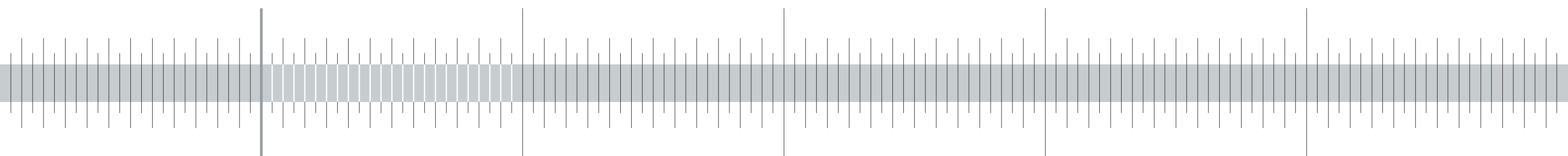
DEUTSCHE
BUNDESBANK
EUROSYSTEM

ANNUAL REPORT

2010 2011 2012 2013 2014



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(until 30 September 2010)

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(since 3 May 2010)

We mourn the death
of the following members of our staff

Franz Michels	16 January 2010
Rainer Brandt	28 January 2010
Jan Oelschlägel	15 March 2010
Jenipher Hauck	19 March 2010
Klaus Lefrancois	11 June 2010
Maria Kotitschke	12 June 2010
Hans-Stefan Patry	14 June 2010
Ursula Mientus	20 June 2010
Uta Lück	23 June 2010
Luise Krämer	20 August 2010
Hans-Jürgen Neumann	17 October 2010
Claus Gerhardt	23 December 2010

We also remember the retired staff members
of the Bank who died in 2010.

We will honour their memory.

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Abbreviations and symbols

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 Figure unknown, not to be published or not meaningful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

A key issue for the Bundesbank and its staff in 2010 was the sovereign debt crisis of a number of euro-area countries. Although the resulting fall-out is posing a serious test for European monetary union, it does not constitute a crisis of monetary union as a whole, nor of the euro. Monetary union is a successful European venture. The euro is a stable currency which has proved to be a major benefit both for trade within the European single market and for the integration of financial markets as well as a key stabilising factor, including during the financial crisis. If the right lessons are drawn from past mistakes, monetary union will even emerge stronger from these challenges.

Extensive economic and fiscal policy adjustments are called for in the countries concerned. The current positive global economic setting provides favourable conditions for undertaking this task. The world economy coped well last year with the transition from a recovery that was initially driven by temporary impulses to a self-sustaining upswing. Fears that the global economic upturn might falter or even come to an end turned out to be unfounded, notwithstanding an easing of the pace of economic growth in the summer months.

Economic activity in the euro area maintained its moderate underlying momentum. Growth was principally driven by Germany, whereas the recovery process was understandably lagging behind in the countries affected by the sovereign debt crisis. Against this backdrop and given subdued monetary and credit growth, the Governing Council of the ECB kept its key policy rates on hold throughout the year.

The German economy has rebounded remarkably quickly from the severe slump it experienced in the latter part of 2008 and early part of 2009. The economic turnaround in Germany was triggered chiefly by the revival in the world economy and world trade. Furthermore, in contrast to the upturn which followed the downturn in 2003, the external impulses quickly spread to the domestic economy. The economic recovery was supported by enterprises' and households' exceptionally high level of confidence. Although, in the past decade, many observers questioned the ongoing viability of the German economic and social model, the prevailing view now is that the restructuring of Germany's social security system and labour market, in particular, as well as

the associated wage restraint, were important preconditions for the remarkable cyclical resilience shown by the German economy. Germany is now in a sounder structural position than it has been at any other time since reunification. Nevertheless, depressed growth in potential output as well as the high general government deficit and the dramatic increase in the debt ratio are reminders of the challenges that are still outstanding and the numerous tasks that remain to be accomplished.

In the euro area, the financial crisis of the past few years has revealed vulnerabilities in some countries' fiscal policies. The task of reinforcing the foundations of monetary union primarily requires the countries concerned to undertake their own strenuous efforts to regain lost confidence in fiscal policy. The impending decisions on the reform of economic governance in the euro area should be informed by the objective of boosting incentives for all member states to pursue a sustainable fiscal policy. Furthermore, the stability of the financial sector as a whole has to be strengthened. Major steps towards this were taken in 2010. These include the new capital and liquidity regulations for banks (Basel III) and the work being coordinated by the Financial Stability Board (FSB) aimed at devising procedures for dealing with systemically important banks. These initiatives now need to be implemented rapidly across the board.

The close interconnectedness of financial intermediaries and the resulting complex interactions within the financial sector as well as the links between the financial sector and the real economy necessitate a macroprudential approach to analysis. The European Systemic Risk Board (ESRB) has been created for this purpose in the European context. At the international level, the IMF will intensify its monitoring and assessment of global capital flows and of the interactions between economic policies and the financial sector.

With the adoption of the Basel III regulatory package in December 2010, the review of banking supervisory legislation begun in the wake of the financial crisis has been provisionally finalised only two years after the framework was laid down by the G20 leaders. The new regulations represent a consistent and appropriate response to the shortcomings that were identified during the crisis. In particular, the planned strengthening of banks' capital base and the introduction for the first time of international liquidity standards are key elements for making the financial system more resilient to crises in the future. The scheduled transition periods until Basel III enters fully into force in 2019 give banks the time they need to prepare for the more stringent capital

and liquidity requirements. They also avert the danger of a short-term credit squeeze with potential negative implications for the recovery of the real sector.

A further response to the financial crisis was the creation of the European System of Financial Supervisors (ESFS) as of 1 January 2011 as an institutional anchor for safeguarding the stability of the European financial system. This new European banking supervisory authority has a key role to play alongside the ESRB. Working together with national supervisory authorities, which retain responsibility for banking supervision, its role will be to intensify and harmonise microprudential supervision at the European level and strengthen cross-border prudential cooperation. The new supervisory system faces the challenging tasks of dovetailing microprudential and macroprudential supervision and of establishing a better European supervisory framework while striking a balance between a necessary harmonisation of supervisory rules and practices and the continuing professional and fiscal responsibility of the national supervisory bodies.

The execution of the first uniform EU-wide bank stress test and subsequent publication of the results represented a particular challenge for the supervisory authorities and central banks involved. Overall, the German banking system demonstrated its resilience even under extreme scenarios.

The events of the past year once again placed heavy demands on the Bundesbank and its staff. In many business areas, work on crisis resolution over the past few years has required a reordering of priorities. However, the strategy review conducted last year showed that the Bundesbank, at the halfway point of its strategic cycle 2008-2012, is making good progress in implementing its programmatic measures aimed at "Raising the Bank's profile – continuing the consolidation process".

Strategic projects in the core business areas encompass the objectives of expanding the Bundesbank's macroeconomic analysis and intensifying its involvement in international bodies relating to financial stability, including in the wake of the financial and economic crisis.

In the area of banking supervision, internal stress tests are employed in constantly upgrading the set of analytical instruments and extending research related to prudential regulation. With regard to the future division of banking supervision duties in Germany, the Bundesbank is in close contact with the Federal Government and the Federal Financial Supervisory Authority (BaFin).

The Bundesbank's intended process of scaling back its involvement in cash management continued in 2010. Last year, a key contribution was made in preparing the banking industry, retailers and cash-in-transit companies for the amended legal basis in 2011 resulting from the entry into force of the Payment Services Oversight Act (*Zahlungsdiensteaufsichtsgesetz*) and the European Central Bank's Decision on the authenticity and fitness checking and recirculation of euro banknotes. This changed legal basis, along with higher charges for the use of mixed containers and the discontinuation of the customised coin portioning service, is likely to reduce the Bundesbank's operational involvement in the cash supply process. This development is being accompanied by a discernible increase in banknote processing outside the Bundesbank, especially by means of customer-operated combined deposit and withdrawal systems at commercial banks. In the field of banknote procurement, too, the Bundesbank gave a further boost to the principle of competition by launching a Europe-wide tender.

Work on the TARGET2-Securities (T2S) single European settlement platform is continuing apace. After finalising the user requirements and the general functional specifications, talks are now taking place with market participants. Furthermore, the Bundesbank decided in September 2010 to participate extensively in the Collateral Central Bank Management Project (CCBM2), the Eurosystem's new single platform for automated management of collateral posted in connection with monetary policy operations. TARGET2-Securities will start operation in autumn 2014. CCBM2 is scheduled to go live in 2013. The two projects will help to make securities settlement in Europe and Eurosystem collateral management more cost-effective and significantly more efficient. They will also make a major contribution to harmonising the financial infrastructure in Europe.

Changeover to the new standard payment instruments in the context of the Single Euro Payments Area (SEPA) has been sluggish throughout Europe so far. An acceleration of the take-up rate is unlikely unless and until a clear deadline is set for the migration of national payment procedures. In December 2010, the European Commission therefore published a draft regulation on setting end-dates for the national credit transfer and direct debit procedures. In the national and European context, the Bundesbank is working actively to intensify the dialogue between providers and customers of the new payment procedures in order to make the changeover to SEPA as smooth and user-friendly as possible.

In the year under review, the Bundesbank's overall headcount contracted only marginally. While further posts were eliminated, particularly at the Bundesbank's branches, more staff were recruited in the fields of financial stability and banking supervision than in recent years in response to the increased requirements resulting, above all, from the financial crisis.

My fellow members of the Executive Board join me in taking this opportunity to express our gratitude to all members of the Bundesbank's staff for their work in 2010. Without their intense dedication and sometimes exceptional personal commitment, the Bundesbank would not have been able to cope with the challenges of the past year so successfully. My thanks also go to the staff representation committees for their invariably constructive cooperation.

Frankfurt am Main, March 2011

Professor Axel A Weber
President of the Deutsche Bundesbank

Monetary policy and economic developments

In the year under review, the global economy managed the transition from a recovery that was sparked, at first, by temporary stimuli to a self-sustaining upswing well. Fears that this upswing might stall or even come to a halt were not confirmed despite the slower pace of economic activity in the summer months.

The robust recovery of the global economy also shaped the situation on the international financial markets. However, the sovereign debt crisis in several euro-area countries was a negative factor that dampened the otherwise benign setting. Extensive support measures taken by the community of states in early May succeeded in temporarily halting the dramatic slump in the bond market prices of the countries affected. There were renewed tensions towards the end of the year, however, which caused the Irish government to accept aid under the EU rescue shield.

Economic developments in the euro area maintained the moderate underlying pace which was driven, above all, by Germany. In line with expectations, however, the countries affected by the sovereign debt crisis lagged behind the recovery process. Against this background, and with monetary and credit growth still muted, the Governing Council of the ECB left its policy rates unchanged throughout the year.

The German economy made a surprisingly swift recovery from the sharp slump in the latter part of 2008 and the first part of 2009. Unlike in the recovery following the downturn in 2003, the external stimuli quickly spilled over to domestic economic activity. Whereas, in the last decade, a sceptical view of the sustainability of Germany's economic and social system often prevailed, the predominating picture now is that structurally Germany is today better positioned than at any other time since German reunification. Nevertheless, the depressed potential output growth shows that challenges remain and that numerous tasks lie ahead.

I International setting

1 Global upswing consolidated

Global recovery proceeding well despite headwinds

The global economic recovery continued with strong momentum after the turn of the year 2009–2010. The cyclical tailwind was attributable initially to the inventory cycle, to monetary and fiscal stimuli as well as to a sustained stabilisation on the financial markets. In spring 2010, however, the positive developments in a number of industrial countries seemed to turn as a result of various factors. In particular, uncertainty about whether several European countries would be able to bear their large sovereign debt burden, which had become heavier still in the wake of the financial and economic crisis, in the long term triggered renewed turmoil on the financial markets. In the United States, above all a slump in housing market activity which arose after government purchase incentives had expired gave rise to doubts about the sustainability of the upswing. These culminated during the summer in worries that the US economy was at risk of sliding into another recession. In Europe, meanwhile, growth – having picked up considerably in the second quarter after the harsh winter – diminished again. The, in some cases, substantial economic pressures on several European countries which face far-reaching structural adjustment and extensive fiscal challenges are also likely to have played a part. The upturn decelerated only moderately in the second half of the year in the group of industrial countries, despite the renewed tensions on the financial markets. Whereas public attention focused on the advanced economies, little notice was taken of the fact that economic momentum in the emerging market economies (EMEs) was slowing substantially. In the second and third quarters of 2010, EMEs' overall economic growth fell below its – admittedly comparatively high – trend rate after exceeding by far its multi-year average in the previous four quarters. However, economic activity in the EMEs, and consequently at global level, gathered momentum again at the turn of the year. All in all, the global economy is likely to have coped well with the transition from a recovery that was at first sparked by powerful yet temporary stimuli to a self-sustaining upswing. Fears that this recovery might level off for a prolonged period or even grind to a halt in response to various pressures proved unfounded. For 2010, the International Monetary Fund (IMF) expects global growth of 5.0% and a further sharp expansion (+4.4%) for 2011.

Even more pronounced than the change of pace in real gross domestic product (GDP) was that seen in production and international exchange of goods

Source: Centraal Planbureau. — 1 OECD excluding Turkey, Mexico, Korea, Czech Republic, Hungary, Poland and Slovak Republic.

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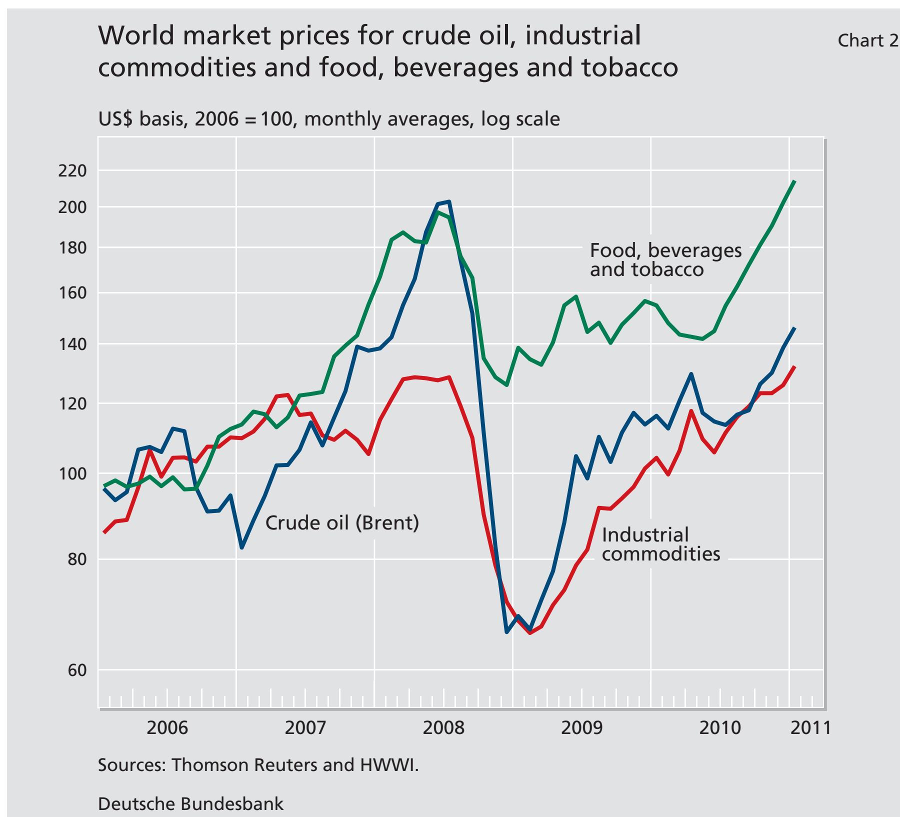
Change of pace in global industrial activity more pronounced than in overall economic activity

in 2010. As early as in the spring, global industrial output had experienced a noticeable loss of momentum, before stalling in the summer months. Waning impulses from the inventory cycle are likely to have played a part in this. Notwithstanding individual factors, the rapid catching-up process in industry came to an end when, in May 2010, production reached pre-crisis levels again for the first time and sought to find a more sustainable long-term level. In line with this, momentum initially decreased sharply in the EMEs, whose output – according to Centraal Planbureau data – had exceeded its level before the global recession by as much as 11¼% in May. Industrial output growth in this group of countries then fell below its longer-term average, while that of the advanced economies also weakened, albeit with a short time lag. In parallel, the recovery in the international trade in goods stalled, although unlike industrial output the volume here was still somewhat short of its pre-crisis level. Global economic activity picked up again in the final quarter of 2010, however. Averaged over the year, global industrial output was 9¾% up on 2009. With growth of 12%, production in the EMEs significantly exceeded its average growth rate of 9¾% measured in the previous phase of expansion (2003 to 2007). Industrial output in the advanced economies surged by 7½%, which was several times higher than the corresponding rate in the pre-crisis period (+2¼%). Such a spurt of



growth must be seen as representing the recovery of ground lost during the slump in activity during the recession; it can scarcely be maintained in the long term. The volume of world trade in goods, which had previously contracted even more strongly than industrial output, increased by 15% in 2010.

Commodity prices in part at new record highs

In recent years, the fluctuations in the global economy have had a major impact on the international commodity markets. Thus, the marked upswing in the world economy in 2010 was reflected in a strong increase in commodity prices. At the end of the year under review, the HWWI non-energy commodity price index for the industrial countries almost reached – in US dollar terms – its previous all-time high of July 2008, and subsequently continued its upward trend. Given that the manufacturing sector follows a very pronounced cyclical pattern worldwide, it is not surprising that industrial commodity prices experienced especially strong volatility. After falling by just over one-quarter in 2009, as an average for 2010 they were 39% up on the previous 12-month period. By contrast, the trend in prices for food, beverages and tobacco merely changed from –14% to +11%. In this case, however, the increase was driven not only by robust demand but also by weather-related crop failures such as the output losses in cereals in eastern Europe. Compared with industrial

commodity prices the average rise in crude oil prices (28% for Brent) was likewise less strong in 2010, especially as it was mainly attributable to the baseline effect of the price increase in the second half of 2009. Up to the fourth quarter of 2010, when upbeat economic data and the onset of severe winter weather in Europe led to upward pressure, Brent prices changed only slightly compared with the fourth quarter of the previous year. The main reason for this was probably the, at first, hesitant recovery in advanced economies' demand for oil, which contributed to a fairly abundant supply and stocks situation.

Inflation picks up in EMEs

Because the economic cycles in EMEs and industrial countries have mostly run in parallel in recent years, economic events in both groups of countries may well be described as synchronous. Yet this masks major differences in the slope of the underlying growth path and subtle discrepancies in the scale of the cyclical fluctuations. On the one hand, overall economic momentum in the EMEs was still very high directly before the global recession. On the other hand, it subsequently did not slump as heavily as in the industrial countries, and ultimately rebounded more strongly. Thus, in 2010, the EMEs reached a position in the cycle in which they probably increasingly reached their capacity limits. In addition, food prices climbed sharply owing partly to special factors. All in all, consumer price inflation rose considerably, prompting more and more central banks in this group of countries to tighten monetary policy. Given the risk of overheating, the central banks most likely welcomed the slowdown in growth in the second and third quarters of 2010. For example, a change in monetary policy was also initiated in China at the end of the year under review. However, it did not lead to a marked revaluation of the currency within the context of greater exchange rate flexibility, which would probably dampen inflationary pressures noticeably.

Uneven expansion of US GDP over the year

In the fourth quarter of 2010, the United States became the second G7 country after Canada in which real GDP returned to its pre-crisis level. Aggregate output rose by 2¾% on average for the year. When, after a buoyant start, growth in the second quarter was subdued and property market activity declined sharply as tax breaks for homebuyers expired, many feared that the upward movement would slow significantly without the temporary support of the inventory cycle and the government economic stimulus package. Some observers even speculated that the US economy might slide back into recession. Economic activity gathered pace again markedly in the second half of the year, however. In contrast with GDP, the expansion of domestic demand at first fluctuated little. Rising by a seasonally adjusted 1¼% on the quarter in the second

Macroeconomic benchmark figures of selected industrialised countries

Table 1

Countries or economic areas	Real GDP		Consumer prices[1]		Current account balance		Unemployment rate[2]	
	2009	2010pe	2009	2010	2009	2010pe	2009	2010pe
	Annual percentage change				As a percentage of GDP		As a percentage	
OECD	[3] – 3.5	[4] 2.8	[3] 0.6	[3] 1.9	– 0.5	[4] – 0.7	[3] 8.3	[3] 8.6
of which								
Euro area	– 4.1	1.7	0.3	1.6	– 0.6	[5] – 0.6	9.4	10.0
United Kingdom	– 4.9	1.3	2.1	3.3	– 1.3	[4] – 2.2	7.6	[4] 7.9
United States	– 2.6	2.8	– 0.4	1.6	– 2.7	[4] – 3.4	9.3	9.6
Japan	– 6.3	3.9	– 1.4	– 0.7	2.8	[4] 3.4	5.1	5.1
Canada	– 2.5	3.1	0.3	1.8	– 2.8	[4] – 2.7	8.3	8.0

Sources: OECD, ECB, national statistics. — **1** HICP for the euro area and the United Kingdom. — **2** Standardised unemployment rate, based on OECD calculations. — **3** 34 member states. — **4** OECD forecasts (Economic Outlook, November 2010). — **5** ECB preliminary estimate.

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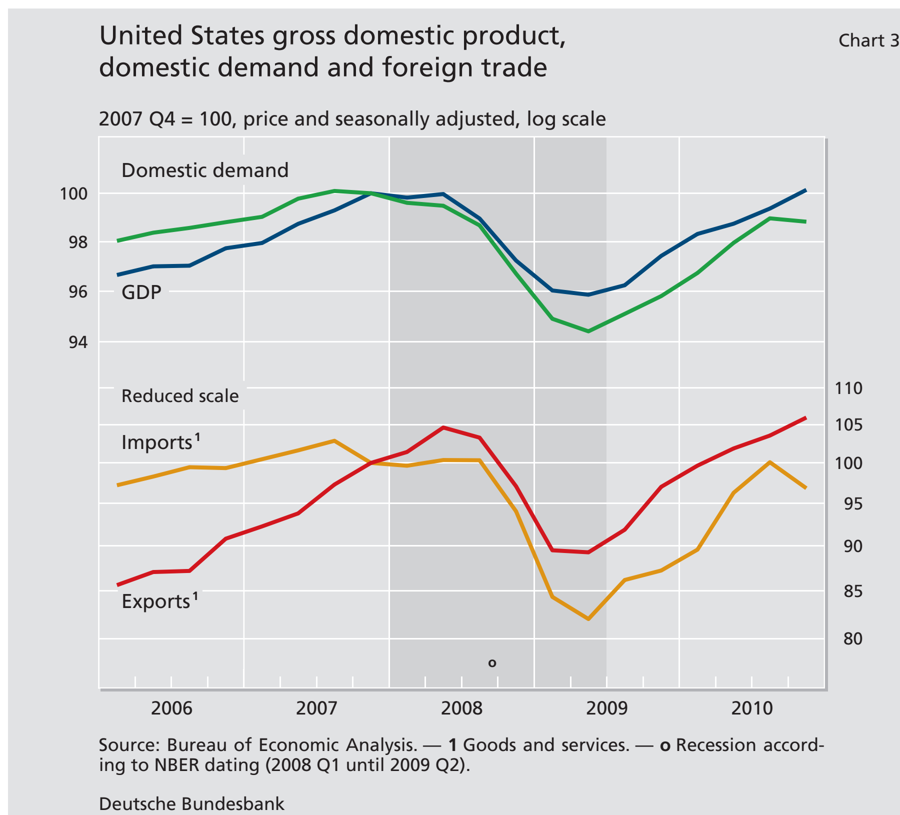
quarter, domestic demand even grew somewhat more strongly than during the winter months. Instead, the temporary deceleration in the upward movement in overall economic activity was mainly attributable to foreign trade, with an unusually strong increase in imports coinciding with a slowdown in exports in the second quarter. Last but not least, oil imports had evidently been brought forward. As a result, a relatively low level of imports boosted GDP growth in statistical terms in the fourth quarter.

US private consumption vigorous of late

One reason to be optimistic about 2011 is that US private consumption gained considerable momentum under its own steam in the course of last year. The labour market recovery did not materialise at first, and then took hold only hesitantly; this initially hampered the upward movement of household incomes and consumption. This situation was compounded towards the middle of the year as temporary jobs created for the large-scale census programme were terminated. Dwindling confidence as well as disruptions on the financial markets did not have a beneficial effect either. However, moderate employment gains in the private sector combined with higher hourly wages led to pronounced increases in incomes and consumption in the second half of the year. Even so, the lack of progress in reducing the high level of unemployment probably



Source: Bureau of Economic Analysis. — **1** Goods and services. — **o** Recession according to NBER dating (2008 Q1 until 2009 Q2).

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played an important part in the Fed's decision to increase its monetary policy stimulus again by expanding securities purchases. The 9.4% unemployment rate in December 2010 was little more than ½ percentage point lower on the year. Over the same period, consumer price inflation excluding energy and food fell by 1 percentage point to 0.8%; as an average for the year it dropped to 1.0%, its lowest level since the survey was launched in 1958.

Japanese economy initially on steep recovery path

In 2010, the cyclical recovery in Japan progressed at a strong pace. The severe decline in the previous year, during which overall economic output had been scaled back by 6¼%, was followed by a strong increase of 4%. Key to the upward movement, which followed a steep path until the summer, was the rapid expansion of the global economy and of international trade, mirroring the previous downturn. The Japanese economy profited not least from having positioned itself well in the EMEs of south and east Asia. In addition to the booming exports, which exceeded by 24% the severely depressed level one year before, private consumption was the second pillar of the upturn. However, the comparatively good annual result must be seen against the backdrop of extensive government economic stimulus programmes. Incentives to buy cars and other durable goods buoyed consumer sentiment until into the summer.

Certain countermovements, which were already apparent in the fourth quarter of 2010, are likely to be felt in 2011 as well. The labour market profited little from the favourable economic developments. Throughout the calendar year the unemployment rate fluctuated around 5%, a relatively high level by Japanese standards. In the wake of the surge in commodity prices, the decline in headline consumer price inflation slowed markedly over 2010. In October, the year-on-year rate moved back into positive territory for the first time in 19 months.

Erratic upturn in UK economy

Economic developments in the United Kingdom were quite erratic in the year under review. After the most severe post-war recession had been overcome in the fourth quarter of 2009, which was later than in other industrial countries, the economic recovery progressed well until the summer of 2010. However, this trend was interrupted again at the end of the year. Total output rose by 1¼% on average for the year. Thus, only just more than one-quarter of the output losses recorded in 2008 and 2009, when real GDP slumped by a cumulative 6½% over six quarters, had been recouped by the fourth quarter of 2010. In particular, gross capital formation by enterprises contributed to the sharp pick-up in the second and third quarters, with both the inventory cycle and the catching-up on replacement investment that had been deferred during the crisis playing a part. By contrast, private and public consumption saw little increase. In the final quarter of 2010, total output was considerably affected by the early and severe onset of winter. The exceptionally heavy snowfalls by UK standards not only impeded construction output; restrictions in the transport sector also had a perceptible impact on value added in the services sector. The labour market situation remained difficult in 2010. Throughout the year the standardised unemployment rate remained within a narrow band of between 7.7% and 7.9%. Due, amongst other things, to increases in indirect taxes and duties as well as to higher import price inflation because of the depreciation of the pound sterling, average annual CPI inflation was, at 3.3%, well above the Bank of England's 2% inflation target.

New EU member states see robust economic recovery on the whole

In the eight new EU member countries, which do not belong to the euro area, the financial and economic crisis revealed substantial discrepancies with regard to the sustainability of domestic economic developments. The diverging paths in the incipient recovery can also be understood against the background of the difficult adjustment processes which became necessary, particularly in those economies which had previously generated high current account deficits that had not been financed primarily by foreign direct investment. Whereas in some

countries, the economy did not bottom out until during 2010 and moved with difficulty to a steady growth path, others emerged buoyantly from the crisis year of 2009 and stayed on a dynamic recovery course up to the end of the period under review. With Poland as the growth locomotive, this group of countries was able as a whole to generate robust economic momentum in 2010. Nonetheless, the profound impact that the severe recession had on the labour market is still clearly visible. On an annual average for 2010, the unemployment rate was, at 9.7%, more than 3 percentage points above 2008 levels.

Reduction in current account imbalances partly cyclically induced

The reduction in global current account imbalances, which had got underway in the wake both of the severe slump in the international trade in goods and of the sharp decline in global commodity market prices, largely ground to a halt at the start of the economic recovery phase. In most of the major economic areas, the trend towards increasing imbalances subsequently resumed again. Thus, there are signs that the decline in these imbalances during the recession was mainly cyclically driven. According to the IMF forecast, however, a return to pre-crisis levels is not expected in the medium term. From its cyclical low in the second quarter of 2009 to the third quarter of 2010, the US current account deficit rose by 1 percentage point to 3½% of GDP on the back of a sharp expansion of domestic demand. The deficit in the United Kingdom likewise increased appreciably in 2010. In the euro area, the already low deficit was virtually unchanged. Conversely, the recovery in world trade and rising commodity prices led to a renewed increase in current account surpluses, particularly in the oil-exporting countries. According to a provisional estimate, the Chinese surplus also rose considerably in 2010 by one-quarter to US$306 billion, or from 5% to 5¼% of GDP. To prevent global imbalances from again becoming a significant downside risk for the world economy, growth of domestic demand in EMEs with high surpluses ought to be strengthened by structural reform and by increasing the flexibility of exchange rates. In countries which traditionally produce a deficit, on the other hand, higher overall saving is called for; this can be achieved most effectively at present by consolidating public budgets. By contrast, concepts which equate to international macroeconomic fine-tuning, for example by setting quantitative standards for current account balances (in relation to GDP), are to be rejected.

2 Shifts in the exchange rate landscape

On balance, US dollar slightly lower in effective terms

Developments on the foreign exchange markets in 2010 were again strongly influenced by the ongoing financial crisis. With the sovereign debt crisis intensifying in several euro-area countries, uncertainty on the financial markets increased appreciably up until the middle of last year; this was reflected in higher exchange rate volatility. In this environment, international investors were interested in safe and liquid assets, which benefited the US dollar, in particular. The appreciation of the US currency was initially also supported by a gradual revival of the US economy. Over the summer months, however, weaker figures from the US housing market and overall slower GDP growth in the United States temporarily cast somewhat of a shadow over the economic picture, which weighed on the US dollar. The Fed responded in November by launching a new US$600 billion government bond purchase programme. Over 2010 as a whole, the US dollar depreciated 2½% in net terms on a weighted average against the currencies of 21 trading partners.

Emerging markets with exchange rate gains

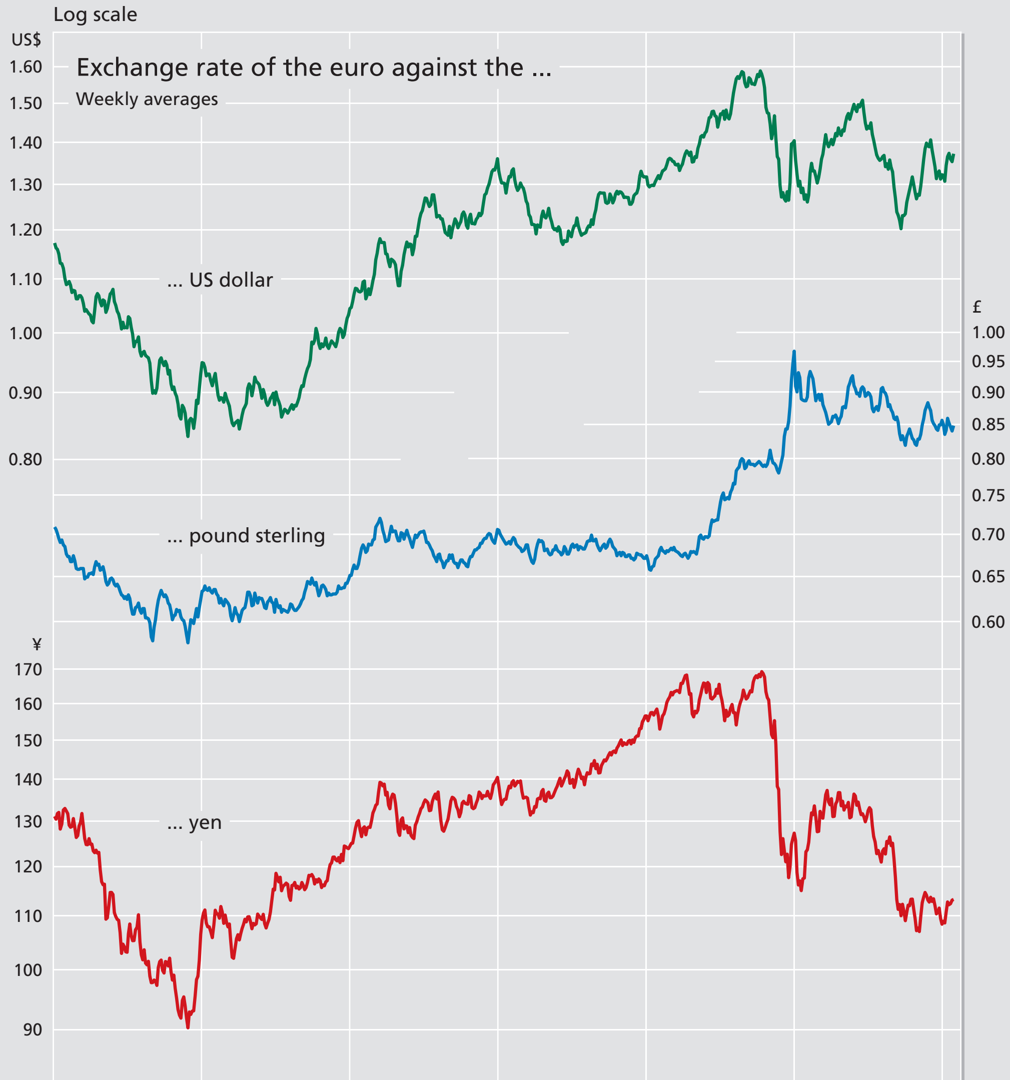
Moreover, the different pace of economic recovery in the individual countries and regions resulted in shifts in the exchange rate landscape. The currencies of many EMEs with flexible exchange rates – as well as commodities exporters – gained, as such economies were frequently less hard hit by the direct effects of the financial crisis and have recovered from the economic slump significantly more rapidly than most industrial countries. The favourable growth prospects and first monetary policy tightening measures resulted in plentiful capital inflows, particularly to Asia and Latin America. As a consequence, measured in effective terms against the currencies of 56 trading partners, the South African currency, for instance, appreciated more than 11%, the Thai exchange rate rose 6%, while both Brazil and Mexico recorded foreign exchange gains of 5% in 2010. Fearing a loss of price competitiveness, several countries took measures to curtail capital inflows or limit their currency's rise. However, past experience shows that such interventions – where they go against fundamental market forces – have a limited prospect of success; moreover, they encourage protectionist tendencies.

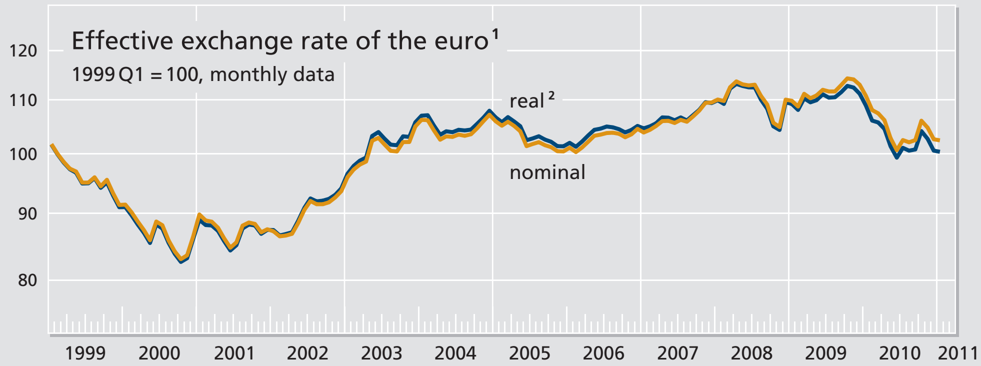
Euro down against the US dollar, …

The developments outlined above also had an impact on the euro's exchange rate performance. In the first few months of 2010, the sovereign debt crisis in Greece, which threatened to spread to other euro countries through increased interest rate spreads, contributed to the euro's weakness against the US dollar, as did strong demand for US dollar-denominated investments. Despite the large-scale rescue shield agreed at the beginning of May and additional

Exchange rate of the euro

Chart 4





1 According to ECB calculations against the currencies of 20 countries. — **2** Based on consumer price indices.

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consolidation efforts announced in Greece, the euro-dollar exchange rate fell to a multi-year low of US$1.19 in June. In the second half of the year, an increasingly more optimistic growth outlook emerged in the euro area, driven mainly by favourable economic data for Germany, which strengthened the euro perceptibly against the US dollar. The appreciation trend was halted only by the financial crisis in Ireland in mid-November, which reignited concerns about the vulnerability of the European banking sector, and the euro-dollar exchange rate fell to around US$1.34 by year-end; it therefore ended 2010 down slightly more than 7% on the year.

… the pound sterling and …

The single European currency also lost ground against the pound sterling in the first half of 2010. However, the sluggish economic recovery and precarious budget situation in the United Kingdom initially limited the euro's losses. The austerity programme passed by the new government strengthened confidence in Britain's public finances again in the summer. Moreover, increased inflationary pressure led to expectations of higher key interest rates, causing the euro-pound exchange rate to drop to a level of around £0.82. The subsequent appreciation of the single currency to roughly £0.89 was driven mainly by fears that the consolidation measures announced by the British government could permanently dent the economic recovery. Surprisingly sharp growth in the UK in the third quarter calmed investors' fears, however, and the euro relinquished some ground to trade at £0.86. Over the year as a whole, the euro therefore lost 3% against the pound sterling.

… the yen

The tensions on the international financial markets also hurt the euro's exchange rate against the Japanese currency. Its role as a financing currency for carry trades meant the yen benefited from investors' growing risk aversion, and it appreciated perceptibly across the board. The yen reached multi-year highs against both the euro and the US dollar. In mid-September 2010, the finance ministry, which is responsible for this area in Japan, responded with massive intervention to bring down the value of the yen, after having not been active on the foreign exchange market for more than six years. At year-end, the euro stood at just under ¥109, some 18½% lower than at the end of 2009.

Euro with losses in effective terms

The euro exchange rate marked a historic low against the Swiss franc, which given jittery financial markets is also seen as a safe haven, of just under CHF 1.25 at year-end. Over the year, it thus depreciated by 15½%. The euro last year also realised large losses against the currencies of commodities-exporting industrial countries such as Australia (–18%), Canada (–12%) and Norway

(–6%), which were among the main beneficiaries of the global economic recovery. On a weighted average against the currencies of 21 trading partners, the euro lost more than 8% in value during 2010 and was thus roughly back at the level it stood at when European monetary union was launched.

3 Capital markets between sovereign debt crisis and the recovery of the world economy

European bond markets feel effects of the sovereign debt crisis

Developments on the international financial markets were last year dominated by the sovereign debt crisis in several countries of the euro area. The crisis started in Greece, where at the end of 2009 the budget deficit turned out to be higher than originally reported. The market thereupon increasingly called into doubt the sustainability of public finances in Greece. This caused a massive increase in the yields on Greek government bonds, with ten-year paper peaking at almost 13%; moreover, other euro-area countries also risked being drawn into the maelstrom. Large-scale support measures by the international community at the beginning of May (including a conditional aid package to avert a Greek insolvency and the newly established European Financial Stabilisation Mechanism) as well as additional consolidation efforts announced by the member states temporarily halted the dramatic drop in bond prices in particularly hard hit countries. The markets did not stabilise on a permanent basis, however, particularly as macroeconomic risks increased and – in Ireland – the burden of rescuing financial institutions proved greater than originally assumed. Moreover, rating agencies downgraded the sovereign ratings of Greece, Ireland, Portugal and Spain in particular. In the fourth quarter, market participants focused mainly on Ireland, where the estimated budget deficit for 2010 soared to 32% of GDP following large-scale measures to stabilise the domestic banking sector. This cast doubt on the government's solvency and resulted in the spreads of Irish bonds with a residual maturity of 10 years over matched-maturity Bunds doubling to just under 680 basis points between August and November. This massive deterioration in financing conditions given further recapitalisation requirements on the part of the banking sector led the Irish government to apply for assistance under the euro rescue shield in November (the measures are described in more detail on page 90).

Intra-euro-area yield spreads widen significantly

The tensions on the euro-area bond markets continued up until the end of 2010 and caused strong divergence in bond yields. The GDP-weighted standard deviation of yields increased by more than 40 basis points over the year to

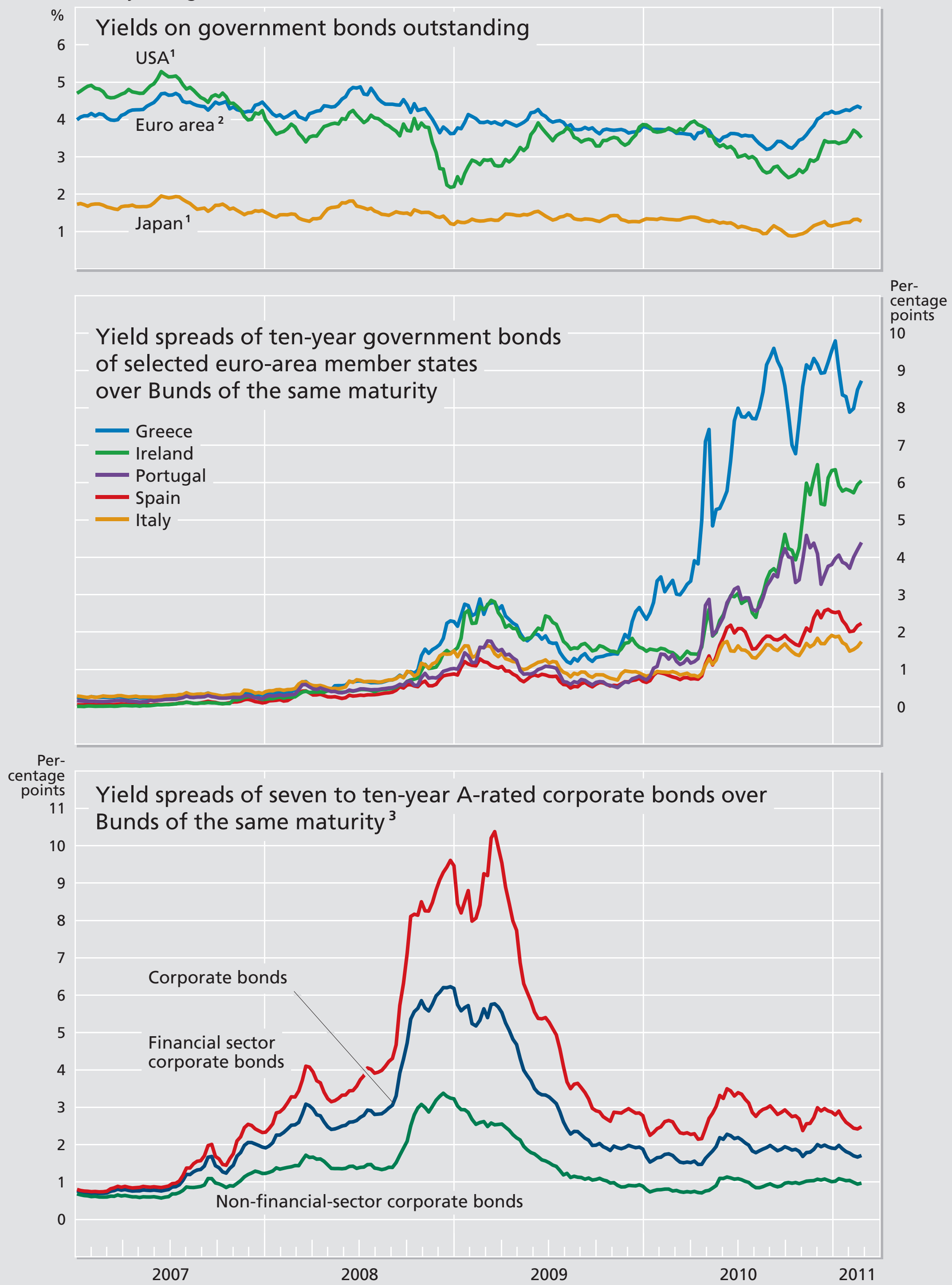
reach an all-time high of just under 60 basis points at year-end. This was due, however, not only to rising yields in the peripheral euro-area countries. The high degree of uncertainty among market participants also resulted in massive safe-haven flows, some into German sovereign bonds, which were particularly popular given their high creditworthiness and liquidity. Overall, yields on 10-year Bunds dropped by just under 40 basis points to slightly less than 3% over the year. At times, they had been even lower, and at the end of August they even reached a historic low of some 2% before favourable economic developments in Germany, rising risk appetite among market participants and international factors caused a countermovement.

