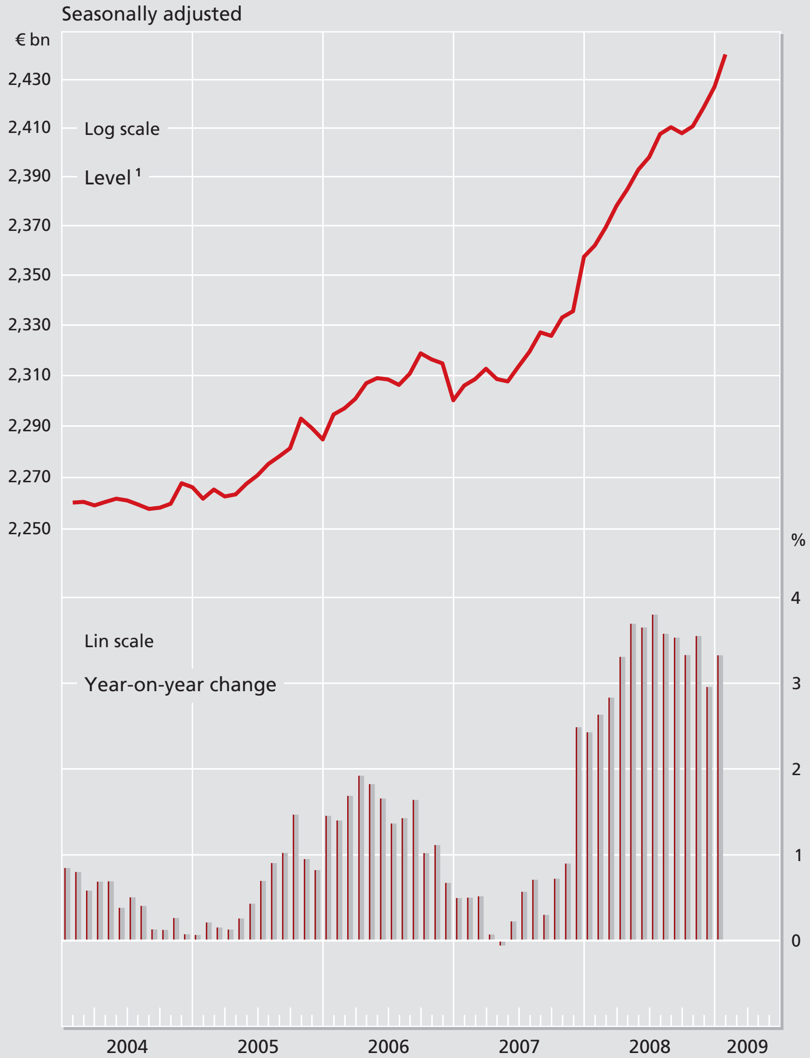
Borrowing by the non-financial sectors totalled €71 billion in the first three quarters of 2008 taken together and was thus around one-quarter higher than its corresponding level a year earlier. In the case of enterprises, the roughly €6 billion drop in equity financing was offset by increased bond sales. Enterprises' bank loans and other financial loans from domestic and foreign entities, at €28 billion, were little changed from a year earlier. As in previous years already, households reduced their debts to banks and insurance companies, by €11 billion. Government borrowing in the credit and capital markets, at just over €10½ billion net, was slightly higher than in the same period a year earlier (just over €6 billion).

Robust growth in loans to enterprises

German banks' credit business with domestic customers rose only moderately in the reporting year (by 3.4%), with lending to the domestic private sector growing somewhat more sluggishly in 2008 (by 2.9% or €65½ billion) than the overall aggregate. Non-financial corporations once again accounted for the largest share of private credit growth. They increased their borrowing from domestic banks sharply by 6.4%, following 6.2% a year earlier. Nevertheless, a deceleration in the pace of growth was discernible here recently. Lending to financial corporations grew by 25.0% in the reporting year. However, only German banks' reverse repurchase operations with a domestic financial intermediary which is statistically recorded as a non-bank increased sharply. By contrast, banks' credit business with domestic households declined slightly throughout the year. Not only consumer loans and other loans – which together fell by 0.2% – but also housing loans were once again on the decline (-0.6%).

Loans to enterprises and households in Germany

Chart 14



1 End of month; statistical changes eliminated.

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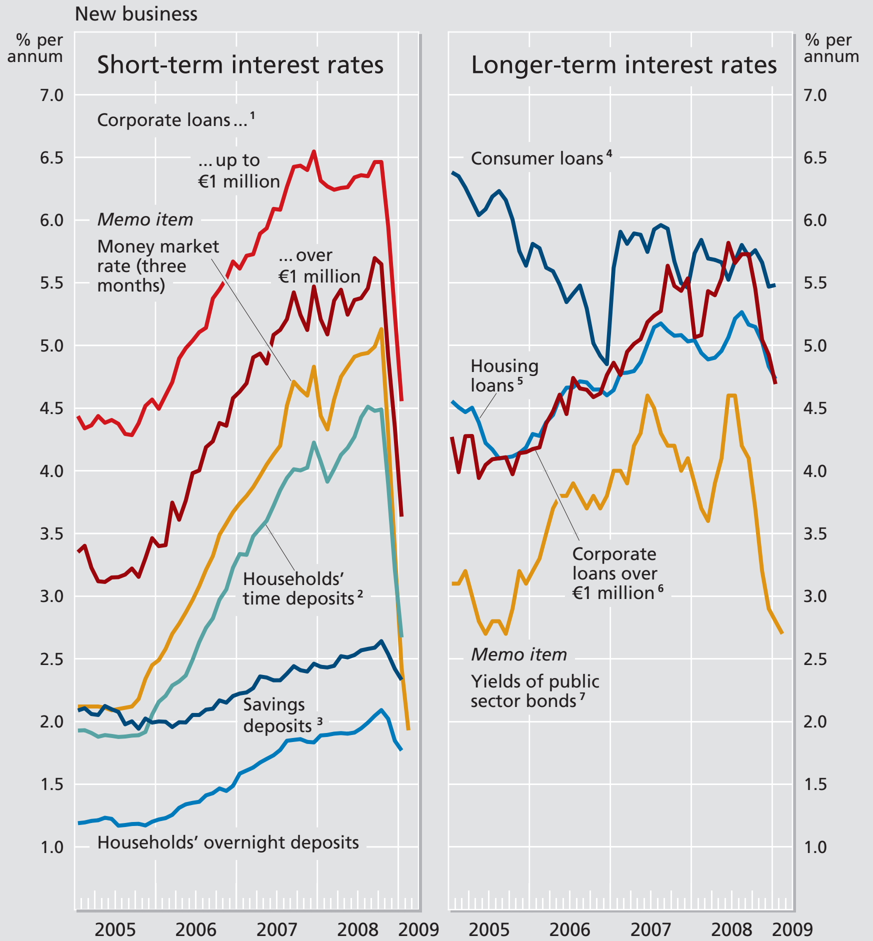
BLS: need for borrowing initially mostly still on the rise…

A variety of factors – the importance of which for explaining developments shifted over the course of the year, in some cases distinctly – were responsible for keeping non-financial corporations' demand for bank lending in robust shape overall in 2008. This, at least, is the assessment suggested by the results of the bank lending survey (BLS) for Germany, with the surveyed bank managers indicating a greater loan demand, especially in the first half of the year, and attributing it primarily to the financing of fixed investment (see chart on page 70). As the year progressed, the demand for bank loans for investment purposes fell; however, this was set against an increase in financing needs for inventories and working capital as well as debt restructuring. The tensions surrounding firms'

Bank interest rates in Germany

Chart 15



1 To non-financial corporations with an initial rate fixation of up to one year. — **2** With an agreed maturity of up to one year. — **3** Households' deposits redeemable at notice of up to three months. — **4** To households with an initial rate fixation of over one year and up to five years. — **5** To households with an initial rate fixation of over five years and up to ten years. — **6** To non-financial corporations with an initial rate fixation of over five years. — **7** Residual maturity of over five years and up to six years.

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financing in the market also boosted the need for bank loans as an alternative source of funding throughout the reporting period. In lending business with households, the survey respondents reported, by contrast, that demand for housing loans continued to fall in the reporting year and that the need for funds for consumption purposes initially rose slightly.

... given more restrictive supply conditions in corporate lending business ...

Robust demand stood in contrast to dampening impulses from the supply side. Given the difficult refinancing conditions, but also in the light of the fact that, particularly in the second half of the year, the assessment of the general economic situation was gloomier, the reporting institutions tightened their credit standards in corporate lending. This affected loans to large firms more severely than loans to small and medium-sized enterprises. Moreover, the banks surveyed in the BLS widened their margins for average and riskier exposures, in some cases sharply. The previously observable relaxation of credit standards for loans to households was virtually halted in 2008; they were recently even tightened somewhat. One particular factor in this development was that interbank competition, which in the past had still acted to ease this supply indicator, had abated. With regard to margins, the BLS banks stated that they had increased them for riskier loans while, in the first half of 2008, the margins had been narrowed further for average loans; the final quarter, however, also saw wider margins dominating here.

... and lower bank interest rates

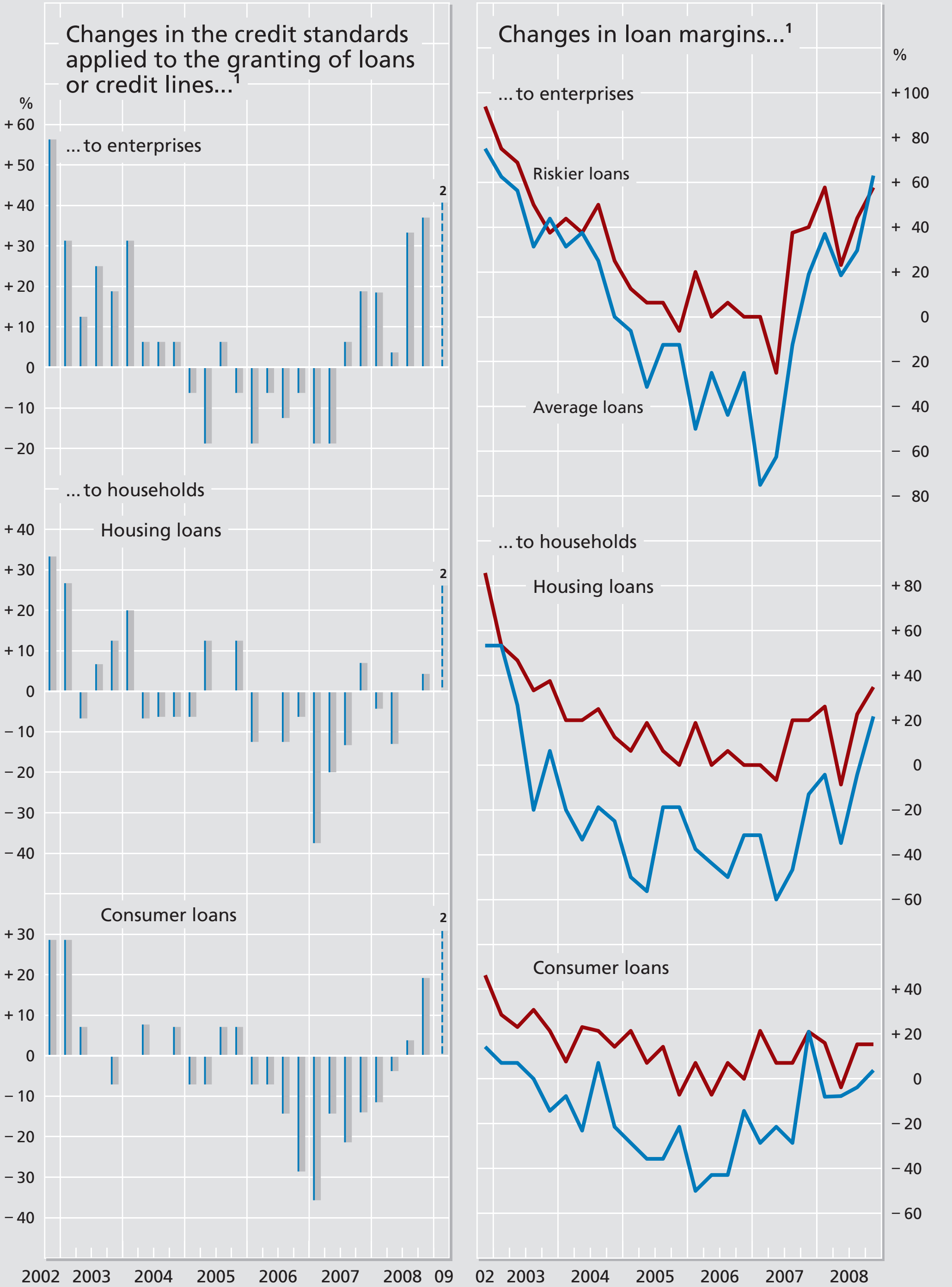
In new lending business with domestic households and non-financial corporations, bank interest rates largely tracked the interest rate movements in the money and capital markets. Whereas, at the beginning of 2008, refinancing costs had initially continued their rise by and large, German banks subsequently passed on part of their lower refinancing costs to their customers in nearly all product categories towards the end of the year (see chart on page 68). As a result, bank interest rates for loans were latterly below their previous year's levels in business with the domestic private sector. At the end of 2008, non-financial corporations and households alike paid much less for short-term loans in particular than they had a year earlier. In corporate lending business with an interest rate fixation of over five years, banks were charging an average of 4.9% for volumes over €1 million and 5.1% for smaller loans; their rates for housing loans with an interest rate fixation of over five years and up to ten years were 4.8% and, for long-term consumer loans, 8.2%.

Decline in borrowing in the German bond market

The domestic sectors' net borrowing in the bond market fell in 2008 – despite a sharp increase in the gross issue volume – by €24 billion to €66 billion. This decline was ultimately attributable entirely to domestic credit institutions, which reduced their capital market debt by a net €45½ billion, compared with net sales of €42 billion in the preceding year. In line with the trend of the past few years, they redeemed a large amount of public Pfandbriefe (€67½ billion). By contrast, unlike in earlier years, they issued a net €6 billion worth of mortgage Pfandbriefe. In addition, since the outbreak of the financial market crisis in the summer of 2007, net issues of other bank debt securities which can be structured flexibly, in particular, have faltered noticeably; the decline becomes even more apparent if the government-guaranteed instruments issued in the fourth quarter of 2008 are excluded. Following net sales of €55 billion in 2007, other

Bank lending survey
Results for Germany

Chart 16



1 Difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably". — 2 Expectations for Q1.

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bank debt securities were redeemed in 2008 for a net €6½ billion. Furthermore, specialised credit institutions, which also include public promotional banks, tapped the capital market for much less than in the past, borrowing only €22½ billion. Domestic enterprises, by contrast, expanded their capital market borrowing considerably (€86½ billion, compared with €20 billion in 2007). Several large-scale securitisation transactions, which had been conducted with the help of domestic special-purpose vehicles without a banking licence and which were absorbed by the banking sector, were the main reason for this increase. The public sector tapped the capital market for a net €25½ billion (2007: €28 billion).

No perceptible revival in share issues

Domestic enterprises raised €11½ billion in the German stock market in the past year, slightly more than a year earlier (€10 billion). Listed enterprises accounted for €8½ billion. The issue volume must be seen in the context of a difficult market environment with falling stock prices and highly risk-averse investors.

Domestic mutual funds showing outflows of funds

Against the background of the financial market crisis, domestic mutual funds recorded outflows of €8 billion in 2008 after having accumulated funds of €13½ billion a year earlier. Savers' reluctance affected mainly mutual funds open to the general public, which were exposed to outflows, particularly in the second half of the year, when investors, among other things, shifted their assets to guaranteed bank deposits. A total of €14½ billion was drained from mutual funds open to the general public. Money market funds and bond-based funds (€12 billion and €9½ billion respectively) were primarily affected, but investors also withdrew resources from share-based funds (€3 billion). By contrast, mixed funds and funds of funds recorded higher inflows (€5 billion and €3 billion respectively) than in previous years. This may ultimately have been attributable to the introduction of a withholding tax on capital income in 2009. Specialised funds reserved for institutional investors, by contrast, offloaded €6½ billion worth of shares in the market on balance; however, this was far less than a year earlier (€21½ billion).

German net foreign assets

In 2008, too, part of financial asset formation took place outside Germany. In the first three quarters of 2008, for which data on the international investment position are currently available, German net foreign assets went up by €152½ billion. This increase was accompanied in real economic terms by Germany's current account surplus, which stood at €165 billion for 2008 as a whole; it was thus smaller than a year earlier (€191½ billion).

Monetary and financial system

In the past year, the financial crisis has left a wide and deep mark on the monetary and financial system. International institutions and committees in particular are analysing the crisis and drawing lessons. The work of the Financial Stability Forum (FSF) and the International Monetary Fund (IMF) on the framework for the international financial system is taking centre stage in this process. Furthermore, the G20 has called upon both institutions to jointly identify potential vulnerabilities and give policymakers recommendations so as to forestall future crises. Looking ahead, the IMF can also make a major contribution to crisis prevention through its surveillance function. It would be neither realistic nor desirable, however, for the Fund to assume central bank-like tasks or global regulatory or supervisory functions. The agreement on voluntary principles for sovereign wealth funds, reached under the auspices of the IMF, and the Organisation for Economic Co-operation and Development (OECD) guidance on recipient country policies towards investments of sovereign wealth funds are to be welcomed; their comprehensive implementation, still lacking in a number of cases, can counter the danger of financial protectionism.

The global financial crisis has posed major challenges for the German financial system. The escalation of the crisis triggered by the insolvency of the US investment bank Lehman Brothers necessitated extraordinary measures to stabilise the financial system. The Financial Market Stabilisation Act (Finanzmarktstabilisierungsgesetz) and its envisaged instruments represent a basis for overcoming the persistent crisis of confidence.

I Developments in the international monetary and financial system and European integration

1 International monetary and financial system

(a) Financial crisis triggers extensive adjustment process in the international financial system and provides impetus for work on the regulatory framework

Adjustment process in international financial system

The turmoil that first struck the international financial system in the summer of 2007 has proven to be exceptionally severe and persistent. In many market segments, the correction process following the exuberance of earlier years involved extreme price volatility, high risk premiums and unusually low levels of liquidity. The liquidity and solvency problems encountered by financial intermediaries in many countries and deleveraging – ie cutting back on the extensive use of loans and derivatives as instruments for increasing returns on equity – have been the main reasons for the deteriorating situation in the global financial system. The spring of 2008 saw a period of temporary stabilisation in the financial markets following the rescue of Bear Stearns, with the help of the Federal Reserve, from impending bankruptcy. Subsequently, however, other systemically important financial institutions, especially in the United States, encountered severe financial difficulties. The insolvency of the US investment bank Lehman Brothers in September 2008 led to renewed turmoil in the international financial system and triggered an acceleration of the adjustment process. Highly leveraged financial intermediaries with a need for short-term funding turned out to be especially vulnerable to write-downs and market illiquidity. Acute liquidity shortfalls forced many market participants to sell their assets at "fire sale" prices. Moreover, in several emerging economies, the reassessment of risks and the unwinding of portfolios, which was accelerated by a shortage of US dollar liquidity, led to considerable tensions in local financial markets and, in some cases, massive capital outflows.

Extensive government intervention to support the financial system

Owing to the general crisis of confidence in the wake of the Lehman Brothers insolvency, many banks throughout the world had virtually no access to money and capital markets. Against this backdrop, governments in both the United States and Europe took comprehensive support measures to prevent a disorderly downward spiral. These interventions – backed by monetary and fiscal policy measures – restored a degree of calm to the financial markets. The depth and length of the adjustment process in the international financial system, however, will also be determined by further developments in the real sector, which for their part have a major influence on factors such as borrowers' credit quality. Owing to the continued slump in asset markets and economic activity, the financial sector is likely to face further considerable strains despite the substantial write-downs that have already taken place.

Regulatory and supervisory framework under scrutiny

The severe turmoil in the international financial system and the concomitant global economic downswing have led to considerable political pressure for a fundamental review, and possible tightening, of the regulatory and supervisory framework for the financial system. Acting on a mandate from the G7 finance ministers, the Financial Stability Forum (FSF) has already been working in close consultation with its member institutions since autumn 2007 on taking concrete steps towards improving the resilience of financial institutions and financial markets. In April 2008, the FSF presented a comprehensive list of recommendations which are now being gradually implemented by the responsible international institutions and national authorities. After the financial crisis worsened even further in autumn 2008 and spilled over to the emerging economies, the existing close international cooperation was intensified and expanded. At a world economic and financial summit in Washington in mid-November, the G20 Heads of State or Government presented a short and medium-term action plan (see box on page 76) and requested their finance ministers to formulate additional recommendations by early April 2009.

(b) Financial crisis causing IMF to assume increasingly prominent role

Continuation of IFI reforms appropriate

Above all, the reforms to the international financial institutions (IFIs) commissioned by the G20 will require strategic foresight. This will also involve the assumption of greater responsibility by emerging and developing economies. The review of responsibilities, governance structures, toolkits and financial resources will need to be managed with prudence. Due respect should be given to existing mandates because it would be neither realistic nor desirable to give the International Monetary Fund (IMF) central bank-like tasks or global regulatory or supervisory functions with the possibility of imposing sanctions – as some have called for.

