

Financial markets

Financial market trends

In the first quarter of 2009, the international financial markets were buffeted by ongoing turmoil and an increasing downward pressure on economic activity. In this setting, the intensive efforts of policymakers to contain the crisis also influenced the developments in the money and capital markets. In view of the intensifying underlying recessionary trends in the world economy and high losses of financial institutions in the final quarter of 2008, investors' risk appetite diminished again significantly at the start of the year. This, in turn, further pushed up credit risk premiums for financial borrowers into the first half of March; at the same time, share prices tumbled across a broad front. Faced with tensions in the financial sector, governments reinforced their efforts to relieve banks' balance sheets of problematic assets. Moreover, central banks intervened directly in the financial markets in order to ease tight financing conditions. Signs of a slight easing of tensions were evident from mid-March. For example, pressure on the stock and bond market valuations of financial institutions lessened. As a result, funds that had previously been moved to safe and liquid bonds were reinvested. This also reduced the perceived credit risks of borrowers in other sectors, although they were still at high levels as this report went to press. Improved sentiment indicators likewise helped create a more benign climate in the stock markets. In the foreign exchange markets, the euro depreciated slightly since the beginning of the year on balance; gains against central and eastern European currencies were more than offset by losses against the US dol-

*Financial
market setting*

lar, the pound sterling and some commodity currencies.

Exchange rates

Exchange rate development of the euro against the US dollar...

Against the backdrop of the narrowing interest rate differential between short-term investments in the euro area and in the United States, the euro-dollar exchange rate initially dropped at the beginning of the year. The downward trend of the US trade deficit, which was caused by a fall in oil prices, declining investment and a rise in US households' propensity to save, had a detrimental effect. Moreover, market players saw the dollar area as a "safe investment haven" at a time when the crisis in the international financial markets had significantly increased risk aversion. This also affected the credit markets in central and eastern Europe, which tended to have a negative impact on the euro given the euro area's close financial and trade ties with this region. However, the noticeable rise in confidence that started in the second half of March led to short-term exchange rate gains for the euro against the US dollar. The Federal Reserve's announcement that it would significantly increase its purchases of securities and also buy government bonds contributed to this development. As a result, the yield on US Treasuries temporarily dropped markedly. However, as expectations of a further Eurosystem interest rate cut subsequently became more entrenched in the foreign exchange markets, the euro temporarily depreciated again somewhat against the US dollar. At the end of the period under review, the euro stood at US\$1.35, which is



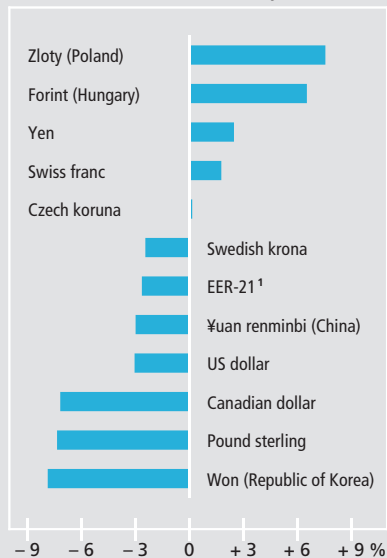
about 3% below its level at the beginning of the year, while short-term exchange rate volatility was on a downward trend but still raised by historical standards.

By contrast, the euro appreciated somewhat against the yen on balance in the reporting period – despite in some cases strong exchange rate volatility. However, the euro-yen rate also initially eased markedly in the first

... against the yen ...

Appreciation/depreciation of the euro against selected currencies

31 December 2008 to 18 May 2009



¹ Nominal effective exchange rate of the euro against the currencies of 21 countries.

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few weeks of the year to about ¥114 per euro in an environment characterised by higher short-term exchange rate volatility and decreasing interest rate differentials between euro and yen assets. In the subsequent period, however, the euro more than compensated for these losses, as the real economic effects of the international financial market crisis were reflected in a dramatic downturn in Japanese economic growth and the marked decline in global trade pointed to ongoing and significant burdens on the Japanese trade balance. As this report went to press, the euro stood at ¥129 and thus 2½% above its level at the start of the year, but about 24% below its level of mid-July 2008.

After reaching an historic high at the end of 2008, the euro relinquished some of its ex-

change rate gains against the pound sterling at the start of the new year. It then mostly traded in a range around £0.90 with strong exchange rate volatility. Bad news from the United Kingdom regarding the crisis in the British banking sector and more clearly apparent concerns about the economy had only temporary effects on the exchange rate regime, as did the purchases of government bonds by the Bank of England. The mostly parallel decline of short-term interest rates in the United Kingdom and in the euro area apparently prevented major shifts in the currency patterns between the euro and the pound sterling. At the end of the reporting period, the euro stood at about £0.88; this constitutes a decline of just under 7½% since the beginning of the year.