Yields on government bonds of largest industrial countries down on balance

A similar pattern can be observed for non-euro-area government bond yields. Up until the fourth quarter, uncertainty regarding economic developments in important industrial countries dominated, and international investors, faced with the sovereign debt crisis in several euro-area countries, were interested not only in Bunds but also, above all, in US Treasuries, which are considered to be a safe haven. This caused Treasury yields to ease by 1½ percentage points. Yields on bonds outstanding in Japan, the United Kingdom and Switzerland also fell sharply in this period. From October onwards, positive economic expectations started to predominate, however. Funds were shifted from the fixed-interest securities of public sector issuers into shares. International government bond yields picked up again. This was also true of the United States and Japan, whose central banks had initiated large-scale programmes to purchase government bonds in a bid to support the economy. Despite this increase, at the end of 2010, 10-year government bond yields in the United States and Japan traded considerably lower year-on-year, at 3¼% and just over 1% respectively.

Slight improvement in corporate wholesale funding conditions

The 2009 trend decline in financing costs for enterprises with access to the capital markets continued from the beginning of 2010 to end-April. The bond yields of enterprises with an investment grade rating of A and a residual maturity of seven to ten years, for instance, fell more than 60 basis points as measured by the iBoxx bond indices. As the government debt crisis intensified, the corporate bond market also temporarily suffered tensions and a slight increase in yields. The sovereign debt crisis in several euro-area countries had only a moderate impact on corporate wholesale funding conditions as the year progressed, however. Corporate bond yields did not pick up again until the end of the year. This was mainly due to investors' tendency to shift out of fixed-interest securities into shares given a slightly higher risk appetite as a result of the good economic performance; higher risk premiums were probably less of a



1 Government bonds with approximately ten-year residual maturity. — **2** Average yield of ten-year euro-area government bonds outstanding (GDP-weighted). — **3** Sources: iBoxx and Bundesbank calculations.

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factor. On balance, financing costs for A-rated enterprises dropped by 36 basis points to slightly more than 4¾% during 2010. Financial firms' bond yields ended the year 2010 almost 30 basis points down compared with the beginning of the year. Moreover, considerable risk premiums are priced in, which means that they had not returned to pre-financial crisis levels.

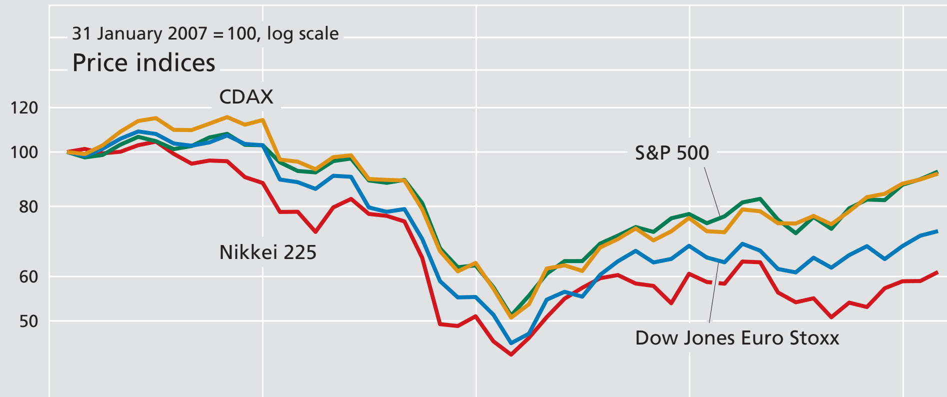
Mixed stock market developments

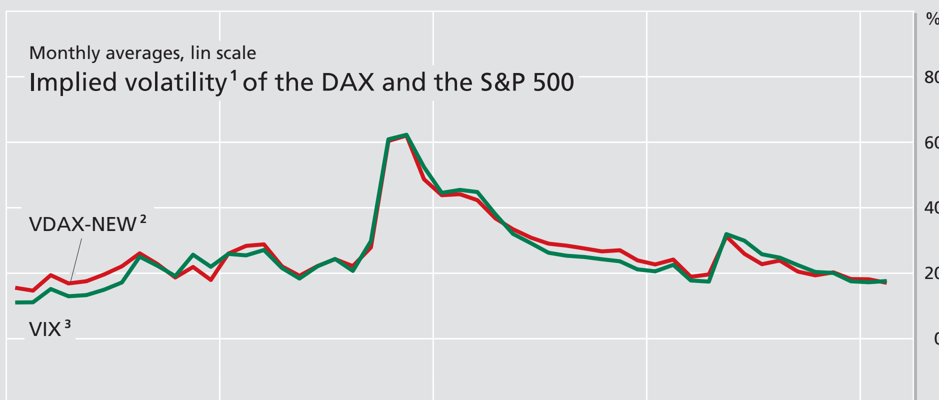
Developments on the stock markets of the industrial countries were fairly mixed overall in 2010. While the German CDAX share index and the US S&P 500 recorded relatively strong gains of 15% and just short of 13% respectively, the euro-area-wide DJ Euro Stoxx was virtually unchanged; the Japanese Nikkei index was even 3% down at year-end. The muted stock market environment in the industrial countries until well into the third quarter was mainly due to the intensification of the government debt crisis and uncertainty regarding the economic outlook in the major currency areas. This was reflected in strong share price volatility and an, at times, large degree of uncertainty among market participants as measured, for instance, by the implied volatility of stock options or by the risk premium which investors demand for holding shares. Bullish sentiment started to gain the upper hand on the stock markets of the major industrial countries only in the second half of the year. With demand for shares picking up, stock market prices rose sharply. Good quarterly figures from both US and European conglomerates, better-than-anticipated economic indicators and upwardly revised earnings guidance supported this development. In the final quarter of 2010, in particular, the US stock market recorded large gains. Much the same applies to the German equity market. The strong growth in Germany and German enterprises' global presence – particularly in the rapidly expanding emerging market economies – were major factors enabling German stock markets to outperform those of other industrial countries. The situation was different in the peripheral euro-area countries: the real economic and financial problems weighed on stock markets there. As a consequence, stock market losses ranged between 8% in Ireland and 35% in Greece. Financials were particularly hard hit; this was also evident in the euro-area-wide equity index DJ Euro Stoxx, which meant that the clear gains posted, amongst others, by enterprises in the consumer goods industry, which in this sectoral definition includes the booming automobile industry, were not reflected in the overall index.

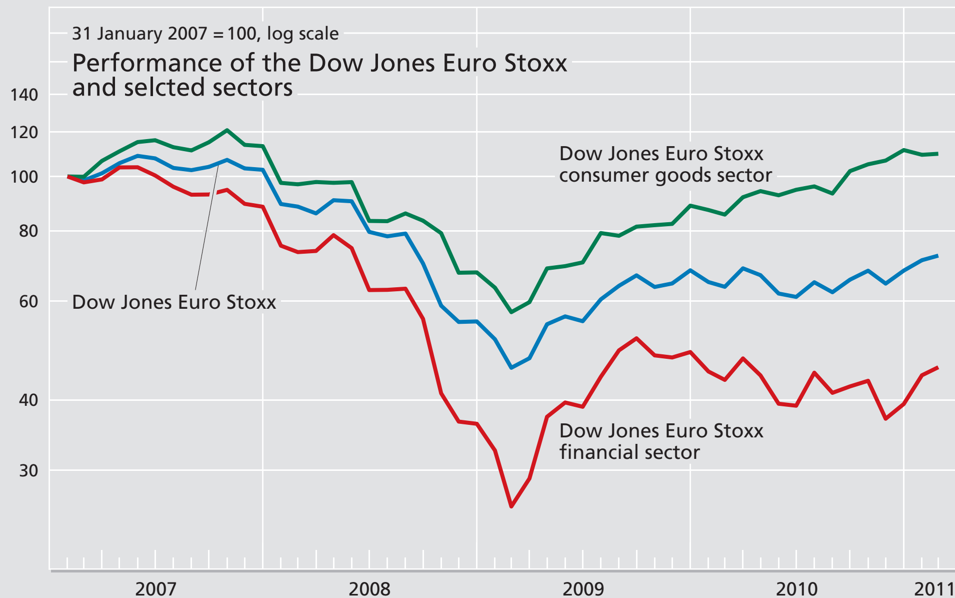
Equity market

Chart 6

End-of-month levels







Sources: Thomson Reuters and Bundesbank calculations. — **1** Expected future volatility calculated from options prices. — **2** Based on options on the S&P 500. — **3** Based on options on the DAX.

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II Economic and monetary developments in the euro area

1 Moderate economic upswing and significant growth disparities within the euro area

Sustained recovery in the euro area …

The economic upturn in the euro area that had begun in mid-2009 continued in 2010. Following a tepid start to the year, which was hampered by adverse weather conditions, the second quarter saw a temporary significant pick-up in growth. This was mainly attributable to the brisk growth in exports to non-euro-area countries and lively investment activity. Investment was strongly influenced, among other things, by catch-up effects in the construction sector of the northern member states following extensive output losses during the fourth quarter of 2009 and the first quarter of 2010. After mid-year, the pace of growth slackened significantly. This partly reflects a return to normal, as growth in the second quarter was unusually strong. In addition, the stimuli from global trade weakened. However, in the second half of 2010, the euro area remained on the growth path that it had embarked upon at the start of the year. Given that the effects of the government stimulus programmes were then weakening – or had come to an end entirely – this demonstrates that a self-sustaining recovery is increasingly gaining a foothold. Nonetheless, aggregate euro-area output at the end of 2010 was still just under 3% below its cyclical peak in early 2008, which, according to the World Economic Outlook published by the IMF in the autumn of 2010, will not be reattained until sometime in 2012 at the earliest. According to initial estimates, real GDP in the euro area grew by 1¾% on average for 2010. Although overall capacity utilisation is likely to have grown perceptibly despite the persistently flat medium-term growth path, the output gap remained substantial.

… with considerable growth disparities

Viewed at a regional level, Germany was the main driver of euro-area growth in 2010. At 3½%, the pace of expansion was three and a half times as high in Germany as in the euro area excluding Germany. This benefited, in particular, the neighbouring partner countries, including the central and east European EU countries outside of the euro area. Although French economic growth remained somewhat below the euro-area average, it should be borne in mind that the slump in output it experienced as a result of the recession was relatively minor, and France – like Germany – is already likely to return to its pre-crisis economic performance in the course of 2011. In Italy, where real GDP contract-

Economic performance in the euro area Table 2

Country	Real GDP		Consumer prices1		Unemployment rate2	
	2009	2010	2009	2010	2009	2010
	Year-on-year percentage change				As a percentage	
Euro-Raum	– 4.1	3 1.7	0.3	1.6	9.4	10.0
Belgium	– 2.7	3 2.0	0.0	2.3	7.9	8.4
Germany	– 4.7	3.6	0.2	1.1	7.5	6.8
Ireland	– 7.6	3 – 0.2	– 1.7	– 1.6	11.9	13.5
Greece	– 2.0	3 – 4.2	1.4	4.7	9.5	3 12.5
Spain	– 3.7	– 0.1	– 0.2	2.0	18.0	20.1
France	– 2.6	1.5	0.1	1.7	9.5	9.7
Italy	– 5.0	1.3	0.7	1.7	7.8	8.5
Cyprus	– 1.7	3 0.5	0.2	2.6	5.3	6.8
Luxembourg	– 3.7	3 3.2	0.0	2.8	5.1	4.7
Malta	– 1.9	3 3.1	1.8	2.0	7.0	6.7
Netherlands	– 3.9	3 1.7	1.0	0.9	3.7	4.5
Austria	– 3.9	3 2.0	0.4	1.7	4.8	4.6
Portugal	– 2.5	3 1.3	– 0.9	1.4	9.6	10.9
Slovenia	– 8.1	3 1.1	0.9	2.1	5.9	7.2
Slovakia	– 4.8	3 4.1	0.9	0.7	12.0	14.5
Finland	– 8.2	3 2.9	1.6	1.7	8.2	8.4

1 Harmonised Index of Consumer Prices (HICP). — **2** Standardised unemployment rate. — **3** European Commission projections (Autumn Forecast, November 2010).

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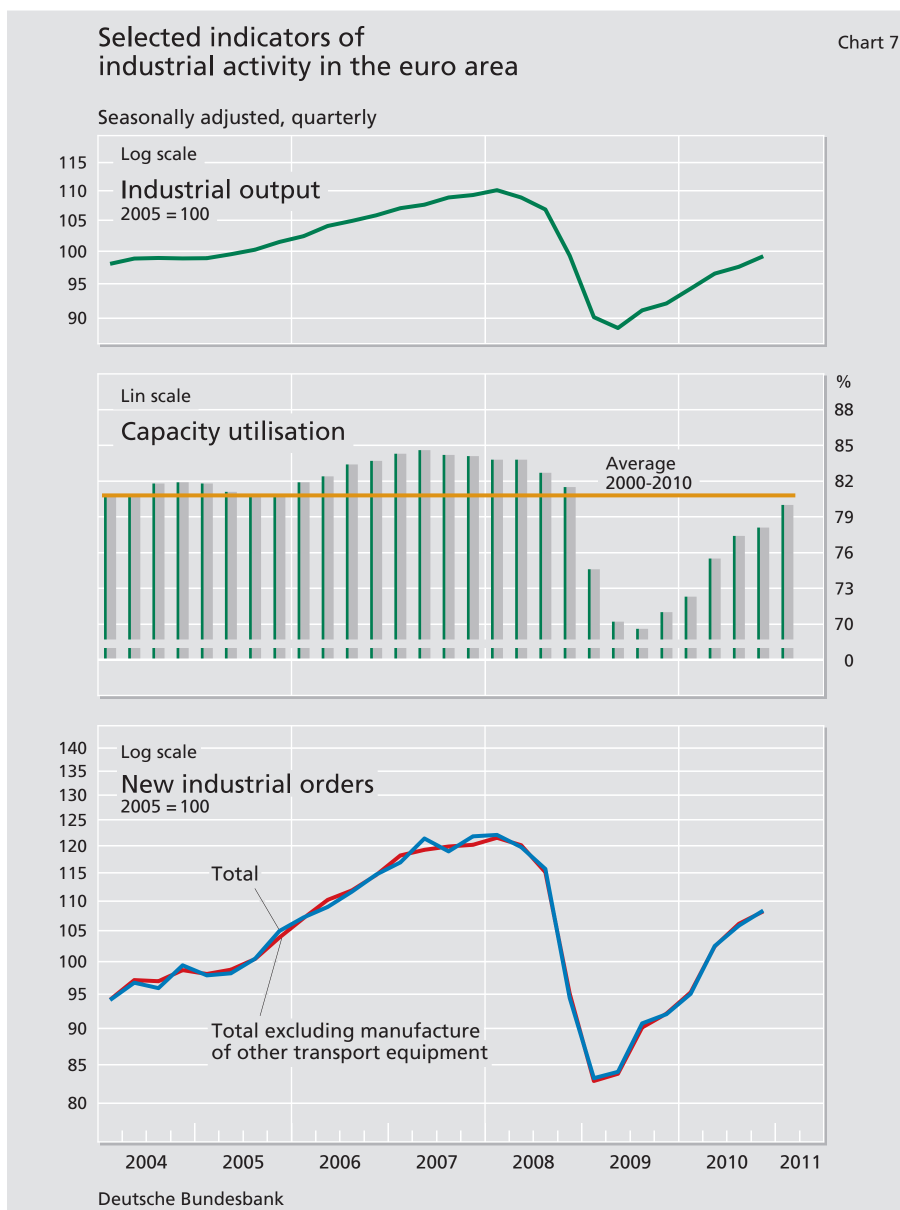
ed sharply in 2009, the subsequent economic recovery lacked vigour. At the end of 2010, aggregate output in Italy was still 5¼% below its pre-crisis level. Euro-area growth was also curbed by the peripheral countries. The recession in Greece is continuing, the Portuguese economy has not yet bottomed out, and the recovery in Spain and Ireland lacks momentum. Alongside ongoing structural adjustment processes, such as in construction or the financial sector, the increased efforts by governments to consolidate public budgets, the aim of which is to restore lost financial market confidence as quickly as possible, are one of the main reasons for the underperformance of this group of countries. However, since the start of the economic recovery in the summer of 2009, the growth disparities in the euro area – as measured by the weighted and unweighted standard deviation – have remained essentially unchanged compared with the average of the years from 1999 to 2007. It is only the growth rankings that have seen a fundamental shift. The growth rates of some peripheral countries that had experienced a rapid expansion in the previous cycle have now fallen below the euro-area average, while Germany has undergone a turnaround from laggard to economic locomotive.

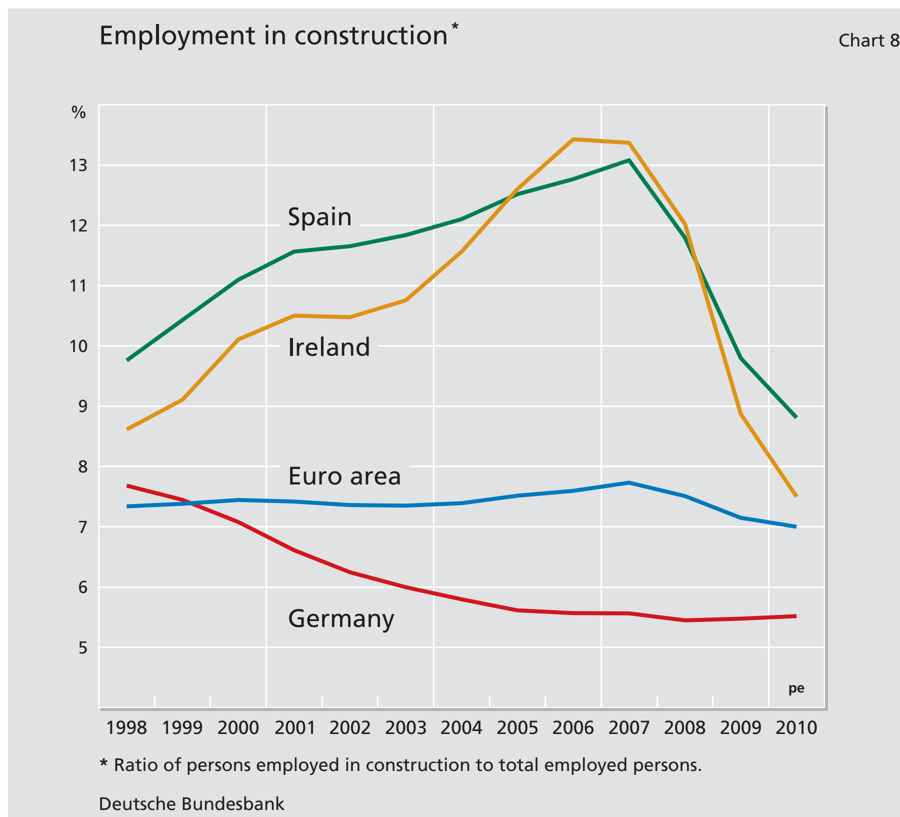


Growth probably moderate in 2011 and somewhat stronger in 2012

The available indicators suggest that the moderate growth seen at the end of 2010 has continued in the first quarter of 2011. In its latest forecast, the European Commission expects real GDP growth of 1.6% in 2011 as a whole. It also predicts that aggregate output will increase by 1.8% in 2012.

Still no substantial improvement in labour market

Although the situation on the euro-area labour market stabilised over the course of 2010, it did not yet noticeably improve. The number of employed persons is likely to have been around the same in the autumn of 2010 as it was a year earlier; on an average of the first three quarters – the period for which data are currently available – it was down by ½% on the year. In keeping



with the disparate economic developments within the euro area, employment saw renewed growth particularly in Germany, but also in France and some other countries in 2010, whereas it continued to decline significantly in Italy and the peripheral countries. In Spain and Ireland, the ongoing job cuts in the construction sector again had an impact; these led to a further substantial rise in the unemployment rate to 20.1% in Spain and 13.5% in Ireland. In the euro area as a whole, annual average unemployment increased by 873,000 to 15.77 million persons, and the unemployment rate rose by 0.5 percentage point to 10.0%. Since its cyclical low at the beginning of 2008, the unemployment rate has increased by nearly 3 percentage points.

Rise in consumer prices at level consistent with price stability

At 1.6%, the rate of inflation in the euro area – as measured by the Harmonised Index of Consumer Prices (HICP) – remained at a level consistent with price stability in 2010. One year previously, inflation had stood at a mere 0.3%, whereas in 2008 it was 3.3%. On the whole, these fluctuations reflect developments in the real economy, with the global cyclical swings having a clear impact, above all, on the volatile components energy and food. Despite additional strains caused by higher rates of turnover tax and consumption tax in a number of countries, inflation on goods (excluding energy) fell to 0.5% in 2010 and

New EU 2020 strategy and reform of the economic governance of the European Union

New EU 2020 strategy builds on Lisbon strategy

At their meeting on 17 June 2010, the European heads of state or government adopted a "European Union strategy for jobs and smart, sustainable and inclusive growth". The new EU 2020 strategy builds on important aims of the previous Lisbon Agenda, and, in addition, is intended to help member states to implement medium to longer-term reforms that contribute to growth, employment and the sustainability of public finances.

Progress will be measured against five headline targets which member states are to translate into national targets – with due consideration of national particularities – and are to be attained by 2020.

- Ensure an employment rate of 75% of 20-64 year-olds
- Invest 3% of GDP in research and development
- Cut CO_2 emissions by 20% (or 30% if other industrial countries commit to similar reductions), increase the share of renewable energy in overall energy consumption to 20% and improve energy efficiency by 20%
- Lower school drop-out rate to below 10% and lift the proportion of 30-34 year-olds with a tertiary degree to 40%
- Reduce the number of people at risk of poverty by at least 20 million

A number of flagship initiatives have been defined to help implement the strategy in core areas.

Furthermore, in June 2010, the European Council gave political endorsement to ten integrated guidelines for economic and employment policies. These provide general guidance on how to implement the EU 2020 strategy and will be fleshed out with detailed country-specific recommendations in mid-2011. The guidelines include, *inter alia*, consolidation strategies to ensure the quality and sustainability of public finances and stipulate that macroeconomic imbalances be reduced. Euro-area countries, in particular, are to improve their competitiveness and take measures to combat excessive private sector debt.

Reform of economic governance

In March 2010, the European heads of state or government asked the President of the European Council, Herman Van Rompuy, to set up a task force in cooperation with the European Commission to develop measures to enhance economic policy coordination. The task force's final report, which the European Council approved in October 2010, proposed a concept outlining a number of elements which are to be implemented by the summer of 2011 at the latest.

New EU 2020 strategy and reform of the economic governance of the European Union (cont'd)

Reinforcing coordination by means of an "EU semester"

Member states are, as of 2011, required to submit their stability and convergence programmes together with their national reform programmes under the EU 2020 strategy to the Commission in April of each year. The aim is, firstly, to ensure greater alignment of the content of both programmes and, secondly, to improve timing with member states' budgetary procedures, enabling the economic policy recommendations that result from the assessment of these programmes to be taken into consideration when drawing up national budgets in the second half of the year. However, the surveillance of general economic policy will remain strictly separate from that of budgetary policy. In terms of content, the focus will shift to include the monitoring of macroeconomic and financial imbalances, competitiveness and obstacles to growth. In addition, euro-area member countries will come under closer scrutiny, and the annual economic summit means that the European heads of state or government will again play a more active role in governance and monitoring in future.

Reforming the Stability and Growth Pact

The Stability and Growth Pact contains rules aimed at achieving sound public finances. Recent events have shown that these rules are insufficient, or have not been enforced rigorously enough, and that unsound public finances undermine the stability of the currency area. Reforming the Pact is therefore key to the long-term functioning of the euro area. In addition to improving statistical data, the task force's proposals for reform are chiefly aimed at strengthening fiscal discipline. Firstly, the debt criterion, which stipulates that the debt ratio should not exceed 60%, is to be given greater prominence. To achieve this, quantitative goals are to be defined which, in the preventive arm of the Pact, are concerned with the adjustment path towards the medium-term budgetary objective and, in the corrective arm, with establishing whether a deficit ratio is excessive. Secondly, compliance with the rules is to be reinforced in particular by extending the possibility of sanctions. For instance, in future it should be possible to impose non-financial measures in the form of more stringent reporting requirements or to decide on monitoring missions. Financial sanctions for euro-area countries are to comprise interest-bearing and non-interest-bearing deposits as well as fines. Here it is planned to allow the inclusion of funds from the EU budget in the financial sanctions. A further proposal is to impose sanctions at an earlier stage than has currently been the case and, if necessary, escalate them. For instance, financial sanctions – initially in the form of interest-bearing deposits – can already be imposed under the preventive arm. The task force has proposed that fines be imposed if the Council determines that a member state has not implemented effective measures to reduce its excessive deficit in a timely manner. Decisions on sanctions should be taken in accordance with the "reverse majority rule". If the Council determines that a rule has been breached, then the European Commission can recommend that sanctions be imposed, and this recommendation would be adopted unless a qualified majority of member states in the Council vote against it. Furthermore, minimum require-

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New EU 2020 strategy and reform of the economic governance of the European Union (cont'd)

ments for national fiscal frameworks are to be defined. Member states are, by 2013, to introduce national budgetary rules that will help them to achieve the European targets.

New mechanism to prevent and correct macroeconomic imbalances

The processes currently in place to monitor economic and fiscal policy are to be supplemented by the surveillance of macroeconomic imbalances. Based on Article 121 of the Treaty on the Functioning of the European Union (TFEU) and two new Council Regulations, a two-stage mechanism has been proposed. In the first stage, member states are regularly assessed based on a scoreboard of economic indicators to determine whether imbalances exist. If these assessments indicate that there may be imbalances, the Commission can conduct an in-depth review. Should this reveal severe imbalances or imbalances that could jeopardise the proper functioning of the economic and monetary union, the Council can open an "excessive imbalance procedure" and issue recommendations for correction. The member state in question submits a corrective action plan, which the Council evaluates before setting an implementation deadline. If a member state repeatedly fails to take corrective action, the Commission can recommend that sanctions be imposed. Here – as in the budgetary surveillance procedure – the principle of "reverse majority" applies, ie a qualified Council majority is required to reject sanctions.

New crisis mechanism

As regards the mandate to draw up proposals for a permanent crisis mechanism, the task force came to the conclusion that, owing to the establishment of the temporary European Financial Stability Facility (EFSF) and the European Financial Stabilisation Mechanism (EFSM), there is currently no acute need for action. It found that more work is needed to put in place the instruments that are required in the medium term to respond to financial crises in member states and the ensuing contagion effects. It identifies the need to avoid setting the wrong incentives for fiscal policy and to create incentives for market participants to behave in a responsible manner as key factors. Given the persistent and escalating crisis of confidence as well as the associated risks for the euro area as a whole, the euro-area finance ministers agreed the most important cornerstones of a permanent crisis mechanism back on 28 November 2010, taking up some of the guidelines established by the Van Rompuy task force. The future European Stability Mechanism (ESM) is to be based on the EFSF in its current form. Financial assistance is permitted only if stability in the euro area as a whole is at risk and is to be conditional on a stringent programme of economic and fiscal adjustment. In the event of a liquidity crisis, private sector creditors are to be encouraged to maintain their exposure while, in the event of insolvency, private sector creditors and the respective debtor country must reach a comprehensive agreement on restoring debt sustainability as a condition for financial assistance. To protect the taxpayers in the countries providing assistance, ESM loans are to be given preferred creditor status and the mechanism is to

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New EU 2020 strategy and reform of the economic governance of the European Union (cont'd)

take the form of a bilateral agreement where decisions regarding support measures are unanimously agreed by the countries providing assistance. At present, negotiations are ongoing with the objective of finalising the mechanism by the end of March.

Assessment

Overall, the EU 2020 strategy may find broader acceptance among the member states and prove more successful than the earlier Lisbon Agenda. This is also likely to be aided by greater involvement of the heads of state or government in implementing the strategy; they will be acting within their existing political remit and will not, as has been claimed on numerous occasions, function as a new economic government of sorts.

The EU semester may improve the coherence of stability and convergence programmes and of national reform programmes as well as their assessment. However, it should be noted that it will have no impact on the results of fiscal policy surveillance. With regard to the new procedure for dealing with macroeconomic imbalances that is currently under discussion, there is also a danger of attempts at macroeconomic fine-tuning. Furthermore, an excessively mechanistic, symmetric interpretation of certain imbalance indicators does not appear appropriate. In particular, it should be ensured that current account surpluses in competitive countries cannot be portrayed as detrimental to the functioning of the economic and monetary union and thus in need of correction.

A fundamentally improved Stability and Growth Pact and an appropriate permanent crisis mechanism would play a key role in safeguarding the stability of the euro area. The reforms that have been launched in connection with the Stability and Growth Pact and the cornerstones agreed for the ESM are basically welcome. In terms of preventing sovereign debt crises, the target of giving greater prominence to the debt criterion and long-term sustainability as well as efforts to improve compliance with regulations are a response to key weaknesses. However, even though the details are yet to be finalised, there are already indications that the reforms will fall far short of what is required in key areas. The shortcoming that the rules give the Council, which remains the main decision-making authority, significant discretion is not addressed.

The decisions taken to date on the ESM envisage the following: keeping the no bail-out clause as the basic principle, ie ensuring that fiscal policy remains a national responsibility, limiting its use to exceptional circumstances and protecting taxpayers in the creditor countries as far as possible. The key to finalising the details is to implement the points that have been agreed so far in an appropriate manner. Some of the proposals currently being discussed – such as secondary market purchases, Eurobonds or perceptibly lowering the interest rate charged on ESM loans – would not only reduce incentives for sound fiscal policy, they also contravene important basic principles of the currency union such as subsidiarity, national fiscal responsibility and the no bail-out rule.[1]

1 See also Deutsche Bundesbank, The debate on secondary market purchases by the future European Stability Mechanism, Monthly Report, February 2011.

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inflation on services declined to 1.4%. By contrast, energy became substantially more expensive (+7.4% year on year) as a result of the sharp increase in crude oil prices and the depreciation of the euro. For food, inflation increased to 1.1% owing, among other things, to higher world market prices. Over the course of 2010, HICP inflation rose from 0.9% in January to 2.2% in December because of the volatile components. At the beginning of 2011 (January-February) year-on-year HICP averaged 2.4%.

2 Monetary policy and money market developments

Macroeconomic environment in 2010 characterised by high degree of uncertainty

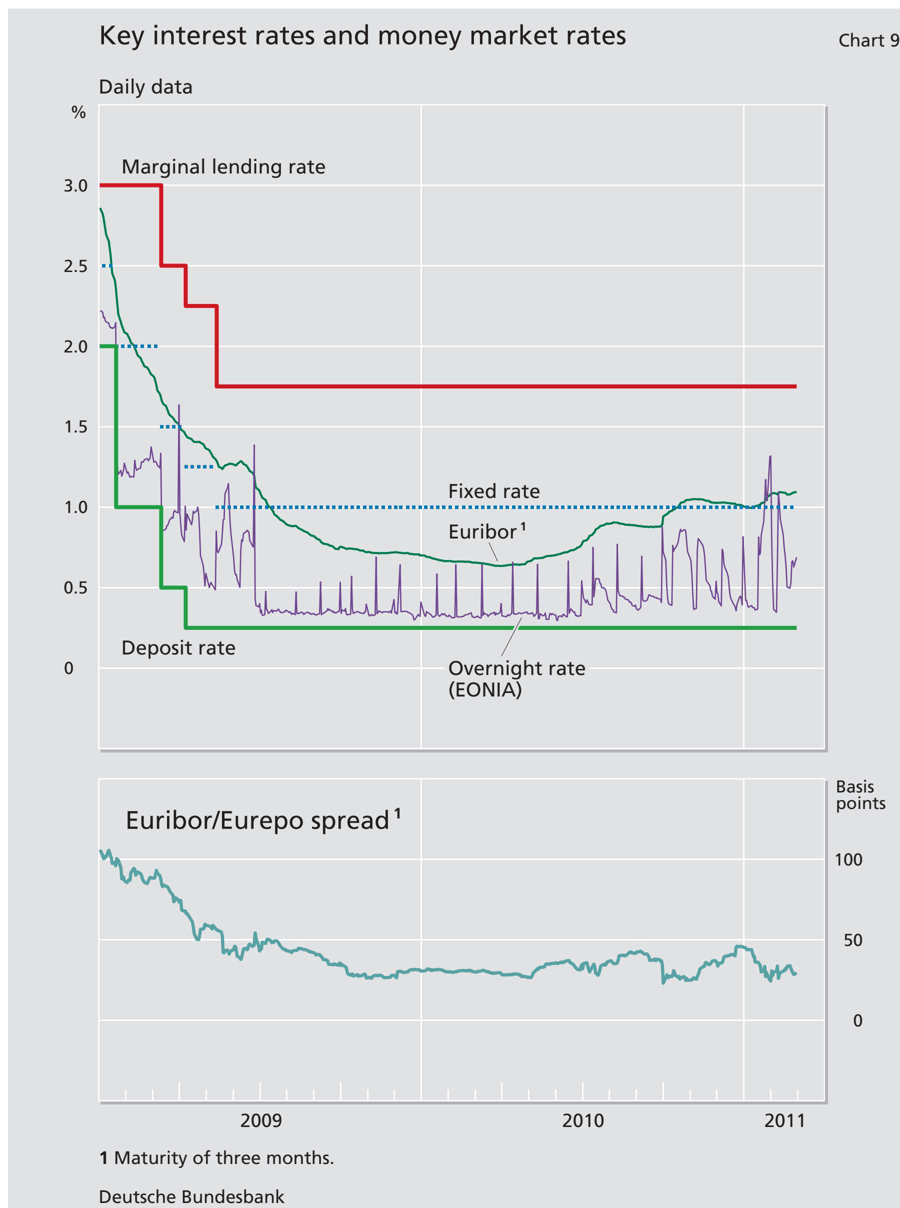
In 2010, the Governing Council of the ECB was confronted with a macroeconomic environment that was characterised by an exceptionally high degree of uncertainty. Given the buoyant global catch-up process and exceptionally expansionary monetary policy stances across the world, 2010 saw a continuation of the economic recovery that had begun in the second half of 2009. Even so, the pace of the recovery remained subdued and uneven among the individual euro-area member states, while waning stimuli over the course of the year from the non-standard fiscal policy measures and the need for balance sheet adjustments in various sectors had a retarding effect. In addition, growing doubts about the solvency of some euro-area member states and the resulting renewed turmoil in some financial market segments increased uncertainty regarding the macroeconomic outlook.

Key policy rates unchanged

Against this backdrop – and in view of the generally moderate underlying monetary dynamics, the resulting low inflation risk, and solidly anchored inflation expectations – the Governing Council of the ECB left the Eurosystem's key policy rates unchanged at their historically low level throughout 2010. For the entire year, the rate on the Eurosystem's deposit facility thus remained at ¼% and the rate on the marginal lending facility at 1¾%. The main refinancing rate was also kept constant at 1%.

Overnight rate mostly remained at historically low levels

Given the continuous ample supply of liquidity to the banking system, euro money market rates likewise remained at their historically low levels during the first half of 2010. For almost the entire year, the overnight rate (EONIA) was only around ten basis points above the interest rate on the Eurosystem's deposit facility, and any significant rises were due almost exclusively to the liquidity-absorbing fine-tuning operations on the last day of each reserve maintenance period. It was only when the first one-year longer-term refinancing operation



1 Maturity of three months.

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(LTRO) matured on 1 July 2010 – as a result of which a total of €442.2 billion was withdrawn from the money market – that the EONIA rose significantly on an average of the maintenance periods. During the second half of the year, the overnight rate regularly saw a sharp increase at the beginning of the maintenance period owing to the banks' continued frontloading, before falling again over the course of the period to around its initial level.

Continuation of exit from non-standard measures in Q1

The stabilisation tendencies on the financial market that initially appeared to be continuing at the beginning of the year led the Governing Council of the ECB, in the first few months of 2010, to persist with the gradual exit from

non-standard monetary policy measures that it had already initiated in 2009. The Governing Council announced that, starting in April, it would be conducting the three-month LTROs as variable-rate tender procedures for the first time since September 2008 and that it would fix the rate for the six-month LTRO allotted at the end of March 2010 at the average minimum bid rate of the main refinancing operations (MROs) over the life of the operation.

Exit postponed owing to renewed tensions

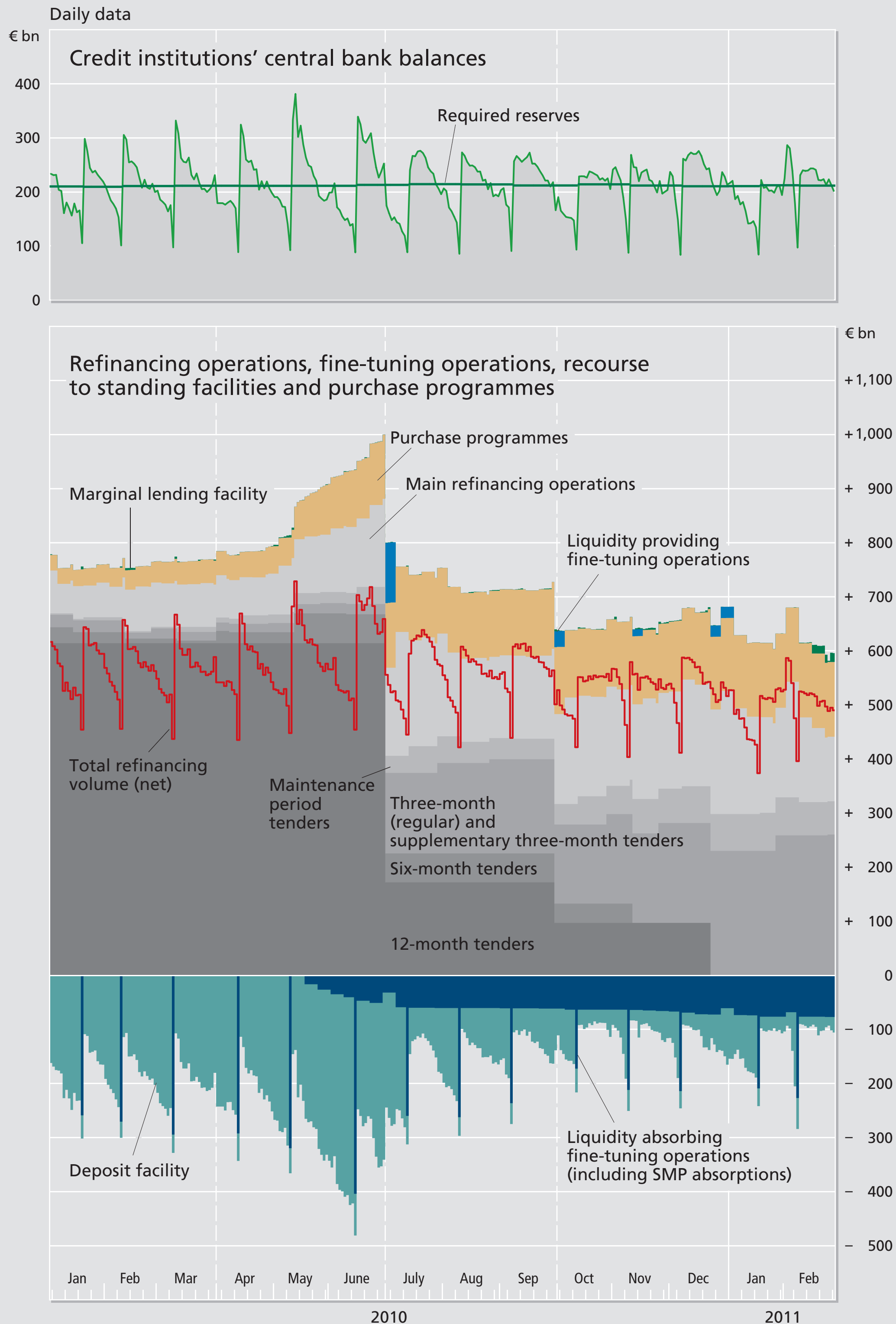
However, from the second quarter of 2010 onwards, there was renewed turmoil in a number of financial market segments in the wake of the escalating sovereign debt crisis in some peripheral euro-area countries. The Governing Council responded by postponing its exit from the non-standard monetary policy measures. Firstly, this involved continuing to conduct the MROs as fixed-rate tender procedures with full allotment of all bids throughout 2010 and beyond. Secondly, the Eurosystem moved back to fixed-rate tenders with full allotment of all bids in the regular three-month LTROs; from October 2010, the Governing Council of the ECB fixed the rates in the three-month LTROs at the average rate of the MROs over the life of the respective operation. Furthermore, the Eurosystem conducted a six-month LTRO again in May 2010, which was likewise at a rate fixed at the average minimum bid rate of the MROs over the life of the operation.

Securities Markets Programme

In view of the severe tensions in some segments of the European financial markets, the Governing Council of the ECB decided on 9 May 2010 to initiate a purchase programme for securities issued by the public and private sectors (the Securities Markets Programme). As this programme is not intended to have any impact on the provision of liquidity by the Eurosystem, the liquidity created through these purchases is sterilised by specific liquidity-absorbing operations.

No further 12-month tenders in 2010

While certain non-standard monetary policy measures were reintroduced or extended during 2010, the Governing Council of the ECB decided not to conduct any further 12-month LTROs. The money market coped well with the maturing of these operations on 1 July, 30 September and 23 December 2010 – owing, in part, to the Eurosystem's fine-tuning operations, which safeguarded the provision of liquidity to the banking system until the following MRO. The expiry of the Covered Bond Purchase Programme, which reached the nominal amount of €60 billion at the end of June 2010, did not cause any noteworthy disruptions on the euro money market, either.


Liquidity management of the Eurosystem
Chart 10
Daily data
€ bn
Credit institutions' central bank balances
400
300
200
100
0
Required reserves
Refinancing operations, fine-tuning operations, recourse to standing facilities and purchase programmes
€ bn
+1,100
+1,000
+ 900
+ 800
+ 700
+ 600
+ 500
+ 400
+ 300
+ 200
+ 100
0
– 100
– 200
– 300
– 400
– 500
Purchase programmes
Marginal lending facility
Main refinancing operations
Liquidity providing fine-tuning operations
Total refinancing volume (net)
Maintenance period tenders
Three-month (regular) and supplementary three-month tenders
Six-month tenders
12-month tenders
Deposit facility
Liquidity absorbing fine-tuning operations (including SMP absorptions)
Jan
Feb
Mar
Apr
May
June
July
Aug
Sep
Oct
Nov
Dec
Jan
Feb
2010
2011
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Money market management and liquidity needs

The Eurosystem's money market management continued to secure the banking system's access to central bank money and supported the functioning of the money market through a generous supply of liquidity. The liquidity conditions were marked by a continuation of the fixed rate and full allotment policy, which enabled the Eurosystem to fully meet banks' demand for liquidity. In the course of the year, there was a general decline in demand, which, however, was interrupted temporarily by the sovereign debt crisis in some euro-area countries which came to light in the spring. Decisive factors included the maturing of the 12-month and six-month tenders, which had the effect of considerably shortening the average time to maturity of the funds provided. In addition, a smaller share of liquidity was provided by the Covered Bond Purchase Programme (CBPP), with which securities such as Pfandbriefe were purchased, and which was scheduled to expire in mid-year. The Securities Markets Programme (SMP), which was newly introduced in May 2010, had been designed to be liquidity-neutral. On the whole, all credit institutions in the euro area were able to meet their minimum reserve requirements without problems.

