

Overall financial flows in 2003

Like 2002, last year was also marked by a pronounced weakness in investment. In the aggregate financial balances this was most clearly seen in the fact that the corporate sector, a "classical" deficit sector, again achieved a positive net lending/net borrowing position. This development was linked to an increase in the internal financing ratio and to a reduction in the corporate debt ratio; this ratio rose fairly sharply in the period from 1998 to 2001. Owing to the improved capital structures and the still low interest rate level, important financial conditions are in place for more buoyant investment in the cyclical recovery process. Households again increased their traditional net lending during the period under review. In addition, the higher rate of saving helped to ensure that the stock of nominal financial assets, which in 2002 had declined for the first time since 1949, grew strongly again in 2003. This contrasted with a public sector deficit, which reached a new peak in 2003. Another point is that a substantial part of domestic savings flowed abroad. This article provides a detailed account of these developments in aggregate income and in the flow of funds within the economy as a whole and sets the findings in an international context.

Aggregate investment

*Real investment
low*

Investment in Germany in 2003 remained at the same low level as in 2002. The net investment ratio after deduction of depreciation again amounted to only 3½% of national disposable income. This means that in the past three years fixed capital formation averaged no more than just over €70 billion, or 4% of disposable income, compared with ratios of between 8% and 12% in the period from 1991 to 2000. While these figures were significantly affected by German reunification and the global stock exchange boom, there is no doubt that there was a pronounced weakness in investment during the past few years.

*Corporate fixed
investment...*

The picture is particularly clear in the case of producing enterprises, whose expenditure on plant and equipment, taken together, declined for the third time in succession. Their net investment during each of the past three years was just under two-thirds below the comparable levels at the beginning and end of the 1990s. Enterprises relinquished the lead in investment to households some time ago. In 2003 non-financial corporations¹ accounted for just over one-third of total real investment.

*... and
households'
investment
decline further*

Even though there has been an increase in the percentage of households, their investment, like that of enterprises, has steadily declined during the past few years. In the period under review real investment was just over two-fifths lower than in 1999 when house-building, in particular, was still very brisk. Construction work has slowed down substantially since then. This development was re-

inforced by the downturn in sole proprietors' investment in machinery and equipment. In accordance with ESA 95, sole proprietors belong to the household sector.

In the context of the economy as a whole, general government has been playing only a minor role as an investor since as far back as the mid-1990s. Expenditure by general government on the public capital stock fell from €46 billion in 1994 to €31 billion at the end of the period under review. Up to 2002 these amounts were enough to compensate for the consumption of assets shown in the statistics. Last year, depreciation actually exceeded the (gross) amount spent on investment, which meant that a disinvestment of just over €3 billion was recorded for the public sector.

*Public sector
capital stock
"downsized"*

Domestic saving

In contrast to investment – and to households' saving, which increased – the aggregate net saving of all domestic sectors actually fell year on year in 2003. At €115 billion, it was just over €10 billion lower than a year earlier. The national saving ratio, at 6½% of disposable income, was the second-lowest ratio since 1991. This decline is attributable primarily to general government. For many years now government revenue has been lower than the ongoing expenditure by government in areas other than investment. In 2003 this differential, including the net capital transfers to the other sectors, amounted to -€87 billion, which was the largest deficit

*Overall fall
in saving*

¹ ESA 95 defines these as non-financial corporations, which include partnerships.

Aggregate acquisition of non-financial assets, saving and net lending/net borrowing

€ billion

Item	1991	1993	1995	1997	1999	2001	2002	2003
Acquisition of non-financial assets								
Net Investment ¹								
Households ²	56.1	66.6	77.1	71.1	72.5	55.8	45.5	41.1
Non-financial corporations	80.4	38.0	51.4	44.8	56.0	33.9	13.7	20.8
Fixed assets	73.8	48.0	48.2	45.1	54.3	47.6	25.8	18.3
Inventories	6.7	- 9.9	3.2	- 0.3	1.6	- 13.8	- 12.1	2.6
Financial sectors	4.2	5.2	4.8	4.3	3.8	2.7	1.4	2.3
General government	13.9	15.4	8.3	3.0	4.8	2.3	0.5	- 3.2
Total	154.6	125.2	141.6	123.3	137.0	94.6	61.1	61.0
<i>Memo item</i>								
Net investment ³	12.1	9.0	9.4	7.9	8.3	5.5	3.5	3.4
Acquisitions less disposals of non-financial non-produced assets								
Households ²	0.6	0.7	0.9	1.0	1.4	0.9	0.9	0.9
Non-financial corporations	0.3	0.7	0.6	0.5	0.6	0.4	0.5	0.4
General government	- 0.9	- 1.4	- 1.5	- 1.5	- 1.9	- 1.3	- 1.4	- 1.3
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saving ⁴								
Households ²	133.0	139.8	134.9	134.9	143.3	154.0	160.8	167.4
Non-financial corporations ⁵	16.8	- 4.3	28.2	20.8	- 12.3	- 2.1	26.9	24.9
Financial sectors	18.2	17.2	14.7	15.3	15.8	12.5	13.9	9.5
General government ⁵	- 31.3	- 37.4	- 52.7	- 49.5	- 26.5	- 57.9	- 75.3	- 86.6
Total	136.7	115.3	125.0	121.6	120.3	106.5	126.3	115.3
<i>Memo item</i>								
Saving ^{3,6}	10.9	8.3	8.4	7.8	7.3	6.2	7.2	6.5
Net lending/net borrowing								
Households ²	76.4	72.5	56.8	62.8	69.4	97.3	114.3	125.5
Non-financial corporations ⁵	- 64.0	- 43.0	- 23.8	- 24.5	- 68.8	- 36.3	12.8	3.7
Financial sectors	14.0	12.1	10.0	11.0	12.0	9.8	12.5	7.2
General government ⁵	- 44.3	- 51.5	- 59.6	- 51.0	- 29.4	- 58.9	- 74.3	- 82.1
Total	- 17.8	- 9.9	- 16.6	- 1.7	- 16.7	12.0	65.2	54.3
<i>Memo item</i>								
Net lending/net borrowing ³								
Households ²	6.0	5.2	3.8	4.0	4.2	5.6	6.5	7.1
Non-financial corporations ⁵	- 5.0	- 3.1	- 1.6	- 1.6	- 4.2	- 2.1	0.7	0.2
Financial sectors	1.1	0.9	0.7	0.7	0.7	0.6	0.7	0.4
General government ⁵	- 3.5	- 3.7	- 3.9	- 3.3	- 1.8	- 3.4	- 4.2	- 4.6
Total	- 1.4	- 0.7	- 1.1	- 0.1	- 1.0	0.7	3.7	3.1

