Financial markets

Financial market trends

The international financial markets again experienced heavy turmoil at the beginning of the first guarter of 2008, although this subsided somewhat towards the end of the guarter and in subsequent weeks. Concerns about the financial soundness of several financial institutions, particularly in the USA, and about the extent of the required writedowns as well as worries about the global economy initially resulted in substantial stock market losses worldwide; at the same time, the spreads on some risky bonds soared to new record highs. A significant increase in risk aversion meant that investors – as in the previous quarter - carried out numerous portfolio changes in favour of safe securities, thus putting government bond yields under considerable pressure. However, after the Federal Reserve had facilitated access to liquidity in mid-March and again lowered its key interest rate, the markets experienced a countermovement, which was also partly based on market players' hope that any US recession would be a mild one. Against this backdrop, the euro put in a comparatively strong performance on the foreign-exchange markets; it briefly attained new highs against important currencies, but relinquished some of its gains towards the end of the reporting period.

Financial market setting

Exchange rates

Despite the two Fed rate cuts totalling 125 basis points in January, the euro initially remained largely range-bound against the

Euro exchange rate development against the US dollar ...



US dollar in a band around US\$1.47 in the first two months of 2008. Concerns that the imminent economic slowdown in the USA could spill over to the euro area may have played a role. However, as inflation risks in the euro area became increasingly apparent, leading many market players to believe that an ECB rate cut was less likely, and growth forecasts for the US economy were simultaneously lowered in response to weak economic

data, the euro moved into an upward trend against the US dollar at the end of February. In mid-April, the single currency reached a new historic high at just under US\$1.60 after Eurostat had revised the euro-area inflation rate for March upwards and general interestrate expectations had risen. However, this was followed by slight losses in the euro-dollar exchange rate after publication of a weaker-than-expected Ifo business climate index; given historically relatively high short-term exchange-rate volatility, the euro was trading at around US\$1.55 when this report went to press, still 5% higher than at the beginning of the year.

... the yen ...

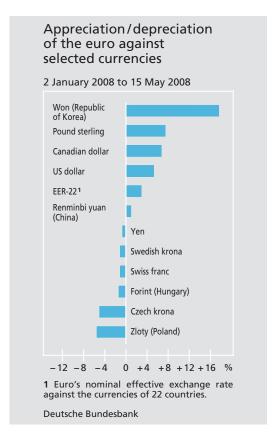
Ultimately, the euro was virtually unchanged against the yen in the first few months of the year - despite some strong exchange-rate fluctuations. The yen's role as financing currency for carry trades is frequently cited as the reason for the, by historical standards, high euro-yen volatility. These transactions mean that changes in risk perception and tolerance on the international stock and bond markets - triggered for example by the problems on the US mortgage market and their knock-on effects in other areas – can have an immediate impact on demand for the Japanese currency. The positive correlation between stock market developments in the euro area and the euro-ven exchange rate that has been observed for some time is an indication that this is indeed the case. In addition, the Bank of Japan's Tankan report at the beginning of April indicated that the economic outlook was clouding over, a development which could have contributed to the view that interest rates in Japan would remain low, the basis for carry trades. When this report was concluded, the euro was only slightly below its level at the beginning of the year, at just under ¥163.

... and the pound sterling

A further cooling of the housing market as well as continued problems on the UK credit markets hurt the pound sterling in the first quarter of 2008. However, the ongoing inflation risks prevented the Bank of England from carrying out more significant rate cuts than those made in February and April. Against this backdrop, the euro-pound exchange rate initially range traded before moving into an upward trend at the beginning of March. More negative news about the UK economy sent the euro up to an historic high of more than £0.80 in mid-April, some 10% higher than at the start of monetary union. Towards the end of the reporting period, the euro was hardly any lower at just under £0.80. This equates to a gain of almost 9% compared with its level at the beginning of the year.

