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Desindustrialisation and Relocation

Report by Lionel Fontagné and Jean-Hervé Lorenzi

EDITORIAL

Deindustrialisation and relocation have been recently two hot topics in the general social and political debate, in France and elsewhere alike.

This report has the merit to offer a state of the art, precise and elaborated, about the issues at stake. In France, volumes of activity and employment affected by relocation, narrowly defined, are limited but the movie has been accelerating for two or three years now, giving rise to a real challenge.

This challenge calls for tailor-made responses. In terms of propositions, the list in the report is long, but most of them are complementary and combine national initiatives and joint European cooperations.

Facing challenges affecting the entire productive sector, the issue at stake is to devise 'win-win' scenarios. Hesitancy must be discarded. Europe has to handle its destiny which requires a good deal of national as well as European resoluteness.

Christian de Boissieu
Executive Chairman of the CAE

The report shares common ground with the report on the funding of research. Deindustrialisation, understood as a decrease in the share of manufacturing employment in total employment, is described in the report as a fairly natural phenomenon in which relocation plays only a small part. The report argues that deindustrialisation is due to relatively large productivity gains in industry (which lower the relative prices of industrial goods) and to income elasticity of demand for industrial goods of less than 1. The report does however underline the risk of industrial «hollowing out» in France (and in Europe) if we lose control over the capacity for innovation and human capital formation, which would prevent industry from positioning at the «technology frontier» enabling us to build comparative advantages against the rapidly industrialising countries of the South. The authors identify the real risks of deindustrialisation in the loss of French export positions on growing markets (particularly Asia) and in innovative products (biotechnology, information technology, etc). A number of suggestions are made regarding this risk.

This report was presented at the CAE plenary meeting held on 24th June 2004, then on 15th November 2004 in the presence of the Prime Minister. This letter, which is published under the direction of the permanent team of the CAE, summarises the authors' main conclusions.

The economic news are constantly drawing our attention to globalisation issues. Globalisation is a recurring debate not only in France but also in Europe and further afield in the United States. Deindustrialisation (the decreasing share of manufacturing employment) and industrial relocation (the closure of a production unit, which is then reopened abroad) are two of the most commonly used terms. The report sets out to clarify the proper meaning of these terms, while trying to understand the processes at play and to quantify impacts.

Factwise, the report notes that the relative decline in manufacturing employment has affected all industrial countries since the 1960s. In France, the percentage fell from 26% to 17% between 1981 and 2003. Over the same period, the share of industrial value-added fell from around 28% to 21% in value terms, while in volume terms it remained in the region of 25%. Two types of phenomena account for these movements. On one hand, the large productivity gains generated in manufacturing industry and accentuated more recently by the opening up of international trade have triggered both a decline in relative prices and in industrial employment. On the other hand, the desire of industrial firms to « refocus on core business » (one reason for strong productivity gains) has led to the outsourcing of business service activities, which has correspondingly increased the share of services in relation to industry. The boundary between industry and services has changed, especially since industrial goods increasingly incorporate services (maintenance, insurance, finance, after-sales service, etc). This structural development is often viewed through the prism of relocation, which is –the report reminds us– a twofold error. Firstly, because relocation does not only occur in industrial sectors (e.g. IT services in India); and secondly because we do not have the counterfactual situation (wouldn't job losses have been even greater *without* relocation if the survival of businesses was threatened?). Furthermore, the disappearance of some jobs (programmers for example) coincides with the creation of others (software engineers, for example).

The mechanisms of deindustrialisation

Reference must be made to both macroeconomic mechanisms and industrial strategies in order to understand the phenomenon of deindustrialisation. The income elasticity of demand for industrial products is less than 1, whereas productivity gains (which are still substantial in the industrial sector) tend to bring about a reduction in relative prices, which causes a substitution effect in favour of industrial products. Under these circumstances, an increase in the standard of living will trigger a substitution effect (due to the drop in relative industrial prices) and an income effect, up to a certain income threshold beyond which the effect of productivity gains in industry overshadows income and substitution effects to decrease industry's share in overall employment. This, strictly speaking, is the basis of deindustrialisation.

The second angle of explanation refers to the role of new overseas competitors, which influence deindustrialisation through two channels.

The first concerns the specialisation of economies. The appearance of international specialisation following the emergence of Southern countries involved in low-skill –intensive industrial production reduces the share of such products in Northern output.

These Southern hemisphere competitors force Northern hemisphere firms to achieve productivity gains through capital-labour substitution, which discourages manufacturing employment in the North. Moreover, industrialisation-led growth in the South itself generates demand for exports from the North.