Sources: National accounts and Bundesbank calculations. — ¹ Net capital formation in the form of fixed assets and changes in inventories. — ² Including non-profit institutions serving households. — ³ As a percentage of aggregate disposable income. — ⁴ Including capital transfers (net). — ⁵ In 1991 including partial remission of the German railways' debt by the Federal Government amounting

to €6.4 billion; in 1995 after eliminating the assumption of the Treuhand agency's debt and part of the old debt of the east German housing enterprises by the Redemption Fund for Inherited Liabilities amounting to around €105 billion and €15 billion respectively. — ⁶ Excluding capital transfers (net).

Deutsche Bundesbank

since reunification. A major part of this was due to the unfavourable tax situation and rising social security spending, developments which were partly attributable to the cyclical weakness. The poor profitability of the banks and insurance corporations also had a negative impact. The retained profits of the producing enterprises, at €9 billion, were likewise lower in 2003 than in the previous year. By contrast, households again increased their savings, which rose this time to almost €170 billion if capital transfers are included.

Aggregate and sectoral net lending/net borrowing

Enterprises are net lenders again

Since general government, as mentioned above, did not even invest as much as the arithmetical level of asset consumption in 2003, the financial gap was somewhat less unfavourable than (negative) saving. Nevertheless, at just over €80 billion, or 4½% of national disposable income, the financial gap reached a new record level. The opposite development in the private sector is striking. Owing to their sharply curtailed investment, the non-financial corporations, for example, ended the year, as in 2002, with a small financial surplus. However, the household sector remained the largest source of funds. This sector again increased its provision of funds to €125½ billion, or 7% of disposable income. Consequently, its net lending was far above the average of the 1990s. All sectors in surplus provided funds amounting to €135 billion in 2003. Government absorbed two-thirds of this. Just under €55 billion flowed into the foreign financial markets.

Germany has not always been a creditor to other countries. Owing to reunification, foreign funds were required to finance domestic investment. It is only since 2001 that the current account is in the black again, as was customary prior to 1990. By contrast, Italy, which is competitively weak, has been dependent on capital imports since 2002. Within the EU-15 countries this has applied to Spain and the United Kingdom for quite some time, albeit for other reasons. Last year the aggregate financial deficit in each of these two countries amounted to about 2% of gross domestic product (GDP). The economic area of the EU 15 recorded a total surplus of just under 1% of the aggregate economic output. This helped to cover the United States' large capital shortfall, which in the past few years has been due to the government's rapidly rising need for credit. Japan, whose aggregate financial balance in 2003 amounted to 3% of GDP, provides a certain counterposition to this.

Net lending/borrowing of other countries

Important information on the "origin" and "nature" of national balances is provided by the sectoral analysis. Whereas in most countries last year households acted as lenders to other sectors, this was not the case in the Anglo-Saxon countries, where saving ratios are relatively low. The public sector mostly showed a financial gap. In the case of enterprises the picture was very mixed. In 2003 only France, Italy and Spain recorded a negative financing balance, as is "customary" in the corporate sector. Japan was particularly conspicuous among the countries with a positive financing balance in the industrial sector. Owing to a significant need for con-

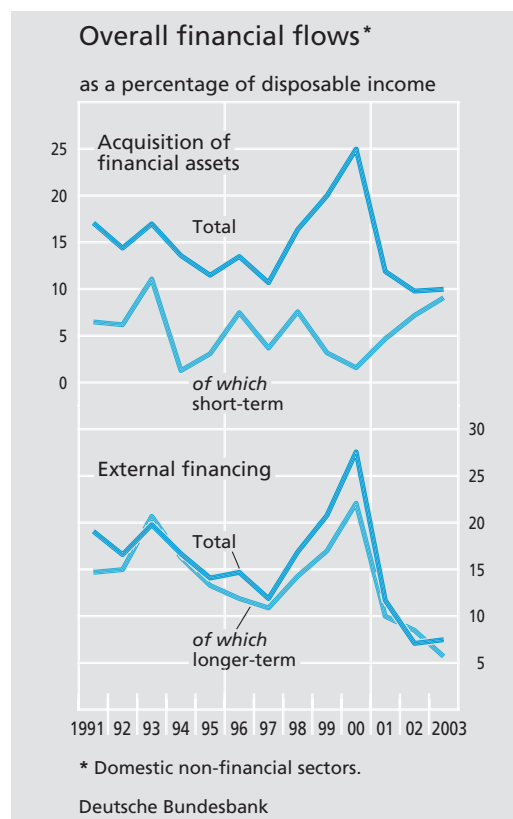
International comparison of sectoral balances

solidation, the corporate financing balance was more than twice as large as that of households. In terms of a mechanical analysis of the balances, this was also reflected in the large Japanese current account surplus.