Effective euro exchange rate

The euro's performance against some other major currencies has been very heterogeneous in the year to date. For example, the single currency posted considerable gains against the Korean won (17½%) and the Canadian dollar (7%) but slipped further against the Czech krona (-5%) and the Polish zloty (-5½%). On average, however, the euro appreciated against the 22 major currencies contained in the exchange rate index and reached a new historic high in mid-April 2008. As this article went to press, the effective exchange rate was 3% above its level at the beginning of the year and around 12% higher than at the start of monetary union. In



real terms, ie taking account of the inflation differentials between the euro area and its major trading partners, the euro's effective exchange rate also rose slightly, a fact which points to losses in price competitiveness. However, the comparatively moderate price and cost developments seen in Germany for years mean the country's price competitiveness can currently still be regarded as favourable.1

¹ The accession of Malta and Cyprus to the euro area meant the trade weights for the indicators of the German economy's price competitiveness were adjusted. In addition, Greece has been included in the narrow group of countries since it introduced the euro in 2001 and Slovenia since 2007. The current weightings of important trade partners' currencies are listed in the table on page 40.



Weighting scheme of the indicators of the German economy's price competitiveness following the introduction of the euro in Malta und Cyprus *

In thousandth

In thousandths									
	Price comp	etitiveness	of the Germa	n economy ag	gainst a				
	medium-si group of countries group of cou								roup of
	18 trading	partners	19 trading partners	20 trading partners	22 trading partners	36 trading	partners	56 trading	partners
Country/group of countries	up to 1998 1	1999 to 2001 ²	2001 to 2006 2,3	2007 2,4	from 2008 2,5	up to 1998 1	from 1999 2	up to 1998 1	from 1999 2
Narrow group of coun-									
tries	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	859.1 60.4	836.1 51.9	772.8 54.3	756.8 47.0
Belgium Finland	71.3	62.9 14.7	62.6 14.7	62.2 14.6	62.1 14.6	11.9	12.2	10.7	11.0
France	150.5	142.2	141.4	140.5	140.3	127.5	117.3	114.7	106.2
Greece	1		5.8	5.7	5.7	5.1	4.8	4.6	4.3
Ireland	13.0	24.5	24.3	24.2	24.1	11.0	20.2	9.9	18.3
Italy Luxembourg	113.7 4.7	104.0 4.3	103.4 4.2	102.7 4.2	102.6 4.2	96.3 4.0	85.8 3.5	86.6 3.6	77.7
Malta	4.7	4.5	4.2	4.2	0.7	0.6	0.6	0.5	0.5
Netherlands	84.1	85.0	84.5	84.0	83.9	71.2	70.2	64.1	63.5
Austria .	57.1	55.7	55.4	55.1	55.0	48.4	46.0	43.6	41.7
Portugal	13.9	13.6	13.5	13.4 6.2	13.4	11.8	11.2	10.6	10.2
Slovenia Spain	46.2	48.3	48.0	47.7	47.7	5.7 39.1	5.2 39.9	5.1 35.2	36.1
Cyprus	40.2	10.5	40.0	77.7	0.4	0.4	0.3	0.3	0.3
Denmark	20.1	18.3	18.1	18.0	18.0	17.1	15.1	15.4	13.6
Sweden	29.6	26.8	26.7	26.5	26.5	25.0	22.1	22.5	20.0
United Kingdom	107.8	108.0 7.9	107.3 7.9	106.7 7.9	106.6 7.9	91.4 7.9	89.1 6.6	82.2 7.1	80.7 5.9
Norway Switzerland	54.5	48.8	48.5	48.2	48.1	46.2	40.2	41.5	36.4
Japan	79.0	71.8	71.4	70.9	70.9	66.9	59.2	60.2	53.6
Canada	10.7	12.6	12.5	12.4	12.4	9.1	10.4	8.2	9.4
USA Additional constrict land	120.5	150.6	149.8	148.9	148.7	102.1	124.3	91.9	112.5
Additional countries be- longing to the medium-									
sized group of countries						140.9	163.9	126.8	148.4
Bulgaria	1 :					1.4	1.5	1.3	1.3
Estonia						0.6	0.8	0.5	0.7
Latvia						0.6	0.8	0.5	0.7
Lithuania Poland						1.1 20.4	1.3 24.6	1.0 18.4	1.1 22.3
Romania	:			:	:	4.3	4.8	3.9	4.4
Slovakia	:					6.2	7.6	5.6	6.9
Czech Republic						18.9	23.9	17.0	21.7
Hungary China						12.3 28.5	19.2 37.6	11.0 25.6	17.4 34.1
Hong Kong, SAR	:		,			13.5	12.1	12.1	11.0
Republic of Korea	1 :					18.0	15.9	16.2	14.4
Singapore						10.5	9.8	9.5	8.8
Australia						4.6	4.0	4.2	3.6
Additional countries belonging to the broad									
group of countries	l .		l .					100.4	94.8
Iceland								0.3	0.4
Israel								4.5	4.9
Croatia Russia								2.5 12.0	1.9 10.1
Turkev	1 :							13.2	12.1
Algeria	1 :							0.4	0.4
Morocco								1.4	1.3
South Africa								5.8	5.8
Argentina Brazil								1.9 8.3	1.6 6.9
Chile	1 :							1.3	1.2
Mexico								4.7	7.7
Venezuela								0.8	0.6
India								7.3	6.0
Indonesia Malaysia								5.3 7.3	3.9 6.8
Philippines								2.6	3.4
Taiwan								13.5	13.8
Thailand								6.6	5.4
New Zealand								0.7	0.6
Total	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0

