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INDUSTRIAL COMPETITIVENESS: THE FRENCH CASE

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By Jean-Michel CHARPIN, Director of CEPII(*)

France is the world's fourth largest exporter. The three countries ranking above it (in descending order, Germany, the United States and Japan) all have larger populations, and so there is no reason to present the French situation as being disastrous. Nevertheless, for the past ten years or so, French positions on world markets have been slipping. In 1987, for the first time in many years, there was a deficit on trade in manufactures. The aim of this paper is to describe the evolution in French foreign trade and to throw light on the reasons for the decline in French industrial competitiveness. Given the prospect of the Single European Market, particular attention will be paid to trade between France and its partners in the European Community.

1. The decline in French industrial competitiveness

The French balance on external trade in manufactures has considerably deteriorated in the past several years, to the point of becoming negative in 1987, for the first time since 1969. This deterioration was large enough for the overall trade deficit to persist despite the considerable reduction in the oil bill following the reverse oil shock of 1985-1986.

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Table 1
French external balances

billion francs

	1980	1981	1982	i 1983	1984	1985	1986	1987
Merchandise trade	-88	 -87	 -136	: -88 !	i -69	-69	i -34	-66
manufactures	35	55	30	60	97	83	32	-11
energy	-133	-163	-180	-169	-190	-182	-92	-84
Trade in services	53	57	67	1 82	[98	97	86	71
Transfers	16	 3 	 -11 	 -28 	 -32 	-27 	-32 	 -29
Net lending capacity	-19	 -28	 -80	 -35	 -4	1	19	 -23

Source: INSEE (1988).

All branches suffered in the decline. In the case of intermediate goods, it amounted to 7 billion francs compared with 1980 and 24 billion compared with 1984. The corresponding figures for other branches were: capital equipment, 13 and 40; vehicles, 5 and 10; household durables, 10 and 7; consumer goods, 21 and 22. The only branch to record an improvement between 1980 and 1987 was armaments, in spite of a decline between 1984 and 1987.

The decline since 1980 was entirely in trade with the EEC. The picture for the period since 1984 is less clear-cut, in that the surplus with countries in the South has also fallen considerably.

Germany, France's leading trade partner, is also the country with which France runs the largest deficit: a massive one, not far off the deficit with OPEC immediately after the second oil shock.

The French share of world manufacturing exports rose from 6.5% in the mid-1960s to 7.7% in 1979, according to CEPII's "CHELEM" data base, and then fell back to 6.0% in 1984-1985 before increasing to 6.3% in 1986. At the same time, the French share of world manufacturing imports, equal by definition to

world exports of these products, has been more stable, ranging between 5.5% and 6.5% over the past twenty years and standing at 6.0% in 1986.

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Graph 1: French shares in world trade in manufactures

72 Source: Lafay and Stemitsiotis (1988).

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The fall in the French . . . the world export markets has often been over-hastily ascribed to simple causes -- for example, to the European Monetary System, for having kept the real exchange rate of the franc too high, or to President Mitterrand's policy, accused of disorganising and handicapping French In reality, as we shall see, structural effects have industrial capacity. . This role played an important role in the decline analysed in detail before making any pronouncement about the competitiveness of French industry.

The role played by structural effects

To analyse the role played by structural effects, three periods have 1967-1973, 1973-1980, 1980-1986. been distinguished: The boundary years chosen are the most meaningful for world trade: 1973 was the year of the first oil shock, while 1980 was the year immediately following the second oil shock and also marked certain major turning-points in the monetary field. The French situation will be systematically compared with that of Germany, as is justified both by the intensity of the trade between the two countries and the fact that they are frequently in competition with each other on third markets.

For each of these periods, the total change in the share of world manufacturing exports has been broken down into two components:

- 1) the effects of the initial structure, in other words, the change which would have resulted simply from variations in imports by the trading partners if market shares had remained unchanged compared with the beginning of the period;
- 2) performance on 1536 individual market segments (32 zones x 48 industrial product groups).