Strengthening IMF surveillance for crisis prevention

The IMF has been commissioned by the G20 to take on a leading role, working in close collaboration with the FSF and consistent with its mandate, in drawing lessons from the financial crisis. Owing to its universal membership and its ex-

Proposals for reforming the framework of the international financial system

The primary aim of the list of recommendations put forward by the Financial Stability Forum (FSF) is to address the weaknesses in the regulatory and supervisory framework revealed by the crisis and to improve cooperation between authorities as well as provide them with better tools with which to deal with financial crises.[1] The five areas covered by these recommendations, some parts of which are quite technical, are: financial institutions' capital requirements, liquidity and risk management; transparency and valuation; credit ratings; authorities' responsiveness to financial institutions' risks; and authorities' arrangements for dealing with stress in the financial system. In addition, the FSF and the responsible member institutions are working together closely to develop measures to mitigate procyclicality in the financial system, review the scope of regulation and study potential sound practice guidelines on compensation in the financial sector.

The G20 arrangements take a broader, more politically motivated approach and also include macroeconomic stabilisation measures.[2] The G20 are seeking to reform the international financial system on the basis of five principles: transparency and accountability; sound regulation; integrity in financial markets; reinforced international cooperation; and reforms of international financial institutions. These principles have been codified in an action plan, the first part of which is due to be completed by the end of March 2009. The action plan contains the majority of the FSF's recommendations and the FSF's ongoing follow-up work, thereby *de facto* augmenting the political significance of these recommendations. Some points in the catalogue, however, go well beyond the FSF recommendations. For instance, all systemically important market participants and financial products are to be regulated or supervised appropriately. Furthermore, the competent bodies undertake to review whether the traditional, differentiated regulatory structures are still compatible with modern financial systems and whether there is a need for greater international convergence of regulatory practices. It is also worth noting that the G20 nations have committed to undertake an IMF Financial Sector Assessment Program (FSAP) report, a step which, in the past, key G20 countries had been unwilling to take.

The G20 believe that action needs to be taken on many points that go beyond those listed in the action plan. This includes mitigating procyclicality in regulatory policy, defining systemically important institutions as well as what constitutes appropriate regulation and oversight, developing global accounting standards, strengthening the infrastructure of OTC derivatives markets, and reviewing the incentive structures of compensation practices. The G20 finance ministers were given the assignment of presenting concrete proposals.

In their declaration, the G20 diagnosed a need for comprehensive reform of international financial institutions. This should be addressed immediately by expanding FSF membership to include key emerging economies. The G20's ideas for reforming the Bretton Woods institutions are focused on the following areas.

- In close collaboration with the FSF and consistent with its mandate, the IMF is urged to take a leading role in drawing lessons from the current crisis, to intensify its global financial surveillance and to better integrate it into its FSAPs, as well as to expand its early warning system.
- The IMF and World Bank should review and, if necessary, adapt their lending instruments to adequately meet their members' needs in the light of the financial crisis.
- The financial resources of the Fund, World Bank and other multilateral development banks should be reviewed for adequacy and – where necessary – increased.
- The Bretton Woods institutions should more adequately reflect changing economic weights in the world economy, and emerging and developing countries should have greater voice and representation. In addition, the mandates and governance of the international financial institutions (IFIs) should be reviewed.

Since November, national agencies and international institutions and bodies, under the aegis of the G20 troika, have been fleshing out and implementing the G20 reform proposals in a cooperative and constructive effort. Progress will be evaluated at a further G20 summit in early April.

1 Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience, 7 April 2008; Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience. Follow-up on Implementation, 10 October 2008. — **2** Declaration of the Summit on Financial Markets and the World Economy, 15 November 2008.

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pertise in macroeconomic analysis, the IMF is predestined for this task. The financial crisis, however, has also made it clear that the IMF needs to intensify its traditional surveillance mandate with regard to the global financial system, the interplay between the financial and real sectors, and cross-border effects in order to be able to make an effective contribution to crisis prevention.

Explosive growth in IMF loans

Following a long period in which there was hardly any new lending, the volume of new IMF loans (excluding credits to low-income countries under the concessional financing programme) has shot up to SDR 32 billion (around US$47 billion or €37 billion) since November 2008, not least as a result of the worsening financial crisis. Nearly all new credit arrangements clearly exceeded the regular access limit of 300% of a given country's quota (see table on page 78).

IMF liquidity sufficient

Against this background, concerns about the state of the IMF's finances have already been voiced. The Managing Director of the IMF has proposed a doubling of the IMF's financial resources from their pre-crisis level to about US$500 billion. In February 2009, the Fund reached an agreement with Japan on a bilateral credit line of US$100 billion, committed for up to five years; this gave the Fund access to additional financial resources. The Bundesbank does not believe that the Fund's current liquidity of around US$200 billion (not taking into account the credit line agreed with Japan) is at a critical low for the tasks within the IMF's mandate; moreover, any justified additional need can be met at relatively short notice through further bilateral loans from members with ample reserves or by replenishing the existing emergency credit lines, also known as the New Arrangements to Borrow. Furthermore, the IMF mandate – rightly – does not provide for the IMF covering the majority or even all of a country's funding needs in a crisis. Rather, its financial assistance, in conjunction with an adjustment programme, is designed to be a catalyst for mobilising additional private and public funding. Moreover, solvency problems in the financial sector cannot be solved with IMF loans.

New short-term liquidity facility not without its problems

In November 2008, the IMF, in response to the financial market crisis, introduced a new Short-Term Liquidity Facility (SLF) in which loans of up to 500% of a country's quota can be quickly disbursed. Access to this facility is to be given to countries with good macroeconomic fundamentals, sound policies and sustainable external and internal indebtedness which require such funding only to address "self-correcting" short-term external balance of payments needs. The problem with this facility is that it completely abandons programme conditionality. Not only does this create misincentives for the use of public funds; the lack

The IMF's Stand-By Arrangements (SBAs) and the international financial crisis

Table 8

Country	Approved on	Number of months	Sum		As a percentage	
			SDR bn	*Memo item* US$ bn 1	of the quota	of GDP
Ukraine	5 Nov 2008	24	11.0	16.4	802	8.9
Hungary	6 Nov 2008	17	10.5	15.7	1,015	10.2
Iceland	19 Nov 2008	24	1.4	2.1	1,190	11.7
Pakistan	24 Nov 2008	23	5.2	7.6	500	5.1
Latvia	23 Dec 2008	27	1.5	2.4	1,200	7.2
Belarus	12 Jan 2009	15	1.6	2.5	419	4.5
El Salvador	16 Jan 2009	15	0.5	0.8	300	3.6
Serbia	16 Jan 2009	15	0.4	0.5	75	1.1

1 Figures as at the date of publication by the IMF.

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of conditionality, which violates the principle of equal treatment, also creates a two-tiered society among its membership. This facility has not yet been used. The IMF has also begun a comprehensive review of its toolkit of lending instruments – facilities, access criteria, amount of access, duration, charges, and programme conditionality. Its aim is to create a consistent set of instruments that better addresses its members' needs and sets the correct incentives.

Quotas and voice must reflect members' weight in world economy

A major quota and voice reform was adopted by the IMF in April 2008. IMF members agreed on a simple, transparent quota formula, a quota increase by a total of 11.5% of the overall quota for underrepresented nations, and a trebling of basic votes. The process of ratification by members has been initiated. The new quota and voice distribution in the IMF now reflects the changes in economic power in the world more accurately. This outcome was achieved because all participants were willing to make compromises and because Germany, like other underrepresented industrial countries, was willing to forgo part of the quota increase for which it was actually eligible. In the further reforms which the G20 has called for, voice distribution and representation in the Fund and the World Bank will need to reflect their members' respective weight in the world economy.

(c) Shifts in global current account structure and exchange rates with a sharp slowdown in foreign currency reserves growth owing to the global financial and economic crisis

Persistently high current account imbalances with some corrections

The global current account structure remains characterised by large imbalances, even though current account balances decreased distinctly in some countries and regions, mainly because of the global economic downturn and falling commodity prices. The United States' current account deficit declined further in 2008 both in absolute figures and as a percentage of gross domestic product (GDP), to an estimated US$660 billion or 4½% of GDP. Furthermore – unlike as recently as 2007 – many Asian countries' current account surpluses fell (to around US$160 billion, or 3% of GDP, in Japan). Although China's current account surplus is likely to have risen further (to as much as an estimated US$440 billion), as a percentage of GDP it fell for the first time in some while (to an estimated 10%). The euro-area current account was virtually balanced in 2008 as well. By contrast, the surpluses of oil-exporting countries[1] again increased sharply (by an estimated two-thirds to around US$800 billion, or 15½% of GDP), whereas in central and eastern Europe current account deficits, according to available information to date, continued to rise on the whole. In the fourth quarter of 2008, the IMF's International Monetary and Financial Committee (IMFC) rightly pointed out that the agreed multilateral strategy for reducing external imbalances – increased national savings in the USA, growth-enhancing reforms in Europe and Japan, and exchange rate appreciation in countries with external surpluses – remains relevant, although priority currently needs to be given to financial market stabilisation measures.

Shifts in exchange rates

During the escalating global financial crisis, the US dollar appreciated distinctly in the second half of 2008 for the first time since 2005, owing not least to its continued dominance as a "safe haven" currency (see also page 20). During 2008, the US dollar rose sharply, particularly against the currencies of some G20 emerging economies and the pound sterling, falling only against a few currencies, chiefly the Japanese yen and the Chinese renminbi. Considerable outflows of capital caused several emerging economies to support their currencies by intervening in the foreign exchange markets last year. This followed frequent interventions in earlier years to reduce upward exchange rate pressure.

1 This group of countries is defined as in the table "Foreign currency reserves of selected countries", footnote 6, but includes Iran and Syria and does not include Iraq.

Foreign currency reserves * of selected countries

Table 9

Country/ group of countries 1	Year-end holdings 1998	Year-end holdings 2008	Year-on-year change 2006	2007	2008	2006	2007	2008
	US$ bn					As a percentage		
Advanced economies in Asia	509.7	1,852.0	116.4	147.1	56.4	7.6	8.9	3.1
Japan	203.2	1,003.7	46.1	73.4	55.3	5.6	8.4	5.8
Hong Kong	89.6	182.5	8.9	19.5	29.8	7.2	14.6	19.6
Singapore	74.6	173.6	20.1	26.7	11.1	17.4	19.7	6.8
South Korea	52.0	200.5	28.4	23.4	– 61.3	13.5	9.8	– 23.4
Taiwan	90.3	291.7	12.9	4.2	21.4	5.1	1.6	7.9
Emerging and developing economies in Asia	268.9	2,539.8	336.8	642.6	404.8	29.1	43.1	19.0
of which								
China 2	145.0	1,946.0	247.5	461.9	417.8	30.2	43.3	27.3
India	27.0	246.6	39.2	96.4	– 20.0	29.9	56.6	– 7.5
Indonesia	22.4	49.3	7.9	13.9	– 5.4	24.1	33.9	– 9.9
Malaysia	24.7	90.5	12.3	18.9	– 10.1	17.8	23.1	– 10.1
Philippines	9.1	33.0	4.1	10.2	3.0	25.9	51.2	9.9
Thailand	28.4	108.3	14.6	20.0	23.2	29.0	30.6	27.3
Asia, total	778.5	4,391.8	453.3	789.7	461.2	16.9	25.1	11.7
Advanced economies excluding Asia	496.5	594.7	57.1	23.5	13.3	11.4	4.2	2.3
of which								
United States	36.0	49.6	3.1	4.9	3.8	8.2	11.9	8.3
Euro area 3	290.9	215.4	16.9	19.4	11.9	10.1	10.6	5.9
Other emerging and developing economies	368.7	1,914.1	351.6	548.4	27.7	35.6	41.0	1.5
Africa	40.6	338.4	60.9	67.7	49.9	38.1	30.7	17.3
Europe 4	94.6	794.6	182.3	250.9	– 53.4	44.0	42.0	– 6.3
of which								
Russia	7.8	411.5	119.6	170.2	– 54.0	68.1	57.6	– 11.6
Latin America and Caribbean	158.4	493.3	59.2	134.9	51.2	23.9	43.9	11.6
Middle East	75.2	287.8	49.1	94.9	– 20.0	30.0	44.6	– 6.5
Memo item								
Oil-exporting countries 5	89.6	967.9	223.3	306.1	– 27.5	47.9	44.4	– 2.8
All countries	1,643.8	6,900.5	862.0	1,361.7	502.2	20.6	27.0	7.8

Sources: IMF and national statistics; Bundesbank calculations. — * At current exchange rates. — 1 Classified into advanced, emerging and developing economies according to the IMF's International Financial Statistics. — 2 Reserves clearly reduced through transfers to state banks and the China Investment Corporation. — 3 Foreign currency reserves of the 15 member states (at end-2008) for the period prior to the beginning of monetary union. — 4 Including Turkey. — 5 22 countries whose main source of export revenue is oil: Algeria, Angola, Azerbaijan, Bahrain, Ecuador, Equatorial Guinea, Gabon, Iraq, Kuwait, Libya, Nigeria, Norway, Oman, Qatar, Republic of the Congo, Russia, Saudi Arabia, Sudan, Trinidad and Tobago, United Arab Emirates, Venezuela and Yemen (no figures available for Iran, Syria and Turkmenistan; in 1998 no figures available for Iraq); figures partly estimated.

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Strongly dampened growth of global foreign currency reserves

Against this background, it comes as no surprise that the vigorous growth of global foreign currency reserves did not continue in 2008. Following the very buoyant rise of earlier years, reserves grew by only around 8% to US$6.9 trillion. This was due mainly to developments in the emerging and developing world; these countries' foreign reserves expanded sharply in the first few months of 2008 and then, in the second half of the year, fell for the first time in quite a while. By contrast, in China, the country with the world's largest holdings of foreign currency reserves (US$1.9 trillion at end-2008), the accumulation of reserves remained strong on the whole.

Probable decline in assets managed by sovereign wealth funds

Last year, a number of sovereign wealth funds (SWFs) which publish data on their size saw, on balance, a decline in assets under management.[1] Overall, inflows of funds decreased, and massive write-downs were undertaken. Nevertheless, SWFs are likely to continue to play an important role in international financial markets. The agreement on voluntary principles for SWFs reached under the auspices of the IMF and the OECD guidance on recipient country policies towards SWF investments are to be welcomed; their comprehensive implementation, still lacking in a number of cases, can counter the danger of financial protectionism.

2 European integration

(a) Euro area enlarged to 16 member states

Slovakia adopts the euro

On 1 January 2009, the euro was introduced in Slovakia. The conversion rate corresponds to the central rate (1 euro = 30.1260 Slovak koruna) in the Exchange Rate Mechanism II (ERM II) following a renewed revaluation of the Slovak koruna by 17.6% on 28 May 2008. Slovakia's accession to monetary union has thus enlarged the euro area to 16 members. A relevant provision in the Statute of the European System of Central Banks and of the ECB was invoked in order to postpone the potential start of the rotation system in the Governing Council of the ECB (see box on page 82).

Treaty of Lisbon still in the balance

The Lisbon Treaty did not take effect as scheduled on 1 January 2009 because the parliamentary ratification procedure had been concluded in only 25 out of the 27 EU member states.[2] At the December meeting of the European Council, the Heads of State or Government reaffirmed that they consider the treaty necessary in order to help the enlarged union to function more efficiently and more democratically. They also established an approach to enable the treaty to take effect at the end of 2009. The European Council agreed to make declaratory concessions to Ireland – where the Lisbon Treaty had been rejected in a referendum – on certain issues that had been the subject of public controversy.

1 SWFs are state-controlled entities that invest public financial assets mostly abroad and separately from the traditional management of foreign currency reserves by the monetary authorities. See Deutsche Bundesbank, Annual Report 2007, pp 73–77.
2 Of those 25 countries in which the parliamentary ratification procedure has already been completed, two (Germany and Poland) have not yet deposited the instrument of ratification. In Germany, the Federal President has not yet issued this instrument because several lawsuits contesting the Lisbon Treaty are pending with the Federal Constitutional Court.

Rotation system in the ECB Governing Council

Pursuant to Article 10.2 of the Statute of the European System of Central Banks (ESCB) and of the European Central Bank (ECB), the governors and presidents of the national central banks exercise their voting rights on the basis of a rotation system once their number in the Governing Council exceeds 15. By contrast, the six members of the Executive Board of the ECB retain permanent voting rights in the Governing Council. The Governing Council takes all necessary measures to implement the rotation system based on a two-thirds majority of its members. It can, moreover, decide to postpone the start of the rotation system until the number of governors exceeds 18. The Governing Council exercised this option at its meeting on 17-18 December 2008.

Article 10.2 of the ESCB Statute stipulates that, when the rotation system enters into force (once the number of governors in the ECB Council exceeds 18), the governors in the Governing Council shall be allocated to two or three groups. The allocation to groups will be based on the number of governors (two groups once the number of governors reaches 19 and three groups once the number of governors reaches 22). Governors will be allocated to individual groups depending on the economic weight (gross domestic product at market prices) and the size of the financial sector (total aggregated balance sheet of the monetary financial institutions) of the respective member state. The President of the Deutsche Bundesbank, as the representative of the largest economy in the euro area, will then belong to the first group, which will be composed of five members and be assigned four voting rights. This group always remains unchanged (see table). The second group will initially be composed of the other governors and assigned a total of 11 voting rights. Once the number of governors reaches 22, the second group will be composed of half of the total number of governors (with any fraction rounded up to the nearest integer) and will be assigned eight voting rights; the third group will be composed of the remaining governors and will be assigned three voting rights.

At its meeting on 17-18 December 2008, the Governing Council also decided on the main aspects for the implementation of the rotation system. The governors in each group will rotate in and out of the voting right after one month. The number of governors rotating will be determined by the difference between the number of governors in a group and the number of votes allocated to each group minus two, taking the absolute value in the case of a negative number. Once rotation starts, the President of the Deutsche Bundesbank, for example, will not exercise a voting right in the Governing Council for one month within a five-month period. This, at first glance, complicated model ensures that the composition of the group of governors with voting rights in the Governing Council is relatively stable over time and also helps ensure that the period during which individual governors cannot exercise their voting right is relatively short. The Governing Council will decide on further implementation details, such as the specific order of rotation for governors in the individual groups, at a later stage.

Allocation to groups and assignment of voting rights in the rotation system of the ECB Governing Council *

Number of governors of national central banks and voting rights

	of which, in					
	group 1		group 2		group 3	
Total number of governors	Governors	Voting rights	Governors	Voting rights	Governors	Voting rights
19	5	4	14	11	–	–
20	5	4	15	11	–	–
21	5	4	16	11	–	–
22	5	4	11	8	6	3
23	5	4	12	8	6	3
24	5	4	12	8	7	3
25	5	4	13	8	7	3
26	5	4	13	8	8	3
27	5	4	14	8	8	3

* Pursuant to Article 10.2 of the Statute of the European System of Central Banks and of the European Central Bank, when there are between 19 and 27 EU countries taking part in monetary union.

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The condition, however, is that the Irish government seek ratification of the treaty by the end of the term of the current European Commission.

(b) Economic policy coordination in times of financial crisis and economic downswing

New policy cycle 2008–2010 of the Lisbon Strategy...

At the 2008 European Spring Council, the Heads of State or Government reaffirmed that the current "Integrated Guidelines" (Broad Economic Policy Guidelines (BEPGs) and employment guidelines) of the Lisbon Strategy for growth and employment, renewed in 2005, remain valid for the new 2008-2010 three-year policy cycle. Additionally, the European Council approved individual recommendations for the EU member states and the euro area. However, the European Commission, looking back on the first ten years of economic and monetary union, called for increased economic policy coordination within the Community.

...and "European Economic Recovery Plan"

With that in mind, the European Commission, against the backdrop of the escalating financial crisis and an increasingly hamstrung real sector, recommended in November 2008 a "European Economic Recovery Plan", which was largely approved by the European Council in December. In addition to the role played by the automatic stabilisers, actions by member states and at EU level to bolster demand are being planned. These measures should amount to about 1.5% of overall GDP, take effect rapidly, be temporary and be targeted at the most important economic areas which have been affected most severely.

Financial and economic crisis and economic stimulus packages likely to lead to deterioration in public finances

In many countries, the gloomier economic situation and outlook have caused public budgets to deteriorate, in some cases considerably. For the first time, France and Romania received "policy advice" from the European Commission as an early warning that they were perilously close to breaching the 3% deficit threshold. The excessive deficit procedures already pending against Hungary and the United Kingdom may be joined by additional procedures. The public sector deficits in the euro area and the EU, which averaged around 2% of GDP in 2008, are likely to be twice their previous year's levels. It is to be feared that government fiscal positions will deteriorate further in 2009 and 2010 as a result of the economic downturn, the burdens imposed by financial market assistance, and the economic stimulus measures.

Given the extreme circumstances at present, the European Commission has announced that it will use the flexibility of the fiscal rules contained in the reformed Stability and Growth Pact (SGP) in its recommendations on possible

Short-term crisis resolution without losing sight of long-term sustainability

excessive deficit procedures. The Bundesbank believes that the available room for manoeuvre should be used responsibly in order to avoid undermining confidence in the SGP, one of the key pillars of monetary union. In the light of demographic developments, policymakers should not lose sight of the aim of securing the long-term sustainability of public finances even during the current crisis. Member states must therefore move quickly to redress deficit positions.

II Current issues relating to the German financial system

1 Stability of the German financial system

Review of 2008 presents a mixed picture

In terms of financial stability, a review of 2008 presents a mixed picture. While the German financial system proved to be quite stable up to the third quarter despite strains stemming from the international setting, extensive financial rescue measures were necessary in the second half of the year.

Situation relatively stable up to third quarter

In the first half of 2008, the financial market turbulence posed considerable challenges for the German banking system – as had been the case in the second half of 2007. The financial crisis was the root cause of numerous new difficulties across the various financial business sectors. Nevertheless, even under these stress conditions, German banks were able to perform their key functions of allocating financial resources and risks. It was possible to limit, isolate and absorb these problems within the financial sector without any resulting major impact on the real economy.

