

German enterprises' profitability and financing in 2012

The temporary slowdown in economic activity in 2012 meant that commercial enterprises saw only marginal growth in sales. Nevertheless, profitability remained favourable. This was partly because the cost of materials rose much less sharply than in the previous two years. Moreover, staffing flexibility helped keep cost increases within limits despite a further rise in headcount and marked growth in wages. Weak demand dragged primarily on a number of industries such as manufacturers of basic metals, chemicals and chemical products, electrical equipment as well as machinery and equipment, whereas the automotive sector and makers of other transport equipment continued to perform very well. Construction enterprises benefited from the booming building demand, posting a record return on sales. The energy enterprises' profits recovered significantly from the slump in 2011. The dampened pace of industrial activity had very little impact on the services sector. Cost-related strains were the main cause of poorer results in some sectors such as wholesale and retail trade or transport and storage.

Sales of goods came to a standstill in some areas towards the end of 2012, leading to a build-up of stocks of finished goods in most industries. By contrast, demand in many parts of the automotive industry was consistently buoyant, as was borne out by persistently high stocks of intermediate products. With utilisation of production capacity high, the need among car manufacturers to invest in new plant and equipment remained strong. Other sectors held back from investing given their unfavourable orders situation, although the building and energy sectors expanded capacity considerably. Moreover, the services sectors continued their steady process of capital accumulation. Thus, the corporate financial statement statistics contrast somewhat with the picture, painted by the latest national accounts data, of a markedly weak investment trend in trade and industry in 2012.

Enterprises continued to acquire equity investments both inside and outside Germany. Increased intra-group lending also contributed to strengthening corporate ties. External financing picked up in 2012, although financing needs were down compared with the preceding years; however, bank loans did not play a significant role, despite the very favourable borrowing terms. Corporate equity levels rose in line with total assets. Non-financial enterprises as a whole did not continue the process of strengthening their capital base, which had been observed for a number of years. However, firms that are still undercapitalised are likely to remain committed to reducing their capital shortfall.

■ Underlying trends

Corporate profitability remains stable despite dip in economic activity

The temporary slowdown in German economic activity during the course of 2012 left its mark on the accounts of German non-financial enterprises, yet without harming their profitability.¹ Growth in sales, which in 2011 almost matched the strong rate of expansion recorded when the economy began to pull out of the severe recession of late 2008 and early 2009, slackened significantly in the year under review. At the same time, however, firms managed to limit cost growth to a similar extent. The annual result before taxes on income in 2012 increased almost as strongly as one year earlier. The gross return on sales as an average for all firms included in the Bundesbank's corporate financial statement statistics was around 4½%, as in the previous two years. The fact that profitability was not impaired in the more difficult cyclical environment in 2012 attests to German businesses' extensive ability to adjust, although firms also benefited from the fact that the purchase prices of intermediate goods rose only marginally and that the increases in personnel expenses induced by the wage bargaining partners again remained within reason.

Returns on sales rise in motor vehicles, construction and the business services sector

The weaker sales growth affected all the major economic sectors, although the individual manufacturing subsectors displayed a highly variegated performance. The automotive sector and other transport equipment held up relatively well, while major manufacturers of intermediate goods just matched their sales result for 2011 or dipped under it. Industrial firms' profitability in 2012 was unchanged on the year and was again higher than that of the other sectors. The construction industry's return on sales rose further, although its merely marginal rise in output probably indicates that it has been working at close to full capacity for some time now. By contrast, business was weaker in wholesale and retail trade and in transportation and storage; as cost pressure intensified somewhat, this dented profitability. The profit situation of the information and communication sector as well as among

business-related service providers in 2012 again markedly outperformed the average level for all the economic sectors considered.

The aggregated balance sheet of the non-financial enterprise sector did not show any notable shifts on the assets side. This is surprising given that the pronounced investment restraint indicated by the latest national accounts data is not reflected in firms' reported fixed investment, which shows that the volume invested in the procurement of new tangible fixed assets in 2012 was roughly on a par with the average for the previous two years. The associated depreciation total was concurrently exceeded by one-eighth.

In manufacturing and mining (including quarrying) the gross increase in tangible fixed assets, as extrapolated from the sample of financial statements, amounted to 5% in 2012. The Federal Statistical Office's recently published investment survey likewise points to a marked rise. According to these figures, industrial and mining enterprises with 20 or more employees invested just over 3% more in tangible fixed assets than they did in 2011.² Based on the standard revision practice used in the past, the national accounts figures, which according to the latest data show a 1% drop in nominal gross fixed capital formation in the economic sectors under review in 2012, are likely to be adjusted accordingly.

In 2012, the acquisition of equity investments came close to the previous year's level. As at the end of the balance sheet year, equity investments accounted for 34% of the fixed assets of all non-financial enterprises, compared with only 22½% 15 years ago. This in-

Financial statement data suggest investment restraint is less pronounced ...

... than the latest national accounts figures indicate

Further increase in equity investments

¹ The study for 2012 is based on 28,000 financial statements, which were expanded on the basis of the projected development of aggregate data taken from the company register. For details on the current procedure, see Deutsche Bundesbank, Financial statements statistics with broader sectoral coverage and a new basis of extrapolation, Monthly Report, December 2011, pp 32-33.

² See Federal Statistical Office, Industry invests 57 billion euros in tangible fixed assets in 2012, press release of 19 November 2013.

crease in equity investments is also a reflection of rising foreign activities, which are usually undertaken by legally autonomous entities, indicating that German firms have further stepped up their presence in the international markets.