Basic structure of financial flows

Differing developments in financial flows

While the national accounts reflect real economic activity and the income cycle, the financial accounts capture the associated transactions in the form of financial assets and external financing. Three different phases can be identified since the beginning of the 1990s. During the first half of the 1990s the financial flows of the (German) non-financial sectors were moving at a relatively high level – averaging 15% of disposable income – and, despite sharp cyclical fluctuations in the economy, showed little volatility. This changed in 1998 when financial activity rapidly increased, mainly as a result of rising stock market prices and numerous corporate mergers and acquisitions. At its height in the year 2000 this activity attained a level of just over 25% of disposable income. It therefore lay far above the values for fixed capital formation and saving. There was then a sharp negative adjustment in the volume of financial flows, which was linked to substantial shifts in net sectoral lending and borrowing. Last year, however, this downward movement did not continue despite persistently sluggish growth; instead, the acquisition of financial assets and external financing held up at the previous year's levels of 10½% and 7¾% of disposable income respectively.



Even so, there was a great deal of activity within financial asset acquisition and the financing of the non-financial sectors last year. Whereas investment in longer-term assets was again fairly sluggish, investment at the short end of the market, notably bank deposits and security acquisitions, increased significantly – a process which has been evident since 2001. Given an approximately 85% share of total financial asset acquisitions in the non-financial sectors, short-term investment accounted for an exceptionally large proportion. On the financing side, by contrast, it was the longer-term maturities that predominated – with a share of approximately three-quarters – in 2003. The demand for funds was determined mainly by buoyant sales of public bonds whereas, with a net value of €2 billion, loans were only of margin-

Emphasis on short-term assets...

... and longer-term financing

al significance. There were similar developments at the short end of the market. Bank loans with short maturities were again repaid to a considerable extent whereas sales of money market paper more than doubled. The outcome was that in 2003 securitised lending accounted for a total of just over two-thirds of non-financial sector borrowing, a share which had not been witnessed since the beginning of the 1990s.

Household investment and borrowing behaviour

Increase in saving

Households continued to increase their rate of saving last year. The saving ratio rose from 10.6% to 10.8% as disposable income increased only marginally. Even so, the level reached was much lower than the level in the first half of the 1990s and in the two decades before. The 1 percentage point rise in the saving ratio since 2000 is probably, first and foremost, a reflection of the greater effort being made to provide for old age through private insurance schemes and of the increasing uncertainty felt by a broad section of the general public. As far as savings are concerned, however, Germany is not an exceptional case within the euro area. The gross concept is often applied as it improves the international comparability of saving ratios. Owing to the inclusion of the "earned" amounts of depreciation, it is rather better suited to modelling the internal financing options. According to this concept, the private saving ratio in Germany, as in France, was 16½% in 2003 and therefore somewhat above the euro-area

average, which rose in the past four years by 1 percentage point to just over 15%.

Disposable investable funds, ie net savings and net capital transfers received, amounted to just under €170 billion, or 90% of total funds, in 2003. Financial asset acquisition is closely correlated with this. Financial saving remained by far the dominant component of the uses to which the funds were put. On the whole, safe short-term assets were the most favoured in 2003. Such resources can be quickly redeployed when investment opportunities improve on the financial markets. As in the previous year, bank deposits grew strongly by almost €60 billion. As time deposits, in particular, were liquified, sight deposits were expanded even more extensively, not least because of the attractive terms offered by some institutions. The tendency to favour safe assets can clearly be seen in the purchase of securities. Bonds, which are subject to only minor price fluctuations, were in even greater demand, at just over €20 billion, than in the previous year. According to the information on hand, the purchase of index-linked investment fund certificates and similar products offered by banks accounted for a sizeable share of this. Shares, by contrast, were sold in 2003 on balance. However, the willingness to sell was much weaker than in the previous two years. This is undoubtedly due to the upturn in prices which set in again in March 2003. The purchase of mutual fund shares is to be interpreted in much the same way. The winners here were bond and real estate funds whereas equity-based mutual funds were again less popular.

Main components of the acquisition of financial assets

Saving through insurance corporations generally on the decline

Diverging developments were behind the purchase of claims on the insurance sector, which includes various types of pension funds, in 2003. First, sales of traditional insurance products were quite buoyant owing to the debate on cutting back tax advantages and the need to increase personal provision for old age. Second, the reduction in capital market interest rates clearly left its mark. Lower capital bonuses ultimately resulted in fewer claims being purchased in 2003 than in the previous year. For this reason a very sharp decline had actually been recorded in 2002. Overall, asset acquisition with insurance corporations was about half of what it had been in 1999. One counterweight to this – albeit only a small one – was the increase in company pension claims, which were covered by pension provisions. These amounted to no less than €13½ billion in 2003.

