

Financial markets

Trends in the financial markets

The international financial markets were characterised by the favourable economic climate in Germany and Europe, in particular towards the end of the fourth quarter of 2006. In addition, the US economy proved more robust than expected by many observers, supported not least by falling energy prices. Consequently, long-term interest rates rose somewhat in the two economic areas. The further tightening of Eurosystem monetary policy was widely expected and its effects were therefore felt primarily in short to medium-term maturities. Given the optimistic economic outlook, the stock markets were very buoyant, with share prices in Europe rising more strongly than in the United States. It was against this backdrop that the euro appreciated significantly against the US dollar, especially in November and at the beginning of December.

*Financial
market
environment*

Exchange rates

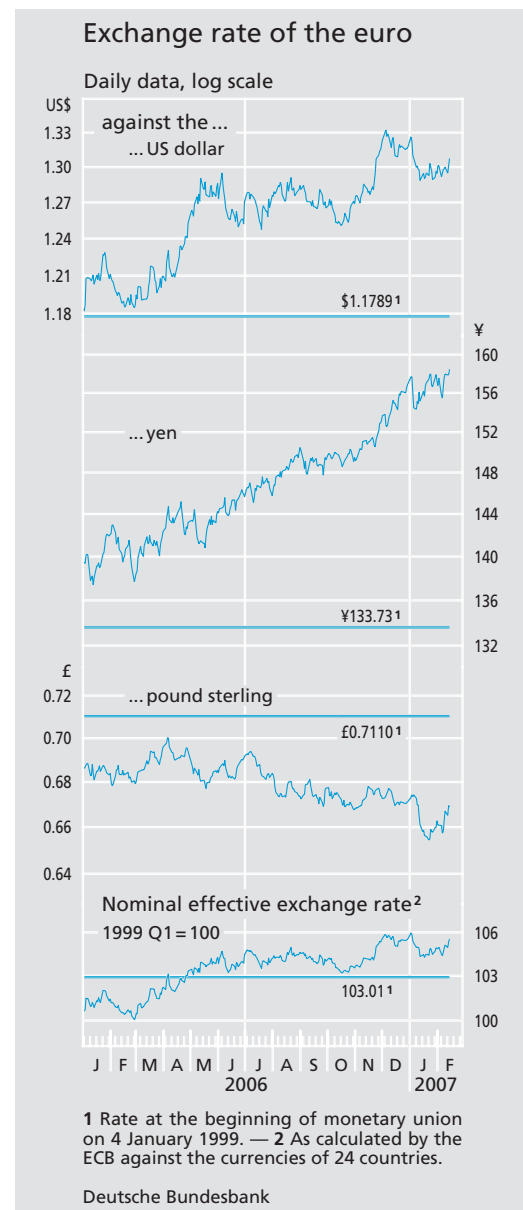
In the last quarter of 2006, the euro benefited from the favourable economic outlook for the euro area and market players' expectations of a further rise in interest rates. Following the publication of the Ifo index at the end of November and the interest rate increase by the Governing Council of the ECB at the beginning of December, the euro occasionally reached levels higher than US\$1.33. At the same time, the growing number of negative reports emerging from the US real estate market led some market participants to speculate that interest rates in the United

*Euro exchange
rate
movements
against the
US dollar...*

States would soon be cut. Subsequently, no clear trend was recognizable for a time in the euro-dollar exchange rate, which remained between US\$1.31 and US\$1.33; at the end of 2006, it was just over 11½% higher than a year previously. At the beginning of 2007, however, sentiment in the foreign exchange markets once again shifted in favour of the US currency, when a spate of positive news dampened existing expectations of falling interest rates. On the one hand, the US labour market presented itself in a surprisingly robust state and, on the other hand, the unexpected decline of the US trade deficit in November 2006 supported the US dollar. In addition, the Federal Reserve emphasised the inflation risks for the US economy in the minutes of its December meeting, which caused the probability of an interest rate cut in the USA to decline further in the eyes of the market participants. The euro temporarily lost some of its gains, but had rebounded to US\$1.31 when this report went to press.

... the yen ...