^{*} For a list of the weights used previously, see Deutsche Bundesbank, Monthly Report, May 2007, p 34. — 1 Base 1995 to 1997. —

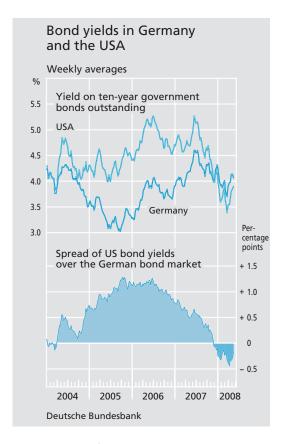
Deutsche Bundesbank

² Base 1999 to 2001. — **3** Euro introduced in Greece. — **4** Euro introduced in Slovenia. — **5** Euro introduced in Malta and Cyprus.

Securities markets and portfolio transactions

Capital market rates fall in euro area ...

In the first guarter of 2008, the securities markets again felt the effects of the turmoil spreading from the credit markets. The need for large write-downs in connection with structured products put financial institutions under severe pressure and meant rescue measures had to be taken in individual cases. In addition, unfavourable economic data, especially in the USA, and rising commodity prices worldwide resulted in stock market prices plummeting. The spreading uncertainty - as indicated, for instance, by the sharp increase in volatility indices - meant investors showed a preference for government bonds, which offer security and liquidity, particularly in turbulent times. As a result, yields for such paper dropped significantly at times during the reporting period, starting in the USA. Within the euro area, yields for ten-year bonds temporarily fell by more than 50 basis points, while yields on very liquid debt securities such as government bonds slipped by as much as 70 basis points. Euro-area yields did not bottom out, at just under 4%, until mid-March when the Federal Reserve again lowered key interest rates sharply and simultaneously gave primary dealers access to its discount window. The "flight to quality" subsequently eased, and a countermovement set in. Capital market rates for European government bonds are currently somewhat higher than 41/4% and therefore only slightly below their end-of-2007 level. Since mid-March, there have been increases in both inflation expectations – based on the difference between nominal and real interest rates – and the real



component, reflecting the again slightly more optimistic economic outlook for the euro area.

As US government bond yields fell even more sharply than their euro-area counterparts in the first quarter, the interest-rate advantage of euro-area bonds temporarily widened to more than 70 basis points. Fears that the financial market turmoil could have a significant impact on the real economy had a particularly negative impact. However, the prospect that the crisis would be contained and the unexpectedly strong GDP data published at the end of April, which raised hopes that a potential US recession would be mild, if it occurred at all, saw long-term interest rates pick up again significantly. As this report went to press, interest rates on ten-year US govern-

... and even more so in dollar area



Price competitiveness and economic growth – a non-linear relationship?

Although Germany's price competitiveness is now less important for determining growth in German exports than external demand, it still exerts a significant influence.1 In the light of the continuing strength of the euro, the question arises as to what impact this could have on the German economy. While German exporters have generally coped well with the appreciation of the euro since 2001, the view is increasingly being expressed in public debate that the euro-dollar exchange rate has now reached a level at which a further strengthening of the single currency will significantly harm exports and ultimately economic development in Germany. This opinion is based on the implicit assumption that there is a non-linear relationship between the real exchange rate, on the one hand, and export performance or economic growth, on the other.