While, in the past two years, “classical” insurance products were in great demand, the private Riester pension failed to live up to initial expectations. In 2003 the number of contracts concluded was actually much lower than in the previous period. Consequently, this government-promoted form of old age provision has so far contributed little to financial asset acquisition. By contrast, the build-up of company pension claims resulting from the regulation applying to direct insurance plans since 2002 was more successful. After a sluggish start in 2002 the contracts concluded with pension funds increased substantially in 2003 although the financial assets lodged there are, admittedly, still small.



In contrast to saving and financial asset acquisition, the acquisition of non-financial assets and the taking up of loans are at a much lower level. Both items have been declining for four years. Households’ retrenchment in investment has been widespread. After expenditure on plant and equipment it is now expenditure on what are known as other assets, including, for example, purchased and self-made software, which has declined. After deduction of depreciation, fixed capital formation amounted to a total of hardly more than €40 billion and therefore about one-third less than the average in the 1990s. At €16 billion net, borrowing in 2003 was still below the levels in the two previous years, which had been comparatively low anyway. While the demand for mortgage loans expanded further on balance, lending for com-

Little investment and low demand for credit

Households' saving and asset acquisition *

€ billion

Item	1991	1993	1995	1997	1999	2001	2002	2003
Sources of funds								
Disposable income	980.4	1,084.2	1,153.7	1,204.9	1,281.1	1,373.7	1,382.8	1,398.4
Household final consumption expenditure	852.5	950.7	1,024.8	1,079.8	1,156.0	1,232.7	1,236.5	1,247.1
Saving	127.9	133.6	128.9	125.1	125.1	141.0	146.3	151.3
<i>Memo item</i>								
Saving ratio ¹	13.0	12.3	11.2	10.4	9.8	10.3	10.6	10.8
Net capital transfers received	5.2	6.2	6.0	9.9	18.1	12.9	14.4	16.1
Own investable funds	133.0	139.8	134.9	134.9	143.3	154.0	160.8	167.4
Incurrence of liabilities ²	65.7	86.6	75.8	64.2	75.9	22.2	17.7	15.9
Total sources of funds	198.8	226.3	210.7	199.2	219.1	176.2	178.4	183.3
Uses of funds								
Net capital formation ³	56.1	66.6	77.1	71.1	72.5	55.8	45.5	41.1
Acquisitions less disposals of non-financial non-produced assets	0.6	0.7	0.9	1.0	1.4	0.9	0.9	0.9
Acquisition of financial assets	142.1	159.0	132.6	127.0	145.3	119.5	132.0	141.4
with banks ⁴	57.8	98.8	34.5	28.6	10.7	27.3	78.8	58.3
Transferable deposits ⁵	9.9	23.1	13.2	10.9	30.4	8.8	83.4	65.5
Time deposits ⁶	38.9	34.1	-37.0	-7.8	-5.5	17.4	-5.2	-17.6
Savings deposits ⁶	4.7	49.1	54.8	24.1	-4.3	2.5	0.9	14.7
Savings certificates	4.4	-7.6	3.5	1.4	-9.9	-1.4	-0.2	-4.4
with insurance corporations ⁷	33.3	44.4	53.0	60.4	68.2	49.9	43.5	32.0
in securities	42.8	10.6	37.2	33.8	59.7	32.4	-2.0	37.5
Bonds ⁸	24.4	-15.5	23.6	5.3	-2.2	5.6	18.6	21.8
Shares	0.3	3.4	-1.7	4.1	13.8	-28.7	-61.0	-15.0
Other equity	4.4	4.3	4.4	3.4	4.1	2.9	3.2	3.1
Mutual fund shares	13.8	18.5	10.9	21.0	44.0	52.6	37.2	27.7
Claims arising from company pension commitments	8.2	5.2	7.9	4.3	6.7	10.0	11.6	13.5
Total uses of funds	198.8	226.3	210.7	199.2	219.1	176.2	178.4	183.3

* Including non-profit institutions serving households. —
 1 As a percentage of households' disposable income. —
 2 Including other liabilities. — 3 Including acquisitions less disposals of valuables. — 4 Domestic and foreign banks. —
 5 Including currency. — 6 Up to 1998 deposits with savings and loan associations are included under savings deposits

and from 1999 (in accordance with the banking statistics) under time deposits. — 7 Including private pension funds, occupational pension schemes, supplementary pension funds and other claims. — 8 Including money market paper.

mercial and consumption purposes stagnated for the most part.

Financial assets of households

*Decline of
financial assets
compensated*

For the first time since 1949 the nominal value of households' financial assets declined in 2002, but a substantial recovery set in last year. In all, the financial assets grew by approximately €200 billion, or 5%. They now amount to an average of about €100,000 per household. Not only the ongoing financial asset formation but also the strong gains in the equity markets contributed to the increase. This means that households' financial assets were 2.8 times greater than disposable income, which was slightly more than the previous peak in 1999. At the same time, the debt ratio declined to approximately 110% at the end of the period under review and net financial assets increased to 170% of disposable income.

*Breakdown of
financial assets*

Last year's positive evaluation effects were admittedly too small to bring about significant structural shifts in households' portfolios. Another impediment was the net sales of shares. Moreover, the acquisition of mutual fund shares was weaker than in previous years. Although the ratio of shares held by households to their financial assets in 2003 increased to 6% in terms of value, it was still well below the floor reached in the 1990s. All in all, securities accounted for one-third of financial assets. The claims on insurance corporations and pension funds as well as bank deposits reached similar proportions. At the beginning of the 1990s weights were still

quite differently distributed. At that time the amount of assets held with banks was 10 percentage points greater than in 2003. The ratios for securities and for claims on the insurance sector were lower accordingly. This means that there has been a continual shift in the breakdown of households' assets over the past ten years.

