

THE COMPETITIVENESS OF FRENCH INDUSTRY: LESSONS FROM A EUROPEAN COMPARISON

Since 1997, strong growth of the French economy has also generated much employment. Such a trend, which reflects the deceleration of productivity growth, could be worrying were it to affect competitiveness. However, productivity growth in manufacturing industry, which is especially exposed to international competition, appears to have maintained a constant level since the 1970s. From this point of view, comparisons made with Germany, the United Kingdom and Spain highlight the specificity of the French case. The macroeconomic policy adopted as of 1983 has forced French firms to control prices and costs, via wage moderation and productivity gains. Comparisons based on an evaluation of production within a single price system indicate that, at the end of the 1990s, France had lower prices and costs as well as better productivity levels than Germany and the United Kingdom.

Growth in France from 1991 to 1996 was especially weak, and below the average for the European Union. Then, from 1997 onwards, renewed confidence in the process of monetary unification allowed France to benefit from a more accommodating monetary policy. Fiscal and employment policies became more dynamic. GDP growth accelerated and income per capita rose slightly above the European average, despite relatively strong demographic growth¹.

This faster growth has also created considerable employment (Graph 1). As growth slowed from the 1970s onwards, so did apparent labour productivity. But the upturn from 1998 to 2001 did not see an acceleration in productivity: instead, there has been a strong surge in employment. This is due to a combination of moderate wage growth, reductions in social security contributions for low wage-earners, as well as the cut in the working week. These factors, especially wage moderation which is encouraged by an abundance of available labour², have all led to a spectacular fall in unemployment in the Netherlands³. Along with the Netherlands, France has one of the highest productivity levels in the world (according to M. O'Mahony and W. Boer, French productivity is close

to American levels⁴). This has made the deceleration of labour productivity growth, which is synonymous with job-creating growth, sustainable in both countries.

However, such a trend in employment may lead to losses in competitiveness if productivity growth becomes insufficient to offset even modest wage increases. The manufacturing sector is especially exposed to this risk⁵. Given its exposure to international competition, this sector is sensitive to any change in the relative levels of productivity and costs. But, compared to the trend in the rest of the French economy, manufacturing productivity in France appears to be maintaining its regular growth (nearly 4%), and it is employment that has adjusted to fluctuations in the activity of this sector (Graph 1). This is a characteristic which is not found in all European countries and explains, in part at least, the relative position of French manufacturing. Several comparative studies of productivity levels make it possible to contrast the French situation with those of Germany, the United Kingdom and Spain. These shed light on the way in which French industry has been adapting to macroeconomic and competitive constraints, since the mid-1980s⁶.

1 The recent debate on the position of France in a European ranking has somewhat clouded the diagnosis of the French economic situation. For more information about this see, G. Gaulier, "Les vraies places de la France", *Les Echos*, 01/02/02, available on Internet at: <<http://www.cepii.fr/francgraph/publications/divers/gaulierppa.pdf>>, and for a more extensive critique of the issue see F. Magnien, J.-L. Tavernier & D. Thesmar, "Les statistiques internationales de PIB par habitant en standard de pouvoir d'achat: une analyse des résultats", *INSEE Working Paper*, 2002/01, and also E. Heyer and M. Plane, "La position de la France a-t-elle réellement reculé en Europe?", *Lettre de l'OFCE*, No 217, March 2002.

2 France's rate of unemployment has remained high and its activity rate is low.

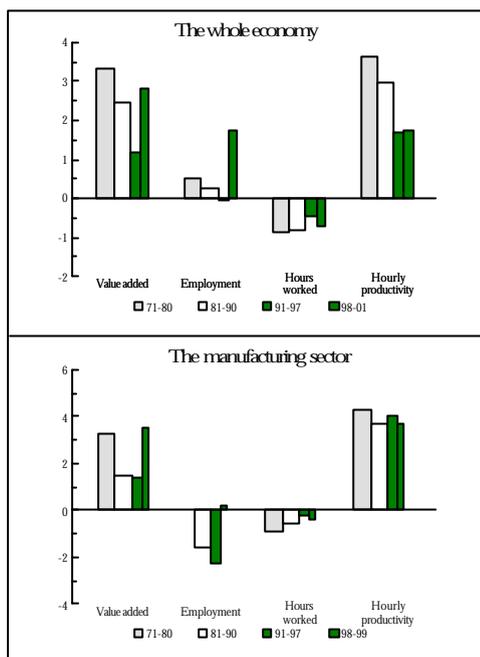
3 See S. Jean, "Employment: Lessons from the Netherlands", *La Lettre du CEPII*, February 2000, at <www.cepii.fr>.

4 M. O'Mahony and W. de Boer, "Britain's Relative Productivity Performance: Has Anything Changed?", *National Institute Economic Review*, No 179, January 2002.