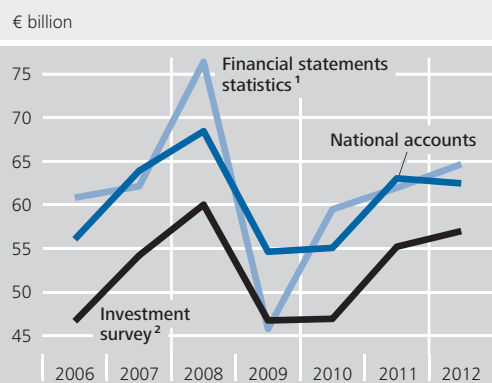
Multi-year process of strengthening the capital base has come to a halt

Non-financial enterprises' equity grew at the same rate as total assets in 2012. The process of strengthening the capital base that had been evident for quite some time has apparently come to a halt (for the factors determining the sustainable strengthening of the capital base over the last decade, see the box on pages 44 to 46). It appears that the marked structural improvement in German firms' financial resilience has prompted them of late to also take greater advantage of the exceptionally favourable debt financing environment. This was demonstrated in 2012 by the fact that funds raised, which were down by one-sixth overall versus 2011, were sourced to a somewhat greater extent from higher bank borrowing and increased bond issuance. However, growth in liabilities to affiliated companies was again the main driver of external financing. Evidently, there was no notable demand for external capital injections. The balance sheet weight of provisions was reduced further in the period under review. As in previous years, this was substantially due to the obligation set forth in the Act Modernising Accounting Law (*Bilanzrechtsmodernisierungsgesetz*) to offset provisions for pensions against corresponding plan assets.

Corporate insolvencies down further in 2012

The sound financing situation of trade and industry as well as the often favourable or at least satisfactory profit ratios across the various sectors are important factors in explaining why the threat of insolvency diminished further in 2012, even though the economic environment was patchy. The corporate default rate dropped below the already very low pre-crisis level; the decline was especially pronounced in wholesale and retail trade. Given the ongoing buoyancy of the construction industry, it comes as no surprise that the number of building firms filing for insolvency fell again. Corporate insolv-

Fixed investment in the manufacturing sector and mining*



* Including quarrying. **1** Change in tangible fixed assets plus depreciation. **2** Increase in tangible fixed assets of enterprises with 20 or more employees. Figures for 2006 and 2007 partly estimated.

Deutsche Bundesbank

encies likewise dropped markedly in the transportation and storage sector in 2012, although they remained well above the pre-crisis level. In manufacturing, the number of business closures was only marginally down; the same applies to business-related service providers.

■ Sales and income

In 2012, non-financial enterprises' sales failed to match the growth rates recorded in the previous two years (+9½% on average), rising by only 2½% compared with 2011. While personnel expenses rose at a similar rate in 2012 to 2010 and 2011, the cost of materials went up only very moderately. The fact that the annual result before taxes on income grew by 7%, which was close to the 2011 growth rate, was also attributable to the small increase in depreciation and in enterprises' other expenses. On balance, the gross return on sales remained at 4½% despite the distinctly less favourable macroeconomic environment.

Despite modest growth in sales, profits rise almost as strongly as in 2011

The temporary dip in economic activity primarily affected manufacturing. As a result, industrial firms' sales only rose by just over 1% in 2012, compared with a double-digit increase in 2011. One exception here was the production of vehicles and other transport equipment,

Manufacturing sector affected by weak sales markets

Capital base of non-financial enterprises in Germany sustainably strengthened

According to the extrapolated results from the Bundesbank's corporate financial statements statistics, the non-financial corporate sector's balance sheet equity ratio has been increasing continuously since 2000, rising by a total of 8½ percentage points to 27½% at the end of 2012. While equity more than doubled at 109% in this period, the balance sheet total grew by merely 43%. On balance, the much lamented capital shortfall of German enterprises identified in past international comparisons of capital structures has largely been eradicated. Even during the financial and economic crisis parts of the German corporate sector managed to strengthen their financial resilience.

The clearly discernible structural changes on the liabilities side of the annual financial statements are primarily the result of a broad-based corporate strategy to improve the capital base, which was accompanied by substantial earnings growth. It is likely that other factors such as the systematic reduction of bank liabilities (deleveraging) and to some extent market exit of financially stressed enterprises also contributed to this development.

The increase in the equity ratio was a great deal higher for small and medium-sized enterprises (SMEs) at 14½ percentage points than for large enterprises (+4 percentage points).¹ In view of the fact that SMEs' equity came to less than one-tenth of the balance sheet total in 2000, this development can be regarded as a catching-up process. Back then SMEs were deemed to be undercapitalised, whereas large enterprises have always had a relatively favourable capital structure by international standards – not least as a result of accumulated reserves, which represent long-term capital. The increase in the equity ratio of all enterprises together can, to a certain extent, also be attributed to a structural effect, as large enterprises, which traditionally have a better equity position, grew significantly more than SMEs in the period under review. If

such proportional shifts are considered not only in terms of size category but also legal form, the structural effect accounts for just under one-quarter of the overall increase in the aggregated equity ratio.

In Germany, a large number of SMEs are organised in the legal form of partnerships and sole proprietorships. Given that company owners bear liability against their private assets and profits are taxed as part of the income tax assessment procedure, an exact distinction between business and personal affairs cannot be made. This systemic lack of clarity in the allocation of capital can cause assets that are used for business purposes (eg as collateral for loans to enterprises) to remain in the company owner's private sphere. They therefore do not appear in the balance sheet of the enterprise. If this capital is merely "reassigned", eg due to banks' stricter collateral requirements, some of the financial growth is of an accounting nature. Therefore, the extent of the actual catching-up process of SMEs in relation to large enterprises cannot be determined accurately against this backdrop. However, the process is also likely to have been of a material nature because comparable small and medium-sized corporations, to which such considerations apply to a lesser extent, considerably improved their equity ratio by around 13½ percentage points in the observation period.

In a sector comparison, the catching-up process of SMEs with regard to equity becomes particularly evident. Economic sectors that are marked by a large number of such companies saw equity ratios in 2012 which represented twice or three times the figures recorded in 2000. Among the sectors with strong growth are, above all, the wholesale and retail trade (+13 percentage points) and construction (+9½ percentage points). By contrast, enterprises in the chemical industry and vehicle

¹ SMEs and large enterprises are distinguished on the basis of a sales threshold of €50 million.