Investment and borrowing behaviour of enterprises

The use of funds by non-financial enterprises fell for the fourth time in succession in 2003 but the rate of the decline was slower. At just over €240 billion, nominal real and financial investment taken together were only slightly above the record low of 1993. If national disposable income were taken as a reference variable, the 2003 ratio of 13½% would actually be about 4 percentage points below the 1993 figure. The renewed decline was due to various developments. First, total gross investment was up on the year as a result of the build-up of inventories while expenditure on plant and equipment declined. Second, enterprises' financial activities almost halved year on year. As in 1992, financial investment accounted for no more than 15% of the total use of funds. In 2000, when financial transactions reached their all-time peak, the figure was 50%.

*Renewed
decline in
financial asset
acquisition*

There were some noteworthy changes in direction within the field of financial asset acquisition. A prime example is the allocation of funds to bank deposits. Whereas in 2002 almost €10 billion was withdrawn from bank

*Changes within
financial assets*

Households' financial assets and liabilities *

Item	1991	1993	1995	1997	1999	2001	2002	2003
	in € billion							
Financial assets								
with banks ¹	926	1,089	1,128	1,210	1,266	1,262	1,341	1,399
Short-term	617	760	782	877	963	957	1,041	1,111
Longer-term	309	329	346	333	303	305	300	288
with insurance corporations ^{2,3}	401	479	573	684	808	916	981	997
in securities	572	722	844	1,050	1,327	1,365	1,204	1,306
Bonds ⁴	266	297	348	367	369	403	421	442
Shares	143	191	204	321	484	356	192	231
Other equity	80	99	102	119	112	171	167	170
Mutual fund shares	84	136	190	244	362	435	425	464
arising from company pension commitments	123	138	152	161	175	194	204	220
Total	2,022	2,428	2,697	3,105	3,576	3,737	3,731	3,922
Liabilities								
Loans	815	970	1,138	1,275	1,442	1,510	1,527	1,542
Short-term	91	99	104	103	110	109	105	97
Longer-term	724	871	1,034	1,172	1,332	1,400	1,421	1,445
Other liabilities	9	10	12	12	9	8	8	9
Total	824	980	1,150	1,287	1,451	1,517	1,535	1,551
<i>of which</i>								
Consumer loans	131	154	165	178	188	193	194	192
Mortgage loans	492	580	697	803	913	978	1,000	1,018
Entrepreneurial loans	191	236	275	294	341	338	332	332
Net financial assets	1,199	1,449	1,547	1,818	2,125	2,219	2,196	2,371
<i>Memo item</i>	in € per household							
Financial assets	57,400	67,000	73,000	82,900	94,600	97,200	96,300	100,700
Liabilities	23,400	27,000	31,100	34,400	38,400	39,500	39,600	39,800
	as a percentage of disposable income							
Financial assets	206.3	224.0	233.8	257.7	279.1	272.0	269.8	280.5
Liabilities	84.0	90.3	99.7	106.8	113.2	110.5	111.0	110.9
Net financial assets	122.3	133.6	134.1	150.9	165.9	161.5	158.8	169.6
	as a percentage of GDP							
Financial assets	134.6	146.8	149.7	165.9	180.7	180.2	176.8	184.2
Liabilities	54.8	59.2	63.8	68.8	73.3	73.2	72.7	72.9
Net financial assets	79.8	87.6	85.9	97.1	107.4	107.0	104.0	111.4

* Including non-profit institutions serving households. —
 1 In Germany and abroad. — 2 Including private pension
 funds as well as occupational pension schemes and supple-

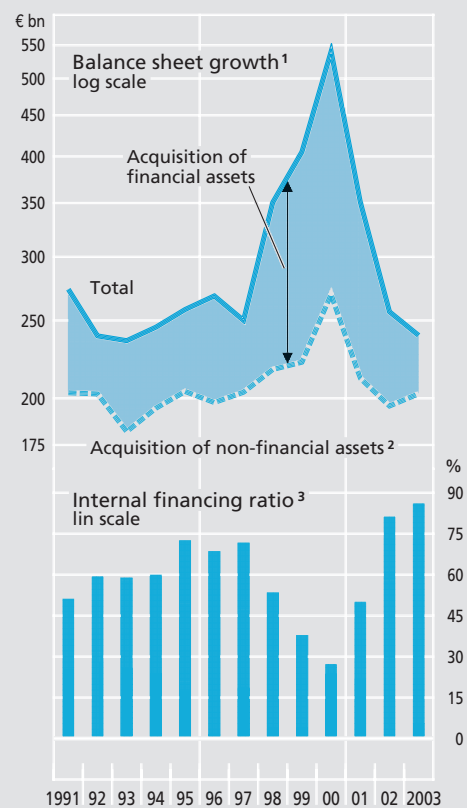
mentary pension funds. — 3 Including other claims. —
 4 Including money market paper.

accounts, last year just over €20 billion was invested, particularly in the form of sight deposits and time deposits, ie just under 60% of total financial asset formation. Such shifts in bank deposits had occurred before that, of course. The acquisition of equities fell abruptly. This was almost negligibly small in 2003 and therefore weaker than at any time since 1991. It was mainly German enterprises that were affected here whereas cross-border purchases totalled as much as just over €20 billion. In the case of corporate lending, too, loans to non-residents developed more positively than to the domestic sectors than they had done in 2002. Cross-border loans amounted to a total of €3½ billion in 2003.