... and against the pound sterling

On an average against the 21 currencies included in the index of the effective exchange rate, the euro has depreciated somewhat in net terms since the start of the year. Exchange rate losses against the US dollar, the pound sterling and some commodity currencies were mitigated by exchange rate gains against the Japanese yen and central and eastern European currencies. In the case of the latter, the fact that international investors withdrew from emerging market economies looking for safe and liquid investments may have played a part. A foreign exchange intervention by the Swiss National Bank meant the euro also appreciated somewhat against the Swiss franc. As this article went to press, the effective euro exchange rate was, overall, 2½% below its level at the beginning of the year and about 9% higher than at the start of monetary union. In real terms – ie taking due

Effective euro exchange rate

account of inflation differentials between the euro area and its major trading partners – it was thus well above its longer-term average. However, in view of the moderate price and cost development in recent years, the price competitiveness of the German economy should be rated more favourably.

Securities markets and portfolio transactions

Rise in capital market interest rates

Long-term government bond yields in large industrial countries rose moderately on balance since the start of the year. The GDP-weighted average yield of debt securities with a ten-year maturity issued by the euro-area member states increased by ¼ percentage point compared with the end of 2008 to just under 4% despite intensifying recessionary developments in the economy and declining key interest rates. Corresponding paper from the USA and Japan had lower yield levels but showed a comparatively sharper rise. Ten-year US paper gained almost 1 percentage point despite the Federal Reserve's buyback programme for Treasuries, which led only to a short-term – albeit marked – decline in yields.

Higher yields were the result both of increased government borrowing requirements to finance extensive financial market stimulus packages and real economic support measures and the easing of tensions in the stock markets, which led to funds that had previously been shifted into safe haven assets being reinvested. As a result, the term premiums of ten-year Federal bonds also in-

creased again in the first quarter of 2009.¹ Just last year, these had declined significantly owing to increased demand for safe assets. Hopes of less turbulent capital market interest rate developments were evident in the decline in the implied volatility of options on futures on long-term government bonds. Nevertheless, this uncertainty indicator, which is still clearly above its long-term average, continues to signal that market players remain wary of (negative) surprises.

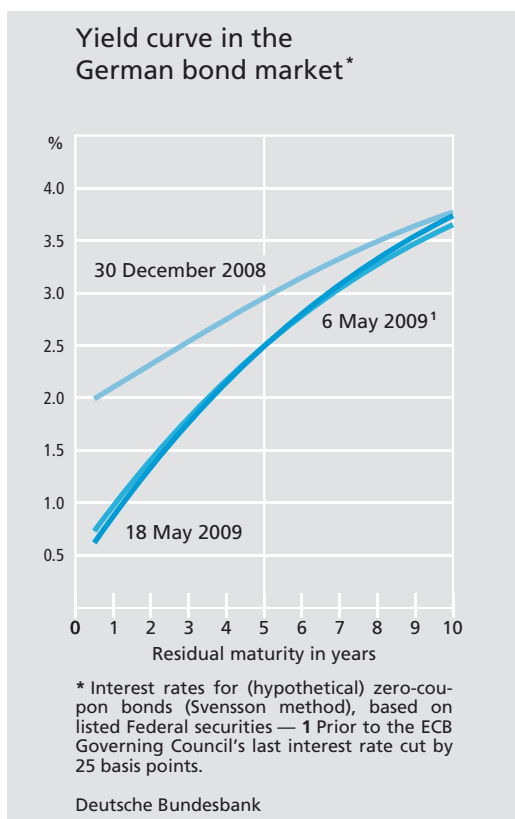
At the same time, the yield curve steepened in the reporting period. In the case of Federal securities, the spread between ten and two-year yields rose to just under 2½ percentage points. While shorter-term interest rates declined since the beginning of the year in line with the – partly already priced-in – key interest rate cuts in the Eurosystem, the yields for longer-term paper were (as already mentioned) somewhat higher. Yields on Federal bonds ultimately rose more than those on other euro-area government bonds, which meant that yield differentials within the euro area narrowed somewhat compared with their levels at the start of the year, when an environment of great uncertainty had led to a pronounced widening.

Steep German yield curve

As a result of the slight signs of a recovery in the financial markets, the spreads of European corporate bonds of the lowest investment grade category, BBB, over government bonds declined by about 160 basis points

Stabilisation in financing conditions for enterprises

¹ On estimating term premiums, see Deutsche Bundesbank, Determinants of the term structure of interest rates – approaches to combining arbitrage-free models and monetary macroeconomics, Monthly Report, April 2006, pp 15-28.



since the start of the year. The absolute yield level in this segment also fell again after the sharp rise in the fourth quarter of 2008. Declining credit risk premiums, as reflected in the iTraxx Europe Index, were a contributory factor.

However, with regard to indications for a lasting stabilisation in the financial markets, it is noteworthy that the signs of a recovery among the non-financial corporations are not mirrored in the area of non-banks that should in effect be included in the financial sector. As this report went to press, the interest rate spreads of financial corporations (excluding banks) were again at the high level seen at the beginning of the year, having temporarily widened significantly in March. This indicates that the fundamental risk assessment for

players with close ties to the financial markets remains fragile.

In the first quarter of 2009, domestic debt securities worth €463 billion (gross) were issued in the German bond market. However, this value – which is only slightly lower than in the previous quarter – was more than compensated for by redemptions and changes in issuers' holdings of their own bonds, which meant that, overall, bonds amounting to €4½ billion were taken out of the market. By contrast, foreign debt securities worth €6 billion were sold in Germany in the reporting period, while a significant volume of foreign bonds had been sold in the final quarter of 2008 (€47 billion). As a result, the overall volume of domestic and foreign debt securities in circulation in Germany increased by €1½ billion.