This question will now be examined using econometric methods which model the non-linearity of exchange rate effects by measuring the absolute deviation of price competitiveness from its long-term average. It has to be remembered when interpreting the results that the weight of the US dollar in this indicator for Germany is comparatively low at about 15% as a considerable proportion of German foreign trade is conducted with other euro-area countries.

The relationship between real economic growth in Germany (y_t) and the relative change in price competitiveness² (w_t) can naturally be obscured by other factors. The following estimation is therefore designed to take account of the impact of the real long-term interest rate³ (r_t) and the effects of external demand⁴

 (d_t) . Furthermore, rigidities in economic activity could lead to a significant contribution to the lagged real economic growth. In order to identify any non-linear effects of changes in price competitiveness on real economic growth (in addition to the linear effects of the aforementioned macroeconomic variables), equation (1) was estimated using a STAR model⁵ based on quarterly data for the years 1993 to 2006:

(1)
$$y_t = \beta_0 + \beta_1 y_{t-1} + \beta_2 r_{t-4} + \underbrace{\delta \cdot \omega_t}_{\beta_{3t}} w_{t-lag} + \beta_4 d_t + \epsilon_t$$

where the changing influence of the exchange rate is represented by the time-varying factor

(2)
$$\omega_t = \frac{2}{1 + exp(\gamma \cdot |dev_{t-lag}|)}$$

and fulfils a logistical function. Furthermore, $|dev_{t-lag}|$ represents the absolute deviation of price competitiveness from its long-term average.⁶ The long-term average is interpreted as being a "neutral" level of price competitiveness.⁷ The long-term average is derived on the basis of data collated between 1975 and 2006. In "equilibrium", the time-varying factor ω_t has the value 1, and the effect of price competitiveness on real economic growth is denoted by the constant δ . As the discrepancy increases, the marginal effect may double in extreme cases (if y is negative) or disappear completely (if y is positive).

The (quasi) maximum-likelihood estimation of equations (1) and (2) produces the coefficients given in the adjacent table. In addition, tests for autocorrelation of the residuals and squared residuals as well as for re-

take account of the price developments in total sales in Germany and the other 19 countries. A rise in the index implies a deterioration in Germany's price competitiveness. — 3 Calculated on the basis of the nominal rate of interest on ten-year government bonds and inflation expectations according to the Consensus Forecast. — 4 Real external demand was calculated as the weighted geometric mean of the deflated import demand of Germany's major trading partners. This was done on the basis of the same group of countries and the same

Deutsche Bundesbank

¹ See the empirical studies by J Clostermann, The impact of the exchange rate on Germany's balance of trade, Economic Research Group of the Deutsche Bundesbank, Discussion Paper, No 7/1996, and K Stahn, Has the export pricing behaviour of German enterprises changed? Empirical evidence from German sectoral export prices, Deutsche Bundesbank Research Centre, Discussion Paper, Series 1, No 37/2006. — 2 Price competitiveness is defined as the nominal external value for Germany against 19 industrial countries, adjusted to

maining non-linearities show that the model is sufficiently specified.

The first point to emerge from the estimation results is that all variables with the exception of the lagged real economic growth have a significant impact on real economic growth and that the estimated coefficients have the expected sign. This means that the German economy benefits from improved external developments and a real effective depreciation of the euro. An increase in the real long-term interest rate, by contrast, impedes economic growth even if this takes about a year to become apparent.

The main question in this section concerns potential non-linear links with economic growth and can be answered using the null hypothesis of a constant coefficient β_3 ($\gamma = 0$). As the results in the table show, this can be rejected at a significance level of 1%. The plus sign of the coefficient γ implies that ω_t declines as the deviation of price competitiveness from its long-term average increases and converges on zero. Accordingly, the responsiveness of real economic growth to changes in price competitiveness declines in Germany as the deviation increases. This result is inconsistent with the hypothesis quoted at the beginning, namely that a prolonged appreciation of the euro would have a disproportionately strong retarding effect on macroeconomic momentum. Evidently, the internal stability of the real economy is underestimated by this pessimistic view.

