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THE MAIN POINTS IN BRIEF

In 1990 manufacturing industry had a relatively limited weight (some 20 % of GDP) in the economy of the Triad countries (the EC Member States, the United States and Japan), even though industrial products are at the heart of these countries' trade. Manufacturing industry, a sector that has been extensively opened up to international competition, is particularly sensitive to changes in the competitiveness of the economies under consideration. An increase in investment is determined by the capacity of enterprises to finance investment, which is in turn linked to their profitability and financial structure. From the aggregated accounts of enterprises supplied by those national bodies which centralize balance-sheet data the EC Commission has created a harmonized data bank that provides access to the necessary financial statistics. This study sets out to compare, on the basis of the BACH data bank, the trends over the last ten years in the costs, profit or loss, and financial structures of industrial enterprises in the EC Member States, the United States and Japan. The key points of this analysis are as follows:

- Purchases of goods and services are the main item of expenditure of enterprises (averaging 63% of turnover in Europe in 1990). Following the fall in the cost of raw materials and a greater use of subcontracting, there has generally been a limited and irregular decline in the weight of purchases in the turnover of enterprises.
- Staff costs (averaging 21 % of turnover in Europe in 1990) vary from country to country depending on the level of productivity, compensation of employees and taxes on labour. Between 1982 and 1989 most European countries, with the exception of Germany and the Netherlands, experienced a marked reduction in staff costs as a proportion of turnover. After 1989 this ratio generally rose again, partly as a result of a combination of higher labour costs and a slowdown in economic activity.
- The gross profit ratio (averaging 12.6% of turnover in Europe in 1990) reflects a firm's ability to finance the costs of maintaining its working capital, financial charges and tax. European enterprises experienced a rapid and regular increase in this ratio up to 1989, when the trend was reversed. Over that period the gap between European countries narrowed steadily (1.5 percentage points in 1987, against 4.4 percentage points in 1982). After 1989 this gross profit ratio declined sharply in all countries, especially Spain, where it fell to a level lower than in 1982.
- The net profit ratio, calculated by deducting from the gross ratio depreciation, financial charges and taxes (which averaged 2.9 % of turnover in Europe in 1990) reflects an enterprise's real profit since it allows shareholders to be paid (dividends) and contributes to self—financing through allocations to reserves. The general trend remained the same as that for the overall gross profit ratio but the relative ranking

of countries changed. Thus, because of the high proportion of financial charges, Italy lost ground, in contrast to the United Kingdom, which has different provisioning practices and low charges.

- Financial charges are the remuneration paid to lenders of capital (averaging 2.8 % of turnover in Europe in 1990). They are directly influenced by the amount of debt contracted by enterprises and by the movement of interest rates. A higher level of debt has meant that European and Japanese enterprises have borne much higher financial charges than US enterprises. In Europe the burden of financial charges eased considerably between 1982 and 1988, and the gap between the different countries narrowed a great deal. However, after 1988 the relative weight of financial charges increased again, at a rate which varied from one country to another (quite rapid in Belgium and the Netherlands, but more moderate elsewhere).
- The overall ratio of indebtedness of European enterprises fell sharply between 1982 and 1990 (averaging 56% of the balance-sheet total in 1990). This was accompanied by a strong convergence between countries. However, the improvement in indebtedness came to a halt in some countries after 1987 (Belgium, Germany), while in others there was a slight return to borrowing (United Kingdom, Netherlands, Italy). Borrowing increased further in Spain, Portugal and France.
- The decline in industrial activity discernible after 1991 should lead to a marked worsening of profit ratios. While the cost of purchases has fallen, the increase in the corrected wage share has probably offset this positive effect. Thus, in a depressed environment, enterprises are still having to cope with high fixed charges even though their turnover is static or diminishing.

This supplement to European Economy is intended to provide on the basis of financial information an annual **comparison of the profit or loss and financial structures of industrial enterprises in the EC Member States, the United States and Japan**. In this first issue, the analysis will look in detail solely at changes in staff costs and financial charges, which depend on the wage and monetary policies being pursued at national level.

An industrial enterprise buys, processes and sells, and it is on the basis of these operations that it is possible to identify its economic characteristics and how its profit or loss is formed. International comparisons of the performances and financial situations of enterprises are particularly difficult for several reasons: profound differences exist between the various countries' accounting methods; financing methods are often specific to each country; and the concepts used may vary. In an attempt to overcome some of these difficulties, the Commission has created a harmonized data bank using the accounts of enterprises provided by the national bodies responsible for centralizing balance-sheet data (see box describing the methodology). The analyses presented here are thus based directly on the information contained in the BACH data bank.

Analysing the cost of manufacturing industries brings out the importance of certain items. On average, purchases of goods and services are the main item of expenditure (62.9 % of turnover in Europe in 1990). Their relative share depends on the cost of raw materials and on the degree to which recourse is had to subcontracting. For European countries there was, from 1985, a limited and irregular decline in the share of purchases in turnover, although it is not possible to identify the role of the various factors influencing this trend. In addition to wages and salaries, staff costs (averaging 21 % of total turnover in 1990) comprise all social contributions (compulsory contributions by employees and employers, and voluntary payments to pension funds). Once purchases of goods and services and staff costs are covered, an enterprise is left with a gross profit (overall gross surplus) which it will use to finance the costs of maintaining its working capital, financial charges and taxes. The balance is the final net profit or loss. Changes in the gross and net profit ratios will be analysed here by reference to these two concepts of profit. Analysing the structure of financing (debts and equity capital) provides a better understanding of the role and weight of financial charges.

Box 1

THE BANK FOR THE ACCOUNTS OF COMPANIES HARMONIZED (BACH)

As an accompaniment to its tools for economic analysis, the Commission (DG II) created in 1985 a data bank made up of the annual accounts, aggregated at different sectoral levels, of several EC countries and of Japan and the United States. To this end, it contacted the national institutes responsible for centralizing balance—sheet data, which supplied it with aggregated sectoral data. The Commission departments assumed the samples used were representative given that the data are generally published and analysed by those institutes.