Net redemptions in the bond market

In the first quarter of 2009, the public sector tapped the capital market for a substantial amount of €32 billion (net). Central government accounted for €26 billion of this, ie about three times as much as in the fourth quarter of 2008 (€8½ billion). The record issuance of Treasury discount paper (Bubills) amounting to €24 billion, whose maturity spectrum was extended from previously just six months to include additional three, nine and twelve-month paper, was particularly striking. In addition, the German government sold five-year Federal notes (€5 billion) and thirty-year Federal bonds (€1½ billion) in net terms in the first quarter of 2009. By contrast, it redeemed ten-year Federal bonds and two-year Treasury discount paper in net terms (€3½ billion and €1 billion, respectively). The

High borrowing by central government

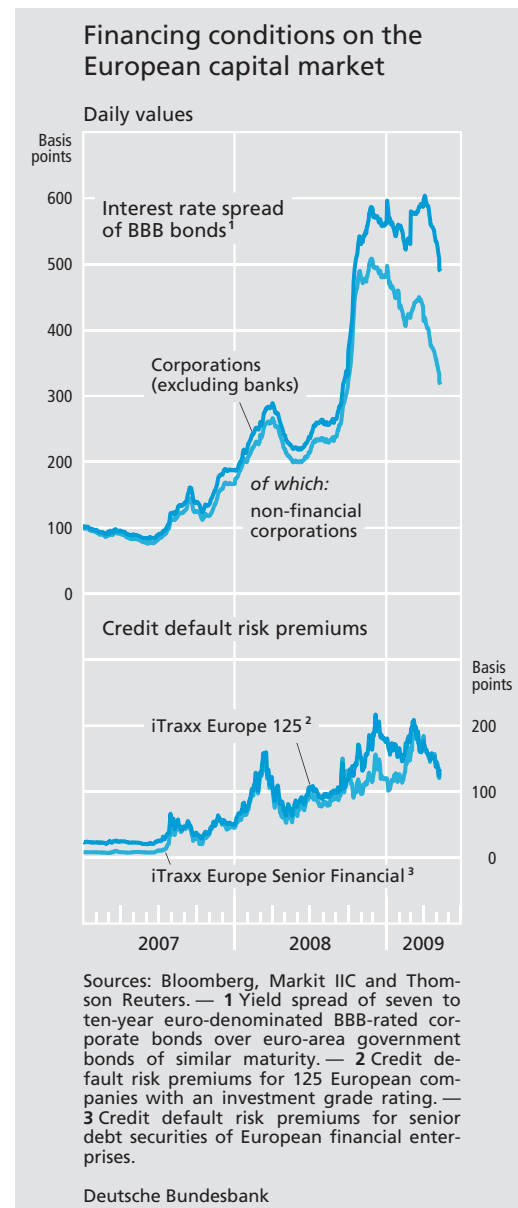
strongly disproportionately high borrowing in the short maturity spectrum served mainly to finance the Special Fund Financial Market Stabilisation – Financial Market Stabilisation Agency (SoFFin). The federal states also extended their capital market debt (€6 billion) as budgetary burdens became heavier.

*Issues
by non-banks*

From January to March 2009, financial corporations (excluding banks) and non-financial corporations issued debt securities amounting to €6½ billion (net) and thus much less than in the previous quarter (€44 billion). As at the end of 2008, a large part of this paper was the result of securitisations by special purpose vehicles, which are based on bank loans and which were absorbed by the banking sector. All in all, the maturity pattern of corporate bonds was extended, since, as in the previous quarter, mainly longer-term securities were issued on balance (€19½ billion), while there were net redemptions of commercial paper.

*Significant net
redemptions
by credit
institutions*

Against the backdrop of the difficult market environment and at times exceptionally high yield spreads over government bonds, credit institutions reduced their capital market debt significantly further (€42½ billion), having already redeemed the same amount of bonds in the previous three-month period. They bought back mainly public Pfandbriefe (€34½ billion) and – despite record levels of gross issuance again – other bank debt securities (€19 billion). Excluding tradable bonds issued with a government guarantee, the decline would even have been €19 billion higher.² Specialised credit institutions, which include the public promotional banks, issued bonds



worth €12 billion (net). By contrast, the outstanding volume of mortgage Pfandbriefe fell by €1 billion.

German debt securities were purchased mainly by domestic credit institutions. These acquired, on balance, €10 billion worth of debt securities in the first quarter; in doing

*Purchases of
debt securities*

² See SoFFin list of 29 March 2009 at http://www.soffin.de/leistungen_garantien.en.php?sub=3.