Owing to the increasing yield spread between Japanese and European debt securities, the euro's upward trend against the yen continued at first. Against the backdrop of the positive economic development in the euro area, the downward revision of the growth rates of gross domestic product (GDP) in Japan caused the euro-yen exchange rate to reach record highs in December. At the end of the year, the euro was valued at just under ¥157 and thus around 13% higher than at the beginning of the year. In January, the euro temporarily surrendered some of its gains amid mounting speculations that the Bank of Japan would increase its key interest



rate. However, when this did not occur, the euro again reached its highs from the end of the year and partly even surpassed them. Most recently, the euro was valued at just under ¥158 and thus 18% higher than at the beginning of European monetary union.

Many market participants see carry trades as the reason for the euro's strength in relation to the Japanese currency. However, econo-

The relationship between currency futures and exchange rate developments

In the foreign exchange markets, macroeconomic information is currently interpreted primarily in the light of its impact on money market rates, since market watchers consider exchange rate developments as driven mainly by interest rate differentials between the currency areas. The reason for this is repeatedly said to be currency carry trades, which involves international investors borrowing capital in low-interest currencies and investing it in high-interest currencies. However, since these capital flows are not recorded systematically, it is difficult to estimate their magnitude and influence on exchange rates. Some pointers may be provided by the currency futures traded on financial futures exchanges, such as the Chicago Mercantile Exchange (CME), because the return on these futures corresponds to that of carry trades. The matching of the returns is based on the validity of covered interest rate parity

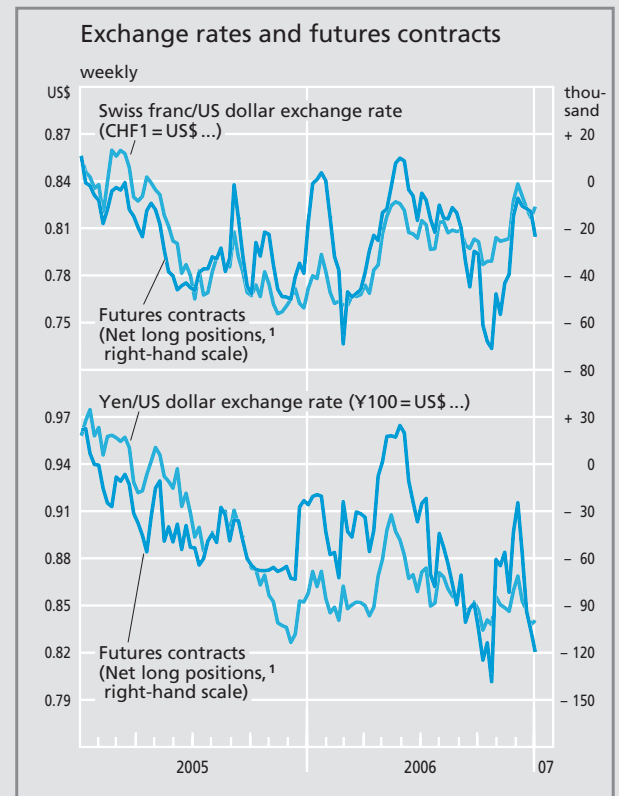
$$(1) f_{t,t+k} - s_t = i_{t,t+k} - i_{t,t+k}^*$$

where $f_{t,t+k}$ denotes the (logarithmic) forward exchange rate, s_t the (logarithmic) spot rate, $i_{t,t+k}$ the domestic interest rate and $i_{t,t+k}^*$ the foreign interest rate. Extending the equation with the (logarithmic) future spot rate s_{t+k} and subsequently transforming it results in

$$(2) s_{t+k} - f_{t,t+k} = s_{t+k} - s_t + i_{t,t+k}^* - i_{t,t+k}$$

The expression on the left-hand side of equation 2 stands for the return on the future trade and the sum on the right-hand side for the return on the carry trade. Therefore, from the viewpoint of international investors, both transactions offer the same risk/return structure. Currency futures are therefore often used to assess the current development in the international financial markets, even though exchange-traded contracts still make up a relatively insignificant share of the overall forward market. In the following we seek to examine the suitability of these data for explaining and forecasting exchange rate developments. The examination is based on the futures contracts traded on the CME in the Australian dollar, euro, pound sterling, Swiss franc, yen and the corresponding US dollar exchange rates. Since a futures contract concluded on the CME implies both