Insolvency of US investment bank marks turning point

The insolvency of the US investment bank Lehman Brothers in mid-September 2008 was a turning point. Although German credit institutions' direct exposure to this investment bank was within manageable bounds, this insolvency triggered a general loss of confidence in financial market participants' ability to meet their obligations. Banks all but stopped lending to each other; core funding markets, such as the unsecured money market and the market for commercial paper, dried up almost entirely. Even refinancing by means of covered bonds came to a standstill in some cases. Trading in many financial products ground to a halt. Any trading that did take place was at very low prices, which necessitated large write-downs. In this situation, the wholesale funding of banks that are heavily reliant on the interbank market was very restricted, whereas the refi-

Package of measures to stabilise the financial system

Legal framework

On 17 October 2008, the Bundestag, with the approval of the Bundesrat, passed the Act on the Implementation of a Package of Measures to Stabilise the Financial Market (*Financial Market Stabilisation Act* – FMStG). This established the framework for the government to provide assistance to financial sector enterprises domiciled in Germany. In particular, the FMStG set up a Financial Market Stabilisation Fund in the form of a special Federal fund, which does not constitute an independent legal entity and is administrated by the Financial Market Stabilisation Agency *(Finanzmarktstabilisierungsanstalt)*. It is generally referred to as the Financial Market Stabilisation Fund (*Sonderfonds Finanzmarktstabilisierung* (SoFFin)).

Instruments of the Financial Market Stabilisation Fund

The Fund has at its disposal the following instruments for stabilising the financial market:
– Assumption of guarantees (for an appropriate fee) of up to €400 billion for new debt issued and liabilities incurred by financial sector enterprises[1] prior to 31 December 2009.
– Recapitalisation of financial sector enterprises at market conditions, for example by acquiring shares or silent participations against the provision of a capital contribution. It may also assume other components of the own funds of these companies, including those created by the legislation of the Länder. The maximum amount for recapitalisation that any single financial sector enterprise and its affiliated companies may receive is generally limited to €10 billion.
– Assumption of risk positions held by financial sector enterprises[1] prior to 13 October 2008. Details, in particular concerning the type of risk positions, type of acquisition or collateral, may be regulated by way of ordinance. The upper limit for the risk assumed for any one financial sector enterprise and its affiliated companies is generally €5 billion.

The Federal Ministry of Finance can take out loans of up to €100 billion to fund these instruments.

Conditions for entitlement to the Financial Market Stabilisation Fund's instruments

Institutions should meet specific criteria to qualify for assistance from SoFFin. Specifically, these relate to
1 business strategy – for credit institutions this especially includes the granting of loans to small and medium-sized enterprises (SMEs) – and the sustainability of the business model pursued,
2 the use of the funds received,
3 remuneration of management, employees and main vicarious agents,
4 capital adequacy,
5 dividend payments,
6 the period within which these requirements are to be fulfilled,
7 measures to avoid distortions of competition,
8 the way in which accountability to the Fund is to be regulated,
9 an undertaking on compliance with the requirements 1 to 8, to be given by the authorised representative body with the consent of the supervisory body and to be published,
10 other conditions required to safeguard the purpose of this Act.

The FMStG authorises the Federal government to issue ordinances on the way in which these conditions are to be fulfilled. To date, the Federal government has done this for criteria 1, 3 and 5. All the other terms and conditions can be specified either through legislation, by way of an amendment to the ordinance, contract, voluntary undertaking or administrative act. It is, for example, possible to make the granting of guarantees conditional on compliance with certain solvency ratios.

Financial Market Stabilisation Act and EU state aid rules

As a general principle, government assistance to banks requires the approval of the European Commission. The Commission has issued guidelines specifying the terms under which its consent will be granted. From a German point of view, some major steps were:
– Publication of guidelines for government rescue packages for financial institutions in the European Commission's communication of 13 October 2008. Assistance which is granted as part of such rescue packages and which complies with the relevant criteria is deemed to be compatible with EU legislation on state aid.
– Approval of the German rescue package for credit institutions in European Commission communication of 27 October 2008.
– European Commission communication on the recapitalisation of credit institutions issued on 5 December 2008, including a number of clarifications concerning the criteria to be met by recapitalisation schemes.

1 This also applies to special-purpose vehicles (SPVs) which have assumed risk positions of a financial sector enterprise.

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nancing of institutions with a large percentage of customer deposits was less affected. In Germany, one bank active primarily in public sector financing came under pressure – mainly owing to the scale of maturity transformation.

Exceptional measures to stabilise financial system

In early October, exceptional political measures were the only way to safeguard the functioning of the financial system. In Germany, the Federal government issued a policy declaration guaranteeing non-banks' bank deposits. In mid-October, the Federal government also announced an extensive package of measures to stabilise the financial system. This package comprises, in particular, the three pillars of the Financial Market Stabilisation Act *(Finanzmarktstabilisierungsgesetz),* ie the recapitalisation of institutions, the assumption of guarantees, and the assumption of risk. The European Commission declared the package of measures to be compatible with existing EU regulations on subsidies (see box on page 85). Furthermore, accounting rules were amended by EU Community law, as a result of which there are now extended possibilities of reclassifying financial instruments. The Bundesbank sees this package of measures as a necessary basis for stabilising the German financial system and for overcoming the crisis of confidence in the financial markets. In addition, the Bundesbank is providing operational support for the Financial Market Stabilisation Fund (SoFFin) and is playing an active part in the ongoing stabilisation of the financial markets.

Additions and amendments to package of measures

In February 2009, the Federal Cabinet decided to amend and extend the package of measures. For example, the government's acquisition of shares and assumption of risk positions are to be accelerated. At the same time, after giving detailed consideration to less sweeping measures, nationalisations to safeguard financial stability are to be made possible within a narrow time frame (between the time the act is passed and 30 June 2009). These more far-reaching measures are subject to parliamentary approval and the consent of the European Commission with regard to matters of government assistance.

Work of SoFFin so far

As this report went to press, the applications for assistance from the Financial Market Stabilisation Fund had a volume of €294 billion, of which €197 billion has already been approved. Of this amount, €178 billion was for the granting of guarantees and €19 billion was for capital aid. Guarantees in the amount of €45 billion have already expired.

2 Profitability of German banks

Noticeable impact of financial crisis on profitability

The financial crisis that has been ongoing since the second half of 2007 left clear marks on the profitability of German banks in 2008. Its effects were also felt increasingly by institutions not active internationally. In particular, the considerably greater need for write-offs and write-downs led to much heavier strains than in the 2007 financial year. However, net commissions received were also marked by declines – not only among those banks concentrating on investment banking. There was also increased pressure on net interest received owing to the – in some cases – considerably higher deposit rates in connection with the crisis and owing to the flat or inverse yield curve, which is unfavourable for earnings from banks' maturity transformation. Unlike in 2007, in the 2008 financial year, domestic institutions were no longer able to offset these heavy burdens by growth in earnings in other lines of business or by transfers from provisions. At the same time, the cyclical setting for German banks persistently deteriorated over the course of 2008. The profitability of savings banks and credit cooperatives, which was largely unaffected by the financial market turmoil in 2007, is now also marked by the difficult situation in the financial market. In 2008, apart from the effects of a general cyclical downturn, the flat or inverse yield curve had a sustained dampening impact on net interest received, which is especially important for these categories of institution. At times, there were also additional burdens from ties with ailing central institutions and from write-downs on securities holdings.

Continuation of the consolidation process

The consolidation process in the German banking sector with regard to the number of institutions continued at a slower pace in 2008. At the same time, however, the consolidation pressure on Landesbanken and big banks has increased significantly owing to the financial crisis. Bank mergers still mainly involved banks active in traditional retail business. The number of savings banks declined by eight and that of credit cooperatives by 35 institutions over the course of the year. The number of Landesbanken was also reduced, namely by two institutions. At the same time, branches of foreign banks active in Germany increased by eight and regional banks increased by five institutions. The banking statistics still recorded a total of 1,981 credit institutions at the end of 2008, which was 34 fewer than in 2007.

Banking supervision

The subprime crisis, which was sparked by distortions on the US mortgage market, escalated into a global financial market crisis in 2008. It also had a considerable dampening effect on the real economy, particularly from the second half of the year onwards. Numerous committees at an international and European level, such as the Financial Stability Forum, the Basel Committee on Banking Supervision and the Committee of European Banking Supervisors, are currently examining the reasons for the crisis and its spread, and are making every effort to develop the necessary countermeasures and modifications to the supervisory framework. The Basel Committee, with the express support of the Financial Stability Forum, has, for instance, revised its recommendations on liquidity management and, in September 2008, published them as the "Principles for Sound Liquidity Risk Management and Supervision". Further measures will follow, inter alia, to improve the quality of core capital, raise the capital requirements for structured financial products and trading book exposures, and strengthen international cooperation between banking supervisors.

I Current developments, lessons to be learned from the financial market turmoil

April 2008: FSF recommendations for strengthening the financial markets

In its "Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience" of 7 April 2008, the Financial Stability Forum (FSF)[1] presented recommendations aimed at strengthening the financial markets. The report was commissioned by the G7 finance ministers and central bank governors who had, in October 2007, asked the FSF to examine the causes of the financial market turmoil. The recommendations are addressed at central banks, banking, securities and insurance supervisors as well as financial market participants such as rating agencies and institutional investors.

FSF measures supported by Bundesbank

The Bundesbank supports the catalogue of measures presented by the FSF. Many of the measures called for in banking supervision, eg improvements to liquidity risk management, had already been initiated at an international level, including in the Basel Committee on Banking Supervision (BCBS) and the Committee of European Banking Supervisors (CEBS), in response to the financial market crisis.

II Refinement of international prudential supervisory standards

Development of international prudential supervisory standards

The issues addressed by the FSF – liquidity risk management, the quality of core capital, the prudential treatment of structured financial products and improvements in risk management as well as the strengthening of international cooperation between banking supervisors – are currently being promoted both by the BCBS and within the European Union.

1 The FSF brings together the authorities, central banks and sector-specific international regulatory and supervisory groupings – such as the Basel Committee on Banking Supervision – which are responsible for financial stability in the world's main financial centres, and was convened on the initiative of the finance ministers and central bank governors of the G7 countries in early 1999.

(a) Liquidity risk management

BCBS' new liquidity principles

Based on the analysis of national liquidity regimes conducted in 2007[1] and initial lessons learned from the financial market turmoil, the BCBS has revised its previous recommendations on liquidity management of the year 2000[2] and, following a public consultation, published the outcome as its "Principles for Sound Liquidity Risk Management and Supervision" in September 2008.

New liquidity principles: main themes and modifications

The principles systematise and describe potential sources of liquidity risk, the necessary management techniques as well as the responsibilities of the different management levels and considerably expand the role of supervisory bodies. The new principles place greater emphasis on stress and crisis situations. Certain aspects of liquidity management are dealt with much more prominently in the light of the financial market turmoil (eg intraday liquidity, collateral management and group-wide management). Moreover, the explicit call for appropriate quantitative liquidity provision in the form of highly liquid assets represents a significant development with a strong signalling effect in an approach that basically focuses on qualitative principles.

CEBS' recommendations on liquidity management and supervision

At the European level, CEBS has published recommendations on managing and supervising liquidity risk in financial institutions.[3] These are modelled on the BCBS' liquidity principles in terms of timeframe and contents. One important difference compared with the Basel principles is that CEBS is more open to the prudential recognition of internal liquidity risk measurement and management procedures. Moreover, CEBS places greater emphasis on the overarching principle of proportionality, including for smaller banks and investment firms.

(b) Capital requirements for structured financial products

Changes to securitisation rules at Basel level

The financial market crisis revealed considerable deficiencies in risk management regarding complex securitisation structures. The risk inherent in these products was seriously underestimated by all market agents, partly because they overrelied on the rating agencies' assessments when establishing their own risk evaluations. In addition, many of these products are extremely opaque, making it considerably more difficult to assess risk adequately. As a result of the financial

1 "Liquidity Risk: Management and Supervisory Challenges" published in February 2008.
2 "Sound Practices for Managing Liquidity in Banking Organisations" published in 2000.
3 "Second Part of CEBS's Technical Advice to the European Commission on Liquidity Risk Management" of 18 September 2008.

market crisis, there are plans at the Basel level, *inter alia*, to raise the risk weights and, consequently, the capital requirements for "resecuritisations".[1] In order to prevent arbitrage, the capital requirements for securitisation positions in the trading book are to be brought into line with those for the banking book. Moreover, the conversion factors for liquidity facilities and operational requirements are to be adjusted. This is intended to ensure that the institutions which grant and securitise loans are credit-scored and monitored more carefully.

Changes to securitisation rules at EU level

Changes to the securitisation rules are also planned at the EU level with the forthcoming amendments to both the Banking Directive and the Capital Adequacy Directive. This will include adjusting the conversion factors for liquidity facilities to bring them into line with the Basel rules. In addition, institutions (as investors) are, in future, to be allowed to take on securitisation risks only if the securitising institution confirms that it will retain a percentage share of the risk (ownership stake). This quantitative criterion will be supplemented by qualitative requirements, with the imposition of sanctions if they are not met.

(c) Quality of core capital

Improvement in core capital quality and additions to Basel II

As a result of the crisis, market participants are also increasingly focusing on supervisory core capital, since institutions need it primarily to cover ongoing losses and thus to continue their operations. The BCBS is therefore striving to improve the quality of capital in order to boost market players' confidence and enhance the banking system's ability to absorb losses.

(d) Possible procyclical effects of Basel II

Examination of the possible procyclical effects of Basel II

Since 2008, the BCBS has also been looking into the possible procyclical effects of the new capital standards and reviewing the general level of capital adequacy. This involves examining, amongst other things, how the switch from Basel I to Basel II has changed the minimum capital requirements. In this connection, it should also be noted that the international accounting standards include elements with a procyclical influence on the capital base.

1 These are securitisations that are, in turn, backed by securitisations, including liquidity lines to asset-backed commercial paper (ABCP) programmes which include securitisation positions.

(e) Risk management

Improvements to internal risk management practices

As a consequence of the crisis, the BCBS is currently discussing the need to improve general institution-wide risk management practices as well as further specific risk management issues (eg the avoidance of risk concentration) besides the above-mentioned specific aspects relating to the adequate management of both liquidity risk and securitisation risk. This includes, *inter alia*, formulating recommendations for conducting internal stress tests as well as work on the subject of counterparty credit risk.

(f) Cross-border cooperation in banking supervision

Greater cooperation in cross-border institutional supervision

One priority in international cooperation in banking supervision is currently to improve the supervision of internationally active institutions. In this respect, particular progress was made in the creation of multilateral, banking-group-specific contacts in "supervisory colleges" in 2008. These colleges are intended to foster effective coordination and cooperation between home and host supervisors. The amended version of the Banking Directive, which is scheduled to enter into force this year, will strengthen the role of the "consolidating supervisor", for instance by giving him the ultimate right of decision on additional capital requirements under Pillar II at the group level. The Memorandum of Understanding that all European financial supervisory authorities, finance ministries and central banks signed in 2008 and which regulates Europe-wide cooperation in the event of a crisis is also intended to improve banking supervisors' ability to act and the effectiveness of their measures at the European level.

International cooperation in the BCBS, CEBS and BSC

Besides the BCBS and CEBS, the Banking Supervision Committee (BSC), which is based at the ECB, also plays a role in prudential cooperation. While the BCBS *de facto* sets global supervisory standards, CEBS focuses on promoting supervisory convergence at the European level. By contrast, the BSC's activities centre on analysing the structure and stability (macroprudential analyses) of the European financial system. Developing a set of analytical instruments for crisis management was a focal point of its work in the reporting year.

Ongoing banking supervision operations

At the end of 2008, 2,154 domestic credit institutions were registered as being subject to the German Banking Act *(Kreditwesengesetz)* (down from 2,282 at the end of 2007).[1] This figure no longer includes investment companies (79), investment stock corporations (7) and branches of foreign management companies (5). Since 28 December 2007, these companies have been supervised by the Federal Financial Supervisory Authority (BaFin) only in accordance with the provisions of the Investment Act *(Investmentgesetz)*. In addition, the streamlining of the German banking market has continued, with a total of 37 fewer credit institutions than in the previous year (25 fewer institutions in 2007). A total of 69 credit institutions closed down, owing predominantly to mergers; 36 of these institutions were credit cooperatives and 8 were savings banks. These closures were partly offset by 32 new institutions, mainly in the categories regional banks, branches of foreign banks from the European Economic Area (EEA) and securities trading banks. By contrast, the number of supervised financial services institutions rose to 876 (compared with 827 in 2004, 800 in 2005, 811 in 2006 and 793 in 2007). The transposition into national law of the Markets in Financial Instruments Directive (MiFID) through the Act Implementing the Markets in Financial Instruments Directive *(Finanzmarktrichtlinie-Umsetzungsgesetz)*, which extended the range of financial services requiring authorisation to include investment advice, placement business, operating a multilateral trading system and proprietary business pursuant to section 1 (1a) of the Banking Act, played a crucial role in this development.

In 2008, the Bundesbank performed 144 on-site inspections on the basis of the "Minimum requirements for risk management" *(Mindestanforderungen an das Risikomanagement)* pursuant to section 44 (1)

Ongoing monitoring of institutions

Number of operations conducted

Item	2006	2007	2008
1 Reports, monthly and other returns			
Individual reports pursuant to sections 13 to 14 of the Banking Act	153,658	148,244	127,405
Single borrowers listed in the summary reports submitted pursuant to sections 13 to 14 of the Banking Act	2,061,135	2,042,756	2,080,237
Reports pursuant to sections 24 and 24a of the Banking Act	27,589	21,998	20,288
Monthly returns and other data pursuant to sections 25 and 25a of the Banking Act	34,486	33,558	32,425
Reports under Principle I or pursuant to the Solvency Regulation	27,572	27,523	27,013
Reports under Principle II or pursuant to the Liquidity Regulation	26,467	26,322	25,847
2 Audit reports and reports on activities	10,734	8,740	5,869
3 Meetings with senior management	2,400	2,314	2,465
4 Audits of banking operations	186	214	215

1 Credit institutions pursuant to section 1 (1) of the German Banking Act (including institutions which are in liquidation or being wound up). For the sake of systematic classification, all 52 securities trading banks are also included here although 45 of these institutions provide only financial services.

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Ongoing banking supervision operations (cont'd)

sentence 2 of the Banking Act. The on-site inspections took the form of risk and process-oriented system audits, focusing on the organisation of risk management practices pursuant to section 25a (1) of the Banking Act. The majority of these on-site inspections related to the requirements for an adequate business organisation of credit business.

In 2008, the financial crisis repeatedly made the unscheduled collection of the latest data necessary. To this end, more than 20 cross-institutional requests for information were made as part of ongoing banking supervision operations. These targeted surveys concerned facts which were not adequately covered by regular reporting.

Activities in connection with the approval of internal ratings-based systems declined slightly on the year. This can largely be explained by the fact that the majority of rating systems were introduced and inspected over the past few years and have now been implemented in business processes. At the same time, the number of institutions that have hitherto submitted applications for approval to use an internal ratings-based approach (IRBA) has fallen marginally, predominantly as a result of banking mergers. To date, 52 institutions have received approval for IRBA use, 20 of them for the advanced approach.

In 2008, the Bundesbank conducted six initial and two follow-up examinations for approval of an Advanced Measurement Approach (AMA) for operational risk. Five of the initial examinations were conducted at the German subsidiaries of foreign institutions. The main focus here was on the implementation of the group-wide model at the respective subsidiary including the related management and data supply processes. It is expected that follow-up examinations as well as further approval examinations will be conducted in 2009.

Credit register of loans of €1.5 million or more

	Volume of loans of €1.5 million or more		Number of loans of €1.5 million or more reported		Number of reporting		
Third quarter	€ billion	Percentage change	Number	Percentage change	institu-tions[1]	financial enterprises	insurance corpora-tions
2000	6,487	+ 14.6	509,567	+ 5.2	3,129	993	645
2001	7,087	+ 9.2	525,020	+ 2.9	2,946	955	644
2002	7,161	+ 1.0	526,552	+ 0.3	2,777	1,075	621
2003	6,995	– 2.3	514,433	– 2.3	2,624	1,174	633
2004	7,118	+ 1.8	503,632	– 7.0	2,547	1,271	635
2005	7,843	+ 10.1	503,290	– 0.1	2,517	1,428	623
2006	8,069	+ 2.9	507,821	+ 0.7	2,489	1,362	615
2007	8,656	+ 7.3	504,052	– 0.7	2,405	981	618
2008	9,989	+ 15.9	518,331	+ 2.8	2,328	982	634

1 Credit institutions and financial services institutions.

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Ongoing banking supervision operations (cont'd)

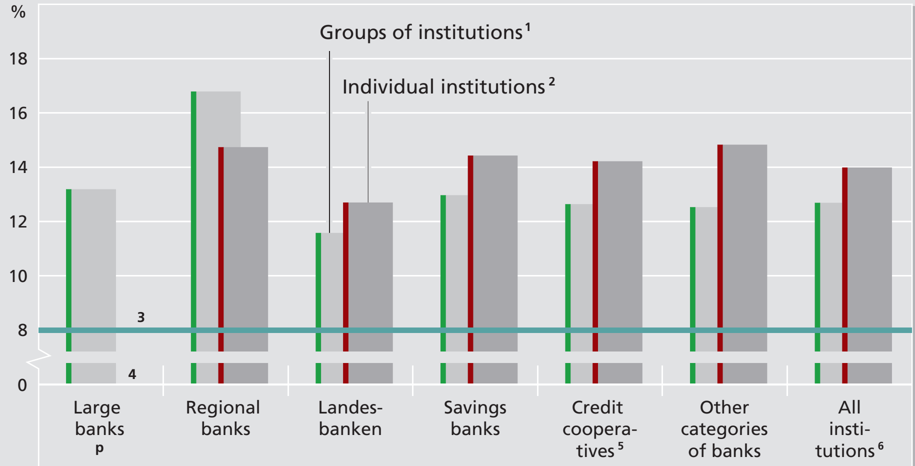
In terms of internal market risk models, one initial and four follow-up examinations were conducted in 2008.[2] The majority of examinations focused mainly on credit spread modelling. The future supervisory own funds requirements, especially for default and migration risks in the trading book (incremental risk charge or IRC), were outlined in meetings with senior management. These go beyond the specific price risks modelled in the VaR calculation and are expected to be implemented as of 1 January 2010.[3]

The joint BaFin and Bundesbank study on liquidity management practices at selected German credit institutions was published in January 2008. Over the course of the year, the Bundesbank conducted the first approval examinations pursuant to section 10 of the Liquidity Regulation *(Liquiditätsverordnung)*, which entered into force on 1 January 2007, but whose application, like that of the Solvency Regulation *(Solvabilitätsverordnung)*, was not obligatory for all institutions until 1 January 2008.