In order to allow comparative analyses to be made, the basic accounts were reworked for the purposes of harmonization according to a single accounting layout consistent with the Fourth Directive. This produced time series of accounting data aggregated by sector and, in most cases, by size of enterprise, thus improving the comparability of the structures of balance sheets and of profit and loss accounts between countries.

Harmonization was at the centre of this project, and comparability remained the main objective, sometimes to the detriment of detail. However, the specific nature of national accounting methods and the difficulty of establishing *a posteriori* accounting documents according to a common layout restricted the degree of harmonization of data in some respects. Consequently, although comparisons of trends are possible, comparisons of levelsare trickier (and indeed impossible in some cases) and require a sound prior knowledge of each country's accounting and financial environment. DG II is a permanent associate member of the *Comité Européen des Centrales de Bilans*, which brings together national experts of the various institutes centralizing balance-sheet information which supply data to BACH. The sectoral nomenclature has also been standardized and comprises 22 sectors or subsectors.

At present, the data bank covers ten countries:

- Belgium (source: Banque Nationale de Belgique),
- Germany (source: Deutsche Bundesbank) (1)
- Spain (source: Banco de España),
- France (source: Banque de France),
- Italy (source: Centrale dei Bilanci),
- the Netherlands (source: Centraal Bureau voor de Statistiek),
- Portugal (source: Banco de Portugal),
- the United Kingdom (source: Central Statistical Office),
- the United States (source: Department of Commerce), and
- Japan (source: Ministry of Finance).

The «EUROPE» row in the tables, specifically calculated for the purposes of this study, has been obtained by taking the average for the eight European countries weighted by each country's relative weight in industrial manufacturing output. The combined industrial manufacturing output of these eight countries accounts, on average, for 97 % of industrial manufacturing output in the Community.

No data is available for 1991 in the case of the United Kingdom. However, in order to obtain a BACH 8 aggregate, estimations have been based on the trend of activity in 1991 (except for financial charges, which have been calculated on the basis of regression between historical series and long-term interest rates).

⁽¹⁾ For technical reasons, the German figures have been taken from the publication «Monatsbericht der Deutschen Bundesbank» and reprocessed using the BACH nomenclature.

1. STAFF COSTS AND FINANCIAL CHARGES OF **ENTERPRISES**

1.1 Irregular trend in staff costs

Staff costs, which serve to measure the cost of labour, include social charges (compulsory contributions by employees and employers) as well as wages and salaries. They impose a particularly heavy burden on enterprises (the second largest item after purchases) and vary with changes in the compensation of employees and in the taxation of labour. The ratio used here allows them to be measured as a proportion of turnover, i.e. in relation to an enterprise's level of activity.

The differences observed between countries in the level of staff costs may be explained by productivity levels (turnover per employee), by the levels of compensation of employees or by the levels of social charges.

On average, European enterprises face a higher burden of staff costs than Japanese enterprises (1) (a difference of about five percentage points over the entire period). In Japan the limited weight of staff costs in turnover compared to the European average can be explained only by high labour productivity and the low level of social security contributions.

Taking the average for European enterprises, changes in staff costs as a proportion of turnover were fairly uneven during the years 1982-91 (see Graph 1). Periods of increase alternated with periods of decline, but changes were limited in magnitude. In 1991 staff costs represented on average 21.5 % of turnover, compared with 21.9 % in 1982.

Among the eight European countries studied, major differences exist not only in the respective level of staff costs but also in the changes that occurred between 1982 and 1991.

Levels of staff costs differ quite significantly from one country to another (see Table 1). Thus, the level in Germany, which fluctuated between 23.5 % and 25.7 % of turnover, is well above the level in the other countries (especially after 1986). At the other end of the scale, the level in Portugal ranged from 15.7 % to 18.8 % over the same period. This is because in Germany pension fund provisions are included in staff costs, but this is not detrimental to German enterprises since these provisions are not disbursed but are an element of self-financing in the same way as depreciation allocations.

(1) Data on staff costs are not available for the United States.



The weight of staff costs has not followed the same trend in the eight European countries. The trend in the United Kingdom is quite specific, being fairly uneven and with a pronounced increase between 1983 and 1988 (which might be explained in part by the sharp increases in real compensation of employees during that period) followed by a rapid fall between 1988 and 1989.

Between 1982 and 1989 most of the countries experienced a marked reduction in staff costs, except Germany and the Netherlands, where they rose from 1985 onwards. Over this period the largest reductions in staff costs were recorded in France (5 percentage points), Spain (4.2 percentage points) and Belgium (2.9 percentage points); this tallies with the observations made for the entire economy regarding the sharp decline in the corrected wage share in those three countries.

Since 1989 a general increase in staff costs as a proportion of turnover can be seen, especially in Portugal (+2.4 percentage)points), Spain (+2 percentage points), Belgium (+2 percentage points) and Italy (+1.3 percentage points). This increase can be attributed to a combination of rising labour costs and slackening business activity.

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Belgium	21,4	20,4	19,5	19,5	20,1	20,3	19,2	18,5	19,4	20,5
Germany	24,6	24,3	23,8	23,5	24,8	25,7	25,0	24,4	24,7	25,1
Spain	23,7	22,2	21,2	20,2	20,4	19,7	19,3	19,5	21,0	21,5
France	24,5	24,0	23,0	22,7	22,2	21,9	20,7	19,5	19,7	20,0
Italy	20,1	19,9	18,5	18,3	18,2	18,4	18,0	17,9	18,3	19,2
Netherlands (1)	18,9	18,6	16,3	16,1	17,5	18,8	18,0	17,1	17,4	18,2
Portugal	n.a.	n.a.	n.a.	15,7	16,9	16,8	16,5	15,8	17,2	18,2
United Kingdom (1)	16,2	15,2	17,5	18,7	19,5	19,3	22,2	18,8	20,1	n.a.
Europe (2)	21,9	21,3	20,9	20,8	21,4	21,6	21,5	20,4	21,0	21,5
Japan	16,1	15,6	15,9	16,0	16,3	16,5	16,0	15,6	15,5	16,1

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Consolidated accounts.
Weighted average of eight countries (see box).
Staff costs are not available for the United States.