Investment activity in the German securities markets

€ billion

Item	2008		2009
	Q1	Q4	Q1
Debt securities			
Residents	9.2	7.7	- 1.2
Credit institutions	19.8	10.5	10.1
of which			
Foreign debt securities	14.5	- 46.9	- 25.5
Non-banks	- 10.6	- 2.9	- 11.3
of which			
Domestic debt securities	- 27.7	- 3.0	- 42.8
Non-residents	34.6	- 38.2	2.8
Shares			
Residents	4.4	- 16.3	14.9
Credit institutions	0.9	- 12.3	- 5.1
of which			
Domestic shares	9.0	- 7.8	- 3.6
Non-banks	3.5	- 4.0	20.0
of which			
Domestic shares	3.3	8.7	16.0
Non-residents	- 11.2	2.4	- 4.1
Mutual fund shares			
Investment in specialised funds	- 4.0	0.3	5.9
Investment in funds open to the general public	- 1.4	- 11.3	1.8
of which: Share-based funds	- 3.4	0.5	0.7

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so, they substituted foreign (-€25½ billion) with domestic (€35½ billion) paper. Of the latter, they purchased, in particular, debt securities issued by other banks (€18 billion) as well as corporate bonds (€12½ billion), of which mainly paper securitised by financial special purpose vehicles based on credit portfolios outsourced by banks. Non-residents purchased domestic paper worth €3 billion (net). They switched out of paper issued by private borrowers (-€25½ billion) and into public sector bonds (€28 billion). Domestic non-banks surrendered domestic and foreign debt securities worth €11½ billion.

Signs of recovery in the international stock markets

In the reporting period, the international stock markets were caught between concerns about the condition of the financial sector and the real economy, on the one hand,

and hopes that the government rescue packages and key interest rate cuts would have a stabilising effect, on the other. The tensions in certain financial market segments and the recession-induced decline in earnings expectations lowered stock prices on both sides of the Atlantic by mid-March to around 80% of their level at the end of 2008. This was predominantly driven by bank and insurance shares, which initially declined by up to 40% in value after reporting high losses in the spring months. At the same time, uncertainty about further share price developments, as measured by the implied volatility of stock options, increased further in January and February. However, the announcement of the Geithner plan for relieving US banks of toxic securities ("Public-Private Investment Program") led to a certain stabilisation and a noticeable upswing in the stock markets in the second half of March, at first mainly for banking stock. Largely determined by the development of bank and insurance stocks, both the Dow Jones EuroStoxx and S&P 500 recouped most of their previous share price losses. Financials alone rose by just over 70% in the euro area and just over 80% in the USA, from their low in March. Positive earnings reports for the first quarter of 2009 by individual financial institutions also likely contributed to this shift in sentiment.

Viewed as a whole, however, the earnings prospects of European enterprises for the next twelve months deteriorated further according to analyst surveys until the end of April. Both developments – the rise in share prices and the downward revisions of earnings – helped lift the price-earnings ratio of

Further deterioration of earnings prospects over the next 12 months

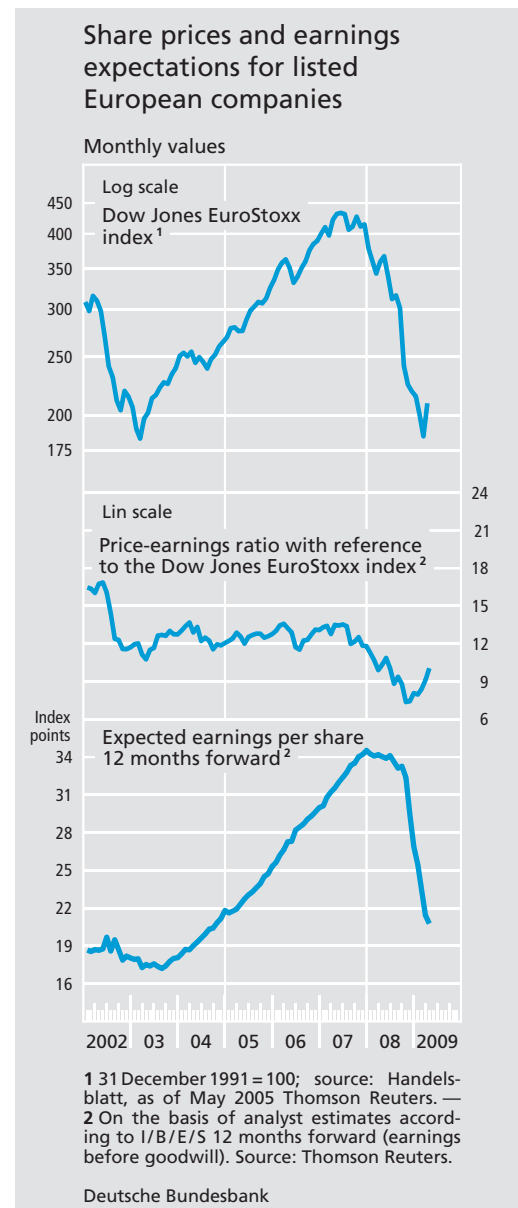
the broad-based Dow Jones EuroStoxx Index sharply from 8.1 at the start of the year to 10.1 at the end of the period under review. Unlike short-term earnings forecasts, however, analysts recently revised their expectations for medium to longer-term earnings growth upwards by just over 1 percentage point to 5.5%. The increase in the corresponding figure for financial sector enterprises was especially high – it went up 3 percentage points to 7.9%. Such a growth rate had not been expected for financial assets since September 2008.