Liquidity demand once again on the rise due to the sovereign debt crisis

The first half of 2010 was marked by a perceptible increase in demand for central bank liquidity in May and June caused by the sovereign debt crisis. The Eurosystem responded by postponing its already-begun exit from non-standard monetary policy measures. On 9 May 2010, owing to an intensification of the situation, the Governing Council of the ECB decided to intervene in the debt securities markets (Securities Markets Programme), with the liquidity injected into banks by this operation being absorbed once a week through seven-day fine-tuning operations. The excess liquidity according to the benchmark calculation peaked in the May-June 2010 reserve maintenance period, when, on average, €289 billion was being held in the deposit facility (as against only €22 billion in the same period of the previous year). At the same time the EONIA was on average only 0.34% and therefore considerably below the main refinancing rate of 1.00% and only marginally above the deposit rate of 0.25%. The collateralised rate of an average of 0.30% at GC Pooling of Eurex Repo was even lower. Although the bidder numbers had risen in the course of the first half of the year (from around 75 bidders in the main refinancing operation at the beginning of March 2010 up to 100 bidders in mid-June 2010), they remained at a very low level in a longer-term comparison. Increased excess liquidity was also caused by a decline in the autonomous factors, chiefly triggered by falling government deposits, which had previously risen notably at some national central banks through government borrowing for public support programmes, among other things. The CBPP grew from around €30 billion at the start of the year to the target of €60 billion set by the ECB Governing Council for the end of June, which had a liquidity-providing effect. Overall, the measures taken contributed to the stabilisation of the interbank money market and gave the banks more certainty in their liquidity planning.

Demand for liquidity declined in the second half of 2010

The maturing of the first 12-month tender in mid-2010 led to a marked reduction in liquidity and therefore also to a decreasing recourse to the deposit facility. The expiration of this €442 billion operation on 1 July went off smoothly. As only just over half of this amount was prolonged by means of new refinancing operations (at shorter maturities), the elevated level of excess liquidity was reduced significantly and money market rates increased somewhat. The decline in the demand for liquidity is likely to be a reflec-

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Money market management and liquidity needs (cont'd)

tion of waning uncertainty among banks and cautiousness on the part of highly liquid institutions which, just the previous year, had regarded this type of longer-term tender as an attractive option. In addition, the bidder numbers fell owing to a higher concentration of the demand for tenders among certain banks and countries. After the second one-year tender maturing at the end of September, the effect of withdrawing excess liquidity reintensified, which caused overnight rates to trend back upwards. This situation was additionally supported by the general, and sometimes massive, practice of frontloading in the euro area during most maintenance periods. The recourse to the deposit facility was reduced by half from an average of €84 billion in the August-September period to €42 billion in the October-November maintenance period. Furthermore, there were shifts into the main refinancing operations during the second half of the year, the shares in the overall refinancing volume of which increased from 8% to 43% in the course of the year. The increasing activity on the interbank market was partly reflected in the rising turnover on the overnight market. EONIA turnover rose from €26 billion to €44 billion on average after the maturing of the first 12-month tender, and collateralised overnight turnover on the GC Pooling electronic trading platform increased from €6 billion to around €10 billion. The improving conditions on the interbank market, which were strengthened by the decision to maintain the full allotment policy for all tender operations up to the first quarter of 2011, were also reflected in the absence of the usual liquidity shortages over Christmas and the end of the year.

Short and longer-term money market rates

The decline of excess liquidity linked to the expiration of the 12-month tenders at the end of June and September 2010 and the banks' usual end-of-year liquidity planning caused the EONIA to rise to 0.88% – close to the key interest rate. Overall, the EONIA rose from an average of 0.35% in the first half of the year to 0.52% in the second half. Fluctuations also became significantly more pronounced in the second half of the year; volatility, measured as the standard deviation of the spread between the EONIA and the minimum bid rate, rose from 6 bp to 15 bp. At the same time, the significant decline in liquidity and market speculation about the Eurosystem's future liquidity policy caused longer-term euro money market rates to go back up. The three-month Euribor increased by 30 bp to 1.00% (the level of the key interest rate) over the course of 2010. During the same period, the Euribor/Eurepo spread for three-month money expanded from 31 bp to 45 bp. However, as in the previous year, the money market was segmented between banks that were able to borrow overnight money at rates below the EONIA and those that had to borrow at significantly higher rates or were heavily dependent on liquidity provided by the Eurosystem.

Development of the factors determining bank liquidity

Once again, the customary key function of liquidity management, ie making sure that the credit institutions' liquidity needs stemming from the minimum reserve requirement (€211.9 billion) and the autonomous factors (€348.0 billion) amounting to €559.9 billion are met on an annual average, was relegated somewhat to a background role by the unchanged full allotment policy and the ample provision of liquidity. The decrease in liquidity needs related to the autonomous factors (–€32 billion) was partly attributable to the decline in general government deposits with the Eurosystem. This reflected, among other things, a scaling-back of government financial support programmes, which were often carried out via central bank accounts. The resultant need for liquidity fell by a sizeable €25.9 billion

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Money market management and liquidity needs (cont'd)

(contrasting with a €61.5 billion increase in the previous year). The changes in net foreign assets and in the other factors injected an additional €49.9 billion (net) into the market. Contributory factors included individual emergency liquidity assistance measures and individual national central banks increasing their non-monetary-policy holdings of euro-denominated securities by €17 billion. By contrast, the €43.9 billion increase in banknotes in circulation absorbed liquidity. This, in turn, caused the demand for cash to increase considerably, albeit at a reduced growth rate. On 24 December 2010, the volume of banknotes in circulation peaked at €842.3 billion. At a rate of around 6%, average growth of banknotes in circulation in 2010 was down considerably from one year earlier (11%).

Against this backdrop, the main and longer-term refinancing operations decreased by €50.0 billion on an annual average (previous year: +€167.9 billion), whereas the other operations increased by €51.8 billion, owing largely to the CBPP. The average recourse to the deposit facility rose by €36.5 billion to reach €145.9 billion. Recourse to the marginal lending facility averaged €649 million, and was thus down from the previous year (€897 million).

On an annual average of 2010, credit institutions' central bank balances were down €3.1 billion on the year, roughly equivalent to the decrease in the minimum reserve requirement. Given the weak monetary growth, the reserve requirement decreased by 2.0%, compared with a 2.6% increase in the previous year. All in all, the Eurosystem's money market management in 2010 once again proved reliable in implementing the ECB Governing Council's monetary policy stance in an eventful environment.

Factors determining bank liquidity

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

Item	2009	2010
I Provision (+) or absorption (–) of central bank balances owing to changes in autonomous factors		
1 Banknotes in circulation (increase: –)	– 77.7	– 43.9
2 Government deposits with the Eurosystem (increase: –)	– 61.5	+ 25.9
3 Net foreign assets[1]	+ 50.7	+ 19.9
4 Other factors[1]	– 17.0	+ 30.0
Total	– 105.5	+ 32.0
II Monetary policy operations of the Eurosystem		
1 Open market operations		
(a) Main refinancing operations	– 50.2	– 20.2
(b) Longer-term refinancing operations	+ 218.1	– 29.8
(c) Other operations	+ 2.8	+ 51.8
2 Standing facilities		
(a) Marginal lending facility	– 1.4	– 0.2
(b) Deposit facility (increase: –)	– 59.6	– 36.5
Total	+ 109.8	– 35.0
III Change in credit institutions' credit balances (I + II)	+ 4.3	– 3.1
IV Change in the minimum reserve requirement (increase: –)	– 5.4	+ 4.3

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

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Refinancing and eligible assets

Given the development of the economy and the fact that markets were becoming calmer, the Eurosystem decided at the beginning of 2010 to continue the gradual phasing-out of its non-standard liquidity measures.

The main refinancing operations (MROs) and special-term refinancing operations with the maturity of the current maintenance period were to be carried out as fixed-rate tender procedures with full allotment as long as required – initially until October 2010. The Governing Council of the ECB also decided to conduct the regular three-month longer-term refinancing operations as variable-rate tenders again starting with the operation in April.

However, rising tensions on the sovereign bond market, which were driven by developments in the euro-area peripheral states, also led to renewed tensions on the money market. This uncertainty prompted the Eurosystem to continue the full allotment policy for MROs and longer-term operations throughout 2010 and into 2011. In order to safeguard the institutions' supply of liquidity, a six-month tender was launched in May 2010 at a rate corresponding to the average minimum bid rate of the MROs conducted over the life of the operation. The longer-term refinancing operations in the fourth quarter were conducted in the same way, too. On average, 62 bidders (including 20 submitting bids via the Bundesbank) took part in the longer-term refinancing operations, which were allotted, on average, just under € 525 billion (Bundesbank: €105 billion).

The three one-year tenders conducted in 2009 matured in the months of July, September and December 2010. No new one-year tenders were conducted. In order to minimise the effects of the large maturities of the three tenders and of the additional six-month tender in November, four additional fine-tuning operations were conducted. These tenders provided market participants with the option of bridging the maturities up to the settlement of the next MRO and were conducted as fixed-rate tender procedures with full allotment at the current main refinancing rate. There was particular demand for the July tender in which just over €111 billion was allotted to 78 bidders throughout the Eurosystem. The allotment volumes of the three other fine-tuning operations, at €29 billion, €13 billion and €21 billion, were fairly low in comparison.

In view of the exceptional situation, the ECB Governing Council decided to intervene in the markets for public and private debt securities in the euro area (SMP: Securities Markets Programme). The scale of the interventions is determined by the Governing Council.

To keep these operations liquidity-neutral on the money market, weekly liquidity-absorbing fine-tuning operations were carried out from mid-May through the collection of fixed-term deposits, which were intended to absorb the volume acquired up to the Friday of the previous week. Altogether, 49 quick tenders were conducted in 2010. As usual, fine-tuning operations were conducted on the last day of each of the 12 reserve maintenance periods so as to offset liquidity imbalances on these days.

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Refinancing and eligible assets (cont'd)

Throughout the Eurosystem, an average of 115 institutions, of which 32 submitted bids via the Bundesbank, took part in the MROs. After allotment volumes of around €60 billion to €80 billion in the first quarter, there was a steady increase in allotments over the summer. The peak was reached in July at just over €229 billion when the first one-year tender from 2009 matured. Following just under €197 billion again when the second one-year tender matured, the allotment amounts settled at around €180 billion at the end of the year. The year-end amount of €228 billion once again came very close to the 2010 peak. On average, €132 billion was outstanding in the MROs in the Eurosystem, including €51 billion in Germany.

What is generally striking, particularly in Germany, is a shift in the overall outstanding refinancing volume away from the longer-term operations towards MROs. Whereas roughly 28% of liquidity needs were met by MROs in 2009, an average of 40% of the total outstanding allotment volume was provided through MROs in 2010. For the Eurosystem, the figure remained virtually unchanged on the year at 22%.

After recourse to the marginal lending facility in the Eurosystem averaging €897 million in 2009, only €649 million of liquidity was provided on average in 2010. The deposit facility stood at €146 billion on an annual average (2009: €109.4 billion).

The total value of collateral submitted to the Bundesbank went down from €819 billion in 2009 to €648 billion in 2010 (end-of-year levels at market values). Of this, €244 billion was accounted for by assets held in custody in other Eurosystem member states and, therefore, on a cross-border basis for refinancing at the Bundesbank.

The diminishing level of submitted eligible assets reflects the reduced refinancing needs of German institutions. Furthermore, the temporary expansion of the collateral framework, which had been introduced against the backdrop of the financial crisis and in view of the Eurosystem counterparties' liquidity situation, expired at the end of 2010. However, the lower credit quality threshold of BBB- (investment grade) for eligible assets, with the exception of asset-backed securities, was retained. At the same time, the Eurosystem decided to introduce a graded haircut schedule for BBB securities from 2011 onwards and undertook a general review of its risk control measures in order to ensure appropriate hedging against the risk of losses arising from credit operations.

At the end of 2010, 29% of the eligible assets submitted to the Bundesbank were uncovered bank debt securities, 27% were government bonds and 17% were covered bank bonds (Pfandbriefe). The percentage of asset-backed securities was 8% down on the year. Other marketable assets had a share of 7%. Credit claims rose again, reaching a total of 12%.

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Longer-term money market rates rose in H2 …

Like the overnight rate, the longer-term unsecured money market rates in the euro area remained almost stable between January and April at their historically low levels. It was only when the euro-area sovereign debt crisis began to escalate in May that these rates rose discernibly, a movement that was reinforced when the first one-year LTRO matured. The rate on unsecured interbank lending with a three-month maturity (three-month Euribor) initially rose from around 0.65% to around 0.9%. Particularly after the second one-year LTRO matured on 30 September, there were further interest rate increases in the euro money market, which led the three-month Euribor to rise to a peak of 1.05%. The unsecured money market rates – above all for shorter maturities – subsequently receded somewhat, a tendency which continued through to the end of the year. The secured money market rates (Eurepo) followed a similar pattern but with greater volatility in their levels.

… as did risk premiums on euro money market

Consequently, the fluctuations in the spread between secured and unsecured money market rates – which is essentially a risk premium – also increased from June onwards. In early May 2010, the spread for the three-month maturity was still approximately 27 basis points, and thus close to its lowest level since the financial market turbulence began in August 2007, but it initially increased again to around 42 basis points in the wake of the sovereign debt crisis in the peripheral euro-area countries. Following a temporary recovery, in which the risk premium on the euro money market for the three-month maturity narrowed to 23 basis points at the beginning of October, the situation on the euro money market deteriorated again. As a result, the risk premiums widened once more, reaching 45 basis points at the end of the year.

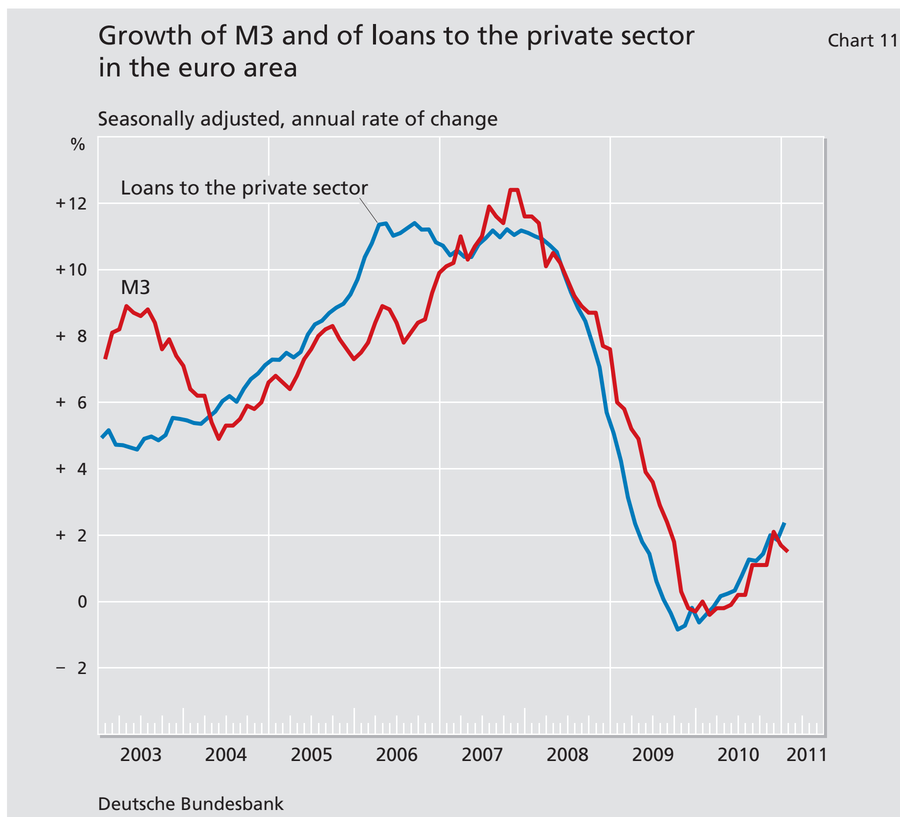
3 Recovery trends in monetary and credit growth

Recovery trends in monetary growth …

Growth in M3 was initially subdued in the first few months of 2010 but recovered perceptibly as the year progressed. The 12-month rate went up from –0.3% in December 2009 to 1.7% in December 2010.

… against the backdrop of a more favourable interest rate setting

The key factor in this development was the interest rate setting. As in 2009, it was characterised at first by a comparatively high return on longer-term investments, which encouraged shifts of funds away from M3 into investment forms outside M3. Along with the gradual flattening of the yield curve as the year went on, such shifts became less attractive, however, and short-term time deposits, in particular, were initially in perceptible demand again in the second



half of the year. It was only towards the end of the year that a countermovement set in with the renewed rise in the yield curve. Seen over the year as a whole, the M3 components remunerated at close-to-market rates – other short-term deposits and marketable financial instruments – showed increasingly positive growth. This upward trend was reflected in an increase in the respective annual growth rates from –9.1% and –11.6% in December 2009 to –0.5% and –2.0% in December 2010.

Shifts between the individual M3 components

By contrast, the 12-month rate of M1 – which contains the most liquid components of M3 – showed a steady fall last year, but remained clearly in positive territory at 4.4%. This was due to the perceptibly weaker inflows of overnight deposits, especially from non-financial corporations and households following an extremely sharp rise in the previous year. Probably the main reason for this was that the remuneration of short-term time deposits increased in the reporting year, while interest rates on overnight deposits remained largely stable.

Loans to the private sector show positive growth

Among the counterparts of M3, the sharp rise in MFI lending to general government in the euro area was especially striking in the reporting year. However, the rise was largely attributable to transactions conducted between the Hypo

Monetary developments in the euro area

Table 3

Changes in the course of the year[1]

Item	2009	2010
	as a percentage	
I. Growth of the monetary aggregates		
M1[2]	12.4	4.4
M2[3]	1.6	2.2
M3[4]	– 0.3	1.7
	€ billion	
II. Money stock and its counterparts		
M3 (= 1+2–3–4–5)	– 30.5	157.5
Currency in circulation and overnight deposits	495.6	198.2
Other short-term deposits	– 368.3	– 18.3
Marketable instruments	– 157.8	– 22.4
Balance sheet counterparts		
1 Total credit to non-MFIs in the euro area	387.7	547.5
Credit to general government	303.3	339
Credit to private-sector non-MFIs in the euro area	84.4	208.5
2 Net claims on non-euro-area residents	125.3	– 82.8
3 Central government deposits	– 4.7	20.6
4 Longer-term financial liabilities to other non-MFIs in the euro area	421.5	262.1
5 Other counterparts of M3[5]	– 126.7	– 24.5

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 redeemable at up to three months' notice). — **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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Real Estate (HRE) Group and the FMS Wertmanagement resolution agency, which are classified in the statistics as part of general government. Loans to the domestic private sector were an equally important source of money creation in the euro area during the reporting year. Unsecuritised lending to enterprises and households went up by 1.6% over the course of 2010 after virtually stagnating in 2009. This rise was due, first and foremost, to lending to households, which increased by 2.9% in 2010 and was driven by loans for house purchase. Lending to non-financial corporations, too, recovered somewhat in comparison with the previous year, although its annual growth rate was still slightly negative at –0.2%. All things considered, the more positive development in lend-

ing to non-financial corporations and households is likely to have been due to better lending and financing conditions, increased investment by enterprises owing to the improved business outlook, and the moderate growth in house prices.

The reporting year also saw a perceptible increase in loans to other financial intermediaries at an annual growth rate of 5.1%. However, many of these loans were ultimately indirect interbank transactions. These have been characterised by a high degree of volatility, especially in the past two years, and have no direct impact on lending to the private non-banking sector.

Slower pace of growth in other lending business

Banks' other lending business grew at a significantly slower pace last year than in 2009. The increase in holdings of fixed-income securities from domestic public issuers became discernibly slower in the course of 2010 as they were serving less and less as a "substitute" for banks' weak unsecuritised lending business. There was also a sharp decline in the acquisition of securities from domestic private issuers in 2010, which was a continuation of a trend that had already begun in the previous year. Furthermore, euro-area banks' net claims on non-euro-area residents showed a marked decline, although much of this was due to transactions in connection with the FMS Wertmanagement resolution agency.

Slowdown in monetary capital formation

Among the other counterparts of M3, there was a perceptibly slower pace of growth in longer-term financial liabilities across all subcomponents, which contributed to the positive monetary dynamics. Specifically, there was a year-on-year decline in inflows of longer-term time deposits, although they were still clearly positive at an annual rate of 4.5%. This is likely to reflect slower shifts into investment forms outside M3 owing to the slight flattening of the yield curve. The reduced sale of longer-term bank debt securities to non-banks compared with 2009 was, however, probably due mainly to the fact that market issues became less attractive for a time owing to tensions in the euro-area sovereign bond markets.

Underlying monetary dynamics do not signal pronounced risks to price stability

Considered as a whole, the underlying monetary dynamics – in other words, those components of monetary growth that are ultimately relevant to inflation – accelerated somewhat in the course 2010 but were still moderate. From a monetary perspective, this means that there are no pronounced risks of inflation for the euro area over the medium term. Nevertheless, a close eye should be kept on the high levels of liquidity worldwide: central banks' attention should be focused on when and how far this liquidity is transformed into demand-relevant money holdings.

III Economic trends in Germany

1 Sharp economic recovery after severe slump

Underlying trends

The German economy has recovered surprisingly quickly from the severe slump it experienced in the latter part of 2008 and early part of 2009. Economic output went up by 3.6% in 2010 after declining by 4.7% in the previous year. The revival in the world economy and in world trade was the main driving force behind the cyclical economic recovery in Germany. German enterprises, which largely retained their skilled staff during the crisis, were able to take particular advantage of the opportunities this afforded them. Furthermore, in contrast to the recovery following the economic downturn in 2003, the external impulses spread quickly to domestic activity. This was helped by a perceptible rise again in employees' disposable income, a further decline in unemployment, a rapid rebound of corporate profitability and a fairly smooth supply of credit. The pick-up in export demand and in domestic activity was accompanied by a sharp increase in imports. Although there were price rises at all stages of the economy, these mostly offset the declines of the previous year. The economic recovery was supported by enterprises' and households' exceptionally high level of confidence. In the past decade, a sceptical view was often taken of Germany's future economic and social viability, but the impression now prevailing is that the restructuring of the social security system and the labour market, in particular, as well as the associated wage moderation, were major preconditions for the German economy's remarkable cyclical resilience. In structural terms, Germany is now in a better position than it has been at any time since German reunification. Nevertheless, the depressed growth of potential output bears witness to the fact that challenges remain and that numerous tasks are still incomplete.

Cyclical recovery in German industry driven by sharp rise in exports

German industry, which was hit particularly hard by the global slump in demand for high-quality capital and durable consumer goods as well as for specialised intermediate goods, saw an almost 17% decline in 2009 in both exports of goods and real value added in manufacturing (excluding construction). It then benefited to an exceptional extent from the global economic recovery in 2010, even though the centre of global economic growth has moved further away from Germany's traditional sales markets towards the emerging market economies, especially those in South and East Asia. German industrial enterprises were helped not only by an appropriate product range, but also by their local pres-

ence in many cases. Forgoing large-scale job cuts during the crisis meant that the conditions were in place to meet the sharp rise in demand. Real exports of goods grew by just under 16% and were therefore almost back at the high pre-crisis level, while industrial real value added was up 10% on the year.

Pick-up in investment activity

The profitability of enterprises recovered significantly during the reporting year and, according to the information available to date, was probably well up on its level in most years of the past decade. Together with the high degree of optimism, this is likely to have been one key reason for the marked pick-up in domestic investment, which benefited both German and foreign suppliers. Spending on machinery and equipment went up by 11% on the year in real terms. Here, the focus was initially on previously deferred investment in replacements, later accompanied by the incentive to expand production capacities. Inventories were built up again, too.

Positive impact on other areas

The main beneficiaries of the cyclical upturn in industry and exports were those economic sectors which were hit particularly hard by the economic slump. Trade, hotels and restaurants, and transport, which suffered a 6% decline in real value added in 2009, recorded growth of over 3% in 2010. Financing, renting and business services saw an expansion of just under 2% following a decline of more than 1%. Public and private service providers, whose growth rate contracted to somewhat less than 2% in the crisis, expanded more strongly again in 2010.

Construction sector influenced by economic stimulus packages

The German construction sector, which was affected only to a marginal extent by the crisis, continued to benefit from public sector orders in 2010. As the two economic stimulus packages adopted by the Federal Government were primarily geared to measures concerning existing infrastructure, it was mainly the finishing trades which benefited from them. The main construction trades, which probably now account for significantly less than half of value added in construction, was affected by the very cold winter weather at the beginning and the end of the year. There was a marked improvement in the situation in commercial and residential construction, partly as a result of the favourable financing conditions and optimistic expectations for the future. Overall, real value added in the construction sector was up by almost 2% on the year. The volume of construction investment increased by almost 3%.

Increase in private consumption

Private consumption went up by ½% in real terms in 2010. This reflects, above all, the increase in household's scope for expenditure. At 2¾%, disposable income increased sharply during the reporting period owing to growth in

Key economic variables in Germany

Table 4

Annual percentage change

Item	2007	2008	2009	2010
Growth (real)[1]				
Private consumption	– 0.2	+ 0.7	– 0.2	+ 0.4
Government consumption	+ 1.6	+ 2.3	+ 2.9	+ 2.3
Machinery and equipment	+ 10.7	+ 3.5	– 22.6	+ 10.9
Premises	– 0.5	+ 1.2	– 1.5	+ 2.8
Other investment	+ 6.8	+ 6.5	+ 5.6	+ 6.4
Domestic demand	+ 1.2	+ 1.2	– 1.9	+ 2.5
Exports[2]	+ 7.6	+ 2.5	– 14.3	+ 14.1
Imports[2]	+ 5.0	+ 3.3	– 9.4	+ 12.6
Gross domestic product	+ 2.7	+ 1.0	– 4.7	+ 3.6
Contribution to GDP growth in percentage points				
Domestic demand (excluding inventories)	+ 1.0	+ 1.3	– 1.5	+ 1.8
Changes in inventories	+ 0.1	– 0.2	– 0.3	+ 0.6
Net exports	+ 1.5	– 0.1	– 2.9	+ 1.3
Employment				
Employed[3]	+ 1.7	+ 1.4	– 0.0	+ 0.5
Average working time per employed person	0.0	– 0.2	– 2.5	+ 2.1
Total number of hours worked	+ 1.7	+ 1.2	– 2.5	+ 2.6
Unemployed (in thousands)[4]	3,777	3,268	3,423	3,244
Western Germany	2,486	2,145	2,320	2,232
Eastern Germany	1,291	1,123	1,103	1,013
as a percentage of the civilian labour force	9.0	7.8	8.2	7.7
Western Germany	7.5	6.4	6.9	6.6
Eastern Germany	15.1	13.1	13.0	12.0
Prices				
Consumer prices	+ 2.3	+ 2.6	+ 0.4	+ 1.1
Producer prices of industrial products[5]	+ 1.3	+ 5.5	– 4.2	+ 1.6
Construction prices	+ 6.7	+ 3.4	+ 1.2	+ 0.9
Import prices	+ 0.7	+ 4.6	– 8.6	7.8
Export prices	+ 1.2	+ 1.7	– 2.2	3.4
Terms of trade	+ 0.5	– 2.6	+ 6.8	– 4.0
GDP deflator	+ 1.8	+ 1.0	+ 1.4	+ 0.6
Productivity and labour costs				
GDP per hour worked by employed persons[1]	+ 1.0	– 0.2	– 2.2	+ 1.0
Compensation per hour worked by employees[3]	+ 0.8	+ 2.2	+ 3.4	– 0.1
Labour costs per unit of value added in real terms in the economy as a whole[7]	– 0.2	+ 2.4	+ 5.7	– 1.1

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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employment, the normalisation of working hours, and a reduced tax burden. At the same time, there was a perceptible rise in consumer prices, although purchasing power declined by just 1 percentage point when taken in isolation. The optimistic expectations of households regarding economic developments and their incomes were also important for the upturn in private consumption. Real retail sales rose by 1¼% in 2010 after declining by 3% in the crisis year of 2009. Furthermore, quite a large number of new motor vehicles were sold, even though there had been considerable frontloading effects in 2009 in connection with the environmental premium for scrapping old cars. Although the number of new car registrations by households, at just over 1.2 million, declined by almost one-half on the year, it was only one-fifth lower than in 2003, 2004 and 2005 – years which were not yet affected by the VAT increase and the surge in crude oil prices. The turnover of hotels and restaurants just about held up at the previous year's level. Households' saving ratio went up to 11.4% in the reporting period after falling to 11.1% in 2009, not least as a result of the large number of motor vehicle sales.

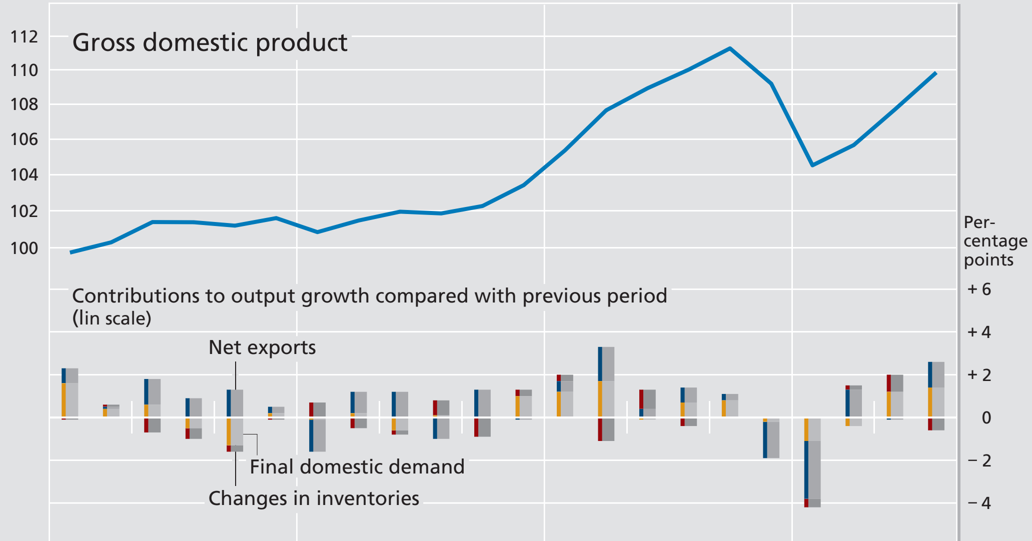
Sharp rise in imports

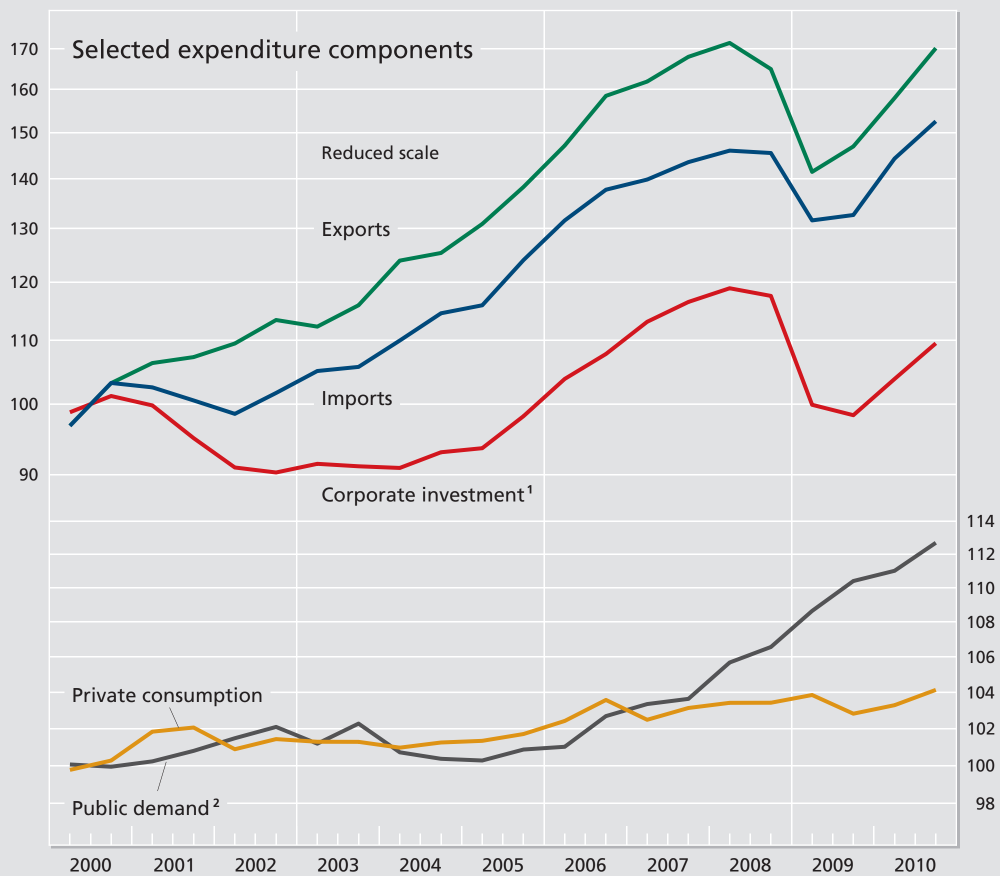
Imports of goods rose sharply, mainly because of rapid growth in exports, but also due to quite buoyant consumption and investment. In addition, there is likely to have been a further increase in the import intensity of exports. The increase in imports of goods, at 13½%, more than offset the 10% decline in the crisis year of 2009 and was 2% up on its pre-crisis level in real terms. There was a very sharp rise in imports from those regions which achieved the greatest exports gains, ie South and East Asia, in particular. Imports from the euro area also rose considerably. According to the foreign trade statistics, the increase in the volume of imports from this region, at 12%, rose much more sharply than that of exports to this region (10%), despite the fact that the crisis-induced declines in exports, at 15%, were significantly more pronounced than in the case of imports. This shows that Germany has assumed an important role in stabilising the economy for the other countries of the euro area. Taking goods and services together, imports expanded by 12½%, compared with an increase of 14% in exports. This represented a net external contribution to real GDP growth of 1.3 percentage points. The nominal foreign trade surplus consequently widened from 4.9% of GDP to 5.2%, despite a marked deterioration in the terms of trade. The current account surplus, at 5.7% of GDP, was again considerably below the record levels recorded immediately before the outbreak of the crisis.

Overall economic output and demand

Chart 12

2000 = 100, price and seasonally adjusted, half-yearly, log scale





1 Private investment in machinery, equipment and other plant as well as in commercial construction. — 2 Government consumption and gross public investment.

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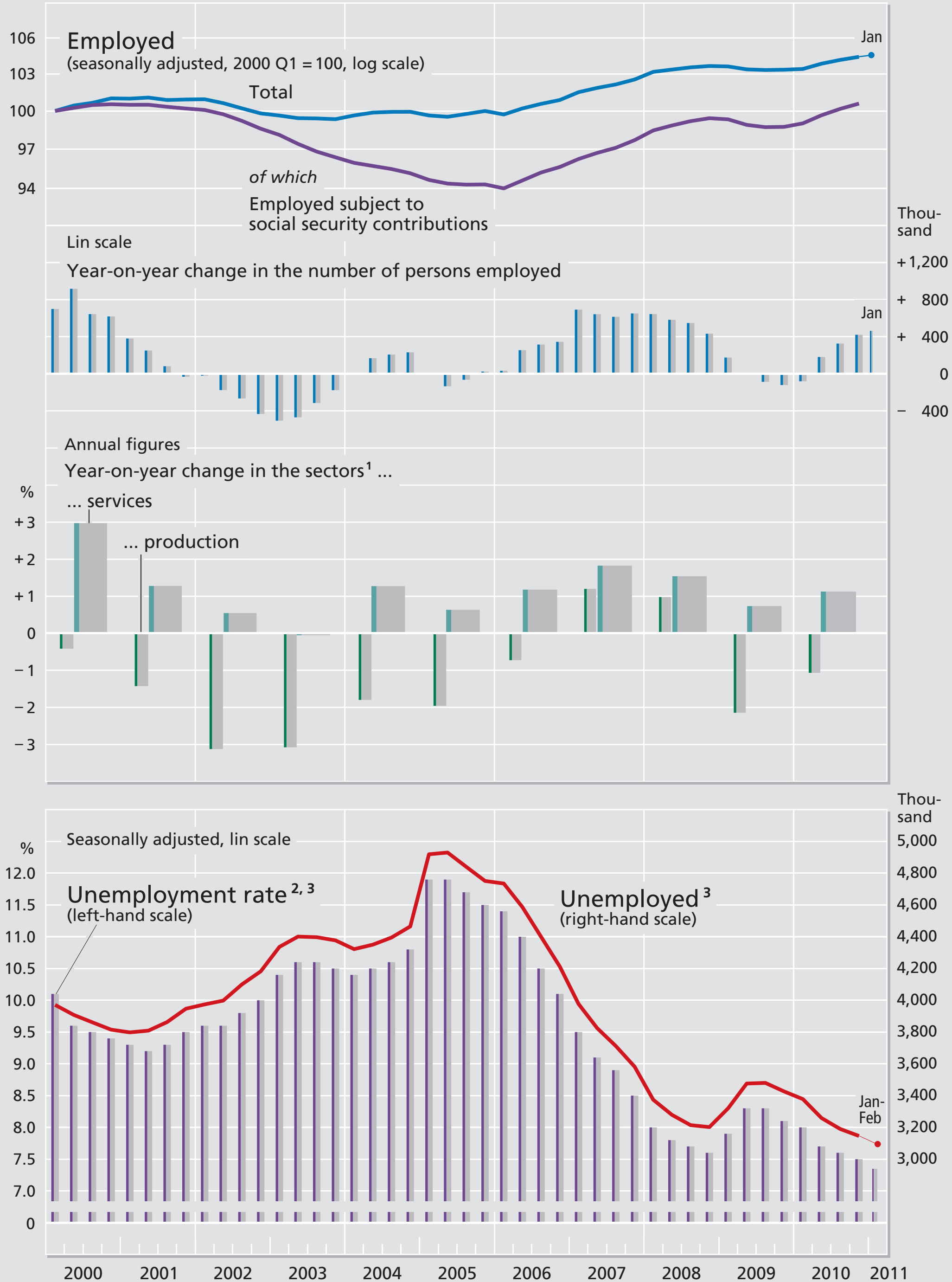
Marked growth in employment and working hours

Employment rose perceptibly in 2010 in the wake of the sharp economic recovery. The number of persons in work in Germany went up during the reporting period by 212,000, or 0.5%, compared with the annual average of 2009. Given the exceptionally stable situation on the labour market during the severe recession, it is not just the scale of staffing increases that is striking, but also the fact that they started as early as the beginning of the year. The upturn was supported by a rise in employment subject to social security contributions, which went up by 292,000, or 1%, on average. As in 2009, a considerable part of this increase was due to new appointments in health and education (+141,000). The importance of cyclical factors can be seen primarily in the sizeable increase in temporary workers (+139,000), but also in the pattern of employment in manufacturing over the four quarters. Although new jobs have been created since the second quarter of 2010, there was still a loss of 108,000 jobs on an annual average. There was also an increase in the number of self-employed persons last year. By contrast, there were fewer persons working exclusively in low-paid part-time employment than in 2009. The average number of hours worked per employed person, which was reduced substantially during the year of the crisis (–2½%) by means of short-time working, reductions in overtime, running down of work time accounts and the reduction of standard weekly working hours, recovered quickly in the reporting year (+2%). As a result, the total number of hours worked in 2010 was almost back at its pre-crisis level. By contrast, the decline in hourly productivity recorded in 2009, at over 2%, was only partly offset by a 1% increase last year.

Decline in unemployment

In parallel with the positive trend in employment, the number of registered unemployed persons fell to 3.24 million on average in 2010, which represents a decline of 179,000 on the year. The unemployment rate therefore went down from 8.2% to 7.7%. Unemployment in the broader sense, which, for example, also covers job seekers on the books of employment agencies, declined by just 79,000 and stood at 3.54 million on an annual average in 2010. The number of workers commissioned through employment agencies was already declining during the course of the year, however. Apart from short-time work, the use of labour market policy measures played no significant role. Despite the further decline in the working-age population, the fall in official unemployment in 2010 was just over 110,000 smaller than the increase in employment subject to social security contributions. Some of the additional jobs, especially in the services sectors, are therefore likely to have been filled by persons seeking long-term employment again after an interval or for the first time. This



1 Column width proportional to the percentage of all persons employed. — 2 Unemloyed as a percentage of the civilian labour force. — 3 As defined by the Federal Employment Agency. From January 2004, unemployed excluding participants in aptitude testing and training schemes. From January 2005, including recipients of social assistance who are able to work. From May 2009, excluding persons newly registered on the books of private employment agencies.

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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 actual earnings and negotiated rates of pay.

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is supported by the increase in labour market participation and the rise in the part-time ratio.

Moderate rise in negotiated wages, recovery in actual earnings

Pay negotiations in the first half of 2010 were still being shaped by the severely depressed business activity resulting from the crisis. In the wake of the strong economic recovery, the renewed improvement in corporate profitability then left its imprint on the agreements between employers and workers. Given the low level of capacity utilisation, the high level of uncertainty regarding future economic developments and associated employment risks, only one-off payments were agreed for 2010 in the major sectors of manufacturing, the amount of these payments being tailored to the firm's economic situation in some cases. In agreements going beyond the current year, management and labour provided for permanent wage increases at a later date. The prospect of German enterprises emerging from the economic crisis much sooner than had been expected prompted the trade unions to step up their wage demands as the year progressed. This was reflected in the pay agreements in the second half of the year. Negotiated wages rose only moderately overall during the reporting period (1.6%). One contributory factor in this was that wage agreements concluded in 2009 with only moderate pay increases were still having an

effect. By contrast, actual earnings on a monthly basis rose more sharply at just over 2% owing to the gradual exit from short-time work, the normalisation of negotiated regular working hours, the increase in paid overtime and the awarding of bonus payments. On an hourly basis, actual earnings decreased slightly, however. Particular factors in this context were the filling up of work time accounts and the discontinuation of the contractual topping up of short-time working benefits. Together with the cyclical recovery in hourly productivity, unit labour costs fell by 1% in 2010 after shooting up by just under 6% in the previous year. Given the price rise for total value added of ½%, this led to a marked improvement in profit margins, which had suffered considerably in the previous year in the wake of the crisis.

Acceleration in cyclically induced inflation

Price inflation intensified perceptibly at all stages of the economy in 2010. The key factor in this was the global economic recovery and its impact on domestic economic activity. After increasing by almost 8%, import prices were almost back at their pre-crisis levels. In terms of domestic sales, German industrial enterprises increased their prices by no more than 1½% on average and were therefore still a long way from offsetting the price decline of over 4% in 2009. By contrast, they increased their foreign sales prices by just under 3½%, which meant that they were 2% above their pre-crisis level. Nevertheless, there was a marked year-on-year deterioration in the terms of trade.