In the period from 30 September 2007 to 30 September 2008, the number of loans of €1.5 million or more to be reported quarterly pursuant to section 14 of the Banking Act increased by 2.8% to 518,331. Meanwhile, over the same period, the total volume of reported loans of €1.5 million or more increased by 15.9% from €8,656 billion to €9,989 billion on the reporting date of 30 September 2008. At this date, 2,328 institutions, 982 financial enterprises and 634 insurance corporations had

Overall capital ratio* of individual institutions as well as groups of institutions and financial holding groups submitting reports pursuant to the Solvency Regulation

End-2008 levels



* Overall capital ratio = (total own funds ÷ capital charges for counterparty risk, market risk and operational risk pursuant to the Solvency Regulation) × 8. — **1** Groups of institutions and financial holding groups pursuant to section 10a of the Banking Act. — **2** Credit institutions and financial services institutions on a non-consolidated basis. — **3** The minimum percentage is 8% under the Solvency Regulation. — **4** Non-consolidated data are not available owing to the provisions of section 2a of the Banking Act (waiver rule). — **5** Excluding regional institutions of credit cooperatives. — **6** Including regional institutions of credit cooperatives.

2 Section 10 (1) sentence 2 of the Banking Act in conjunction with section 2 (3) and section 313 (1) of the Solvency Regulation. — **3** Section 317 (3) of the Solvency Regulation; sections 718 (xcii) and 718 (xciii) of the Basel II Framework as published in June 2006.

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Ongoing banking supervision operations (cont'd)

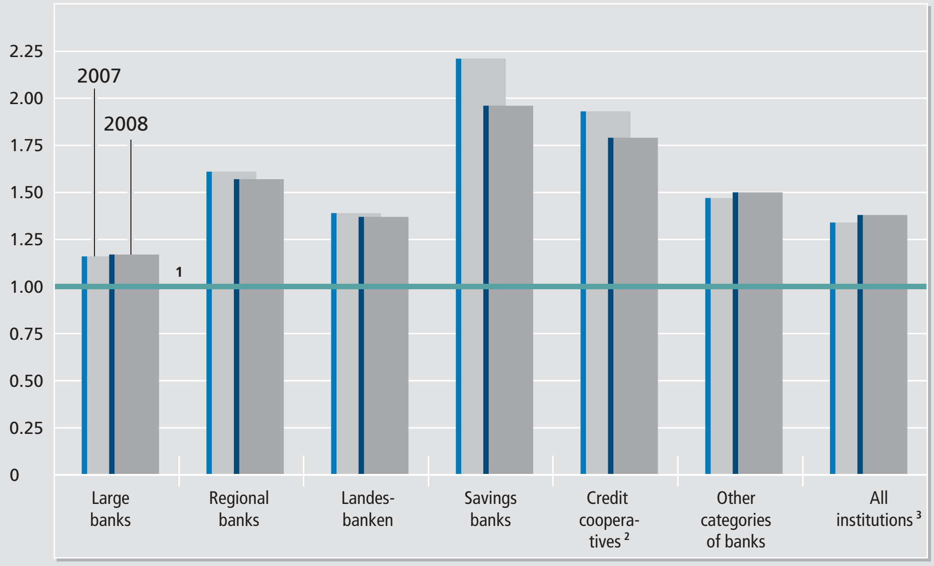
submitted reports on loans of €1.5 million or more. This included 127,405 individual reports pursuant to sections 13 to 14 of the Banking Act (20,839 fewer than a year earlier), while 2,080,237 single borrowers were listed in summary reports submitted pursuant to sections 13 to 14 of the Banking Act (37,481 more than in 2007).

Since 1 January 2008, all credit and financial services institutions subject to reporting requirements under the Solvency Regulation must apply the provisions on the implementation of Basel II in full. In 2008, the overall capital ratio, which gives the ratio of all risk positions that have to be backed by capital to own funds, was, for the first time, based exclusively on the new Solvency Regulation following the transitional arrangements in 2007. The average overall capital ratio of institutions reporting on a non-consolidated basis was 13.99% on 31 December 2008, while for groups of institutions/financial holding groups, the average overall capital ratio was 12.69%. This includes all institutions reporting on a non-consolidated basis – provided they are not partially exempt from supervision on a solo basis pursuant to section 2a of the Banking Act – and groups of institutions/financial holding groups.

Under the Liquidity Regulation, institutions must demonstrate adequate liquidity for payment purposes at all times by maintaining a liquidity ratio of at least 1. At the end of 2008, the average liquidity ratio was 1.38.

Liquidity ratio of individual institutions submitting reports pursuant to the Liquidity Regulation*

End-of-year levels



* Credit institutions and financial services institutions on a non-consolidated basis (Liquidity Regulation reporting format). Liquidity ratio = total payment assets ÷ total payment liabilities. — **1** Under the Liquidity Regulation, the required minimum liquidity ratio is 1.0. — **2** Excluding regional institutions of credit cooperatives. — **3** Including regional institutions of credit cooperatives.

III Development of the national prudential supervisory standards

Factoring and financial leasing newly defined as requiring authorisation

The Annual Tax Act 2009 *(Jahressteuergesetz 2009)* classifies factoring and financial leasing as financial services. Therefore, authorisation according to the German Banking Act *(Kreditwesengesetz)* has been required to conduct such business since 25 December 2008. The inclusion of factoring and financial leasing in the catalogue of financial services requiring authorisation was effected at the initiative of the enterprises concerned with the intention of claiming the same local business tax privileges as banks.

Newly defined investment management services to require authorisation

As part of the Act to Reform German Pfandbrief Legislation *(Gesetz zur Neuordnung des Pfandbriefrechts)*, which will come into force in 2009, the term "principal broking services" pursuant to section 1 (1) sentence 2 number 4 of the Banking Act will be replaced by the term "investment management services" pursuant to section 1 (1a) sentence 2 number 11 of the (revised) Banking Act. The Federal Administrative Court *(Bundesverwaltungsgericht)* has decided that there is no legal basis for defining certain collective investment models – such as the issuing of index certificates by enterprises which invest the funds received in various financial instruments in their own name and for their own account – as principal broking services within the meaning of the Banking Act and especially for prohibiting them. The new statutory definition of investment management services is intended to close this supervisory loophole.

Payment Services Oversight Act

The Payment Services Oversight Act *(Zahlungsdiensteaufsichtsgesetz)* is the main component of the draft Act to Implement the Supervisory Provisions of the Payment Services Directive *(Gesetzentwurf zur Umsetzung der aufsichtsrechtlichen Vorschriften der Zahlungsdiensterichtlinie)*, which is to enter into force on 31 October 2009. The Payment Services Oversight Act will introduce a new category of institution, namely "payment institutions". Enterprises which provide payment services are to have their own authorisation procedure and are to be governed by special supervisory rules. In addition, there will be amendments to the Banking Act and other legislation containing supervisory provisions. As payment services, for example, also cover money transmission services and credit card business, the relevant provisions in the Banking Act will be repealed.

The Regulation Governing the Capital Adequacy of Financial Conglomerates *(Finanzkonglomeratesolvabilitätsverordnung)* was amended twice in the report-

Regulation Governing the Capital Adequacy of Financial Conglomerates

ing period. The Regulation was first changed to allow the use of group accounts to calculate financial conglomerate solvency requirements. The changes which entered into force at the end of 2008 serve to harmonise the provisions applicable to single enterprise, group and financial conglomerate solvency in the insurance sector.

Cash management

The Bundesbank aims to play an appropriate role in cash management, one of its core business areas, in order to ensure the high quality of the currency in circulation and the smooth and efficient supply of cash at all times, including in times of crisis. The role of the Bundesbank's branches in the cash cycle became particularly apparent during the crisis on the financial markets when the branches were consistently able to meet the sharp rise in demand for euro banknotes throughout Germany. The cash services, which include multi-denomination lodgements and the electronic submission of cash orders and lodgement notifications (CashEDI) at all Bundesbank branches, have met with a high degree of customer acceptance and have led to significant efficiency gains. In 2009, the collective effort in the development of the second series of euro banknotes, the testing of cash-recycling machines operated by credit institutions – which was contractually agreed in the framework for private banknote processing – and the ongoing enhancement of the implemented cash management procedures and processes will continue.

Euro currency in circulation in the Eurosystem

During 2008, the volume of banknotes in circulation in the Eurosystem again increased sharply, rising by 12.7% to €762.8 billion, while the volume of coins in circulation rose by 5.7% to €20.4 billion.

Euro currency in circulation in the Eurosystem Table 10

Trend

€ million

End of	Currency in circulation	Banknotes in circulation	Coins in circulation 1
2006	646,119	628,242	17,877
2007	695,860	676,621	19,239
2008	783,179	762,775	20,404

Breakdown at year-end 2008

Banknotes in circulation			Coins in circulation		
Banknotes of €	€ million	Percentage of total	Coins of €	€ million	Percentage of total
500	265,032	34.7	2	8,066	39.5
200	34,019	4.5	1	6,015	29.5
100	138,101	18.1	0.50	2,418	11.9
50	245,587	32.2	0.20	1,667	8.2
20	52,358	6.8	0.10	1,060	5.2
10	20,300	2.7	0.05	669	3.3
5	7,378	1.0	0.02	316	1.5
			0.01	193	0.9
Total	762,775	100.0	Total	20,404	100.0

1 Circulation of euro coins excluding commemorative coins.

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Besides regular issue coins, euro collector coins were issued in all euro-area countries; these are legal tender only in their country of issue. In Germany, issues of German euro collector coins in 2008 had a total value of €120 million.

In the financial year 2008, the Bundesbank paid out 15.6 billion euro banknotes with a value of €515.9 billion. During the same period, the Bundesbank received lodgements from its customers of 14.9 billion euro banknotes with a value of €468.9 billion.

Financial market crisis raises demand for euro banknotes

Cash supply operations in the Eurosystem have successfully passed the acid test during the crisis on the financial markets. In October, there was a sharp rise in the demand for higher-denomination banknotes from credit institutions both inside and outside the Eurosystem. The Bundesbank's branch network has played a particularly important role in ensuring a smooth supply of currency to the German economy. Together with its Eurosystem partner central banks, the Bundesbank, which has traditionally played a key role in satisfying the demand for banknotes from countries outside the Eurosystem, has had no difficulty in meeting this high demand either.

Euro counterfeits

The number of counterfeit euro banknotes detained in German payments and recorded by the Bundesbank was slightly higher than in the previous year. By contrast, there was a decline in the number of counterfeit euro coins recorded.

Number of counterfeit euro banknotes and coins detained in German payments and recorded by the Bundesbank Table 11

Year	Banknotes		Coins	
	Number (thousand)	€ thousand	Number (thousand)	€ thousand
2006	46	3,233	77	150
2007	40	3,769	82	157
2008	41	3,477	80	147

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The €50 banknote was still the most frequently counterfeited denomination in Germany in 2008, accounting for 31% of the total volume of counterfeits. At 30%, the incidence of counterfeit €100 banknotes, which had increased, was almost as high. In relative terms, the incidence of counterfeit banknotes detected is exceptionally low in Germany at around five counterfeits per 10,000 inhabitants per year. The €2 coin accounted for the majority of counterfeit coins (85%). For the first time, however, the €1 coin accounted for over 10% of counterfeit euro coins.

Counterfeit prevention

The training courses offered free of charge by the Bundesbank on how to recognise counterfeit money were again very well attended by the banking industry, the retail sector and other interested parties in 2008. A total of around 850 training courses were organised across Germany, attracting some 18,000 participants. In addition to this, the Bundesbank has developed an interactive electronic learning programme which illustrates how euro banknotes can be quickly and discreetly checked for authenticity.

Damaged and mutilated banknotes and coins

In the financial year 2008, the National Analysis Centre for damaged banknotes and coins received around 19,900 applications (2007: 19,600). Deutsche Mark and euro banknotes and coins for reimbursement were submitted with these applications.

Deutsche Mark and euro banknotes and coins submitted to the Bundesbank's National Analysis Centre for reimbursement

Table 12

Year	Banknotes		Coins	
	Number (thousand)	€ million	Number (thousand)	€ million
2006	428	17.2	242	0.07
2007	452	16.6	192	0.05
2008	511	19.3	133	0.05

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Deutsche Mark currency in circulation

The volume of Deutsche Mark currency in circulation had declined to DM13.8 billion by the end of 2008. Banknotes accounted for around DM6.8 billion of this amount and coins for roughly DM7.0 billion.

Deutsche Mark currency in circulation

Table 13

DM million

End of	Currency in circulation	Banknotes in circulation	Coins in circulation
2006	14,380	7,218	7,162
2007	14,086	6,990	7,096
2008	13,835	6,801	7,034

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Second series of euro banknotes

The new series of euro banknotes, which has been approved by the Governing Council of the ECB, will replace the current banknote series in a few years' time. It is envisaged that the individual banknote denominations will be introduced in stages. The essential design elements of the first series of euro banknotes will largely be adopted for the second series as well. However, new and improved security features will be integrated into the new designs to enable the general public to identify counterfeits more easily.

Introduction of multi-denomination processing successfully completed

Since July 2008, all of the Bundesbank's 47 branches and its operating unit in Lörrach have been offering a modernised range of cash payment services based on multi-denomination processing. Multi-denomination processing has significantly increased the efficiency of banknote processing at the Bundesbank and it has also reduced costs for cash handlers owing to an easing of the Bundesbank's lodgement requirements. From 2011, the Bundesbank's standard for lodgements, whereby banknotes no longer have to be packed facing in the same direction prior to lodgement, will be standard practice in the Eurosystem.

Customer acceptance of CashEDI high

Since the beginning of January 2008, CashEDI (Cash Electronic Data Interchange) has been available at all Bundesbank branches and is becoming increasingly popular among customers. With this procedure, the Bundesbank offers an international logistical standard for optimising cash payment operations.

Framework for private banknote processing successfully implemented

At the end of May 2007, the Bundesbank asked all commercial banks which issue banknotes via ATMs to sign the agreement for the national implementation of the framework for the detection of counterfeits and fitness sorting of euro banknotes by credit institutions and other professional cash handlers. By the end of 2008, around 85% of all the credit institutions that were contacted had signed the agreement. The names of these banks are published on the Bundesbank's website. In accordance with the contractual agreement, the Bundesbank has started testing the cash-recycling machines used by the credit institutions. For those credit institutions and other professional cash handlers which recycle banknotes, these monitoring tests constitute an important measure in ensuring the authenticity of the banknotes and their fitness for circulation.

New legal framework for cash payments

With the new version of Regulation (EC) No 1338/2001, an additional compulsory authenticity check will be introduced for banknotes which are to be paid out by ATM. This check goes beyond the current obligation to detain counterfeit money. This means that statutory rules have been laid down for major parts of the framework for private banknote processing. Furthermore, in October, the Federal Cabinet approved the draft Payment Services Oversight Act (*Zahlungsdiensteaufsichtsgesetz*), which will incorporate the European Payment Services Directive (2007/64/EC) into German law. In accordance with Community law, the Act must come into force on 1 November 2009. Following its implementation, those cash-in-transit companies whose cash handling activities go beyond the pure transportation of cash will be subject to oversight and a security obligation to protect the customer funds entrusted to them.

Cashless payment and securities settlement systems

With respect to cashless payments and securities settlement, the Bundesbank strives to fulfil its statutory mandate and strategic objectives by making payment and settlement systems as secure and efficient as possible as well as by promoting innovation. Through the provision of its own reliable systems for interbank clearing, the Bundesbank contributes significantly to financial stability in Germany. In this context, cooperation with other central banks is becoming increasingly important. Moreover, the Bundesbank also offers fiscal agency services, in particular for public administrations. Last but not least, the Bundesbank influences events at the national, European and G10 level and acts as an overseer in the area of payments and – together with the other responsible authorities – in securities settlement.

In 2008 the Bundesbank focused on activities relating to the TARGET2-Securities project, the introduction of the Single Euro Payments Area (SEPA) and the further enhancement of its own range of services, in particular the migration of the Clearstream Banking Frankfurt (CBF) daytime cash clearing process to TARGET2 and the expansion of its self-collateralisation service. In addition to these efforts, the Bundesbank supported activities aimed at improving over-the-counter (OTC) derivatives settlement.

Single market for cashless payments

The Single Euro Payments Area (SEPA) was launched in January 2008 with the introduction of the SEPA credit transfer. The aim of this European banking industry project is to provide 31 European countries (the 27 EU countries, Iceland, Liechtenstein, Norway and Switzerland) with a single set of payment instruments, which are settled on the basis of common standards and rules. The European Union and the Eurosystem support the project as a vehicle for realising the single market in the area of cashless payments as well.

SEPA credit transfers successfully launched

Since its introduction on 28 January 2008, use of the SEPA credit transfer has steadily increased. Nevertheless, it remains at a relatively low level. At present, the SEPA credit transfer is primarily used for cross-border transactions. Consequently, SEPA credit transfers within the euro-area accounted for a mere 1.8% of all euro-denominated transfers in December 2008.

Preparations for launch of the SEPA direct debit scheme

A meaningful increase in this figure can only be expected if large enterprises and public administrations switch to the SEPA procedure for the purpose of processing their payments. This might happen on a major scale once the SEPA direct debit becomes available in November 2009. Throughout 2008, the Bundesbank, together with other Eurosystem central banks, followed the activities of the European banking industry and actively observed its work towards developing a European card scheme. In collaboration with the Central Credit Committee (CCC) of the German banking industry, the Bundesbank worked on the implementation of SEPA in Germany, and in particular on the introduction of the SEPA direct debit procedure for private and business customers. The Bundesbank monitors national migration progress and is working to promote the rapid migration to SEPA. In its role as "fiscal agent", the Bundesbank gives particular support to public administrations, which generate a significant share of payments in Germany.

Participation in the G10 Committee on Payment and Settlement Systems

At the international level, the Bundesbank is a member of the G10 central banks' Committee on Payment and Settlement Systems (CPSS) at the Bank for International Settlements (BIS) in Basel. In this capacity, the Bundesbank was involved in writing the CPSS report entitled "The interdependencies of payment and settlement systems", which was published in June 2008 and sheds light on the increasingly interdependent nature of these systems and the implications for risks and efficiency in the global financial system. The CPSS also focused its attention on foreign exchange settlement risk, business continuity arrangements for critical settlement systems and the cross-border use of collateral by central banks in the event of a crisis. In addition, the CPSS assisted the Basel Committee

Cashless payment and securities settlement systems

Together with Banque de France and Banca d'Italia, the Bundesbank has been operating the TARGET2 Single Shared Platform on behalf of the Eurosystem successfully for more than one year now. Full migration of all the participating countries was completed in May 2008 and between then and the end of the year, in a highly stable operating environment, an average of around 359,000 payments with a value of €3,050 billion were processed each working day. With its TARGET2-Bundesbank system, which replaced RTGS^{plus}, the Bundesbank itself uses the single technical TARGET2 platform along with 21 other central banks. In total, 139 institutions in Germany and the European Economic Area settle their euro payments directly through the TARGET2-Bundesbank system. Another 14,000 institutions, along with their branches around the world, are indirectly connected to TARGET2 via the German component of the system. The number of transactions processed through the Bundesbank posted a strong year-on-year increase of almost 12 %. The Bundesbank share of the total for TARGET2 has thus expanded to more than 50 % while its share of total individual payments within the EU stands at about 30 %. The volume of processed payments was also up significantly on the year, not least as a consequence of the fact that cash clearing for securities and derivatives transactions now takes place in TARGET2.

In German interbank clearing, the Bundesbank offers its Retail Payment System (RPS) for the settlement of retail payments and the SEPA clearer for payments in the SEPA format as a complement to other providers' services. The RPS is actively used by 255 credit institutions, primarily commercial banks.