Reduced risk premiums on equity investments

The implied risk premium on equity investments – which can be calculated, for example, using a dividend discount model – clearly declined as share prices rose in recent weeks. The slight return of confidence this reflects can likely be attributed primarily to a somewhat higher “risk appetite” on the part of market players as share price uncertainty waned and given some improved sentiment indicators for the real economy. This can also be seen in declining risk premiums on the markets for credit derivatives (CDS). Nevertheless, these “crisis indicators” are still well above their levels of the fourth quarter of 2008.

Stock market funding and stock purchases

The slight reduction in uncertainty on the stock markets meant issuing activity on the domestic stock market revived in the first quarter of 2009. At €8½ billion, domestic enterprises issued a greater amount of new stock than in the previous quarter (€3½ billion). Just over €5 billion of this was accounted for by listed equities. A major role was played by – partly government-supported –



capital increases by financial and automobile enterprises. In the reporting period, as in the last three months of 2008, German shares were purchased on balance solely by resident non-banks (€16 billion). By contrast, non-resident investors and domestic credit institutions reduced their holdings of German shares by €4 billion and €3½ billion, respectively. The outstanding amount of foreign equities in the German market increased

Major items of the balance of payments

€ billion

Item	2008		2009
	Q1	Q4	Q1
I Current account 1,2	+ 49.6	+ 37.2	+ 19.3
Foreign trade 1,3	+ 51.2	+ 33.8	+ 26.9
Services 1	- 0.9	- 0.9	- 4.2
Income 1	+ 14.8	+ 14.8	+ 12.8
Current transfers 1	- 12.2	- 6.8	- 13.1
II Capital transfers 1,4	+ 0.5	- 0.6	+ 0.0
III Financial account 1 (Net capital exports: -)	- 60.6	- 47.5	- 1.8
1 Direct investment	- 37.3	- 18.2	- 11.8
German investment abroad	- 43.1	- 22.5	- 13.7
Foreign investment in Germany	+ 5.8	+ 4.3	+ 2.0
2 Portfolio investment	- 10.8	+ 36.4	- 9.5
German investment abroad	- 32.4	+ 74.4	- 5.0
Shares	+ 12.0	+ 14.0	+ 0.6
Mutual fund shares	- 12.7	+ 13.6	+ 0.4
Debt securities	- 31.6	+ 46.8	- 6.0
Bonds and notes 5	- 23.3	+ 20.7	- 11.5
of which Euro-denominated bonds and notes	- 5.9	+ 13.6	- 15.4
Money market instruments	- 8.4	+ 26.1	+ 5.5
Foreign investment in Germany	+ 21.5	- 38.0	- 4.5
Shares	- 11.5	+ 2.9	- 7.7
Mutual fund shares	- 1.5	- 2.7	+ 0.4
Debt securities	+ 34.6	- 38.2	+ 2.8
Bonds and notes 5	+ 17.2	- 45.3	- 15.5
of which Public bonds and notes	- 1.0	- 7.4	+ 8.8
Money market instruments	+ 17.4	+ 7.1	+ 18.3
3 Financial derivatives 6	- 19.6	+ 10.2	+ 2.9
4 Other investment 7	+ 8.2	- 74.3	+ 16.3
Monetary financial institutions 8	+ 18.2	- 87.5	+ 83.7
of which: short-term	+ 46.4	- 73.1	+ 87.3
Enterprises and households	- 9.4	+ 34.1	- 25.6
of which: short-term	- 14.2	+ 27.5	- 22.4
General government	+ 6.2	- 8.9	+ 16.7
of which: short-term	+ 7.4	- 9.2	+ 17.5
Bundesbank	- 6.8	- 12.0	- 58.5
5 Change in reserve assets at transaction values (increase: -) 9	- 1.2	- 1.6	+ 0.3
IV Errors and omissions	+ 10.5	+ 11.0	- 17.5

1 Balance. — 2 Including supplementary trade items. — 3 Special trade according to the official foreign trade statistics (source: Federal Statistical Office). — 4 Including the acquisition/disposal of non-produced non-financial assets. — 5 Original maturity of more than one year. — 6 Securitised and non-securitised options as well as financial futures contracts. — 7 Includes financial and trade credits, bank deposits and other assets. — 8 Excluding the Bundesbank. — 9 Excluding allocation of SDRs and excluding changes due to value adjustments.

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slightly on the whole by €2½ billion. On balance, it was again only domestic non-banks that purchased this paper (€4 billion), while credit institutions sold foreign shares amounting to €1½ billion.

Domestic investment companies recorded an inflow of €7½ billion in the reporting period, following an outflow of €11 billion in the previous quarter. Funds open to the general public sold certificates worth €2 billion from January to March 2009, while specialised funds reserved for institutional investors achieved an inflow of funds of €6 billion. Of the funds open to the general public, open-end real estate funds and bond funds, in particular, were able to sell own shares (€1 billion in each case); equity funds were also able to do so to a lesser degree (€½ billion). However, against the backdrop of sharply reduced short-term interest rates, money market funds once again suffered outflows of funds (€1½ billion). The holdings of shares in the other fund categories hardly changed overall in the first quarter. However, funds operated by foreign companies and traded on the German market had to buy back certificates worth €½ billion net. Domestic and foreign fund shares were overwhelmingly bought by resident non-banks and only to a very small degree by foreign investors (€18 billion and €½ billion, respectively). This indicates that non-banks reinvested the funds they had previously shifted into government-guaranteed bank deposits and public debt securities in response to the financial crisis in investment certificates. By contrast, German credit institutions sold fund shares worth €11 billion on balance.