Consumer prices showed a more mixed picture. While energy and food prices rose quite sharply in some cases following a decline in 2009, owing, in part, to price rises on the world markets, price inflation eased significantly in the case of other goods (excluding energy) and services. This pattern is fairly typical at the beginning of periods of economic upswing. According to the national consumer price index (CPI), consumer prices in 2010 went up by 1.1% overall. The corresponding HICP figure was 1.2%. Price inflation in 2009 had stood at 0.4% (CPI) and 0.2% (HICP). Measured in terms of the 12-month rate, price inflation went up during the course of the year by just under 1% to almost 2%. Crude oil prices were the driving force behind this acceleration. Prices went up by 2.0% at the beginning of 2011, the sharp rise in energy prices also playing a part in this.

Moderate rise in property prices

Residential construction prices rose significantly during 2010 owing to an increase in input costs and buoyant construction activity. However, at 1% on an annual average, the rise in prices was more or less as moderate as in 2009. Demand was fuelled by low interest rates on loans for house purchase and

Prices at various levels of the economy

Table 5

Annual percentage change

Item	2009 Q4	2010 Q1	Q2	Q3	Q4
Import prices	– 4.8	3.0	8.5	9.4	10.4
Export prices	– 1.6	1.0	3.5	4.3	4.7
Terms of trade	3.4	– 1.9	– 4.5	– 4.8	– 5.2
Industrial producer prices	– 6.3	– 2.6	1.0	3.6	4.7
Construction prices	0.4	0.1	0.9	1.2	1.5
of which					
Residential buildings	0.3	0.2	1.0	1.2	1.6
Prices for owner-occupied housing according to vdp	– 0.7	– 1.5	0.7	1.4	1.5
Consumer prices	0.4	0.7	1.0	1.2	1.5
Energy	– 3.0	1.7	4.3	3.8	6.1
Refined petroleum products	– 0.4	15.2	16.1	10.9	11.7
Gas, electricity and heat energy	– 4.9	– 7.2	– 4.2	– 1.3	1.8
Food products	– 2.6	– 0.7	1.3	2.8	3.4
Industrial goods (excluding energy)	1.4	0.8	0.6	0.3	0.7
Services (excluding rents)	1.3	0.8	0.3	0.6	0.5
Housing rents	1.0	1.0	1.1	1.1	1.2
Memo items					
GDP deflator	1.3	1.0	0.8	0.4	0.3
Use of domestic product deflator	0.3	1.3	1.6	1.3	1.4
Deflator of imported goods and services	– 5.2	1.1	5.2	6.5	6.6

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the increase in consumer confidence, which in turn drove up property prices. According to calculations based on data of BulwienGesa AG, the prices of new owner-occupied apartments and of new semi-detached houses went up by 4% and 2% respectively year on year, with corresponding resale price increases of 3% and 1%. The price index of the Association of German Pfandbrief Banks (*Verband deutscher Pfandbriefbanken*, vdp) for owner-occupied housing also shows an increase of ½% after a slight decline in 2009. Estimates by BulwienGesa AG indicate that rents for new lettings of residential property went up by 2% on the year. According to the CPI, the overall rise in housing

rents, at slightly more than 1%, was just as moderate as in 2009. Nevertheless, there were signs of a slight acceleration during the course of the year.

2 General government deficit higher again in 2010 but lower than expected

Deterioration in public finances again in 2010

The general government deficit ratio rose from 3.0% in 2009 to 3.3% in 2010. Considerable structural deterioration arising from expansionary fiscal measures was set against favourable cyclical influences[1] as well as positive one-off effects (auction of radio frequencies[2] and higher insolvency benefit contributions). Moreover, assistance provided to financial institutions drove up the deficit ratio perceptibly. The general government deficit rose by far less than was initially feared, chiefly as a result of unexpectedly robust economic growth. However, after already reaching the very high level of 73.4% in 2009, the debt ratio jumped again in 2010 – this time probably to well over 80%. This can be attributed mainly to the assumption of risk assets by the government sector in connection with setting up resolution agencies for parts of HRE and WestLB.[3]

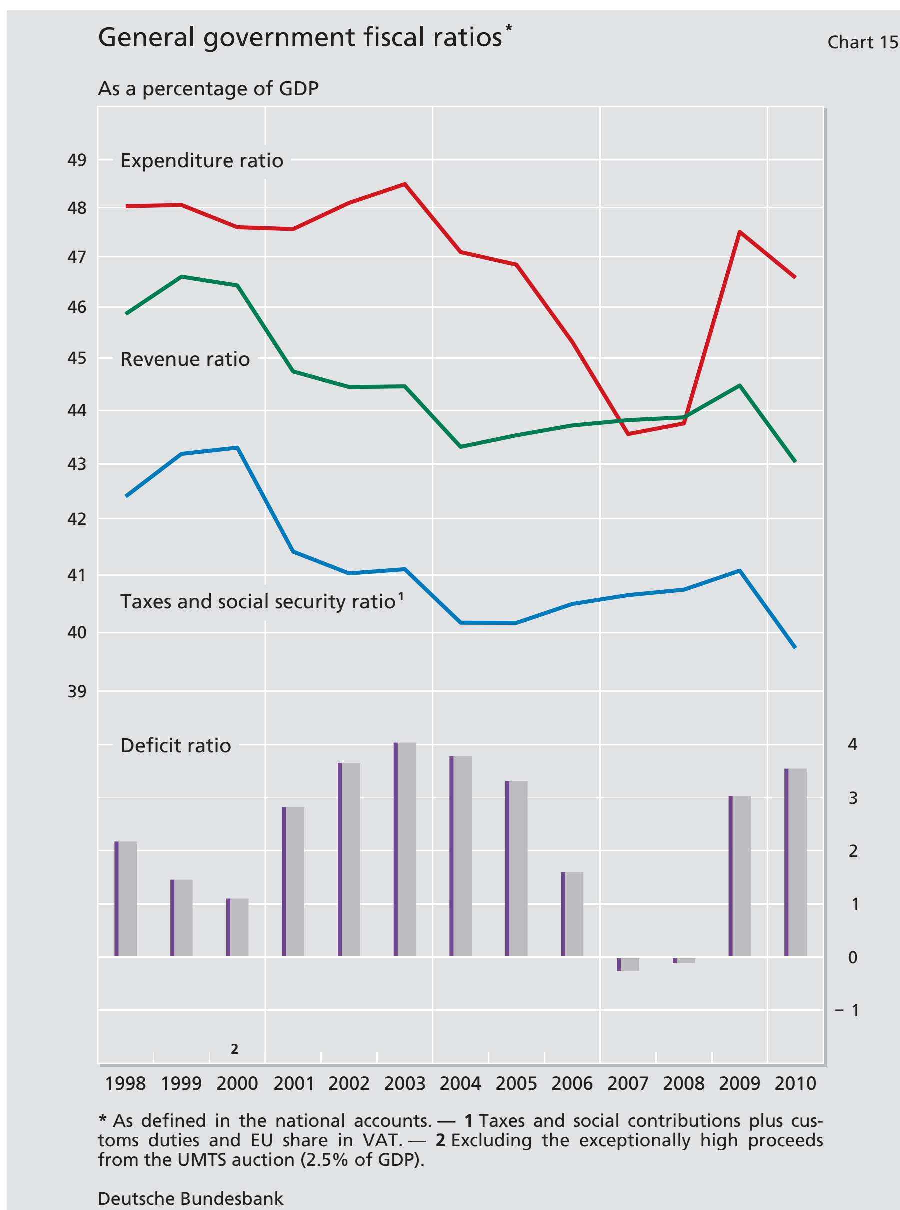
Drop in revenue ratio due to tax relief measures and unfavourable growth structure

Government revenue went up by 1.5%. This increase, which was due to dynamic economic growth, more than compensated for shortfalls as a result of tax relief measures in an amount of approximately €20 billion on balance. However, the revenue ratio fell by 1.2 percentage points to 43.3%. The ratio was depressed by revenue shortfalls as a result of legislative changes (in particular, the greater tax deductibility of insurance contributions, economic stimulus packages) as well as the fact that gross wages and salaries and private consumption, both of which are important reference variables for revenue, grew at a much weaker pace than overall GDP.

Expenditure ratio down somewhat due to economic recovery

As a result of the economic recovery, the government expenditure ratio declined by 0.9 percentage point to 46.6%, after soaring by 3.7 percentage points in 2009. These fluctuations largely mirror the cyclical development of GDP in the denominator of the ratio. By contrast, the cyclically adjusted expenditure ratio

1 The cyclically induced decline in the deficit was much smaller than suggested by the strong GDP growth, as key macroeconomic variables for general government revenue showed disproportionately slow growth in 2010. See also Deutsche Bundesbank, Germany in the financial and economic crisis – Fiscal policy, Monthly Report, October 2010, pp 71–85.
2 The proceeds received in May 2010 from the auction amounted to €4.4 billion.
3 The increase in debt as a result of financial market support measures is largely offset by higher financial assets owing to the assumption of risk assets. Interest payments are thus counterbalanced by current revenue and debt will fall in line with asset realisations.



* As defined in the national accounts. — **1** Taxes and social contributions plus customs duties and EU share in VAT. — **2** Excluding the exceptionally high proceeds from the UMTS auction (2.5% of GDP).

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rose slightly. In particular, the further increase in child benefit, the dynamic rise in spending on healthcare services, as well as higher capital transfers in connection with financial market support measures played a role here.

Further deterioration in central, state and local government budgets

The combined deficit of central, state and local government as defined in the budgetary accounts eased slightly from its very high 2009 level[1] but is still likely to be in excess of €80 billion. Overall, state and local government's core budg-

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1 This included extensive capital transfers to financial institutions which, as financial transactions, had no impact on the national accounts deficit.

General government as defined in the national accounts* Table 6

Item	2008	2009	2010pe	2008	2009	2010pe
				Year-on-year change		
	€ billion			as a percentage		
Expenditure	1,085.6	1,138.7	1,164.1	2.5	4.9	2.2
of which						
Social benefits	606.8	640.1	654.7	1.6	5.5	2.3
Compensation of employees	170.7	177.6	181.8	1.4	4.1	2.3
Interest	66.7	62.2	59.8	– 1.0	– 6.7	– 3.8
Gross capital formation	36.8	39.3	39.0	7.1	7.0	– 0.9
Memo item						
Old-age provision[1]	295.8	303.0	307.8	1.6	2.4	1.6
Healthcare[2]	164.0	175.3	181.1	4.4	6.9	3.3
Revenue	1,088.5	1,066.0	1,082.1	2.1	– 2.1	1.5
of which						
Taxes	590.1	564.5	568.3	2.4	– 4.3	0.7
Social contributions	407.8	409.9	420.3	1.9	0.5	2.5
				€ billion		
Balance	2.8	– 72.7	– 82.0	– 3.5	– 75.5	– 9.3
Memo item						
As defined in the Maastricht Treaty				as a percentage		
Debt level	1,643.8	1,760.5	…	4.1	7.1	…
	as a percentage of GDP			in percentage points		
Debt ratio	66.3	73.4	…	1.3	7.2	…
Budget balance[3]	0.1	– 3.0	– 3.3	– 0.2	– 3.2	– 0.2

* In accordance with ESA 95. — **1** In particular, 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 balance as defined in the Maastricht Treaty is calculated taking into account interest payments from swap transactions and forward rate agreements.

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ets concluded the year with sizeable funding gaps to the tune of €30 billion, whereby, in comparison with 2009, the deficit fell significantly less than the amount of non-recurrent bank recapitalisations. Central government's budgetary situation again deteriorated considerably. The core budget deficit climbed further to €44½ billion compared with €34½ billion in 2009. However, it was €36 billion below the budgetary estimate of €80½ billion, predominantly due to higher-than-estimated tax revenue and proceeds from the auction of radio frequencies as well as lower labour market-related expenditure and interest expenses. On the revenue side, tax receipts went up by 1% on the year. However, the increase in expenditure was much greater, mainly due to higher payments to the health insurance fund and to offset the Federal Employment Agency's deficit. Central government's off-budget entities posted a deficit of €7 billion. The decline of €14 billion vis-à-vis 2009 largely stemmed from lower capital transfers from the Financial Market Stabilisation Fund (SoFFin) to credit institutions.

Budgets of the social security funds recorded slight surplus on balance

On balance, the social security funds concluded 2010 with a slight surplus (as defined in the budgetary accounts) of €1½ billion. The significant improvement of €15½ billion on 2009 to a large extent reflects higher revenue from social contributions and lower labour market expenditure in the wake of the economic

General government finances*

Table 7

Item	2008pe	2009pe	2010pe	2008pe	2009pe	2010pe
	€ billion			Year-on-year change		
Central, state and local government				as a percentage		
Expenditure	677.4	725.8	722	5.2	7.1	– 0.5
of which						
Central government (core budget)	303.8	317.1	332.5	4.0	4.4	5
State government (core budgets)	273.9	284.8	286.5	3.7	4.0	0.5
Revenue	668.9	632.3	638.5	3.7	– 5.5	1
of which						
Taxes	560.5	524.0	528	4.2	– 6.5	1
				€ billion		
Balance	– 8.5	– 93.4	– 84	– 9.1	– 84.9	9.5
of which						
Central government (core budget)	– 11.8	– 34.5	– 44.5	2.9	– 22.7	– 10
State government (core budgets)	0.7	– 25.5	– 21.5	– 2.2	– 26.2	4
Social security funds				as a percentage		
Expenditure	478.9	505.9	513.5	2.7	5.6	1.5
Revenue	485.5	492.0	515	2.1	1.3	4.5
				€ billion		
Balance	6.6	– 13.9	1.5	– 2.3	– 20.5	15.5
of which						
Statutory pension insurance scheme	3.6	0.1	2	2.6	– 3.5	2
Statutory health insurance scheme	0.9	– 1.3	2	– 0.6	– 2.2	3
Federal Employment Agency	1.6	– 13.5	– 2.5	– 5.0	– 15.1	11

* As defined in the government's financial statitistics. This differs from the definition of the government account within the national accounts.

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upswing. In addition, central government grants to the Federal Employment Agency and the statutory health insurance scheme were higher. The effects on revenue of lowering the general contribution rate to the statutory health insurance scheme and raising the contribution rate for insolvency benefit payments largely cancelled each other out. Of the social security schemes, only the Federal Employment Agency recorded a deficit; however, this was much lower than in the previous year. This was attributable to more favourable labour market developments and, above all, the fact that central government provided sizeable additional funds (of just over €5 billion) to balance the budget, whereas the Federal Employment Agency had covered the entirety of its 2009 deficit using its own

reserves. The waiver of the mid-2010 pension adjustment and a positive contribution trend both played a role in the improvement in the finances of the statutory pension insurance scheme. Despite a sharp rise in expenditure, the statutory health insurance scheme also reported a more favourable outturn as it received significantly higher funds from central government. Only the long-term care insurance scheme recorded a deterioration owing to a sharp rise in expenditure.

Drop in deficit ratio in 2011

The deficit ratio could potentially drop towards 2% in 2011, provided (as is assumed here) the burdens arising from the financial market support measures decline and all levels of government initiate the corrections necessary, not least to comply with budgetary rules. Positive cyclical influences are likely to continue to support a reduction in the deficit. Furthermore, various measures to stimulate the economy are gradually being phased out and savings are on the horizon in connection with the Federal Government's consolidation package from the summer of 2010. The strain on the budgets of the social security funds will be eased by higher contribution rates to the statutory health insurance scheme and the Federal Employment Agency. Moreover, it is possible that the healthcare reform and further improvements on the labour market will dampen growth in expenditure in structural terms, too. Favourable economic and budgetary developments are likely to enable the deficit to be brought back below the 3% ceiling as early as 2011 – that is, two years before the deadline set by the Ecofin Council.

3 Investment and financing

Financial investment at much the same high level as in 2009

According to the available financial accounts data, financial investment by the German non-financial sectors showed a marked rise in the first three quarters of 2010 and totalled €188 billion. At €117 billion net, households increased their financial assets on a scale similar to that in the same period of 2009. By contrast, general government formed only €27 billion worth of financial assets, which was well down on the corresponding prior-year figure of €58 billion. The was due principally to a reduction in deposits. A €22 billion increase in credit claims – mainly owing to support measures in the wake of the financial crisis – had a positive impact on the government sector's financial assets, however. Non-financial corporations increased their financial assets by €44 billion; in the first three quarters of 2009 they had reduced their asstes by €18 billion. This increase involved a marked change in the portfolio structure; nearly all financial assets were topped up, although the focus was on fixed-income securities, equities and loans.

Overall perceptible growth in deposits at banks

In terms of amount, the part of financial investment by all domestic non-monetary sectors that flowed into deposits with domestic banks in 2010 was almost unchanged on the year.[1] It grew by €60½ billion, or 2.2%, compared with just over €56 billion, or 2.1%, in 2009. In contrast to the previous year, there was greater demand on balance for short-term deposits again. As in 2009, this demand was focused mainly on overnight deposits and, to a lesser extent, short-term savings deposits, as interest rates for short-term time deposits – unlike in the rest of the euro area – remained at a low level. Overnight deposits were topped up most strongly by households, which cut back their short-term time deposits significantly, especially at the beginning of the year.

In contrast to 2009, there was no demand for longer-term bank deposits on balance. Insurance companies and pension funds, but also non-financial corporations sharply reduced their longer-term time deposits, while households used the existing interest rate advantage of longer-term time deposits over longer-term savings deposits to shift assets between these two types of deposit.

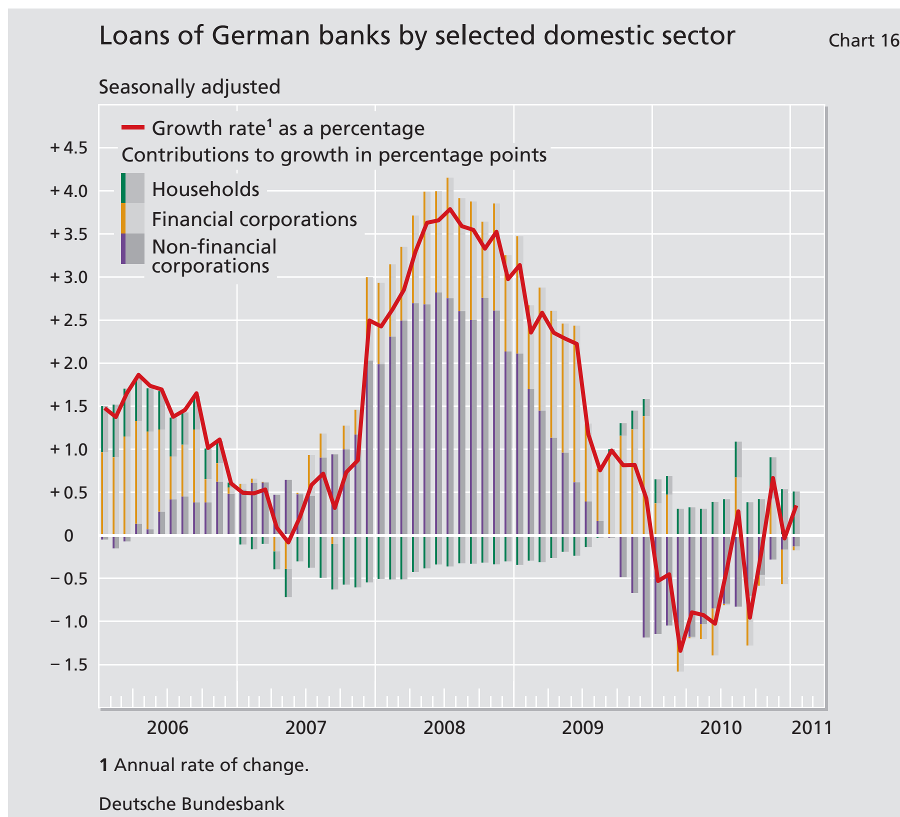
Sharp increase in securities holdings resulting from transfer of foreign debt instruments to resolution agencies

Domestic non-banks' financial investment took place to a considerable extent in the capital market last year. Despite the low level of remuneration, domestic non-banks strongly expanded their bond holdings in the main in 2010 (€204 billion, compared with €76 billion in 2009). These were solely foreign debt securities on balance. The newly established public-law institutions were the main purchasers: as part of the takeover and resolution of two credit institutions' offloaded business lines and risk exposures, they took large amounts of foreign debt instruments on to their balance sheets. Furthermore, domestic banks purchased shares in investment funds for €100½ billion, compared with €51½ billion in 2009. Specialised funds, which manage funds for institutional investors, were in particular demand. Despite the positive stock market climate, however, acquisition of shares, at €30½ billion, remained at roughly the same level as in 2009 (€40½ billion). While investment funds' interest was focused on domestic paper, domestic non-banks invested more or less equally in German and foreign shares.

Stable raising of external finance

The non-financial sectors raised €121 billion in external financial resources in the first three quarters altogether, which was an increase of 10% compared with the previous year. As in the case of financial investment, however, sectoral developments were very mixed. Producing enterprises as a whole increased

1 These two paragraphs on bank deposit growth are based on seasonally adjusted figures.



their credit liabilities by taking up short-term loans in the amount of €17 billion net and redeeming loans in the amount of €13 billion net. Their borrowing of funds in the capital market, at over €6 billion each for fixed-income securities and shares, was clearly higher than in the same period of 2009, however. New borrowing by general government in the credit and capital markets, at €88 billion net, was somewhat lower than in the comparable period one year earlier (€105 billion). Households' borrowing from banks and insurance companies showed a marked rise of €4.3 billion on the year.

Stagnation in loans to the private sector…

The reporting year saw a sharp increase in German banks' lending to domestic customers, which was due solely to lending to general government.[1] This was marked crucially by the establishment of resolution agencies under the Financial Market Stabilisation Development Act (*Finanzmarktstabilisierungsfortentwicklungsgesetz*) for two credit institutions which, for statistical purposes, belong to the general government sector. However, loans to the domestic private sector stagnated following a slight rise of 0.4% in 2009 (see chart on this page),

1 This paragraph and the following paragraph on the growth of bank lending – like the chart on this page – are based on seasonally adjusted figures.

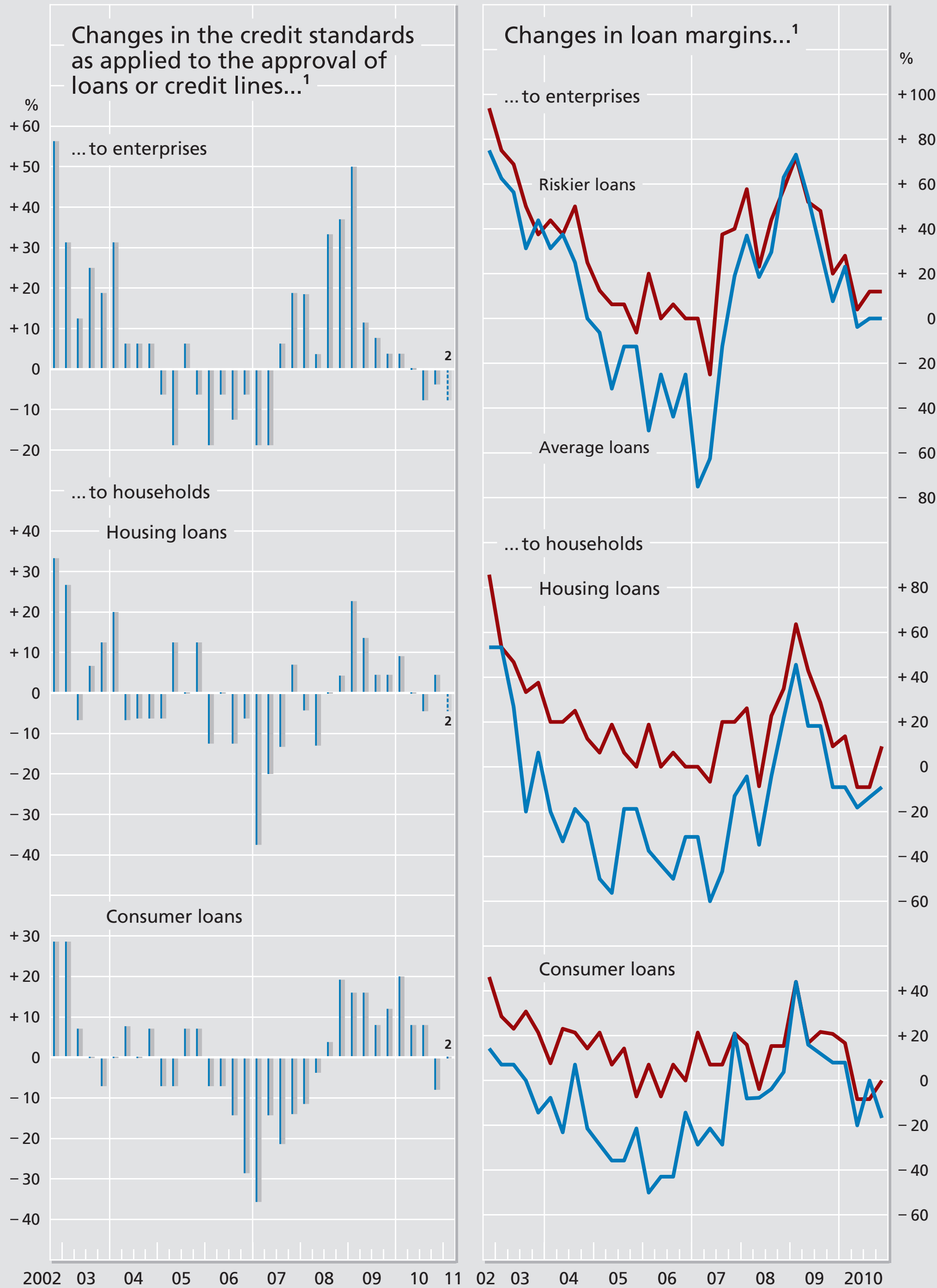
with clear differences in lending to the individual sectors again being apparent. German banks' lending to domestic households, at 0.9%, showed the most marked increase of the past seven years; since mid-2010, loans for house purchase have been the driving factor in this context owing to favourable mortgage lending rates and declining income uncertainty among households. Loans to financial corporations were very volatile, showing an identifiable decline over the year at a rate of –5.6%. As in earlier years, this is principally a reflection of banks' special refinancing operations.

… but still no increases in loans to non-financial corporations

The start of the reporting year saw an end to the noticeable downward movement in loans to domestic non-financial corporations that had followed the widening global financial crisis in the autumn of 2008. Since the beginning of 2010, the level of loans to the business sector has largely stagnated. Owing to the statistical base effect associated with this development, there was a steady increase in the annual rate during the reporting year, although it remained in negative territory at –0.5%. Given that German banks' profitability is stabilising and the fact that the euro-area interbank market was slowly returning to normal in 2010, this is unlikely to be due mainly to bank-related factors, however. In fact, empirical evidence shows that non-financial corporations' demand for bank loans lags somewhat behind recovery in the real economy. Added to this is the fact that the sharp pick-up in the German economy in the reporting year facilitated internal financing, in particular. Moreover, the fact that capacity utilisation in manufacturing was not approaching its longer-term average until the end of the year meant that there was not yet any need for major expansion investment in this area. The broad credit crunch in Germany that was feared with the increasing duration of the financial crisis therefore did not materialise in 2010, either.

Credit standards eased somewhat in some cases for the first time again in the second half of the year …

This is also indicated by the results of the Bank Lending Survey for Germany in 2010. The quite marked tightening of credit standards in lending to non-financial corporations in the wake of the financial and economic crisis came to a final halt in the second quarter of 2010. In the second half of the year, some initial cases of an easing on balance were reported (see chart on page 69). This was due, above all, to institutions' positive liquidity situation and to an improvement in the outlook for general economic activity. Up to the end of the period under review, it was only large enterprises that did not benefit from an easing of credit standards. Credit standards for loans to households for house purchase moved mostly in parallel with loans to enterprises, whereas institutions were still tending to tighten their standards for consumer credit up



1 Difference between the respondents reporting "tightened considerably" and "tightened somewhat" and the respondents reporting "eased somewhat" and "eased considerably" as a percentage of the responses given. — 2 Expectations for Q1.

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to the third quarter. In the final quarter of 2010, there was a slight easing in this business segment for the first time since the onset of the financial crisis; according to the surveyed banks, this was likewise due to the positive economic setting.

… along with a simultaneous increase in demand for funds …

At the same time, participating institutions reported a significant pick-up in demand, which they attributed, first and foremost, to higher financing needs for inventories and working capital. Nevertheless, according to the surveyed banks, fixed investment, too, gained in importance in the second half of the year as a reason for rising demand for bank loans. Alternative funding options, however, had a dampening impact, especially enterprises' clearly improved scope for internal financing towards the end of the year and the issuance of debt instruments in the capital market. Households' demand for funds underwent a similarly positive development in the course of the year. This was due, in particular, to the favourable outlook in the housing market and, in some cases, the improvement in consumer confidence.

… and low lending rates

In new lending business with domestic households and non-financial corporations, bank lending rates were predominantly declining or remained at the already very low level of the preceding year (see chart on page 71). Interest rates for loans to enterprises with an interest rate fixation of more than five years fell to 3.6% for large loans and 3.8% for smaller loans. The average rate of interest for loans for house purchase with an interest rate fixation of over five years and up to ten years was also declining and stood at 3.7% at the end of the period under review. Long-term consumer loans became somewhat more expensive, however, and cost 7.7% in December 2010.

Redemptions in the bond market …

Domestic borrowers redeemed bonds worth €1 billion net in the German market in 2010, compared with €½ billion net in 2009. The key factor in this was that public sector entities made high redemption payments in 2010 and bought their own securities on a large scale, ultimately leading to negative net sales of debt securities amounting to €17½ billion.[1] This contrasts with 2009, when public sector entities increased their capital market debt by €91½ billion. In that year, the Federal Government issued significant amounts of short-term Bubills, some of which matured in 2010. Besides sales of Federal bonds (Bunds),

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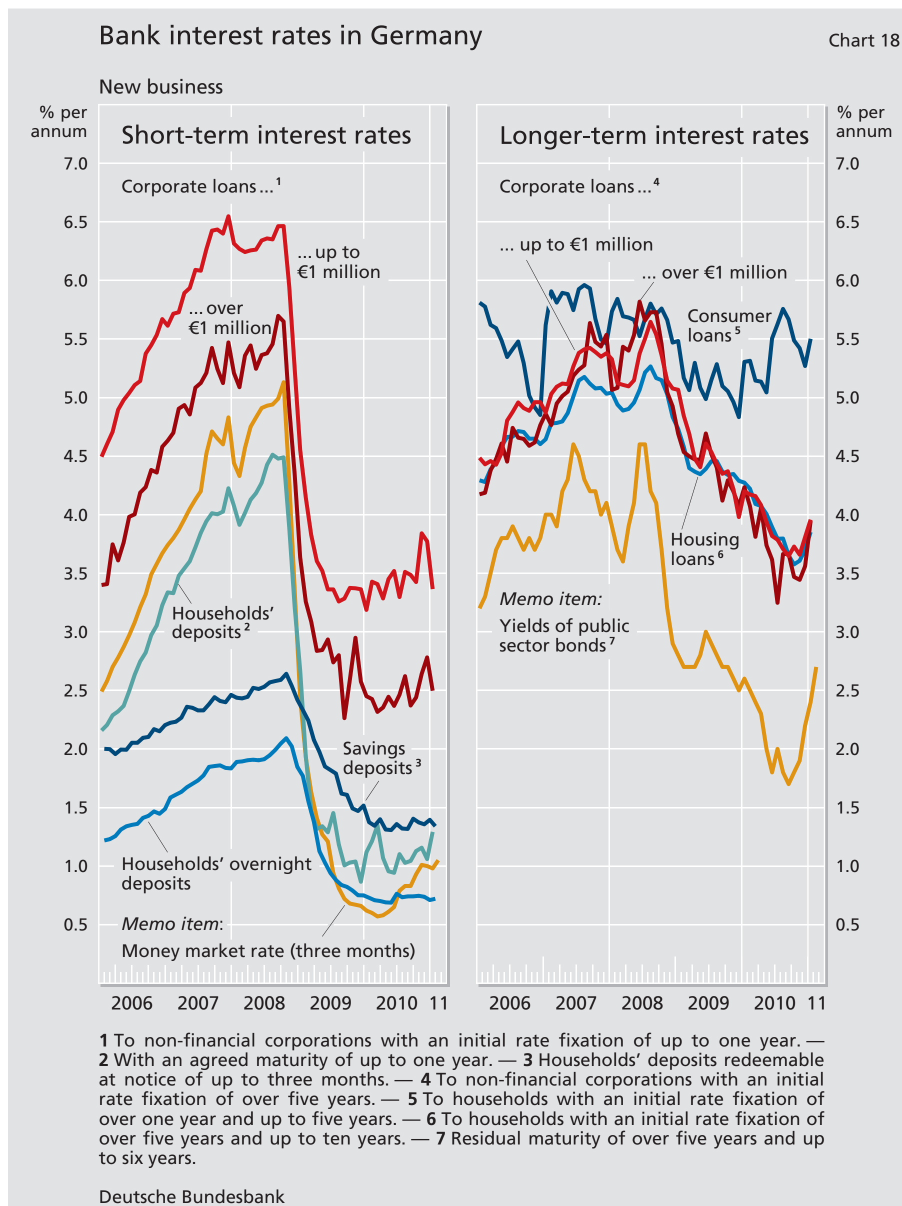
1 This figure from the capital market statistics relates to 2010 as a whole, while the financial accounts figures for new government borrowing (see page 67) covers only the first three quarters. Differences also arise as a result of including changes in issuers' holdings in the sales figures of the capital market statistics.



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 non-financial corporations with an initial rate fixation of over five years. — **5** To households with an initial rate fixation of over one year and up to five years. — **6** To households with an initial rate fixation of over five years and up to ten years. — **7** Residual maturity of over five years and up to six years.

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instruments issued by public-law resolution agencies played a major role in the reporting year.

Fall in credit institutions' capital market debt ...

In the case of credit institutions, too, redemptions predominated on balance in 2010 (€7½ billion, compared with €115 billion in 2009). There was therefore a continuation of the trend of the two preceding years, albeit at a slower pace. Once again, the focus was on the redemption of public Pfandbriefe (€63½ billion), the outstanding volume of which has been declining markedly for some time as a result of public entities utilising other financing channels. This contrasted with additional sales of other bank debt securities that can be

structured flexibly (€38 billion) and debt securities issued by specialised credit institutions (€21½ billion). A sharp reduction in own bond holdings owing to a change of debtor when setting up a resolution agency for one credit institution was the only factor to have a positive impact on net sales of other bank debt securities, which occurred in October. In the other months, there was a preponderance of redemptions of such paper, often featuring elements of derivatives for which, especially while the sovereign debt crisis was coming to head, there was hardly any demand.

Issues of corporate bonds …

By contrast, domestic enterprises took advantage of the improved financing conditions and increased their market debt by €24 billion through domestically issued paper. A large part of net sales (€20 billion) was accounted for by non-bank financial institutions, however. Non-financial corporations issued €2½ billion worth of bonds, compared with €20 billion in 2009. Domestic enterprises predominantly issued debt securities with maturities of more than one year.

Equity issuance …

Issuing activity in the German equity market slowed somewhat in 2010 despite the improved stock market environment. At €20 billion, domestic corporations raised less equity capital than in 2009 (€24 billion). The majority of issues were by listed enterprises (€18½ billion). These consisted predominantly of capital increases by existing enterprises, with the raising of funds by one credit institution playing a prominent role.

Inflows to domestic investment funds

The German mutual investment fund sector continued its recovery in 2010. At €85 billion, inflows were almost twice as large as in 2009. The improvement in economic activity, the recovery in stock prices and investors' waning risk aversion are likely to have played a part in this. The injections benefited mainly specialised funds reserved for institutional investors, which sold shares for €71½ billion. Among funds open to the general public, it was mainly mixed securities-based funds that sold their own share units (€6 billion). In addition, mixed funds, open-end real estate funds and equity-based funds sold shares for a total of €7½ billion. By contrast, given low short-term interest rates, money market funds suffered outflows on a small scale The outstanding volume of units issued by bond-based funds showed hardly any change.

German net external assets

As in earlier years, a significant part of financial investment was formed abroad in 2010. In the first three quarters of the year, for which data on the international investment position are currently available, German net external assets went up by €62½ billion. This increase corresponded in real terms to Germa-

ny's current account surplus. This stood at €141½ billion in 2010 as a whole and was thus higher than in 2009 (€133½ billion). Furthermore, there were valuation gains in external assets during the year owing to the depreciation of the euro. By contrast, price developments in the international bond markets had a dampening impact on balance.

Chronology of economic and monetary policy measures

1 January 2010
Income tax relief is provided by adjusting the tax rates and extending the deductibility of contributions to health and long-term care insurance schemes. The child benefit and child tax allowances are raised. Adjustments to the counterfinancing measures from the 2008 business tax reform provide relief for enterprises. The hotel trade is now subject to turnover tax at the reduced rate. Changes to inheritance tax, providing tax relief for transferring a family-owned business and for close family members, enter into force. The benefit rates of the long-term care insurance scheme are raised by 2% on average.

27 January 2010
In its Annual Economic Report, the Federal Government expects a 1.4% increase in real gross domestic product (GDP) in 2010, with the pace of growth to increase during the course of the year. The number of employed persons is forecast to fall by 1.0%. Nevertheless, the Federal Government expects disposable income to increase owing to income tax relief measures. However, since many purchases of new cars were brought forward as a result of the car scrappage scheme, private consumption is likely to fall by 0.5%. Investment in machinery and equipment is expected to rise substantially and an increase in housing construction is also forecast. Gross fixed capital formation is expected to go up by a total of 2.1%. Overall domestic demand is likely to account for around half of the expected growth and net exports for the other half. As a result of a pick-up in the global economy, exports are forecast to rise at a considerably stronger pace (+5.1%) than imports (+3.4%).

Given improvements in the financial markets, the Eurosystem, in coordination with other international central banks, decides to discontinue the US dollar liquidity swap lines set up with the Federal Reserve as of 31 January 2010. Furthermore, in agreement with the Swiss National Bank, the liquidity-providing swap transactions for Swiss francs will no longer be conducted.

9 February 2010
The Federal Cabinet presents an updated stability programme for Germany. This is based on a 1.4% increase in real GDP in

2010 and an annual increase of 2% for the years thereafter up to 2013. A deficit ratio of 5½% is forecast for 2010. From 2011, the structural deficit is to be reduced by at least 0.5% of GDP per year and the 3% ceiling is therefore to be observed again from 2013.

The Federal Constitutional Court issues a ruling on the basic allowance for job seekers. This states that the benefit rates for unemployment benefit II and for the social allowance are not sufficiently substantiated. The annual adjustment of the standard rates in line with pension developments is also rejected. However, the level of the benefits is not considered to contravene basic human rights. Atypical special needs must be taken into account to a greater extent with immediate effect. Parliament has until the end of 2010 to introduce new legislation.

11 February 2010
Given the crisis of confidence regarding the sustainability of public finances in Greece, which has been escalating over a period of several months, and the associated risks for the euro area as a whole, at a special summit of the European Council, the heads of state or government of the euro-area member states declare their willingness to take determined and coordinated action, if needed, to safeguard financial stability in the euro area as a whole.

4 March 2010
In view of the continued financial market stabilisation, the Governing Council of the ECB decides to continue the gradual phasing-out of non-standard monetary policy measures. Thus, the Eurosystem returns to variable-rate tenders in the regular three-month refinancing operations, starting with the operation to be allotted on 28 April 2010, and it announces that the six-month special-term refinancing operations will in future be interest-indexed to the average main refinancing rate over the life of the respective operation.

9 March 2010
The Bundesbank's profit, amounting to €4,147 million, is distributed to central government (€647 million of this is transferred to the Investment and Repayment Fund).

15 March 2010
In response to the ongoing and advancing crisis of confidence regarding public finances, particularly those of Greece, the euro-area member states reaffirm their declaration of 11 February 2010. They emphasise that the objective is not to provide individual member states with financing at average euro-area interest rates.

19 March 2010
The Bundestag approves the Federal budget for 2010. New borrowing is reduced by €5.6 billion to €80.2 billion compared with the Federal Cabinet decision in December, above all as a result of lower estimates for labour-market-related expenditure and interest costs. The structural deficit, which in the context of the new debt brake forms the base value for the borrowing limit for the transitional period up to 2015, decreases to a much lesser extent and is estimated to amount to €66.6 billion.

25 March 2010
As part of an aid package for Greece involving substantial International Monetary Fund (IMF) financing and mostly European financing, the

Chronology of economic and monetary policy measures

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euro-area member states declare that they are willing, if necessary, to contribute to coordinated bilateral loans to safeguard financial stability in the euro area as a whole. This package is to be considered as a last resort, particularly if market financing is insufficient. Any disbursement on the bilateral loans would be decided by the euro-area member states unanimously, subject to strict conditionality and based on an assessment by the European Commission and the ECB.

26 March 2010
The Bundesrat approves the Social Security Stabilisation Act (*Sozialversicherungsstabilisierungsgesetz*). On an exceptional basis, the Federal Employment Agency (*Bundesagentur für Arbeit – BA*) is given a Federal grant to offset its deficit in 2010, rather than a repayable loan. Furthermore, the statutory health insurance scheme receives €3.9 billion in one-off additional funds to offset cyclically induced revenue shortfalls.

31 March 2010
Deficit and debt levels are reported to the European Commission under the European budgetary surveillance procedure. After a balanced budget in 2008, a deficit ratio of 3.3% is recorded for 2009. The debt ratio increases by more than 7 percentage points vis-à-vis 2008 to 73.2%, not least owing to interventions to support financial institutions (which do not affect the deficit but push up the debt level). For 2010, the Federal Government announces a planned deficit ratio of 5.5% and a further rise in the debt ratio to 78.9%.

8 April 2010
The Governing Council of the ECB decides to keep the minimum credit threshold for marketable and non-marketable assets in the Eurosystem collateral framework at investment-grade level (ie BBB-/Baa3) beyond the end of 2010, except in the case of asset-backed securities (ABS). In addition, the Governing Council decides to apply, as of 1 January 2011, a schedule of graduated valuation haircuts to the assets rated in the BBB+/Baa1 to BBB-/Baa3 range. Furthermore, the Governing Council confirms that debt instruments denominated in foreign currencies, debt instruments traded on the accepted non-regulated markets and subordinated debt instruments

will no longer be eligible as collateral for Eurosystem refinancing operations as of 1 January 2011.

11 April 2010
Further details, including interest terms, are set out for the aid package for Greece which was announced on 25 March 2010. The euro-area member states declare that they are willing to contribute €30 billion in the first year of the three-year programme to cover Greece's financing needs. The programme is supplemented by contributions from the IMF. Financial support for the following years will be decided once the economic and financial adjustment programme has been adopted.

23 April 2010
Greece requests support from the assistance programme owing to imminent insolvency.

28 April 2010
The Stability Council, which was set up when revising the borrowing limits with the purpose of overseeing budgetary developments within Germany, meets for the first time and decides on rules of procedure. Furthermore, a financial ratio system with thresholds is established, the overshooting of which indicates imminent budgetary hardship for central and/or state government. After further checks have been carried out, restructuring programmes can be agreed where appropriate.

30 April 2010
WestLB transfers a portfolio with a nominal value of €71 billion to the First Winding-up Agency, which is managed under German federal law within the Federal Agency for Financial Market Stabilisation (FMSA).

2 May 2010
The ministers of the Eurogroup concur with the European Commission and the ECB that providing a loan to Greece is warranted to safeguard financial stability in the euro area as a whole. The ministers of the euro-area countries unanimously agree on bilateral loans; Slovakia does not participate in the financing. Greece undertakes to comply with the agreed adjustment programme, which, in particular, foresees a substantial reduction in its deficit over the coming years. The three-year lending programme comprises a total of €110 billion, €80 billion of which is to be provided by euro-area countries. The first disbursement is to be made before 19 May 2010.

3 May 2010
In light of the restructuring measures introduced by the Greek government, the Governing Council of the ECB announces that it will suspend the application of the minimum credit rating threshold for marketable debt instruments eligible as collateral that are issued or guaranteed by the Greek government until further notice.