Source: BACH (EC Commission DG II).

1.2 Very appreciable reduction in the weight of financial charges

An enterprise's financial charges essentially represent interest paid on loans, even though the concept of «financial charges» used here for reasons relating to the technical problems of international comparability is broader than the traditional concept of «interest paid». In certain countries in particular, it includes negative foreign-exchange differences (¹).

Thus, financial charges reflect principally the cost of a firm's debt and their level is directly influenced both by the size of the debt and by movements in interest rates.

In theory, enterprises should tend to reduce their debt in periods of rising interest rates and, conversely, increase their debt when interest rates are low. In practice, for very diverse reasons (organization of capital markets, credit policies, historical circumstances, etc.), enterprises do not always have sufficient room for manœuvre to retain control over their financial strategy.

In comparison with their US counterparts, European and Japanese enterprises face a much greater burden of financial charges (²) (in 1991 2.9 % and 3 % respectively, against 1.4 %), essentially because of a higher level of debt (see Part 3).

The very similar trends in Europe and Japan (Figure 2) reflect a reduction in financial charges until 1988 followed by a renewed increase at the end of the period. In the United States, this



 Negative foreign—exchange differences represent varying proportions of financial charges depending on the country (between 5 % and 15 %).
See box on definition of ratios. turnaround was discernible as early as 1987 and was more pronounced (± 1.2 percentage points between 1987 and 1991, compared with 0.8 percentage points for Europe between 1988 and 1991). In the case of the United States, the increase in financial charges as a proportion of turnover is due mainly to the increase in the level of debt (see Part 3) since nominal longterm interest rates remained relatively stable between 1987 and 1991.

In Europe the change in the weight of financial charges borne by enterprises between 1982 and 1991 is therefore characterized by two successive trends: from 1982 to 1988 a very sharp reduction and a significant narrowing of the spread in terms of levels and then, conversely, a general renewed increase. In 1982 the difference between the highest and lowest levels of financial charges was 6.1 percentage points. Spain and Italy had particularly high levels of financial charges (8.1 % and 7 % respectively), while Germany and the United Kingdom had the lowest levels (2.1 % and 2 %).

The general reduction in the burden of financial charges was particularly marked for those countries with a high level at the outset. Thus, between 1987 and 1988, the levels in Spain, Italy, Portugal, France and Belgium moved much closer to those in Germany, the United Kingdom and the Netherlands. The spread in levels between the seven countries that were present at the outset fell back to 2.4 percentage points in 1988. The pace of the renewed increase in the relative burden of financial charges from 1988 varied between countries: it was fairly rapid in Belgium and the Netherlands, where the level in 1991 was higher than in 1982, and more modest overall for the other countries. However, the gap between the highest and lowest rates did not widen significantly (2.8 percentage points).



	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Belgium	3,7	3,0	2,9	2,8	3,0	2,6	2,4	3,0	3,4	3,8
Germany	2,1	1,5	1,4	1,3	1,3	1,2	1,1	1,3	1,5	1,7
Spain	8,1	8,1	7,4	5,8	4,8	4,2	3,3	3,2	3,7	4,0
France	3,7	3,5	4,1	3,7	3,2	2,8	2,4	2,4	2,8	2,7
Italy	7,0	6,4	5,7	5,0	4,1 ·	3,4	3,5	3,6	4,2	4,3
Netherlands (1)	2,3	2,0	1,8	1,6	1,7	1,7	1,7	2,1	2,7	3,0
Portugal	n.a.	n.a.	n.a.	9,9	9,3	7,4	6,2	6,0	6,5	6,8
United Kingdom (1)	2,0	1,7	1,7	1,7	1,7	1,5	1,5	2,3	2,8	n.a
Europe (²)	3,7	3,3	3,2	2,9	2,6	2,3	2,1	2,4	2,8	2,5
United States (1)	n.a.	n.a.	n.a.	n.a.	0,4	0,2	0,3	0,6	0,9	1,4
Japan	3,3	3,1	2,9	2,8	2,8	2,6	2,3	2,6	2,8	3,0

(1) Consolidated accounts.

(2) Weighted average of eight countries (see box).
Source: BACH (Commission Européenne DG II).

The change in trend after 1988 was not due to an increase in corporate indebtedness, which on the contrary remained very stable, but was caused instead by the renewed rise in interest rates against a background of a relative decline in economic activity (with turnover growing more slowly than financial charges) (Graph 3). Future changes in financial charges of European enterprises will, therefore, hinge on the movement of interest rates. Thus, the relaxation of interest rates since 1990 should pave the way for a marked reduction in the burden of financial charges. However, this reversal in the trend will not be immediate — a time-lag of some two years is needed for a lasting fall in interest rates to have any significant effect on the profit and loss accounts of the corporate sector as a whole.

The level of enterprises' costs has a direct effect on their profit or loss. Purchases and staff costs are always taken into account in calculating the profit or loss, whereas financial charges, depreciation, provisions and taxes are deducted from the gross profit or loss to give the net figure.

2. PROFITS OR LOSSES OF EUROPEAN ENTERPRISES

Marked improvement and convergence in the performance of enterprises during the 1980s

2.1 Overall gross profit ratio

Changes in the profit or loss of enterprises are traditionally assessed on the basis of their overall gross profit ratio (¹), which measures business performance («gross profit») in relation to turnover. This ratio captures the capacity of a given enterprise to generate profits from its overall business activities.



As Graph 4 shows, the overall gross profit ratio of European enterprises grew more strongly and more steadily than that of their Japanese counterparts but this trend was reversed in 1989. In the United States the impact of the recession showed up in the profit or loss of enterprises as early as 1988 and was much more pronounced, with the overall gross profit ratio falling by 1.8 percentage points between 1988 and 1990, compared with a fall of 0.5 percentage point in Europe.

Changes in the overall gross profit ratio of European enterprises between 1982 and 1991 show two unmistakable trends. During an initial period between 1982 and 1989 the growth in the profit ratio was very marked for the eight European countries, with a clear point of convergence in 1987; the spread between the highest and lowest figures was 1.5 percentage points that year, compared with 4.4 percentage points in 1982. The countries with a much lower overall gross profit ratio at the start of the period (France, United Kingdom) thus experienced a faster rate of increase during that five—year period (+5.8 and +5.1 percentage points respectively).