One explanation for the declining impact of price competitiveness observed here could be that in the

trade weights as in the calculation of the index for price competitiveness. — 5 In a smooth transition autoregressive (STAR) model the relationship between two variables depends on a transition function. The latter is selected to ensure a "smooth" transition between the possible extremes of the STAR coefficients β_{3t} . See Granger and Teräsvirta (1993), Modeling Nonlinear Economic Relationships, Oxford University Press, Oxford. — 6 Specification tests indicate that the

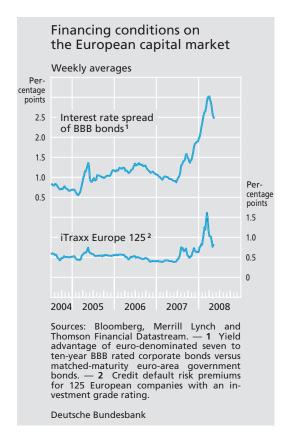
A non-linear model of economic growth

Item	y_t
eta_0	0.0087 (3.29)***
β_1	- 0.0209 (- 0.18)
β_2	- 0.0019 (- 2.31)**
$\delta_t(lag = 2)$	- 0.2761 (- 4.49)***
γ	28.371 (4.43)***
eta_4	0.0804 (2.53)**

Pseudo t-values in brackets. * (**) [***] denote significance at the 10% (5%) [1%] level.

event of an appreciation of the euro the exports of enterprises facing strong international competition are hit first. High price elasticity of foreign demand, which applies primarily to low-tech products, implies that the mark-up in the prices set in foreign currency is comparatively small and will decline relatively quickly in the event of a rising exchange rate. The possibility of applying a pricing-to-market strategy in these economic sectors is therefore very limited. If appreciation pressures continue, the enterprises left on the world market will increasingly have a strong market position and a correspondingly low price elasticity of demand. Exchange rate developments therefore also become less important as a macroeconomic determinant, a fact that is reflected in the non-linear relationship between economic growth and price competitiveness described above. This argument is not implausible given German enterprises' favourable position in the capital goods industry.8

absolute deviation of the real exchange rate from its long-term average does have a non-linear influence with a lag of 1 along a logistical function. See Teräsvirta (1994), Specification, Estimation, and Evaluation of Smooth Transition Autoregressive Models, Journal of the American Statistical Association, Vol 89, pp 208-218. — 7 See Deutsche Bundesbank, Monthly Report of June 2004. — 8 See K Stahn (2006), op cit.



ment bonds were just under 4% and therefore just 10 basis points lower than at the beginning of the year.

Worse financing conditions for corporates Overall, financing conditions for European corporates on the bond markets have tended to deteriorate further in the year to date. Despite the drop in government bond rates, the majority of corporate bond yields increased in the reporting period. Thus, spreads on corporate bonds in the lowest investment grade category, BBB, rose 55 basis points against euro-area government bonds to trade at 250 basis points as this report went to press. At times, spreads were even more than 300 basis points. Premiums on the market for credit risk transfer, an indication of investors' assessment of the credit default risk, also point to a slight easing of tensions. Following

the abrupt repricing of risk at the beginning of the year, market players are again paying slightly less for insurance against credit defaults.

In the first guarter of 2008, only some sections of the German bond market suffered lower issuance as a result of the heightened uncertainty and increased risk aversion among market players. Overall, gross sales of domestic bonds reached a new record high of €391 billion (previous quarter €338½ billion). However, after deducting redemptions, which were also higher, and accounting for changes in issuers' holdings of their own bonds, German issuers' net inflows were small, at €12 billion. Sales of foreign bonds in the German market were significantly higher, at €23½ billion. Compared with the previous two quarters, this represents a recovery in sales of bonds issued by non-residents. However, it is still well below the placement volume in the quarters immediately preceding the outbreak of the financial market turmoil (first half of 2007: €103½ billion).2 The total amount of funds raised from sales of domestic and foreign debt securities in the first quarter was €35½ billion, compared with €38½ billion in the final quarter of 2007.

Given an overall positive cash balance, the public sector increased its bond market debt only slightly in the first quarter, by €3 billion, having raised €28½ billion in the capital market in the previous three-month period. In the

Net issuance of publicsector bonds ...