7 May 2010
The Currency Union Financial Stability Act (*Währungsunion-Finanzstabilitätsgesetz*), which enables Germany to contribute to the financial assistance for Greece, is announced and enters into force on 8 May 2010.

The heads of state or government of the euro area reaffirm their commitment to ensure the stability, unity and integrity of the euro area and to use the full range of means available to achieve this. The European Commission is asked to propose a European stabilisation mechanism to safeguard financial market

Chronology of economic and monetary policy measures

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stability in Europe. This proposal is to be submitted for decision to an extraordinary meeting of the Ecofin Council on 9 May 2010.

9 May 2010
At an extraordinary meeting of the Ecofin Council, the ministers decide on a package of measures containing two different approaches for financial support from member states. First, a European Financial Stabilisation Mechanism (EFSM), based on Article 122 of the Treaty on the Functioning of the European Union (TFEU), with a planned scope of €60 billion. Second, the European Financial Stability Facility (EFSF) with a volume of €440 billion, which is to be set up for a period of three years. The IMF is expected to put forward half as much of the contributions made by the EU countries. To receive assistance, a country must comply with monetary and economic policy conditions.

An EU task force to strengthen the existing regulatory framework for safeguarding the sustainability of public finances, led by the President of the European Council, Herman Van Rompuy, is established.

10 May 2010
In order to ensure a smooth monetary policy transmission process in light of severe tensions in certain financial market segments, the Governing Council of the ECB decides on four non-standard monetary policy measures:

- To launch a purchase programme for debt securities issued by the euro-area public and private sectors (Securities Markets Programme: SMP), enabling interventions to be conducted in particularly dysfunctional financial market segments.
- To adopt a fixed-rate tender procedure with full allotment in the regular three-month longer-term refinancing operations (LTROs) to be allotted on 26 May and 30 June 2010.
- To conduct an interest-indexed six-month refinancing operation with full allotment on 12 May 2010.
- To reactivate the temporary swap lines set up with the Federal Reserve to provide US dollar liquidity from 11 May 2010.

20 May 2010
The auction of radio frequencies closes with total bids of €4.4 billion

destined for the central government budget. Only the minimum bid (€0.1 billion) had been budgeted for.

21 May 2010
The Bundestag and Bundesrat approve the Act Assuming Guarantees in Connection with a European Stabilisation Mechanism (*Gesetz zur Übernahme von Gewährleistungen im Rahmen eines europäischen Stabilisierungsmechanismus*). Germany may therefore participate in the EFSF in the amount of up to €123 billion. If necessary, this figure can be increased by up to 20%.

7 June 2010
After a closed meeting, the Federal Cabinet lays out the cornerstones for the consolidation of the Federal budget up until 2014. A cumulated improvement in the fiscal balance of around €80 billion is set as a target for 2011 to 2014. The measures include, *inter alia*, the introduction of two new taxes. From 2011, it is thus planned to tax nuclear fuel used in the industrial production of electricity. Furthermore, flights departing from German airports are generally to be subject to an air traffic tax from 2011, the level of which will depend on the distance to the final destination. Additional revenue is also to be generated by reducing energy and electricity tax concessions for the production sector, as well as by means of dividend payments from Deutsche Bahn (the German national rail company) in the amount of €0.5 billion per year. On the expenditure side, pension contributions for recipients of unemployment benefit II are to be abolished and parental benefit payments are to be deducted from the level of unemployment benefit II received. Moreover, spending on active labour market policy, in particular, is to be reduced by switching from standard to discretionary benefits. Conversely, in 2011 it is planned to once again make an additional payment of €2 billion to the health insurance fund to overcome the impact of the crisis. Savings are to be made in the area of administration, not least by postponing a pay increase planned for 2011 for several years. The volume of consolidation is estimated to amount to €11.2 billion for 2011 and is thus in line with the level needed to comply with the debt brake. Parts of the package will be passed by the end of 2010, although a gap still needs to be filled in order to meet the target volume of consolidation.

10 June 2010
In response to the money market having taken another turn for the worse as a result of the sovereign debt crisis, the Governing Council of the ECB announces that it will adopt a fixed-rate tender procedure with full allotment in the regular three-month longer-term refinancing operations to be allotted on 28 July, 25 August and 29 September 2010.

30 June 2010
As planned, after a year, the Covered Bond Purchase Programme decided on by the Governing Council of the ECB on 7 May 2009 achieves the intended nominal volume of purchases of €60 billion and has thus been fully implemented.

1 July 2010
The first Eurosystem one-year longer-term refinancing tender allotted on 25 June 2009 with a volume of €442.2 billion matures. So as to avoid disruptions on the euro money market as a result of this, the Eurosystem puts out a six-day fine-tuning operation, providing credit institutions with a total of

Chronology of economic and monetary policy measures

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€111.2 billion until the next main refinancing operation.

7 July 2010
The Federal Cabinet approves the draft Federal budget for 2011. Permitted structural new borrowing is set at €45.8 billion, based on the estimate for the base year 2010, which was revised down to €53.2 billion. A cyclical component of €5.5 billion and net financial asset acquisitions of €6.2 billion are forecast. The resulting limit for (unadjusted) new borrowing of €57.5 billion is virtually completely exhausted in the draft budget containing the consolidation package measures of 7 June, which have yet to be specified.

9 July 2010
The Act Amending Health Insurance Provisions and Other Provisions (*Gesetz zur Änderung krankenversicherungsrechtlicher und anderer Vorschriften*) is passed by the Bundesrat. *Inter alia*, from 1 August the manufacturers' discount for pharmaceuticals that are not subject to the fixed-amount regulation is raised from 6% to 16% and a price freeze is introduced for pharmaceuticals paid for by the statutory health insurance scheme. These regulations apply until the end of 2013.

15 July 2010
In its updated forecast, the Federal Ministry of Finance (*Bundesministerium der Finanzen – BMF*) now expects the general government deficit ratio to develop more favourably. A smaller increase to 4½% is forecast for 2010 and the ratio is then expected to decline to 4% in 2011 and 3% in 2012.

23 July 2010
In a joint press release, the Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin*) and the Bundesbank publish the results of the EU-wide stress tests for Germany. With the exception of Hypo Real Estate Holding AG (HRE), for which further stabilisation measures are envisaged, German banks prove to be robust and resilient.

25 August 2010
The Federal Cabinet approves the draft of the Restructuring Act (*Restrukturierungsgesetz*). This foresees, in particular, the establishment of a restructuring fund for credit institutions under the aegis of the FMSA. The restructuring

fund is to help stabilise the financial market by, among other things, granting guarantees or providing recapitalisation measures. The measures undertaken by the fund are generally to be financed through annual and, where necessary, special contributions from credit institutions. Furthermore, parts of SoFFin's guarantee and loan authorisations are to be transferred to the fund (up to a maximum of €100 billion and €20 billion, respectively).

2 September 2010
The Governing Council of the ECB decides to continue to conduct the main refinancing operations of the Eurosystem as fixed-rate tender procedures with full allotment for as long as necessary, and at least until 18 January 2011. The same applies to refinancing operations with a maturity of one maintenance period. Furthermore, the Governing Council of the ECB announces that it will conduct the three-month longer-term refinancing operations to be settled on 28 October, 25 November and 23 December 2010 on an interest-indexed basis with full allotment.

12 September 2010
The Group of Central Bank Governors and Heads of Supervision (GHOS) agrees on new supervisory requirements for banks' capital, which are to be gradually introduced by 1 January 2019.

30 September 2010
Under the European budgetary surveillance procedure, the Federal Government reports a planned deficit ratio of 4.0% for 2010 to the European Commission. The debt ratio is expected to rise to 75.4%. The impact of the announced "filling up" of the bad bank for HRE (FMS Wertmanagement) has not yet been included here. A deficit ratio of 3.0% and a debt ratio of 73.4% are submitted for 2009.

The second Eurosystem 12-month tender with a volume of around €75.2 billion matures. The fine-tuning operation offered to stabilise the euro money market is taken up in the amount of around €29.4 billion.

1 October 2010
Individual business lines and risk positions of HRE with a nominal value of €173 billion are transferred to FMS Wertmanagement, which was set up by the FMSA.

9 October 2010
The Governing Council of the ECB introduces amendments to the collateral framework for monetary policy refinancing operations in the Eurosystem. They relate, among other things, to the use of ABS as collateral, the addition of discretionary measures in order to limit risk and how to proceed in the case of insufficient collateral.

28 October 2010
The Bundestag approves both the introduction of the nuclear fuel tax and the setting up of a new central government special fund (Energy and Climate Fund). This special fund, which is to be financed in particular by nuclear power plant operators, is intended to support environmentally-friendly energy supply programmes.

29 October 2010
The EU heads of state or government endorse the report of the task force led by Herman Van Rompuy. It presents a new mechanism to detect macroeconomic imbalances at an early stage, enhanced coordination

Chronology of economic and monetary policy measures

(cont'd)

(particularly the "European semester"), proposals for more powerful institutions at a national level, as well as initial starting points for reforming the Stability and Growth Pact.

10 November 2010
After estimating a sharp increase in real GDP of 3.7% for 2010, in its 2010–2011 Annual Report, the German Council of Economic Experts forecasts more moderate growth in output of 2.2% for 2011. In statistical terms, the growth is mainly due to private consumption and investment in machinery and equipment. Construction investment is expected to increase slightly overall. The growth momentum in exports and imports is forecast to weaken compared with 2010 and net exports are expected to play only a minor role. The labour market situation is likely to continue to improve and the unemployment rate (as defined by the BA) is expected to fall from 7.7% on an annual average for 2010 to 7.0% in 2011. In this context, working time and hourly productivity will probably be back at the levels recorded in 2008.

21 November 2010
Ireland is the first country to apply for financial assistance from the European rescue shield. The Governing Council of the ECB welcomes the request of the Irish government for financial assistance from the IMF, the European Union and the euro-area member states with a view to safeguarding financial stability in the European Union and the euro area.

25 November 2010
The Bundesbank publishes its Financial Stability Review for 2010. Despite the ongoing global financial and European sovereign debt crisis, it records an improvement in the stability situation for the German financial system, but highlights weaknesses in the German banking market.

26 November 2010
The Bundestag approves the 2011 Federal budget. Although, at around €50 billion, net borrowing in the 2010 budget is about €15 billion lower than the figure estimated in the summer of 2010, the base value for the structural deficit for 2010 of €53.2 billion, on which the debt ceiling in the transitional period up

to 2015 is based, remains unchanged. For 2011, the maximum permitted level of net borrowing, with a cyclical component of €2.5 billion and net expenditure on financial transactions of €5 billion, is calculated at €53.1 billion. The estimated level of net borrowing is reduced by €9.1 billion, compared with the draft from July, to €48.4 billion, above all owing to an increase of €7.4 billion in tax revenue.

The Act Accompanying the 2010 Budget (*Haushaltsbegleitgesetz 2010*) is passed by the Bundesrat. In particular, central government pension contributions for recipients of unemployment benefit II are abolished and the air traffic tax is approved. Furthermore, the Restructuring Act is passed.

28 November 2010
The Ecofin Council, the European Commission and the ECB concur that providing assistance to Ireland is warranted to safeguard financial stability in the euro area. The euro-area ministers in the Ecofin Council approve an aid package for Ireland totalling €85 billion, subject to the condition that Ireland adopts an economic and fiscal adjustment programme. The ministers of the euro-area countries agree to the establishment of a permanent crisis mechanism. Following a similar concept to the EFSF, the European Stability Mechanism (ESM) is to provide financial assistance if financial stability in the euro area as a whole is at risk. The "no bail-out" clause and thus the founding principle of national responsibility for fiscal policy in the EMU is to remain in place.

2 December 2010
The Governing Council of the ECB decides to continue to conduct the main refinancing operations of the Eurosystem as fixed-rate tender procedures with full allotment for as long as necessary, and at least until 12 April 2011. The same applies to refinancing operations with a maturity of one maintenance period. Furthermore, the three-month longer-term refinancing operations to be allotted on 26 January, 23 February and 30 March 2011 will once again be conducted on an interest-indexed basis with full allotment.

16 December 2010
The European Council agrees on a limited amendment to Article 136 of the TFEU, which will allow the establishment of a permanent crisis mechanism. The Treaty amendment does not extend the jurisdiction of the European Union. Rather, it affects the member states of the euro area. After being approved by the member states, the amendment is to enter into force by 1 January 2013 at the latest and the mechanism is to be available from June 2013. The European Council approves the agreements reached by the finance ministers on 28 November 2010 concerning the functioning of a permanent crisis mechanism.

The Governing Council of the ECB decides on further changes with regard to the collateral framework for monetary policy operations in the Eurosystem. These include, *inter alia*, loan-by-loan information requirements for ABS deposited as collateral and regulations on recognising fixed-term deposits held in the Eurosystem as collateral. Furthermore, the Governing Council of the ECB decides to increase its subscribed capital by €5 billion to €10.76 billion. Consequently, the Bundesbank's contribution to the subscribed capital of the

Chronology of economic and monetary policy measures

(cont'd)

ECB rises from around €1.09 billion to around €2.04 billion.

17 December 2010
The key legislation of the healthcare reform is passed by the Bundesrat. By virtue of the Statutory Health Insurance Financing Act (*GKV-Finanzierungsgesetz*), the general contribution rate is raised from 14.9% to 15.5%. In future, additional financing needs will be met solely by means of non-income-related additional contributions from insurees. A social equalisation component is aimed at preventing an excessive strain being placed on persons in lower-income groups. By virtue of the Pharmaceutical Restructuring Act (*Arzneimittelneuordnungsgesetz*), pharmaceutical manufacturers are obliged to demonstrate the additional benefits of any new medications that are not subject to the fixed-price regulation.

The ECB and the Bank of England agree on a temporary swap line with a volume of up to GBP 10 billion. This enables the Central Bank of Ireland to also meet any liquidity needs of Irish banks in pounds sterling. The agreement expires at the end of September 2011.

21 December 2010
The Governing Council of the ECB decides, in coordination with other central banks, to extend the liquidity swap arrangements with the Federal Reserve up to 1 August 2011 and to continue to conduct US dollar liquidity-providing operations with a maturity of seven days.

23 December 2010
The Eurosystem's third and final one-year tender reaches maturity. The counterparties pay back a total of €96.9 billion to the Eurosystem. In order to avoid possible distortions in the wake of the maturity, the Eurosystem once again offers a fine-tuning operation, which is taken up by the credit institutions in the amount of €20.6 billion.

31 December 2010
As of the end of the year, the Financial Market Stabilisation Fund cannot provide support to any further financial institutions. Just before the new budgetary rules prohibiting new loan authorisations being granted to special funds enter into force, unused guarantee and loan authorisations in the amount of €100 billion and €20 billion, respectively,

are transferred to the Restructuring Fund.

1 January 2011
The general contribution rate to the statutory health insurance scheme is raised from 14.9% to 15.5% and the contribution rate to the BA is put up from 2.8% to 3.0%. At the same time, the contribution rate for insolvency benefit payments is lowered from 0.41% to 0% of earned income. The Nuclear Fuel Tax Act (*Kernbrennstoffsteuergesetz*) and the Restructuring Act enter into force. Flights departing from German airports will generally be subject to an air traffic tax from 2011 (for legal proceedings from 1 September 2010 onwards). The energy and electricity tax concessions for the production sector are reduced.

13 January 2011
According to the provisional figures, the 2010 Federal budget records a deficit of €44½ billion. The estimated deficit is undershot by a total of €36 billion, predominantly owing to significantly higher tax revenue and proceeds from the auction of radio frequencies, as well as relief on the expenditure side with regard to interest costs and offsetting the BA's deficit.

19 January 2011
In its Annual Economic Report, the Federal Government expects a 2.3% increase in real GDP in 2011. External impulses are forecast to be weaker than in 2010, whereas domestic demand is expected to rise sharply. The development of private consumption is forecast to be stable. The Federal Government predicts that investment will strongly support growth, but that this will be somewhat subdued for a short time at the start of the year when the more generous tax depreciation rules come to an end. The normalisation of productivity and unit labour costs is likely to continue. The report states that the number of employed persons will increase to 40.8 million and the unemployment rate (as defined by the BA) will fall to 7.0%. Consumer prices are forecast to rise by 1.8%.

24 February 2011
The Federal Statistical Office reports a general government deficit ratio (pursuant to the Maastricht criteria) of 3.3% for 2010, thus exceeding the European reference value.

8 March 2011
The Bundesbank presents its annual accounts for 2010. The profit of €2,206 million is transferred in full to central government.

Financial and monetary system

A salient feature of the international financial and monetary system in 2010 was the spillover of the financial crisis into a sovereign debt crisis in Europe. Weaknesses in the fiscal policies of some euro-area member states were brutally exposed. A crucial need now is to implement rigorous consolidation measures in order to restore lost confidence in the sustainability of public debt levels in the affected countries as elsewhere. In addition, major reforms been adopted to strengthen and stabilise the international financial system focusing on measures to increase the resilience of banks (Basel III) and to deal with systemically important financial institutions (SIFIs). A key step towards avoiding future crises lies in an integrated approach to monitoring risks within the financial sector – bearing in mind the extensive interconnectedness among market participants – and the mutual feedback effects with the real sector. At European level, the European Systemic Risk Board (ESRB) was created to conduct such macroprudential surveillance; it commenced operations at the beginning of 2011.

The dynamically growing emerging market economies have been accorded a greater role in international cooperation. Thanks to a redistribution of quotas and a comprehensive governance reform, they will enjoy much greater representation within the International Monetary Fund (IMF) in future. In the field of international financial stability, the IMF will intensify its surveillance and assessment of global capital flows and of the interaction between economic policies and financial sector developments. The IMF's array of credit instruments was overhauled in 2010 with a view to enhancing crisis prevention; however, this will tend to lead to growing financial risks to the Fund.

In the past year, German banks improved their resilience and benefited from waning domestic risks in the wake of economic recovery. Their profitability also stabilised. Their business activity, however, displayed heterogeneous patterns, not least because some banks need to meet European Commission conditionality requirements following recourse to government assistance.

I International financial and monetary system

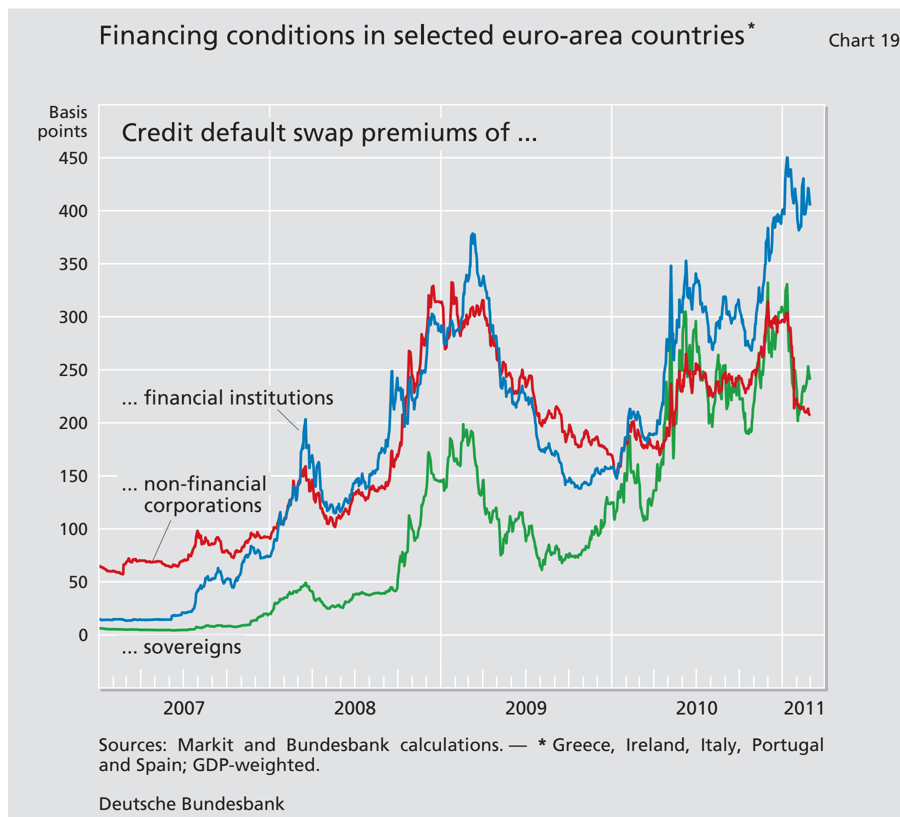
1 International financial system

Sovereign debt crisis in Europe weighs on markets

In spring 2010 the international financial system once again came under considerable pressure, the salient feature of which was the sovereign debt crisis in some European countries. As early as the first few months of last year, the initially positive investor sentiment was superseded by worries about the potential repercussions of the precarious state of Greek government finances. In early May, doubts about Greece's ability to repay its international debts then unleashed a wave of contagion which, in some cases, culminated in an abrupt revaluation of the sovereign risk of other euro-area countries. It turned out that investors were factoring not only the sustainability of a given country's sovereign debt but also its aggregate debt position, including the financial situation of its banks and private non-financial sectors, into their risk assessment. Starting in the markets for sovereign bonds and wholesale funding markets for banks, the tensions broadened into a general shift out of riskier assets such as equities and into safe-haven assets like German Bunds and US Treasuries.

Aid measures prevent free fall

It was only the decisions in May to provide Greece with a financial aid package, the establishment of a comprehensive mechanism to ensure the solvency of euro-area member states facing liquidity problems and the announcement of radical consolidation plans by these countries that managed to stabilise the markets sufficiently to avert a free fall. During this period, the ECB began to purchase selected sovereign bonds in order to ensure the functioning of the monetary policy transmission mechanism. While the risk spreads of the countries that were bearing the brunt of the sovereign debt crisis subsequently receded somewhat, they were still at a high level overall at the end of the reporting period. A reference indicator that tracks the development of credit default swap premiums of west European sovereigns trended relentlessly upwards – with some brief respites – as the year wore on (see chart on page 89). It became increasingly clear that it was going to take a fairly long time for a number of countries to regain sustainable public finance positions. This adjustment process is associated with major uncertainty which has to do with the complex interplay between fiscal consolidation, the real and financial sectors and the associated distribution of the adjustment burdens. At the end of November Ireland, owing to exceptionally high fiscal strains caused by the rescue of its domestic banks, became the first country to apply for financial aid



Financing conditions in selected euro-area countries* — Chart 19

Sources: Markit and Bundesbank calculations. — * Greece, Ireland, Italy, Portugal and Spain; GDP-weighted.

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from the European rescue package, supplemented with funds from an IMF programme (see box on page 90).

Financial markets differentiating more between banks

Banks in countries suffering from financial distress were particularly affected by the tension in the financial markets and, in some cases, continue to have only restricted access to wholesale funding markets. This has given rise to considerable market pressure on these banks to improve their liquidity and solvency as well as their refinancing structure.

Another reason why the financial markets are differentiating more between banks with respect to refinancing conditions is that numerous credit institutions are still in the process of expunging their problem assets and adapting their business models. The markets reacted positively in July to the outcome of negotiations on reforming the international regulation of banks (Basel III) once it became clear that the banking sector, on the whole, would be able to cope with the burdens during the implementation phase.

Measures to contain the present sovereign debt crisis and prevent future occurrences of such crises in Europe

The loss of confidence in the sustainability of public finances in some euro-area countries dominated events on the financial markets for most of 2010. At the beginning of May, Greece's worsening financing difficulties, which posed a considerable threat to the stability of monetary union and of the financial system, prompted the other euro-area countries and the IMF to agree upon a €110 billion aid package. Of this sum, €80 billion was provided by euro-area countries while the IMF contributed €30 billion. Based on strict conditionality, in particular rigorous consolidation, and subject to significant interest rate premiums, this lending facility was designed to bridge the gap caused by the country's temporary loss of access to the international financial markets. A total amount of €10 billion from the aid package can be used to restructure the Greek banking system.

On their own, however, these measures were not enough to contain the contagion effects triggered by Greece's financial difficulties. As the tensions mounted in the financial markets, further extensive stabilisation measures were adopted before the end of May. First, the finance ministers of the EU member states agreed to establish a European Financial Stabilisation Mechanism (EFSM). The European Commission was authorised, on behalf of the European Union, to issue additional bonds up to a total amount of around €60 billion in order to grant loans to EU member states. Any aid from the EFSM is to be disbursed under strict conditions only in accordance with a joint EU-IMF programme. Second, the euro-area states agreed to set up a European Financial Stability Facility (EFSF). With the aim of safeguarding financial stability in the euro area, the EFSF can borrow so as to extend loans, subject to strict conditionality, to euro-area member states which have run into difficulties caused by exceptional circumstances beyond their control. This lending is tied to conditions matching those for the Greek aid. The rest of the euro area member states act as guarantor for the EFSF's borrowing up to a total amount of €440 billion, with a prescribed overcollateralisation level of 20% which, however, results in a correponding lowering of the maximum actual lending volume. These safeguards, along with the setting up of a cash reserve, ensure a triple-A rating for the EFSF. Applications for aid may be submitted to the EFSF up to 30 June 2013. As a complement to this, the IMF will, on a case-by-case basis, top up any financial aid deriving from the EFSM and EFSF by 50%.

Following the adoption of this rescue shield, the markets initially stabilised. However, when it became clear that Ireland's distressed domestic banking sector carried substantial burdens and risks for the national public finances, the country was obliged, despite its vigorous consolidation efforts, to apply for international aid in November 2010. Subsequent calculations put the nation's financing needs at a total of €85 billion, with up to €35 billion of this amount earmarked for the further recapitalisation and restructuring

Measures to contain the present sovereign debt crisis and prevent future occurrences of such crises in Europe (cont'd)

of its banks. Ireland itself is obliged to raise €17.5 billion through the release of financial reserves while the EFSM and the IMF are each contributing €22.5 billion; the EFSF's share amounts to €17.7 billion. Another €4.8 billion is being provided by the United Kingdom, Sweden and Denmark.

Notwithstanding the measures agreed by the international community, the risk spreads on the government bonds of some euro-area member states widened further. At the beginning of March 2011, these spreads were narrower than those payable prior to interest rate convergence triggered by monetary union; however, they are still significantly wider than they were during the period before the financial crisis, which saw a marked levelling of risk premiums. Market uncertainty may have been inflated at the time by the lack of clarity prior to the European summit in December 2010 regarding the precise structure of a permanent European crisis mechanism. At the December meeting of the European Council, the heads of state or government reached agreement on a limited amendment to the Lisbon Treaty to enable the creation of a European Stability Mechanism (ESM) which is to be permanent in nature and replace the EFSF and the EFSM as of mid-2013. This new intergovernmental mechanism is to be essentially based upon the same rules as the EFSF. The stability mechanism to be established by the euro-area member states may be activated only if this is indispensable to safeguard the stability of the euro area as a whole. Any assistance granted is subject to strict conditionality and linked to a debt sustainability analysis. Such ESM loans will enjoy preferred creditor status, junior only to IMF loans. Rules will be adopted to provide for a case-by-case involvement of private-sector creditors. Where a solvent member state is given support, private-sector creditors are encouraged to maintain their exposure to the debtor. Should the debt sustainability crisis indicate that a country is insolvent, that member state has to negotiate a comprehensive restructuring plan with its private-sector creditors and implement this plan before the ESM may provide liquidity assistance. Ultimately, any return to smoothly functioning financial markets remains predicated on a credible consolidation path and strenuous efforts by each and every member state to safeguard sound public finances. The yield spreads observable at the beginning of 2011 indicate that there is a need to build confidence in this respect. Taken in isolation, a rigorous consolidation course may restrict macroeconomic developments in the short term. Yet under the prevailing circumstances, failure to take suitable steps to lastingly curb government debt would almost certainly lead to a further intensification of the tensions evident on the financial markets, with far harsher consequences for growth and employment. In the longer term, unsound public finances within the euro area are to be avoided through reform of the Stability and Growth Pact and improved macroeconomic coordination (see box on page 34).

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Approaches to reforming the international monetary system

For some time now, the G20 and the IMF have been looking intensively into ways of refining or reforming the international monetary system. There is a consensus that the analysis and monitoring of international capital flows has to be intensified and that the IMF will need to take on a prominent role in this area. Thought is also being given to assigning the IMF a greater advisory function for members confronted with volatile capital flows. The high levels of foreign reserves and their dynamic growth in some countries have, moreover, drawn attention to the issue of adequate levels of reserves.

Future role of the SDR in the world monetary system

Following substantial allocations of special drawing rights (SDRs) to IMF member countries in August-September 2009, the future role of the SDR in the world monetary system has once again come up for discussion; it is a topic which the French G20 presidency wishes to address. At the last regular review of the valuation of the SDR currency basket in November 2010, the IMF decided to increase the weights of the euro and the pound sterling in the basket and to reduce the weight of the US dollar and the yen; the calculation of the SDR exchange and interest rates have been based on these new weights since January 2011. In addition, the IMF is reviewing the general criteria and conditions for selecting currencies for the SDR basket.

Adoption of extensive adjustment of quota shares and doubling of quota volume

In order to strengthen its legitimacy, in 2010 the IMF adopted extensive quota and governance reforms which take account of changes in the weight of its members in the global economy. The new quota structure will shift an extra 6 percentage points to the quotas of the dynamically growing and underrepresented emerging market economies, while at the same time preserving the quota shares of the poorest countries. Voice reform in the World Bank had already been concluded at the 2010 Spring Meeting by shifting the weight by a total of 4.6% (in two steps) towards developing countries and emerging market economies. Germany's quota share in the IMF will fall from 6.1% to 5.6%. This will make Germany the fourth largest shareholder in the IMF – as in the World Bank – behind the USA, Japan and China. In addition, the IMF decided to double its overall quota volume from SDR 238.4 billion to SDR 476.8 billion and to reduce the New Arrangements to Borrow (NAB) accordingly once the quota increase takes effect. The deadline for implementing the quota reform is the Annual Meeting of the IMF and World Bank in autumn 2012. An agreement was also reached to review the quota formula by January 2013 and to bring the completion of the next general quota review forward by two years to January 2014.

Strengthening the representation of dynamic emerging market economies on IMF Executive Board

The comprehensive reform of IMF governance, too, has helped to significantly strengthen the representation of the dynamic emerging market economies on the IMF's Executive Board. Although they were not overrepresented on the Executive Board hitherto, the European advanced economies have declared their willingness to relinguish two of their seats on the 24-person Board to the dynamically growing developing countries and emerging market economies. The World Bank increased its Executive Board in November 2010 to 25 members by adding one seat for the sub-Saharan countries. The IMF's five largest shareholders (including Germany) will also surrender their privilege of directly appointing an Executive Director and will in future, like all other members, elect an Executive Director every two years (thus creating an "All-Elected Board"). However, owing to the size of its quota, Germany will still be represented by its own Executive Director.

Intensified surveillance and mandatory participation of systemically important countries in FSAP

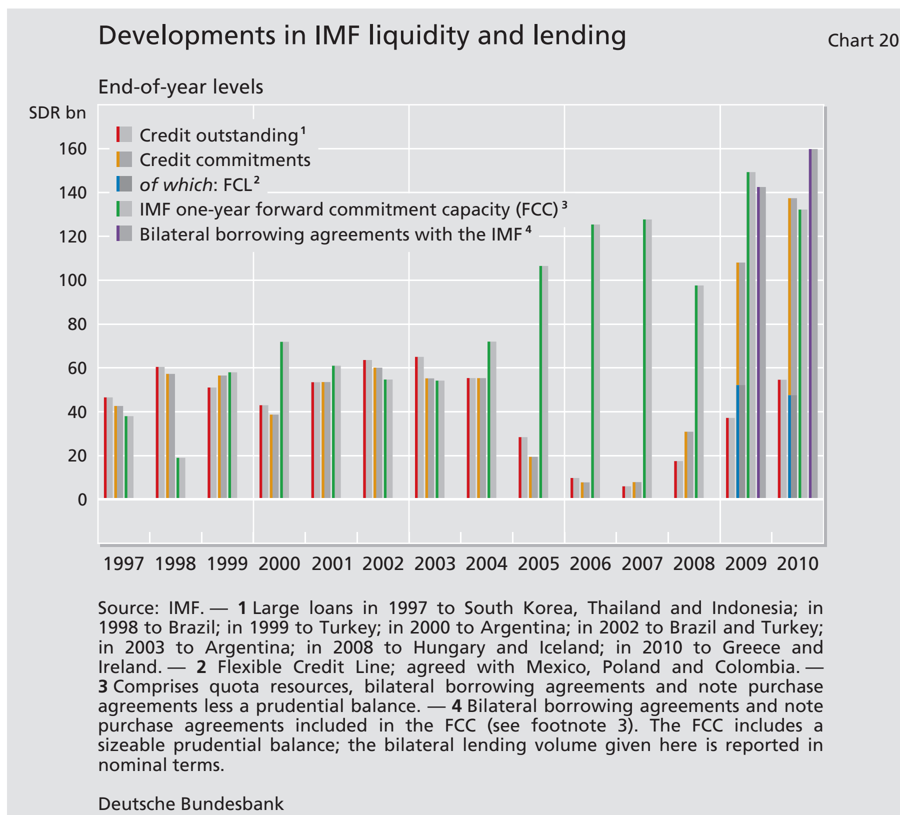
At the IMF Annual Meeting in October and the Seoul G20 summit in November 2010, further efforts to intensify surveillance were made. Under their surveillance mandate, the IMF and World Bank have, for more than a decade now, been conducting Financial Sector Assessment Programs (FSAP) for countries on a voluntary basis. In future, FSAP assessments every five years will be mandatory for the 25 countries deemed to be systemically important by the IMF in order to facilitate timelier and better analysis of international capital links and risks among systemically important countries. The results of the FSAP will also be integrated into the Article IV consultations, the Fund's regular surveillance activity. In 2011, Germany is facing an extensive update of its FSAP, first conducted in 2003. A pilot project is also scheduled under which, beginning in 2011, IMF spillover reports will be prepared for five countries or economic regions (USA, China, euro area, United Kingdom and Japan), focusing the analysis on the cross-border impact of national economic policies and financial sector developments.

Modification and expansion of IMF precautionary lending instruments

In September 2010, the IMF Executive Board approved a modification and expansion of the IMF's precautionary lending instruments. The Flexible Credit Line (FCL) for countries with very sound fundamentals was modified to give eligible countries, upon application, unlimited potential access to IMF resources (previously only up to 1,000% of quota) without an acute balance of payments need. In addition, countries with good fundamentals which face moderate vulnerabilities qualify for a Precautionary Credit Line (PCL), which they can draw on up to 1,000% of quota in the event of balance of payments problems. However, to qualify for a PCL, a country must not be suffering from a sustained

Developments in IMF liquidity and lending

Chart 20



Source: IMF. — **1** Large loans in 1997 to South Korea, Thailand and Indonesia; in 1998 to Brazil; in 1999 to Turkey; in 2000 to Argentina; in 2002 to Brazil and Turkey; in 2003 to Argentina; in 2008 to Hungary and Iceland; in 2010 to Greece and Ireland. — **2** Flexible Credit Line; agreed with Mexico, Poland and Colombia. — **3** Comprises quota resources, bilateral borrowing agreements and note purchase agreements less a prudential balance. — **4** Bilateral borrowing agreements and note purchase agreements included in the FCC (see footnote 3). The FCC includes a sizeable prudential balance; the bilateral lending volume given here is reported in nominal terms.

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inability to access international capital markets and must not need to undertake substantial macroeconomic or structural policy adjustments. A PCL therefore involves only very little *ex post* conditionality. It is questionable whether adjusting the lending instruments has strengthened the IMF's crisis prevention role. The new instruments appear more likely to lead to increasing financial risks to the Fund. It is therefore necessary first to gather experience of the new instruments before then undertaking further modifications to the lending tool kit. All reforms should aim at maintaining the right balance between necessary internal adjustments and supportive temporary financing by the IMF to avoid giving the wrong incentives to policymakers and the markets.

IMF credit commitments up further

IMF credit outstanding rose further in 2010 and, at the beginning of 2011, stood at SDR 61 billion (around US$95 billion), as against SDR 37 billion (around US$58 billion) at the end of 2009. The largest new lending programmes in 2010 involved loans to Greece (SDR 26 billion), Ireland (SDR 19 billion) and Ukraine (SDR 10 billion). In addition, Poland, Mexico and Colombia were given FCLs totalling SDR 69 billion. The amount of undrawn balances from credit commitments currently stands at SDR 114 billion (around US$177 billion). The total amount of lending programmes concluded by the IMF

since the beginning of the financial crisis thus equals SDR 180 billion (around US$281 billion). The IMF's 12-month forward commitment capacity (FCC), ie the amount it can disburse as new loans, amounted to SDR 109 billion (around US$170 billion) as this report went to press. Once the enlarged and modified NAB, earmarked as "contingency reserve", enter into force, the potentially available resources will increase. The Bundesbank – Germany's NAB participant – consented to the new arrangements in June 2010 already and agreed to an increase in its financing facilities from SDR 3.5 billion to SDR 25.4 billion.

Increased drawing on Bundesbank bilateral borrowing agreement with IMF

The Bundesbank's bilateral €15 billion, two-year (extendable to a maximum of four years) borrowing agreement with the IMF, in existence since September 2009, was drawn upon increasingly throughout 2010 to finance IMF lending activities. Drawing rose from SDR 315 million at the beginning of the year to around SDR 1.3 billion (around €1.5 billion) at the end of 2010. Once the NAB have entered into force, all bilateral borrowing agreements are due to be incorporated in the NAB.

3 International cooperation

(a) G20

"Framework for strong, sustainable and balanced growth" – first round of mutual assessment process completed

The G20 continued to be the predominant forum for international economic cooperation in 2010. It initiated comprehensive reforms of the IMF and the financial sector. At the summit meeting of G20 leaders in Seoul in November 2010, the first round of the new mutual assessment process (MAP) for evaluating economic development and policies of the G20 nations, agreed at the Pittsburgh G20 summit in September 2009, was completed. The shared objective is to promote strong, sustainable and balanced growth.

Action plan with commitment to fiscal consolidation and more flexible exchange rates

The provisional outcome of this MAP was the adoption in Seoul of an action plan for all three targeted elements. The action plan lists extensive measures in individual policy areas. These include the industrial countries' commitment to fiscal consolidation agreed in Toronto, a transition to more market-driven exchange rate policies in line with economic fundamentals and a rejection of protectionism as well as the looming threat of competitive currency devaluations.

Development of indicators to monitor current account balances

The G20 countries intend to continue and expand the MAP after Seoul. Implementation of the agreements will be monitored; additional measures to help to achieve stronger and sustainable growth will be adopted if necessary. In particular, the joint quest for ways to reduce excessive current account imbalances has been intensified since the Seoul summit. A separate monitoring procedure to examine sustained high current account deficits or surpluses with a view to diagnosing a potential need for economic policy corrections is being envisaged. This analysis is to be based on indicative guidelines which are currently being developed together with the IMF.

Quantitative targets for current account balances not useful

The instruments for detecting and recording imbalances should not be rigidly focused on current account balances, however. Current account deficits or surpluses are not harmful *per se*. For instance, a surplus of domestic savings over investment could well be justified in the light of an ageing population. Moreover, global imbalances have to be monitored in the context of the individual currency area. It is therefore gratifying that the new procedure is to take into consideration the particular type and causes of current account positions as well as regional circumstances, thereby better accommodating the wide variety of structural features of the affected regions and economies. Potential macroeconomic fine-tuning to achieve quantitative targets for current account balances should not be the objective of coordination among G20 countries.

Stronger global financial safety nets

In Seoul, the G20 leaders mandated the finance ministers and central bank governors to continue their work on strengthening global capabilities for coping with systemic crises. One idea being floated is the introduction of a global IMF mechanism that could give potentially unlimited and unconditional liquidity lines to IMF members. The Bundesbank is critical of such an IMF mechanism, especially as it would interfere with the autonomy of the reserve-currency countries' central banks. It would also be incompatible with the stabilisation arrangements in place within the EU, which are based on strict conditionality. Such a mechanism would ultimately foster moral hazard and thus run counter to the primary objective of the G20's agenda for reforming the financial sector, namely to improve the resilience of the financial system and its participants.

(b) Enhancement of the institutional and regulatory framework

The institutional and regulatory reforms set in train by the G20 are intended to reduce the financial sector's vulnerability to systemic crises and to limit the costs of overcoming them. Key reform projects have already been adopted

Considerable progress in implementing G20 financial sector reform agenda

at an international level and now have to be transposed consistently into national law; other projects are currently still being fleshed out in the competent international bodies and institutions. The Financial Stability Board (FSB), the central international coordinating body for financial sector issues, is monitoring the progress of implementation and reporting regularly to G20 finance ministers and central bank governors as well as to G20 leaders.[1] Major regulatory projects will be either completed or continued in 2011 under the French G20 presidency, especially with regard to the macroprudential framework and its role in the oversight of unregulated segments of the financial system. Global consistency in the implementation of all decisions is crucial to ensure a level playing field and to curb regulatory arbitrage.

Enhancing resilience of individual financial institutions

By adopting the Basel III framework, at their last summit in Seoul the G20 countries committed themselves *inter alia* to gradually raise the quantity and quality of their financial institutions' capital and to introduce, for the first time, global liquidity standards. Capital buffers to dampen the procyclicality of the financial system are also planned.[2]

Specific rules for SIFIs to strengthen the overall system

Strengthening the resilience of the overall system is substantially dependent on how systemically important financial institutions (SIFIs) are dealt with. In line with the principle of "guided discretion", which allows the flexibility to take national characteristics into account – a necessary factor for competitive reasons – an additional capital buffer above and beyond the Basel III requirements is intended to increase the loss-absorbency capacity of the affected institutions and to internalise the negative externalities that emanate from these institutions. Specific restructuring and winding-down procedures enabling early intervention by supervisors are being introduced in order to give financial institutions a credible option of exiting the market in an orderly fashion.[3] In addition, the reform package contains measures to improve the intensity and effectiveness of microprudential supervision. Key details of this multi-pronged approach have to be worked out in the coming months, however.

Macroprudential oversight and institutional frameworks

Macroprudential oversight, which has been expanded worldwide following the financial crisis, focuses on identifying systemic risks created through inter-

1 For the latest progress report, see: Progress in the Implementation of the G20 Recommendations for Strengthening Financial Stability, http://www.financialstabilityboard.org/publications/r_110219.pdf.
2 See also Development of the international prudential supervisory standards, p 106.
3 See also European work on strengthening supervisory cooperation and crisis management, pp 110–116.

European Systemic Risk Board

On 17 November 2010, the EU's Economic and Financial Affairs Council (Ecofin) gave its approval for the creation of a European Systemic Risk Board (ESRB) and three new European supervisory authorities (ESAs),[1] thus implementing key recommendations made by the high-level group of experts (the de Larosière Group) mandated by the European Commission in October 2008 to develop proposals for reforming the regulatory and supervisory framework in Europe. The relevant regulations were published in the Official Journal of the European Union on 15 December 2010, and the ESRB and the new ESAs took up their work at the beginning of 2011.

The ESRB is responsible for macroprudential oversight across the European Union.[2] Its core task is the early identification of risks within or to the EU's financial system. The ESRB issues warnings and recommendations to prevent, avert or mitigate systemic risks. Moreover, it monitors the implementation of the remedial action taken to address such risks. The ESRB must fulfil these tasks in close cooperation with the national, European and international institutions involved in safeguarding financial stability.

The ESRB's central decision-making body is the General Board. Its members include representatives of the ECB, the national central banks, the national and European regulatory and supervisory authorities, and the European Commission. The ECB President will be the Chair of the General Board for the first five years. A Steering Committee is responsible for preparing the General Board meetings and monitoring the progress of the Board's ongoing work. The Secretariat of the ESRB provides analytical, administrative and logistical support. It is located at and provided with resources by the ECB. In addition, the Advisory Technical Committee (ATC) and the Advisory Scientific Committee (ASC) provide the ESRB with advice and assistance.