1 Difference between the number of long and short contracts on Swiss francs (above CHF125,000) and yen (above ¥12,500,000). — 2 However, the correlation between the exchange rate and speculative net position decreases significantly when longer time periods



a long (ie forward purchase) and a short (ie forward sale) currency trade, the sum of all short contracts is at first equal to the sum of all long contracts. However, the counterparties are divided into two groups by the US Commodity Futures Trading Commission (CFTC), mainly in accordance with their trading motives. Counterparties who use currency futures primarily to hedge open positions are classified as "commercial traders", whereas all others, in particular those with predominantly speculative motives, are classified as "non-commercial traders". According to the CFTC, the distinction between commercial and non-commercial traders is based on information supplied by the market participants themselves. Focusing on the trading activities of non-commercial traders should thus produce an at least approximate estimate of the exchange rate expectations of the "market". For example, if the sum of the speculative short contracts in

are considered. — 3 GMM estimator of the regressions with Newey-West correction of the covariance matrix. The dependent variable is the percentage change in the respective US dollar exchange rate (dspot); dnetlong is the change of the net long positions. t-statistic

yen is greater than the sum of the speculative long contracts, risk-neutral non-commercial traders should expect on average that the yen will rise less than the interest rate differential between the two currencies implies. In practice, such a situation is assessed simply as indicating a future depreciation of the yen against the US dollar.

With a correlation coefficient of 61% since the beginning of 2005, the weekly available time series (Tuesday values) for the speculative net positions as well as for the exchange rates show a remarkable co-movement for the yen, which is considered the starting point of carry trade business. However, similar high values are also found for the Australian dollar (79%), the euro (53%), the pound sterling (90%) and the Swiss franc (66%), which can certainly also explain market observers' interest in the speculative net positions as an indicator of exchange rate developments.²

The statistical relationship found will now be econometrically analysed in more detail. Since the exchange rate level generally exhibits a unit root, the percentage change in the exchange rate is regressed in the econometric analysis on the change in the net position. The coefficients all have the correct sign and are statistically significant at the 1% level. For example, a coefficient of 0.09 (for the euro) means that, all things being equal, a rise by 1,000 long contracts is accompanied by a 0.09% appreciation of the euro. In addition, a comparatively high R^2 suggests a significant contribution to explaining the net positions. Of course, speculators in foreign exchange markets are mainly interested in knowing whether the sign of their position change corresponds to the sign of the exchange rate change. Therefore, success rates were also calculated, which are defined as the relative number of weeks in which non-commercial traders raised (lowered) their net long position and the currency appreciated (depreciated). In fact, with values predominantly above 70%, the coefficients point to a relatively high success rate of the market-wide speculative position-taking. Consequently, the net positions in the futures markets can indeed be regarded as an indicator of current developments in the foreign exchange market.

in brackets. (*, **, ***) signifies statistical significance at the 10% (5%, 1%) level. Success is defined as a week in which non-commercial traders raised (lowered) their net long position and the currency

However, if these data are to be used for projecting exchange rate movements, they must have systematic leading indicator properties. The leading indicator property of a variable can be gauged by means of Granger causality tests, in which case historical values of the position change are to be tested for their statistical significance for the current exchange rate change. The test results show that the position changes generally do not have any predictive or explanatory power; position changes (except in the case of the euro) are not Granger-causal for the exchange rate changes. By contrast, a Granger-causal relationship can be seen from the exchange rate changes to the position changes. The econometric model therefore does not allow the conclusion that the exchange rate is driven by the speculative activities of international investors. On the contrary, speculators appear to react to exchange rate changes by changing their net long position, which could be interpreted as an indicator of feedback trading.

If the econometric test results are predominantly negative in this case, too, a leading indicator property of speculative positions cannot be completely ruled out. Since the tests are based on weekly data, any shorter-run relationship between the two variables is not captured. According to more recent approaches in exchange rate theory, which explicitly take the microstructure of the foreign exchange markets into account, a causal impact of open positions on the exchange rate development could at least exist for intraday data.