5 This sector accounts for about 16% of total employment in France, but 72% of trade in goods and services.

6 See L. Nayman and D. Ünal-Kesenci, "The French-German Productivity Comparison Revisited", *CEPII Working Paper*, No 2001-14; A. Chevalier and D. Ünal-Kesenci, "La productivité des industries méditerranéennes", *CEPII Working Paper*, No 2001-16 (<www.cepii.fr>). The data concerning the United Kingdom have been provided by M. O'Mahony (NISE02 data set, <www.niesr.ac.uk>).

Graph 1 - France, the breakdown of growth in value added - average annual growth rates, in %



Sources: OECD, DARES, CEPII databases on output levels and productivity, authors' calculations.

Price Levels

2

International comparisons often examine **trends** in indicators, especially when it comes to prices and costs. The approach used in the work presented here allows for a comparison of the levels of productivity, prices and costs, for the manufacturing industries of several countries.

The first stage in such research involves calculating exchange rates at production price parity⁷, based on detailed industrial statistics. This calculation is based on the same principle as that used for purchasing power parity. The ratio of prices, in national currencies, of a bundle of manufactured goods provides a monetary conversion rate which ensures manufacturing production price parity (the MPP rate). The MPP rate makes it possible to calculate manufacturing output of different countries in a single currency and a single price system. The hourly labour productivity levels calculated using these assessments of production are then comparable from one country to another: they are not affected by exchange rate levels, nor by differences in relative prices. These measures of productivity are used to assess unit labour costs, which take into account the "real" level of production for the same hourly cost (the hourly compensation⁸ of employees given at the nominal exchange rate) and so allow differences between countries to be gauged. Lastly, once

they are expressed in a common currency, the MPP rates (in other words, the ratio of prices in national currency) provide real exchange rate levels, i.e. the level of prices in one country with respect to another.

The results obtained indicate that French manufacturing industry, at the end of the 1990s, benefited both from a price and unit cost advantage as well as from a higher level of productivity (see Table 1), when compared to Germany and the United Kingdom (both these countries have similar per capita income levels to France). The macroeconomic policy adopted from 1983 onwards has forced French companies to control prices and costs strictly, through both wage moderation and productivity gains.

Table 1 - Relative levels in the manufacturing sector, 1999 (France = 100)

	Price	Unit labour cost	Productivity per capita	Productivity per hour
Germany	106	121	97	98
United Kingdom	105	110	91	80
Spain	76	78	86	77

Note: The levels of relative prices refer to value added. They are calculated using the ratio of the "MPP level/nominal exchange rate". The productivity levels are estimated in MPP. Unit labour costs are calculated by the ratio of "hourly wages at the nominal exchange rate/productivity at the MPP rate".

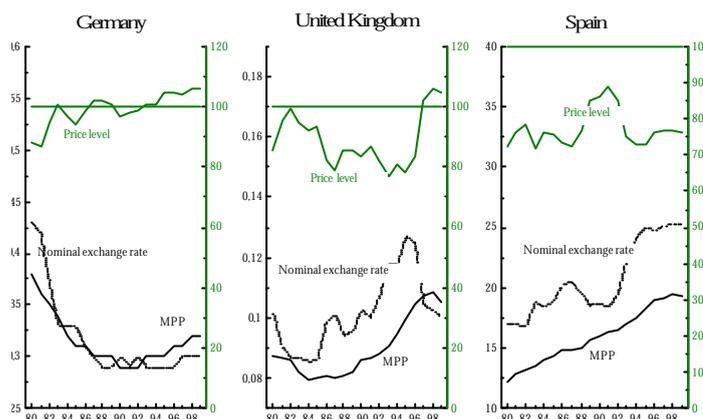
Sources: Output and productivity databases of the CEPII and M. O'Mahony, authors' calculations.

The "competitive disinflation" strategy has brought about a significant slowdown in price rises in the manufacturing sector. While French value added prices rose by 8% per year between 1980 and 1984, they were only increasing by 2% per year at the end of the 1980s. The stability of French manufacturing industry's prices was maintained during the 1990s, whereas German prices were under upwards pressure, following reunification. By 1999, German prices were 6% higher than France's (Graph 2). With respect to the other two countries, relative price levels were strongly affected by exchange rate movements, above and beyond differences arising from national inflation rates (the spread shown by the curve of the MPP rate). The move of the peseta outside its fluctuation bands in the European Exchange Rate Mechanism (ERM) as well as the pound's exit from the ERM in the autumn of 1992 meant that British and Spanish prices fell relative to French prices (to respectively 78% and 73% of the French level in 1995). But as of 1996, the appreciation of the pound compounded with the inflation rate differential brought British prices back up above French prices (to 105% in 1999). As for the spread between French and Spanish prices, it fell progressively once the exchange rate stabilised, given the tendency of Spain's inflation to be high, as its economy catches up with the rest of Europe.