The ESRB is the first body to be established which is charged with monitoring financial stability across the EU. The central banks' expertise in this field is brought to bear through the significant role played by the European System of Central Banks within the ESRB. The President of the Bundesbank is a member of the General Board with voting rights. In order to fulfil its mandate, it will be important in future for the ESRB to develop a suitable framework for risk analysis and proper macroprudential instruments. These should serve as a basis for drawing up targeted and addressee-oriented recommendations and warnings.

1 On 22 September 2010, the European Parliament – following agreement by all member states – had voted through the new supervisory framework proposed by the European Commission.
2 The three ESAs, which are part of the European System of Financial Supervision (ESFS), are responsible for performing tasks in connection with the microprudential supervision of banks (European Banking Authority or EBA), insurance companies and pension funds (European Insurance and Occupational Pensions Authority or EIOPA) as well as securities markets and stock exchanges (European Securities and Markets Authority or ESMA).

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actions within the financial system or between the financial system and the real economy. The European Systemic Risk Board (ESRB), which commenced operations on 1 January 2011, has given macroprudential oversight an institutional framework within the EU and closed a gap in the European financial supervisory structure (see the box on page 98). National and global early warning systems for detecting risks to financial stability with the participation of central banks have either already been established or are in the process of being set up.[1]

II Current issues relating to the German financial system

1 Stability of the German financial system

Greater stability but new risks emanating from international environment

In 2010, two factors strengthened the stability of the German banking system. Firstly, German banks were able to enhance their resilience and, secondly, the risk situation improved somewhat. However, in terms of credit risk, which is still the most important risk category for banks, there are divergent trends in national and international business. While German banks' credit risk in domestic business stabilised owing to positive macroeconomic conditions, international credit risk fanned out up to the end of the reporting period.

Risks from public finances under the spotlight

Over the course of the year, market risk came under the spotlight owing to high sovereign debt levels in several euro-area countries. This also gave rise to heightened uncertainty as credit quality was indirectly impaired as a result of repercussions on other sectors in the countries affected.

Individual credit segments still subject to heightened default risk

The credit quality of enterprises that do business globally and are active on the capital market improved in 2010. However, a considerable proportion of German banks' international corporate lending business is conducted with countries whose corporate sector has been particularly hard hit by the consequences of the recession and in which uncertainty about the future growth path is especially pronounced.

1 Within Germany by the Bundesbank-BaFin Risk Committee; at global level through joint IMF and FSB early warning exercises.

Risks to stability in commercial real estate sector manageable

Likewise, risks continue to exist internationally in relation to the late-cycle and volatile commercial real estate sector. According to a survey conducted by the Bundesbank among 11 German banks, their exposures are, however, amply cushioned against possible impairment. On this front, risks to the stability of the German banking system therefore appear manageable on the whole.

Enterprises prove to be robust

All banking categories experienced a significant rise in non-performing loans in 2010; however, increased risk provisioning over the past few years should largely cover potential write-downs. After sizeable loan losses in 2009, write-downs are likely to have developed rather favourably in 2010. Measured in terms of the preceding steep decline in GDP, there were relatively few business insolvencies during the course of 2010. However, the medium-term risk situation in the corporate sector and, therefore, in German banks' credit portfolios could deteriorate if, in a low-interest rate environment, the market exit of enterprises which are uncompetitive in the long term were to be delayed.

Financial situation of households remains comfortable

The risk inherent in loans to domestic households appears moderate given the stability of their financial situation. There was almost no change in their debt levels. Banks' retail exposures (consumer loans and mortgage loans) continued to evidence a constant decline in the median probability of default in 2010. However, according to the Bank Lending Survey, German banks believe that risks in connection with households' creditworthiness are on the increase.

Risk situation in domestic lending business improved

Domestic loans continued to make up the lion's share (approximately 79%) of the overall credit portfolio. Thanks to the sound position in which enterprises and households found themselves at the onset of the financial and economic crisis, the recent economic recovery and the improved labour market situation, domestic credit risk in 2010 was better than one year previously.

Improvement in German banks' resilience

In terms of resilience, the constitution of the German banking system has improved overall, although vulnerabilities remain. Above all, major German banks with an international focus deleveraged and bolstered their tier 1 capital significantly in the reporting year. The favourable outlook in domestic business points to a further strengthening of resilience even if uncertainty on the financial markets has increased. Business activity and total assets have shown fairly divergent trends, partly because some banks that have accepted government aid had to comply with demands from the European Commission to reorient their business model.

Latent danger of imbalances

Nevertheless, the danger of potential imbalances should be kept in mind. Low short-term interest rates are encouraging banks to take on liquidity risk and increasing dependence on volatile market developments. Although the German banking system has made progress towards achieving a more stable mix of funding sources, recourse to the wholesale market and use of bank debt securities have become more short term. The necessary reversal of this expansion into the short-term maturity segment is long overdue.

Vulnerabilities in the German banking system need reducing

Banks should use the favourable earnings situation to further strengthen their capital base and further reduce known vulnerabilities. Consolidating, devising sustainable business models and probably also reducing capacity are key in this context.[1] Furthermore, banks should limit potential risks arising from asset-liability maturity mismatches.

2 Profitability of German banks

Moderate stabilisation of earnings situation expected

After the financial and economic crisis forced the German banking system to report losses in 2008 and 2009, a moderate stabilisation is emerging for the 2010 financial year. However, it is marked by downside risks and, as in 2008 and 2009, by a high degree of heterogeneity among and, in some cases, also within individual categories of banks.

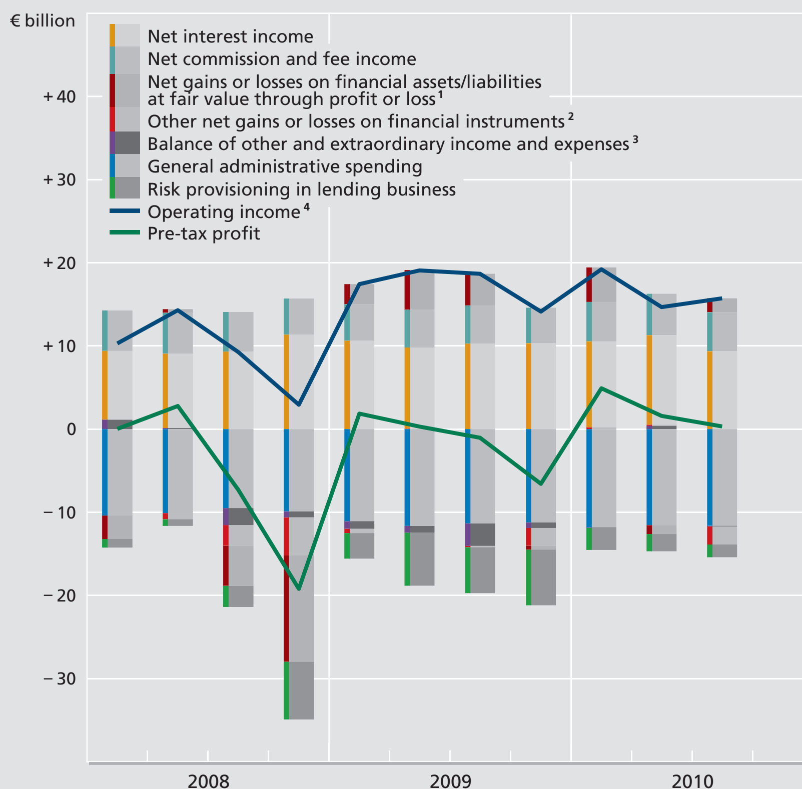
Earnings situation of large banking groups improved – marked slowdown in earnings momentum since mid-year

The sample of major German banks with an international focus[2] reported pre-tax profits in each of the first three quarters of 2010. However, after strong profits in the first quarter, these then deteriorated sharply in the following two quarters. Despite this marked slowdown in earnings momentum, pre-tax profits of approximately €6.8 billion were recorded in the first three quarters as a whole, which was significantly more than the cumulative pre-tax results of the same period of 2008 (–€4.5 billion) and 2009 (€1.1 billion). This positive development can be attributed to high net interest income and favourable commission and fee income. However, both of these components declined considerably in the third quarter of 2010. Furthermore, the slackening of profit momentum over the course of the year was chiefly due to net gains and losses on financial instruments, mainly as a result of tensions in the financial markets as the sovereign debt crisis escalated in several euro-area countries. Considerable cost-side

1 To date, two credit institutions have made use of the option of divesting risk positions and non-strategic business areas from the core bank and hiving them off to a resolution agency.
2 This sample covers big banks as well as selected Landesbanken and mortgage banks.

Earnings components of the profit and loss accounts of German banks*

Chart 21



* Covers 13 major German banks with an international focus (big banks as well as selected Landesbanken and mortgage banks). All figures are based on the published intra-year group accounts in accordance with IFRS and refer to the income and expenses booked in a quarter. — **1** Sum of trading income and net gains or losses on financial assets/liabilities designated at fair value through profit or loss. — **2** Sum of results of the items: financial assets classified as available for sale, held-to-maturity investments, equity method investments as well as hedge accounting. — **3** Sum of balance of other income and expenses, balance of income and expenses in insurance business, amortisation of goodwill and other intangible assets, restructuring expenses, expenses for public sector guarantees as well as new provisions. — **4** Sum of net interest income, net commission and fee income and net gains or losses on financial assets/liabilities at fair value through profit or loss.

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relief came from a – in comparison with the crisis years of 2008 and 2009 – sizeable and steady decline in risk provisioning in large banking groups' lending business, probably owing mainly to positive economic trends in Germany and the continued stabilisation of the global economy. By contrast, there was virtually no change in general administrative spending during the year under review.

Positive earnings trend for savings banks and credit cooperatives

Based on the information available to date, earnings developments at savings banks and credit cooperatives are expected to be positive in 2010 compared with 2009. The greatest drivers of this development were increased net interest income and lower credit risk provisioning. By contrast, net commission and fee

income appears to have stagnated. While the net income or net charges from the valuation of assets made a significantly positive contribution to earnings in 2009, this stimulus is likely to have almost entirely disappeared in 2010.

Pace of consolidation process slowed

The consolidation of the German banking sector continued in 2010 but at a much slower pace. Most bank mergers took place among credit cooperatives, reducing the number of such institutions by 19. The banking statistics recorded a total of 1,919 credit institutions at the end of 2010, which was 20 fewer than in 2009.

Banking supervision

The main focus in the refinement of international prudential supervisory standards in 2010 was again on strengthening the resilience of the financial system in a targeted manner in respect of the weaknesses revealed by the financial and economic crisis. The Basel Committee on Banking Supervision adopted and published the new provisions of the Basel III regulatory framework, which are scheduled to be transposed into national law by the end of 2012. The key features of Basel III are a new definition of regulatory capital, which trains supervisors' sights on common equity tier 1 capital, and international liquidity requirements. At the European level, the new supervisory authorities for banking, insurance and securities markets started work on 1 January 2011. The European Banking Authority will be equipped with more extensive powers than its predecessor, the Committee of European Banking Supervisors. It is to cooperate with national supervisory authorities to render banking supervision more coherent by developing technical regulatory and implementation standards. At the national level, important building blocks with which to further stabilise the financial system were also put in place with the enactment of a restructuring law and the implementation of the amended Banking Directive and the amended Capital Adequacy Directive.

I Development of the international prudential supervisory standards

Basel III

In December 2010, the Basel Committee on Banking Supervision (BCBS) adopted and published the new provisions of the Basel III regulatory framework. The aim is to strengthen the resilience of the financial system by means of far-reaching measures, with the overriding focus being on raising the quality, quantity and transparency of capital. Other new features include reducing the cyclicality of regulatory capital requirements, especially by introducing both a capital conservation and a countercyclical capital buffer, a (maximum) leverage ratio and stricter capital requirements for individual risk assets, such as counterparty credit risk. Ultimately, the objective is also to intensify the supervision of systemically important financial institutions (SIFIs) and to establish a framework for global liquidity standards.

1 Regulatory capital

New definition of regulatory capital is key element of Basel III

The revised definition of regulatory capital is a key component of the Basel III package. The new rules aim to raise the quality of banks' capital and to ensure that it is calculated in a uniform manner that is transparent for all market participants. This is to be achieved through more stringent criteria for recognising regulatory capital components, stricter and harmonised rules for deductions applied in the calculation of the capital base and extended disclosure requirements for banks.

Supervisors to focus on common equity tier 1 capital in future

Supervisors will focus on common equity tier 1 capital in future. Under Basel III, this includes only paid-in capital and disclosed reserves for banks structured as a joint stock company, while for institutions structured in other legal forms it comprises capital elements of comparable quality. The narrower definition of capital follows on from the observation made during the financial crisis that not all of the elements of capital previously recognised by banking supervisors were actually available to absorb losses. With the introduction and narrow definition of common equity tier 1 capital, the BCBS is underscoring the importance of regulatory capital's loss absorbency; this is also evident in the planned new higher minimum capital ratios. For instance, banks will have to calculate not only the overall capital ratio laid down in Basel II, but also separate ratios for common equity tier 1 capital and total tier 1 capital in relation to their risk exposures. The minimum

requirement for total regulatory capital in relation to a bank's risk-weighted assets of 8% will have to be backed by at least 4.5 percentage points (previously 2 percentage points) of common equity tier 1 capital from 2015 onwards.

Introduction of capital buffers over and above the minimum requirements

In addition, banks must maintain capital buffers over and above the minimum capital requirements in order to improve loss absorbency and to solve the current problem of supervisors having to take drastic measures, even going so far as to revoke authorisation to operate, if banks fail to meet the regulatory minimum capital requirements. To ensure their proper functioning, these capital buffers must also be made up of common equity tier 1 capital or other capital components whose suitability for the purpose must be beyond doubt.

2 Quantitative liquidity standards

New liquidity standards

Basel III will extend the global regulatory framework to include a quantitative framework for liquidity risk – the first to be introduced at this level. In terms of content, the liquidity standards are based on the BCBS Principles for Sound Liquidity Risk Management and Supervision, published in 2008. Concrete quantitative minimum requirements and monitoring metrics have been derived from the management principles and fully defined; they will serve as a basis for qualitative supervision that is more focused on the individual banks.

Minimum requirements and monitoring metrics

The liquidity buffer concept introduced in the qualitative principles will be implemented in the form of the short-term liquidity coverage ratio. This stipulates that sufficient unencumbered high-quality liquid assets will have to be held in future to allow institutions to weather, unaided, a severe liquidity stress scenario specified by supervisors for a period of 30 days. The original intention was to recognise – along with cash and specific central bank deposits – essentially only marketable debt securities issued by governments and other public sector bodies of the highest credit standing as high-quality liquid assets. However, this idea has been called into question, not least given the government debt crisis in several peripheral euro-area countries and public policy considerations. In order to avoid focusing excessively on public-sector debtors, the final version of the regulatory framework will therefore allow up to 40% of the liquidity buffer to consist of certain private issuers' securities, namely unsecured bonds issued by non-financial corporations and covered bonds, of comparable marketability and stability of value. This short-term liquidity coverage ratio, which focuses on a direct and acute liquidity shock, is complemented by the net stable funding

ratio, which takes a structural approach and requires a balanced maturity structure over a time horizon of up to one year. In annual terms, this helps to combat the risk of cumulative net cash outflows beyond the one-month horizon covered by the short-term liquidity coverage ratio. Both metrics are therefore intended to promote a balance-sheet and business structure that gives institutions sufficient time to take short or medium-term measures in the event of a liquidity shock. In the area of monitoring metrics, Basel III addresses not only general market indicators, but also the institution-specific maturity structure of assets and liabilities, potential risk concentrations (in terms of counterparties, financial instruments and currencies) and the capacity for secured borrowing under stress.

3 Leverage ratio

Leverage ratio as a non-risk-based metric

A leverage ratio is to be introduced, initially as a monitoring metric, as a backstop to the risk-based minimum capital requirements. The leverage ratio measures an institution's capital as a percentage of its total exposure. The latter includes both on-balance-sheet and off-balance-sheet items. The BCBS intends to use the leverage ratio to constrain excessive borrowing in boom phases. Moreover, the leverage ratio is designed to mitigate model risk by taking a non-risk-based view of an institution's total exposure.

4 Trading book

Finalisation of new rules for market risk and initiation of fundamental review

The supervisory rules for market risk were amended again in the second quarter of 2010 once the first results of the quantitative impact study were available, and the implementation deadline was moved to 31 December 2011 in order to ensure simultaneous introduction worldwide. The new market risk framework will, on average, raise the capital requirements for market risk by a factor of three to four. The BCBS believes the trading book rules require further work and has therefore initiated a fundamental review.

5 Comprehensive impact study on Basel III

Comprehensive quantitative impact study on Basel III

In order to analyse the potential impact of the Basel III requirements on the banking industry, the BCBS and the Committee of European Banking Supervisors (CEBS) conducted and published a comprehensive quantitative impact

study (QIS). The main question investigated in the QIS was how a stricter definition of capital in terms of quantity and quality, enhanced risk capture and the introduction of a leverage ratio would affect the global banking industry. Moreover, proposals for new uniform liquidity standards for the international banking system were analysed.

The macroeconomic impact of implementing Basel III was studied in parallel by both the BCBS' Top-Down Calibration Group (TCG) and the Macroeconomic Assessment Group (MAG) as a joint BCBS and Financial Stability Board working group. Whereas the TCG's focus was on comparing macroeconomic equilibria before and after the implementation of Basel III, the MAG analysed the macroeconomic cost of implementing Basel III during the transitional phase between the equilibria.

6 Timetable

Basel III: timetable

In September 2010, the Group of Governors and Heads of Supervision, the oversight body of the BCBS, agreed on appropriate transition and grandfathering arrangements intended to prevent banks from curtailing lending and avert negative consequences for macroeconomic growth during implementation of Basel III. Legal implementation at the national level is scheduled to be complete by end-2012, with the new capital ratios and the capital conservation buffer to be phased in over a six-year period from 1 January 2013 onwards.

During a parallel run period from 2013 to 2017, the BCBS and the European Banking Authority (EBA) will study the impact of a leverage ratio calibrated to 3%. In this period, the influence of different accounting regulations on the leverage ratio and the impact of the leverage ratio on institutions' business models and risk appetite are also to be analysed. From 2015 onwards, banks will have to publish this ratio. The leverage ratio will be migrated to a Pillar 1 treatment in 2018 at the earliest – subject to an in-depth review.

The binding introduction of the short-term liquidity coverage ratio and the stable funding ratio is scheduled as of 2015 and 2018 respectively. Both measures are to be tested before entering into force. Work on the new, more comprehensive supervisory framework for SIFIs will be continued in 2011.

II European work on strengthening supervisory cooperation and crisis management

1 The new European Banking Authority

EBA helping to improve coherence of European regulatory framework and supervisory practice

Under the new European System of Financial Supervisors, the EBA started work on 1 January 2011, replacing CEBS. The EBA has not only taken over existing tasks from CEBS but has also been given more wide-ranging powers to improve the coherence of banking supervision and to strengthen the supervision of cross-border banking groups in cooperation with the national supervisory authorities. To this end, the EBA is, *inter alia*, to assume responsibility for developing binding, directly applicable technical regulatory and implementation standards, to monitor the uniform application of European supervisory legislation and also to assume an important role with regard to the supervisory colleges. Moreover, the EBA has been given a mediation role to settle disagreements between national supervisory authorities in the EU with binding effect.

EBA's coordinating role and powers of intervention in "crisis situations"

Where developments could seriously jeopardise the proper functioning of the financial markets or the stability of the financial system in Europe as a whole or in part, the EBA may contribute to and coordinate the measures taken by the national supervisory authorities. In such a crisis situation, or if EU regulatory law has been breached or in settling disagreements, the EBA may in individual cases – if necessary – issue direct instructions to the competent supervisory authorities or even to individual institutions.

EBA as an independent and member-led body

The EBA is organised as an EU authority similar to the EU agencies. Nonetheless, it is to remain independent, and the member organisations are to play a major role. As was the case with CEBS in the past, the Bundesbank and the Federal Financial Supervisory Authority (BaFin) will be actively involved in the EBA's work.

2 Crisis management

Need to reform the regulation and supervision of financial markets

In its communication of 20 October 2010, the European Commission set out the cornerstones of the legislative proposals it plans for 2011. The new framework described in the communication is broad-ranging and aims to equip the national authorities with effective tools and powers to tackle bank crises at

the earliest possible stage and avoid costs for taxpayers. The planned tool kit includes preparatory and preventative measures such as a requirement for institutions and authorities to prepare for recovery and draw up resolution plans to ensure adequate capability to cope with financial stress or failure (living wills). It also comprises powers to take early action to remedy problems before they become severe, such as powers for supervisors to require the replacement of management, or to require an institution to divest itself of activities or business lines that pose an excessive risk to its financial soundness, as well as resolution tools, such as the power to effect the takeover of a failing bank by a sound institution, or to transfer all or part of its business to a bridge bank.

Financing through national funds

In addition, the European Commission proposes setting up national funds from contributions paid by banks. These are intended to ensure that the financial sector helps to finance future resolution measures. In a bid to avoid moral hazard, the resolution of a bank should thus be established as a realistic alternative to a government bail-out. While the Commission's roadmap envisages a single EU fund to finance the cost of resolution, the national funds are initially to be tightly interlinked. The ideas regarding the EU-wide financing of the cost of resolution appear problematic, however, as fiscal sovereignty remains anchored at national level. The funds and decisions on the use of the fund's resources ought, therefore, to be left at national level.

Cooperation between European supervisors, finance ministries and central banks in crises

Furthermore, cross-border stability groups are to help to strengthen supervisory cooperation in Europe. In May 2010, Ecofin decided to set up such groups for all large EU cross-border financial groups by mid-2011. Within these groups, EU banking supervisors, finance ministries and central banks will work together closely to strengthen cross-border cooperation in the event of a crisis. The cross-border stability groups' day-to-day work will mainly involve drawing up recovery and resolution plans for the financial institutions and developing suitable criteria for *ex post* burden-sharing.

3 Supervisory colleges

Stronger cooperation through improved flow of information

Both in Europe and at the international level, further progress has been made in setting up supervisory colleges as an instrument of cross-border cooperation. The supervisory colleges bring together the banking supervisors from those EU countries in which a credit institution has subsidiaries or significant branches. Overall, some 100 colleges are already active at the European level or are in the

Ongoing banking supervision operations

At the end of 2010, 2,084 domestic credit institutions were registered as being subject to the German Banking Act (*Kreditwesengesetz*), down from 2,106 at the end of 2009.[1] The streamlining of the German banking network therefore continued in 2010, with a total of 22 fewer credit institutions than in the previous year (the number of institutions fell by 48 in 2009). A total of 35 credit institutions closed down, owing predominantly to mergers; 19 of these institutions were credit cooperatives and two were savings banks. These closures were partly offset by 13 new institutions, mainly regional banks and branches of foreign banks from the European Economic Area. There was a further rise in the number of supervised financial services institutions to 1,601 (compared with 1,483 in 2009), primarily because of institutions that engage in factoring and finance leasing, for which authorisation is compulsory. In addition, at the beginning of December 2010, 14 German payment institutions were registered as being subject to the Banking Act. However, the transitional arrangement provided in the Payment Services Oversight Act (*Zahlungsdiensteaufsichtsgesetz*) is applicable only until 30 April 2011. When the transitional period expires, activities that constitute payment services which were taken up before 25 December 2007 without having hitherto violated the authorisation requirement laid down in section 32 of the Banking Act will also require authorisation pursuant to the Payment Services Oversight Act. The same will apply to enterprises that were granted authorisation pursuant to the Banking Act to conduct credit card business and/or to provide money transmission services before 25 December 2007.

In 2010, the Bundesbank's Regional Offices were again responsible for the ongoing monitoring of credit institutions and financial services institutions pursuant to section 7 of the Banking Act. They applied a risk-oriented approach, including regular and extensive dialogue with the institutions. The key element in the assessment of credit institutions and for establishing the annual supervisory schedule is the "risk profile" drawn up by the Bundesbank. A risk profile is created by regularly and systematically pooling information from audit reports, other reports and returns and other sources with the knowledge obtained from direct contact with the institutions and condensing all these data to create a "big picture" of each institution's risk situation.[2] For

Ongoing monitoring of institutions

Number of operations conducted

Item	2008	2009	2010
1 Reports, monthly and other returns			
Individual reports pursuant to sections 13 to 14 of the Banking Act	127,405	95,014	85,140
Single borrowers listed in the summary reports submitted pursuant to sections 13 to 14 of the Banking Act	2,080,237	2,146,240	2,157,927
Reports pursuant to sections 24 and 24a of the Banking Act	20,288	20,997	26,398
Monthly returns and other data pursuant to section 25 of the Banking Act	32,425	30,291	30,598
Reports under Principle I or pursuant to the Solvency Regulation	27,013	[1] 8,684	8,584
Reports under Principle II or pursuant to the Liquidity Regulation	25,847	26,052	25,752
2 Audit reports and reports on activities	5,869	6,328	6,137
3 Meetings with senior management	2,465	2,345	1,957
4 Audits of banking operations	215	223	214

1 Since 2009, only quarterly reports.

1 Credit institutions pursuant to section 1 (1) of the Banking Act (including institutions which are in liquidation or resolution). For the sake of systematic classification, all 44 securities trading banks are also included here, although 42 of these institutions provide only financial services.
2 See the Prudential Supervisory Guideline (Aufsichtsrichtlinie) – Guideline on the Implementation of and Quality Assurance for the Ongoing Monitoring of Credit Institutions and Financial Services Institutions by the Deutsche Bundesbank (Richtlinie zur Durchführung und Qualitätssicherung der laufenden Überwachung der Kredit- und Finanzdienstleistungsinstitute durch die Deutsche Bundesbank) – of 21 February 2008.

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Ongoing banking supervision operations (cont'd)

important cross-border banks, these assessments also feed into the overall risk assessment at the European level. The intensification of supervisory activity necessitated by the financial crisis was reflected in an increase in the number of meetings with the senior management of systemically important banks[1] and the requisite examinations as well as in a further rise in cross-institutional requests for information (from around 20 in 2009 to approximately 35 in 2010). This enabled supervisors to combine macroprudential and microprudential aspects by collecting valuable up-to-date information, from which they gained insights into potential systemic risks. In addition, extensive analyses of resilience were carried out, particularly for systemically important institutions.

As a result of orders issued by BaFin pursuant to section 44 (1) sentence 2 of the Banking Act, the Bundesbank performed 161 on-site inspections on the basis of the Minimum Requirements for Risk Management (*Mindestanforderungen an das Risikomanagement*) in 2010. The on-site inspections were conducted as 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, trading activities and liquidity management, and to the assessment of resilience. Supervisors also increasingly focused on examinations to assess the adequacy of institutions' interest rate risk management procedures.

By the end of 2010, 50 institutions operating in Germany had received approval to use an Internal Ratings-Based Approach (IRBA) to assess the capital requirements for counterparty credit risk. The slight year-on-year decline (54 institutions had approval in 2009) was caused by mergers. Last year, a total of 38 audits of banking operations (compared with 32 in 2009) were carried out by the Bundesbank in relation to the use of IRBA procedures (including one audit on the use of the Internal Model Method (IMM) and one on the use of the Internal Assessment Approach (IAA) for securitisations). As expected, auditing activities increased, as audits scheduled for the preceding years were postponed until 2010 owing to the financial crisis. A further rise in the auditing workload is expected in 2011. The proportion of total assets whose risk weight is calculated using IRBA procedures remained virtually unchanged year on year, amounting to around 55% of the risk-weighted assets of all German credit institutions.

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
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	7,125	+ 2.0	504,111	– 2.2	2,552	1,270	635
2005	7,843	+ 10.8	504,202	– 0.0	2,519	1,430	622
2006	8,067	+ 2.9	507,839	+ 0.7	2,491	1,360	615
2007	8,622	+ 6.9	504,095	– 0.7	2,405	981	619
2008	9,989	+ 15.9	518,331	+ 2.8	2,328	982	634
2009	9,375	– 6.2	517,339	– 0.2	2,322	959	622
2010	9,267	– 1.2	527,375	+ 1.9	2,446	965	606

1 Credit institutions and financial services institutions.

1 Although the total number of meetings with senior management declined, this was due to a fall in the number of routine meetings at "normal" institutions. By contrast, the number of ad hoc meetings with the senior management of systemically important institutions rose significantly from 272 in 2009 to 421 in 2010.

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Ongoing banking supervision operations (cont'd)

In 2010, the Bundesbank conducted two initial and two follow-up examinations for approval of an Advanced Measurement Approach (AMA) for operational risk, as well as a follow-up examination for approval of liquidity risk models pursuant to section 10 of the Liquidity Regulation (*Liquiditätsverordnung*).

In the area of internal market risk models, ten examinations were carried out in 2010. Four of these examinations related to additional default and migration risk. According to international standards, this kind of approach must be approved by the end of 2011 at the latest in order to maintain approval to use models to measure the specific risk in interest positions. An intensification of audit activities relating to approaches for measuring additional default and migration risk and to approaches for taking account of all risks arising from value changes in correlation trading (Comprehensive Risk Measure (CRM)) is expected in 2011. In 2010, the capital charge calculated using internal market risk models amounted to around 45% of the total capital charge for market risk and was thus slightly down on the year.

In the period from 30 September 2009 to 30 September 2010, the number of loans of €1.5 million or more to be reported on a quarterly basis pursuant to section 14 of the Banking Act fell by 1.94% to 527,375 reports. Meanwhile, over the same period, the total volume of reported loans of €1.5 million or more decreased by 1.15% from €9,375 billion to €9,267 billion by the reporting date of 30 September 2010. By this date, 2,446 institutions, 965 financial enterprises and 606 insurance corporations had submitted reports on loans of €1.5 million or more. This included 85,140 individual reports pursuant to sections 13 to 14 of the Banking Act (9,874 fewer than a year earlier), while 2,157,927 single borrowers were listed in summary reports submitted pursuant to sections 13 to 14 of the Banking Act (11,687 more than in 2009). There have also been changes in cross-border information sharing; credit data on domestic and foreign borrowers are now exchanged and

Overall capital ratio and tier 1 capital ratio of institutions submitting reports pursuant to the Solvency Regulation*

December 2010 levels

* Single-entity reports from credit institutions and financial services institutions plus reports submitted by groups of institutions and financial holding groups that are parent-waiver institutions pursuant to section 2a (6) of the Banking Act less individual reports submitted by institutions that are subordinated to a parent-waiver institution (the aforementioned overall definition relates to the "whole banking sector" in aggregate form). — **1** Tier 1 capital ratio = (total tier 1 capital for solvency purposes ÷ capital charges for counterparty risk, market risk and operational risk pursuant to the Solvency Regulation) × 8. — **2** Overall capital ratio = (total own funds ÷ capital charges for counterparty risk, market risk and operational risk pursuant to the Solvency Regulation) × 8. — **3** The minimum overall capital ratio is 8% under the Solvency Regulation. — **4** The minimum tier 1 capital ratio is 4% pursuant to section 10 of the Banking Act. — **5** Excluding regional institutions of credit cooperatives. — **6** Including regional institutions of credit cooperatives.

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Ongoing banking supervision operations (cont'd)

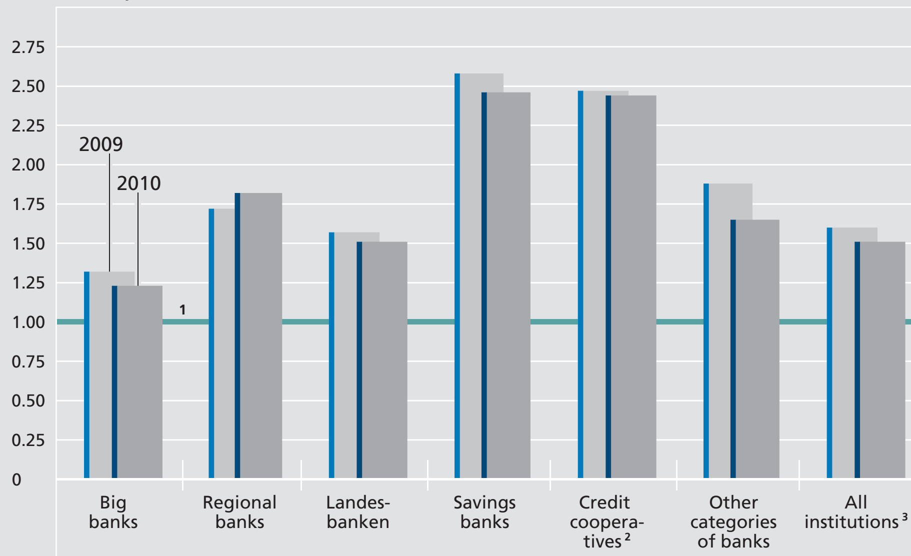
made available to banks at regular intervals. To make these data more up-to-date, they have generally been exchanged on a monthly basis since October 2010, although Germany does not derive any benefit from this as its figures are reported quarterly. Furthermore, the credit registers of the Czech and Romanian central banks are expected to participate in this cross-border exchange of information from 2012 onwards; the governors of these central banks signed the corresponding Memorandum of Understanding in April 2010.

On 31 December 2010, the average overall capital ratio, which gives the ratio of all risk positions that have to be backed by capital to own funds, was 16.07% for all institutions required to submit reports. The average tier 1 capital ratio, which gives the ratio of all risk positions that have to be backed by capital to tier 1 capital, was 11.85%. This includes all institutions reporting on a non-consolidated basis – provided they are not exempt from supervision on a solo basis pursuant to section 2a of the Banking Act – as well as groups of institutions and financial holding groups whose superordinated enterprise is subject to section 2a of the Banking Act. Both the tier 1 capital ratio and the overall capital ratio rose over the course of 2010. The rise in the capital ratios was due, in particular, to a reduction in risk positions for counterparty credit risk that have to be backed by capital. The capital adequacy levels of institutions required to submit reports pursuant to the Solvency Regulation (*Solvabilitätsverordnung*) remained stable on the whole in 2010, although this was still partly the result of government support measures and initial transfer and spin-off measures.

Under the Liquidity Regulation, institutions must demonstrate that they have adequate liquidity for payment purposes at all times by maintaining a liquidity ratio of at least 1. On 31 December 2010, the average liquidity ratio was 1.51.

Liquidity ratio of single-entity 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.

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process of being established; the German supervisory authorities act as the consolidating supervisor in 18 of these.

Provisions and guidelines based on the principle of proportionality at the European level

The provisions of the revised Banking Directive regarding supervisory colleges, which have been applicable since 1 January 2011, have been further fleshed out at the European level through CEBS' guidelines on the organisation and tasks of supervisory colleges. The guiding principle for work in the supervisory colleges is adherence to the principle of proportionality. This means that, when analysing and assessing a banking group's risk, the institution's specific circumstances are taken into consideration both from an organisational and a material perspective.

Good practice principles at the international level

Based on the G20's recommendations, the BCBS passed the Good Practice Principles on Supervisory Colleges in October 2010. These principles complement supervisory cooperation in Europe as regards global banking groups and thereby ensure a common basis for supervisory activities worldwide.

4 Stress tests and stability studies

CEBS' stress testing exercise

In the business year under review, the Bundesbank and BaFin helped to develop and carry out the European stress testing exercise coordinated by CEBS. A total of 91 European banking groups participated, of which 14 were headquartered in Germany. The stress test scenarios investigated included deteriorating credit ratings in lending business and securitisation positions as well as heightened market risks for institutions. Moreover, sovereign risk was taken into account by applying haircuts to government bonds in the trading book. The results of the stress testing exercise were published on 23 July 2010 at a bank-by-bank level and in the aggregate. Of the German participants, all institutions with the exception of the Hypo Real Estate Group achieved a tier 1 capital ratio exceeding the 6% minimum threshold defined for the purposes of this exercise, even for the adverse scenario.

Internal stress tests

Moreover, the Bundesbank, as one of Germany's banking supervisory authorities, regularly conducts its own stress tests using data provided in prudential reports. These include annual capital, portfolio and market risk stress tests as well as quarterly analyses of interest rate risk. Enhancing quantitative procedures to model the effects of stress is, moreover, an element of the research programme in banking supervision.

III Development of the national prudential supervisory standards

1 Restructuring Act

Regulatory lessons from the financial crisis

One of the aims of the Restructuring Act (*Restrukturierungsgesetz*), which came into force at the beginning of 2011, is to establish an effective procedure for restructuring distressed banks. Credit institutions themselves can initiate this procedure with BaFin. BaFin then files an application for a restructuring or reorganisation procedure with the court with jurisdiction for such matters, namely the Higher Regional Court (*Oberlandesgericht*) Frankfurt am Main. The option of initiating a restructuring procedure can be considered when the bank's problems seem surmountable and encroachments on the rights of third parties do not appear necessary. A reorganisation procedure can be initiated when a SIFI is under such severe distress that it may result in insolvency and could jeopardise the stability of the financial system; this can involve substantial encroachments on creditors' rights.

The revised German Banking Act (*Kreditwesengesetz*) stipulates that, if financial market stability is under threat (going-concern and systemic risk), BaFin can order the transfer of the systemically important business components of a bank to another private bank or to a public bridge bank. A Restructuring Fund (*Restrukturierungsfonds*) has been set up for the purpose of absorbing the financial effects of a transfer order; it is managed as a Federal Government special fund by the Financial Market Stabilisation Agency (*Bundesanstalt für Finanzmarktstabilisierung*). All credit institutions must pay contributions (a bank levy) to the fund; the size of the levy varies according to each bank's estimated systemic risk (as measured, in particular, by the institution's size and interconnectedness on the financial markets).

The Restructuring Act also addresses the "event of default" problem, which arises when the use of certain measures or procedures potentially entitles investors to terminate contracts with a given credit institution or triggers automatic reasons for termination. However, it is doubtful whether legislation introduced solely at a national level will suffice to solve this problem for German institutions operating internationally. Instead, what is needed are sustainable solutions and harmonised provisions at an international level.

2 Implementation of the E-Money Directive

Incorporation of e-money institutions into Payment Services Oversight Act

Council Directive 2009/110/EC of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions (Second E-Money Directive) must be transposed into German law by 30 April 2011. In Germany, the provisions of the Second E-Money Directive are to be integrated into the Payment Services Oversight Act (*Zahlungsdiensteaufsichtsgesetz*). This will introduce a new definition of "institutions" within the Payment Services Oversight Act; in future, the term will be used here to designate e-money institutions and payment institutions. The provisions of the Second E-Money Directive are to be transposed not only by establishing a separate category of institution but also through a number of legal provisions supplementing the Payment Services Oversight Act. At the same time, e-money business will no longer be governed by the Banking Act. However, deposit-taking credit institutions that are authorised to conduct business operations in Germany will not need separate authorisation pursuant to the Payment Services Oversight Act in order to conduct e-money business.

3 Transposition of the amended Banking Directive and the amended Capital Adequacy Directive

National transposition of the amended international supervisory standards

On 31 December 2010, the Act Implementing the Amended Banking Directive and the Amended Capital Adequacy Directive (*Gesetz zur Umsetzung der geänderten Bankenrichtlinie und der geänderten Kapitaladäquanzrichtlinie*) and a supplementary regulation amending both the Solvency Regulation (*Solvabilitätsverordnung*) and the Large Exposures Regulation (*Grosskredit- und Millionenkreditverordnung*) came into force. Through this new legislation, a number of EU amending directives (CRD II and, in part, CRD III) were transposed into national law. The majority of the amendments to the Banking Act concern cooperation between the European supervisory authorities, the inclusion of hybrid capital components in tier 1 capital, and the large exposure rules.

Tighter requirements regarding securitisations

Another direct result of the financial crisis is that institutions are now subject to tighter requirements with regard to their securitisation positions. Pursuant to the newly added sections 18a and 18b of the Banking Act, institutions are permitted to invest in securitisation positions only if the originator, the sponsor or the original lender has declared that it will retain at least 10% (5% up to the end of 2012) of the risk exposure. In addition, organisational requirements

oblige institutions investing in securitisations, as well as originators and sponsors of securitisation transactions, to examine the securitised loan portfolio in order to gain an accurate picture of the risks it entails. Furthermore, the same lending standards must be met for positions intended for securitisation as for loans not intended for securitisation. Originators and sponsors now also have a more comprehensive duty to provide investors with information regarding securitisations. Violations of the legal provisions can be punished by increasing the own funds requirements up to the full amount of the securitisation position.

New requirements for remuneration systems

Provisions laid down in CRD III that had to be implemented by the end of 2010 were transposed into national law by means of the Act on the Prudential Requirements for the Remuneration Systems of Institutions and Insurance Companies (*Gesetz über die aufsichtsrechtlichen Anforderungen an die Vergütungssysteme von Instituten und Versicherungsunternehmen*) and the Regulation Governing Remuneration at Institutions (*Instituts-Vergütungsverordnung*). These new legal provisions encompass supervisory guidelines and review mechanisms for institutions' remuneration systems, and aim to prevent the occurrence of misguided incentives in financial sector remuneration that foster the development of crises. Remuneration systems should therefore be geared towards long-term institutional aims, while incentives for taking disproportionately high risks are to be avoided. To prevent less complex institutions from being subject to unreasonable requirements, the Regulation Governing Remuneration at Institutions differentiates between general requirements for remuneration systems which must be fulfilled by all institutions that are subject to the Regulation and special requirements that are applicable solely to key institutions. All institutions must ensure that the ratio between fixed and variable remuneration components is appropriate. If an institution has insufficient own funds or liquidity, BaFin can prohibit or limit the payment of variable remuneration components.

4 Adjustments to the Minimum Requirements for Risk Management

International developments in risk management requirements

In the new amendments to the Minimum Requirements for Risk Management (*Mindestanforderungen an das Risikomanagement* or MaRisk), the banking supervisory authorities have taken account of international developments in risk management requirements and the practical experience gained in off-site supervision and on-site examinations. The financial crisis has also shown that publicly traded institutions, in particular, are sensitive to liquidity shortages. The

requirements for the risk management and control processes for liquidity risk have therefore been divided into two categories: general requirements applicable to all institutions and additional requirements for publicly traded institutions. Furthermore, the minimum requirements for banks' internal stress tests have been specified in more detail and supplemented with a requirement for "inverse stress tests".[1] The aim is to gain a clearer picture of the main risk drivers and of the vulnerability of a given institution to developments that threaten its survival. Finally, clarifying amendments were made to MaRisk regarding the risk inventory and requirements for taking account of diversification effects and risk concentrations in the context of the resilience analysis and the risk management and control processes.

1 "Inverse stress tests" are used to establish which events could threaten the survival of a given institution.

Cash management

There was a further increase in cash recycling by third parties last year, particularly in the area of customer-operated combined deposit and withdrawal systems at credit institutions. The new regulations which are now in force – the ECB Decision on the detection of counterfeits and fitness sorting of banknotes as well as the Payment Services Oversight Act (Zahlungsdiensteaufsichtsgesetz) – are framework conditions which will have an impact on private cash handlers' banknote processing and reissuing activities over the next few years. Irrespective of the new framework conditions, the Bundesbank will continue to fulfil its statutory mandate in the area of cash payments in the future, too, by ensuring efficient cash processing operations and an efficient cash infrastructure. Work will also continue on a new series of euro banknotes in 2011. The judicial review filed in connection with the Bundesbank's tender procedure for the procurement of euro banknotes concluded that there have been no infringements of the European and national contract award regulations that would constitute a violation of the bidders' rights. The tender procedure will therefore be continued in the coming years.

Euro currency in circulation in the Eurosystem

The volume of banknotes in circulation issued by the Eurosystem went up by 4.1% to €839.7 billion in 2010; the increase was therefore less dynamic than in previous years. The volume of coins in circulation rose by 4.4% to €22.3 billion.