Subsequently, for all the countries except Germany, which benefitted from the effects of unification, a turning point was apparent in 1988 or 1989 and the overall gross profit ratio fell considerably, in particular in Spain, where it dropped below the 1982 level (9.8 % in 1991, compared with 10.6 % in 1982).

2.2 Net profit ratio

Analysing the profit or loss by means of the net profit ratio, which is defined as the ratio of the final profit or loss to turnover (¹), gives a more accurate picture of business profits than operating profit or loss than if overall profit or loss is taken. This ratio is calculated by deducting financial charges, depreciation and taxes from gross profit.

From an enterprise's point of view, the net profit ratio is particularly important since it is the final net result, i.e. the enterprise's actual profit, which will be the source either of shareholder remuneration - in the form of dividends - or selffinancing by allocations to reserves. The movement of this indicator will therefore determine an enterprise's investment potential.

A number of factors identified above in connection with the overall gross profit ratio have changed but the general trend remains the same.

From 1982 to 1989 European enterprises saw their net profit ratio increase faster than that of Japanese and US enterprises (see Graph 5) and were not affected by the cyclical turnaround that took place between 1984 and 1986. The reversal of trend at the end of the period had a much greater effect on US enterprises, which lost 3.4 percentage points between 1988 and 1990, compared with 0.9 for European enterprises.

(1) See box on definition of ratios.

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Belgium	9,9	8,6	9,9	10,0	11,6	11,6	12,1	13,8	12,8	12,2
Germany	11,3	11,1	11,3	11,4	11,7	12,0	12,2	12,4	12,6	12,5
Spain	10,6	10,7	11,6	11,0	11,6	13,1	14,5	13,9	11,5	9,8
France	7,3	7,7	9,1	10,9	11,3	12,4	13,1	12,7	12,1	11,7
Italy	11,7	12,2	13,1	12,8	13,7	12,8	12,5	12,8	12,0	11,3
Netherlands (1)	7,4	9,0	10,4	9,5	10,6	12,5	14,8	16,4	15,2	16,1
Portugal	n.a.	n.a.	n.a.	14,8	16,4	17,7	17,1	16,9	16,4	15,6
United Kingdom (1)	9,0	9,7	10,6	10,9	12,3	12,8	13,3	14,1	13,5	n.a.
Europe (2)	10,0	10,2	11,0	11,4	12,1	12,5	12,9	13,2	12,6	12,1
United States (1)	n.a.	9,4	10,4	9,5	10,0	11,3	11,8	10,7	10,0	8,7
Japan	10,0	9,9	10,3	10,0	9,7	10.6	11,1	11.4	11,2	10,8

(1) Consolidated accounts.

(2) Weighted average of eight countries (see box).

Source: BACH (EC Commission DG II).

TABLE 4: Net profit ratio - Manufacturing industries

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Belgium	0,9	0,4	1,7	1,8	2,2	2,1	2,5	4,0	2,5	1,4
Germany	1,5	1,8	2,0	2,3	2,5	2,3	2,6	2,4	2,5	2,1
Spain	-2,9	-2,7	-1,5	-0,3	0,9	3,1	4,7	4,8	1,9	0,0
France	- 1,3	-0,8	-1,3	0,5	1,2	2,7	3,6	3,6	2,7	2,1
Italy	- 1,8	-0,7	0,8	1,3	2,4	2,1	1,9	2,4	1,3	0,2
Netherlands (1)	1,3	2,6	4,4	3,6	4,0	5,3	6,9	8,4	6,4	7,3
Portugal	n.a.	n.a.	n.a.	-2,5	-0,6	2,7	2,8	3,4	3,2	1,3
United Kingdom (¹)	2,0	2,7	3,5	3,8	5,4	5,7	6,0	6,4	5,2	n.a
Europe (²)	0,1	0,7	1,3	1,9	2,7	3,1	3,6	3,8	2,9	2,4
United States (1)	n.a.	3,7	4,5	3,7	3,7	4,9	5,7	4,7	3,8	2,3
Japan	1,4	1,4	1,7	1,5	1,2	1,7	2,2	2,3	2,2	1,7

(2) Weighted average of eight countries (see box).

Source : BACH (EC Commission DG II).



If account is taken of the net profit ratio, the ranking of the eight European countries changes as compared with the findings for the overall profit ratio. Italy, which from 1982 to 1985 had the highest overall profit ratio, is among the three countries (France, Spain, Italy) that at the beginning of the period had a negative net profit ratio, essentially because of the high proportion of financial charges. On the other hand, enterprises in the United Kingdom had, on average, the highest net profit ratio because of different provisioning practices and low financial charges.

The downturn in European manufacturing activity that began after 1991 (-0.9 % in 1992 and -3.5 % in 1993 in terms of value added at constant prices) should lead to an appreciable deterioration in profit ratios. While the cost of energy and nonoil commodities has fallen, something which is bound to have resulted in purchases accounting for a smaller proportion of turnover, the increase in the corrected wage share observed in 1991 and 1992 probably offset the positive effect on profit ratios.

Thus, in a depressed economic climate, enterprises are still facing high fixed charges, while their turnover is static or diminishing. As a result, the downward trend of profit ratios recorded since 1990 will probably continue at least until 1993.

3. FINANCIAL STRUCTURES OF ENTERPRISES

3.1 General reduction in external debt

By analysing the ratio of indebtedness of enterprises, it is possible to identify the choices made by them to finance their activities. In very simple terms, an enterprise has two major sources of finance: first, its own resources, which it constitutes by calling on shareholders or by self-financing (allocating profits to reserves) and, second, the funds that it obtains from external lenders, essentially banks but also the bond markets.

Analysing an enterprise's financial structure thus provides essential pointers not only to the reasons for the level of its performance but also to its degree of dependence on external lenders. The definition of the overall ratio of indebtedness used here reflects the weight of debt in the balance sheet. All debt is taken into consideration, i.e. not only bank debt, which accounts for the bulk of total debt, but also bond loans as well as commercial, tax and social security debts, any intra-group debt, etc.