The calculations were carried out by G.Lafay and L.Stemitsiotis, using CEPII's "CHELEM" data bank.

Table 2

Breakdown of the variations in manufacturing exports

thousandths of world trade

		1973/1967	1980 1973	1986/1980
i]	<u> </u>	İ
F	Total conjection		÷1.6	-9.9
RIA	Total variation	: +7.0 I	-1.0	, -9.9 ,
N i	- structural effect	+6.4	-5.1	-5.3
C	market performance	+0.6	-3.5	-4.6
E		!		
G i		: 1		
E	Total variation	+17.3	-21.2	+4.1
R		1 i	1	•
M	 structural effect 	+9.7	-1.0	-2.6
A	 market performance 	+7.6	-20.2	+6.7
N		<u> </u>		1
Y		i i	1	

Source: Lafay and Stemitsiotis (1988).

The first period, from 1967 to 1973, was characterised by a strong structural gain for France as regards exports of manufactured goods (+6.4), backed up by a small positive performance on the individual market segments (+0.6). In the other two periods, in contrast, there were setbacks in the

performance on the individual market segments, with losses of 3.5 and 4.6, respectively.

But the most striking feature was the total reversal in the structural effect. Between 1973 and 1980, France, by reason of its initial position on the expanding markets, enjoyed a structural gain of +5.1. Because this more than made up for the losses of market share on the individual market segments, it permitted an overall gain of 1.6, and this obscured the initial phase of deterioration in foreign trade. After 1980, however, the two components worked in the same direction, leading to a particularly sharp decline in French export share (-9.9), roughly half the decline being due to the distribution of world trade which became unfavourable to France (structural loss of 5.3), and about the same amount to market share losses on the individual market segments (-4.6).

Germany, for its part, went through a process which was both uneven and often the inverse of the French experience. During the first period, it recorded very large gains (+17.3), due both to the initial structure of its exports and to the evolution on the individual market segments. Between 1973 and 1980, by contrast, (a period of rapid appreciation for the DM), the structural effect turned slightly negative, just when German industry was suffering large market share losses, so that the total variation amounted to -21.2. After 1980, Germany staged a rally with respect to market share (+6.7) and this outweighed the structural effect, which although negative (-2.6) was only half that suffered by France.

Table 2 clearly shows that the 1980 turning-point was in fact a turn-ing-point as regards the structural effect, but that the losses of positions on the individual market segments has been a continuous process since 1973.

The causes of the 1980 reversal of the structural effect are well known. France, because it was traditionally well placed, geographically on the markets of the Gulf, Africa and Europe, and sectorally on the markets for vehicles, chemicals, engineering and steel, was a major beneficiary of the tendencies between 1973 and 1980, but then suffered much for exactive the same reasons in 1980-1986.

The poor French performance on the individual market segments dates back, not to 1980, but to the first oil shock. It is in stark contrast with

German performance: Germany had large market share losses in the period between the two oil shocks, but has been recovering since the beginning of the 1980s.

In the French case, the market share losses on the individual market segments differ according to geographic location.

- a) Outside Western Europe, the results were highly negative over the period 1967-1973 (-3.2), when the former colonial markets were being opened up to other suppliers. Although still negative in the two later periods, the results were less unfavourable (-1.3 and -0.8. respectively). This relative improvement on the non-European markets after the first oil shock reflected a change encouraged by special export support.
- b) On the European markets, on the other hand, where there is less distortion of competition, the deterioration in the French position can be seen to have accelerated. Whereas French industry recorded market share gains between 1967 and 1973 (+3.8 thousandths of world trade), it began to show losses between 1973 and 1980 (-2.2) and even more between 1980 and 1986 (-3.8).

It is highly instructive to compare these results with the German performance, where there was greater synchronisation between gains and losses on the different markets. Between 1967 and 1973, German industry recorded export gains which were substantial in Western Europe (+6.8) and more modest eisewhere -0.8). Between 1973 and 1980, it fell back everywhere, both in Europe (-9.4) and outside (-10.8), Between 1980 and 1986, it was unable to make up for the ground lost outside Europe and even continued to decline (-0.4). But it achieved a spectacular recovery on the European markets, precisely those where France was accumulating losses. This gain on Germany's part in the latest period (+7.1) was not a contribution to recovery for Europe as a whole, because it was entirely at the expense of its neighbours, notably France.

