ISSN : 1287-4558

Analyses Économiques vol. V-06 (Nov. 2006)

The Newsletter of the French Council of Economic Analysis

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EDITORIAL

France has recorded a significant trade deficit in recent years. Is this to be seen as a worrying development that requires corrective measures?

The report by Patrick Artus and Lionel Fontagné provides informed and enlightening answers to this question. The current oil-price shock and the appreciation of the euro go some way towards explaining the deterioration in France's balance of trade. However, the increased oil price and the euro exchange rate have had a like impact on all euro-zone countries.

The report takes a close look at the specialisation of France's foreign trade. The differences in sectoral or geographical patterns of specialisation appear to account for only a minor part of the difference in the performance between France and Germany. In fact, to improve its competitiveness, France will need not only to increase its efforts in R&D, innovation, training and qualification levels but also to promote small firms growth. With more medium-sized companies, the country would be able to boost its exports and be more competitive and attractive.

Christian de Boissieu
Executive Chairman of the CAE

Recent Trends in France's Foreign Trade

Report by Patrick Artus and Lionel Fontagné

Whereas France had withstood the increase in competition from new trading partners rather better than most industrialised countries, its foreign performance has deteriorated since 2001. The report by Patrick Artus and Lionel Fontagné is original in its particular complete coverage of the causes of the slack growth in French exports in recent years. After considering the traditional approaches, the authors make an in-depth analysis at the products and firms level. This new perspective leads them to conclude that the problems experienced by French foreign trade are mainly microeconomic in origin. Their suggestions, for stimulating French exports and increasing firms' responsiveness, include making SMEs more productive, bigger and more flexible.

This report was presented to the Minister of Economy, Finance and Industry and members of the Prime Minister's Office. This letter, published under the responsibility of the standing committee, provides an overview of the authors' main conclusions.

The facts

The authors start by presenting the stylized facts about France's foreign trade:

• they note that France withstood the increasing competition from new trading partners rather better than most other industrialised countries up until 2000. Between 1970 and 1999, France's world market share in industrial and agricultural goods, excluding commodities, only decreased by 4%, while Germany and the United States saw their market share fall by 15%. However, recent trends show France to be underperforming Germany;

• in volume terms, German and French exports expanded in line with the growth in world trade between the mid-eighties and 2000. But French exports levelled off as from 2001, while German export growth outstripped the expansion in world trade;

• an examination of trade balances reveals major differences between Germany, Italy and France as from 2001, at a time when exports and imports started to accelerate considerably. In Germany, exports expanded more rapidly than imports, which was reflected in a very rapid rise in trade surpluses between 2001 and 2005. In Italy, exports and imports more or less balanced each other out, whereas the French trade balance displays a deficit at the beginning of 2004;

• the increased oil price has, of course, pushed up energy bills in European countries, but does this account for the differences in the trade performance of these three countries? The energy deficit has increased by roughly the same amount in Germany, France and Italy. So the difference in the overall performance is due to trends in the balance of trade excluding energy. The German trade surplus, excluding energy, increased two and a half times between 2000 and 2005. The Italian equivalent doubled, whereas the small trade surplus (excluding energy) in France has remained flat;

• trends in cost competitiveness cannot account for the difference in France and

Germany's export performance. Of course if we examine the developments in the real exchange rate over the past ten years deflated by unit labour costs for *the economy as a whole*, we see that Germany's competitiveness has improved more than that of France: overall unit labour costs have increased by almost 15 points more in France. But this observation for the economy as a whole is misleading. In fact, *in manufacturing industry* trends in unit labour costs, productivity and per capita wages have been very similar in Germany and France over the past ten years.

Traditional analyses

The authors next consider the deterioration of the French export performance since 2001. They emphasise that although the traditional macroeconomic determinants (foreign demand and price competitiveness) have indeed contributed to this poor performance, their impact is not sufficient to explain the difference between the French and German export performance.

They then analyse whether the recent slowing of French export growth can be ascribed to the differences in sectoral and geographical structures of French and German exports.