Estimation results ³

Weekly data from 5 January 1999 to 2 January 2007

Position	AUD	CHF	EUR	GBP	YEN
Constant	0.03 (0.53)	0.04 (0.77)	0.01 (0.21)	0.03 (0.71)	0.03 (0.06)
dnetlong	0.13 (10.12)***	0.11 (11.24)***	0.09 (8.52)***	0.09 (9.17)***	0.06 (11.65)***
R^2	0.22	0.39	0.24	0.28	0.33
Success rate	63.31	73.86	70.50	70.98	72.66
Granger causality dnetlong >> dspot	9.77	0.17	6.22**	2.30	2.71
dspot >> dnetlong	19.31**	13.30**	8.74**	10.79**	8.31**

appreciated (depreciated) (success rate in per cent). Granger causality test based on VAR estimations (Wald test) χ^2 - test statistic.

metric studies show more of a reversed causality and trace the speculative positions in the derivative markets back to earlier exchange rate movements (see box on pages 30-31).

*... and the
pound sterling*

Vis-à-vis the pound sterling, the euro stayed within a narrow range around £0.67 at the end of 2006. This therefore initially confirmed the assumption of a strong co-movement of the euro and the pound against the US dollar. However, after the Bank of England surprisingly increased its interest rate to 5.25% in January 2007, the euro depreciated considerably. Subsequently, the unexpectedly sharp rise in real estate and consumer prices also pointed to a dynamic development of the British economy and initially triggered speculations about further interest rate moves by the central bank. However, these speculations were dampened following the publication of the minutes of the Bank of England's meeting, which showed that the last interest rate move was voted through with only a small majority. At the end of the period under review, the euro-pound exchange rate was hovering around £0.67 amid slight fluctuations, which is just over 5½% below its value at the start of European monetary union.

*Effective euro
exchange rate*

Due to the accession of Slovenia into the euro area and the entry of Bulgaria and Romania into the EU, the index of the effective euro exchange rate has been calculated since the beginning of the year vis-à-vis 24 instead of 23 major trading partners. On average, it has somewhat appreciated against the currencies of this new group of countries since mid-November. As this article went to press, the ef-

fective exchange rate stood at around the same level recorded at the beginning of this year and just over 2½% above the level at the start of monetary union. In real terms – ie taking the simultaneously prevailing inflation differentials between the euro area and major trading partners into account – the effective euro exchange rate, which is also a measure of the price competitiveness of companies in the euro area, was thus again somewhat more clearly above its value at the start of monetary union.

Securities markets and portfolio transactions

Since the beginning of October, European government bond yields in the capital market have increased by almost ½ percentage point to just over 4%. After a decline in November, the increase since mid-December has been notably pronounced. It was accompanied by positive economic reports for the euro area and for Germany, in particular. In line with a buoyant economic outlook, the rise in interest rates was accompanied by a higher real interest rate level.¹ The uncertainty about future interest rate developments, measured in terms of the implied volatility of options on Bund futures, concurrently decreased.

The yields in the European bond market moved somewhat synchronously to interest rates in the dollar area. There also, interest rates have increased since mid-December,

*Rising long-
term interest
rates in the
euro area ...*

*... and in the
dollar area*

¹ Real interest rates calculated from Consensus Economics surveys as well as yields of inflation-indexed government bonds.

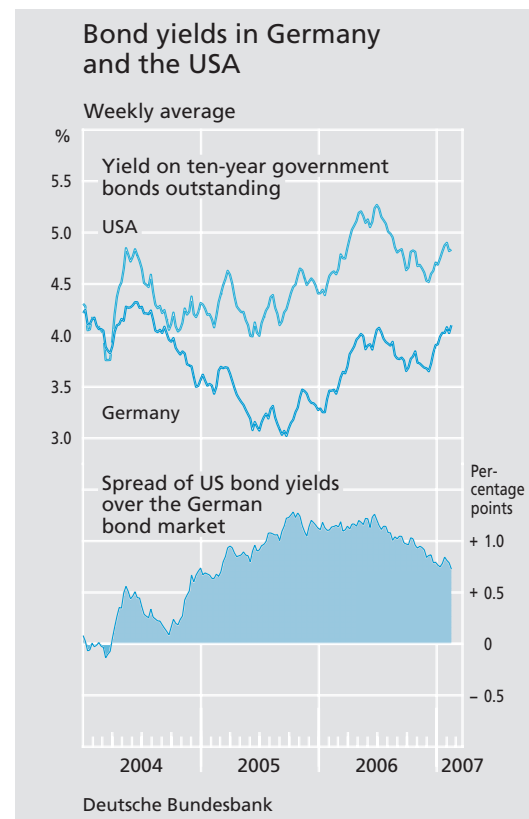
when a more favourable economic picture started to emerge, to almost 5% most recently. Besides the fall in oil prices, this is likely to be due *inter alia* to the more robust state of the real estate market. Previously expected negative effects on private consumption, which is especially important for the US economy, have so far largely failed to materialise. In line with this, GDP growth expectations for the USA for 2007 inferred from surveys increased slightly in January to 2.4%.²