In general, enterprises in Europe and Japan have structurally higher levels of debt than enterprises in the United States, where capital markets are traditionally a much more important source of finance and where there is far less recourse to intercompany loans.

None the less, as Graph 6 shows, the overall ratio of indebtedness of European enterprises has fallen in parallel with that of Japanese firms. By contrast, US enterprises have seen a marked increase in their ratios of indebtedness (from 38.9 % in 1983 to 46.4 % in 1991), which have thus moved much closer to the levels in Europe.

An analysis of changes in ratios of indebtedness in Europe between 1982 and 1991 brings to light both a reduction in, and a convergence of, the overall level of indebtedness in European enterprises. Thus, in 1982 the average overall ratio of indebtedness for European enterprises was 61.2 %, the highest ratio being in France (70.3 %) and the lowest in the United Kingdom (49.5 %).

Until 1987 the ratios of indebtedness of enterprises were all heading downwards, at a much faster rate in the countries where

they were highest (France, Spain, Portugal) than elsewhere (Germany, United Kingdom, Netherlands). For the first three years of this period, France was unusual in having an inverse trend: the ratio of indebtedness of French enterprises, already the highest in 1982, continued to rise and peaked at 77.7 % in 1984.



After 1987 the move to reduce debt stalled in some countries (Belgium, Germany) but increased somewhat in others (United Kingdom, Netherlands, Italy). Elsewhere, the process of reducing debt continued strongly (Spain, Portugal, France). In 1991 the spread between the lowest and highest ratios narrowed sharply and the very large discrepancies in the downward trend of indebtedness in certain countries (France, Spain, Portugal) changed the ranking of the eight countries concerned.

Thus, since 1982, European enterprises have made substantial progress overall in consolidating their financial structures: by reducing the proportion of debt in their financing, they have given a strong boost to equity capital. This change in balancesheet structures reflects a radical improvement in the financial independence of firms in that the cyclical downturn after 1988 did not engender a major increase in indebtedness until 1991. However, the continuing unfavourable economic situation may eventually lead to a further deterioration in equity capital and to increased borrowing, a trend already discernible in Portugal and Spain in 1991.

3.2 Continuation of fairly wide disparities in debt structure

By studying the composition and nature of indebtedness by debt maturity, it is possible, in theory, to evaluate part of the financial constraint borne by enterprises. Long-term debt, traditionally more stable and less expensive, reflects the degree of confidence placed in them by the banking system. However, it is awkward to make international comparisons in this area because of the differences in behaviour and habits within each country (banking traditions, method of commercial financing, role played by real guarantees, etc.).

For instance, in terms of level, the comparison between Europe, the United States and Japan (see Graph 7) clearly illustrates the different situation of US enterprises. Not only do they carry less debt than the others (see above) but their debt is chiefly longterm debt, and not short-term debt like that of European and Japanese enterprises.

The average general trend over the last ten years nevertheless reflects an increase in the long-term debt of European enterprises expressed as a proportion of total indebtedness (from 26.9 % to 29 %). This general picture conceals a number of differences and contrasting developments within the eight European countries studied.

Italy and Spain rely heavily on short-term debt for their financing and saw this reliance increase further throughout the period. France, which had a high proportion of short-term debt in 1982, had by the end of the period and following a series of marked fluctuations become one of the countries having greatest recourse to medium or long-term borrowing. The United Kingdom and Belgium followed a parallel trend. The relatively greater reliance of German enterprises on long-term bank financing is attributable in large measure to the nature of the relationships between banks and enterprises («Hausbank» phenomenon).



	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Belgium	66,4	63,7	62,0	59,1	57,2	56,7	57,7	57,6	57,5	58.5
Germany	56,9	55,9	54,6	53,8	51,9	50,2	50,9	51,5	51,4	51,9
Spain	68,3	68,8	64,9	61,9	60,2	56,4	52,9	50,6	52,8	55,8
France	70,3	71,0	77,7	73,6	71,0	67,5	64,4	62,0	61,8	60,1
Italy	69,0	66,7	67,5	66,1	64,7	65,0	66,1	66,3	65,9	65,1
Netherlands (1)	51,5	51,1	49,2	49,4	47,7	47,1	47,4	48,2	49,4	49,5
Portugal	n.a.	n.a.	n.a.	72,3	67,0	64,7	59,3	56,9	51,1	53,6
United Kingdom (1)	49,5	48,4	48,6	48,8	50,5	50,5	50,7	53,7	50,4	n.a.
Europe (2)	61,2	60,3	60,9	59,5	58,2	56,8	56,4	56,6	56,0	56,0
United States (1)	n.a.	38,9	39,6	40,7	42,6	43,9	45,3	46,7	46,9	46,4
Japan	69,7	69,9	69,1	67.8	66,8	65,3	64.7	63,9	63,7	63,2

Consolidated accounts.
Weighted average of eight countries (see box).

Source : BACH (EC Commission DG II).

DO SMEs FOLLOW A DIFFERENT TREND?

As additional input for the current debate on the distinctive features of small and medium-sized enterprises (SMEs), this box provides some analytical data on developments in the financial situation of SMEs as compared with that of enterprises generally.

However, data is available for only a limited number of countries (¹) because not all the national departments supplying financial data concerning enterprises classify them by size. However, we felt that it would be useful to recalculate, purely as an indication, an average for the six countries for which data were available; for most of the indicators used below, this average shadows very closely the BACH 8 average calculated for the eight European countries.

In terms of trend, the variations in the performances of SMEs in recent years have been less pronounced than those for all enterprises. On the one hand, the increase in profit ratios in the early 1980s, a period of rapid growth, was far smaller and, on the other, the deterioration in the same indicators after 1989 was much less marked.

SMEs would thus seem to be less sensitive and more adaptable to cyclical developments.