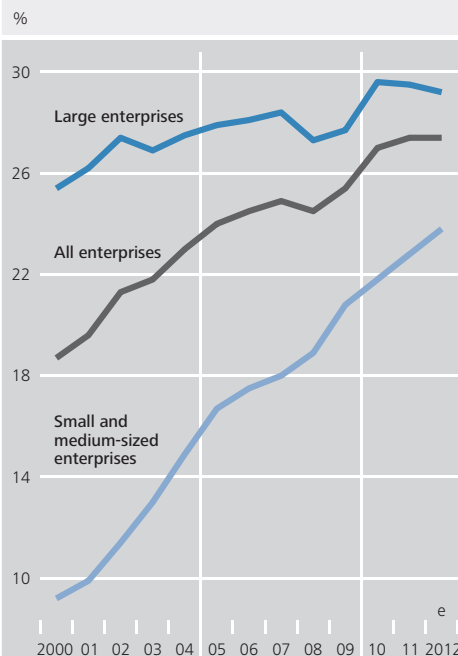
manufacture, the capital structure of which is traditionally relatively favourable, improved their capital base only slightly, if at all.

The upward trend in equity was based, above all, on the increase in retained earnings among corporations and in undistributed profits among non-corporations. Although the available annual accounts data do not permit an exact distinction between all the internally financed parts (based on retained corporate earnings, in particular) and externally financed parts (obtained from external financing sources) of the increase in the formation of equity capital,² it is nevertheless possible to establish that more than half the increase stems from internal sources and was thus generated in the sales process by the enterprises themselves.³

A key motive for the structural changes in funding behaviour is the tightening of banking regulation through the regulatory frameworks Basel III and Basel IV. At the time, enterprises were made aware at an early stage – mainly by their principal bankers and trade bodies but also as part of public discussion – that banks' prescribed credit risk-based capital requirements could lead to less favourable financing conditions and possibly even problems with regard to lending, especially for enterprises with low equity ratios and limited risk-bearing capacity.⁴ As a result of the extended requirements for banks' capital and liquidity positions through Basel III, it is also expected at present that even more emphasis will be put on the creditworthiness of enterprises and enterprises will therefore be advised to continue to work systematically on their capital structure.

In addition, changes in tax legislation favour a greater accumulation of reserves in the corporate sector. The 2000 business tax reform introduced a reduction in the corporate income tax rate for corporations to a uniform 25%, doing away with unequal tax treatment of retained earnings and creating an incentive for greater accumulation of revenue reserves. It is likely that the further reduction in the corporate income tax rate to 15%, which was adopted as part of the

Equity ratio of non-financial corporations*



* Extrapolated results from the corporate financial statements statistics (excluding holding companies). Results up to 2005 chain-linked to data in later years.
 Deutsche Bundesbank

tax legislation of 2008, and the introduction of preferential tax treatment for retained profits for partnerships and sole proprietorships by lowering the top income tax rate for retained profits from 45% to 28.25%, also caused the payout behaviour of enterprises to change.⁵ It is evident that the sus-

² A key reason is that balance sheet data contain annual accounts either prior to or after appropriation of profit. Prior to appropriation of profit, the breakdown of the annual accounts into capital to be distributed and retained capital has not yet taken place, which means that the entire annual profit is still allocated to internal funding. This problem arises primarily with corporations, while partnerships and sole proprietorships present their balance sheets mainly after appropriation of profit.

³ See also Deutsche Bundesbank, Long-term developments in corporate financing in Germany – evidence based on the financial accounts, Monthly Report, January 2012, pp 13-27.

⁴ See for example the series of essays in Wirtschaftsdienst, Zeitgespräch, Finanzierungsprobleme des Mittelstandes durch Basel II?, volume 7 2002, pp 383ff (in German only).

⁵ However, the introduction of a flat-rate tax on capital income as part of the tax reform of 2008 also meant tax increases in the corporate sector. The taxation of capital income was standardised for private investors and corporations.

tained reduction in tax rates for retained profits set incentives for internal funding.

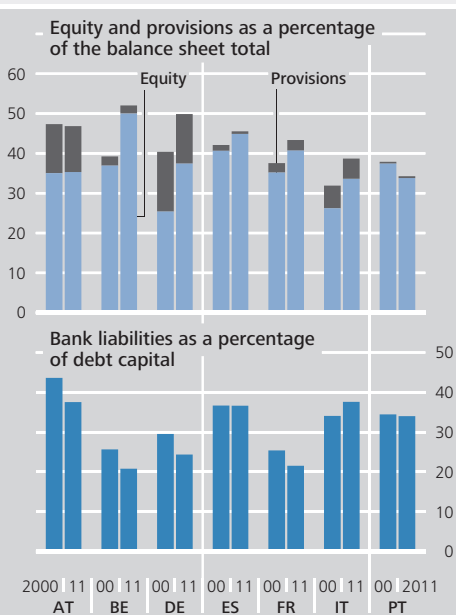
Lastly, capital developments possibly also reflect enterprises' efforts to enhance their risk provisioning. The sectors, in particular, that were confronted with a serious slump in demand during the recession year of 2009 allocated a great deal more equity in 2010 even though, at a rate of well above 20%, they were not among the undercapitalised sectors before the crisis. Evidently, the financial and economic risks in the corporate sector induced by exogenous shocks are to be offset by an appropriate capital buffer. Coupled with a comfortable overall level of profitability, German enterprises have therefore also had the necessary financial strength since 2003 to build up risk cushions, thereby documenting enhanced resilience and creditworthiness.

The now much improved funding situation of German enterprises is also discernible in an international comparison of equity ratios of small and medium-sized incorporated

enterprises⁶ in the manufacturing sector of selected European countries for 2000 and 2011. The comparison shows that the small and medium-sized corporations in Germany have caught up in terms of capital and are now at the top end of the group of countries concerned, while they had been at the very bottom of the scale ten years earlier. This finding is confirmed by survey results from the European Central Bank and the European Commission, according to which SMEs in Germany were able to considerably reduce their need for debt financing owing to greater availability of equity.⁷ This development caused the importance of bank loans as a means of corporate financing to decline correspondingly, although bank loans still dominate in the capital structure of a considerable proportion of SMEs in particular.

Hence, the improvement in the financing situation of German SMEs in recent years is essentially the result of increased recourse to internal sources of financing amidst a persistently good earnings situation and widespread use of the various funding sources⁸ available for corporate financing. Attempts to classify the German corporate financing system in a generalised way as "bank-based" do not (now) correspond with the actual financing pattern, which is far more mixed.