Sales and purchases of mutual fund shares

Direct investment

If the cross-border securities transactions are aggregated, this yields net capital exports of €9½ billion in the months January to March 2009, following capital imports of €36½ billion in the previous three-month period. Direct investment also resulted in outflows of funds abroad since the beginning of the year. These outflows amounted to €12 billion, compared with €18 billion in the final quarter of 2008.

*German direct
investment
abroad*

This was due largely to the fact that domestic proprietors provided their affiliates abroad with €13½ billion worth of funds. They mainly increased their equity capital abroad (€19½ billion), with the financial sector accounting for the largest share (€11½ billion). The most important recipient countries were Luxem-

bourg (€10 billion) and the United Kingdom (€3½ billion). There were further capital outflows as earnings were reinvested (€6½ billion). Conversely, German firms experienced inflows of funds from intra-group credit relationships (€12½ billion). These mainly originated from financing subsidiaries in the Netherlands, which had tapped the capital market for funds.

Foreign firms provided their branches in Germany with merely a small amount of additional funds (€2 billion). While they provided them with €7 billion through the injection of equity capital and through reinvested earnings, they simultaneously withdrew €5 billion in credit transactions – in particular by withdrawing previously granted financial and trade credits.

*Foreign direct
investment
in Germany*

The German government's "bad bank" model

Additional element in the government's financial market stabilisation framework

The severe financial market crisis and the resulting high degree of uncertainty continue to endanger overall economic activity. The Financial Market Stabilisation Act (*Finanzmarktstabilisierungsgesetz*),¹ which was passed in October 2008, has undeniably made an important contribution to stabilising the situation through the measures the Financial Market Stabilisation Fund (Special Fund Financial Market Stabilisation (*Sonderfonds Finanzmarktstabilisierung* or SoFFin)) has undertaken to date. However, the developments of the past few months have shown that these measures have not been sufficient to eliminate the uncertainty regarding the financial system and the real economy arising from questions concerning the underlying value of problematic assets, especially on banks' balance sheets. The German government therefore passed the Draft Act to Develop Financial Market Stability (*Gesetzentwurf zur Fortentwicklung der Finanzmarktstabilisierung*) on 13 May 2009, based not least on the lessons learned from previous financial crises which indicate that the "detoxification" of balance sheets is a key condition for restoring confidence in the financial sector. The draft act focuses on freeing up balance sheets by hiving off financial assets subject to a severe impairment risk to special purpose vehicles ("bad banks"). The legislation is currently going through the parliamentary process.

Objectives and key criteria

The underlying objective of the government initiative is to stabilise the banking system and the financial market. As with any government assistance, however, fundamental principles of a market economy should be observed, and the financial risk to the general pub-

lic should be minimised. A "bad bank" solution must therefore meet certain key criteria.

Freeing up balance sheets and restoring confidence in financial sector enterprises

Financial sector enterprises that are relevant to financial market stability should be freed of high uncertainty and risk by ensuring that risky assets are effectively removed from banks' balance sheets. Providers of new equity and debt capital should be shielded from risks arising from the revaluation of problematic assets.

Ensuring losses are borne by those who caused them: relief for enterprises, but not for risk capital providers

In a market economy, the providers of equity and risk capital bear the risks arising from entrepreneurial activities and benefit from the opportunities. On the other hand, the government must, in the public interest, provide protection especially for systemically relevant enterprises where their existence is threatened in order to maintain the stability of the financial system. However, this does not apply to the net worth of the shareholders who provided the risk capital.

Subordinated liability of government and minimised burden on government coffers

It is one of the government's tasks to ensure the ongoing functional viability of the financial system in a crisis. However, where possible the government's legal responsibility should be subordinated to that of the risk capital providers. The risks and opportunities arising from enterprises' transactions should, therefore, remain with the old owners wherever possible – as would, incidentally, also be the case if the "bad bank" model were not deployed.

¹ See Deutsche Bundesbank, Monthly Report, November 2008, pp 30-31 for an outline of the Financial Market Stabilisation Act as at 17 October 2008. — ² Below we provide a rough outline of the "bad bank" model according to the government's draft legislation. The details will, in some cases, need to be clarified, and further changes and adjustments are possible during the legislative process. Alongside the model presented here, the German government is also working on a more comprehensive model for transferring further risk positions and business units. — ³ These include, in particular, far-reaching disclo-

sure requirements in terms of the impaired assets, adequate capital levels, a sound business policy and solid business model. In addition, the transferring enterprises must comply with the same management remuneration requirements as for the recapitalisation instrument. — ⁴ Cut-off date 31 March 2009 or later; otherwise, the book value as at 31 March 2009 shall apply as determined according to the applicable rules for the annual accounts. — ⁵ According to the European Commission, the real economic value is the transfer value reflecting the underlying long-term economic value of the assets on the basis of

Risk offload conditional on a sustainable business concept and sufficient capital levels

Financial sector enterprises that benefit from offloading their risks should have both a sustainable business concept and sufficient capital levels, both at the present juncture and going forward. The government initiative is intended neither to compensate enterprises for currently foreseeable losses nor to keep unprofitable institutions or business units afloat. Rather the intention is to dispel the uncertainty surrounding the future development of the underlying value of illiquid and complex bank assets that is aggravating the crisis.