Lively issuing

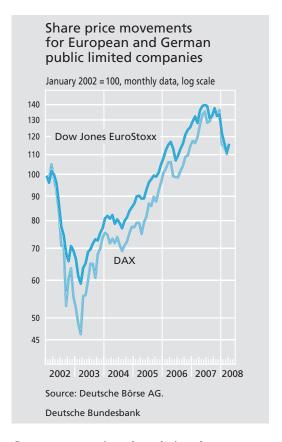
activity in the

bond market

² Foreign bonds sold in Germany primarily represented asset backed securities, which were, as in the past two quarters, denominated mainly in foreign currency and which German banks have increasingly been taking on to their balance sheets of late.

period from January to March, the Federal Government redeemed bonds worth €6½ billion, including Federal savings notes, Federal Treasury notes (Schätze) and Federal Treasury financing paper (€½ billion in total) as well as, above all, Federal notes (Bobls, €5½ billion). Yet at the same time it also issued Federal bonds (€8½ billion) and topped up inflation-indexed bonds (€3 billion), which are - from the issuer's point of view - preferable to nominal bonds mainly when future inflation is lower than market players had expected at the time of issuance. As a result, the Federal Government borrowed €5 billion on the German bond market taking into account redemptions and changes to holdings of its own bonds, whereas state governments reduced their market debt by €2 billion.

... but decline in credit institutions' market debt As in the previous two quarters when redemptions and repurchases had dominated, German credit institutions reduced their capital market debt by €3 billion net between January and March. In line with the trend of the past few years, they also reduced their public Pfandbrief debt (€14 billion). In addition, they redeemed other bank debt securities with flexible terms and conditions (€6 billion), where net issuance has dropped noticeably since the outbreak of the crisis in the third quarter of 2007. Previously, the average volume issued per quarter since the start of monetary union had amounted to €11 billion. By contrast, special credit institutions stepped up their issuance, selling bonds worth €13½ billion on the German market. Organisational restructuring within financial institutions accounts for some of this increase. Business units responsible for issuance were moved to



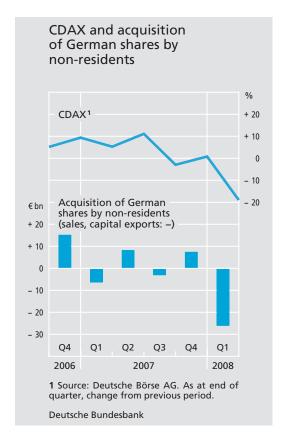
Germany, meaning that their sales are now reported in Germany. In addition, domestic credit institutions brought €4 billion in mortgage Pfandbriefe to the market and thus realised the highest net issuance in this instrument in five years.

Non-financial enterprises tapped the capital market for a total of \in 12 billion (compared with \in 8 billion in the previous quarter). They mainly raised the outstanding volume of short-dated bonds by \in 12 billion net; in addition, longer-term paper with a value of \in 1 billion net was placed on the market.

Net issuance of corporate bonds

In the three-month period from January to March, German bonds were bought almost exclusively by investors based abroad (€35½ billion). Non-resident investors were interest-

Acquisitions of bonds



ed only in private issuers' bonds (€41½ billion). When interpreting the data, however, one should note that only a fairly small percentage of the securities on record are ultimately held by private investors outside the banking sector. The high volumes can, in particular, be attributed to cross-border transactions between financial groups with crossholdings, with financial products created in Germany (mainly certificates and warrants) being sold to associated companies "en bloc" and held there until maturity if they cannot be sold on to private end customers.3 By contrast, non-resident investors reduced their holdings of public-sector bonds by €6 billion in the first quarter of the year. The only month in which they were net sellers of German bonds was February during a short period of calm following the massive stock market losses in January and preceding the re-emergence of stability concerns in March. By contrast, German investors bought virtually no coupon securities (€½ billion). While German non-banks sold €19½ billion worth of bonds net,⁴ domestic credit institutions increased their bond market exposure by a similar amount. They invested just under three-quarters of this sum in foreign bonds (€14½ billion), some of which also represented the asset backed securities issued by their own securitisation vehicles that had to be taken on balance.