7. The conversion rates used in this research are calculated according to the **Industry of Origin** method used in the ICOP (International Comparisons of Output and Productivity) project, in which the CEPII is participating. They are calculated for 1997. Time series are established, based on 1997 levels, using the price indices for value added in national accounts.

8. Including all wage costs and employers' social security contributions.

Graph 2 - The nominal exchange rate, the MPP rate and price levels



Note: The nominal exchange rate and the manufacturing production parity (MPP) of the mark, the pound sterling and the peseta (indicated on the left-hand axis) are expressed relative to the franc (x DM, x £ ou x PST=1 FF). Thus, an upward trend in the curves reflects an appreciation of the franc compared to these currencies. The level of manufacturing prices of each country with respect to the French level (shown on the right-hand axis, France = 100) is obtained by dividing the MPP rate by the nominal exchange rate.

Sources: Output and productivity databases of the CEPII and M. O'Mahony, authors' calculations.

Productivity, Employment and Costs

The restructuring or the shocks (German reunification) which have affected the manufacturing sectors of these four countries have led to important cuts in labour. These sectors were thus quite different at the end of the 1990s. Only France and Spain have recorded strong manufacturing growth. Apart from France, none of the other three countries experienced a regular increase in manufacturing productivity, nor the gap (mentioned above) between manufacturing productivity gains and those found in the whole of the economy. It turns out that this gap has actually favoured the fall in France's unit labour costs, in as far as wage compensation in the manufacturing sector has risen in real terms at a rate that is close to the productivity growth of the whole economy.

At the end of the 1980s, German manufacturing productivity was about 25% higher than France's, when measured on an hourly basis. This differential was brutally reduced in 1991, as reunification brought down the average level of German productivity. German industry was unable to return to its old growth path in the wake of reunification (Table 2). Nominal wages rose as in France, but productivity gains were noticeably weaker. Thus, as unit labour costs fell in France, they rose in Germany, to exceed French costs by 20% in 1999 (they had been at the same level in 1991: see Graph 3). The loss of competitiveness of German goods has led to a 3 percentage point fall in Germany's share of European exports between 1991 and 2000 (the share being 25% in 1999). The sluggishness of this sector has been weighing down on the German economy as a whole.

At the beginning of the 1980s, British industry's productivity was relatively weak, equivalent to 80% of the French level, in terms of hours. Subsequent restructuring, which brought about strong cuts in labour, pushed productivity up to

Table 2 - Growth, productivity and wages in manufacturing, 1991-1999 - average annual growth rates

in %	France		Germany*		United Kingdom		Spain	
	91-99	98-99	92-99	98-99	91-99	98-99	91-99	98-99
Value added	1.8	3.5	-0.6	0.9	0.6	0.5	2.3	4.4
Employment	-1.8	0.2	-3.2	0.0	-1.7	-1.5	0.5	4.4
Average time worked	-0.2	-0.4	0.9	0.2	-0.1	-0.3	0.1	-0.1
Hourly productivity	3.9	3.7	1.8	0.7	2.4	2.2	1.7	0.0
Hourly wage	3.0	2.2	3.2	1.4	4.6	4.4	4.9	2.7

Notes: The aggregates in this table are given in national currencies. The hourly wage is nominal.

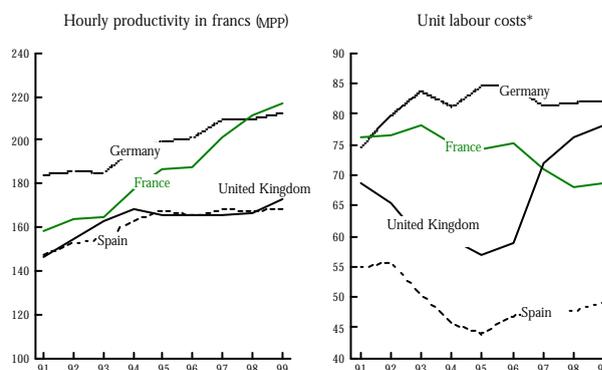
* 1992-1999 is the period used for Germany. The rise in average working time corresponds to the alignment of East Germany on the West.

Sources: Output and productivity databases of the CEPII and M. O'Mahony, authors' calculations.

Continental levels. By 1993, Britain had caught up with France. The devaluations in 1992 and 1994 also improved the price competitiveness of British products. But British manufacturing industry growth has remained lacklustre, falling behind global growth. Productivity stopped increasing, and the gap with France has once again widened (back to 80% of the French level in 1999). Also, the renewed appreciation of the pound from 1996 onwards has pushed up relative unit costs. Though British and French manufacturing account for similar proportions of national value added and employment (about 18% of valued added and 16% of employment), they appear to be on diverging paths. Britain's economic specialisation in services is increasingly strong (with the consolidation of London's position as a financial centre). In France, manufacturing industry remains an engine of growth, so that productivity continues to be a key issue.