Capital structure of small and medium-sized incorporated enterprises in Europe*



Source: BACH database of the European Committee of Central Balance-Sheet Data Offices (ECCBSO). * Manufacturing sector. Deutsche Bundesbank

⁶ Given that harmonised data at the European level are only available for this legal form, the comparison is limited to incorporated enterprises. These data are available for a restricted group of EU countries in the BACH database of the European Committee of Central Balance-Sheet Data Offices (ECCBSO).

⁷ See European Central Bank, Survey on the access to finance of SMEs in the euro area, October 2012 to March 2013, Frankfurt, April 2013, p 7.

⁸ See H Friderichs and T Körting, Die Rolle der Bankkredite im Finanzierungsspektrum der deutschen Wirtschaft, Wirtschaftsdienst, volume 1, 2011, pp 31ff (in German only).

which along with coke and refined petroleum product manufacturers generated the biggest rise in sales (+5%). A major factor in this context was that brisk motor vehicle sales in the United States, Russia and China, in particular, more than offset the sluggish demand in euro-area countries. While manufacturers of machinery and equipment and the chemicals industry both posted slight sales increases, these did not suffice to enable them to equal the 2011 annual result, amongst other things owing to steadily rising personnel costs. After recording double-digit growth rates in 2010 and 2011, manufacturers of electrical equipment and of basic metals even suffered a drop in sales in 2012. However, this did not adversely affect either sector's profitability. Overall, the manufacturing sector's return on sales remained at 5% in the reporting period.

Construction chalks up another excellent annual result

The construction industry, too, raised its sales only slightly in 2012 compared with the previous year. However, this is probably due to the fact that this sector, which has been producing at near maximum capacity for some time now, is reliant on investment in capacity extensions and higher headcount in order to raise business activity substantially. The very strong demand is reflected by the fact that construction firms' gross return on sales reached a new record level of 6% in 2012. Small increases in the cost of materials also played a part in this.

Energy companies see sales and income rise

The growth in revenue of the energy sector by more than one-eighth was driven not only by the strong expansion in electricity trading but also by the production launch of a large number of plants which extract energy from renewable sources. This was accompanied by business start-ups. Energy companies reported another good annual result in 2012 after their pre-tax profit in 2011 had slumped heavily due, amongst other things, to losses incurred in energy trading and expenses directly related to the decommissioning of nuclear power plants. However, this sector was not yet able in 2012 to fully achieve the level of returns generated in the years preceding the German government's

decision to switch to non-nuclear energy production.

Whereas retail traders and, to a lesser degree, wholesalers managed to push up their sales slightly, a drop in new car registrations in 2012 led to a slight decrease for traders of motor vehicles and motorcycles. Costs rose faster than income in all trading sectors, primarily as a result of higher personnel expenses. Motor vehicle dealers' and retailers' profits fell markedly. All trade sectors saw their return on sales decline, with retail traders again proving the most profitable, with a return of 3½%.

Sales down in trade sector

The economic slowdown had less of an impact on the other services sectors on balance. The business services sector posted another substantial increase in sales (+4%) and significantly higher profits in 2012. Business-related services, in particular professional, scientific and technical activities, led the business economy in terms of profitability. Although the transportation and storage sector and the information and communication industry were able to marginally improve their income in 2012, higher costs prevented them from achieving a better annual result. Posting a return on sales of 8¼%, the information and communication industry was again among the leaders of the economic sectors considered here, while the performance of transport and logistics enterprises was clearly below average. Moreover, at 2¼%, their return was still well below the pre-crisis level.

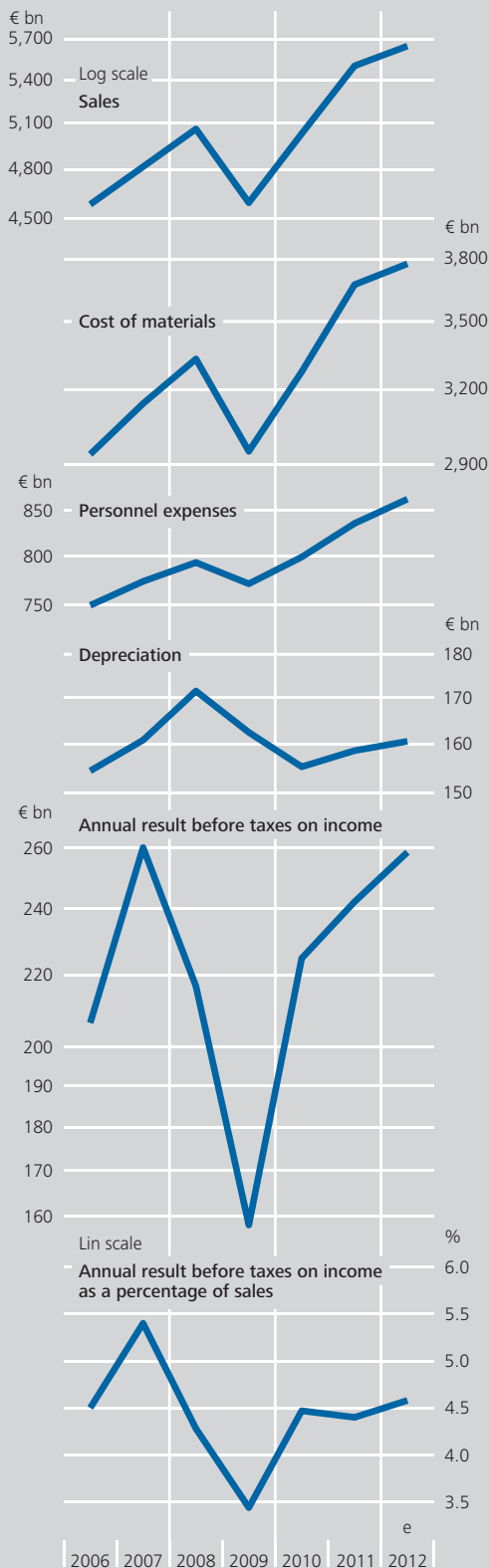
Economic slowdown has little impact on business services sector

Income and expenses in detail

Enterprises' gross revenue – which, in addition to the proceeds from sales, also includes the small accounting item “change in finished goods” – increased by 2½% in 2012. The year-on-year change in the other income components varied a great deal across the corporate sector. However, these disparate influences more or less cancelled each other out, which

Gross revenue increases in line with sales growth

Selected indicators from German enterprises' income statement*



* Extrapolated results from corporate financial statements statistics.
 Deutsche Bundesbank

meant that enterprises' total income expanded in tandem with their sales and gross revenue.