*End of the
inverse yield
curve*

In November, an inverse curve emerged in the short to medium-term maturity segment of the yield curve for Federal bonds (Bunds) in the German bond market. At the short end, the yields increased owing to the Eurosystem's interest rate rises, while the medium and long-term yields decreased. Such a pattern is often seen as a leading indicator of a marked economic slowdown, which, however, did not emerge for Germany (apart from the known shifts in the economic profile due to the raising of value-added tax). After partly surprisingly positive economic data in December, the yields therefore edged upwards again perceptibly especially in the medium and long-term segments, which finally resulted again in a rising interest rate curve.

*Declining
premiums on
corporate
bonds*

At a slightly increasing interest rate level, the yield spread of BBB-rated corporate bonds over government bonds in the euro area declined by about one-fifth to 99 basis points. The increased risk premium, which had emerged in the tense financial markets in May/June 2006, has thus been more than eliminated. The declining yield spreads point to a continuing high risk propensity on the



part of investors, which is benefiting not least the persistently ebullient business with mergers and acquisitions.

With gross sales of domestic debt securities amounting to €256 billion in the fourth quarter, issuing activity in the German bond market was stronger than in the third quarter. However, at €2½ billion net after deducting redemptions and changes in issuers' holdings of their own securities, German borrowers raised less than half as much as in the previous quarter (€6 billion). Foreign bonds and money market instruments were accommodated to a much greater degree in the German market in the reporting period (€42 billion). The vast majority of these were euro-

*Issuing activity
in the German
bond market
somewhat
brisker*

² Source: Consensus Economics.



denominated government debt securities from euro-area partner countries. The net sales of these securities, which are regularly in demand among domestic investors owing to the fact that they carry a slightly higher rate of interest than the benchmark Bund, thus more than doubled quarter on quarter. In addition, €3½ billion worth of foreign debt securities denominated in foreign currency were purchased in the German market. The total amount raised from the sales of domestic and foreign debt securities in the period from October to December thus reached €44½ billion, compared with €25 billion in the previous three months.

At barely €4½ billion in the fourth quarter, the public sector increased its indebtedness in the bond market to a much lesser degree

Low level of funds raised by the public sector

than in the previous quarter (just over €20 billion). On balance, it was mainly state government that tapped the capital market (€2½ billion). The amount raised by central government was – partly owing to its favourable cash balance – merely €2 billion, compared with €21½ billion in the third quarter. On balance, it issued only five-year Federal notes (Bobl) for €9 billion and Federal Treasury financing paper (€½ billion), while it reduced its market debt in the other debt instruments. For example, it redeemed two-year Federal Treasury notes (Schätze) amounting to €4 billion net and ten-year Bunds worth €2 billion net. In addition, it reduced the circulation of thirty-year Bunds and Federal Treasury discount paper (Bubills) by €½ billion in each case.

After the German credit institutions had redeemed their own bonds on balance in the previous quarter, they made small use of the bond market in the reporting period (€2½ billion). The amount raised from the issuance of debt certificates by the specialised credit institutions and the category of other bank debt securities, which can be structured flexibly, reached €8½ billion and €7 billion, respectively, in the fourth quarter. By contrast, the German credit institutions reduced their debt related to mortgage Pfandbriefe by €9 billion and their outstanding public Pfandbriefe by €4 billion.

Slight rise in credit institutions' market debt

In contrast to the other issuers, non-financial corporations reduced the circulation of their own bonds and money market instruments on balance in the fourth quarter, namely by €4½ billion and thus on a similar scale as in

Net redemptions of corporate bonds

the previous quarter (€4 billion). In doing so, they redeemed short-term and longer-term instruments in roughly equal amounts. The main reason for this was probably firms' low external financing requirement.