Limiting impact of valuation problems on distribution of losses

It is currently very difficult to reliably determine the real economic value of the problem assets. Nevertheless, the decision on large-scale financial risks for the state will have to be delegated to (expert) third parties. The consequences of misvaluations should therefore be minimised when it comes to the final distribution of losses between the government and the equity capital providers.

The "bad bank" model – an outline²

Voluntary participation of systemically relevant banks, in particular

The Financial Market Stabilisation Agency (*Finanzmarktstabilisierungsanstalt*) decides on institutions' application to participate in the government "bad bank" model, giving special consideration to their systemic relevance, the urgency of their situation and the principle of the most effective and economical de-

underlying cash flows and broader time horizons. See also European Commission, Communication from the Commission on the treatment of impaired assets in the Community banking sector of 25 February 2009. — ⁶ Including the associated hedging transactions. Examples are asset backed securities (ABS), residential or commercial mortgage backed securities (RMBS, CMBS) and collateralised debt obligations (CDO). — ⁷ The haircut will be determined by SoFFin on a case-by-case basis. — ⁸ The constant percentage is calculated by dividing the difference (reduced book value minus fundamental value) by the

ployment of resources. In comparison with the other stabilisation instruments according to the Financial Market Stabilisation Act, the range of potential applicants is more narrowly defined and includes only credit institutions, financial holding companies and their subsidiaries (hereinafter referred to as transferring enterprises) domiciled in Germany as at 31 December 2008. An application to participate must be made within six months of the Act to Develop Financial Market Stability being promulgated and is conditional on various requirements³ being met. There is no legal entitlement to participate; however, neither can enterprises be obliged to participate.

Offloading of problem financial assets to a special purpose vehicle at reduced book value

To offload impaired financial assets, a special purpose vehicle (SPV) is set up, which does not require authorisation to conduct banking business. The problematic financial assets are then transferred to the SPV at the reduced book value. This is the higher of 90% of the book value as stated in the last audited annual accounts⁴ or the real economic value.⁵ The latter must be calculated by the transferring enterprise, and this valuation must be checked by an expert third party nominated by SoFFin and confirmed by the banking supervision authorities. The flat-rate haircut on the book value is subject to the proviso that the transferring enterprise retains a core capital ratio of at least 7%.

The range of impaired financial assets that can be transferred to the SPV includes structured securities.⁶ Plain vanilla loans, for instance, are not included. In addition, the SPV may only take over impaired financial assets that the transferring enterprise acquired prior to 31 December 2008.

number of full years in the term of the guarantee. As compensation payments are limited to a maximum of 20 years, the annual percentage is at least a twentieth of the difference. — ⁹ In the original draft of the Act, problematic assets were to have been transferred to the SPV at book value, with a compensation payment equal to the difference between the book value and the fundamental value to be paid in instalments. The 10% flat-rate haircut on the book value now envisaged in the legislation means that the transfer of assets to an SPV results in an immediate write-down on equity and consequently to a

The German government's "bad bank" model (con'd)

Funding through government-guaranteed debt securities issued by the SPV

The transfer of the impaired financial assets at the reduced book value is financed through the issue of a corresponding volume of interest-paying debt securities by the SPV to the transferring enterprise. The debt securities issued by the SPV are guaranteed by SoFFin in return for remuneration at market rates. This remuneration is based, *inter alia*, on an institution-specific percentage of the maximum guarantee provided to cover default risk plus a margin. The guarantee may not run for longer than the contractual maturity of the longest-dated structured security.

Balance sheet relief for transferring enterprise

From the perspective of the transferring enterprise, exchanging impaired risky financial assets for safe, interest-paying bonds guaranteed by SoFFin gives effective balance sheet relief. These guaranteed bonds may be used as collateral in refinancing transactions within the Eurosystem and may reduce capital requirements as they have a lower risk weight. Both factors should encourage lending.

Repayment of the difference between the reduced book value and the fundamental value over a period of up to 20 years, capped at amount of income distributable to shareholders

To ensure that the SPV does not end up with a loss from today's perspective and therefore that the guarantee does not mean the government has to intervene, the transferring enterprise must pay a compensation sum spread over a specific period. To set the compensation payment, the fundamental value of the paper must first be determined. This is calculated as the real economic value minus a risk haircut.⁷ The dif-

reduction in the bank's lending base. Moreover, the additional haircut to be applied by SoFFin when calculating the fundamental value remains in place. Furthermore, institutions would be subject to greater uncertainty if the European Commission were to monitor not only the legislation and its proper implementation, but also each individual case for compliance with state-aid regulations. — 10 While this payment is deferred, interest-bearing debt securities in the amount of the reduced book value are transferred immediately for the entire term of the guarantee. Consequently, the transferring enterprises re-

ference between the reduced book value and the fundamental value determines the expected loss and therefore the compensation payment, which the transferring enterprise must pay to the SPV in equal annual instalments⁸ spread over the life of the guarantee, although at most 20 years. This annual instalment is capped by the amount that would otherwise be paid out to shareholders in the respective business year.⁹ The interest rate advantage arising from the deferred payment of the difference between the reduced book value and the fundamental value must be remunerated in the form of a market-based fee for SoFFin's guarantee (the guarantee fee).¹⁰ If, in any one business year, the sum to be disbursed to the shareholders is lower than the annual compensation payment to be made to the SPV, the latter will be increased in subsequent years until it reaches the sum to be disbursed to the shareholders.