The dominant importance of the European markets emerges clearly when one looks more closely at the countries and products which have had the most to do with the setbacks recorded by French industry since the first oil shock.

Between 1973 and 1980, French market share losses on the West European markets -- especially Germany -- accounted for two thirds of the losses. In the other regions, France saw its market shares in Africa gradually eroded when

the market itself was buoyant. The branches where the main losses were recorded were vehicles, textiles and mechanical engineering. In the case of vehicles, there were losses on all the markets, but these were masked in the period in question by the positive structural effect. The losses in textiles occurred both in Europe and in the United States.

Exactly which countries benefited from the French decline depends on the particular branch. Market shares lost by France in the vehicle sector were systematically picked up by Japan, when Japanese car-makers were making a major breakthrough. Market shares lost in textiles went mainly to the Asian NICs or to Italy. The Asian NICs were also the main beneficiaries from French declines in the electronic and wood-paper-miscellaneous sectors in Africa. In Europe, the British Isles profited from entry into the European Community by taking market share away from France in engineering and chemicals. Some gains were made at French expense by Southern European countries (vehicles in Italy, steel in Africa) or even by the United States (engineering in Latin America). But throughout this period, except on the United Kingdom car market, Germany never appears on the list of gainers.

Over the period 1980-1986, French industry hardly ever managed to find items on which it could regain market share, with the result that the overall decline meant a loss of 7 billion dollars in 1986. Export setbacks accumulated especially on Western European markets. Germany and Italy in particular, followed by the United Kingdom. Belgium-Luxembourg, Spain, the non-EEC Southern European countries and the Netherlands. Elsewhere, France was losing market share in the United States just when this market was booming, and in Eastern Europe.

The branches showing the greatest market share losses by France over this period were vehicles, mechanical engineering and chemicals. Taking all markets together, vehicles alone accounted for a loss of 2.9 billion dollars, while mechanical engineering and chemicals lost 2.2 and 1.2 billion dollars, respectively. But the countries gaining shares in this later period were not the same as in the first. On the European markets, and in almost all branches, the country picking up the market shares lost by France was Germany.

This means that since the start of the 1980s the decline in French industrial exports has been the result, first, of structural effects and, second, of the recovery of shares of the European market by Germany.

3. The nature of intra-European trade

French trade with its European partners is a hybrid. On the one hand, it consists of trade between separate nations, influenced by each country's specific structure and macro-economic performance. In this respect, the particular resource endowments of each country, their know-how, their efficiency, their social, fiscal and monetary circumstances all enter into the explanation of the trade flows. But, from another angle, it is clear that the considerable expansion of intra-European trade that has taken place since the early 1960s is not mainly the result of an intensification of an international division of labour based on comparative advantage. On the contrary, and in line with the analyses made by Linder (1961), it is the close similarity between the demand structures in the various European countries that has been behind the economic integration within the Common Market. And there is every chance that this tendency will be given a further boost by the completion of the Single Market.

As Balassa (1986) has already pointed out, French trade with its European partners is "intra" in two senses: both intra-European and to a great extent intra-industry.

In order to evaluate the importance of this phenomenon, Abd-El-Rahman and Charpin (1989) classified French foreign trade in manufactures into several categories, representing different types of French participation in international trade, using the 6-digit Nimexe customs nomenclature in the Eurostat external trade data (details of the classification method will be found in the Annex):

eous and significant exports and imports of the same segment of the same product, as determined by examination of unit values. These products are said to be similar if, first, they cannot be distinguished even with the use of the six-digit statistical customs nomenclature and, second, the closeness between their unit values indicates that they do not belong to different segments of the product range. But this does not mean that the products are identical: if this were the case, it would be absurd to trade them between countries, except in the immediate neighbourhood of national frontiers. Reciprocal trade in similar products can be bilateral when the same

partner is involved in both the exports and the imports or triangular when different partners are involved.