Enterprises' interest and similar income declined by 1% year-on-year in 2012. This was the result of a further fall in average remuneration, which was already very meagre. Overall, interest-bearing assets – the total stock of which expanded by 2% in the corporate sector – yielded a return of just 2%. By contrast, income from long-term equity investments grew by one-twelfth in the year under review. This increase was attributable mainly to profitable direct investments by German vehicle manufacturers in China³ and to profit growth recorded by subsidiaries of German business services providers; income from long-term equity investments in the chemical industry contracted significantly. Other operating income rose by 4%, and thus also made an above-average contribution to the growth in enterprises' total income.

Interest income weak, long-term equity investments profitable

The rise in enterprises' cost of materials was much more moderate in 2012 than in the preceding years, at 3%. This increase was only marginally higher than the growth in sales. This was mainly attributable to the modest rise in intermediate goods prices. On the import side, raw materials were 4½% more expensive, and semi-finished goods prices went up by 1¾%; these compare with double-digit rates of increase in 2010 and 2011 brought about by the global economic upturn. The prices of domestically purchased intermediate goods rose by ¼% in 2012. These rates of increase considerably alleviated the cost of materials, particularly in industry. In the business services sector, the growth in proceeds from services rendered actually exceeded the rise in the cost of procuring intermediate services. The retail trade sector, on the other hand, had to cope with buying prices increasing more sharply than selling prices in 2012. A similarly unfavourable cost

Only a moderate increase in the cost of materials in 2012 ...

³ See Deutsche Bundesbank, Reasons for the recent slump in German goods exports to China, Monthly Report, November 2013, pp 47-49.

Enterprises' income statement*					
Item	2010	2011	2012 ^e	2011	2012 ^e
	€ billion			Year-on-year percentage change	
Income					
Sales	5,031.8	5,501.9	5,647	9.3	2.5
Change in finished goods ¹	29.6	36.2	30	22.3	- 17.5
Gross revenue	5,061.3	5,538.0	5,677	9.4	2.5
Interest and similar income	19.1	21.5	21	12.3	- 1
Other income ²	244.5	249.0	258	1.8	3.5
of which					
from long-term equity investments	32.4	29.4	32	- 9.4	8.5
Total income	5,325.0	5,808.5	5,956	9.1	2.5
Expenses					
Cost of materials	3,276.1	3,674.1	3,776.5	12.1	3
Personnel expenses	799.1	835.4	862.5	4.5	3.5
Depreciation	155.2	158.5	160.5	2.1	1
of tangible fixed assets ³	142.5	141.7	145	- 0.5	2.5
Other ⁴	12.7	16.8	15.5	32.3	- 8.5
Interest and similar expenses	62.0	65.5	62.5	5.6	- 4.5
Operating taxes	64.9	65.6	65.5	1.0	- 0.5
of which					
Excise duties	57.8	58.5	58	1.2	- 1
Other expenses ⁵	742.8	767.2	770.0	3.3	0.5
Total expenses before taxes on income	5,100.2	5,566.3	5,697.5	9.1	2.5
Annual result before taxes on income	224.8	242.2	258.5	7.7	7
Taxes on income ⁶	46.1	52.3	51.5	13.5	- 1.5
Annual result	178.7	189.8	207	6.2	9
<i>Memo item</i>					
Cash flow ⁷	⁸ 349.4	367.8	354.5	5.3	- 3.5
Net interest paid	42.8	44.0	41.5	2.7	- 6
	As a percentage of sales			Year-on-year change in percentage points	
Gross income ⁹	35.5	33.9	33.7	- 1.6	- 0.2
Annual result	3.6	3.5	3.7	- 0.1	0.2
Annual result before taxes on income	4.5	4.4	4.6	- 0.1	0.2
Net interest paid	0.9	0.8	0.7	- 0.1	- 0.1

* Extrapolated results; differences in the figures due to rounding. **1** Including other own work capitalised. **2** Excluding income from profit transfers (parent company) and loss transfers (subsidiary). **3** Including write-downs of intangible fixed assets. **4** Predominantly write-downs of receivables, securities and other long-term equity investments. **5** Excluding cost of loss transfers (parent company) and profit transfers (subsidiary). **6** In the case of partnerships and sole proprietorships, trade earnings tax only. **7** Annual result, depreciation, and changes in provisions, in the special tax-allowable reserve and in prepaid expenses and deferred income. **8** Adjusted for special effects due to the Act Modernising Accounting Law (Bilanzrechtsmodernisierungsgesetz). **9** Gross revenue less cost of materials.

Deutsche Bundesbank

situation was also experienced in the information and communication industry.

... but personnel expenses continued to move up sharply

In the period under review, as in the previous two years, personnel expenses – bringing together the payroll costs for core staff – recorded another comparatively sharp rise, advancing by 3½%. One reason for this was a marked increase in pay. For instance, collectively agreed wages in the private sector went up more sharply in 2012 than in the preceding years, with the manufacturing sector being the main catalyst in this respect. In addition, employees' wages were supplemented by in some cases substantial one-off payments and bo-

nuses. This was the case at car manufacturers in particular. The second reason is that enterprises also hired additional labour in the period under review, though not to the same extent as in 2010 and 2011. A cross-sector comparison reveals that manufacturing and the wholesale and retail trade sector, in particular, saw personnel expenses rise faster than sales revenue. However, by longer-term standards the ratio of personnel expenses to gross revenue in these sectors – as in the whole non-financial corporate sector – remained at a low level.