In order to distinguish between sectoral structure and performance respectively, the gap between French and German export growth is broken down according to two criteria. The first, which is equal to the sum of the differences in the two countries' exports weights of each sector weighted by the average growth of exports in each sector, ascertains the effect of the sectoral structure. The second, which is equal to the sum of the export growth differentials by sector between the two countries weighted by the average weigh of each sector in exports, measures the effect of the sectoral performance.

The result of this calculation shows that, between 1998 and 2003, just 9% of the growth gap between German and French exports stems from the sectoral structure effect. Germany's advantage is primarily attributable to the automotive and plant and machinery sectors, whereas France has a structural advantage in the food-processing and aeronautics sectors. Most (91%) of this difference is therefore due to the performance effect. France is subject to a highly negative impact from four sectors that account for almost 60% of the performance effect: radio, television and communication equipment, office and computer equipment, the aeronautics and space sector and the automotive sector. Only two sectors weigh on the German outperformance: pharmaceuticals and, to a lesser extent, iron and steel.

The same exercise was then repeated in geographical terms, and showed that here too the structure effect had a minor impact between 1998 and 2002, accounting for 6% of the growth differential between German and French exports. The geographical structure of exports is clearly to France's detriment; Germany benefits from the fact that, in regional terms, its exports focus more on the CEEC (Central and Eastern European Countries) and emerging markets in Asia, which are high growth areas. However, the different weightings of these markets in France and Germany's total exports are too minor to make any significant contribution to Germany's outperformance in global terms.

The growth differential between French and German exports therefore stems primarily from the geographical performance effect in Germany's favour, accounting for 94% of the overall differential. Bilateral trade between France and Germany accounts for 23.8% of France's underperformance. German exports to France are growing far more rapidly than French exports to Germany, probably due to the fact that domestic demand is stronger in France than in Germany. 47% of this underperformance is due to trade with the rest of Europe, including Switzerland, and 27% to Asia and Oceania. On a lesser scale, 12% of the geographical performance effect weighing on France's performance stems from Germany's better performance in terms of exports to America.

Overall, the sectoral structure and the geographical structure only account for a very minor part of the export growth differential between France and Germany. Having examined these traditional aspects and noted that they explain very little of the export growth differential, the authors turn to an analysis focusing on micro-economic aspects.

Position in range and technology

One of the factors with a decisive impact on a country's competitiveness is its ability to take a position in top-of-the-range and hi-tech products. This is a strategic position because it provides a buffer against competition from low-wage countries. On average, between 2000 and 2003, half of the exports from the 15-country European Union and Japan involved top-of-the-range products. This market segment accounts for one third of world demand. China's exports share of this segment is just 13%. Germany is more specialised in top-of-the-range products (48.9% of its exports in 2003) than France (42.4%) or Italy (38.3%).

The technological aspect of products should not be confused with their range, although the two aspects are not independent: a top-of-the-range product may be a non-technological product incorporating technological components. Exporting a bottom-of-the-range technological product may merely involve an assembler with no real technological capacity. A product's position in the range may stem largely from brand image.

Between 1995 and 2002, France saw its surplus on the world market (excluding intra-EU trade) in high-tech goods fall quite sharply. In 2003, the situation was reversed, and the French surplus (1.5% of global imports of high-tech products, excluding intra-EU trade) was one third of the Japanese surplus. It was far higher than for Germany, which was close to equilibrium, or Italy. The United States also experienced virtual equilibrium for these products, but this does nevertheless represent a comparative advantage considering the overall US trade deficit. China has outstripped France since 2000, with the cumulative French/German surplus failing to match that of China. As a result, China now has the second largest surplus in the world in high-tech products (2.5%).

China's growing presence suggests that, in terms of competition in high-tech products and other industrial sectors, it is now important to be able to maintain a position in high value-added market segments, and hence in top-of-the-range high-tech products. In this respect, France has a good, relatively sustainable position, discounting year-on-year fluctuations. Germany, whose position only dates from 2000, has since matched France in this niche. Both France and Germany outstripped Japan in 2003, while China has a sizeable deficit. In this niche, China's deficit is equivalent to France and Germany's combined surplus, and the deficit is swelling very rapidly.