- 2) One-way flows. This category covers those trade flows in which, for a given product in the nomenclature, one of the two flows, exports or imports, is negligible with respect to the other (is less than 10% of the other, to be precise).
- 3) Trade within individual product ranges ("intra-range trade"). These are the flows remaining after eliminating trade in similar products and trade in which flows in one direction are negligible in relation to the other. In other words, they form a category in which imports and exports are simultaneous and significant, but where the products belong to different segments of the product range.

Table 3 shows the predominant importance of intra-industry trade in French external trade in manufactures. In 1984, only 23% of trade with the world as a whole fell into the "one-way" category, and the phenomenon is even more striking taking only trade with EEC countries, the percentage being as low as 17%. Conversely, this means that 83% of French-EEC trade in 1984 was in products which, even when identified under the extreme refinement of the six-digit Nimexe nomenclature, gave rise to simultaneous and significant flows of exports and imports.

Comparison of the figures for 1978 and 1984 shows a certain stability in the distribution between categories.

As far as the comparison between trade with the world and trade with the EEC is concerned, the only really significant difference is the relative shares of bilateral and triangular trade within the reciprocal similar-product category. Bilateral reciprocal trade is of much greater importance in French trade with the EEC. To be more precise, close to 90% of French reciprocal similar-product trade in 1978 was with other EEC countries, and 85% in 1984.

Reciprocal trade in similar products accounts for almost half French trade in manufactures, both with Europe and with the world in general.

Table 3

Distribution of French trade in manufactures according to trade pattern

, 1		France - world			
	· · · · · · · · · · · · · · · · · · ·	1978	i 1984	1978	 1984
One-way flow	is	18%	23%	18%	 17%
Intra-produc	t-range	35%	 31% 	32%	 . 35%
Reciprocal trade in	bilateral	16%	 15%	26%	 24%
similar products	triangular	31%	31%	24%	 24%

(1) EEC membership is as at the selected dates, i.e. nine members | in 1978 and ten in 1984.

Source: Abd-El-Rahman and Charpin (1989)

The relative proportions of bilateral and triangular reciprocal trade depend hardly at all on the branch. This remark leads one to look a little more closely at the actual partners involved in these exchanges with France. If the branch of economic activity is not a discriminating factor in the distribution between bilateral and triangular, this is most probably because the distribution is more a function of the nature of the relationship between the countries than the nature of the product.

In bilateral reciprocal trade, three groups of partners are clearly distinguishable:

1) The group consisting of Germany, Belgium and Luxembourg, where there is a high degree of intensity of bilateral reciprocal similar-product trade with France.

- 2) The group comprising the Netherlands, the United Kingdom, and Italy, with intermediate intensity. The French export/import coverage in reciprocal bilateral trade with this group of countries is well above the average.
- 3) The group consisting of Denmark, Ireland and Greece, with a very low intensity of bilateral reciprocal similar-product trade.

A similar analysis can be applied to the triangular reciprocal trade. Obviously, for a given product, any partner is involved only as export destination or import source, but after aggregation of all the products, each partner country accounts for an identifiable part of the exports and of the imports in the total triangular reciprocal trade of France.

Here too, three separate groups can be distinguished:

- 1) The group consisting of Germany, Belgium, Luxembourg and the Netherlands, with whom France is mainly an importer as far as triangular similar-product trade is concerned.
- 2) The group consisting of the United Kingdom, Denmark and Greece, with whom France is substantially in surplus for triangular trade in manufactures.
- 3) Lastly, two countries, Italy and Ireland, very different from each other, but whose export/import ratio vis-à-vis France for this type of trade is close to the average.

These conclusions taken together tend to confirm the intermediate position of the French economy within the European Community described in many earlier studies.