*Purchases of
debt securities*

As in the third quarter, German debt securities were mainly purchased by foreign investors in the last quarter of 2006. They added bonds and notes of public sector borrowers worth €20½ billion and private sector debt instruments worth €20 billion to their portfolios. In addition, German credit institutions acquired bonds and notes worth €21½ billion net. By contrast, domestic non-banks sold fixed-income securities amounting to €17½ billion. Both domestic groups of investors sold domestic debt securities (€16½ billion and €21½ billion, respectively). While the credit institutions primarily sold bank debt securities, non-banks sold public sector paper and instruments issued by credit institutions to a similar extent. By contrast, the interest of domestic buyers was focused on foreign securities. Banks, in particular, included them in their bond portfolios (€38½ billion), but also non-banks were among the purchasers of foreign debt securities (€4 billion).

*Share price
gains in the
stock markets*

The share prices in the international stock markets have experienced extremely buoyant growth since the end of September. The share price gains in Germany and Europe of 17% (CDAX) and 12% (DJ Euro Stoxx) were significantly higher than the gains of the US S&P 500 index (9%).³ This presumably also reflects changed growth expectations of the capital market players. The good performance of the sub-indices for pro-cyclical stocks

Investment activity in the German securities markets

€ billion			
Item	2005	2006	
	Q4	Q3	Q4
Debt securities			
Residents	- 5.9	6.6	4.0
Credit institutions	- 1.3	- 0.8	21.7
of which			
Foreign debt securities	24.3	10.0	38.4
Non-banks	- 4.6	7.5	- 17.7
of which			
Domestic debt securities	- 14.3	- 1.6	- 21.5
Non-residents	16.8	18.4	40.6
Shares			
Residents	5.3	16.3	- 20.0
Credit institutions	7.2	3.7	9.7
of which			
Domestic shares	1.6	- 2.5	5.1
Non-banks	- 1.9	12.6	- 29.7
of which			
Domestic shares	- 14.0	4.6	- 25.1
Non-residents	19.2	2.0	22.2
Mutual fund shares			
Investment in specialised funds	13.9	5.7	7.0
Investment in funds open to the general public	- 3.4	- 3.9	- 1.9
of which: Share-based funds	1.7	- 1.1	- 1.9

also indicates cyclical influences on share price movements. One factor that did not have an effect on the share price development, by contrast, was the slight downward revision of the expected earnings growth for European enterprises.⁴ In January, for example, analysts projected an average annual rise in profits of 7.3% for the next three to five years, compared with 8.6% in September.

³ Throughout the calendar year 2006, share prices in Germany and in the euro area rose faster than in the US market, while Japanese equities achieved lower growth. In Japan, the subdued pace of economic activity in the fourth quarter as well as in the year as a whole, together with declining private consumption, weighed heavily on the share prices. Most recently, however, the fact that the Bank of Japan, contrary to expectations, did not raise its key interest rate boosted share prices, at least for a time.

⁴ I/B/E/S analysts' forecasts for the DJ Euro Stoxx.