Apart from marked short-term fluctuations, it is therefore difficult to explain France's poor export performance by its product position. On the contrary, France appears to have exploited its competitive advantages in this area to the utmost. More than two thirds of French exports in the top-of-the-range high-tech niche involve the aeronautics segment alone. Apart from Finland, with its focus on mobile phones, no other country –particularly of the same size as France– has such a high concentration in a single segment.

Pricing to market and export elasticity

Based on an analysis of the standard determinants (foreign demand and price competitiveness) of French and German exports on detailed sectoral data rather than in aggregate terms, the authors ascertain some sources of significant asymmetry between France and Germany.

In the face of an exchange-rate shock, price-setting behaviour among exporters in the two countries is very different: only 16% of the exchange-rate shock is absorbed by German exporters, as compared with 34% among French exporters. If the euro appreciates by 10%, French exporters cut their prices in euros by more than 3% and German exporters by just 1.5%. As a result, French exporters compress their margins to maintain their export market shares, whereas German exporters pass on exchange-rate fluctuations in their export prices much more directly, which enables them to uphold their margins. If the euro depreciates, French exporters restore their margins, even if this means making prices less competitive. In this respect, France is akin to Italy and Germany to the United States.

These behavioural differences between France and Germany are partly attributable to market structures: in response to an exchange-rate shock, German exporters are able to maintain their prices in euros (and their margins) because of their greater market share in the importing countries. With lesser market power, French exporters are also hampered by the less extensive geographical diversification of their sales, which means they cannot neglect any of their markets and so have to resort to pricing to market.

Another difference relates to income elasticity. Whilst German exports have a high income elasticity, comparable to that of other European countries, French exports increase far less following a given increase in demand. All things being equal, French exports expand in line with demand while the exports of all the other countries in the sample increase almost twice as fast as demand.

Hence, for a given geographical structure, French exporters benefit less from the increase in demand on foreign markets than their German competitors. The problem stems more from the inability to gain market shares on the more dynamic markets than from a bad geographical structure of trade. There are two reasons for this difficulty affecting French exporters. Firstly, their sales focus on goods with comparatively low income elasticity. Secondly, for identical goods, French exporters have to contend with a lower average income elasticity than their German and European competitors. In engineering, for instance, French exports increase twice as fast as global demand, and German exports three times as fast. In the automotive sector, French exports increase at less than double the rate, and German exports five times as fast.

How to explain this result? The authors suggest several possible explanations. More robust French domestic demand could discourage French firms; as French firms have smaller market power than their German competitors on their export markets, they may have fewer incentives to seek out new customers because this would put them in a more vulnerable position in the event of an exchange-rate fluctuation. In addition, a lack of competition on the domestic market would increase the previous effect by giving French firms a market power on their own market. Furthermore, the French ‘marginal’ exporter would have features that limit its international scope, since it would be too small, and probably too isolated, and would have to resort to pricing to market to bear up if it has already experienced fixed export costs.

Exports and firms’ performances

These findings led the authors to consider the behaviour of firms. Recent studies based on firms’ export data focusing on the destination of each individual export flow make it possible to examine several interesting aspects of export performance. Although based on outdated figures, a number of conclusions can be drawn from these studies. The authors believe these to be relevant insofar as they relate to structural features of the economies.

There are large disparities in terms of size and productivity and hence export performance, among firms within the same sector. A comparison of the size of companies in terms of number of employees shows exporting firms to be bigger than non-exporting one. They also have higher total turnover. Exporting firms are also the most productive in their sector. The question of the direction of causality, which is currently the focus of the empirical debate, remains an open question, but trade probably selects firms which have highest productivity levels at the outset.