4. French industry and the prospect of the Single Market

The programme for the creation of the Single European Market is not concerned only with industry, far from it. Its main effects are likely to be felt in services of various kinds: transport, telecommunications, and above all financial services. All these are to a great extent protected from foreign competition at present in most European countries, whereas the industrial branches, apart from those involved in public procurements, have already had to face foreign competition, both within the Common Market and at world level.

Estimates of the potential consequences of the Single Market carried out by the Commission of the European Communities (1988) nevertheless show that industry will also be largely affected. The elimination of obstacles to trade of various kinds are expected to lead to an intensification of the international division of labour, economies of scale and a reduction in inefficiency within firms that are likely to mean an appreciable improvement in the productivity of European industry, especially in chemicals, mechanical engineering, electrical equipment and automobiles. It is obvious that the consumers will benefit from the Single Market, .but , among firms, there will be winners and losers. In basic terms, the gains connected with the Single Market will be derived from a higher degree of competition, favouring the efficient at the expense of the inefficient. One must therefore expect major redistributive effects, among countries, regions and social groups.

Few studies have as yet been made of these redistributive effects. This is hardly surprising, given the dangerous and delicate nature of studies of this kind: dangerous, because the results could influence public opinion and governments to the point of making them change position; delicate, because this type of prognosis is very difficult -- some would say impossible -- to establish. Common sense would lead one to favour the hypothesis that those best placed at the start will be the gainers from intensification of competition. But past experience, including that of the Common Market in the 1960s, has shown that the reactions on the part of certain countries or firms, even though not well placed at the start, could be sufficiently vigorous to turn them into winners.

France still has a powerful industrial sector, even though it is outstripped by German industry in Europe and even though it has lost ground in the past fifteen years, particularly on the European market. What will count most in the coming Single Market, as the analysis of the nature of intra-European trade has shown, is the capacity of individual firms to adjust to demand, to produce efficiently, to compare economies of scale. Intra-European trade will come more and more to resemble trade within a single country. Trade flows will still depend partly on comparative advantages and on macro-economic conditions, but they will be determined above all by the capacities of the different firms to face competition.

Annex

The method used for classifying trade patterns

The statistical source used is the external trade data base of the Statistical Office of the European Communities (Eurostat), at the most disaggregated (6-digit) level of the Nimexe nomenclature. For each of the member countries, this data base provides export and import statistics, in quantity and value, by destination and origin. The 6-digit level contains some nine thousand products, approximately six thousand of them in the manufacturing sector. For details concerning this data base, see Eurostat (1985).

After extracting the statistics for France, the analysis dealt with exports to and imports from each of France's trade partners, for each of the 6-digit Nimexe items. The trade partners identified for this purpose consisted of: Belgium-Luxembourg, the Netherlands, Germany, Italy, the United Kingdom, Ireland, Denmark, Greece, Portugal, Spain, the rest of Western Europe, the United States, Canada, Japan, the other Western countries, the Latin American NICs, the South-East Asian NICs, the OPEC countries, the non-OPEC developing countries, the Eastern countries, the rest of the world.

For each flow (export or import) the unit value was calculated. Flows of each product in the nomenclature were then broken down into tranches by unit value, each tranche being 15% wide, starting from the highest unit value.

The reciprocal trade in similar products was extracted first. These are the flows, within a single tranche, that are simultaneous and significant, in the sense that neither of the two flows, imports or exports, is less than 10% of the other.

Unlike other approaches that have been used in this field (see especially Grubel and Lloyd (1975) in which only balanced reciprocal flows are considered, or even Aquino (1978) despite the correction introduced), our approach covers the totality of reciprocal trade. making it possible to discern surplus and deficit phenomena even for this type of trade.

The remaining flows are classified in the categories of "intra-product-range" or "one-way" flows, depending on the relative importance of the minority export or import flows in relation to the majority flows. Where the minority flows are zero or less than 10% of the majority flows, the exchanges are classified as one-way flows. Minority flows, where they exist, are then treated as residuals. Where the minority flows are greater than 10% of the majority flows, the exchanges are treated as being of the intra-product-range category.

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