Deterioration in staff costs

TABLE 6: Staff cost	ts – Man	ufact	uring	indus	tries (% of	turn	over)
	1984	1985	1986	1987	1988	1989	1990	1991
SMEs	19,1	18,8	18,9	19,2	18,7	18,5	19,1	19,9
All Enterprises (1)	20,3	19,9	19,9	19,9	19,2	18,6	19,1	19,8

(1) Weighted average obtained from national samples permitting classification by size Belgium, Spain, France, Italy, Netherlands, Portugal. Source: BACH, DG II.

Between 1984 and 1991 changes in staff costs were relatively unfavourable for SMEs, whose staff costs up to 1989 expressed as a proportion of turnover were markedly lower than for enterprises as a whole (-1.2 percentage points) although the gap gradually narrowed until the two curves met in 1989. Therefore, over that period, SMEs saw their staff costs increase in relative terms (from 19.1 % in 1984 to 19.9 %), thereby losing their advantage as compared with the average for all enterprises, which nevertheless also faced a renewed increase at the end of the period.

Decline in the relative advantage with respect to financial charges

TABLE 7: Financial c (% of turn	harges lover)	s – M	anufa	cturi	ng ind	lustrie	es	
	1984	1985	1986	1987	1988	1989	1990	1991
SMEs	3,7	3,6	3,2	2,8	2,7	2,9	3,2	3,5
All Enterprises (1)	4,8	4,3	3,7	3,2	2,9	3,0	3,5	3,6

Source: BACH, DG II.

(1) Belgium, France, Spain, Italy, Portugal, Netherlands.

At the start of the period, the proportion of financial charges in the turnover of SMEs was distinctly lower than the average figure for all enterprises (3.7 %, compared with 4.8 % in 1984), largely because of their lower ratio of indebtedness (see below). However, after 1988 financial charges once again rose steeply although the level of indebtedness among SMEs remained stable. SMEs thus seem more sensitive to the rise in interest rates that took place during that period.



In 1991 the proportion of financial charges for SMEs was very similar to that observed in 1984 (3.7 % in 1984, compared with 3.5 % in 1991), while for all enterprises it decreased (4.8 %, compared with 3.6 %).

The gap in terms of profit or loss narrows

	1984	1985	1986	1987	1988	1989	1990	1991
SMEs	10,1	10,4	11,3	11,7	11,8	11,8	11,8	11,5
All Enterprises (1)	11,0	11,5	12,2	12,7	13,2	13,4	12,4	11,8



Box 2



Despite a relative increase in staff costs and financial charges, SMEs have improved their performance. Thus, the movement of profit ratios has in the last few years been very favourable to SMEs, which have increased their ability to generate profits compared with enterprises as a whole.

Their overall gross profit ratio has moved appreciably closer to the average level, with the 0.9 percentage point difference in 1984 narrowing to 0.3 percentage point in 1991.

	1984	1985	1986	1987	1988	1989	1990	1991
SMEs	1,3	1,7	2,3	2,9	3,1	3,1	2,7	2,0
All Enterprises (1)	0,1	1,0	1,9	2,7	3,3	3,8	2,4	1,8

The comparative analysis of net profit ratios highlights the advantage enjoyed by SMEs in relation to enterprises as a whole at the start of the period. In 1984 the net profit ratio for SMEs was much higher (+1.2 percentage points). The situation was the opposite of that for overall profit ratios. Half of this difference can be explained by the lower financial charges for SMEs in 1984.



SMEs lose some of this advantage after 1987 since the growth in their net profit ratio was lower between 1984 and 1989 than that of enterprises as a whole (+1.8 percentage points, compared with +3.7 percentage points). By contrast, their end-of-period decline was less pronounced and in 1991 the level of their net profit ratio still exceeded the average for all enterprises.

Less pronounced reduction in debt

	1984	1985	1986	1987	1988	1989	1990	1991
SMEs	65,5	64,9	63,5	62,5	63,0	62,6	62,6	61,5
All enterprises (1)	68,8	66,4	64,4	62,7	61,5	60,5	60,5	60,1



At the start of the period SMEs carried much less debt (-3.3 percentage points in 1984) than enterprises as a whole, but the general reduction in debt between 1984 and 1988 was less pronounced for SMEs. While carrying less debt in 1991 than in 1984 (61.5 %, compared with 65.5 % in 1984), their level of indebtedness was higher than that for enterprises as a whole (+1.4 percentage points). In addition, short—term debt predominated (76.1 % in 1991, compared with 73.2 % for enterprises as a whole) even though the proportion of medium and long-term debt tended to rise throughout the period.



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Box 3

Formation of an enterprise's final profit or loss on the basis of a simplified «standard» profit and loss account layout

- Turnover
- + (or -) Change in stocks
- + Capitalized production

= PRODUCTION

- Purchases
 - Staff costs
- **Depreciation and provisions**
- Other operating charges
- + Interest receivable and related income
- Interest payable and related expenses
- Tax
- Extraordinary income
- Extraordinary charges

= FINAL NET PROFIT OR LOSS

Box 4

Definitions of ratios used

OVERALL GROSS PROFIT RATIO:

Ratio of overall gross surplus to net turnover

NET PROFIT RATIO:

Ratio of net final profit or loss to net turnover

RATIO OF INDEBTEDNESS:

Ratio of total debts to balance-sheet total

STAFF COSTS:

Ratio of staff costs to net turnover

FINANCIAL CHARGES:

Ratio of financial charges to net turnover

Glossary

Gross operating surplus =

Production

- Purchases
- Staff costs
- Other operating charges

Overall gross surplus =

Gross operating surplus

- + Interest receivable and related income
- + Extraordinary income
- + Extraordinary charges

Final net profit or loss =

Overall gross surplus

- Depreciation and provisions
- Interest payable and related expenses Tax

Box 5

THE CONVERGENCE OF CORPORATE FINANCIAL STRUCTURES IN EUROPE -AN ECONOMETRIC ESTIMATION (1)

Here we tested the convergence of corporate financial structures in eight European countries over the period 1982-91 on the basis of data for nine sectors of manufacturing industry. Three ratios were used to represent financial structures: the equity ratio, the liquidity ratio (financial charges as a proportion of gross operating profit or loss) and the profit ratio (gross operating profit or loss as a proportion of turnover).