Market positions in top-of-the-range high-tech products

% of world market, excluding intra-EU trade

	France	Germany	Italy	United Kingdom	EU-15	United States	Japan	China	Emerging countries
1995	3,9	– 0,2	0,5	– 0,5	4,8	10,5	9,5	– 1,9	– 7,4
1996	1,6	– 0,6	0,0	– 0,8	1,8	13,1	8,6	– 2,3	– 6,8
1997	3,0	1,0	0,2	– 1,7	2,5	14,9	6,3	– 2,6	– 5,5
1998	3,1	1,4	0,0	– 1,4	3,7	10,6	5,9	– 3,1	– 2,9
1999	2,6	– 0,3	0,0	– 1,1	0,2	8,8	7,2	– 2,3	– 0,8
2000	2,9	0,3	– 0,1	– 1,3	0,4	2,1	9,7	– 2,8	– 2,5
2001	3,4	0,5	0,0	0,2	3,1	2,4	8,8	– 3,1	– 2,4
2002	3,5	1,3	0,4	0,9	6,0	1,8	6,9	– 5,4	– 2,6
2003	3,7	3,6	– 0,2	0,3	8,0	2,4	3,4	– 7,0	– 2,0

Note: Position defined as the balance of the country concerned for top-of-the-range high-tech products compared to world imports of these products.

Source: CEPII calculations, BACI database.

A study of the number of exporters and the average volume exported by company and market highlights another significant feature. Most of the variation in French exports to different countries is due to the variation in the number of exporters rather than to the average volume exported by each company.

Finally, the analysis of firms’ export behaviour reveals an hysterisis effect due to the exporter’s situation. A company that has borne the costs of entry onto a foreign market will tend to continue to export to the market concerned even if the initial conditions (including the exchange rate) have changed slightly.

All these factors bring the authors to an obvious conclusion: exporting firms are large, productive, and already have experience of export markets. In contrast, non-exporting companies are small, have low productivity and then do not have experience of export markets.

Implications for economic policy

The authors draw four conclusions from this multidimensional analysis of the recent slowdown in French exports:

• French exporters are especially slow to react to trends on foreign markets, and they have considerably less market power than German exporters;

• the growing trend towards outsourcing –i.e. international fragmentation of production– among German companies has made it possible to reduce production costs in German industry and so increase export market shares. Although this strategy does involve a lower share of value-added in production and an increase in the ratio of imports in domestic demand, it has substantially boosted Germany’s competitiveness, even though this increase in exports has had little impact on employment;

• any improvement in France’s export situation will require increased efforts in business innovation in order to diversify the technological sectors in which France exports or to extend the range of competitive products from existing positions and increasing the number of exporting companies, which is tantamount to increasing the range of variety offered on foreign markets;

• instead of the usual policy of export aid (loans at special terms, export insurance and aid for prospecting), increasing French exports will depend far more on making SMEs more productive, bigger and more flexible. In other words, it will be necessary to bring them to the critical size and the level of innovation that makes it possible for them to export. We know that the handicap facing France (and Europe as a whole) compared with the United States is neither the number of new companies created nor their survival rate, but the absence of corporate growth. This relates back to well-known problems: entry barriers on some markets, the absence of a small businesses act granting a minimal share of public markets to SMEs and providing them with a guaranteed turnover that will make it possible for them to take the risk of creating jobs and exporting, and under-capitalisation of new companies (too few investors in start-ups and absence of business angels, for instance).

Comments

Jean-Michel Charpin would have liked to see the comparison of French and Italian performances in the first part continued throughout the report. He makes some critics on the diagnosis and on the economic policy recommendations. He deems the conclusion on the specific features of France in terms of export income elasticity to be especially flimsy and difficult to interpret. He also considers the role of the geographical structure of French exports to be more significant than the authors suggest. Finally, he believes it is rather unwise to draw economic policy recomendations concerning the necessity of increasing the number of exporting SMEs and the size of SMEs from analysis based on old data.

Olivier Garnier highlights the scope of the analysis undertaken by the authors. However, he has reservations about using Germany as the benchmark for assessing the French performance, noting that in many respects it is Germany that has been atypical in recent years. He also suggests that the conclusions should focus more attention on traditional factors such as price competitiveness and the geographical structure of trade; here, he highlights the necessity of France increasing its presence on high-growth emerging markets.

La **documentation** Française

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Publisher: Christian de Boissieu – Editor: Hervé Bonnaz – Electronic Publishing: Christine Carl