Internal financing exceptionally high

The normalisation which emerged in financial asset formation after 2000 also had an impact on the financing side. A decline in the demand for external funds was directly connected to this. This in itself would already have meant a larger proportion of internal financing. At the same time, however, the internal financing options also improved. First, the proceeds arising from depreciation tended to increase, and, second, the retained profits of enterprises had a change in sign. In 2000 saving showed a deficit of €36 billion but ran a surplus of €9 billion in 2003. Finally, there was also an increase to €16 billion in net capital transfers received. This resulted in a sharp rise in the internal financing ratio. At 86% of the total use of funds, a very high value was reached. If the pension provisions were also included, the indicator would actually be at 90%.

Balance sheet growth and internal financing of the corporate sector



1 Transaction-related increase in the assets of non-financial corporations. — **2** Gross fixed capital formation and changes in inventories plus acquisitions less disposals of non-financial non-produced assets. — **3** Net retained income, net capital transfers received and depreciation allowances as a percentage of the total use of funds; figures for 1995 adjusted for the "Treuhand effect".

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Almost all external funding channels were used to a lesser extent last year than in 2002. This applied, in particular, to the commercial demand for loans from banks and other bodies. In 2003 bank loans were actually repaid to a large extent on balance, with longer-term maturities being included here for the first time since 1991. Indebtedness to banks was reduced by a total of almost €40 billion; a year earlier this reduction had

Loan and equity financing fall sharply

Non-financial corporations' investment and financing

€ billion

Item	1991	1993	1995	1997	1999	2001	2002	2003
Investment								
Gross capital formation	204.3	182.4	204.8	204.5	222.8	212.9	196.5	203.7
Gross fixed capital formation	197.6	192.4	201.6	204.8	221.2	226.6	208.7	201.1
Changes in inventories	6.7	- 9.9	3.2	- 0.3	1.6	- 13.8	- 12.1	2.6
Acquisitions less disposals of non-financial non-produced assets	0.3	0.7	0.6	0.5	0.6	0.4	0.5	0.4
Acquisition of financial assets	70.7	54.5	45.1	46.9	184.8	140.2	61.1	37.1
with banks ¹	8.2	24.0	10.6	- 15.7	- 4.9	33.7	- 8.5	21.6
Short-term	8.9	26.6	5.2	- 17.6	- 7.7	33.8	- 7.5	20.6
Longer-term	- 0.8	- 2.6	5.4	1.9	2.8	- 0.1	- 1.0	1.0
in securities ²	16.4	4.5	- 3.9	3.9	47.1	34.5	- 48.1	- 16.0
in equities ³	19.3	3.2	18.6	23.6	124.1	33.2	75.9	0.1
in Germany	0.7	- 8.1	- 6.9	- 2.2	48.8	- 22.0	39.1	- 20.8
abroad	18.6	11.2	25.5	25.7	75.3	55.2	36.8	20.9
Loans ⁴	25.4	21.2	17.3	32.6	17.3	37.2	40.7	29.5
to residents ⁵	20.2	19.4	5.9	13.2	- 19.9	28.2	66.2	26.1
to non-residents	5.2	1.8	11.5	19.4	37.2	9.0	- 25.6	3.4
Short-term	4.7	2.2	9.4	16.5	31.6	3.4	- 32.0	- 1.9
Longer-term	0.6	- 0.4	2.1	2.9	5.7	5.6	6.5	5.2
with insurance corporations	1.4	1.6	2.6	2.4	1.2	1.7	1.1	2.0
Total ⁵	275.3	237.6	250.5	251.8	408.1	353.5	258.1	241.2
Financing								
Internal financing	140.7	140.1	181.5	180.4	154.6	176.9	209.8	207.7
Net retained income ^{5,6}	16.8	- 4.3	28.1	20.8	- 12.3	- 2.1	26.9	24.9
Depreciation allowances	123.9	144.4	153.4	159.7	166.8	179.0	182.9	182.8
<i>Memo item</i>								
Internal financing ratio ^{5,7}	51.1	59.0	72.5	71.7	37.9	50.1	81.3	86.1
External financing	129.1	114.6	81.7	78.2	237.8	174.6	54.2	36.5
via banks	90.1	37.0	57.9	44.0	71.2	34.9	- 21.8	- 39.0
Short-term	34.3	- 10.5	19.0	7.4	10.2	1.7	- 27.4	- 25.3
in Germany ⁵	27.7	- 7.9	16.5	4.7	- 5.3	6.3	- 24.2	- 24.7
abroad	6.6	- 2.7	2.5	2.7	15.5	- 4.6	- 3.2	- 0.6
Longer-term	55.8	47.5	38.9	36.6	61.0	33.2	5.6	- 13.7
in Germany ⁵	55.5	45.3	39.1	36.1	58.2	21.5	3.5	- 11.6
abroad	0.3	2.2	- 0.2	0.5	2.7	11.8	2.1	- 2.0
via other lenders ⁴	11.5	12.3	3.4	16.9	83.2	58.0	41.6	20.9
in Germany	0.1	7.9	- 7.8	0.6	16.2	5.9	21.3	12.8
Short-term	0.3	0.1	- 0.0	- 0.2	1.7	- 0.3	- 0.2	6.9
Longer-term	- 0.2	7.8	- 7.8	0.7	14.5	6.2	21.5	5.9
abroad	11.4	4.4	11.3	16.4	67.1	52.1	20.3	8.0
Short-term	7.4	0.8	6.0	12.5	39.7	6.5	- 17.0	11.2
Longer-term	4.0	3.6	5.2	3.9	27.4	45.6	37.3	- 3.2
in the securities market ^{5,8}	3.8	46.9	- 3.3	- 3.0	1.3	9.8	6.0	27.0
in the form of equities ³	16.5	14.2	16.5	16.7	75.8	63.7	18.8	16.6
in Germany	14.2	15.8	14.0	12.7	57.1	55.7	6.3	- 6.2
abroad	2.3	- 1.7	2.5	4.0	18.6	8.0	12.6	22.8
Pension fund provisions	7.2	4.2	7.1	3.6	6.3	8.2	9.6	11.1
Total ⁵	269.7	254.7	263.2	258.6	392.4	351.5	264.0	244.2
Net acquisition of financial assets ⁵	- 58.4	- 60.1	- 36.5	- 31.3	- 53.1	- 34.4	6.9	0.6
Statistical discrepancy ⁹	5.6	- 17.1	- 12.7	- 6.8	15.7	1.9	- 5.9	- 3.0
Net lending/net borrowing ^{5, 10}	- 64.0	- 43.0	- 23.9	- 24.5	- 68.8	- 36.3	12.8	3.7