A comparison with Spain shows up a new specificity of the French case. Despite the former country's dynamic output growth in manufacturing in the last years of the 1990s (running at an average of 4.4% in 1998 and 1999), it has also experienced a complete stop in productivity growth since 1995: employment gains have therefore accompanied the rise in output (Graph 3). Indeed, employment is rising as much in manufacturing as in the whole of the economy, following the major labour market reforms introduced in 1997.

Graph 3 - Productivity levels and unit labour costs in the manufacturing sector, 1991-1999

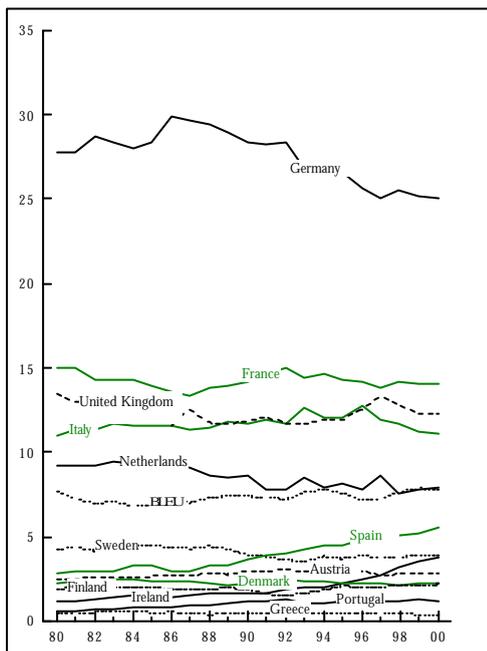


* Unit labour costs correspond to the ratio of "nominal hourly wages/real hourly productivity". Wages are converted at the nominal exchange rate, whereas productivity rates are converted using MPP.

Sources: Output and productivity databases of the CEPII and M. O'Mahony, authors' calculations.

Compared to France, the labour content of growth has been as important in Spain's manufacturing sector as it has in the rest of the economy. The gap between French and Spanish productivity in manufacturing is therefore rising. France's manufacturing sector has not given up on its efforts to hold down costs by increasing productivity, since coming out of the phase of competitive disinflation of the 1980s⁹. Having gained market share within Europe as of 1988, France did indeed come under competitive pressure from its partners which left the ERM. But, France was able to overcome this from 1998 onwards, whereas the United Kingdom and Italy began losing the advantages they obtained from devaluation (Graph 4).

Graph 4 - The share in manufacturing exports by the EU-15 (in %)



Sources: CEPII-CHELEM, Eurostat-Comext, authors' calculations.

Despite wage moderation, French industry has (for a long time) followed a strategy of substituting capital for labour¹⁰. According to the latest figures by INSEE, it was not until 1998-99, and especially 2000, that strong growth led to job creation¹¹. There has been upward pressure on unit wage costs over the last years, especially stemming from the introduction of the 35-hour working week¹². In the future, it is likely that upward pressure on unit labour costs will be maintained. Once the present slowdown in business cycle has ended, a new period of growth could have the effect of seeing the trade-off in favour of employment, which characterised the years 1997-2001, giving way to faster wage growth. Given the present level of French manufacturing costs, it is possible that such a shift would not run up too quickly against the constraints of competitiveness in the euro-zone. It would nevertheless be a motive for not diminishing the effort to raise productivity.

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9. At the same time, French industry has strengthened its non-price competitiveness, as shown by the rising share of up-market goods in its total exports (L. Nayman and D. Unal-Kesenci, op. cit.) and has significantly improved the image of its products (L. Ferrara, "L'image des biens de consommation sur le marché européen en 2000", Centre d'observation économique, *Working Paper*, No 54).

10. O. Blanchard ("Revisiting European Unemployment: Unemployment, Capital Accumulation and Factor Prices", *NBER Working Paper*, No 6566, May 1998) suggests that there are two characteristics of the demand for labour in continental Europe which explain the continuation of such substitution: labour market negotiating power which has become very favourable for employers and a preference for capital intensive technologies.

11. In 2000, output growth remained very strong and employment rose at more than 2%, a level not experienced since the 1970s; T. Méot, "L'industrie en 2000 - Les industries traditionnelles ont encore du tonus", INSEE PREMIERE, No 781, May 2001.

12. This cut in the working week has led to a rise in hourly wages, even when offset by cuts in employer social security contributions, and this has only partly been compensated for by hourly productivity growth.

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