Other expenses edged up by ½%, making a below-average contribution to the growth in

Other expenses made a below-average contribution to cost growth in 2012 ...

firms' costs. Measures to reduce costs by adjusting flexible staffing components are likely to have played a role here. Industrial firms were particularly active in cutting back their temporary hirings, the costs for which are generally booked to this item. In addition, weak order books eroded employees' working time accounts on balance in large parts of the manufacturing sector. This meant that, unlike in 2010 and 2011 when working time credit balances accumulated, no additional provisions had to be set up to cover such a liability. There was likewise a decline in transfers to provisions for pensions – transfers which had caused a significant increase in extraordinary expenses in 2010 owing to the introduction of the German Act Modernising Accounting Law.

... as did depreciation

Depreciation at enterprises recorded only a modest increase of 1% in the period under review. Although depreciation of tangible fixed assets in practically all sectors climbed for the first time since 2008 (+2½%), write-downs on financial and other assets fell following a sharp rise the year before.

Low interest rate level cuts interest expenses

In the period under review, enterprises' interest and similar expenses dropped for the first time since 2009 (-4½%). This was attributable solely to the low level of interest rates, which pushed the implied interest cost down to 4¼% on average over the year, whilst enterprises' interest-bearing liabilities once again expanded considerably in 2012.

■ Sources and uses of funds

Much narrower scope for internal financing

Enterprises' sources of funds were one-sixth lower in 2012 than in 2011. This was attributable to considerable shrinkage in internal financing, which made up only two-thirds of total funding in the period under review, compared to a ratio of three-quarters in 2011. Internal funding sources were narrowed, first, by the write-back of provisions. Second, retained earnings in 2012 were once again lower than in the year before. On the other hand, external

financing expanded slightly. This was brought about by a considerable increase in long-term liabilities, following net repayments in 2011. Firms notably incurred new payment obligations to affiliated companies. Capital market finance did not play a significant role, aside from isolated bond issues by major companies. Small and medium-sized enterprises are likely to have had greater recourse to the lines of credit granted to them by the banks.

As in 2011, the use of funds in 2012 was roughly divided 70:30 between the acquisition of non-financial assets and the accumulation of financial assets. More than half of the latter category was accounted for by the acquisition of new long-term equity investments. Corporations are much more active in this regard than unincorporated enterprises; in the period under review there was only a slight drop in these acquisitions compared to the high level recorded in the previous two years. Corporations were comparatively restrained in investing in production facilities. In the year under review, the gross increase in tangible fixed assets nonetheless exceeded depreciation of such assets by one-eighth, compared to one-tenth in 2011. However, this was overwhelmingly attributable to extraordinarily large capacity expansions at the major car manufacturers and other transport equipment makers, with most other sectors recording rather low figures.

At unincorporated enterprises, investment in tangible fixed assets in 2012 – relative to depreciation – was not only more substantial than that undertaken by corporations, but also more broadly based across sectors. The production sector was led in this respect by small and medium-sized construction and energy firms, presumably owing to robust housing construction and the accelerated expansion of renewable energy generation facilities. However, unincorporated enterprises in industry cut back their accumulation of tangible fixed assets somewhat in 2012 following two years of significant growth. In the services sector, in which sole proprietorships and partnerships are much

Substantial capital investment at the large car manufacturers and ...

... in domestically oriented sectors

Enterprises' sources and uses of funds*					
€ billion					
Item	2010 ¹	2011	2012 ^e	Year-on-year change	
				2011	2012 ^e
Sources of funds					
Capital increase from profits and contributions to the capital of non-corporations ²	75.1	45.3	25	-29.8	-20.5
Depreciation (total)	155.2	158.5	160.5	3.3	2
Increase in provisions ³	-11.0	20.5	-13	31.5	-34
Internal funds	219.3	224.4	172	5.1	-52.5
Increase in capital of corporations ⁴	41.1	8.1	2	-33.1	-6
Change in liabilities	129.4	77.8	85	-51.6	7
Short-term	105.3	89.1	52.5	-16.2	-36.5
Long-term	24.2	-11.3	32.5	-35.5	43.5
External funds	170.6	85.9	86.5	-84.7	1
Total	389.9	310.3	259	-79.6	-51.5
Uses of funds					
Increase in tangible fixed assets (gross) ⁵	172.1	155.7	164	-16.4	8
<i>Memo item</i>					
Increase in tangible fixed assets (net)	29.6	14.0	19	-15.6	5
Depreciation of tangible fixed assets	142.5	141.7	145	-0.8	3
Change in inventories	43.4	50.8	16.5	7.4	-34
Non-financial asset formation (gross investments)	215.6	206.5	180.5	-9.0	-26
Change in cash	19.7	-6.1	10	-25.8	16
Change in receivables ⁶	115.9	67.8	27.5	-48.1	-40
Short-term	116.3	64.6	21	-51.6	-43.5
Long-term	-0.4	3.1	7	3.5	3.5
Acquisition of securities	-11.5	-2.1	-2	9.5	0
Acquisition of other long-term equity investments	50.3	44.1	43	-6.2	-1
Financial asset formation	174.3	103.7	78.5	-70.6	-25.5
Total	389.9	310.3	259	-79.6	-51.5
<i>Memo item</i>					
Internal funds as a percentage of gross investments	101.7	108.6	95.5	.	.

* Extrapolated results; differences in the figures due to rounding. **1** Influenced in part by special effects as a result of the Act Modernising Accounting Law (Bilanzrechtsmodernisierungsgesetz). **2** Including "GmbH und Co KG" and similar legal forms. **3** Including change in the balance of prepaid expenses and deferred income. **4** Increase in nominal capital through the issue of shares and transfers to capital reserves. **5** Change in tangible fixed assets (including intangible assets) plus depreciation. **6** Including unusual write-downs of current assets.

Deutsche Bundesbank

more widespread than in the production sector, the formation of tangible fixed capital was increased across the various sectors in the period under review. This needs to be seen in relation to an across-the-board decline in the year before. Taken overall, the capital investment behaviour of non-financial enterprises reflects the sectoral demand profile, which was shaped in 2012 by temporarily weaker demand in the heavily export-oriented industrial sector, on the one hand, and by burgeoning construction and services business, on the other.