Major items of the balance of payments

€ billion

Item	2005		2006	
	Q4	Q3	Q3	Q4
I Current account 1,2	+ 19.4	+ 18.7		+ 35.4
Foreign trade 1,3	+ 33.6	+ 39.5	o	+ 46.3
Services 1	- 4.3	- 11.3		- 3.0
Income 1	+ 3.5	+ 3.3		+ 5.3
Current transfers 1	- 7.6	- 7.6		- 8.1
II Capital transfers 1,4	+ 0.1	- 0.3		- 0.1
III Financial account 1 (Net capital exports: -)	- 41.0	- 16.7		- 47.3
1 Direct investment	+ 20.5	- 13.0		+ 8.6
German investment abroad	+ 4.0	- 16.9		- 8.8
Foreign investment in Germany	+ 16.5	+ 3.8		+ 17.3
2 Portfolio investment	- 44.9	+ 4.0		+ 1.8
German investment abroad	- 59.9	- 22.1		- 53.4
Shares	- 20.6	- 1.9		- 3.1
Mutual fund shares	- 5.3	- 1.1		- 8.1
Debt securities	- 34.1	- 19.1		- 42.2
Bonds and notes 5	- 32.6	- 17.6		- 44.1
of which Euro-denominated bonds and notes	- 25.3	- 15.5		- 38.6
Money market instruments	- 1.5	- 1.5		+ 1.9
Foreign investment in Germany	+ 15.0	+ 26.1		+ 55.2
Shares	+ 0.1	+ 6.5		+ 13.3
Mutual fund shares	- 1.9	+ 1.2		+ 1.4
Debt securities	+ 16.8	+ 18.4		+ 40.6
Bonds and notes 5	+ 24.7	+ 22.7		+ 48.5
of which Public bonds and notes	+ 14.3	+ 10.1		+ 21.3
Money market instruments	- 7.9	- 4.3		- 8.0
3 Financial derivatives 6	- 3.2	- 0.3		- 3.0
4 Other investment 7	- 15.4	- 8.3		- 55.3
Monetary financial institutions 8	+ 10.6	+ 13.0		- 56.1
of which: short-term	+ 38.4	+ 28.3		- 23.0
Enterprises and individuals	+ 4.7	+ 0.8		- 13.2
of which: short-term	+ 10.1	+ 4.1		- 4.9
General government	- 6.2	+ 5.9		+ 4.2
of which: short-term	- 6.0	- 1.0		+ 2.9
Bundesbank	- 24.5	- 28.0		+ 9.8
5 Change in reserve assets at transaction values (increase: -) 9	+ 1.9	+ 0.8		+ 0.6
IV Errors and omissions	+ 21.6	- 1.7		+ 12.0

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. — o Exports positively influenced by late reports.

Deutsche Bundesbank

In spite of rising share prices, issuing activity in the German share market weakened in the fourth quarter. Domestic enterprises issued new shares totalling around €2 billion, compared with just over €4 billion in the previous quarter. The majority of these shares were shares of listed companies. Foreign shares were not sold on balance in Germany between October and December.

Slightly less funds raised in equity market

As in the bond market, foreign buyers were the foremost investor group in the German stock market in the fourth quarter with €22 billion. This mainly took the form of portfolio investment (€13½ billion).⁵ Domestic credit institutions increased their holdings of German shares by €5 billion and purchased foreign equities worth €4½ billion net. By contrast, regardless of the positive share price developments in the stock markets, domestic non-banks sold both German and foreign shares on balance in the amount of €25 billion and €4½ billion, respectively, after having increased their equity investments in the previous quarter.

Share purchases

In the fourth quarter of 2006, domestic mutual investment companies recorded inflows of €5 billion, and thus more than in the previous reporting period (€2 billion). On balance, new resources were attracted only by the specialised funds which are reserved for institutional investors (€7 billion). By contrast, mutual fund shares of German funds open to the general public were redeemed again on balance (€2 billion), although the withdrawal of resources has slowed down compared

Sales of mutual fund shares

⁵ For details of direct investment, see p 38.

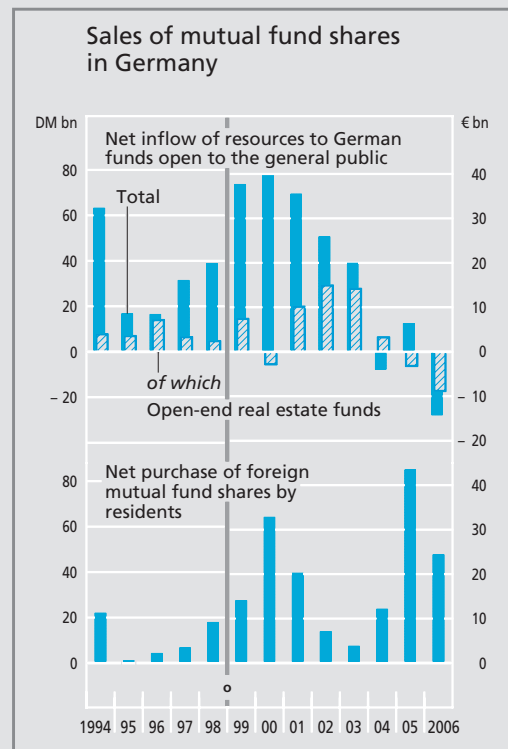
Outflows from domestic mutual funds in 2006

German non-banks reshuffled their portfolios in 2006. This also had a bearing on mutual investment funds. Thus, domestic funds open to the general public redeemed shares for just over €14 billion on balance in 2006. This outflow of resources – the biggest to date – can be attributed largely to the withdrawal of capital from open-end real estate funds (€9 billion), which, after a large mutual fund temporarily suspended redeeming shares at the turn of 2005-06, continued into the middle of 2006. In addition, share-based funds and bond-based funds, the two other traditional mutual funds categories, both had to make repayments (€6½ billion and €4 billion, respectively). This is noteworthy inasmuch as domestic non-banks' direct investment in equities likewise fell, even though stock markets recorded significant share price gains all over the world in 2006.