Transferring enterprises shielded from further risks

The transferring enterprises therefore incur no more risks from the problematic securities once they have been written down to the reduced book value. They are protected against any additional write-downs on the impaired assets and thus from any further deterioration in their solvency situation this could entail.

Old owners continue to participate in all opportunities and, to a large extent, in all risks, government has only a subordinated liability, new investors shielded from risks

To ensure that the government's liability for any losses is, at most, subordinated and that the current providers of risk capital remain responsible to as great an extent as possible for the opportunities and risks arising from the problematic assets, as is appropriate under a market-based regulatory policy (and as would

ceive interest payments on a loss that has yet to be repaid amounting to the difference between the reduced book value and the fundamental value. To prevent this subsidy, the guarantee fee should take due account of this interest-rate advantage. — 11 In this case, the losses exceed the difference between the reduced book value and the fundamental value. — 12 Where transferring enterprises do not operate as public limited companies, SoFFin must stipulate this extended liability in the terms of the guarantee. — 13 A more consist-

be the case if the “bad bank” model were not deployed), both extended liability and extended profit participation are envisaged. This perceptibly eases the valuation problem, as potential errors have only a limited impact on the ultimate distribution of profits and/or losses.

In terms of the distribution of potential profits, the SPV’s profits are, in the event of a positive balance for the SPV after full disposal of the impaired financial assets, to be given to the transferring enterprise for distribution to its shareholders. Consequently, SoFFin would receive compensation for the assumption of the risk of a loss in the form of the guarantee fee, but would not participate in any further profits.

If the compensation payments paid over the term of the guarantee do not cover losses compared to the reduced book value,¹¹ the shareholders in the transferring enterprise must make up the shortfall from the income distributable to them (the dividends) after disposal of the relevant structured securities. Their liability therefore extends beyond the term of the guarantee. This additional loss compensation may also be effected by issuing shares to SoFFin. There is no time bar on SoFFin’s claims.¹² However, risk capital providers’ liability is perceptibly limited under the current plans in that the final disposal of the structured paper and thus the final calculation of losses are, in some cases, far off in the future, and any dividends paid out in the meantime are not included in the liability.¹³

In order to render the transferring enterprises attractive for new capital and shield this new capital from the risks associated with the problematic securities, preferential shares can be issued (which may also have voting rights).¹⁴ Unlike the stock of other shareholders, these are given preferential treatment over SoFFin’s claims in the event of extended liability. The

ent implementation of subordinated liability on the part of the government as part of the “bad bank” model could, for instance, be to have all dividends (with the exception of those paid to new preferential shareholders) flow into the SPV and to issue the shareholders with tradable participation certificates on the SPV’s profits in return. That would indeed mean that all opportunities and risks remain with the current risk capital providers. The tradable participation certificates would allow the anticipated profits (including the dividends

transferring enterprise is therefore attractive for new investors, as they are not burdened with incalculable risks from problematic assets (although they do not benefit from potential profits from the realisation of the problematic assets either). It should, however, be ensured that the preferential shareholders’ claims on distributable profits are no greater than their percentage share in the equity capital to prevent the government’s claim to senior liability of the current equity capital from being diluted.

All in all, the government consequently does not benefit from potential profits from the realisation of problematic assets, but at the same time only has subordinated liability after the risk capital providers. Nevertheless, it does assume the risk that future dividends will not cover losses (and the interest payments incurred thereafter).¹⁵ This should constitute the government’s only contribution to stabilisation. Assumption of this risk is inevitable if the government wishes to rule out the possibility of a systemic bank becoming insolvent and if providers of debt capital and future providers of equity capital are to be shielded from risk. Nevertheless, it must be ensured that the old owners cannot escape their liability by carrying out dividend payments, capital reductions or the like ahead of the liability event.¹⁶

However, by taking part in the “bad bank” model, the current shareholders continue to participate in the opportunities and risks of the relevant financial securities – just as they would if the securities were to remain with the transferring enterprise. Credit institutions are shielded from future risks arising from problematic securities by participating in the “bad bank” scheme, rendering them attractive for new investors. This may mitigate the uncertainty in the financial markets.

“saved up” in the SPV) to be realised at any time. — **14** Up to a maximum of 50% of the equity capital as at the day the Act enters into force. — **15** In other words (to simplify), if the present value of the losses incurred on problematic securities exceeds the present value of the current equity capital of the transferring enterprise. — **16** If the accruing loss looks likely to exceed the return on capital (dividends), measures should be put in place to prevent the transferring enterprise from attempting to compensate for this by incurring large risks.