Euro currency in circulation in the Eurosystem — Table 8

Trend

€ million

End of	Currency in circulation	Banknotes in circulation	Coins in circulation[1]
2008	783,179	762,775	20,404
2009	827,728	806,412	21,316
2010	861,973	839,702	22,271

Breakdown at year-end 2010

Banknotes in circulation			Coins in circulation		
Banknotes of €	€ million	Percentage of total	Coins of €	€ million	Percentage of total
500	287,926	34.3	2	9,043	40.6
200	36,121	4.3	1	6,345	28.5
100	155,107	18.5	0.5	2,571	11.6
50	277,508	33.0	0.2	1,804	8.1
20	55,036	6.6	0.1	1,157	5.2
10	20,393	2.4	0.05	756	3.4
5	7,611	0.9	0.02	366	1.6
			0.01	229	1.0
Total	839,702	100.0	Total	22,271	100.0

1 Circulation of euro coins excluding commemorative coins.

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In the financial year 2010, the Bundesbank paid out 15.2 billion euro banknotes with a value of €478 billion. During the same period, the Bundesbank received lodgements from its customers of 14.8 billion euro banknotes with a value of €456 billion.

Euro counterfeits

The number of counterfeit euro banknotes detained in German payments and recorded by the Bundesbank increased again on the 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 9

Year	Banknotes		Coins	
	Number (thousand)	€ thousand	Number (thousand)	€ thousand
2008	41	3,477	80	147
2009	53	3,134	79	142
2010	60	3,381	67	121

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The €50 banknote remained by far the most frequently counterfeited denomination in Germany in 2010, accounting for 59% of the total volume of counterfeits. Despite the overall rise in the volume of counterfeits, there was a decline in the number of large-denomination banknote counterfeits (€100 notes and above). By international standards, the incidence of counterfeit banknotes detected is exceptionally low in Germany at around seven counterfeits per 10,000 inhabitants per year.

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 2010. A total of around 1,300 training courses were organised across Germany, attracting over 29,000 participants.

Damaged and mutilated banknotes and coins

In the financial year 2010, the National Analysis Centre for damaged banknotes and coins received around 20,200 applications (2009: 20,800).

Deutsche Mark and euro banknotes and coins submitted to the Bundesbank's National Analysis Centre for reimbursement — Table 10

	Banknotes		Coins	
Year	Number (thousand)	€ million	Number (thousand)	€ million
2008	511	19.3	133	0.05
2009	571	22.0	160	0.05
2010	547	23.2	124	0.04

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Deutsche Mark currency in circulation

The volume of Deutsche Mark currency in circulation had declined to DM13.4 billion by the end of 2010. Banknotes accounted for around DM6.5 billion of this amount and coins for roughly DM6.9 billion.

Deutsche Mark currency in circulation — Table 11

DM million

End of	Currency in circulation	Banknotes in circulation	Coins in circulation
2008	13,835	6,801	7,034
2009	13,608	6,635	6,973
2010	13,435	6,509	6,926

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New legal framework for cash payments

On the basis of the amended Regulation (EC) No 1338/2001 laying down the measures necessary for the protection of the euro against counterfeiting, the Governing Council of the ECB decided in September 2010 to transpose – for

the extended group of addressees stipulated in the regulation – the "Framework for the detection of counterfeits and fitness sorting of euro banknotes by credit institutions and other professional cash handlers" into a uniform, legally binding regulation applying to the whole of the euro area. This makes a significant contribution towards harmonising the competitive conditions, especially for credit institutions, retailers and cash-in-transit (CIT) companies which check banknotes for authenticity and fitness before paying them out to their customers again. Pursuant to the Payment Services Oversight Act, CIT companies which offer their customers banknote processing services on their own behalf and which use their own accounts for settling the countervalues require authorisation from the German Federal Financial Supervisory Authority (BaFin). At the end of 2010, no CIT companies had been granted authorisation to do this. However, cooperations which aim to optimise cash processes are emerging between credit institutions, CIT companies and, occasionally, retailers – partly as a result of the fact that the transition period laid down in the Payment Services Oversight Act is due to expire on 30 April 2011.

EU regulation concerning the authentication of euro coins and the handling of euro coins unfit for circulation

Following the adoption of the regulation of the European Parliament and of the Council of December 2010 concerning the authentication of euro coins and the handling of euro coins unfit for circulation, uniform and legally binding procedures for checking the authenticity of euro coins in circulation and for the use of mechanisms to control these procedures will be introduced by the national authorities from 2012 onwards. In order to allow a gradual adjustment of the current national procedures, transition periods – for the coin processing machines which are currently in use, for instance – are envisaged up to the end of 2014.

With the entry into force of the regulation, common rules are now also in place for the reimbursement of euro coins which are unfit for circulation. In Germany, however, this has not resulted in any changes to the Bundesbank's current reimbursement procedure, either for the cash handlers who regularly work together with the Bundesbank in coin processing or for members of the general public occasionally wishing to exchange unfit coins at the Bundesbank's branches.

Private banknote recycling

Owing to the increased level of banknote processing by credit institutions, 2010 was the second year in succession with no year-on-year rise in the number of banknotes processed by the Bundesbank. Banknote recycling by credit institutions is performed primarily using some 6,700 customer-operated combined deposit and withdrawal systems. The number of staff-operated systems is significantly lower (around 880).

Standard container for coins

At the end of 2010, the Bundesbank withdrew its coin portioning service which allowed customers to deposit and withdraw coins in non-standard amounts. Since the beginning of 2011, standard containers have been the only accepted packaging unit for lodgements and withdrawals of coins at the Bundesbank. This is designed to provide the market participants with incentives to offset their own cash supply and demand needs without the involvement of the Bundesbank. In order to avoid coin supply shortages, the Bundesbank will, for a transitional period, also continue to accept lodgements and withdrawals of coins which do not conform to a standard container. However, significantly higher fees will be charged for this service.

Second series of euro banknotes

The second series of euro banknotes will replace the current banknote series in a few years' time. Unlike the first series, it is envisaged that the individual banknote denominations will be introduced in a stage-by-stage approach. In order to maintain continuity, the key design elements of the euro banknotes currently in circulation, such as the colour scheme and the main motifs, will largely be adopted for the second series as well. In addition, a number of new and improved security features should enable the general public to identify counterfeit banknotes more easily than before. Incorporating these security features into the new banknote design proved to be more technically challenging than originally anticipated. The additional development work and test prints that were required have therefore led to delays in preparing the second series of euro banknotes. Details of the time schedule and the time sequence in which the individual denominations are to be introduced will be made available to the general public well in advance of the new banknotes being introduced.

Tender procedure for the procurement of euro banknotes for 2011

A petition for judicial review was filed by one of the bidders in connection with the Bundesbank's tender procedure for the procurement of euro banknotes for the year 2011. The courts concluded that there have been no infringements of the European and national contract award regulations which would constitute a violation of the rights of the bidders. The contracts were awarded to the successful bidders at the beginning of November 2010.

Bundesbank publishes study on "Withdrawal behaviour in Germany"

Also in 2010, the Bundesbank continued to strengthen its research and analyses in the field of cash payments in the form of an empirical study entitled "Where does the cash in your wallet come from?". This was followed in January 2011 by publications on the banknote cycle, banknote recycling and the volume of German-issued euro banknotes in circulation abroad.

Cashless payments and securities settlement

The Bundesbank strives to fulfil its statutory mandate and strategic objectives in cashless payments and securities settlement by making payment and settlement systems as secure and efficient as possible as well as by encouraging innovations. The Bundesbank works towards achieving these goals by providing its own efficient and competitively neutral settlement systems and by helping to shape payment policy at the national, European and international level. Moreover, it oversees payments and – in collaboration with other competent authorities – securities settlement systems. In so doing, the Bundesbank makes a significant contribution to the stability of the German financial system.

In 2010, the Bundesbank's activities were focused on projects related to TARGET2-Securities, the ongoing development of the Single Euro Payments Area (SEPA), and its contribution to the designing of the single processing platform for the management of Eurosystem collateral used in Eurosystem credit operations (Collateral Central Bank Management – CCBM2). Above and beyond this, the Bundesbank was actively engaged in the field of payments research and analysis.

Single market for cashless payments

The aim of SEPA (Single Euro Payments Area) is to create a single European market for cashless payments. To this end, the European banking industry developed new SEPA payment instruments, for which there has thus far been a limited take-up. In December 2010, use of the SEPA credit transfer, which was launched on the market on 28 January 2008, had increased to 13.9% of the total volume of credit transfers processed through euro-area clearing houses. However, use of the SEPA direct debit procedure, which currently stands below 1%, is still insignificant. With respect to SEPA for cards, the migration of cards, terminals and ATMs to the EMV (chip) standard in Germany continued apace. However, it is fair to assume that the changeover will not take place at the end of 2010, as planned, but only during the course of 2011 instead.

Setting end-dates for SEPA migration

The European Commission published a draft regulation in December 2010 with the aim of setting end-dates for the SEPA migration. In line with this, national credit transfer procedures are scheduled to cease operation one year after the end-date regulation enters into force, while the national direct debit procedures are to be discontinued two years afterwards. Against this backdrop, end-users and the banking industry in Germany should work jointly on solutions to make the changeover to SEPA as consumer-friendly and cost-effective as possible. The Bundesbank, in close consultation with the German federal government, is lending its support to this dialogue. Furthermore, especially in Germany, there is a need for more extensive communication concerning the advantages and effects of SEPA.

Promotion of SEPA through own range of services

With the Retail Payment System (RPS) SEPA-Clearer, the Bundesbank is promoting the active use of SEPA procedures by offering its own range of services to credit institutions and public administrations. Following a muted start, the number of processed SEPA credit transfers, which were introduced in January 2008, has been rising, largely on account of the migration of public administrations to SEPA. By contrast, the number of SEPA credit transfers processed through the SEPA-Clearer remains extremely low. At the end of 2010, around 107,000 SEPA transactions were being processed by the Bundesbank every working day. Bilateral cooperation with other clearing houses in the exchange of SEPA credit transfers was extended further in 2010.

As part of the drive to improve efficiency in payments and account management, the initiated strategy of replacing legacy payment procedures continued to be pursued vigorously. In the area of communications, in particular, the Bundesbank is committed to the use of modern standard procedures.

Cashless payment systems

In 2010, the TARGET2 individual payment system, which is jointly operated by the Deutsche Bundesbank, Banca d'Italia and Banque de France, handled a stable volume of payment transactions compared with the previous year. In spite of a business environment marked by the financial crisis and further mergers among participating institutions, TARGET2 posted an average settlement volume of around 343,400 payments per day, with a value of €2,299 billion. While the volume of payments remained stable, the average value of individual transactions went up by 6.8%. This year-on-year increase in terms of value was probably attributable, in particular, to banks' improved liquidity as a result of the monetary policy measures taken by the Eurosystem. A total of 857 direct participants use the TARGET2 Single Shared Platform (SSP) to settle their urgent payments and some 57,000 financial institutions can be accessed via the system worldwide.

Exactly 159 credit institutions in Germany and the European Economic Area (EEA) are directly connected to TARGET2 via the German component, TARGET2-Bundesbank (TARGET2-BBk), while payments can be addressed to around 17,500 additional institutions indirectly. As in previous years, TARGET2-BBk represents the largest national component of the TARGET2 SSP. However, the performance of TARGET2-BBk is only partially similar to that of the system as a whole. Its share of the total volume of payments handled remains unchanged at around 50%. Nevertheless, its share of turnover in 2010 went up significantly, by around one-quarter, to approximately 36%.

With respect to interbank clearing, the Bundesbank also offers its Retail Payment System (RPS) for the clearing and settlement of retail payments – where volumes continue to rise – in the national DTA format as a complement to other providers' services. At present, 220 credit institutions make active use of this service. The RPS SEPA-Clearer, which is used for the processing of payments in the SEPA format, currently has 159 participants. Overall, payment transactions executed via Bundesbank systems have developed as shown below.

Cashless payments of the Deutsche Bundesbank

Item	2009		2010			
	Volume (million)	Value (€ billion)	Volume (million)	Percentage change	Value (€ billion)	Percentage change
Individual payments	45.3	173,685	45.2	– 0.2	216,959	24.9
TARGET2-BBk	44.7	171,299	44.7	0.0	213,841	24.8
National	34.3	114,905	33.9	– 1.3	158,029	37.5
Cross-border	10.4	56,394	10.8	4.1	55,811	– 1.0
Other[1]	0.6	2,385	0.5	– 11.0	3,118	30.7
Retail payments	2,589.1	2,297	2,666.6	3.0	2,302	0.2
RPS	2,585.5	2,295	2,662.9	3.0	2,300	0.2
National	2,575.0	2,261	2,637.8	2.4	2,239	– 0.9
Cross-border	3.6	5	2.7	– 24.4	4	– 30.6
SEPA credit transfers[2]	7.0	29	22.4	218.7	56	94.3
SEPA direct debits[2]	0.0	0	0.1	.	0	.
Other[3]	3.5	2	3.7	3.3	2	– 10.2
Total	2,634.4	175,982	2,711.8	2.9	219,261	24.6

1 In particular CAM: Customer Access Mechanism (access to TARGET-BBk, correspondent banking). — **2** National and cross-border payments. — **3** Exclusively MASSE: Procedure for cross-border retail payments effected by public authorities.

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T2S on the advance

The Eurosystem's TARGET2-Securities project made substantial progress in 2010. For instance, the relevant user requirements, which can now be used as a stable basis for subsequent project phases, have been finalised. Building on this, work on the detailed specifications, in particular, was driven forward and initial development work was commenced. Nonetheless, this phase took more time than originally planned. The high degree of complexity of the user requirements and the in-depth involvement of the market led to the project plan being revised, as a result of which the starting date was postponed to September 2014.

Contracts to be signed in 2011

The contractual negotiations between the Eurosystem and the participating central securities depositories as well as between the Eurosystem and the non-euro-area central banks, which are making their currency available for TARGET2-Securities, continued in a constructive manner during 2010, and produced a broad consensus on key issues. The contracts are expected to be signed in the autumn of 2011.

T2S pricing scheme finalised

The decision taken by the Governing Council of the ECB in November 2010 concerning the price structure and list for TARGET2-Securities met with a positive response from market participants. Accordingly, a DvP settlement instruction will, under certain conditions, be priced at €0.15, irrespective of whether the instruction is carried out nationally or on a cross-border basis. This fulfils the expectation that TARGET2-Securities should lead to significantly more efficient securities settlement in Europe, with lower prices, especially for cross-border transactions.

CCBM2

At its meeting on 7 September 2010, the ECB Governing Council took a decision on the continuation of the "Collateral Central Bank Management (CCBM2)" project to manage all collateral required for the Eurosystem's credit operations on a single platform. At the same time, the Eurosystem central banks confirmed their extensive participation in the project. The aim of CCBM2 is to ensure the future provision of efficient, largely harmonised communication channels and procedures for the delivery and management of marketable and non-marketable assets for both domestic and cross-border use. The plethora of national solutions currently in place will be replaced. The close interaction of the future three shared Eurosystem platforms (TARGET2 for the settlement of payments, TARGET2-Securities for the settlement of securities using central bank money, and CCBM2 for the management of Eurosystem collateral) will deliver perceptible efficiency gains, not just in monetary policy operations but

also in the liquidity and collateral management of credit institutions in the Eurosystem.

Insights from the recent financial crisis and additional analyses by the CPSS and IOSCO

The Core Principles for Systemically Important Payment Systems as well as the Recommendations for securities settlement systems and central counterparties are currently being revised by a joint working group of the CPSS (Committee on Payment and Settlement Systems) and IOSCO (International Organization of Securities Commissions). This work, in which the Bundesbank is also involved, is geared to strengthening the stability of financial market infrastructures, taking into account the recommendations issued by the CPSS and IOSCO in 2010 concerning over-the-counter (OTC) derivatives for central counterparties and trade repositories as well as the findings of the CPSS report on repo market infrastructures which was published in the same year.

Assessments according to ESCB/CESR recommendations for securities settlement systems and central counterparties

In the reporting year, the Bundesbank, in cooperation with the Federal Financial Supervisory Authority (BaFin), conducted an assessment of Eurex Clearing AG and Clearstream Banking AG based on the joint recommendations of the Committee of European Securities Regulators (CESR) and the ESCB.

Participation in oversight of payment systems, ...

In addition, the Bundesbank was involved in several Eurosystem activities relating to payment systems oversight. For instance, systemically important payment systems were assessed for compliance with the “Business Continuity Oversight Expectations for Systemically Important Payment Systems” and the findings were published.

... CLS and SWIFT

Under the cooperative oversight arrangement (led by the Federal Reserve) for 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 consultations on the impact of new business activities. The cooperative oversight of SWIFT was focused on aspects of SWIFT’s strategic stance in the ongoing design of the technical infrastructure, matters relating to risk provisioning, and SWIFT activities to enhance its own cost efficiency.

Payment instruments oversight

In October 2010, the Eurosystem published oversight frameworks for credit transfers and direct debits. The Eurosystem intends to apply the standards specified in the frameworks to the oversight of SEPA credit transfers and SEPA direct debits. Furthermore, national central banks may apply the standards of

the Eurosystem to the oversight of existing national instruments. The assessment procedures for card systems were retained.

TARGET2 simulator launched

Preparatory work on a simulation-based analysis of TARGET2 came to an end with the operational launch of the TARGET2 simulator in July 2010. Simulation using real data is designed to complement the existing set of payment oversight instruments (eg for stress scenarios and network analyses) and also to serve as an aid in assessing the impact of TARGET2 updates.

Statistics

In the wake of the global financial and economic crisis, it has become apparent that there is much greater need for additional and in some cases qualitatively innovative information in the field of macroprudential and financial market-related statistics and indicators. The newly created EU financial supervisory architecture has, moreover, permanently expanded the range of statistical tasks substantially.

To meet the urgency and the large number of data requests – due to the onset of the sovereign debt crisis in parts of the EU – as promptly as possible, more special analyses have been undertaken and available partial data from various sources have been rebundled and published. Granular databases based on microdata, particularly in the field of securities, have also proven to be a very flexible instrument.

With regard to closing the data gaps that were identified, in 2010, pivotal levers were set and vital work done to strengthen the cooperation between the national central banks and statistical offices on the one hand and the relevant international organisations on the other. As far as German statistics are concerned, an initial assessment of the broad range of monetary and financial indicators shows a high degree of overlap with the international catalogue of recommendations.

Wide spectrum of themes

The statistics and sets of indicators compiled by the Bundesbank in the framework of its legal mandate cover a broad spectrum of themes and focus on the areas of banks and other financial institutions, financial markets and foreign trade. Moreover, the Bundesbank collaborates in the operation of joint ESCB/EU reference databases for securities and enterprises. A large number of seasonal and calendar adjustments are also undertaken for the analysis of cyclical and price developments.

This informational infrastructure is a key part of the empirical basis for the monetary policy opinion forming, decision-making and communication process, as well as of associated macroeconomic and macroprudential analyses. Furthermore, the Bundesbank provides its data to economic policymakers in a broader sense, to international organisations as well as to the general public and economic research facilities.

New tasks and user groups

Additional statistical tasks have been created in response to the financial crisis and the newly created EU supervisory agencies. The ESCB's legal mandate now also covers data collection and the compilation of statistics for financial stability purposes and for the European Systemic Risk Board (ESRB). Besides the banking sector, which is the focus of attention, the questions and problems also concern other financial institutions and the securities markets. Moreover, it is necessary for micro and macroeconomic purposes to supplement the classical single-entity perspective with the group perspective and the balance sheet focus with further indicators for profitability, capitalisation, liquidity and risk situation (eg asset quality, exposures). Against this background there are a range of statistical expansion and harmonisation activities in the European and global context. In order to best handle the great many additional urgent data requests now, more special analyses have been undertaken (for more on the profitability of selected banking groups, for example, see page 101) and available information from various sources has been rebundled. The latter mainly concerns consolidated bank data, which includes an insight into the banks' capitalisation and the scale of their non-performing loans.

Expanded data provision service

To more precisely identify the international networking of financial relations and the risk position associated with it, the provision of data concerning German credit institutions' foreign assets and the international investment position has been extended. Moreover bank loans to domestic non-banks and securities issues (corporate bonds, shares) have been broken down by sector in such a way that a separate monthly statement of the external financing activities

of non-financial corporations is now possible for better statistical coverage of financing processes in the real economy. This year the first results of the new statistics on financial vehicle corporations (FVCs) and insurers as well as the extended monthly balance sheet statistics and interest rate statistics from monetary financial institutions will also be published.

Flexible collection and processing procedures

For special macroprudential requirements it is appropriate to set up granular databases with flexible processing options, particularly in terms of the creditor-debtor relationships. The Bundesbank follows this approach with surveys based on individual securities. This procedure will also relieve the burden of reporting on the economy, as the many statistically relevant securities and issuer attributes no longer need to be reported but instead can be obtained from the joint ESCB Centralised Securities Database. One example is the Bundesbank's securities deposits statistics, in which 6 million datasets for around 400,000 different securities (debt securities, shares, mutual fund shares), broken down by sector and securities owner's country, are currently made available for individual securities. The ESCB is planning to expand such survey procedures on a harmonised basis and to develop a joint infrastructure for analysis and data production in the field of statistics on securities holders.

Economic development as reflected in seasonal adjustment

The seasonal adjustment of cyclically relevant indicators, which is partly conducted in cooperation with Destatis and currently comprises more than 10,000 time series, also faced particular challenges in 2010. The most difficult challenge concerned how to appropriately model economic development, which had suddenly sprung back into life following the abrupt, sharp downturn in the fourth quarter of 2008 and the first quarter of 2009. Only through such modelling could it be assured that the estimate of annually recurring seasonal and calendar influences was not distorted by unusual effects and the new aspects in the seasonally adjusted data remained fully visible.

Restriction on the burden of reporting required

In its role as producer of monetary and financial primary statistics, the Bundesbank is increasingly endeavouring to limit as far as possible the associated costs for reporting agents. Particularly when demand is rapidly rising for extended and in some cases new statistics, it must be the overarching principle to balance the effort required to undertake statistical surveys very carefully against the gains in information and insight for the various user groups in the framework of a systematic and transparent cost-benefit analysis. In those areas where cost-cutting is methodically acceptable in an established system (eg by using exemption limits, conducting a sample instead of a complete survey,

Contribution of German statistics to G20 catalogue of recommendations

In the wake of the global financial and economic crisis, it has become apparent that there is much greater need for additional and/or qualitatively innovative information in the field of macroprudential and financial market-related statistics and indicators. In this regard, two main approaches need to be pursued. One has to aim at achieving an empirical basis for a deeper analytical understanding of systemic crises; this primarily involves questions of process dynamics and the various transmission channels and reinforcement mechanisms both within the financial system as well as between it and the real economy. The other approach must address the challenge of using statistics to provide economic policymakers with a robust canon of consistent, internationally harmonised and timely accessible indicators that will be needed for ongoing monitoring within the scope of macroprudential oversight, which has now been institutionally strengthened in the EU, and for establishing highly efficient early-warning systems (see also page 98).

In view of the complexity, broad range of themes and the global dimension of the project tasks, two fundamental criteria are of key importance. Firstly, a procedure is required whose content and time-scale have been coordinated by the statistics producers and the users from academia, economics and politics. Secondly, there needs to be greater cooperation between the many national public data providers and the relevant international organisations, and this cooperation needs to be established on a new level of quality under the coordinating leadership of these organisations.

Important preliminary work was undertaken in this area in 2010, and new initiatives were promoted. This applies mainly to the catalogue of recommendations[1] adopted by the G20 Finance Ministers and Central Bank Governors, which, following implementation into relevant action plans and timetables, has now resulted in feasibility studies and work programmes at the national level. The indicators and datasets in question can be broken down into four large categories by theme: risk positions in the financial sector (eg debt leverage, maturity mismatches, shadow banks), international network relations (especially systemically important global financial institutions), vulnerability of domestic sectors to shocks (balance sheet structures, financial dependencies, property markets) as well as communication strategies (primarily between the official statistics producers).

As far as German statistics are concerned, an initial assessment of the monetary and financial indicators on which the focus lies shows a very high degree of coverage with the G20 to-do list. This particularly applies to the large indicator area, such as the group of the 40 Financial Soundness Indicators and the 40 Principal Global Indicators, for which statistical collection procedures and accounting systems already exist. From a German point of view, the data gaps are concentrated on property price statistics, particularly on representative commercial property prices. There is also considerable room for improvement with regard to the balance sheet and transaction information by insurance companies. Work on greater and/or more prompt integration of financial and non-financial sector accounts also needs to be brought forward. Last but not least, the rise in user requests needs to be accommodated by a quarterly profit and loss account from the banks and differentiated details about the loan portfolio.

Despite all of this, it also has to be considered that the G20 statistics initiative is not based on any analytically consistent concept in the strict sense of the term. It is more to be seen as an iterative process that requires constant dialogue between producers and users as well as national central banks, statistical offices, the ECB and international organisations (including the newly formed EU institutions for micro and macroprudential supervision).

1 For greater detail, see Deutsche Bundesbank, Financial Stability Review 2009, p 81–82.

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reviewing the reporting catalogue), this leeway is to be exploited. The Bundesbank pursues the objectives so as to promote timeliness and quality and to relieve the burden on the economy. The Bundesbank took an important step in this direction by launching the new electronic reporting portal in 2010 for the open reporting sectors. When forming new statistics, strict attention needs to be paid to ensure that existing partial information from various statistics and institutions can be coordinated as much as possible both methodically and by content and interlinked with one another.

Increased need for cooperation in the international context

It is no less important that the statistics producers and the various user groups adopt a procedure that is highly consistent in respect of content and time. This has become especially clear given the need – identified above all in the areas to be expanded (namely macroprudential analysis and supervision, international coordination) – for, in some cases, qualitatively innovative information which cannot be adequately covered by selective or temporary efforts in providing statistical data. This also applies when one takes into account that – measured by the catalogue of indicators recommended by the G20 Finance Ministers and G20 Central Bank Governors – the statistical starting point in Germany is comparatively favourable (see also the box on page 136).

Other activities

I Management of foreign reserves and euro-denominated financial assets

Management of foreign reserves …

The management of the Bundesbank's foreign reserves includes the investment of foreign currency reserves and the management of the IMF reserve position as well as the management of gold reserves. Along with its own foreign reserve assets, the Bundesbank also manages a part of the ECB's foreign reserves.

… 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 the respective currency (US dollar and yen). These benchmark portfolios 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 set 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

In addition to US and Japanese government bonds, a very limited volume of fixed-income securities of other issuers of top credit quality are eligible as investment instruments. Furthermore, investments can be made in money market instruments, in particular in the form of repo transactions.

Euro-denominated financial assets …

In addition, the Bundesbank manages portfolios in euro-denominated financial assets. One portfolio is the balance sheet counterpart to the pension reserves for Bundesbank civil servants, the capital base, the statutory reserves and provisions for general risks. A further portfolio is assigned to non-specific balance sheet items. Both portfolios are invested in covered bonds using a hold-to-maturity strategy.

… made available for securities lending

Since April 2010, the Bundesbank has used the lending facility of the central securities depository Clearstream to make instruments from these euro-denominated portfolios, as well as bonds purchased under the Covered Bond Purchase Programme (CBPP), available for automated securities lending. The objective is to improve the liquidity of the covered bond market and to reduce settlement failures.

Management of financial risks at the Bundesbank

The Bundesbank is exposed to various financial risks through its business activities. Along with the counterparty credit risks, market risks, interest rate risks and liquidity risks associated with individual assets in the balance sheet, reputational risks resulting from financial losses should also be taken into consideration.

While the responsibility for risk management generally rests with the Executive Board, the monitoring, measurement, analysis and communication of business risks is conducted by the Bundesbank's Office for Risk Control; this function is organisationally segregated from the risk taking units of the front office up to and including board level. This reflects the "segregation of duties" principle in the Minimum Requirements for Risk Management (*Mindestanforderungen an das Risikomanagement* or MaRisk), which form part of the German prudential supervisory framework of rules. Although the MaRisk are not legally binding for the Bundesbank, it applies them anyway. External auditors verify compliance with the MaRisk during their audit of the annual accounts.

The market risks of the foreign reserves (gold price risk, exchange rate risk) are largely determined by the size of the foreign currency portfolio and the gold holdings. With regard to the gold price risk, a balance sheet loss owing to the prevailing revaluation position is very unlikely at the current time. The interest rate risk for the foreign currency portfolios, which are largely denominated in US dollars with a relatively small amount in yen, is limited through a conservative duration management. The Bundesbank's high standards for the security of its investments are met by concentrating on US and Japanese government bonds. At the same time, this takes into consideration aspects of liquidity risk. Fixed-income securities of certain other top-tier issuers, all rated AAA, are permitted to a limited extent. Short-term money market transactions with selected commercial banks are an additional option.

In addition, the Bundesbank holds euro-denominated fixed-income securities in various portfolios. They are invested exclusively in covered bonds, largely German Pfandbriefe, which enjoy particularly high creditor protection.

The risk-mitigating provisions for the above-mentioned portfolios, as well as other business areas (in particular foreign exchange trading and central bank services) are set forth in internal rulebooks, which are approved by the Executive Board at least once a year. The creditworthiness of the counterparties and securities issuers is monitored continuously. Business activities with the individual counterparties in the different instruments are governed by a differentiated limit system.

The risk of claims arising from monetary policy operations as well as that of the monetary policy securities portfolios, which were established under the Covered Bond Purchase Programme (CBPP) and the Securities Market Programme (SMP), is managed according to Eurosystem guidance.

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II Fiscal agent activities

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 through the Bund Issues Auction Group. The auction procedure is carried out using the electronic primary market platform Bund Bidding System provided by the Bundesbank. In 2010, 73 auctions were carried out (as against 60 in 2009), including eight auctions of inflation-linked instruments. The allotment volume was €273.1 billion (2009: €262.5 billion). In the reporting year, the Bundesbank continued to be involved, through credit institutions, in selling tap issues of Federal savings notes and Federal Treasury financing paper.

Asset management …

In its role as fiscal agent, the Bundesbank also performs asset management services on behalf of the Federal and state governments. It manages these assets under a passive strategy.

… 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 (BaFin) …

The funded pension scheme for civil servants employed at the Federal Financial Supervisory Authority (BaFin) is also regulated outside the scope of the abovementioned Act on a Federal Government Pension Reserve. Nevertheless, the portfolio managed by the Bundesbank for this scheme 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 asset management services for several state government pension reserves and funds.

III Implementation of financial sanctions

The Bundesbank's responsibility

Under foreign trade and payments law, the Bundesbank is responsible for administering restrictions on capital movements and payments. Such restrictions currently consist of financial sanctions that are based partly on requirements from the United Nations (UN) Security Council and partly on autonomous decisions by the European Union. Within the scope of its tasks, the Bundesbank works closely with the other responsible national and European agencies, especially the Federal Ministry of Economics and Technology.

Tightening of financial sanctions against Iran

In 2010, particular emphasis should be given to the tightening of restrictive measures against Iran.[1] The freezing of funds was extended to further persons, to whom funds must not be made available, either. Exceptions can be approved by the Bundesbank under certain circumstances.

There is a novel obligation to report in advance to the Bundesbank any transfers of funds to or from an Iranian person, entity or body with a value of more than €10,000. Prior approval is required for such transfers of funds with a value of €40,000 or more. This is not granted if there is evidence suggesting that the transfer of funds contributes to certain prohibited activities, in particular any nuclear proliferation activities. In this case, the transaction giving rise to the transfer of funds must be examined; this is carried out by the Bundesbank in cooperation with the German Federal Office of Economics and Export Control (*Bundesamt für Wirtschaft und Ausfuhrkontrolle* or BAFA).

1 Council Regulation (EU) No 961/2010 of 25 October 2010 on restrictive measures against Iran and repealing regulation (EC) No 423/2007.

In order to help exporters, the Bundesbank has granted a general approval for incoming transfers of funds from an Iranian person for exports which have already been cleared by German customs.

IV Research Centre

Research priorities

In 2010, activities by members of staff of the Research Centre focused on topics associated with monetary and fiscal policy, studies on the behaviour of banks and other financial intermediaries and the consequences thereof for financial stability, the economic impact of regulatory measures as well as issues of interest in connection with macroeconomic forecasting. Many of these activities were related to the recent financial and economic crisis. For instance, empirical studies examined *inter alia* the European capital markets' response to rising sovereign debt and state guarantees for banks and the lessons to be learned. Other projects focused more heavily on monetary policy. These include, for example, an analysis of the unconventional measures taken by central banks during the crisis as well as of the extent to which US monetary policy in the run-up to the crisis actually contributed to its outbreak. The behaviour of banks and the consequences for the real economy and financial stability were the subject of a number of research activities. One issue analysed in this context was whether, and if so how, banks restricted their credit supply and propensity to provide liquidity during the crisis, and to what extent these decisions have been influenced by prudential regulations. Another research project devoted itself to establishing which past measures have proven most suitable for getting distressed credit institutions back up and running.

Research networks

The Research Centre maintains numerous contacts to academics outside the Bundesbank, for example through joint seminars and research projects or by hosting visiting researchers. One particularly established form of contact is through national and international research associations and networks in which the Bundesbank is a participant. A number of these research networks and working groups are organised together with other European central banks. The aim of one of these networks is to compile detailed micro data on the wealth and consumption of euro-area households, derive statistics and conduct relevant research. The Research Centre initiated a corresponding survey that is to be repeated at regular intervals. Another European research network was

established last year and is dedicated to macroprudential topics. This includes gaining a better understanding of contagion in the financial sector, establishing whether early warning systems for financial crises are feasible and, if so, what form they should take, and improving the modelling of the interplay between the macro economy and the financial sector with the aim of enhancing the analysis of potential financial stability problems.

In the European Marie Curie project on "Risk Assessment and Measurement" (RISK), which was established in 2009, the Bundesbank is responsible for co-ordinating research activities on "Regulatory Requirements and Risk Modelling Frameworks". Together with non-Bundesbank researchers from this network, Bundesbank economists are working on projects regarding the interaction of liquidity and solvency risks as well as the impact of securitisation on banks' risk management.

In addition to these research associations, the Research Centre is also active in numerous other networks, including an association of university and central bank researchers who conduct empirical and theoretical analyses from a European perspective in the field of business cycle phenomena.

Compiling research data and making them available

Efforts started in the past to compile selected data and make them available to external researchers, too – within the ambit of confidentiality provisions – have been continued. For instance, the research data centres of the Federal and the state statistical offices, the German Institute for Employment Research and the Bundesbank's Research Centre have been working together to collect an extensive set of data on German enterprises. This data set will make a crucial contribution to the advancement of research on the behaviour of enterprises and the consequences thereof, for example, for employment growth or fiscal policy.

Publications

The Research Centre publishes two series of discussion papers. In 2010, it published 27 papers in series 1 (Economic Studies) and 14 papers in series 2 (Banking and Financial Studies). Many of those articles that were initially released as discussion papers were later published in academic journals or books. Last year, more than 50 articles written by Research Centre staff members were published or accepted for publication.

Conferences and workshops

In 2010, the Bundesbank again organised a number of conferences and workshops in which academics and economic policymakers addressed topics that are vital to understanding and solving current problems. The focus of such events

continued to be the recent financial and economic crisis as well as related topics. The Spring Conference, entitled "International Risk Sharing and Global Imbalances", discussed, in particular, the international aspects of the recent crisis. The main aim was to improve the understanding of how great a role the continuous growth of financial integration as well as global imbalances played in developments over the past few years. Discussions at the accompanying workshop concentrated on how best to measure the national and international interconnectedness of banks. Liquidity risks were a central feature of the recent financial crisis. The Autumn Conference on "Liquidity and Liquidity Risks", which was hosted together with the European Banking Center in Tilburg, the Netherlands, and the European Business School in Oestrich-Winkel, Germany, examined banks' liquidity risks from a systemic perspective. It cast light on many topics, including the role of money markets in the financial crisis. In October, a workshop was held on the topic "Beyond the Financial Crisis: Systemic Risk, Spillovers and Regulation"; one of its aims was to analyse new approaches to measuring systemic risk.

Other events were not so closely connected with the financial crisis. At a joint conference with the ECB and the European Area Business Cycle Network, research papers were presented showing how survey data can be used to improve macroeconomic forecasting and how forecasters should account for the fact that a great deal of economic data are prone to revision. In September, a joint conference was held with the Federal Reserve Bank of Cleveland to investigate the consequences of household heterogeneity with regard, not least, to income and wealth for economic analysis and economic policy. This conference was also linked to the above-mentioned survey of German household wealth and consumption conducted by the Bundesbank's Research Centre.

V Centre for Education, Training and Central Bank Cooperation

Executive education programme to train central bank employees

In the second half of 2010, the Bundesbank's Training Centre proactively stepped up its cooperation with universities and business schools in the area of research-based training by launching an executive education programme. Existing training courses are to be geared to the Bundesbank's needs and new tailor-made seminars are to be developed in partnership with academe. This type of execu-

tive education is characterised by authentic knowledge transfer; in other words, academics' contributions are based on their own research and practitioners' contributions on their own experience. This enables the Bundesbank to make a significant contribution to knowledge transfer at the Frankfurt financial centre.

This joint initiative of the Bundesbank and the business schools is also open to members of staff of other central banks, and the "Central Banker Education and Financial Stability" conference held on 17 November 2010 as part of the Euro Finance Week was a first step in opening up these events to a wider audience.

Training for Bundesbank staff

In 2010, again around three-quarters of the Bundesbank's members of staff took part in one, or in some cases several, of over 1,500 training events either organised internally for specific business units or hosted by external providers. A major project to modernise the Bundesbank's PCs required all members of staff to undergo extensive training in preparation for using the new standard office software. This posed a great challenge in more ways than one but was successfully implemented throughout the Bundesbank by means of information events, seminars and e-learning programs (blended learning).

Stepping up joint Eurosystem training activities…

In 2010, the Bundesbank contributed 16 seminars to the joint Eurosystem training activities. Due to the increasing importance of project management in the ESCB, a qualification programme designed specifically with central banks' needs in mind was launched throughout Europe opening with 14 events, two of which were organised by the Bundesbank. Given the significance of this topic, the number of events is to be increased by 50% in 2011.

…and supervisor training

In its second year, the European Supervisor Education (ESE) Initiative hosted a total of 27 seminars on 11 different topics. More than 400 banking, insurance and securities supervisors from 58 European central banks/supervisory authorities (54 in 2009) and 35 countries (31 in 2009) took part in these events. In 2010, the Banque centrale du Luxembourg joined the ESE Initiative and the Czech National Bank became an associated partner for a new type of seminar. 2010 saw the publication of the first ESE Annual Report and, towards the close of the year, the launch of its own website (www.ese-initiative.org).

Central banking studies at Bank's own university of applied sciences

The Bundesbank not only provides vocational training for specific occupations as well as training for the intermediate and higher career paths but is also the only central bank in the Eurosystem to operate its own university of applied sciences (in the town of Hachenburg in the state of Rhineland-Palatinate). Since

1980, Hachenburg has been home to those studying to be future members of the upper intermediate service of the Bundesbank and the Federal Financial Supervisory Authority (BaFin). By closely meshing theory and practice, the qualification in business management with an emphasis on central banking ensures that students gain a detailed understanding of monetary and foreign exchange policy, banking supervision and financial markets. The 14 full-time and 63 guest lecturers cover a broad range of economic and methodological topics from the Bundesbank's five core business areas. There are currently 152 students at the Bundesbank's University of Applied Sciences, while 136 students are completing practical work experience in various departments at the Bundesbank and BaFin. In 2010, 63 students graduated with the academic title "Diploma in Business Management (University of Applied Sciences)". The diploma course is to be converted to a bachelor degree course (Bachelor of Science in Central Banking) in 2011.

Demand for TCBC services remained high

In the reporting period, too, demand from foreign central banks for services provided by Technical Central Bank Cooperation (TCBC) remained at a high level. More than 3,700 staff members from over 90 central banks across the world took part in over 300 activities both in Germany and elsewhere. One of the larger EU partnership projects for the central bank of Bosnia-Herzegovina reached a successful conclusion. Interest was primarily focused on the Bundesbank's five core business areas as well as increasingly on good governance in central banks. As in 2009, demand came chiefly from EU accession countries and EU candidate countries as well as the states of the former Soviet Union and China. Moreover, the Bundesbank supported the Federal Government's foreign policy initiatives, especially in Africa.

Conference on "20 years of Technical Central Bank Cooperation"

A conference marking "20 years of Technical Central Bank Cooperation" was held at the Deutsche Bundesbank's Training Centre in Eltville from 27 to 29 October 2010 and was attended by 72 high-ranking central bank representatives from 42 countries. The central topic of the conference was not just restricted to a review of the past 20 years of training and advisory services for developing nations, emerging market economies and transition countries; major attention was also dedicated to future challenges in the era of globalisation, especially amidst the current financial and economic crisis. These include not only the advancement of cooperation among providers on current central banking issues but also an increasing geographical regionalisation on the part of TCBC clients, as can currently be observed in the states of the former Yugoslavia, Central and South America and East Africa.

Organisation and staff

I Staff

Slight reduction in staff levels

As at the reporting date of 31 December 2010, the number of core staff had fallen slightly by 0.8% to stand at 10,487. Measured in terms of contractual working hours, the Bundesbank had a weighted core headcount of 9,743.4 full-time equivalent (FTE) employees (compared with 9,822.3 one year earlier). The increasing automation of cash processing coupled with the concentration of cash payment operations led to a further reduction in staff numbers at branch level (–5.7%). At the same time, the Bundesbank recruited a greater number of qualified university graduates in order to meet the new challenges and tasks that were generated by the financial crisis. The share of employees with a technical college or university degree now stands at around 47%.

Staff exchange within the European System of Central Banks

During the year under review, 14 members of the Bundesbank's staff were on secondment to the European Central Bank. In addition, 13 Bundesbank employees took up temporary positions at the ECB or another ESCB central bank. In total, five employees of other ESCB central banks worked for a limited term at the Bundesbank.

Attractive employer

In 2010, the Bundesbank remained one of the most sought after employers in Germany, as concluded by various studies including the Universum Graduate Survey 2010. Furthermore, the Deutsche Bundesbank was once again listed as a top employer in the Trendence institute studies "Deutsches Absolventenbarometer 2010" (German Graduate Barometer 2010) and "Deutsches Schülerbarometer 2010" (German Secondary School Student Barometer 2010). In the course of the reporting year, the Bundesbank hired 207 interns, mostly students of economics, thereby allowing them to gather initial experience in the specific fields of work that are pursued by a central bank. These placements were carried out in line with the "Fair Company Initiative" rules and aimed to focus the attention of highly qualified career starters on the Bundesbank as an attractive employer at an early stage.

Balancing work and family life

The Bundesbank offers its staff flexible working time models and in so doing facilitates working time and workplace arrangements that allow employees a good work-life balance at all stages in their career. On 31 December 2010, there were 1,990 part-time staff members and 327 teleworkers.

Bundesbank staff on 31 December 2010*

Table 12

Item	Staff numbers[1]				Year-on-year changes			
	Total	Regional Offices	Branches	Central Office	Total	Regional Offices	Branches	Central Office
Civil servants	5,418	1,513	1,606	2,299	– 66	– 123	– 102	159
Salaried staff	5,636	1,484	2,062	2,090	– 11	– 80	– 116	185
Total	11,054	2,997	3,668	4,389	– 77	– 203	– 218	344
of which Trainees	567	188	22	357	11	– 39	4	46
Remainder Core staff	10,487	2,809	3,646	4,032	– 88	– 164	– 222	298
Staff with permanent contracts	10,332	2,735	3,634	3,963	– 121	– 204	– 217	300
Staff with temporary contracts	155	74	12	69	33	40	– 5	– 2
Memo item Core staff *pro rata* (full-time equivalent)	9,743.4	2,578.5	3,368.0	3,796.9	– 78.9	– 141.9	– 217.4	280.4

	End-2010	End-2009
* Not included:		
Members of staff on secondment	156	170
Members of staff on unpaid leave	369	394
Members of staff in the second phase of the partial retirement scheme	408	359
1 Of which part-time employees.	1,990	1,968

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Commitment to social welfare

In the course of the year under review, the Bundesbank received the German "Corporate Health Award" in recognition of its notable commitment to the health and productivity of its staff.