Mixed funds and mixed securities-based funds, which were able to sell shares for €2 billion and €1 billion net, respectively, benefited from some of the resources which were freed up. Purchases of foreign mutual fund shares by domestic non-banks were an even stronger counterweight (€25 billion, compared with €40 billion in 2005), which means that net sales of foreign mutual fund shares have exceeded inflows of domestic mutual funds open to the general public in every year since their distribution was simplified in the context of European harmonisation at the start of 2004. However, this does not necessarily imply a withdrawal of resources from German investment groups. A comparison with the fund statistics of BVI, the German investment industries' association, suggests that foreign mutual fund shares were sold mainly by foreign subsidiaries of German investment companies. Furthermore, there was strong growth in 2006 in the derivatives market aimed at retail investors. Instruments with a conditional promise to pay ("certificates" and the like) are, in some cases, probably regarded by investors as a substitute for mutual funds.¹⁾

The outflows from domestic funds open to the general public in 2006 were offset by larger value gains, with the result that, overall, their assets

¹ In the capital market statistics, these products, which, in contrast to mutual funds, do not constitute a ring-fenced pool of dedicated resources ("special fund") and are there-



under management increased by €1½ billion to €354½ billion. The proportion of equities in mutual funds' portfolios went up in relation to debt securities, which was due mainly to the different price trends in the two markets. One possible reason for the reluctance of retail investors – who were primarily the investors in question – to invest in equities despite rising share prices could be a lesser risk propensity, although this would contrast to a certain extent with the behaviour of other groups of investors who have ultimately contributed to the generally observable compression of risk premiums in the financial markets. Irrespective of this, the cautious investment behaviour of retail savers might also be attributable to psychological aspects. For example, many shares were trading at least close to their historical peaks in 2006, which allowed investors who had purchased during the last boom to withdraw their capital again without sustaining a nominal loss.

fore subject to an issuer credit risk, are shown under other bank debt securities — ◦ From 1999 data in euro.

with July to September (€4 billion) (see box on page 37). Share and bond-based funds, in particular, recorded outflows (€2 billion and €1½ billion, respectively). By contrast, open-end real estate funds and money market funds were able to place unit shares amounting to just over €1 billion and €½ billion, respectively, in the market. The outstanding shares of the mixed funds and pension mutual funds remained unchanged. There was a significant increase, however, in the sales of foreign investment fund units (€8 billion), which were sold in the German market only to the amount of €1 billion in the previous quarter.

Purchases of mutual fund shares

Mutual fund shares were purchased mainly by domestic non-banks (€10 billion), two-thirds of which were foreign mutual fund shares. Domestic credit institutions slightly increased their holdings of mutual fund shares on balance by €2 billion; they likewise showed a clear preference for foreign mutual fund shares (€1½ billion). Foreign investors purchased just under €1½ billion of mutual fund shares in the German market.

Direct investment

Similar to the transactions in cross-border portfolio investment, direct investment also resulted in capital imports in the last quarter of 2006, amounting to €8½ billion (net); in each of the previous three quarters, there had been noticeable outflows of funds. One main reason for the turnaround was higher investment by foreign enterprises in Germany (€17½ billion, after €4 billion in the third quarter). These enterprises increased their equity capital by €9½ billion, with corporate takeovers in the pharmaceutical sector playing an important role. Moreover, they granted more loans to their branches in Germany. Another main reason is that the direct investment of German enterprises in the three-month period from October to December (€9 billion) did not reach the value of the preceding period (€17 billion). The decline was significantly influenced by the sale of an enterprise in the utility sector, after a large takeover transaction had made an impact in the previous three-month period. In addition, inflows of funds owing to German parent companies borrowing from their subsidiaries abroad had further restraining effects.

Turnaround in direct investment