«Convergence» occurs when the levels of an economic aggregate tend to equalize between countries over time, with those countries that start from a lower level progressing at a faster rate than the other, more advanced countries. Verifying the convergence of corporate financial structures in Europe during the 1980s consists, therefore, in verifying the existence of a negative correlation between the initial calculations of the ratios, which best reflect financial structures and growth rate. In formal terms, if X_i , T is the value of a ratio X in country *i* in initial year T, the convergence of this aggregate for a group of countries N is verified if, during a period of m years, the following coefficient b of the regression, carried out on the country data, is negative:

$In(X_i, T+m) - In(X_i, T) =$ $a + b.In(X_i, T) + II.Y_i + v_i, i = 1,...,N$

In the above equation, a is a constant, Y; represents a group of control variables (which reflect the heterogeneity factors of the structures and of corporate financial behaviour from one country to another), II represents the set of coefficients relating to these variables and v_i is the error term of the regression.

The results of the estimations are in line with this assumption of convergence (Table BOX5-1) since there is indeed a negative correlation between the changes in the three major financial ratios describing the state of corporate financial structures and their initial level. The coefficients b relating to the initial ratio are all negative.

⁽¹⁾ This box reproduces some of the conclusions of a report carried out for the Commission by Professor Dietsch. The report deals with the expected effects of convergence on the financial situation of enterprises in Europe and with the contribution made by BACH.

TABLE 11: Convergenc (¹) – Data 1982-91, 8	e of corpora from 9 secto European co	ate financial ra ors of manufact ountries (²)	tios in Europe uring industry,
	Equity	Liquidity	Taux de
	ratio	ratio	marge
Constant	-1,086	2,254	-1,047
	(-3,36)	(4,57)	(-2,41)
Log of the initial ratio	-0,218	-0,694	-0,663
in 1982 (³)	(-2,86)	(-10,74)	(-11,94)
Log of size (average ratio turnover	0,089 (⁴) (5,85)		
Log of average ratio	0.371		0.292

	(-3,36)	(4,57)	(-2,41)
Log of the initial ratio	-0,218	-0,694	-0,663
in 1982 (³)	(-2,86)	(-10,74)	(-11,94)
Log of size	0,089		
(average ratio turnover	(4) (5,85)		
Log of average ratio	0,371		0,292
of financial charges to turnover	(4,03)		(3,77)
Log of average		0,524	
interest rate		(4,55)	
Log of average ratio		-0,203	0,659
of circulation of capital		(-1,60)	(5,80)
R ²	0,495	0,708	0,832

The table presents the coefficients estimated using ordinary least squares, with the Student's t-distribution in brackets: it will be seen that, as a general rule, the coefficients are significant at the 1 % threshold. Those which relate to the initial value of the variable are all significant at the 1 % threshold, clearly confirming the assumption of convergence. The data used for each country have the average values of the ratios in 9 sectors of manufacturing industry. Various control variables are used in each equation; their choice is guided by the principles of financial analysis.
Germany, Belgium, Spain, France, Italy, Netherlands, United Kingdom.
In other words, the log of the equity ratio in 1982, then that of the liquidity ratio, etc. in order.

 (4) 'Average ratio' means here the average of the ratio the sector and bt country over the period 1982-91. This applies to all the ratios appearing in line in the table, with exception, of course, of the initial ratio for 1982.Average Source: BACH, DG II.

This convergence of corporate financial structures can be explained partly by the convergence of the macroeconomic aggregates. It can be assumed that the convergence of inflation rates, interest rates and exchange rates, observed under the EMS, has improved the availability of funds and eased the financial constraints on enterprises by reducing uncertainty and the imperfections of credit markets. In order to check this assumption indirectly, we show that the permanence of credit market imperfections are not favorable to the growth of corporate activity and profitability and that it tends to perpetuate the differences between countries.

Three variables enable the extent of credit market imperfections to be measured. The first is the spread of interest rates between borrowers who obtain the best rates and those who obtain the worst. The second is the growth of debt, which measures the degree of availability of funds for enterprises. The third is the cost of credit. The greater the imperfections (within a country or from one country to another), the less debt will be available and the greater will be the financial charges for enterprises. These three variables should therefore have an adverse effect on the growth of corporate activity and profitability. In order to verify this assumption, we estimated the impact of these imperfections on the activity rate and the profitability ratio of enterprises in BACH.

The model of the estimated growth rate is in the form:

$$(GRP_{i,t}) = a_0 + a_1 (GDETTES_{i,t})$$

- $a_2(CHFIN_{i,t}) + a_3(SPREAD_{i,t}) + a_4(PRODUC_{i,t}) + e_i$

with i = 1, ..., N, the manufacturing sectors and

t = 1982,..., 1990, the years.

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-

In this equation, $GPR_{i,t}$ is the rate of growth of production (of sector *i* in year *t*). In accordance with the previous assumption, an increase in *GDETTES*_{i,t} the growth rate of financial debt, should have a positive influence on growth; an increase in CHFIN_{i,t}, the weight of financial charges (ratio of interest payable and related expenses to gross profit or loss) should have an adverse effect; and an increase in SPREAD_{it}, the spread between the average cost of the financial debt of sector *i* in year t and the average cost of the same debt in all the manufacturing sectors of the country in year t, should have an adverse effect. The variable $PRODUC_{i,t}$, the capital productivity ratio (net value added as a proportion of fixed assets) is a control variable.

The estimated model of profitability is in the form:

$(GRENECO_{i,t}) = a_0 + a_1(GDETTES_{i,t}) + a_2(CHFIN_{i,t}) + V_i$

In this equation, GRENECO_{it} is the rate of growth of profit (measured by the ratio of gross operating profit or loss to net turnover). The expected signs on the coefficients of GDETTES and CHFIN are the same as in the preceding equation.

The results of the estimations (see TABLE 12) support the assumption that credit market imperfections are an obstacle both to the growth of activity and to corporate profitability. By reducing these imperfections, macroeconomic convergence, envisaged by the Maastricht Treaty, should therefore tend to improve the financial situation of enterprises and to reduce the differences between countries arising out of these imperfections.