Overall, payment transactions executed via these Bundesbank systems have developed as follows:

Cashless payments of the Deutsche Bundesbank

Item	2007 Number (million)	2007 € billion	2008 Number (million)	2008 Percentage change	2008 € billion	2008 Percentage change
Individual payments	42.6	185,080	47.1	10.5	250,446	35.3
TARGET2-BBk/RTGS^{plus}	41.9	181,232	46.5	11.1	248,816	37.3
National	36.2	126,527	36.2	0.1	184,358	45.7
Cross-border	5.7	54,705	10.3	81.1	64,458	17.8
Other[1]	0.8	3,848	0.6	– 21.3	1,630	– 57.6
Retail payments	2,346.4	2,263	2,468.9	5.2	2,359	4.2
RPS	2,343.0	2,262	2,465.4	5.2	2,357	4.2
National	2,339.0	2,255	2,459.3	5.1	2,338	3.7
Cross-border	4.0	7	3.6	– 11.3	6	– 9.9
SEPA credit transfers[2]	.	.	2.6	.	13	.
Other[3]	3.4	2	3.5	1.3	2	1.8
Total	2,389.0	187,343	2,516.0	5.3	252,805	34.9

1 CAM: Customer Access Mechanism (access to TARGET2, correspondent banking), in specific. — **2** National and cross-border credit transfers. — **3** Exclusively MASSE: Procedure for cross-border retail payments effected by public authorities.

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in revising the Principles for Sound Liquidity Risk Management and Supervision (September 2008), not least as a result of the financial market turmoil.

Payment systems oversight in the Eurosystem

At the European level, the Bundesbank's oversight activities were mainly characterised by its involvement in overseeing TARGET2 and the launch of the process for assessing compliance with the Eurosystem's standards for the oversight of card payment schemes. The Bundesbank is responsible for overseeing the German girocard system and is also involved in the joint monitoring of international card schemes operating in the euro area. The Eurosystem is also developing additional European-level oversight standards for important payment instruments (SEPA credit transfer, SEPA direct debit).

Cooperative oversight of CLS and SWIFT

As a cooperative overseer of the Continuous Linked Settlement (CLS) system for international foreign exchange transactions, the Bundesbank was involved in the general risk assessment of the system and took part in discussions concerning the implications of new CLS business activities (settlement of credit derivatives, non-deliverable forwards, FX option premiums). In doing so, the Bundesbank vigorously supported the Eurosystem policy of locating systemically important settlement infrastructures in the euro area, which was defined more specifically in 2008. In their cooperative oversight of SWIFT, the most important international communication services provider in the financial sector, the G10 central banks focused their attention on a realignment of SWIFT's technical infrastructure. Starting at the end of 2009, SWIFT plans to "regionalise" its current global messaging service by organising it into two processing zones, a European zone and a transatlantic zone.

Central counterparty for OTC derivatives

The current turmoil in the financial markets clearly demonstrates the need, from a risk policy perspective, for improvements in how over-the-counter (OTC) derivatives are settled. This is why the Bundesbank has given its backing to statements and initiatives put forward by the Financial Stability Forum (FSF), the G20, the Eurosystem and the European Commission advocating the introduction of one or several central counterparties for OTC derivatives such as credit default swaps. With regard to safety, regulation and oversight, a central counterparty for OTC credit derivatives denominated in euro should be entrenched in the euro area, this being the only way to guarantee the smooth provision and management of liquidity, the transparency of open positions of market participants and the rapid dissemination of information in normal and crisis situations. The necessary payments should be made using secure central bank money via TARGET2.

Projects at the European level involving the Bundesbank: …

… TARGET2-Securities …

Over the course of the last year, work continued on the development of "TARGET2-Securities (T2S)" as a central European platform for securities settlement using central bank money. Market participants were closely involved in these activities. Along with an economic impact analysis, an overview of the governance structure for the current project phase and initial declarations of intent by the individual European central securities depositories (CSDs), the user requirements formed the basis for the ECB Governing Council decision of 17 July 2008 to go ahead with T2S. At the same time, the task of developing and operating T2S was assigned to the Bundesbank, Banca d'Italia, Banco de España and Banque de France. These four central banks, which already collaborated intensively in the user requirements phase, are at present drafting the specifications of T2S. An initial version of the T2S General Functional Specifications was published early in 2009. In addition, it is envisaged to release an overview of the system's technical design. Furthermore, additional detailed work is being vigorously pursued with the involvement of market participants.

… and CCBM2

At its meeting on 17 July 2008, the ECB Governing Council decided to launch the "Collateral Central Bank Management (CCBM2)" project designed to manage national and cross-border use of collateral in the Eurosystem from a single platform. The central banks of Belgium and the Netherlands were given the task of developing and operating CCBM2, based on their existing securities management system. Use of the single platform is voluntary for the national central banks. The Bundesbank will participate in CCBM2 from the outset. The modular design of CCBM2 gives central banks the option of deciding for themselves the extent of their participation.

Service developments: …

… TARGET2 proves its worth, …

Even during the most critical phases of the financial crisis, the settlement of individual payments in euro in TARGET2 has maintained an exceptional level of stability and reliability, with no indications of payments settlement having suffered on account of the financial crisis. In fact, it has been precisely during the financial crisis that each TARGET2 participant was able to benefit from the maximum security afforded by the payment system when processing payments in central bank money. There is no evidence of the financial crisis having had any lasting impact on the behaviour of participants in terms of how they submit payments or provide liquidity for the execution of payment orders. Likewise, the sometimes necessary exclusion of some participants from TARGET2 (eg owing to immediate measures pursuant to section 46a of the German Banking Act (*Kreditwesengesetz*) against the participant concerned) has not led to any disruption within TARGET2.

... introduction of new CBF daytime processing, ...

Soon after TARGET2 was launched in November 2007, CBF migrated its night-time cash clearing process for securities settlement to TARGET2. Daytime cash clearing initially continued to take place directly through accounts held at the Bundesbank. It was then migrated to TARGET2 successfully and on schedule on 17 November 2008 in a joint CBF/Bundesbank project. At the same time, settlement risks in daytime processing were further reduced by means of a revised settlement procedure. On 1 December 2008, cash clearing of transactions with the most important German central counterparties (Eurex Clearing, European Commodity Clearing) was likewise migrated to TARGET2.

... self-collateralisation facility expanded, ...

The connection of CBF daytime processing to TARGET2 has expanded the self-collateralisation service provided by the Bundesbank and CBF for the purpose of making central bank money available during the night. Credit institutions are now able to generate liquidity in central bank money for securities settlement from self-collateralisation during daytime hours up to 10.00. This has further enhanced the efficiency of securities settlement and optimised liquidity management in Germany.

... introduction of SEPA credit transfer and preparations for SEPA direct debit ...

Since SEPA was launched in January 2008, the Bundesbank has been offering its SEPA Clearer, which is part of the Retail Payment System (RPS), to the banking sector as a competitively neutral procedure for the clearing and settlement of SEPA credit transfers. On 28 January 2008, the Bundesbank extended this service to non-bank customers as well, in particular to public administrations. By the end of the year, around 21,000 SEPA credit transfers were being processed by the Bundesbank per working day. As of 1 November 2009, the Bundesbank will offer participating credit institutions and public administrations the additional service of SEPA direct debit clearing and settlement.

... and modernisation of communication channels used in cashless payments and account management

While SEPA is being implemented, the Bundesbank is also modernising its communication infrastructure for cashless payments and account management so as to enable the adoption of secure, broadly accepted communication standards and a gradual replacement of the existing communication channel via the Bundesbank's Electronic Access system. Against this background, at the beginning of 2008 the Bundesbank implemented the high-performance EBICS (Electronic Banking Internet Communication Standard) in order to settle SEPA payments on behalf of credit institutions and non-bank customers. Furthermore, in the area of interbank payments, the Bundesbank supports communication via the SWIFT network. In addition, non-banks with a low payments volume may use a modern and secure online banking procedure.

Organisation and staff

I Strategy

Strategic cycle 2008-2012 launched successfully

The new strategic cycle 2008-2012 was launched successfully in the 2008 financial year. This was confirmed by the first strategy review, which is carried out annually and evaluates the measures taken and progress made in pursuing the strategic objectives. The following section describes developments in the core business areas.

Core business area: monetary policy

In the strategic cycle which began in 2008, application-oriented research in the core business area of monetary policy is being stepped up, eg in the fields of monetary analysis and model-based forecasting and simulation methods. The Bundesbank aims to take on additional joint operational tasks in the implementation of euro-area monetary policy. It will also play its part in developing efficient instruments and management procedures in this context.

Core business area: financial and monetary system

In 2008, as previously, the Bundesbank fulfilled its particular responsibility for maintaining a stable financial and monetary system. In particular, this was exemplified by its active crisis management for handling systemic risks, eg providing special liquidity assistance and co-designing initiatives to help stabilise the financial system. The strong market turbulence, the far-reaching adjustment process in the international financial system and the global burdens on macroeconomic and financial stability have underlined the great importance of analysis and research and the Bundesbank's participation in international bodies working in these areas. In 2009, the ongoing evolution of the international financial and monetary system, including the reform of global financial institutions and learning the lessons from the financial crisis, will remain the focus of work in this business area.

Core business area: banking supervision

The new Prudential Supervisory Guideline (*Aufsichtsrichtlinie*) was adopted at the beginning of 2008. This more clearly delineates the respective responsibilities assigned to the Federal Financial Supervisory Authority (*BaFin*) and the Bundesbank, and also stipulates higher qualitative standards for the Bundesbank, eg when responding to and evaluating cross-institutional requests for information. The analytical tools required for banking supervision are constantly being refined and enhanced, eg in the field of stress testing for liquidity risks. In this business area, too, the main focus of work in the coming year will be on analysing the financial market crisis and collaborative work to improve the regulatory framework – including on an international level.

Regional Offices and branches of the Deutsche Bundesbank on 1 April 2009

Locality number	Bank location	Regional Office [1]	Locality number	Bank location	Regional Office [1]
390	Aachen	D			
720	Augsburg	M	660	Karlsruhe	S
			520	Kassel	F
773	Bayreuth	M	210	Kiel	HH
100	Berlin	B			
480	Bielefeld	D	860	Leipzig	L
430	Bochum	D	545	Ludwigshafen	MZ
290	Bremen	H	230	Lübeck	HH
870	Chemnitz	L	810	Magdeburg	H
570	Coblenz	MZ	550	Mainz	MZ
370	Cologne	D	840	Meiningen	L
180	Cottbus	B	700	Munich	M
440	Dortmund	D	150	Neubrandenburg	HH
850	Dresden	L	760	Nuremberg	M
300	Düsseldorf	D			
350	Duisburg	D	280	Oldenburg	H
			265	Osnabrück	H
820	Erfurt	L			
360	Essen	D	750	Regensburg	M
			640	Reutlingen	S
215	Flensburg	HH	130	Rostock	HH
500	Frankfurt/Main	F			
680	Freiburg	S	590	Saarbrücken	MZ
	Lörrach [2]		600	Stuttgart	S
513	Giessen	F	630	Ulm	S
260	Göttingen	H			
			694	Villingen-	
450	Hagen	D		Schwenningen	S
200	Hamburg	HH			
250	Hanover	H	790	Würzburg	M

1 Abbreviations: B = Berlin; D = Düsseldorf; F = Frankfurt am Main; H = Hanover; HH = Hamburg; L = Leipzig; M = Munich; MZ = Mainz; S = Stuttgart. — **2** Operating unit.

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Core business area: cash management

As of July 2008, all Bundesbank branches offer multi-denomination lodgements as an additional service subject to a charge. Furthermore, since mid-2008, all branches have been offering the Bundesbank's major customers the opportunity to submit cash orders and lodgement notifications electronically (CashEDI). In this way, the Bundesbank is helping to improve efficiency and security in the cash management cycle.

By the end of 2008, around 85% of all affected credit institutions had signed the implementation agreement on the European "Framework for the detection of counterfeits and fitness sorting by credit institutions and other professional cash handlers". Through a more widespread use of ATMs suitable for both in-payments and out-payments (cash-recycling machines), the banking industry can help to achieve an increase in the private recycling volume in banknote processing as aimed for by the Bundesbank. The draft Payment Services Oversight Act *(Zahlungsdiensteaufsichtsgesetz)* approved by the Federal Cabinet, which is set to enter into force in November 2009, could likewise play a key role in building confidence in independent banknote recycling by cash-in-transit companies.

Core business area: cashless payments

The key European project TARGET2 was officially completed in May 2008; the Bundesbank was one of the first central banks to start using this platform for its large-value payment transactions, taking this migration step in November 2007. TARGET2 was jointly developed – and is now run – by the Bundesbank, Banque de France and Banca d'Italia. On 17 July 2008, the ECB Governing Council approved the development of TARGET2 Securities, a key European project for securities settlement. Four central banks – the Bundesbank, Banque de France, Banca d'Italia and Banco de España – have been given the joint responsibility of developing and running the planned single shared platform for securities settlement. This harmonisation measure will further promote the integration of securities markets in Europe. In addition, the Bundesbank is making a major contribution to a number of other European payment system and infrastructure projects, including the Single Euro Payments Area (SEPA).

II Staff

Further downsizing

The number of core staff continued to fall in 2008, decreasing by around 3.2% to 10,801. As in previous years, the branch network bore the brunt of this downsizing. Measured by contractual working hours, the Bundesbank had a weighted core headcount of 10,038 full-time equivalent (FTE) employees (a decline of 3.4%).

On 31 December 2008, 856 members of staff had been admitted to the partial retirement scheme, compared with 901 in 2007. The majority have contracts based on a "phase model", which means that a phase of full-time employment with reduced remuneration is followed by a second pre-retirement phase in which the employee does not work but receives the same (reduced) remuneration as in the first phase. The early retirement scheme available to salaried employees was used by 166 staff members, compared with 299 in 2007.

Expertise ensured through intake of junior staff

In view of the demographic trend in the labour market and the age structure of the Bundesbank's personnel, the deep staff cuts that have been a key feature of the past few years were moderated in the 2008 financial year by a more intensive recruitment of junior staff. In this way, the Bundesbank aims to ensure that it has sufficient numbers of qualified employees to work in its specific areas of activity both now and in the future. The preparatory training scheme for a career path in the Bundesbank's Intermediate Service, which had been discontinued for some time, was resumed in the year under review.

Moreover, the Bundesbank again provided far more commercial trainee vacancies in 2008 than it actually needed to ensure an intake of junior staff. In total, 518 members of staff (482 in 2007) were undergoing professional training as civil servants or salaried employees at the end of the reporting year.

Further development of leadership skills

The demands placed on Bundesbank line managers are growing steadily. For this reason, the Bundesbank some years ago established an employee potential analysis procedure – over and above its business-related training programmes – in order to foster leadership skills among junior staff in the Higher Service. In the 2008 financial year, this procedure was extended to include staff in the Upper Intermediate Service. Furthermore, the Bundesbank takes targeted measures to support all staff members assuming management functions for the first time.

Bundesbank staff on 31 December 2008 *

Table 14

Item	Staff numbers 1				Year-on-year changes			
	Total	Regional Offices	Branches	Central Office	Total	Regional Offices	Branches	Central Office
Civil servants	5,566	1,643	1,826	2,097	– 89	– 40	– 98	49
Salaried staff	5,753	1,569	2,319	1,865	– 234	– 41	– 173	– 20
Total	11,319	3,212	4,145	3,962	– 323	– 81	– 271	29
of which Trainees	518	206	27	285	36	32	– 14	18
Remainder Core staff	10,801	3,006	4,118	3,677	– 359	– 113	– 257	11
of which Staff with permanent contracts	10,711	2,985	4,107	3,619	– 368	– 126	– 250	8
Staff with temporary contracts	90	21	11	58	9	13	– 7	3
Memo item Core staff *pro rata* (full-time equivalent)	10,037.7	2,751.5	3,812.2	3,474.0	– 353.3	– 119.3	– 242.9	8.9

	End-2008	End-2007
* Not included:		
Members of staff on secondment	215	207
Members of staff on unpaid leave	420	458
Members of staff in the second phase of the partial retirement scheme	362	408
1 *Of which*: part-time employees	1,964	1,923

Deutsche Bundesbank

Workplace health management scheme established

In the past, the Bundesbank has promoted a healthy lifestyle for its employees both in and outside of the workplace, eg by offering influenza vaccinations or talks providing information on cardiovascular diseases. Now, these activities are being systematically enhanced and refined under an overarching workplace health management scheme.

Staff exchange within the European System of Central Banks

At the end of the year under review, 83 members of the Bundesbank's staff were on secondment to the European Central Bank. In addition, 20 employees took up temporary positions at the ECB or another ESCB central bank. In total, eight employees of other central banks in Europe worked for a limited term at the Bundesbank under the ESCB staff exchange programme.

III Offices held by members of the Executive Board of the Deutsche Bundesbank

At its meeting on 14 July 2004, the Executive Board of the Deutsche Bundesbank, in consultation with the Corporate Governance Compliance Adviser, Professor Theodor Baums, approved a Code of Conduct for the members of the Executive Board of the Deutsche Bundesbank. This code states, *inter alia*, that details of offices held by Board members on supervisory boards or similar inspection bodies of business enterprises shall be disclosed in the Annual Report.

The Board members hold the offices indicated below.

– Professor Axel A Weber, President:
  Member of the Board of Directors, BIS[1]

– Professor Franz-Christoph Zeitler, Vice-President:
  Member of the Administrative Council, Liko-Bank;[2]
  Member of the Board of Trustees, Monetary Stability Foundation

– Mr Rudolf Böhmler:
  Member of the Supervisory Board of Aradex AG, Lorch[3]

– Dr Hans Georg Fabritius:
  Alternate, Administrative Council, Liko-Bank;[2]
  Alternate, Credit Committee, Liko-Bank;[2]
  Member of the Administrative Council, Rhineland-Westphalian Institute for Economic Research

– Professor Hans-Helmut Kotz:
  Member of the Administrative Council, Liko-Bank;[2]
  Member of the Credit Committee, Liko-Bank;[2]
  Standing guest on the Central Capital Market Committee

1 Ex officio.
2 Partnership agreement.
3 Membership will elapse upon expiry of the current mandate, which was accepted before Mr Böhmler joined the Deutsche Bundesbank's Executive Board.

– Dr Hans Reckers:
  Alternate, Administrative Council, Liko-Bank;[1]
  Member of the Stock Exchange Expert Commission of the Federal Ministry of Finance

– Professor Hermann Remsperger:
  Alternate, Board of Directors, BIS;[2]
  Chairman of the Board of Trustees, Monetary Stability Foundation

1 Partnership agreement.
2 Ex officio.

Other activities

I Conferences and workshops

Conferences influenced by the financial crisis

In 2008, the Bundesbank once again organised a series of conferences and workshops in which it had both a scientific and economic policy interest. Many of these events dealt with issues which were more or less directly related to the financial crisis. The topic of the Bundesbank Spring Conference was "Central banks and globalisation". The current crisis has affected virtually the entire world economy. Therefore, the aim of the conference was to shed light on how shocks are transmitted internationally, whether the ways of transmitting shocks have changed over time and how monetary policy makers should react. Another phenomenon which received much attention in connection with the events of the past year was the transmission of risks in lending operations between banks and other financial intermediaries and the consequences of the transmission of these risks for financial stability. The Autumn Conference entitled "Risk transfer: challenges for financial institutions and markets" addressed a number of arguments which are important in this context. A third key aspect of the current financial crisis is the loss in confidence among the financial market players and the resultant drying-up of liquidity. The conference "Liquidity: concepts and risks" dealt with issues related to this problem. Finally, the conference "What drives asset and housing markets?" looked at the reasons for the bubbles which can be observed in these markets in some countries and which helped trigger the current crisis.

G8 conferences

As part of the G8 initiative to develop the domestic bond markets in emerging market economies and developing countries, the Bundesbank organised a conference entitled "Financial globalisation, vulnerabilities and data needs" as well as a workshop on "Global support to develop domestic bond markets" in these countries. These events supported the implementation of the recommendations made by the G8 Finance Ministers in an action plan approved under the German presidency of the G7/G8.[1]

The Bundesbank once again organised most of these events in cooperation with other institutions. These included the Federal Ministry of Finance, the University of Frankfurt's Center for Financial Studies as well as its Institute for Monetary and Financial Stability, CESifo in Munich, the Halle Institute for Economic Research (iwh), the Centre for European Economic Research (ZEW) in Mannheim,

1 See Deutsche Bundesbank, Bond markets in emerging market economies, Financial Stability Review 2007, pp 113-131.

several different universities, the International Monetary Fund (IMF), the World Bank, the ECB, the BIS, the OECD and the Centre for Economic Policy Research in London.

II Research Centre

At the Research Centre, work was carried out on a variety of projects focusing on economic policy, in particular monetary policy, as well as on financial stability. Many of these projects were carried out in cooperation with experts from other central banks and from universities.

Several international research networks

In 2008, Bundesbank staff were active in several international networks. One of these research networks aims to measure and analyse the assets and debts of private households as well as their consumption using a random survey technique. In 2008, preparations were made to enable the first survey to take place in 2010. The ESCB research network on wage setting behaviour in Europe made further progress in the past year, releasing a series of publications and an interim report. Through macro and micro studies, this network aims to improve understanding of the determining factors in the wage setting process, existing wage rigidities, the relationship between wages and price setting and the functioning of the labour markets.

Key areas of Bundesbank research activity within the context of the Basel Committee's Research Task Force included the modelling of the interaction between market and credit risks, in particular when securitising credit claims, as well as macro stress tests in credit institutions and central banks. The Bundesbank carried out research in both of these areas.

Models for macroeconomic analysis, forecasting and stress tests

The Research Centre also focused on developing economic and statistical models. Variants of the New Keynesian general equilibrium models have been developed in order to analyse monetary and fiscal policy questions. Another, very empirically oriented, class of model serves to improve the methodological base for the forecasting process. In this context, so-called dynamic factor models play a significant role. They are designed to efficiently evaluate a very large number of time series when forecasting important economic indicators such as inflation and GDP. In the field of financial stability, models which help to test the resistance of the financial system in stress situations were refined and evolved.