The above-mentioned credit market turbulence and concerns about the economy resulted in strong stock market losses worldwide at the beginning of the year. The international equity markets did not see a certain degree of recovery until the middle of March following the takeover of an ailing US securities house and the lowering of interest rates and injection of liquidity by the Fed. Numerous capital increases by several US banks and some unexpectedly strong quarterly results are also likely to have helped improve sentiment. Market players obviously also viewed massive write-downs by major banks as a positive move as they increase transparency. In addition, the euro-area economy proved relatively robust, there were initial signs of an easing of tensions on the credit markets, and it was increasingly hoped that any US recession would be mild. In this environment,

Strong stock market losses until mid-March ...

... but stocks recently recover

³ For more details, see Deutsche Bundesbank, The German balance of payments in 2007, Monthly Report, March 2008, p 26-27.

⁴ Securities acquisitions by German non-banks are determined as a residual. The data are consequently associated with greater uncertainty.

share prices – particularly for banking stock – were able to recoup some of their previous losses. Ultimately, German and European equities have, in the year to date, fallen 13% and 11% respectively as measured by the broad market indices CDAX and Dow Jones EuroStoxx, while the US S&P 500 has slipped by 5%.

Issuance in stock market weakens

Against the backdrop of the share price losses, issuance activity in the domestic stock market weakened in the first quarter. German enterprises issued €1 billion worth of new shares, compared with €3 billion in the fourth quarter of 2007. These were mostly listed equities. Moreover, residents sold €7½ billion worth of foreign shares net.

Share purchases

In the first quarter, domestic non-banks represented the largest group of equity market buyers with €18 billion in purchases. Banks added equities worth a total of €1 billion to their portfolios. By contrast, non-resident investors reduced their holdings of German shares by €26 billion, which were on balance exclusively portfolio investments.⁵

Sales of mutual fund shares Domestic investment companies recorded outflows amounting to €5½ billion in the first quarter after raising funds of almost €9 billion in the preceding three months. At €4 billion, the outflows predominantly hit specialised funds reserved for institutional investors, while mutual funds open to the general public were less badly affected (€1½ billion). In the case of mutual funds, equity-based funds in particular were obliged to repurchase fund units (€3½ billion), followed by bond-based funds (€2 billion) and money market funds

Investment activity in the German securities markets

			or	

Deutsche Bundesbank

	2007		2008	
Item	Q1	Q4	Q1	
Debt securities				
Residents	66.5	- 48.1	0.3	
Credit institutions of which	46.0	25.4	19.7	
Foreign debt securities	49.4	29.5	14.3	
Non-banks	20.5	- 73.5	- 19.3	
of which	l			
Domestic debt securities	6.0	- 50.5	- 28.6	
Non-residents	48.2	86.6	35.5	
Shares				
Residents	- 6.0	9.8	19.5	
Credit institutions	5.0	5.3	0.9	
of which	1 ,,	27		
Domestic shares Non-banks	1.3	2.7 4.5	9.0 18.6	
of which	- 11.0	4.5	10.0	
Domestic shares	8.5	- 3.0	18.0	
Non-residents	- 6.5	3.5	- 25.9	
Mutual fund shares				
Investment in specialised funds	12.3	9.2	- 4.0	
Investment in funds open to the				
general public of which: Share-based funds	0.0	- 0.3	- 1.4 - 3.4	
or writer: Share-based funds	- 2.6	- 0.1	- 3.4	

(€1½ billion). By contrast, open-ended realestate funds, balanced funds and mixed securities funds sold certificates (€3 billion, €1½ billion and €½ billion respectively). In addition, net sales of foreign mutual fund shares on the German market totalled €17 billion.

In the first quarter, mutual fund shares were purchased exclusively by domestic non-banks (\in 16½ billion), which on balance added only mutual fund shares issued by foreign investment companies to their portfolios (\in 19 billion). Foreign investors reduced their exposure to German funds by \in 1½ billion; credit institutions sold domestic and foreign mutual fund shares worth \in 3½ billion.

Purchases of mutual fund shares

⁵ For more details on direct investment, see p 48.