■ Balance sheet developments

The total assets of the non-financial corporate sector expanded by 3% in 2012. This was somewhat less than the growth figure for 2011 (+4½%). The assets side noticeably included more long-term receivables from affiliated companies and other long-term equity investments. Inventories rose in line with total assets, whereas the growth in tangible fixed assets was below average. On the liabilities side, liabilities and provisions expanded at the same rate as equity overall, though there were noticeable shifts within this item. For instance, lower provisions were booked in 2012 than in

Balance sheet growth driven by growing intra-group links

Enterprises' balance sheet*					
Item	2010	2011	2012 ^e	2011	2012 ^e
	€ billion			Year-on-year percentage change	
Assets					
Intangible fixed assets	83.9	80.8	80.5	-3.7	-0.5
Tangible fixed assets	839.1	856.3	875.5	2.0	2.5
Inventories	542.6	593.4	610	9.4	3
Non-financial assets	1,465.7	1,530.5	1,566	4.4	2.5
Cash	249.1	243.0	253	-2.5	4
Receivables	1,122.4	1,184.5	1,207.5	5.5	2
of which					
Trade receivables	371.4	390.4	398	5.1	2
Receivables from affiliated companies	608.1	648.0	660	6.6	2
Securities	78.1	76.1	74	-2.6	-3
Other long-term equity investments ¹	499.5	532.5	565	6.6	6
Prepaid expenses	18.3	18.4	19.5	0.8	5.5
Financial assets	1,967.5	2,054.5	2,118.5	4.4	3
Total assets ²	3,433.1	3,585.0	3,684.5	4.4	3
Capital					
Equity ^{2,3}	927.9	981.3	1,008.5	5.8	3
Liabilities	1,903.4	1,981.2	2,066	4.1	4.5
of which					
to banks	455.2	456.5	459	0.3	0.5
Trade payables	289.7	306.1	311	5.7	1.5
to affiliated companies	722.3	757.9	820	4.9	8
Payments received on account of orders	187.0	204.8	209	9.5	2
Provisions ³	573.0	593.9	581	3.6	-2
of which					
Provisions for pensions	188.8	192.6	191	2.0	-1
Deferred income	28.8	28.6	29.5	-0.7	3
Liabilities and provisions	2,505.2	2,603.7	2,676.5	3.9	3
Total capital ²	3,433.1	3,585.0	3,684.5	4.4	3
<i>Memo item</i>					
Sales	5,031.8	5,501.9	5,647	9.3	2.5
Sales as a percentage of total assets	146.6	153.5	153.5	.	.

* Extrapolated results; differences in the figures due to rounding. 1 Including shares in affiliated companies. 2 Less adjustments to equity. 3 Including half of the special tax-allowable reserve.
 Deutsche Bundesbank

2011, whilst the balance sheet included more short-term and long-term liabilities to affiliated companies in particular. The relative weight of the items that reflect such financial interlinkage within corporate groups has been expanding on both sides of the balance sheet for years, and now makes up more than one-sixth of assets and just under one-quarter of liabilities.

Inventory stockpiling prompted by flagging industrial and booming construction demand

The stockpiling of inventories observable in the period under review is largely explained by the temporary lull in demand for industrial products, which forced many manufacturing firms to warehouse finished goods. The electrical engineering sector, basic metals producers and

chemicals firms all faced flagging demand in the course of 2012. Manufacturers of transport equipment, on the other hand, registered barely any rise in their inventories of finished goods. This sector's buoyant position is additionally attested by the fact that its holdings of intermediate goods have remained high, whilst enterprises in some other branches of industry have been more circumspect in placing input orders. A smaller part of inventory stockpiling was caused by a one-tenth increase in the stock of contracts in progress at construction companies in 2012, which had also risen sharply in the two preceding years. This upward trend is explained by the continued robustness

of the construction business. In the period under review, almost two-fifths of all assets in the construction sector consisted of unfinished buildings and structures.

Rise in tangible fixed assets driven by equipment purchases

The growth in tangible fixed assets arose predominantly from the increase in movable fixed assets, whilst investment in land and buildings rose only modestly. This difference applied across practically all major industries. The expansion of production facilities was particularly substantial in car manufacture, and related both to plant and equipment (+10%) and to the amount of industrial/commercial space being used (+6½%). This points to considerable creation of new capacity in the automotive sector. This impression is reinforced if Germany's large global car manufacturers are regarded in isolation: their tangible fixed assets posted double-digit growth over 2012 on average.

Weight of total fixed assets higher ...

Intangible fixed assets declined somewhat as a share of the aggregate total assets of non-financial enterprises in 2012, as they did in 2011; this was connected notably with a fall in goodwill. On the other hand, long-term receivables, securities and equity investments expanded substantially, which meant that financial asset components played a major part in the build-up in enterprises' overall fixed assets. As a result, the ratio of fixed to total assets rose to 45% in the period under review, following a decline in the previous two years.

... and still solidly financed by long-term capital

The growth in fixed assets was mirrored in 2012 by an expansion in long-term capital, which comprises equity, long-term liabilities and provisions for pension. The combined share of these items has remained unchanged for several years at around 48% of total assets. This means that, in terms of matching maturity, the means of production and receivables are solidly financed. With the ratio of equity to total assets unchanged of late and the relative weight of provisions for pensions shrinking in the context of greater off-balance-sheet funding of company pension commitments, enterprises have accumulated more long-term liabilities.