Numerous publications

The Research Centre published 50 discussion papers during the year under review, 30 in Series 1 (Economic Studies) and 20 in Series 2 (Banking and Financial Studies). They primarily reflect the work of employees and visiting researchers who were working on temporary assignments at the Research Centre. Many of these papers went on to be published in academic journals and books. Last year, Bundesbank staff published around 60 such articles.

Research council/Research professors

In 2008, Professor Charles Goodhart left the Bundesbank research council, of which he had been a member since 2004. Professor Stefan Mittnik was appointed to the council. Additionally, the Bundesbank was able to secure Stefan Gerlach and Thomas Laubach as research professors for the Research Centre.

III Technical central bank cooperation

Worldwide activity concentrated in certain areas

The Bundesbank runs technical cooperation projects with a large number of central banks. These projects primarily involve training and consultancy activities which are very practice-oriented. The aim of this partnership-based scheme is to enable the participants to apply the approaches and processes directly in their central banking activities. In 2008, the Bundesbank, like many other central banks and institutions throughout the world, continued its technical central bank cooperation activities to the same extent as in previous years. In the last year, particular emphasis was placed on supporting the Federal President's "Partnership with Africa" programme as well as on various Central Asian countries which were highlighted as being particularly important in the EU's Central Asia strategy.

More practical programmes and growing international cooperation

The Bundesbank's training and consultancy activities are essentially demand driven, ie the content is determined by the interests of our international partner central banks. The events on offer cover the entire spectrum of modern central bank management. Interested parties are increasingly expecting practical programmes in which there is a direct exchange of knowledge and experiences which our partners can then directly apply at their institutions. The Bundesbank offers these programmes via various platforms. Alongside the international central banking courses, which have formed the backbone of the Bundesbank's technical central bank cooperation for many years, bilateral activities which take place both in Germany and abroad and are tailored to meet the individual requirements of the partner central banks are also a core feature of technical central bank cooperation activities. In 2008, the Bundesbank recorded a slight increase in the number of consultancy activities abroad, although this was mainly focused on short-term consulting assignments. A consultant is currently on a long-term on-site assignment at the central bank of Botswana. With respect to major projects, a trend has emerged in recent years of increasing international cooperation and the formation of technical central bank cooperation consortia. Such joint projects have become established in the ESCB in particular. In 2008, three large projects funded by the EU for the central banks of Egypt, Russia and Serbia were started. Organised in cooperation with the ECB and a series of other national central banks, these projects will run over several years.

Demand for central bank expertise remained high

The demand for Bundesbank training and consultancy services remained high. More than 3,600 central bank staff members from over 90 central banks attended the 300 events organised by the Bundesbank both in Germany and abroad. In terms of content, interest was concentrated on current questions regarding the core areas of central bank business such as monetary policy, financial market stability and banking supervision, for example. Topics related to corporate governance also became more popular among our partner central banks, however. We expect demand from abroad for technical central bank cooperation activities to remain strong in 2009.

IV Services the Deutsche Bundesbank provides for the Federal Government

Involvement in the issuance of Federal securities

The Bundesbank conducts the auctions of one-off issues of Federal securities and carries out market management operations for listed Federal securities on the German stock exchanges on behalf of the Federal Republic of Germany – Finance Agency. One-off issues of Federal securities are sold by auction via the electronic "Bund Bidding System" (BBS) developed by the Bundesbank. In 2008, 37 auctions, including three auctions of inflation-linked instruments, were carried out. The allotment volume was €170.1 billion (2007: €184.4 billion in 36 auctions). In the reporting year, the Bundesbank continued to be involved, through credit institutions, in selling tap issues of Federal Treasury financing paper and Federal savings notes.

Asset management …

In its role as fiscal agent, the Bundesbank also performs asset management services on behalf of the Federal and state governments. A passive strategy is used in the management of these assets.

… for the Federal Government, …

Asset management services for the Federal Government cover several pension fund portfolios and the portfolio of the Monetary Stability Foundation. The Bundesbank was given the responsibility for managing this portfolio after the Act on a Federal Government Pension Reserve (*Versorgungsrücklagegesetz des Bundes*) came into force in 1999. The reserve is partially funded by wage increases and serves to balance out the Federal Government's increased pension burden in the years 2018 to 2032. In 2007, the Bundesbank was also given the task of managing the Federal Government's newly established pension fund. The purpose of this pension fund is to finance the pension claims of all Federal civil servants, judges and professional soldiers newly hired from 2007 onwards. The spectrum of investment instruments permitted by the Federal Government includes Federal securities as well as other investment-grade euro-denominated debt securities. For the pension fund, Parliament also created the possibility of an index-linked investment of up to 10% of the assets in shares.

… for the Federal Employment Agency, …

At the beginning of 2008, the Federal Employment Agency's pension scheme was separated from that of the Federal Government and redesigned. The Bundesbank was appointed asset manager by law. This portfolio is also subject to the investment rules of the Federal Government's reserve fund.

… for the Federal Financial Supervisory Authority …

The funded pension scheme for civil servants employed at the Federal Financial Supervisory Authority is also regulated outside the scope of the aforementioned Act on a Federal Government Pension Reserve. Nevertheless, the portfolio managed by the Bundesbank has a similar structure to the portfolio of the Federal Government's pension fund.

… and for the federal states

The Bundesbank also provides varying levels of securities management services for several state government pension reserves and funds. The number of states that have requested such services from the Bundesbank increased again in 2008.

V Own portfolio and management of the foreign reserves

Own portfolio

The Bundesbank's own portfolio, which is denominated in euro, is the balance sheet counterpart to the pension reserves for Bundesbank civil servants, the capital base and the statutory reserves and provisions for general risks. It mirrors the core of the market for euro-denominated covered bonds using a buy-and-hold strategy.

Management of foreign reserves…

The management of the Bundesbank's foreign reserves includes the investment of foreign currency reserves, stewardship of the IMF reserve position as well as management of gold reserves. Along with its own foreign reserve assets, the Bundesbank also manages some of the ECB's foreign reserves. Holding liquid foreign currency reserves and concentrating on investment-grade instruments have proven effective during the financial market turmoil.

…on the basis of benchmark portfolios…

The framework for managing the foreign currency reserves of the Bundesbank and the ECB is defined by benchmark portfolios for each currency (US dollar and yen). These benchmarks reflect the desired long-term risk level and serve as a yardstick. The benchmarks for the Bundesbank's own reserves are specified by the Executive Board each year. The Bundesbank manages the ECB reserves for which it is responsible using benchmarks fixed by the Governing Council and Executive Board of the ECB. Reserve management decisions may deviate from the benchmark within a narrow margin in order to outperform the benchmark through duration and yield curve management and the choice of instruments.

…and eligible investment instruments and limits

In addition to US and Japanese government bonds, a very limited volume of fixed-income securities of other investment-grade issuers represent eligible investment instruments. Furthermore, investments can be made in the money market, in particular in the form of repo transactions and short-term time deposits. Business activities with individual counterparties in the different business lines are regulated by a differentiated limit system.

Annual accounts of the Deutsche Bundesbank for 2008

I Balance sheet of the Deutsche Bundesbank as at 31 December 2008

Assets

				31.12.2007
			€ million	€ million
1	Gold and gold receivables		68,194	62,433
2	Claims on non-euro-area residents denominated in foreign currency			
	2.1 Receivables from the IMF	3,285		(2,418)
	2.2 Balances with banks, portfolio investment, external loans and other external assets	27,705		(27,694)
			30,991	30,112
3	Claims on euro-area residents denominated in foreign currency		63,263	7,051
4	Claims on non-euro-area residents denominated in euro		300	300
5	Lending to euro-area credit institutions related to monetary policy operations denominated in euro			
	5.1 Main refinancing operations	75,291		(133,095)
	5.2 Longer-term refinancing operations	201,383		(134,769)
	5.3 Fine-tuning reverse operations	—		(—)
	5.4 Structural reverse operations	—		(—)
	5.5 Marginal lending facility	750		(91)
			277,425	267,955
6	Other claims on euro-area credit institutions denominated in euro		22,031	13,077
7	Securities of euro-area residents denominated in euro		—	—
8	Claims on the Federal Government		4,440	4,440
9	Intra-Eurosystem claims			
	9.1 Participating interest in the ECB	1,196		(1,196)
	9.2 Claims arising from the transfer of foreign reserves to the ECB	11,821		(11,821)
	9.3 Claims related to the allocation of euro banknotes within the Eurosystem (net)	—		(—)
	9.4 Other claims within the Eurosystem (net)	115,537		(70,933)
			128,555	83,951
10	Items in course of settlement		2	4
11	Other assets			
	11.1 Coins	665		(626)
	11.2 Tangible and intangible fixed assets	1,253		(1,472)
	11.3 Other financial assets	10,011		(9,799)
	11.4 Off-balance-sheet instruments revaluation differences	2,813		(158)
	11.5 Accruals and prepaid expenses	2,330		(1,979)
	11.6 Sundry items	289		(316)
			17,362	14,351
			612,563	483,674

Liabilities

				31.12.2007
			€ million	€ million
1	Banknotes in circulation		206,620	183,781
2	Liabilities to euro-area credit institutions related to monetary policy operations denominated in euro			
	2.1 Current accounts	100,678		(64,032)
	2.2 Deposit facility	66,261		(4,931)
	2.3 Fixed-term deposits	—		(40,550)
	2.4 Fine-tuning reverse operations	—		(—)
			166,938	109,513
3	Other liabilities to euro-area credit institutions denominated in euro		—	—
4	Liabilities to other euro-area residents denominated in euro			
	4.1 General government deposits	170		(43)
	4.2 Other liabilities	646		(405)
			816	448
5	Liabilities to non-euro-area residents denominated in euro		9,226	14,045
6	Liabilities to euro-area residents denominated in foreign currency		18,401	4
7	Liabilities to non-euro-area residents denominated in foreign currency		2,540	1,951
8	Counterpart of special drawing rights allocated by the IMF		1,338	1,300
9	Intra-Eurosystem liabilities			
	9.1 Liabilities to the ECB arising from promissory notes	—		(—)
	9.2 Liabilities related to the allocation of euro banknotes within the Eurosystem (net)	121,759		(99,498)
	9.3 Other liabilities within the Eurosystem (net)	—		(—)
			121,759	99,498
10	Items in course of settlement		4	5
11	Other liabilities			
	11.1 Off-balance-sheet instruments revaluation differences	—		(—)
	11.2 Accruals and income collected in advance	1,206		(1,168)
	11.3 Sundry items	2,333		(2,442)
			3,540	3,610
12	Provisions		7,011	5,190
13	Revaluation accounts		63,108	55,044
14	Capital and reserves			
	14.1 Capital	2,500		(2,500)
	14.2 Statutory reserves	2,500		(2,500)
			5,000	5,000
15	Profit for the year		6,261	4,285
			612,563	483,674

II Profit and loss account of the Deutsche Bundesbank for the year 2008

				2007
			€ million	€ million
	– Interest income	16,880		(13,111)
	– Interest expense	– 8,451		(– 5,609)
1	Net interest income		8,429	7,502
	– Realised gains/losses arising from financial operations	623		(158)
	– Write-downs on financial assets and positions	0		(– 2,256)
	– Transfers to/from provisions for general risks, foreign exchange risks and price risks	– 40		(152)
2	Net result of financial operations, write-downs and risk provisions		583	– 1,946
	– Income from fees and commissions	62		(59)
	– Expense relating to fees and commissions	– 13		(– 14)
3	Net income from fees and commissions		49	46
4	Income from participating interests		371	16
5	Net result arising from allocation of monetary income		– 1,802	– 113
6	Other income		143	140
7	**Total net income**		7,772	5,644
8	Staff costs		954	825
9	Other administrative expenses		237	241
10	Depreciation on tangible and intangible fixed assets		141	147
11	Banknote printing		157	128
12	Other expenses		23	18
13	**Profit for the year**		6,261	4,285

Frankfurt am Main, 17 February 2009

DEUTSCHE BUNDESBANK
Executive Board

Professor Axel A Weber　　Professor Franz-Christoph Zeitler

Mr Rudolf Böhmler　　Dr Hans Georg Fabritius　　Professor Hans-Helmut Kotz　　Dr Hans Reckers　　Professor Hermann Remsperger

III Unqualified auditor's report for statutory audits of annual financial statements

We have audited the annual financial statements – consisting of the balance sheet and the profit and loss account – together with the bookkeeping system of the Deutsche Bundesbank for the business year from 1 January 2008 to 31 December 2008. The maintenance of the books and records and the preparation of the annual financial statements in accordance with generally accepted accounting principles and the principles for the accounting of the Deutsche Bundesbank approved by the Executive Board pursuant to section 26 (2) of the Bundesbank Act are the responsibility of the Executive Board of the Deutsche Bundesbank. Our responsibility is to express an opinion on the annual financial statements, together with the bookkeeping system, based on our audit.

We conducted our audit of the annual financial statements in accordance with section 317 HGB ["Handelsgesetzbuch": "German Commercial Code"] and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [*Institute of Public Auditors in Germany*] (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the annual financial statements in accordance with [German] principles of proper accounting are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Deutsche Bundesbank and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the books and records as well as the annual financial statements are examined primarily on a test basis within the framework of the audit. The audit includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall presentation of the annual financial statements. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the annual financial statements comply with the legal requirements and the additional provisions of the principles for the accounting of the Deutsche Bundesbank and give a true and fair view of the net assets, financial position and results of operations of the Deutsche Bundesbank in accordance with [German] principles of proper accounting.

Frankfurt am Main, 4 March 2009

PricewaterhouseCoopers
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

Borgel
Wirtschaftsprüfer

Theobald
Wirtschaftsprüfer

Overview of the principles for the accounting of the Deutsche Bundesbank

General accounting principles
Record of economic reality, thus reflecting the Bundesbank's assets and liabilities, financial position and profitability; prudence; account to be taken of post-balance-sheet events that affect the balance sheet; materiality; going-concern principle; accruals principle (income and expense to be recognised in the accounting period in which they are earned or incurred); consistency and comparability.

Recording of spot transactions
Spot transactions in gold and foreign currencies shall be taken into account as from the trade date for ascertaining the average acquisition costs and the realised gains and losses. The balance sheet recording of these spot transactions and of spot transactions in securities shall be based on the date of payment (settlement date).

Balance sheet valuation rules
Gold, foreign currency instruments, securities and financial instruments shall be valued at mid-market rates and prices on the balance sheet date. Securities held to maturity and non-marketable securities are valued at amortised cost.

No distinction shall be made between price and currency revaluation differences for gold, but a single gold revaluation difference shall be accounted for on the basis of the euro price per defined unit of weight of gold derived from the euro-US dollar exchange rate on the balance sheet date.

Revaluation shall take place on a currency-by-currency basis for foreign exchange (including off-balance-sheet transactions).

In the case of securities, revaluation shall be on a code-by-code basis (same ISIN number/type).

Repurchase agreements
A repurchase agreement (repo) shall be recorded as a collateralised inward deposit on the liabilities side of the balance sheet while the item that has been given as collateral remains on the assets side of the balance sheet. A reverse repurchase agreement (reverse repo) shall be recorded as a collateralised outward loan on the assets side of the balance sheet for the amount of the loan.

In the case of security lending transactions, the assets shall remain on the balance sheet of the transferor.

Income recognition
Realised gains and realised losses can arise only in the case of transactions leading to a reduction in securities items or currency positions. They are derived from a comparison of the transaction value with the acquisition value as calculated using the average method; they shall be taken into the profit and loss account.

Unrealised gains and unrealised losses arise as a result of the revaluation of assets through a comparison of the market value with the acquisition value as calculated using the average method. Unrealised gains shall not be recognised as income but shall be transferred direct to a revaluation account.

Unrealised losses shall be taken into the profit and loss account if they exceed previous unrealised gains registered in the corresponding revaluation account. Unrealised losses recorded in the profit and loss account in previous years shall not be reversed in subsequent years in the event of new unrealised gains. There shall be no netting of unrealised losses in any one security, in any currency or in gold holdings against unrealised gains in other securities, currencies or gold.

The average cost method shall be used on a daily basis for calculating the acquisition cost in the case of assets that are subject to exchange rate and/or price movements. The average cost price or rate of the assets shall be reduced by unrealised losses taken into the profit and loss account at the end of the year.

Premiums or discounts arising on purchased securities shall be treated as part of interest income and shall be amortised using either the straight-line method or the implicit rate of return method. The implicit rate of return method shall be used in the case of zero-coupon bonds with a residual maturity of more than one year at the time of acquisition.

Accrual and deferral items covering foreign currency holdings shall be converted at the mid-market rate on each business day and change the respective foreign currency position.

Accounting rules for off-balance-sheet instruments

Foreign exchange forward transactions, the forward legs of foreign exchange swaps and other currency instruments involving an exchange of one currency for another at a future date shall be included in the foreign currency position as from the trade date.

Interest rate swaps, futures, forward rate agreements and other interest rate instruments shall be accounted for and valued on an item-by-item basis.

Gains and losses arising from off-balance-sheet instruments shall be treated in a similar manner to those from spot transactions.

Tangible and intangible fixed assets

Tangible and intangible fixed assets shall be valued at cost less depreciation, which shall be calculated on a straight-line basis and applied over the expected economic life of the assets. A distinction shall be made as follows:

– Computers, related hardware and software, and motor vehicles: four years
– Equipment, furniture and installed equipment: ten years
– Building and capitalised refurbishment expenditure: 25 years
– Depreciation shall not apply to land

Tangible and intangible fixed assets, the acquisition value after deduction of value added tax of which is less than €10,000 shall be fully amortised in the year in which they were acquired.

Provisions

The regulations set forth in the Commercial Code continue to apply to the reporting of provisions in the balance sheet. Pursuant to section 26 (2) of the Bundesbank Act, the creation of liability items for general risks associated with domestic and foreign business is possible.

Transitory rules

The assets and liabilities shown in the closing Deutsche Mark balance sheet of 31 December 1998 shall be revalued on 1 January 1999. Unrealised gains arising on or before 1 January 1999 are to be recorded separately from the unrealised gains which arise after 1 January 1999. The market rates/prices applied by the Bundesbank in the euro-denominated opening balance sheet of 1 January 1999 shall be deemed to be the average acquisition rates/prices as at 1 January 1999. The revaluation items for unrealised gains accruing on or before 1 January 1999 shall be dissolved only in connection with decreases in value and in the event of disposals after 1 January 1999.

IV General information on annual accounts

Legal basis

Sections 26 and 27 of the Bundesbank Act form the legal basis for the annual accounts and the distribution of profit. In accordance with the provisions on accounting laid down in the second sentence of section 26 (2), the Bundesbank may apply the accounting principles governing the annual accounts of the ECB.

Accounting principles of the Bundesbank

The Governing Council of the ECB adopted the principles it applies to its annual accounts in accordance with Article 26.2 of the ESCB Statute. The Deutsche Bundesbank decided to adopt those principles as the "accounting principles of the Deutsche Bundesbank".[1] An overview of the principles for the accounting of the Deutsche Bundesbank is given above.

Notes on balance sheet entry of euro banknotes and associated intra-Eurosystem balances arising from the allocation of euro banknotes within the Eurosystem

The ECB and the national central banks of the euro-area countries, which together comprise the Eurosystem, issue banknotes denominated in euro. The following allocation procedure was approved for recording the euro banknotes in circulation in the financial statements of the individual central banks in the Eurosystem.[2] The respective share of the total value of euro banknotes in circulation due to each central bank in the Eurosystem is calculated on the last business day of each month in accordance with the key for allocating euro banknotes. The ECB has been allocated an 8% share of the total value of the euro banknotes in circulation whereas the remaining 92% has been allocated to the national central banks in proportion to their respective paid-up shares in the capital of the ECB. In the year under review the Bundesbank had a 29.4% share in the fully paid-up capital of the ECB and therefore a 27.1% share of the euro banknotes in circulation in accordance with the banknote allocation key. The value of the Bundesbank's share in the total amount of euro banknotes issued by the Eurosystem is shown in item 1 "Banknotes in circulation" on the liabilities side of the balance sheet.

The difference between the value of the euro banknotes allocated to each Eurosystem central bank in accordance with the banknote allocation key and the value of the euro banknotes that this national central bank actually puts into

1 Published as a revised edition in Bundesbank Notice No 10001/2009 of 3 February 2009.
2 Decision of the European Central Bank of 6 December 2001 on the issue of euro banknotes (ECB/2001/15).

circulation gives rise to remunerated intra-Eurosystem balances.[1] If the value of the euro banknotes actually issued is greater than the value according to the banknote allocation key, the difference is recorded in the balance sheet in liability sub-item 9.2 "Liabilities related to the allocation of euro banknotes within the Eurosystem". If the value of the euro banknotes actually issued is less than the value according to the banknote allocation key, the difference is recorded in asset sub-item 9.3 "Claims related to the allocation of euro banknotes within the Eurosystem". These balances are remunerated at the latest available rate of the main refinancing operations.

In the year of the cash changeover and in the following five years, the intra-Eurosystem balances arising from the allocation of euro banknotes within the Eurosystem are being adjusted in order to avoid significant changes in NCBs' relevant income positions from those in previous years. The adjustments are effected by taking into account the differences between the average value of the banknotes which each national central bank had in circulation in the reference period and the average value of the banknotes which would have been allocated to them during that period in accordance with the ECB's capital key. The adjustments are being reduced in annual stages until the first day of the sixth year after the year of the cash changeover when income from euro banknotes will be allocated fully in proportion to the NCB's paid-up shares in the ECB's capital. For the Bundesbank, the adjustment was to be made between 2002 and 2007. The period between July 1999 and June 2001 was taken as the reference period. The interest income and interest expense arising from the remuneration of the intra-Eurosystem balances are cleared through the accounts of the ECB and are shown in the profit and loss account of the Bundesbank in item 1 "Net interest income".