TABLE 12: Effect of credit market imperfections on corporate

activity and profitability in Europa - Data from 9

	Rate of growth of net turnover (GPRODi t)	Profit ratio (GRENi t)	
Constant	5,679 (3,672)	-0,389 (-1,372)	
GDETTESi, t	0,405 (11,554)	0,056 (3,059)	
CHFINi, t	-0,065 (-3,915)	-0,139 (-13,503)	
SPREADi, t	- 1,229 (- 2,591)		
PRODUCi, t	0,297 (9,938)		
R (²)	0,559	0,269	

 Student's t-distribution in brackets.
Germany, Belgium, Spain, France, Italy, Netherlands, United Kingdom Source: BACH (DG II).

1993	Issues discussed in Supplement A	
1./2.	Economic Forecasts for 1992-1994	
3.	The economic effects of the proposed CO ₂ /energy tax	
4.	Removing the legal obstacles to the use of the ecu	
5.	Market Services in the Community Economy	
6./7.	Economic Forecasts for 1993-1994	
8./9.	Economic situation and economic reform in Central and Eastern Europe	
10.	Reports on the borrowing and lending activities of the Community in 1992	
11./12.	Economic Forecasts for 1993-1995	

Principal economic policy measures — November 1993

Community (EUR-12)

10.11 Commission Services Autumn forecasts for 1993, 1994 and 1995 are presented to the press by Vice-President Christophersen.

15.11 Budget Council approves the Community budget for 1994.

22.11 ECOFIN Council begins implementing the decisions taken by the extraordinary European Council of 25 October with regard to the European Growth Initiative.

22.11 ECOFIN Council gives a favourable opinion on the Convergence Programmes presented by France and Germany.

24.11 Commission approves its recommendation for the Broad Guidelines of the Economic Policies of the Member States and of the Community.

Belgium (B)

17.11 The Government presents to Parliament its «grand plan» for curbing social security spending, restoring competitiveness and promoting employment; the plan includes the following measures:

- improving competitiveness:
- wage freeze in real terms for the period from 1994 to 1996: eight-month postponement of the next index-linked adjustment; structural change in the wage-indexation system (exclusion of a number of
- products from the index);
- promoting employment: employers' social security contributions to be cut by half for the lowest-paid
- employees; employers' social security contributions to be reduced for each additional job created under a work redistribution plan; plan for recruiting young people (exemption from employers' social security
- contributions on a reducing scale); stabilization of social security accounts:
- statutory limit on the growth in health-care spending in real terms (maximum of 1.5 % per year);

reduction in pensions in excess of BFR 40 000 per month; reduction in family allowances in line with the level of household income; additional savings in unemployment benefits;

tax increases;

investment income: increase in the withholding tax on interest income, from 10.3 % to 13.4 %; reduction in the withholding tax on dividends from new shares, from 25 % to 13.4 %;

income from property: increase in the rateable value applied to privately

rented property for the purpose of calculating personal income tax; indirect taxation: rise in the standard rate of VAT, as from 1 January 1994, from 19.5 % to 20.5 %; increase in excise duties on fuels; increase in the price of cigarettes

The measures planned in the social security sphere are expected to yield a total of BFR 70.2 billion in 1994, BFR 89.9 billion in 1995 and BFR 110.6 billion in 1996. The indirect tax measures should yield BFR 30 billion.

The central bank reduces its discount rate from 6 % to 5.5 % with immediate effect. In addition, the central rate is cut from 9.40% to 8.30% and the rate on advances in excess of the ceiling is reduced by 1.25 percentage points, to 12%. These decisions are a direct result of the agreement reached within the government coalition.

Denmark (DK)

4.11 The Nationalbank lowers its discount rate by a quarter of a percentage point, to 7 %.

16.11 The Nationalbank lowers its discount rate by a quarter of a percentage point, to 63/4 %.

29.11 The Nationalbank lowers its discount rate by a quarter of a percentage point, to $6\frac{1}{2}$ %.

Germany (D)

None.

Greece (GR)

30.11 The 1994 budget forecasts a central government deficit of 12.8 % of GDP, down from 13.9 % in 1993. The primary deficit of 0.3 % of GDP in 1993 will turn into a primary surplus of 2.3 % of GDP next year.

Spain (E)

None.

France (F)

5.11 The 1994 budget provides for new financial support of FF 1.5 billion for farmers.

5.11 A total of FF 140 billion is to be allocated from the budget over a period of ten years from 1994 to finance motorway construction.

18.11 The law designed to promote employment in the medium term (five years) is adopted by Parliament.

29.11 The French Government decides that public utilities' investment will increase by 1.7% in volume terms in 1994 (+6% in 1993).

Ireland (IRL)

None.

Italy (I) None.

Luxembourg (L)

None.

Netherlands (NL)

16.11 The Nederlandsche Bank decides to cut its special advances rate from 6.1 % to 6 %.

Portugal (P)

4.11 The Government decides to increase the retirement and invalidity pensions paid under the social security system. These increases, which will come into force in December 1993 and will affect the end-of-year allowance, will average some 5.3%; this compares with an inflation target of 4% to 5.5%.

United Kingdom (UK)

23.11 The Bank of England cuts its base rate by 0.5 % to 5.5 %.

The Chancellor of the Exchequer announces a deficit-cutting budget by 30.11 reducing public spending significantly - UKL 10 billion by 1997 - and increasing government revenue, against a background of slightly more optimistic medium-term prospects for the economy: GDP up 2.5 % in 1994. - Public spending will fall in real terms, with cuts in defence and local-authority

- spending and increases in motoring charges.
- Income-tax and VAT rates remain unchanged; future tax-revenue increases will be achieved by freezing thresholds and imposing new limits on certain allowances
- There will be new indirect taxes on air travel and insurance premiums and

increased duties on petrol and tobaci. The public sector borrowing requirement (PSBR) is expected to fall from UKL 50 billion (7 $\frac{3}{4}$ % of GDP) in the financial year 1993/94 to UKL 38 billion (5 $\frac{1}{2}$ %) next year and to UKL 21 billion (2 $\frac{3}{4}$ %) in 1996/97.

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