¹ In Germany and abroad. — ² Money market paper, bonds (including financial derivatives) and mutual fund shares. — ³ Shares and other equity. — ⁴ Including other claims or liabilities. — ⁵ In 1995 after the elimination of transactions associated with the transfer of the Treuhand agency's debt to the Redemption Fund for Inherited Liabilities. — ⁶ Including net capital transfers received. — ⁷ Internal financing

as a percentage of total asset formation. — ⁸ Through the sale of money market paper and bonds. — ⁹ Corresponds to the balancing item in the financial account with the rest of the world owing to statistically unclassifiable payment transactions with non-residents. — ¹⁰ Internal financing less gross capital formation and acquisitions less disposals of non-financial non-produced assets.

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amounted to €22 billion. This is in stark contrast to the period prior to 1998 when bank loans had been the main external source of funds. Since 1999 other sources of credit have outstripped transactions with banks. It is the cross-border transactions with financial subsidiaries that have made the biggest contribution in this respect. A reversal in trend can also be identified here. Such activities have declined rapidly since 2001 and have now settled down at a level comparable with that at the beginning of the 1990s. Finally, equity financing has also lost ground. In 2003 it was the acquisition of funds through listed and unlisted shares that were most affected. At €8 billion, a substantial shortfall was recorded for the net issue. Although there were certainly inflows in return for cash payments, share repurchasing and other operations resulted in a transaction-related reduction in the volume of shares outstanding. The only form of financing which expanded significantly in 2003 was the sale of debt securities. The highest value for some time was reached at €27 billion. It was only in 1993 and 1994 that greater volumes of such paper could be placed.

Development and structure of corporate debt

Reduction in debt ratio

In the period from 1998 to 2001 the external borrowing by producing enterprises increased strongly. Extensive M & A activity and the fairly rapid acquisition of non-financial assets, which in 2000 included the purchase of UMTS licences, played a role here. A certain portion was procured by means of fresh cap-

ital; however, recourse to domestic and foreign credit and capital markets was even more extensive. This development, which was sustained especially by large enterprises, also affected the aggregate balance sheet relationships. For example, the level of debt increased by more than €400 billion between 1998 and 2001; by contrast, borrowing increased by only €250 billion between 1991 and 1997. Accordingly, the debt ratio of enterprises rose from just over 70% of GDP to just under 90% in 2001. This development did not continue during the past two years, however. In 2003 there was even a slight decline in the debt ratio to 86%.

In terms of the stock data the most important source of corporate financing is still domestic bank loans even if these have lost ground in the past few years. Bank loans accounted for just under 50% of the total outstanding debt in 2003 compared with almost two-thirds in the first half of the 1990s. Borrowing from other lenders, especially non-resident creditors, which had grown strongly during the stock market boom, amounted to just under one-quarter during that period. Even so, that was four times as high as at the beginning of the 1990s. In macroeconomic terms, securities have so far played an almost insignificant role as a financing tool for enterprises. Even provisions for company pension and other liabilities have played a much greater role. Overall, the financing structure of German enterprises has traditionally been predominantly long-termist. Maturities of less than a year accounted for scarcely more than one-third of total borrowing in 2003; short-term debt outstanding actually accounted for no

Debt structure predominantly longer-term

Debt of non-financial enterprises

€ billion

Item	1991	1993	1995	1997	1999	2001	2002	2003
Financial debt								
Loans	714.6	786.6	826.6	939.0	1,076.5	1,343.0	1,362.0	1,297.9
Short-term loans	254.3	229.2	250.9	288.6	341.0	428.8	382.8	369.2
Longer-term loans	460.3	557.4	575.8	650.3	735.5	914.3	979.3	928.7
Bonds	32.7	109.5	53.8	44.2	35.8	42.1	50.7	66.6
Money market paper	4.8	6.0	2.9	4.1	8.0	20.6	20.2	31.3
Other external debt								
Pension provisions	108.0	120.7	133.3	140.4	153.2	169.6	178.8	190.3
Trade credits ¹	94.7	104.2	124.7	154.3	208.9	254.7	256.2	244.3
Total debt	954.8	1,127.0	1,141.3	1,282.0	1,482.4	1,830.1	1,868.1	1,830.4
<i>Memo item</i>								
Debt as a percentage of gross value added	113.0	125.3	116.9	126.6	137.2	158.6	158.1	153.6
Debt as a percentage of GDP	63.6	68.1	63.4	68.5	74.9	88.2	88.5	86.0
Financial debt as a percentage of GDP	50.1	54.5	49.1	52.7	56.6	67.8	67.9	65.6

¹ Including advance payments, tax liability and outstanding social security contributions.