Enterprises' balance sheet ratios*

Item	2010	2011	2012 ^e
	As a percentage of total assets ¹		
Intangible fixed assets	2.4	2.3	2
Tangible fixed assets	24.4	23.9	24
Inventories	15.8	16.6	16.5
Short-term receivables	30.4	30.8	30.5
Long-term equity and liabilities ²	48.6	47.8	48
of which			
Equity ¹	27.0	27.4	27.5
Long-term liabilities	15.9	14.9	15.5
Short-term liabilities	39.6	40.4	40.5
	As a percentage of tangible fixed assets ³		
Equity ¹	100.5	104.7	105.5
Long-term equity and liabilities ²	180.9	183.0	185.5
	As a percentage of fixed assets ⁴		
Long-term equity and liabilities ²	108.2	107.9	107.5
	As a percentage of short-term liabilities		
Cash resources ⁵ and short-term receivables	97.9	95.7	93.5
	As a percentage of liabilities and provisions ⁶		
Cash flow ⁷	⁸ 15.5	15.6	14.5

* Extrapolated results. Differences in the figures due to rounding. **1** Less adjustments to equity. **2** Equity, provisions for pensions, long-term liabilities and the special tax-allowable reserve. **3** Including intangible fixed assets. **4** Tangible fixed assets, intangible fixed assets, other long-term equity investments, long-term receivables and long-term securities. **5** Cash and short-term securities. **6** Liabilities, provisions, deferred income and half of the special tax-allowable reserve less cash. **7** Annual result, depreciation, and changes in provisions, in the special tax-allowable reserve and in prepaid expenses and deferred income. **8** Adjusted for special effects due to the Act Modernising Accounting Law (Bilanzrechtsmodernisierungsgesetz).

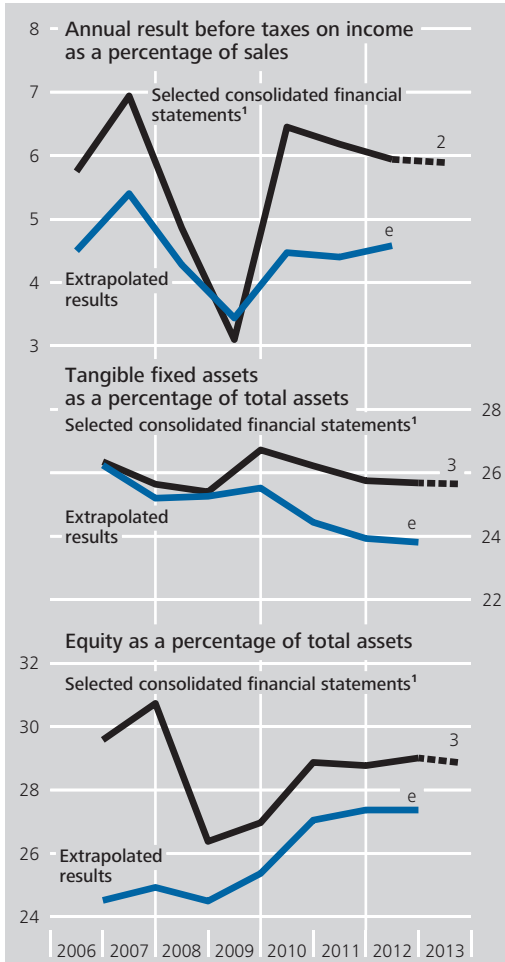
Deutsche Bundesbank

ities. Loans from affiliated companies have played a greater part in this than additional bank borrowing.

At the end of the 2012 financial year, the equity ratio amounted to 27½% on average across all the sectors surveyed, which was the same level as in 2011, when it had recorded only a relatively modest rise compared with previous years. Unincorporated enterprises, which have been steadily catching up with corporations for some time, raised their equity levels further. In the year under review, their equity amounted to 17% of total assets. The equity ratio of corporations has stuck at just over 30% since

Equity ratio unchanged in 2012

Selected ratios from consolidated and individual financial statements



1 Approximately 75 non-financial groups of enterprises listed in the DAX and the MDAX. **2** Seasonally adjusted average for the 2013 Q1 to Q3 period. **3** Balance sheet date: 30 September 2013.
 Deutsche Bundesbank

2010. The sectoral breakdown likewise shows a variegated picture. Thus in the production sector and in wholesale and retail trade the equity ratio rose in 2012, whereas it declined a little at business services providers and fell appreciably in the information and communication sector. Overall, the inter-sectoral heterogeneity of equity ratios is likely to have been further reduced because sectors with below-average ratios have tended to increase them to a greater extent. This is true in particular of the construction industry, wholesale and retail trade, and accommodation and food service activities.

Trends for 2013

Industrial enterprises are likely to have recorded only very moderate sales growth overall in 2013. According to data from the group financial statement statistics, which cover non-financial groups listed on the DAX and MDAX, sales revenue was practically stagnant against 2012 until the third quarter of 2013. However, there was distinct relief in terms of the cost of materials, with prices for both domestically and externally purchased intermediate goods having eased. With a moderate pick-up in employment and very uniform growth in pay, personnel expenses are likely to have risen to an extent similar to that experienced in the previous two years. From today's perspective, there has therefore probably been no marked decline in the profitability of the enterprise sector as a whole.

Corporate groups' return on sales up to 2013 Q3 ...

The impression gained from extrapolating single-entity financial statements available up to 2012 – namely, that the drive to strengthen equity ratios in the aftermath of the sharp recession in late 2008 and early 2009 has abated – receives further corroboration from the consolidated financial statements for 2013. The equity ratio has remained unchanged since that time at around 29% of total assets. With profitability at a constant level, the corporate groups' desire to keep shareholder dividends on an even keel is consistent with steady transfers to retained earnings.

... and equity ratio unchanged vis-à-vis 2012

Corporate groups' tangible fixed assets at the end of the third quarter of 2013 amounted to just under 26% of total assets, as in 2012. This means that this ratio has stabilised on group balance sheets at a level which is significantly higher than the corresponding ratio in the aggregated single-entity financial statements, where the ratio has declined distinctly in recent years. Taking into consideration the fact that fixed capital formation at foreign subsidiaries boosts non-financial assets on group balance sheets, but is reflected on single-entity balance sheets only partly and through other items (eg receivables from affiliated companies, long-

Corporate groups' ratio of tangible fixed assets to total assets stable since 2010

term equity investments),⁴ then the divergent developments may be an indication that foreign investment by domestic enterprises has increased at the expense of capacity expansion at domestic locations in recent years.

4 If investment in foreign locations is financed using resources generated locally by the subsidiary, this creates hidden reserves on the single-entity balance sheet of the domestic parent company, as the long-term equity investment must be recognised at cost.