In addition, for the second time a number of particularly dedicated junior employees of the Bundesbank took part in a corporate social responsibility project. As part of this seven-month project, parallel to their regular working activities, the employees in question donated their time and expertise to support a charitable institution in its work assisting persons with a disability or individuals in need.

Regional Offices and branches of the Deutsche Bundesbank on 1 April 2011

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/M	F			
680	Freiburg	S	590	Saarbrücken	MZ
	Lörrach[2]		600	Stuttgart	S
513	Giessen	F	630	Ulm	S
260	Göttingen	H			
			694	Villingen-Schwenningen	S
450	Hagen	D			
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.

Deutsche Bundesbank

II 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, 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]
  Alternate, Administrative Council, LIKO-Bank[2]

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

– Dr hc Rudolf Böhmler:
  Member of the Supervisory Board of ARADEX AG, Lorch;
  Member of the Board of Trustees, Monetary Stability Foundation

– Dr Andreas Dombret, Member of the Executive Board of the Deutsche Bundesbank since 1 May 2010:
  Senior Vice-Chairman of the Administrative Council, LIKO-Bank;[2]
  Vice-Chairman of the Credit Committee, LIKO-Bank;[2]
  Alternate, Board of Directors, BIS;[1]
  Member of the Stock Exchange Expert Commission of the Federal Ministry of Finance;
  Standing guest on the Central Capital Market Committee (up to 30 November 2010)

1 Ex officio.
2 Partnership agreement.

- Dr Hans Georg Fabritius, Member of the Executive Board of the Deutsche Bundesbank up to 30 April 2010:[1]
  Alternate, Administrative Council, LIKO-Bank;[2]
  Member of the Administrative Council, Rhineland-Westphalian Institute for Economic Research;
  Alternate, Board of Trustees, Monetary Stability Foundation

- Professor Hans-Helmut Kotz, Member of the Executive Board of the Deutsche Bundesbank up to 30 April 2010:[1]
  Member of the Administrative Council, LIKO-Bank;[2]
  Member of the Credit Committee, LIKO-Bank;[2]
  Alternate, Board of Directors, BIS;[3]
  Standing guest on the Central Capital Market Committee;
  Member of the Stock Exchange Expert Commission of the
  Federal Ministry of Finance

- Dr Joachim Nagel, Member of the Executive Board of the Deutsche Bundesbank since 1 December 2010:
  Standing guest on the Central Capital Market Committee

- Dr Thilo Sarrazin, Member of the Executive Board of the Deutsche Bundesbank up to 30 September 2010:[4]
  Alternate, Administrative Council, LIKO-Bank;[2]
  Member of the Board of Trustees, Monetary Stability Foundation

- Mr Carl-Ludwig Thiele, Member of the Executive Board of the Deutsche Bundesbank since 3 May 2010:
  Alternate, Administrative Council, LIKO-Bank;[2]
  Member of the Board of Trustees, Monetary Stability Foundation

1 Offices held when he stepped down from the Executive Board on 30 April 2010.
2 Partnership agreement.
3 Ex officio.
4 Offices held when he stepped down from the Executive Board on 30 September 2010.

Annual accounts of the Deutsche Bundesbank for 2010

I Balance sheet of the Deutsche Bundesbank as at 31 December 2010

Assets

				31.12.2009
			€ million	€ million
1	Gold and gold receivables		115,403	83,939
2	Claims on non-euro-area residents denominated in foreign currency			
	2.1 Receivables from the IMF	18,740		(15,969)
	2.2 Balances with banks, portfolio investment, external loans and other external assets	27,957		(25,634)
			46,697	41,602
3	Claims on euro-area residents denominated in foreign currency		—	4,412
4	Claims on non-euro-area residents denominated in euro		—	300
5	Lending to euro-area credit institutions related to monetary policy operations denominated in euro			
	5.1 Main refinancing operations	68,376		(53,605)
	5.2 Longer-term refinancing operations	33,460		(170,004)
	5.3 Fine-tuning reverse operations	1,240		(—)
	5.4 Structural reverse operations	—		(—)
	5.5 Marginal lending facility	—		(1)
			103,076	223,610
6	Other claims on euro-area credit institutions denominated in euro		9,610	7,136
7	Securities of euro-area residents denominated in euro			
	7.1 Securities held for monetary policy purposes	30,899		(7,892)
	7.2 Other securities	5,246		(5,276)
			36,146	13,168
8	Claims on the Federal Government		4,440	4,440
9	Intra-Eurosystem claims			
	9.1 Participating interest in the ECB	1,407		(1,091)
	9.2 Claims arising from the transfer of foreign reserves to the ECB	10,909		(10,909)
	9.3 Claims related to the allocation of euro banknotes within the Eurosystem (net)	—		(—)
	9.4 Other claims within the Eurosystem (net)	325,535		(177,706)
			337,850	189,706
10	Items in course of settlement		1	2
11	Other assets			
	11.1 Coins	763		(721)
	11.2 Tangible and intangible fixed assets	968		(1,038)
	11.3 Other financial assets	10,312		(10,227)
	11.4 Off-balance-sheet instruments revaluation differences	–		(24)
	11.5 Accruals and prepaid expenses	1,651		(1,703)
	11.6 Sundry items	4,343		(6,017)
			18,036	19,729
			671,259	588,043

Liabilities

				31.12.2009
			€ million	€ million
1	Banknotes in circulation		209,615	201,304
2	Liabilities to euro-area credit institutions related to monetary policy operations denominated in euro			
	2.1 Current accounts	71,407		(76,665)
	2.2 Deposit facility	38,536		(35,498)
	2.3 Fixed-term deposits	36,489		(—)
	2.4 Fine-tuning reverse operations	—		(—)
			146,431	112,163
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	173		(9,987)
	4.2 Other liabilities	756		(363)
			928	10,350
5	Liabilities to non-euro-area residents denominated in euro		14,460	9,124
6	Liabilities to euro-area residents denominated in foreign currency		15	36
7	Liabilities to non-euro-area residents denominated in foreign currency		159	—
8	Counterpart of special drawing rights allocated by the IMF		13,955	13,127
9	Intra-Eurosystem liabilities			
	9.1 Liabilities related to the issuance of ECB debt certificates	—		(—)
	9.2 Liabilities related to the allocation of euro banknotes within the Eurosystem (net)	157,105		(146,806)
	9.3 Other liabilities within the Eurosystem (net)	—		(—)
			157,105	146,806
10	Items in course of settlement		2	6
11	Other liabilities			
	11.1 Off-balance-sheet instruments revaluation differences	0		(—)
	11.2 Accruals and income collected in advance	443		(414)
	11.3 Sundry items	2,443		(2,225)
			2,886	2,639
12	Provisions		7,996	6,562
13	Revaluation accounts		110,502	76,778
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		2,206	4,147
			671,259	588,043

II Profit and loss account of the Deutsche Bundesbank for the year 2010

				2009
			€ million	€ million
1.1 Interest income		6,193		(7,624)
1.2 Interest expense		– 2,623		(– 3,468)
1	Net interest income		3,570	4,156
2.1 Realised gains/losses arising from financial operations		688		(673)
2.2 Write-downs on financial assets and positions		– 87		(– 142)
2.3 Transfers to/from provisions for general risks, foreign exchange risks and price risks		– 1,631		(– 49)
2	Net result of financial operations, write-downs and risk provisions		– 1,030	482
3.1 Income from fees and commissions		67		(64)
3.2 Expense relating to fees and commissions		– 17		(– 15)
3	Net income from fees and commissions		49	49
4	Income from participating interests		441	564
5	Net result arising from allocation of monetary income		417	278
6	Other income		91	90
	Total net income		3,537	5,619
7	Staff costs		622	857
8	Other administrative expenses		252	250
9	Depreciation on tangible and intangible fixed assets		115	193
10	Banknote printing		125	154
11	Other expenses		218	19
	Profit for the year		2,206	4,147

Frankfurt am Main, 15 February 2011

DEUTSCHE BUNDESBANK
Executive Board

Professor Axel A Weber   Professor Franz-Christoph Zeitler

Dr hc Rudolf Böhmler   Dr Andreas Dombret   Dr Joachim Nagel   Mr Carl-Ludwig Thiele

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 2010 to 31 December 2010. 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.

Eschborn/Frankfurt am Main, 1 March 2011

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Müller-Tronnier
Wirtschaftsprüfer

Havas
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, each 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 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 directly 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 of which, after deduction of value added tax, is less than €10,000 shall be fully amortised in the year in which they were acquired.

Provisions

With the exception of the provision for Eurosystem monetary policy operations, the regulations set forth in the Commercial Code (*Handelsgesetzbuch*) continue to apply to the reporting of provisions in the balance sheet. Pursuant to section 26 (2) of the Bundesbank Act (*Bundesbankgesetz*), the creation of liability items for general risks associated with domestic and foreign business is possible.

Transitional arrangements

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 (*Bundesbankgesetz*) 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 banknote allocation key. 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 27.1% share in the fully paid-up capital of the ECB and therefore a 25.0% 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 10001/2011 of 7 February 2011.
2 Decision of the European Central Bank of 12 December 2008 amending Decision ECB/2001/15 on the issue of euro banknotes (ECB/2008/26).

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 (net)". 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 (net)". These balances are remunerated at the respective 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 adjusted in order to avoid significant changes in NCBs' relevant income positions from those in previous years. The adjustments are made 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 reduced in annual stages until the first day of the sixth year after the year of the cash changeover, when income from euro banknotes is allocated fully in proportion to the NCBs' paid-up shares in the ECB's capital. In the year under review, the adjustments resulted from the accession of the central bank of Slovenia in 2007, the Maltese and the Cypriot central banks in 2008 and the Slovakian central bank in 2009. Accordingly, the adjustments will be phased out by 31 December 2012, 2013 and 2014. 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".

ECB's interim distribution of profit

The ECB's income from the transfer of 8% of the euro banknotes in circulation to the ECB as well as from securities purchased by the ECB as part of the "Securities Markets Programme" 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 this income or, as a result of a decision by the Governing Council of the ECB,

1 Decision of the European Central Bank of 25 November 2010 on the allocation of monetary income of the national central banks of member states whose currency is the euro (ECB/2010/23).

the amount is retained for allocation to a risk provision.[1] For the financial year 2010, all of this income of the ECB will be required to fund the risk provision.

Change to ECB capital key on 1 January 2011

As of 1 January 2011, the Eurosystem was expanded owing to the accession of the Estonian central bank, which paid up its contribution to the capital of the ECB in full. As a result, the Bundesbank's share in the fully paid-up capital of the ECB declined from 27.13% to 27.06% on 1 January 2011.

Preparation and auditing of financial statements

The Executive Board drew up the Bundesbank's financial statements for the financial year 2010 on 15 February 2011. The financial statements were audited by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Eschborn/Frankfurt am Main. The Executive Board had appointed the firm as external auditors on 25 November 2008 in accordance with section 26 (3) of the Bundesbank Act. The auditors confirmed without qualification on 1 March 2011 that the Bundesbank's financial statements for 2010 – 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 8 March 2011.

1 Decision of the European Central Bank of 25 November 2010 on the interim distribution of the income of the European Central Bank on euro banknotes in circulation and arising from securities purchased under the securities markets programme (ECB/2010/24).

V Notes on the individual balance sheet items

1 Assets

1 Gold and gold receivables

As of 31 December 2010, the Bundesbank's holdings of fine gold (ozf) amounted to 3,400,968 kg or 109 million ounces. The gold was valued at market prices at the end of the year (1 kg = €33,932.48 or 1 ozf = €1,055.418). In the year under review, the gold holdings declined by 5,820 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.

2 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.

2.1 Receivables from the IMF

Receivables from the IMF — Table 13

Item	31.12.2010		31.12.2009		Year-on-year change			
	SDR million	€ million	SDR million	€ million	SDR million	%	€ million	%
German quota	13,008	15,054	13,008	14,160	.	.	893	6.3
less euro balances	10,140	11,735	10,838	11,798	– 698	– 6.4	– 63	– 0.5
Drawing rights within the reserve tranche	2,868	3,319	2,170	2,362	698	32.2	957	40.5
Special drawing rights	12,188	14,104	12,184	13,263	3	0	841	6.3
Bilateral loans	1,138	1,317	315	343	823	261.3	974	284.1
Total	16,194	18,740	14,669	15,969	1,524	10.4	2,771	17.4

Deutsche Bundesbank

Sub-item 2.1 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 16,194 million (€18,740 million), consist of drawing rights within the reserve tranche, special drawing rights and bilateral loans.

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 (€15,054 million) and the euro balances amounting to €11,735 million (SDR

10,140 million) at the disposal of the IMF at the end of the year. In 2010, there was a net increase of SDR 698 million to SDR 2,868 million (€3,319 million) in the holdings of drawing rights.

Special drawing rights, by means of which convertible currencies can be obtained at any time, were allocated free of charge to the extent of SDR 12,059 million. A corresponding counterpart is shown as liability item 8 "Counterpart of special drawing rights allocated by the IMF". In 2010, the holdings of special drawing rights increased only slightly on the year.

Credit due to a bilateral loan agreement rose by SDR 823 million to SDR 1,138 million (€1,317 million) in the reporting year. The Bundesbank's credit line with the IMF, which has been in place since September 2009, has an equivalent value of €15 billion.

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 4,137 million compared with SDR 2,611 million in 2009. The valuation is based on the reference rate of SDR 1 = €1.1572 (2009: SDR 1 = €1.0886) calculated by the ECB at the end of the year for all central banks participating in the Eurosystem.

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

Balances with banks, portfolio investment, external loans and other external assets — Table 14

Item	31.12.2010	31.12.2009	Year-on-year change	
	€ million	€ million	€ million	%
Current account holdings and overnight deposits	594	596	– 2	– 0.3
Claims arising from reverse repurchase agreements	3,594	–	3,594	.
Fixed-term deposits and deposits at notice	1,609	6,928	– 5,319	– 76.8
Marketable securities	22,036	18,004	4,032	22.4
Other	124	106	17	16.3
Total	27,957	25,634	2,323	9.1

Deutsche Bundesbank

The balances with banks, portfolio investment, loans and other foreign currency claims which are shown in sub-item 2.2 amounted to €27,957 million at the end of 2010 compared with €25,634 million on 31 December 2009. These are almost exclusively US dollar holdings amounting to US$36,303 million (€27,169 million), representing an increase of US$304 million on the previous year. This sub-item also contains holdings in yen (¥83,975 million = €773 million) and a very small amount in other currencies. The holdings are interest-bearing. If all 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$36,202 million compared with US$36,097 million in 2009 and the net yen item valued at market prices amounted to ¥84,015 million compared with ¥83,934 million in 2009. The foreign currency items were valued at the respective end-of-year market rate; in the case of the US dollar item, this amounted to €1 = US$1.3362 (2009: €1 = US$1.4406) and for the yen item, €1 = ¥108.65 (2009: €1 = ¥133.16).

3 Claims on euro-area residents denominated in foreign currency

In 2009, this item contained €4,412 million of US dollar claims on credit institutions resulting from refinancing operations within the context of the Federal Reserve's Term Auction Facility. As of 31 December 2010, this item contained no operations.

4 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 2000 in agreement with the Federal Government in connection with the financing of debt relief for heavily indebted poor countries, expired in the reporting year.

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

The volume and structure of liquidity-providing monetary policy operations carried out by the Bundesbank as part of the Eurosystem are shown in this item (main and longer-term refinancing operations, liquidity-providing fine-tuning operations and the marginal lending facility). At the end of the reporting year, the Eurosystem's corresponding outstanding monetary policy operations amounted to €546,747 million (2009: €749,906 million), of which the Bundesbank held €103,076 million (2009: €223,610 million). Pursuant to Article 32.4 of the ESCB Statute, all risks from these operations, provided they materialise, are shared among the Eurosystem national central banks in proportion to the prevailing ECB capital key shares.

Main refinancing operations are regular weekly transactions with a normal one-week maturity, the purpose of which is to provide liquidity. In the reporting year, main refinancing operations were 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 €68,376 million, which was €14,771 million more than the level on 31 December 2009. On a daily average, the main refinancing operations amounted to €51,327 million (2009: €60,790 million).

Longer-term refinancing operations with a maturity of between one maintenance period and six months were carried out in the year under review with the

purpose of providing longer-term liquidity. The operations were conducted as fixed-rate tenders with full allotment at the main refinancing rate. The volume of these transactions amounted to €33,460 million at the end of 2010 and was therefore €136,544 million lower than the volume of the previous year. On a daily average, the volume of longer-term refinancing operations amounted to €102,499 million (2009: €158,141 million).

In the reporting year, short-term liquidity-providing fine-tuning operations were conducted due to the redemption of maturing longer-term refinancing operations with a term of six or twelve months. These were conducted as fixed-rate tenders with full allotment at the main refinancing rate and with a term of six to thirteen days. At the end of the reporting year, they amounted to €1,240 million and €485 million on a daily average (2009: no holdings).

The marginal lending facility is available at a predetermined interest rate (standing facility). By 31 December 2010, no recourse had been taken to this facility. The extent to which it was being used on a daily average amounted to €151 million (2009: €602 million).

6 Other claims on euro-area credit institutions denominated in euro

This item, amounting to €9,610 million (2009: €7,136 million), consists in particular of fixed-term deposits which are held at credit institutions and which arise from funds received in connection with central bank services (see liability item 5 “Liabilities to non-euro-area residents denominated in euro”).

7 Securities of euro-area residents denominated in euro

This item contains covered bonds denominated in euro as well as bonds of euro-area sovereign issuers which are held to maturity and valued at amortised cost. Purchases as part of the Eurosystem’s “Covered Bond Purchase Programme” (CBPP) and “Securities Markets Programme” (SMP), which the ECB Governing Council approved on 7 May 2009 and 9 May 2010 respectively, are shown under sub-item 7.1 “Securities held for monetary policy purposes”; other purchases of euro-denominated covered bonds are shown under sub-item 7.2 “Other securities”.

At the end of 2010, the Eurosystem national central banks’ SMP holdings amounted to €60,873 million, of which the Bundesbank held €15,569 million. Pursuant to Article 32.4 of the ESCB Statute, all risks from these operations, provided they materialise, are shared among the Eurosystem national central banks in proportion to the prevailing ECB capital key shares.

8 Claims on the Federal Government

This item shows the equalisation claims on the Federal Government and the non-interest-bearing debt register claim 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 123 of the Treaty on the Functioning of the European Union (Lisbon Treaty), it has been stipulated that equalisation claims and the debt register claim are to be redeemed in ten annual instalments, starting in the year 2024.

9 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 ESCB national central banks are the sole subscribers to the capital of the ECB (see General information on annual accounts). In accordance with rules laid down in Article 29.3 of this statute, the key for subscription to the ECB's capital was adjusted with effect from 1 January 2009. Since then, the Bundesbank has had an 18.9% share of the ECB's subscribed capital. Pursuant to a decision of the Governing Council of the ECB,[1] the ECB's capital was increased by €5 billion with effect from 29 December 2010. The Eurosystem national central banks pay the capital in three equal annual instalments. The Bundesbank's capital contribution amounts to a total of €947 million; as at 29 December 2010, €316 million was transferred to the ECB as a TARGET2 payment (see sub-item 9.4 "Other claims within the Eurosystem"). The Bundesbank's participating interest in the ECB increased from €1,091 million to €1,407 million as a result.

Sub-item 9.2 contains the Bundesbank's euro-denominated claims arising from the transfer of foreign reserves to the ECB. At the beginning of 1999, the central banks participating in the Eurosystem transferred foreign reserves (15% in gold and 85% in foreign currency) to the ECB in accordance with Article 30 of the ESCB Statute. 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 2010, these claims amounted

1 Decision of the European Central Bank of 13 December 2010 on the increase of the European Central Bank's capital (ECB/2010/26).

to €10,909 million. As the transferred gold does not earn interest, the claims are remunerated at 85% of the respective 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 euro banknote allocation key. Like at the end of 2009, the Bundesbank again had no claims at the end of 2010 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 TARGET2 settlement balances between the central banks of the ESCB. This balance is generally remunerated at the respective interest rate for the main refinancing operations. At the end of the year, the Bundesbank had net claims amounting to €325,556 million (2009: €177,723 million), which are shown under sub-item 9.4 "Other claims within the Eurosystem (net)". On a daily average, the interest-bearing net claims arising from TARGET2 settlement balances amounted to €244,921 million (2009: €177,498 million).

10 Items in course of settlement

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

11 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.

Tangible and intangible fixed assets — Table 15

€ million

Item	Purchase/ production costs 31.12.2009	Additions	Disposals	Accumulated depreciations	Book value 31.12.2010	Book value 31.12.2009	Depreciation in 2010
Land and buildings	2,399	15	– 49	– 1,528	837	890	– 63
Furniture and equipment	704	36	– 41	– 572	127	142	– 48
Computer software	120	3	– 3	– 115	5	6	– 4
Total	3,222	54	– 93	– 2,215	968	1,038	– 115

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Sub-item 11.2 "Tangible and intangible fixed assets" amounted to €968 million compared with €1,038 million in 2009; it comprises land and buildings, furniture and equipment and computer software.

Sub-item 11.3 "Other financial assets" amounted to €10,312 million compared with €10,227 million in 2009. It contains fixed-interest euro assets of €10,223 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 to maturity and valued at amortised cost. This item also includes €89 million in participating interests of the Bundesbank. The participating interest in the BIS, Basel, was unchanged at €50 million at the end of 2010. 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 2009, the participating interest in the cooperative society SWIFT, La Hulpe (Belgium), amounted to €1 million.

Sub-item 11.5 "Accruals and prepaid expenses" contains the accrued and prepaid expenditure identified on 31 December 2010. These chiefly consist of interest income which is due in the new financial year from securities and refinancing operations which were acquired or transacted in the financial year just ended.

As of 31 December 2010, sub-item 11.6 "Sundry items" essentially contained the nominal value of claims against one counterparty that defaulted from monetary policy operations undertaken by the Eurosystem as in the previous year.

2 Liabilities

1 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). According to the banknote allocation key applying on 31 December 2010, the Bundesbank has a 25.0% 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 €806,411 million to €839,702 million, or by 4.1%. According to the allocation key, the Bundes-

bank had euro banknotes in circulation worth €209,615 million at the end of the year compared with €201,304 million at the end of 2009. The value of the euro banknotes actually issued by the Bundesbank in the year under review increased by 5.3% from €348,110 million to €366,720 million. As this was more than the allocated amount, the difference of €157,105 million (2009: €146,806 million) is shown in sub-item 9.2 "Liabilities related to the allocation of euro banknotes within the Eurosystem (net)".

2 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 €71,407 million (2009: €76,665 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 Eurosystem's minimum reserve regulations. 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 €50,923 million (2009: €52,232 million).

Sub-item 2.2 "Deposit facility", amounting to €38,536 million (2009: €35,498 million), contains overnight deposits at a predetermined interest rate (standing facility). On a daily average, the deposit facility amounted to €52,298 million (2009: €46,147 million).

The sub-item 2.3 "Fixed-term deposits" contains liquidity-absorbing fine-tuning operations of €36,489 million (2009: no holdings). In the year under review, they were conducted as variable-rate tenders with a maximum bid rate in particular to neutralise the liquidity-providing effects of the "Securities Markets Programme". Furthermore, as in 2009, liquidity-absorbing fine-tuning operations were conducted to offset high liquidity imbalances at the end of the maintenance periods. On a daily average, the fixed-term deposits amounted to €20,090 million (2009: €2,246 million).

4 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 2010, general government deposits amounted to €173 million in all (2009: €9,987 million). This decrease results, in particular, from lower deposits of the Financial Market Stabilisation Fund as a Federal special fund.

Sub-item 4.2 “Other liabilities” amounted to €756 million compared with €363 million on 31 December 2009 and largely comprises the deposits of individuals and financial intermediaries.

5 Liabilities to non-euro-area residents denominated in euro

This balance sheet item, amounting to €14,460 million (2009: €9,124 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 to settle the payments and other services provided by the Bundesbank. These fixed-term deposits are accepted mainly as part of the Bundesbank’s central bank services; the proceeds are invested in the money market (see asset item 6 “Other claims on euro-area credit institutions denominated in euro”).

6 Liabilities to euro-area residents denominated in foreign currency

This item contains the US dollar deposits of banks domiciled in the euro area and of the Federal Government.

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

The foreign-currency-denominated liabilities to banks outside the euro area are reported in this item. These are liabilities in US dollars which have arisen from securities repurchase agreements (repos). At the end of 2010, the item contained operations of €159 million (2009: no holdings).

8 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, from 1979 to 1981 and in 2009, which totalled SDR 12,059 million.

9 Intra-Eurosystem liabilities

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

Sub-item 9.1 contains “Liabilities related to the issuance 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 euro banknote allocation key (see item 1 “Banknotes in circulation”). At the end of the year, these liabilities amounted to €157,105 million (2009: €146,806 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 2010, 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.

10 Items in course of settlement

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

11 Other liabilities

Sub-item 11.2 "Accruals and income collected in advance" contains the accrued income identified on 31 December 2010. 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 2010, totalled €3,328 million. The banknote series BBk I/Ia accounted for €1,262 million of this total (2009: €1,273 million) and the banknote series BBk III/IIIa for €2,067 million (2009: €2,119 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 part 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 2010 amounted to €2,091 million.

12 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 (*Bundesbankgesetz*). They are established to hedge against general risks associated with domestic and foreign business. 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 (€2.5 billion) are taken into account. Taking the aforementioned factors into consideration, the risk provisions need to be increased. It is planned to increase

Provisions Table 16

Provisions for	31.12.2010 € million	31.12.2009 € million	Year-on-year change € million	 %
General risks	3,568	1,937	1,631	84.2
Monetary policy operations	650	1,181	– 531	– 45.0
Direct pension commitments	2,514	2,240	274	12.2
Indirect pension commitments (supplementary pension funds)	398	380	18	4.7
Healthcare subsidy commitments to civil servants	496	441	55	12.4
Partial retirement scheme	102	97	5	5.0
Staff restructuring schemes	229	247	– 18	– 7.2
Other	40	40	– 0	– 0.3
Total	7,996	6,562	1,434	21.8

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the provisions over a period of three years. According to the current valuation of the risks, the risk provisions were increased by €1,631 million on 31 December 2010 as the first of the planned three equal stages (see the profit and loss sub-item 2.3 "Transfers to/from provisions for general risks, foreign exchange risks and price risks").

In accordance with Article 32.4 of the ESCB Statute, the provision for monetary policy operations will be funded by all national central banks of participating member states in proportion to their subscribed capital key shares in the ECB applicable in the year in which the counterparty defaults. In accordance with the Eurosystem accounting principles and in consideration of the general principle of prudence, the Governing Council has reviewed the appropriateness of this provision and decided to reduce the total amount from €4,011 million on 31 December 2009 to €2,207 million on 31 December 2010. The Bundesbank's share of this provision is €650 million (2009: €1,181 million). This resulted in income of €531 million for the Bundesbank in 2010 (see profit and loss item 5 "Net result arising from allocation of monetary income").

Provisions for direct pension commitments, for indirect pension commitments 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 and for healthcare subsidy commitments to civil servants are valued based on an actuarial expert opinion pursuant to the entry age normal method (*Teilwertverfahren*), with a discount rate of 5.1% used in the reporting year (2009: 5.2%). After the provisions of the Accounting Law Modernisation Act (*Bilanzrechtsmodernisierungsgesetz*) were implemented, provisions for pension and health-

care subsidy commitments amounted to €3,978 million as at 31 December 2010, in particular given future cost increases. €3,407 million of this sum is recorded in the provisions as at 31 December 2010. It is planned to distribute the remaining amount of €571 million evenly among the annual accounts for 2011, 2012 and 2013. Provisions for the partial retirement scheme and for payment commitments arising from staff restructuring schemes that had already been carried out by the balance sheet date are valued using a discount rate of 3.91% (2009: 3.8%) based on an actuarial expert opinion pursuant to the present value method (*Barwertverfahren*). Expenses in the amount of €286 million from marking up the aforementioned staff provisions are contained in profit and loss sub-item 1.2 "Interest expense"; transfers in the amount of €201 million due to the first-time application of the provisions of the Accounting Law Modernisation Act are booked to profit and loss item 11 "Other expenses". Other changes to provisions provide relief of €141 million in profit and loss item 7 "Staff costs" and income of €11 million in profit and loss item 6 "Other income".

Other provisions have been created for remaining holiday entitlement, overtime and positive balances of flexible working hours as well as for uncertain liabilities.

13 Revaluation accounts

Revaluation accounts — Table 17

Item	Revaluation items "old"	Revaluation items "new"	Total 31.12.2010	Total 31.12.2009	Year-on-year change	
	€ million	€ million	€ million	€ million	€ million	%
Gold	18,899	88,464	107,363	75,885	31,478	41.5
US dollars	–	2,277	2,277	469	1,807	385.0
SDRs	–	150	150	–	150	.
Yen	–	248	248	108	139	128.6
Securities	–	464	464	315	149	47.4
Total	18,899	91,603	110,502	76,778	33,724	43.9

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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 2010 (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 are 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 €32 million in the year under review. The dissolution amount is included in profit and loss sub-item 2.1 "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 portfolios, the positive difference between their market value on 31 December 2010 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 2010, the market value of the gold position exceeded its acquisition value, with the result that a revaluation item amounting to €88,464 million arose (2009: €56,954 million). The market values of the US dollar, SDR and Japanese yen positions at the end of 2010 were likewise above their acquisition value (€1 = US$1.4611, €1 = SDR 0.8921 and €1 = ¥159.9222), with the result that there were revaluation items. There were only slight valuation gains in the case of the other foreign currencies.

The valuation gains from securities result almost exclusively from US dollar investments.

14 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.

15 Profit for the year

The profit and loss account for the year 2010 closed with an annual surplus of €2,206 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 2010.

VI Notes on the profit and loss account

1 Net interest income

This item shows interest income less interest expense. Net interest income was lower than in the previous year, falling by €586 million to €3,570 million. Of this total amount, €454 million was in foreign currency (primarily US-dollar-denominated securities) while the euro holdings amounted to €3,116 million (primarily from the use of monetary policy instruments).

1.1 Interest income

Interest income

Table 18

Item	2010	2009	Year-on-year change	
	€ million	€ million	€ million	%
Interest income in foreign currency				
IMF	11	9	2	21.6
Reverse repo transactions	9	2	7	372.4
Claims arising from the provision of foreign exchange liquidity	3	436	– 433	– 99.4
Securities	430	560	– 130	– 23.2
Other	5	40	– 35	– 87.8
Total	457	1,046	– 589	– 56.3
Interest income in euro				
Main refinancing operations	520	829	– 308	– 37.2
Longer-term refinancing operations	1,039	2,531	– 1,491	– 58.9
Other refinancing operations	8	15	– 8	– 50.3
TARGET2 balances in the ESCB	2,483	2,270	213	9.4
Government bonds (SMP portfolio)	521	–	521	.
Covered bonds	563	166	397	239.6
Claims arising from the transfer of foreign reserves to the ECB	94	120	– 26	– 21.8
Claims arising from central bank services	40	38	2	5.6
Financial assets	397	419	– 22	– 5.2
Other	69	190	– 121	– 63.6
Total	5,736	6,578	– 842	– 12.8
Grand total	6,193	7,624	– 1,431	– 18.8

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Interest income in foreign currency fell year on year by €589 million to €457 million. This was due to the decline in US dollar liquidity-providing operations and the lower annual average rate of interest on US dollar assets.

Interest income in euro declined on the year by €842 million to €5,736 million. Income from the refinancing of credit institutions and the TARGET2 balances shrank by €1,594 million overall. This resulted primarily from the lower average rate of interest over the year. Income from securities increased by €919 million, particularly owing to purchases of securities as part of the Euroystem's "Securities Markets Programme" (SMP) and "Covered Bond Purchase Programme".

1.2 Interest expense

Interest expense Table 19

	2010	2009	Year-on-year change	
Item	€ million	€ million	€ million	%
Interest expense in foreign currency				
Liabilities arising from the provision of foreign exchange liquidity	3	410	– 407	– 99.3
Other	0	0	0	.
Total	3	410	– 407	– 99.3
Interest expense in euro				
Minimum reserves	512	674	– 161	– 23.9
Deposit facility	133	280	– 147	– 52.6
Fixed-term deposits	106	21	85	394.6
Liabilities related to the allocation of euro banknotes	1,533	1,826	– 293	– 16.1
Liabilities arising from central bank services	35	41	– 6	– 14.5
Marking up of staff provisions	286	–	286	.
Other	16	217	– 201	– 92.6
Total	2,620	3,058	– 438	– 14.3
Grand total	2,623	3,468	– 845	– 24.4

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Interest expenditure decreased by €845 million to €2,623 million year on year. In the case of foreign currency, interest expenditure on liabilities arising from the provision of US dollar liquidity fell by €407 million because of the reduced demand for this type of operation. In the case of the euro, there was a year-on-year decline of €438 million to €2,620 million. The interest expenditure on the remuneration of intra-Eurosystem balances arising from the allocation of euro banknotes fell by €293 million owing to the lower rate of interest over the year (see General information on annual accounts). Furthermore, interest expenditure on liabilities related to monetary policy operations (minimum reserve, deposit facility and fixed-term deposits) decreased by €224 million because of the lower average interest rate. Expenses from marking up staff provisions in the amount of €286 million are recorded under interest expense (see liability item 12 "Provisions") for the first time.

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

The net income shown in sub-item 2.1 "Realised gains/losses arising from financial operations" amounted to €688 million compared with €673 million in 2009.

The sub-item 2.3 "Transfers to/from provisions for general risks, foreign exchange risks and price risks" contains the allocation of €1,631 million to the provision for general risks (see liability item 12 "Provisions").

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

Table 20

Item	2010	2009	Year-on-year change	
	€ million	€ million	€ million	%
Realised gains/losses				
Gold	163	112	52	46.3
Foreign currency	167	37	130	348.9
Securities	359	524	– 165	– 31.6
Total	688	673	16	2.3
Write-downs				
Foreign currency	– 0	– 54	54	99.9
Securities	– 87	– 88	1	1.3
Total	– 87	– 142	55	38.5
Transfers to/from provisions for general risks, foreign exchange risks and price risks	– 1,631	– 49	– 1,582	.
Grand total	– 1,030	482	– 1,512	.

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3 Net income from fees and commissions

As in 2009, net income from fees and commissions amounted to €49 million.

Net income from fees and commissions

Table 21

Item	2010	2009	Year-on-year change	
	€ million	€ million	€ million	%
Income				
Cashless payments	26	25	1	4.3
Cash payments	14	11	3	27.2
Securities business and security deposit business	11	12	– 1	– 7.3
Other	14	15	– 1	– 5.8
Total	67	64	2	3.7
Expense				
Securities business and security deposit business	13	10	3	25.3
Other	4	4	– 0	– 3.6
Total	17	15	2	16.7
Grand total	49	49	– 0	– 0.2

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4 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 total income of €441 million (2009: €564 million) includes, in particular, the Bundesbank's share of the ECB's profit distribution for the financial year 2009.

This item comprises income of €417 million overall in 2010 compared with €278 million in 2009. Risk provisioning for Eurosystem monetary policy opera-

5 Net result arising from allocation of monetary income

tions resulted in net income of €435 million (2009: €508 million). Expenditure from the allocation of monetary income amounted on balance to €18 million, compared with €230 million in 2009.

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 is measured on the basis of the actual income which arises from the earmarked assets that each holds as a counterpart to its monetary base.

The monetary base contains, in particular, 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 9.2 "Liabilities related to the allocation of euro banknotes within the Eurosystem (net)" and the net liabilities arising from 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 monetary base items mentioned reduces the amount of the monetary income to be transferred by the national central bank concerned.

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 7.1 "Securities held for monetary policy purposes", 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 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 and securities purchased as part of the "Covered Bond Purchase Programme" generate income according to the respective interest rate for the main refinancing instrument.

If the value of a national central bank's earmarked assets is above or below the value of its monetary base, the difference is offset by applying to the value of the difference the applicable interest rate for the main refinancing instrument.

1 Decision of the European Central Bank of 25 November 2010 on the allocation of monetary income of the national central banks of member states whose currency is the euro (ECB/2010/23).

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 shares in the fully paid-up capital of the ECB.

The allocation of monetary income resulted in a net expense of €18 million for the Bundesbank. This net expense represents the difference between the €2,836 million in monetary income paid by the Bundesbank into the common pool and the Bundesbank's claim of €2,818 million – corresponding to the Bundesbank's share of the ECB's paid-up capital – on the common pool.

6 Other income

The remaining income amounted to €91 million compared with €90 million in 2009.

7 Staff costs

Staff costs

Table 22

Item	2010	2009	Year-on-year change	
	€ million	€ million	€ million	%
Salaries and wages	489	538	– 49	– 9.1
Social security contributions	80	82	– 2	– 2.6
Expenditure on retirement pensions	54	236	– 183	– 77.4
Grand total	622	857	– 234	– 27.3

Deutsche Bundesbank

Staff costs fell from €857 million to €622 million year on year. The main reason for this is that the amounts allocated to staff provisions are reported under profit and loss sub-item 1.2 "Interest expense" (see liability item 12 "Provisions") for the first time.

The remuneration received by each member of the Executive Board is published in the annual report in accordance with item 8 of the "Code of Conduct for the members of the Executive Board of the Deutsche Bundesbank". For the year 2010, the President of the Bundesbank received a pensionable salary of €309,715.56, a special non-pensionable remuneration of €76,693.78 and a standard expenses allowance of €5,112.96, amounting to a total of €391,522.30. The Vice-President of the Bundesbank received for the year 2010 a pensionable salary of €247,772.52, a special non-pensionable remuneration of €61,355.03 and a standard expenses allowance of €3,067.80, amounting to a total of €312,195.35. Another member of the Executive Board received for the year 2010 a pensionable salary of €185,829.48, a special non-pensionable remuneration of €46,016.27 and a standard expenses allowance of €2,556.48,

amounting to a total of €234,402.23. Three members of the Executive Board were replaced in 2010. For the period from 1 January 2010 until they left on 30 April 2010, two departing Executive Board members each received €78,134.08; €61,943.16 of this was in the form of a pensionable salary, €15,338.76 as a special non-pensionable remuneration and €852.16 as a standard expenses allowance. Their successors took office on 1 and 3 May 2010 respectively. Up until the end of 2010, the board member who took office on 1 May 2010 received a pensionable salary of €123,886.32, a special non-pensionable remuneration of €30,677.51 and a standard expenses allowance of €1,704.32, amounting to a total of €156,268.15. The board member who took office on 3 May 2010 received a pensionable salary of €122,887.24, a special non-pensionable remuneration of €30,421.87 and a standard expenses allowance of €1,690.58, amounting to a total of €154,999.69. For the period from 1 January 2010 until he left on 30 September 2010, another departing Executive Board member received a pensionable salary of €139,372.11, a special non-pensionable remuneration of €34,512.20 and a standard expenses allowance of €1,917.36, amounting to €175,801.67. From the time he took office on 1 December 2010 to the end of 2010, his successor received a pensionable salary of €15,485.79, a special non-pensionable remuneration of €3,834.69 and a standard expenses allowance of €213.04, amounting to a total of €19,533.52.

Total payments to serving and former members of the Executive Board as well as to former members of the Bundesbank's Directorate and of the Executive Boards of the Land Central Banks, including their surviving dependants, amounted to €11,293,336.96 in 2010.

8 Other administrative expenses

The other (non-staff) operating expenditure increased year on year by €2 million to €252 million.

9 Depreciation on tangible and intangible fixed assets

The depreciation of land and buildings, of furniture and equipment and of computer software amounted to €115 million compared with €193 million in 2009 (see asset sub-item 11.2 "Tangible and intangible fixed assets").

10 Banknote printing

Expenditure on banknote printing amounted to €125 million compared with €154 million in 2009.

11 Other expenses

Other expenses were up on the year by €199 million to €218 million. This was due to transfers to staff provisions owing to the Accounting Law Modernisation Act being applied for the first time (see liability item 12 "Provisions").

The Deutsche Bundesbank: key figures

	2009	2010
Staff[1]		
Core staff (full-time equivalents)	9,822	9,743
– Contraction since 31 December 2001[2]	4,978 (= 33.6%)	5,057 (= 34.2%)
Projected core staff (full-time equivalents)		
– End-2012 = 9,000		
Locations/core staff (full-time equivalents)[1]		
Central Office	1 / 3,517	1 / 3,797
Regional Offices	9 / 2,720	9 / 2,579
Branches	47 / 3,585	47 / 3,368
Annual accounts[1]		
Profit for the year	€4,147 million	€2,206 million
Net interest income	€4,156 million	€3,570 million
Balance sheet total	€588,043 million	€671,259 million
Foreign reserve assets (total)	€125.5 billion	€162.1 billion
– foreign currency	€25.6 billion	€28.0 billion
– gold	(3,407 t) €83.9 billion	(3,401 t) €115.4 billion
– receivables from the IMF	€16.0 billion	18.7 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[4]		€1.41 billion
Foreign reserve assets transferred to the ECB		€10.91 billion
Money market transactions (main refinancing operations)		
Banks participating in the Eurosystem (average)	404	115
– *of which* using the Bundesbank as an intermediary	288	32
Amount outstanding for main refinancing operations in the Eurosystem[5]	€152 billion	€132 billion
– *of which* counterparties of the Bundesbank	€61 billion	€51 billion
Cash payments		
Volume of euro banknotes in circulation (Eurosystem)[1]	€806.4 billion	€839.7 billion
Volume of euro coins in circulation (Eurosystem)[1]	€21.3 billion	€22.3 billion
Value of DM/euro exchange transactions	DM162.8 million	DM131.2 million
Unreturned DM banknotes and coins[1]	DM13.60 billion	DM13.44 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 Since 29 December 2010.
5 Daily average.

	2009	2010
Incidence of counterfeit money in Germany		
Euro banknotes (number)	52,500	60,000
Euro coins (number)	78,500	67,400
Cashless payments		
Payments via the Bundesbank (number of transactions)	2,634.4 million	2,711.8 million
– *of which* via RPS	2,585.5 million	2,663.0 million
– *of which* via TARGET2-BBk	44.7 million	44.7 million
Payments via the Bundesbank (value)	€176 trillion	€219 trillion
– *of which* via RPS	€2,295 billion	€2,300 billion
– *of which* via TARGET2-BBk	€171 trillion	€214 trillion
Share of TARGET2-BBk transactions in EU-wide TARGET2 system	50.5%	50.5%
Banking supervision		
Number of institutions to be supervised	3,589	3,686
Audits of banking operations	223	214
Monthly returns processed and additional information pursuant to section 25 of the German Banking Act	30,291	30,598
Audit reports processed	6,328	6,137
Reports on Own Funds Principle (Solvency Regulation)[6]	8,684	8,584
Reports on Liquidity Principle (Liquidity Regulation)	26,052	25,752
Meetings with senior management	3,051	1,957
Cooperation with foreign central banks		
Training and advisory events	309	309
– Number of participants (total)	3,557	3,719
– Number of participating countries (total)	99	92
Selected economic publications (editions/circulation)		
Annual Report	1/20,000	1/20,000
Financial Stability Review	1/17,800	1/17,000
Monthly Report	12/16,700	12/16,000
Statistical Supplements	52/2,750	52/2,700
Research Centre Discussion Papers	50/324	40/350
Publications in academic journals/books	58/–	49/–
External communication/public relations		
Visitors to the Money Museum	38,780	40,512
Written answers to queries	15,700	24,446
Press releases	292	342
Visits to the website (www.bundesbank.de)	7,121,000	7,215,157
Training sessions on counterfeit prevention	1,200	1,300
– Number of participants	25,000	29,000

6 Since 2009, quarterly reports only.