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more than just over one-quarter of the more narrowly defined "market" financial debt, which comprises financial credits and debt securities.

*Relief in terms
of interest
payments*

One major aspect of debt is the associated expenditure on interest.² Here, too, the considerable need for capital between 1998 and 2001 has left its mark. Enterprises' (net) expenditure on interest rose from 18% of the operating surplus to 21%. Since then, however, the interest payment ratio has gone back down to 18% again. First, this was the result of consolidation efforts and the weak demand for fixed capital. Second, the lower cost of borrowing made a substantial contribution here. Both factors greatly eased the profit and loss accounts of German enterprises during the past two years.

A glance at the other large EU economies shows that there, too, corporate debt rose sharply between 1998 and 2001, in most cases even more sharply than in Germany. There was an extremely steep increase in the operating debt ratio in Spain, France and the United Kingdom. It was only French and Italian non-financial corporations that achieved a certain stabilisation in the ensuing period. In France and Italy the ratio of borrowing to GDP in 2003 more or less persisted at the same level as in the previous year. This ratio also showed a further rise in the other countries last year, in Spain by as much as almost 10 percentage points. These findings are also confirmed on the basis of "market" financial

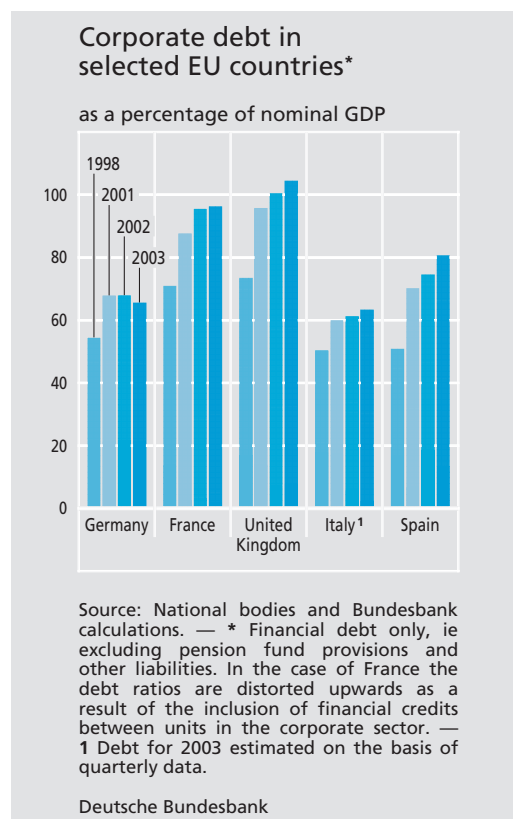
*Debt in other
EU countries*

² Tax relief on interest payments ought to be taken into account here but there is insufficient information available on this.

debt, which also provides better international comparability of the debt ratio. In a cross-section analysis the United Kingdom had by far the highest ratio at almost 105% of GDP in 2003 and Italy the lowest at just over 60%. There were also significant national differences in the maturity structure of debt. Longer-term financing predominated in Spain and France to much the same extent as in Germany. Italian and, to a slightly lesser extent, British enterprises had considerably greater recourse to short-term borrowing, which, in these two cases, amounted to as much as a half and two-fifths of financial liabilities respectively. Owing to the low interest rate level, however, a general decline in short-termism has been noticeable in these countries during the past few years. Generally speaking, loans were the predominant form of financial debt. It was only in the United Kingdom and France that securities played a significant role with a share of almost one-quarter.

Financial leverage

The debt-equity ratio is often used in addition to the relationship between debt and GDP. Owing, among other things, to the rise in share prices during the stock exchange boom of the late 1990s and despite the very high demand for borrowed funds, this ratio between debt and equity fell to a low of approximately 75% in Germany. Thereafter, the ratio rose dramatically to just under 150% by the end of 2002. This was due primarily to the sharp fall in share prices and the lower market value of enterprises and not to a greater propensity to borrow. In 2003 the ratio declined to just over 120% or so following the recovery of the stock markets. In the



other EU countries this indicator followed a similar path for the most part. However, an international comparison of financial leverage must be interpreted with care because, in addition to the difficulty of establishing market values for the capital of unlisted enterprises, the size structure of businesses and their funding habits as well as the sectoral composition may distort the picture.

The available data show that German enterprises got their balance sheet debt under control again during the past two years and in some cases did so with greater success than enterprises in other EU countries. This was associated with a substantial reduction in expenditure on interest and relief in the profit and loss account. Thus, enterprises also created more favourable conditions for increas-

Financial conditions for more investment



ing fixed capital formation. However, this is only one of the factors instrumental in over-

coming the persistent weakness in investment.