Major items of the balance of payments

€billion

	2007	2008	
Item	Q1	Q4	Q1
I Current account 1,2	+ 46.5	+ 53.3	+ 48.
Foreign trade 1,3	+ 49.4	+ 49.2	+ 50.
Services 1	- 2.5	- 2.5	- 1.
Income 1	+ 13.0	+ 14.5	+ 12.
Current transfers 1	- 10.9	- 5.8	– 11.
II Capital transfers 1,4	+ 0.2	- 0.7	+ 0.
III Financial account 1		66.2	7.0
(Net capital exports: –)	- 55.7	- 66.2	– 70.
Direct investment German investment	- 10.6	- 36.0	– 45.
abroad Foreign investment in	- 18.2	- 41.7	- 48.
Germany	+ 7.6	+ 5.7	+ 2.
2 Portfolio investment	- 19.8	+ 85.1	- 21.
German investment abroad	- 62.4	- 9.6	– 29.
Shares	+ 13.9	+ 6.7	+ 11.
Mutual fund shares	- 12.4	- 9.8	- 16.
Debt securities Bonds and notes 5	- 63.9 - 59.4	- 6.5 - 0.4	– 23. – 19.
of which Euro-denominated	- 33.4	- 0.4	- 13.
bonds and notes	- 47.6	+ 4.1	- 5.
Money market instruments	- 4.5	- 6.1	- 3.
Foreign investment			
in Germany	+ 42.6	+ 94.6	+ 7.
Shares Mutual fund shares	- 6.4 + 0.7	+ 7.5 + 0.5	- 26. - 1.
Debt securities	+ 48.2	+ 86.6	+ 35
Bonds and notes 5	+ 38.0	+ 70.3	+ 18
of which			
Public bonds and notes	- 3.9	+ 35.3	- 1.
Money market	- 3.9	+ 33.3	- 1.
instruments	+ 10.3	+ 16.3	+ 17.
3 Financial derivatives 6	- 8.1	- 27.2	- 18
4 Other investment 7	- 17.3	- 88.6	+ 16
Monetary financial	17.5	00.0	110
institutions 8	- 10.6	- 55.5	+ 18.
of which: short-term	+ 8.9	- 19.5	+ 46.
Enterprises and households	- 5.3	- 10.4	- 1
of which: short-term	+ 3.0	- 10.4 - 1.5	- 1. - 5.
General government	+ 13.8	- 7.2	+ 6
of which: short-term	+ 14.6	- 8.0	+ 7.
Bundesbank	- 15.3	- 15.5	- 6.
5 Change in reserve assets at			
transaction values	. 01	. 0.7	4
(increase: –) 9	+ 0.1	+ 0.7	- 1.
IV Errors and omissions	+ 9.0	+ 13.5	+ 21.

1 Balance. — 2 Including supplementary trade items. — 3 Special trade according to the official foreign trade statistics (source: Federal Statistical Office). From January 2007, excluding supplies of goods for/after repair/maintenance, which, up to December 2006, were deducted via the supplementary foreign trade items. — 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.

Deutsche Bundesbank

Direct investment

Against the backdrop of the ongoing financial market crisis, there has also been a decline in global mergers and acquisitions. Overall, however, major transactions, which are probably more difficult to finance in the current environment, in particular appear to have declined. The situation in Germany is similar: the volume of completed cross-border mergers and acquisitions totalled €14 billion in the first three months of this year, compared with €35½ billion in the previous quarter. 6

Mergers and acquisitions

Over the same period, direct investment, which is more broadly defined and includes the building-up of new foreign affiliates, reinvested earnings and credit transactions by affiliated companies, recorded net capital exports of €45½ billion. Capital outflows were therefore higher than in the previous quarter and significantly exceeded the 2007 average.

Direct investment

German companies which provided their foreign branches with additional funds of €48 billion made a large contribution to capital exports. They primarily increased capital stakes in foreign companies (€22½ billion). In addition, however, direct investment loans to affiliates (€16½ billion) and reinvested earnings (€9 billion) played a role. The focus was on transactions carried out by holding companies (€10½ billion), vehicle manufacturers (€7½ billion) and credit institutions (€6 billion). The main host countries for German dir-

6 Source: Zephyr, Bureau van Dijk.

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ect investment were the 14 old EU countries (€28 billion), including the United Kingdom (€9½ billion), the Netherlands (€9 billion) and France (€6½ billion).

Foreign direct investment in Germany amounted to €2½ billion in the past quarter.

While there were slight inflows of equity capital and reinvested earnings, outflows were recorded in credit transactions. This essentially represented the repayment by German affiliates of short-term loans to their foreign parent companies.