Furthermore, the ECB's seigniorage income from the transfer of 8% of the euro banknotes in circulation to the ECB is allocated to the national central banks of the Eurosystem in the form of an interim distribution of profit in the financial year in which the income arose unless the ECB's net profit for the year is less than the income earned on the euro banknotes allocated to it or, as a result of a decision by the Governing Council of the ECB, the amount is retained for alloca-

1 Decision of the European Central Bank of 6 December 2001 on the allocation of monetary income of the national central banks of participating member states from the financial year 2002 (ECB/2001/16) and amended by its decisions of 19 May 2006 (ECB/2006/7) and 22 November 2007 (ECB/2007/15).

tion to a risk provision.[1] For the financial year 2008, €1,025 million of the ECB's income from banknotes allocated to it was retained to fund the risk provision. The remaining income of €1,206 million from banknotes allocated to it was distributed among the national central banks as interim profit for 2008 on 5 January 2009. The Bundesbank's share of €355 million is shown in item 4 "Income from participating interests" in its profit and loss account.

Change to ECB capital key on 1 January 2008

As of 1 January 2008, the Eurosystem was expanded owing to the accession of the Maltese and Cypriot central banks, which paid in their capital shares to the ECB in full. As a result, the Bundesbank's share in the fully paid-up capital of the ECB declined from 29.5% to 29.4% on 1 January 2008.

Change to ECB capital key on 1 January 2009

Pursuant to the provisions laid down in Article 29.3 of the ESCB Statute, the key establishing the respective subscriptions of the ESCB national central banks to the ECB's capital is to be adjusted every five years. At the beginning of 2009, such an adjustment was made on the basis of the EU Council Decision of 15 July 2003 on the statistical data to be used for determining the key for subscription to the capital of the European Central Bank. The Bundesbank's share of the ECB's subscribed capital changed on 1 January 2009 from 20.5% to 18.9%. The main results of this for the Bundesbank as of 1 January 2009 were that the Bundesbank's participating interest in the ECB (see asset sub-item 9.1) decreased from €1,182 million to €1,091 million. The Bundesbank's euro-denominated claims arising from the transfer of foreign reserves to the ECB fell from €11,821 million to €10,909 million (asset sub-item 9.2).

Furthermore, the Slovakian central bank joined the Eurosystem on 1 January 2009 and paid up its capital share to the ECB in full. As a result, the Bundesbank's share in the fully paid-up capital of the ECB dropped from 29.4% to 27.1% on 1 January 2009.

Preparation and auditing of financial statements

The Executive Board drew up the Bundesbank's financial statements for the financial year 2008 on 17 February 2009. The financial statements were audited by PricewaterhouseCoopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Frankfurt am Main. The Executive Board had appointed the firm as external auditors on 6 November 2007 in accordance with section 26 (3) of the Bundesbank Act. The auditors confirmed without qualification on 4 March 2009 that

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1 Decision of the European Central Bank of 17 November 2005 on the distribution of the income of the European Central Bank on euro banknotes in circulation to the national central banks of the participating member states (ECB/2005/11).

the Bundesbank's financial statements for 2008 – consisting of the balance sheet and the profit and loss account – comply with the statutory provisions and the additional provisions of the principles for the accounting of the Deutsche Bundesbank and give a true and fair view of the net assets, financial position and results of operations of the Deutsche Bundesbank. After studying the external auditors' report, the Executive Board decided to publish the financial statements and transfer the Bundesbank's profit to the Federal Government on 10 March 2009.

V Notes on the individual balance sheet items

1 Assets

Gold and gold receivables

At the end of 2008, the Bundesbank's holdings of fine gold (ozf) amounted to 3,412,598 kg or 110 million ounces. The gold was valued at market prices (1 kg = €19,983.04 or 1 ozf = €621.542). In the year under review the gold holdings declined by 4,810 kg or 0.2 million ounces. This was due to the sale of gold to the Federal Government at market prices for the purpose of minting gold coins.

Claims on non-euro-area residents denominated in foreign currency

The claims on the International Monetary Fund (IMF) as well as balances with banks, portfolio investment, loans and other foreign currency claims on non-euro-area residents are shown in this item.

Receivables from the IMF

This sub-item contains the claims on the IMF which are financed and held by the Bundesbank and which arise from the Federal Republic of Germany's membership of the IMF. The claims, which total SDR 2,974 million (€3,285 million), consist of drawing rights within the reserve tranche and special drawing rights.

The drawing rights within the reserve tranche correspond to the amounts actually paid to the IMF in gold, special drawing rights, foreign exchange and national currency under the German quota. The drawing rights held represent the difference between the unchanged German quota of SDR 13,008 million (€14,371 million) and the euro balances amounting to €12,663 million (SDR 11,461 million) at the disposal of the IMF at the end of the year. In 2008 there was a net

Receivables from the IMF								Table 15
	31.12.2008		31.12.2007		Year-on-year change			
Item	SDR million	€ million	SDR million	€ million	SDR million	%	€ million	%
German quota	13,008	14,371	13,008	13,971	–	–	400	2.9
less euro balances	11,461	12,663	12,125	13,022	– 663	– 5.5	– 359	– 2.8
Drawing rights within the reserve tranche	1,547	1,709	884	949	663	75.0	760	80.1
Special drawing rights	1,427	1,576	1,368	1,469	59	4.3	107	7.3
Total	2,974	3,285	2,252	2,418	722	32.1	867	35.9

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increase of SDR 663 million (€760 million) to SDR 1,547 million (€1,709 million) in the holdings of drawing rights.

Special drawing rights, by means of which convertible currencies can be obtained at any time, were originally allocated free of charge to the extent of SDR 1,211 million. A corresponding counterpart is shown as liability item 8, "Counterpart of special drawing rights allocated by the IMF". The level of special drawing rights held at the end of 2008 amounted to SDR 1,427 million (€1,576 million) compared with SDR 1,368 million (€1,469 million) on 31 December 2007.

If all items on the assets side and the liabilities side of the balance sheet are taken into account, the net SDR item amounted to SDR 1,765 million compared with SDR 1,045 million in 2007. The year-end revaluation is based on the market rate of SDR 1 = €1.1048 (2007: SDR 1 = €1.0740) calculated by the ECB at the end of the year for all central banks participating in the Eurosystem.

Balances with banks and portfolio investment, external loans and other external assets

The balances with banks, portfolio investment, loans and other foreign currency claims which are shown in this sub-item amounted to €27,705 million at the end of 2008 compared with €27,694 million on 31 December 2007. These are almost exclusively US dollar holdings amounting to US$37,631 million (= €27,039 million), representing a decline of US$2,392 million from the previous year. This sub-item also contains holdings in yen (¥83,086 million = €659 million) and a very small amount in other currencies. The holdings are interest-bearing. If all US dollar items on the assets side and the liabilities side of the balance sheet are taken into account, the net US dollar item valued at market prices amounted to US$38,031 million compared with US$37,467 million in 2007 and the net yen item valued at market prices amounted to ¥83,306 million

Balances with banks, portfolio investment, external loans and other external assets Table 16

Item	31.12.2008 € million	31.12.2007 € million	Year-on-year change € million	%
Current account holdings and overnight deposits	1,576	794	783	98.7
Claims arising from reverse repurchase agreements (reverse repos, held in US dollars)	1,478	1,972	– 494	– 25.1
Fixed-term deposits and deposits at notice (held in US dollars)	–	3,726	– 3,726	– 100.0
Marketable securities	24,535	21,099	3,436	16.3
of which: amount held in US dollars	23,978	20,641	3,337	16.2
Other	115	102	13	12.6
Total	27,705	27,694	12	0.0

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compared with ¥82,107 million in 2007. The foreign currency items were valued at the end-of-year market rate; in the case of the US dollar item, this amounted to €1 = US$1.3917 (compared with €1 = US$1.4721 at the end of the previous year) and for the yen item €1 = ¥126.14 (2007: €1 = ¥164.93).

Claims on euro-area residents denominated in foreign currency

This item consists mainly of US dollar claims on credit institutions within the context of the Term Auction Facility. In order to carry out these refinancing operations, the ECB receives US dollars from the Fed based on the joint swap agreement; the ECB then makes these available to the national central banks which pass them on to Eurosystem credit institutions. The TARGET balances resulting from swap transactions between the ECB and the Bundesbank are shown in asset sub-item 9.4 “Other claims within the Eurosystem (net)”.

Claims on non-euro-area residents denominated in euro

A long-term interest-free loan amounting to €300 million which the Bundesbank made available to the IMF in agreement with the Federal Government in 2000 is shown in this item. The loan is in connection with the financing of debt relief which the IMF grants to the heavily indebted poor developing countries (Heavily Indebted Poor Countries Initiative or HIPC initiative). The interest income from the investment of this money is at the disposal of a trust fund which is administered by the IMF and from which the debt relief granted by the IMF is financed. The loan has a maturity of ten years.

Lending to euro-area credit institutions related to monetary policy operations denominated in euro

This item reflects the volume and composition of the Bundesbank’s refinancing of the credit institutions. At the end of the year under review, the amount of funds loaned for refinancing purposes was €9,470 million higher than on 31 December 2007.

The main refinancing operations undertaken for money market management purposes are regular weekly transactions with a normal one-week maturity, the purpose of which is to provide liquidity. In the year under review the main refinancing operations were initially conducted as variable-rate tenders with a minimum bidding rate. Since the Governing Council's decision of 8 October 2008, they have been conducted as fixed-rate tenders with full allotment at a fixed interest rate. At the end of the year, the main refinancing operations amounted to €75,291 million, which was €57,804 million less than the level on 31 December 2007. On a daily average, the main refinancing operations amounted to €78,052 million (2007: €119,854 million).

Longer-term refinancing operations with a maturity of between one and six months were carried out in the period under review with the purpose of providing longer-term liquidity. The transactions were executed as variable-rate tenders at first. Since the Governing Council's decision of 15 October 2008, longer-term refinancing operations have also been carried out as fixed-rate tenders with full allotment at a fixed interest rate. The volume of these transactions amounted to €201,383 million at the end of 2008 and was therefore €66,615 million greater than the volume of the previous year. On a daily average, the volume of longer-term refinancing operations amounted to €131,585 million (2007: €113,364 million).

The marginal lending facility (overnight liquidity) is permanently available at a predetermined interest rate (standing facility). The extent to which recourse to the marginal lending facility was being taken on 31 December 2008 had risen by €659 million since the previous year to €750 million. The extent to which it was being used on a daily average amounted to €627 million (2007: €107 million).

Other claims on euro-area credit institutions denominated in euro

This item includes fixed-term deposits which are held at credit institutions and which arise from funds received in connection with central bank services.

Claims on the Federal Government

This item shows the equalisation claims on the Federal Government and the non-interest-bearing debt register claims in respect of Berlin; both date back to the currency reform of 1948. They form the balance sheet counterpart of the amounts paid out at that time in cash *per capita* and per enterprise and of the initial provision of credit institutions and public corporations with central bank money. Equalisation claims yield interest at the rate of 1% per annum. In conjunction with Article 101 of the EC Treaty it has been stipulated that equalisation claims and the debt register claims are to be redeemed in ten annual instalments, starting in the year 2024.

Intra-Eurosystem claims

The Bundesbank's claims on the ECB and on the other central banks participating in the Eurosystem are combined in this item.

Sub-item 9.1 shows the Bundesbank's participating interest in the ECB. Pursuant to Article 28 of the ESCB Statute, the national central banks of the ESCB are the sole subscribers to the capital of the ECB (see *General information on annual accounts*). On 31 December 2008, the Bundesbank had a 20.5% share of the ECB's capital. This share amounts to €1,182 million excluding the net increase in the Bundesbank's share of the accumulated net assets of the ECB (also referred to as net equity) in connection with the last capital key changes on 1 May 2004 and 1 January 2007, which amount to a cumulative €14 million.

Sub-item 9.2 contains the Bundesbank's euro-denominated claims arising from the transfer of foreign reserves to the ECB. In accordance with Article 30 of the ESCB Statute, the central banks participating in the Eurosystem transferred foreign reserves (15% in gold and 85% in foreign currency) to the ECB at the beginning of 1999. Adjustments to the key for subscribing to the ECB's capital also result in adjustments to the Bundesbank's claims arising from the transfer of foreign reserves to the ECB. On 31 December 2008, these claims amounted to €11,821 million. As the transferred gold does not earn interest, the claims are remunerated at 85% of the latest available interest rate for the main refinancing operations.

Sub-item 9.3 "Claims related to the allocation of euro banknotes within the Eurosystem (net)" shows the claims which arise from applying the banknote allocation key. As at the end of 2007, the Bundesbank again had no claims at the end of 2008 but, instead, liabilities, which are shown in liability sub-item 9.2 "Liabilities related to the allocation of euro banknotes within the Eurosystem (net)".

A daily net balance vis-à-vis the ECB is derived from the TARGET/TARGET2 settlement balances between the central banks of the ESCB. At the end of the year the Bundesbank had net claims amounting to €115,295 million (2007: €71,046 million), which are shown under sub-item 9.4 "Other claims within the Eurosystem (net)". These claims, with the exception of unremunerated intra-Eurosystem balances resulting from the swap transactions between the ECB and the Bundesbank, are remunerated at the latest available interest rate for main refinancing operations (see asset item 3 "Claims on euro-area residents denominated in foreign currency"). On a daily average, the interest-bearing net claims arising from TARGET/TARGET2 settlement balances amounted to €111,172 million (2007: €32,815 million). This item also contains the liabilities amounting to €113 million in 2008 arising from the allocation of monetary income to the national central banks (see profit and loss item 5 "Net result arising from allocation of monetary income") and the claim on the ECB of €355 million arising from the distribution of ECB income from banknotes allocated to it (see item 4 "Income from participating interests" in its profit and loss account).

Items in course of settlement

This item contains the asset items arising from payments still being processed within the Bundesbank.

Other assets

The Bundesbank's holdings of euro coins are shown in sub-item 11.1 "Coins". New coins are received from the federal mints at their nominal value for the account of the Federal Government, which holds the coin prerogative.

Sub-item 11.2 "Tangible and intangible fixed assets" amounted to €1,253 million compared with €1,472 million in 2007; it comprises land and buildings, furniture and equipment and computer software.

Sub-item 11.3 "Other financial assets" amounted to €10,011 million compared with €9,799 million in 2007. It contains fixed-interest euro assets of €9,921 million as a counterpart to the capital, statutory reserves, provisions for general risks and provisions for pensions and healthcare assistance. The euro assets are held until maturity and valued at acquisition cost. This item also includes €90 million in participating interests of the Bundesbank. The participating interest in the BIS, Basel, was unchanged at €50 million at the end of 2008. The Bundesbank holds 50,100 shares. As in the previous year, the balance sheet value of the participating interest in Liquiditäts-Konsortialbank GmbH, Frankfurt am Main, amounted to €38 million. This 30% interest continues to entail a maximum additional commitment of €300 million for the Bundesbank. As in 2007, the participating interest in the cooperative society SWIFT, La Hulpe (Belgium), amounted to €2 million.

Sub-item 11.4 "Off-balance-sheet instruments revaluation differences" essentially comprises €2,813 million for the year-end valuation of the US dollar forward liabilities to the ECB arising from the US dollar Term Auction Facility estab-

Tangible and intangible fixed assets — Table 17

€ million

Item	Purchase/ production costs 31.12.2007	Additions	Disposals	Accumulated depreciations	Book value 31.12.2008	Book value 31.12.2007	Depreciation in 2008
Land and buildings	2,762	11	– 254	– 1,436	1,082	1,270	– 79
Furniture and equipment	743	76	– 123	– 532	163	196	– 58
Computer software	113	6	– 1	– 110	8	7	– 5
Total	3,617	93	– 378	– 2,079	1,253	1,472	– 141

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lished by the Fed compared with €158 million in the previous year (see asset item 3 “Claims on euro-area residents denominated in foreign currency”.)

Sub-item 11.5 “Accruals and prepaid expenses” contains the accrued and prepaid expenditure identified at 31 December 2008. These chiefly consist of interest income which is due in the new financial year from refinancing operations, securities or the transfer of foreign reserves to the ECB which were undertaken or acquired in the financial year just ended.

2 Liabilities

Banknotes in circulation

The total value of euro banknotes issued by the central banks in the Eurosystem is distributed among these banks on the last business day of each month in accordance with the key for allocating euro banknotes (see *General information on annual accounts*). In accordance with the banknote allocation key applying on 31 December 2008, the Bundesbank has a 27.1% share of the value of all euro banknotes in circulation. During the year under review, the total value of banknotes in circulation within the Eurosystem rose from €676,637 million to €762,775 million, or 12.7%. In accordance with the banknote allocation key, the Bundesbank shows holdings of euro banknotes worth €206,620 million at the end of the year compared with €183,781 million at the end of 2007. The value of the euro banknotes actually issued by the Bundesbank in the year under review increased by 15.9% from €283,279 million to €328,380 million. As this was more than the allocated amount, the difference of €121,759 million (2007: €99,498 million) is shown in liability sub-item 9.2 “Liabilities related to the allocation of euro banknotes within the Eurosystem (net)”.

Liabilities to euro-area credit institutions related to monetary policy operations denominated in euro

Sub-item 2.1 "Current accounts" contains the deposits of the credit institutions, amounting to €100,678 million (31 December 2007: €64,032 million), which are used to meet the minimum reserve requirement and settle payments. The main criterion for including these deposits in this sub-item is that the respective business partners appear in the list of institutions which are subject to the minimum reserve regulations in the Eurosystem. Minimum reserve balances are remunerated at the average interest rate for main refinancing operations in the maintenance period. On a daily average, the current account deposits amounted to €49,852 million (2007: €44,757 million).

Sub-item 2.2 "Deposit facility", amounting to €66,261 million (31 December 2007: €4,931 million), contains overnight deposits at a predetermined interest rate (standing facility). On a daily average, the deposit facility amounted to €21,262 million (2007: €232 million).

The sub-item 2.3 "Fixed-term deposits" contains liquidity-absorbing fine-tuning operations. At the end of 2008, no operations were reported under this sub-item (2007: €40,550 million). Until November 2008, they were settled as fixed-rate tenders at a prescribed rate of interest; in December as variable-rate tenders. On a daily average, the fixed-term deposits amounted to €1,463 million (2007: €2,255 million).

Liabilities to other euro-area residents denominated in euro

Sub-item 4.1 "General government deposits" encompasses the balances of the Federal Government, its special funds, the state governments and other public depositors. The deposits of other public depositors constitute balances held by social security funds and local authorities. On 31 December 2008, general government deposits amounted to €170 million in all (31 December 2007: €43 million).

Sub-item 4.2 "Other liabilities" amounted to €646 million compared with €405 million on 31 December 2007. The deposits of enterprises and individuals are the main items shown here.

Liabilities to non-euro-area residents denominated in euro

This balance sheet item, amounting to €9,226 million (31 December 2007: €14,045 million), contains primarily the fixed-term deposits of central banks and the working balances of central banks, monetary authorities, commercial banks and international organisations held for settling the payments and other services provided by the Bundesbank. These deposits are accepted mainly as part of the

Bundesbank's central bank services; the proceeds are invested in the money market.

Liabilities to euro-area residents denominated in foreign currency

This item contains the US dollar liabilities to the ECB, to banks domiciled in the euro area and to euro-area branches of banks domiciled outside the euro area as well as the US dollar deposits of central government.

Liabilities to non-euro-area residents denominated in foreign currency

The foreign-currency-denominated liabilities to banks outside the euro area are recorded in this item. These are mainly liabilities in US dollars which have arisen from securities repurchase agreements (repos).

Counterpart of special drawing rights allocated by the IMF

The counterpart of the special drawing rights allocated by the IMF free of charge and shown in sub-item 2.1 "Receivables from the IMF" on the assets side of the balance sheet corresponds to the allocations of SDRs to the Federal Republic of Germany from 1970 to 1972 and from 1979 to 1981, which totalled SDR 1,211 million.

Intra-Eurosystem liabilities

The Bundesbank's euro liabilities to the ECB and to the other central banks participating in the Eurosystem are combined in this item.

The "Liabilities to the ECB arising from promissory notes", shown as sub-item 9.1, arise in connection with the issue of ECB debt certificates. The ECB did not issue such paper during the year under review.

Sub-item 9.2 "Liabilities related to the allocation of euro banknotes within the Eurosystem (net)" contains the liabilities arising from the application of the banknote allocation key (see liability item 1 "Banknotes in circulation"). At the end of the year, these liabilities amounted to €121,759 million (2007: €99,498 million).

The net liabilities balance arising from other assets and liabilities within the Eurosystem would be shown in sub-item 9.3 "Other liabilities within the Eurosystem (net)". At the end of 2008, the Bundesbank had a net claim, and this is shown on the assets side under sub-item 9.4 "Other claims within the Eurosystem (net)" and explained in the explanatory notes above.

Items in course of settlement

This item contains the liabilities items arising from the payments still being processed within the Bundesbank.

Other liabilities

Sub-item 11.2 "Accruals and income collected in advance" contains the accrued income identified at 31 December 2008. This consists essentially of interest expenditure which is due in the new financial year but was incurred in the financial year just ended and which arose in connection with the allocation of banknotes within the Eurosystem.

Sub-item 11.3 "Sundry items" essentially consists of the liabilities arising from the Deutsche Mark banknotes still in circulation. Although Deutsche Mark banknotes are no longer legal tender, the Bundesbank has publicly undertaken to redeem Deutsche Mark banknotes that are still in circulation for an indefinite period. The Deutsche Mark banknotes still in circulation belong to the series BBk I/Ia and BBk III/IIIa and at the end of 2008 amounted to a total of €3,477 million. The banknote series BBk I/Ia accounted for €1,288 million of this sum (2007: €1,305 million) and the banknote series BBk III/IIIa for €2,189 million (2007: €2,269 million). In 2004, part of the liabilities arising from Deutsche Mark BBk I/Ia series banknotes still in circulation and amounting to €1,237 million were taken off the books and reported as income as it is highly unlikely that this amount of the banknote stock will now be exchanged for euro. As a result of this partial write-off, the liabilities arising from Deutsche Mark banknotes still in circulation on 31 December 2008 amounted to €2,240 million.

Provisions

The provisions for general risks are created pursuant to the regulations governing the Bundesbank's annual accounts contained in section 26 (2) of the Bundesbank Act. They are, in particular, established against foreign exchange risks in the bank's US dollar, SDR and yen positions not already covered by existing revaluation items. The level of funds to be allocated to risk provisions is reviewed annually using value-at-risk methods amongst others. In doing so, bank holdings of risk-weighted assets, the financial situation expected for the coming year and the statutory reserves (currently €2.5 billion) are taken into account. Taking the aforementioned factors into consideration and the fact that currency reserves increased slightly on the year, provisions of €1,888 million were deemed appropriate (see asset item 2 "Claims on non-euro-area residents denominated in foreign currency").

In accordance with the general accounting principle of prudence, the Governing Council has deemed it appropriate to establish a buffer totalling €5,736 million against counterparty risks in monetary policy operations. In accordance with Article 32.4 of the ESCB Statute, this buffer will be funded by all national central banks of participating member states in proportion to their subscribed capital

Provisions Table 18

Provisions for	31.12.2008 € million	31.12.2007 € million	Year-on-year change € million	%
General risk	1,888	1,848	40	2.2
Monetary policy operations	1,689	–	1,689	.
Direct pension commitments	2,205	2,062	143	6.9
Indirect pension commitments (supplementary pension funds)	367	360	8	2.1
Healthcare subsidy commitments to civil servants	404	384	20	5.3
Pre-retirement part-time work	89	79	10	12.8
Staff restructuring schemes	252	242	10	4.3
Other	117	215	– 99	– 45.9
Total	7,011	5,190	1,821	35.1

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key shares in the ECB in 2008. As a result, the Bundesbank created a provision amounting to €1,689 million, in line with its 29.4% share of fully paid-up capital, to be debited to its net result arising from the allocation of monetary income.

The provisions for direct pension commitments were increased by €143 million and now amount to €2,205 million. As a result of the Bundesbank's obligation to act as guarantor for pension payments out of the supplementary pension funds for public sector employees, indirect pension commitments amounted to €367 million on 31 December 2008 (2007: €360 million). The provision for healthcare subsidy commitments to civil servants was increased by €20 million to €404 million. The calculations of the provisions for pensions and healthcare assistance are based on an actuarial expert opinion, resulting in an increase in "Staff costs". For accounting purposes, an interest rate of 5.4% was applied in the year under review, as was the case in 2007.

After an increase of €10 million, a provision of €89 million for pre-retirement part-time work was shown in the balance sheet as of 31 December 2008. The provision for payment commitments arising from staff restructuring schemes that had already been carried out by the balance sheet date was increased by €10 million to €252 million. The calculations of these provisions are based on an actuarial expert opinion, resulting in an increase in "Staff costs". For accounting purposes, an interest rate of 4.1% was applied in the year under review, as was the case in 2007.

The other provisions were created primarily for the risk of losses on the sale of property as well as for holiday entitlement not taken, overtime and positive balances of flexible working hours as well as for uncertain liabilities.

Revaluation accounts

This item contains the disclosed hidden reserves from the initial valuation at the time of the changeover to market valuation on 1 January 1999 (revaluation items "old") and the unrealised profits arising from market valuation on 31 December 2008 (revaluation items "new").

Revaluation items "old"

A revaluation item "old" now remains only for the gold position. It represents the difference between the market value of gold on 1 January 1999 and the lower value of gold prior to that date. In the balance sheet on 31 December 1998 the value for gold was 1 ozf = DM143.8065 (€73.5271) while the market value on 1 January 1999 was 1 ozf = €246.368. Although the valuation gains arising from the initial valuation of the gold holdings are not eligible for distribution, they will be dissolved under certain circumstances. Besides a dissolution in the case of valuation losses on the gold item, a proportionate dissolution also takes place in the event of net reductions if the end-of-year gold holdings are below their lowest end-of-year level since 1999.

The reduction of 0.2 million ozf in the gold holdings resulted in a dissolution amount of €27 million in the year under review (see asset item 1 "Gold and gold receivables"). The dissolution amount is included in the profit and loss item 2/sub-item "Realised gains/losses arising from financial operations".

Revaluation items "new"

In the case of gold holdings, the net positions in each foreign currency and the securities portfolio, the positive difference between their market value on 31 December 2008 and their value in terms of the average acquisition costs carried forward from 1 January 1999 is shown in the revaluation items "new".

In the case of gold, the acquisition cost is 1 ozf = €246.370. At the end of 2008, the market value of the gold position exceeded its acquisition value, with the result that a revaluation item amounting to €41,163 million arose (2007: €35,364 million). In the case of the US dollar, SDR and yen positions, the relevant market values at the end of the year were above the respective acquisition values (€1 = US$1.4711, €1 = SDR 0.9077, €1 = ¥163.6370), resulting in revaluation items (2007: valuation losses, see profit and loss item 2/sub-item "Write-downs on financial assets and positions"). There were only slight valuation gains in the case of the other foreign currencies.

Revaluation accounts

Table 19

Item	Revaluation items "old" € million	Revaluation items "new" € million	Total 31.12.2008 € million	Total 31.12.2007 € million	Year-on-year change € million	%
Gold	18,964	41,163	60,127	54,355	5,772	10.6
US dollars	–	1,398	1,398	–	1,398	.
SDRs	–	6	6	–	6	.
Yen	–	151	151	–	151	.
Securities	–	1,427	1,427	690	737	106.8
Total	18,964	44,144	63,108	55,044	8,063	14.6

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In the case of the valuation of securities, gains of €1,424 million arose from US dollar-denominated assets and gains of €3 million from yen-denominated paper.

Capital and reserves

In accordance with section 2 of the Bundesbank Act, the liable capital amounts to €2.5 billion. The statutory reserves are in line with the fixed upper limit which is laid down in section 27 number 1 of the Bundesbank Act and which is likewise €2.5 billion.

Profit for the year

The profit and loss account for the year 2008 closed with an annual surplus of €6,261 million. Pursuant to section 27 of the Bundesbank Act, it will be transferred in full to the Federal Government as the statutory reserves were at their maximum level of €2.5 billion at the end of 2008.

VI Notes on the profit and loss account

Net interest income

This item shows interest income less interest expense. Net interest income was greater than in the previous year, rising by €927 million to €8,429 million. Of this total amount, €996 million was in foreign currency (primarily foreign reserves) while the euro holdings amounted to €7,434 million (primarily from the use of monetary policy instruments).

Interest income

Interest income in foreign currency increased year on year by €87 million to €1,520 million. This is attributable mainly to income from the provision of

Interest income

Table 20

Item	2008 € million	2007 € million	Year-on-year change € million	%
Interest income in foreign currency				
Gold	0	1	– 1	– 56.0
IMF	21	34	– 13	– 38.0
Current account holdings and overnight deposits	4	5	– 1	– 13.0
Reverse repo transactions	81	115	– 34	– 29.8
Claims arising from the provision of foreign exchange liquidity	540	7	533	.
Fixed-term deposits and deposits at notice	52	190	– 138	– 72.4
Marketable securities	805	1,076	– 271	– 25.2
Other	17	6	11	186.6
Total	1,520	1,433	87	6.1
Interest income in euro				
Main refinancing operations	3,212	4,750	– 1,538	– 32.4
Longer-term refinancing operations	5,661	4,761	901	18.9
Other refinancing operations	60	22	39	180.3
TARGET/TARGET2 balances in the ESCB	4,509	1,302	3,206	246.2
Claims arising from central bank services	837	187	650	348.0
Claims arising from the transfer of foreign reserves to the ECB	412	400	12	3.0
Financial assets	430	205	225	109.6
Other	239	51	188	367.7
Total	15,360	11,678	3,682	31.5
Grand total	16,880	13,111	3,769	28.7

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liquidity in US dollars (see asset item 3 "Claims on euro-area residents denominated in foreign currency").

Interest income in euro increased year on year by €3,682 million to €15,360 million. Income from the refinancing of credit institutions fell by €598 million to €8,934 million (see asset item 5 "Lending to euro-area credit institutions related to monetary policy operations denominated in euro"). This resulted primarily from the lower average refinancing volume over the year. Interest income from TARGET/TARGET2 settlement balances rose by €3,206 million to €4,509 million (see asset sub-item 9.4 "Other claims within the Eurosystem (net)"), mainly because the average annual volume increased.

Interest expense

Interest expense increased by €2,842 million to €8,451 million year on year. In the case of foreign currency, interest expenditure on liabilities in connection with the provision of foreign exchange liquidity rose by €471 million to €478 million. In the case of euro, there was a year-on-year increase of €5,506 million to €7,926 million. The expenditure on remunerating intra-Eurosystem balances arising from the allocation of euro banknotes increased by €965 million owing to the rise in the euro banknotes in circulation (see *General information on an-*

Interest expense

Table 21

Item	2008 € million	2007 € million	Year-on-year change € million	%
Interest expense in foreign currency				
Liabilities arising from the provision of foreign exchange liquidity	478	7	471	.
Repo transactions	47	96	– 49	– 51.2
Total	525	103	421	407.2
Interest expense in euro				
Minimum reserves	2,021	1,774	247	13.9
Time deposits/deposit facility	660	98	562	571.6
Liabilities arising from central bank services	820	201	619	307.5
Net liabilities related to the allocation of banknotes	4,391	3,426	965	28.2
Other	33	7	27	389.3
Total	7,926	5,506	2,420	44.0
Grand total	8,451	5,609	2,842	50.7

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nual accounts and liability sub-item 9.2 "Liabilities related to the allocation of euro banknotes within the Eurosystem (net)"). Furthermore, interest expenditure on liabilities related to monetary policy operations (minimum reserve and fixed-term deposits/deposit facility) rose by €809 million because of higher quantities.

Net result of financial operations, write-downs and risk provisions

The net income shown in sub-item "Realised gains/losses arising from financial operations" amounted to €623 million compared with €158 million in 2007.

Contrary to the previous year (€2,256 million), there were no significant write-downs.

The sub-item "Transfers to/from provisions for general risks, foreign exchange risks and price risks" contains the increase of €40 million in the provision for general risks (see liability item 12 "Provisions").

Net income from fees and commissions

There was a year-on-year increase of €3 million to €49 million in net income from fees and commissions.

Income from participating interests

This item contains the Bundesbank's profit from its participating interests in the ECB, the BIS and Liquiditäts-Konsortialbank GmbH. The increase of €355 million in total income to €371 million is attributable to the distribution of interim profit

Net result of financial operations, write-downs and risk provisions

Table 22

Item	2008	2007	Year-on-year change	
	€ million	€ million	€ million	%
Realised gains/losses				
Gold	76	68	7	10.9
Foreign currency	30	– 8	38	.
Securities	517	98	420	430.0
Total	623	158	465	295.0
Write-downs				
Foreign currency	0	– 2,253	2,253	– 100.0
Securities	–	– 3	3	– 100.0
Total	0	– 2,256	2,256	– 100.0
Transfers to/from provisions for general risks, foreign exchange risks and price risks	– 40	152	– 192	.
Grand total	583	– 1,946	2,529	.

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by the ECB for financial year 2008 (see *"General information on annual accounts"*).

Net result arising from allocation of monetary income

The monetary income of the Eurosystem national central banks is allocated in accordance with a decision taken by the Governing Council of the ECB.[1] Since 2003, the amount of monetary income allocated to each national central bank has been measured on the basis of the actual income which arises from the earmarked assets that each holds as a counterpart to its liability base.

The liability base contains the following items: liability item 1 "Banknotes in circulation"; liability item 2 "Liabilities to euro-area credit institutions related to monetary policy operations denominated in euro"; liability sub-item 9.1 "Liabilities to the ECB arising from promissory notes"; liability sub-item 9.2 "Liabilities related to the allocation of euro banknotes within the Eurosystem (net)"; and the net liabilities arising from TARGET/TARGET2 accounts contained in liability sub-item 9.3 "Other liabilities within the Eurosystem (net)". All interest expense which a national central bank has paid on the items of the liability base mentioned reduces the amount of the monetary income to be transferred by the national central bank concerned.

1 Decision of the European Central Bank of 6 December 2001 on the allocation of monetary income of the national central banks of participating member states from the financial year 2002 (ECB/2001/16) and amended by its decisions of 19 May 2006 (ECB/2006/7) and 22 November 2007 (ECB/2007/15).

Net income from fees and commissions Table 23

Item	2008 € million	2007 € million	Year-on-year change € million	 %
Income				
Cashless payments	29	31	– 2	– 7.2
Cash payments	9	6	3	54.0
Securities business and security deposit business	11	11	– 0	– 1.4
Other	13	11	2	13.8
Total	62	59	2	4.0
Expense				
Securities business and security deposit business	9	9	– 0	– 0.9
Other	5	5	– 0	– 7.0
Total	13	14	– 0	– 3.1
Grand total	49	46	3	6.2

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A national central bank's earmarked assets consist of the following items: asset item 5 "Lending to euro-area credit institutions related to monetary policy operations denominated in euro", asset sub-item 9.2 "Claims arising from the transfer of foreign reserves to the ECB", asset sub-item 9.3 "Claims related to the allocation of euro banknotes within the Eurosystem (net)", the net assets arising from TARGET/TARGET2 accounts contained in asset sub-item 9.4 "Other claims within the Eurosystem (net)" and a limited amount of the national central banks' gold holdings corresponding to their share in the fully paid-up capital of the ECB. Gold is considered to generate no income.

If the value of a central bank's earmarked assets is above or below the value of its liability base, the difference is offset by applying to the value of the difference the applicable interest rate for the main refinancing instrument. At the end of each financial year, the total monetary income transferred by all national central banks is distributed among the national central banks in proportion to their respective paid-up shares in the fully paid-up capital of the ECB.

In the year under review, the allocation of monetary income resulted in a net liability of €113 million for the Bundesbank. This net liability represents the difference between the €8,217 million in monetary income paid by the Bundesbank into the common pool and the Bundesbank's claim of €8,104 million – corresponding to the Bundesbank's share of the ECB's paid-up capital – on the common pool. In 2007, the distribution of monetary income among the national central banks resulted in net expenditure of €113 million.

Staff costs Table 24

Item	2008 € million	2007 € million	Year-on-year change € million	%
Salaries and wages	555	507	48	9.4
Social security contributions	83	82	1	1.5
Expenditure on retirement pensions	315	235	80	34.0
Grand total	954	825	129	15.7

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Pursuant to Article 32.4 of the ESCB Statute, the Governing Council decided to establish a buffer against counterparty risks in monetary policy operations. The Bundesbank contributes to this buffer in line with its capital key share of 29.4% and has created a provision of €1,689 million (see liability item 12 "Provisions").

Other income

The remaining income amounted to €143 million compared with €140 million in 2007.

Staff costs

Staff costs rose from €825 million year on year to €954 million. Of the €129 million increase, €127 million net is attributable to transfers to staff provisions; these relate mainly to pay rises of wage and salaried staff and of civil servants in 2008 and 2009. Staff provisions include, in particular, pension and healthcare subsidy commitments and provisions for staff restructuring schemes as well as commitments under pre-retirement part-time working agreements (see liability item 12 "Provisions").

Pursuant to the *Code of Conduct for the members of the Executive Board of the Deutsche Bundesbank,* the remuneration received by each member of the Bundesbank's Executive Board is published. In 2008, the President of the Bundesbank received a pensionable salary of €290,446.08, a special non-pensionable remuneration of €76,693.78, a special payment of €7,261.15 in accordance with the *Bundessonderzahlungsgesetz* and a standard expenses allowance of €5,112.96, amounting to a total of €379,513.97. In 2008, the Vice-President received a pensionable salary of €232,356.96, a special non-pensionable remuneration of €61,355.03, a special payment of €5,808.92 in accordance with the *Bundessonderzahlungsgesetz* and a standard expenses allowance of €3,067.80, amounting to a total of €302,588.71. In 2008, each of the five other members of the Executive Board received €227,197.16; €174,267.72 of this was in the form of a pensionable salary, €46,016.27 as a special non-pensionable remuneration, €4,356.69 as a special payment in accordance with the *Bundessonderzahlungsgesetz* and €2,556.48 as a standard expenses allowance.

Total payments to serving and former members of the Executive Board, former members of the Bundesbank's Directorate and of the Executive Boards of Land Central Banks, including their surviving dependants, amounted to €11,750,033.48 in 2008.

Other administrative expenses

The other (non-staff) operating expenditure fell year on year by €5 million (1.9%) to €237 million.

Depreciation on tangible and intangible fixed assets

The depreciation of land and buildings, of furniture and equipment and of computer software amounted to €141 million compared with €147 million in 2007 (see asset sub-item 11.2 "Tangible and intangible fixed assets").

Banknote printing

Expenditure on banknote printing increased by €29 million to €157 million because the Bundesbank procured a greater number of banknotes than in 2007.

Other expenses

Other expenses increased by €5 million to €23 million year on year.

The Deutsche Bundesbank: key figures

	2007	2008
Staff[1]		
Core staff (full-time equivalents)	10,391	10,038
– Contraction since 31 December 2001[2]	4,409 (= 29.8%)	4,762 (= 32.2%)
Projected core staff (full-time equivalents)		
– End-2012 = 9,000		
Locations/core staff (full-time equivalents)[1]		
Central Office	1 / 3,465	1 / 3,474
Regional Offices	9 / 2,871	9 / 2,752
Branches	47 / 4,055	47 / 3,812
Annual accounts[1]		
Profit for the year	€4,285 million	€6,261 million
Net interest income	€7,502 million	€8,429 million
Balance sheet total	€483,674 million	€612,563 million
Foreign reserve assets (total)	€92.5 billion	€99.2 billion
– *of which* foreign currency	€27.7 billion	€27.7 billion
– *of which* gold	(3,417 t) €62.4 billion	(3,413 t) €68.2 billion
– *of which* receivables from the IMF	€2.4 billion	€3.3 billion
ECB capital key[3]		
Share of subscribed capital		18.9373%
Share of paid-up capital		27.1341%
Amount of the participating interest in the ECB		€1.09 billion
Foreign reserve assets transferred to the ECB		€10.91 billion
Money market transactions (main refinancing operations)		
Banks participating in the Eurosystem (average)	338	443
– *of which* using the Bundesbank as an intermediary	227	316
Amount outstanding for main refinancing operations in the Eurosystem[4]	€264 billion	€203 billion
– *of which* counterparties of the Bundesbank	€120 billion	€78 billion
Cash payments		
Volume of euro banknotes in circulation (Eurosystem)[1]	€676.6 billion	€762.8 billion
Volume of euro coins in circulation (Eurosystem)[1]	€19.2 billion	€20.4 billion
Value of DM/euro exchange transactions	DM211.3 million	DM184.5 million
Unreturned DM banknotes and coins	DM14.09 billion	DM13.83 billion

1 On 31 December.
2 Core staff (full-time equivalents) on 31 December 2001 (year before the structural reform began): 14,800.
3 Since 1 January 2009.
4 Daily average.

	2007	2008
Incidence of counterfeit money in Germany		
Euro banknotes	40,200 banknotes	40,800 banknotes
Euro coins	82,000 coins	80,000 coins
Cashless payments		
Payments via the Bundesbank (number of transactions)	2,389.0 million	2,516.0 million
– *of which* via RPS	2,343.0 million	2,462.9 million
– *of which* via TARGET2-BBk [5]	41.9 million	46.5 million
Payments via the Bundesbank (value)	€187 trillion	€253 trillion
– *of which* via RPS	€2,262 billion	€2,344 billion
– *of which* via TARGET2-BBk [5]	€182 trillion	€248 trillion
Share of TARGET2-BBk [5] transactions in EU-wide TARGET2 system	45%	49%
Banking supervision		
Number of institutions to be supervised	3,075	3,030
Audits of banking operations	214	215
Monthly returns processed	33,558	32,425
Audit reports processed	8,740	5,869
Reports on Own Funds Principle (Solvency Regulation)	27,523	27,013
Reports on Liquidity Principle (Liquidity Regulation)	26,322	25,847
Meetings with senior management	2,314	2,465
Cooperation with foreign central banks		
Training and advisory events	282	296
– Number of participants (total)	3,716	3,610
– Number of participating countries (total)	91	91
Selected publications (number per year/average number of copies)		
Annual Report	1 / 23,000	1 / 20,800
Monthly Report	12 / 17,650	12 / 17,200
Statistical Supplements	52 / 3,400	52 / 3,000
Research Centre Discussion Papers	53 / 400	50 / 380
Publications in academic journals/books	46 / –	61 / –
External communication/public relations		
Visitors to the Money Museum	38,600	37,100
Written answers to queries	18,500	18,600
Press releases	219	217
Visits to the website (www.bundesbank.de)	5,116,700	6,406,600
Total number of copies of educational material for schools	160,000	150,000
Training sessions on counterfeit prevention	750	850
– Number of participants	15,000	17,600

5 Until 18 November 2007: RTGS^{plus}.