In North-South trade, the dynamics of specialisation mean that Northern hemisphere exports have a lower employment content than Southern hemisphere exports and trade openness favours the most productive firms in the North.

Apart from the above macroeconomic factors, explanations for the location of production units can also be found in firm strategy analysis. The central idea is that we are looking at the general reorganisation of firms rather than systematic relocation. The focus is therefore on the vertical division of labour and the exchange of intermediate goods. The location of business is no longer based on sector, but rather the optimal exploitation of advantages (costs, tax regimes, proximity of markets, specific skills, etc.). Therefore, the reorganisation of production tends to leave the North specialising in those segments of the value chain that are relatively intensive in skilled labour, while the most unskilled-intensive sectors tend to be located in the South.

Vertical integration strategies (marked out by the vertical division of labour) and/or horizontal integration strategies (including the replication of production units in order to access local markets) favour the emergence of organisational forms in which the business scope changes and partnerships are formed with both upstream and downstream entities. 'Networks of enterprises' are often referred to, to the point that the nationality of a company sometimes becomes hard to determine.

Measuring the effects of deindustrialisation

The concern aroused by industrial relocation, which is wrongly equated to deindustrialisation, has prompted efforts to quantify the effects of the phenomenon. The first thing to emphasise is the complexity of the issue. In order to take stock of the effects of openness to developing countries, several, sometimes contradictory, factors need to be taken into account: production of low-skill-intensive products are being transferred to the South; the factor content of international trade is detrimental to unskilled jobs and favours skilled jobs; competition raises the general productivity of industrial enterprises, which in turn leads to a drop in relative industrial prices, causing a shift in demand towards these products.

The overall impact of all these effects on employment is uncertain, but at any event limited in macroeconomic terms. The studies referred to in the report tend to show that imports from southern countries would be responsible for a annual loss in manufacturing jobs less than 1%, mostly indirectly, through increased productivity. It must be added that the phenomenon has tended to accelerate in the recent period. On the other hand, there is a consensus that the impact is clearly bad for unskilled labour.

Another way of looking at the issue is to examine the 'investment shortfall' likely to result from foreign direct investment (FDI), which itself acts as a substitute for domestic production. FDI flow figures do not support this idea, since they highlight the weakness of these flows relative to gross fixed capital investment in the North. What is more, FDI funds only 12% to 13% of capacity extension in the South. Furthermore, FDI inflows often appear to supplement rather than replace exports. The problem in this case is not so much FDI as the weakness of internal investment in French firms.

Deindustrialisation: the real issues

The report carefully examines the way in which the French manufacturing system has responded to the challenges globalisation imposes on industry. It sets out to discover whether the French economy is specialised in services, whether it has changed its productive and sector specialisation in favour of segments where demand is strongest, whether the shift to higher quality products –a reflection of R&D efforts– is effective and allows France to withstand the price competition imposed by the South, etc. The emergence of new countries may work in France's favour if France manages to gear its export offering to growing markets (e.g. in Asia) and to products with the strongest demand; in short if France makes the right specialisation choices, both in geographic and sectors terms.

The report challenges the conventional wisdom that France will offset the decline of industry through increased specialisation in services. The report shows that France's revealed comparative advantage indicator for services has been falling steadily since the mid-1970s (which does not preclude specialisation in some services such as tourism).

In this respect, it is revealing to compare France with similar countries facing the same globalisation constraints. The data provided in the report show that developed countries as a whole have lost market share, that France has withstood the effects of globalisation better than the United States and Japan, but not as well as the other European countries. These results reveal that France's main downfall has been poor geographic specialisation (France tends to trade in slow-growing geographical regions more than its average competitor). For example, the share of French imports from emerging countries grew by some 50%, while the share of French exports to emerging countries remained pretty much constant over the past decade. China in particular is worth noting, since it accounts for 40% of French imports from emerging countries. But the report also shows that France does less well in terms of sector specialisation than the United States, Japan and Germany.

The report also examines product positioning (i.e. the quality of products). The higher up the quality chain a country is, the greater its capacity to withstand price competition. Available studies show that France was well positioned in the past, but that it has lost ground in recent years. It slipped relative to the eurozone in 1999-2000. If we turn to high-technology products, the diagnosis is the same: France is slipping, since its position indicator (trade balance relative to the size of the global market) has shown a steady decline over the past 10 years or so.

The real issues in terms of French deindustrialisation are therefore its poor geographic and sector positioning and, above all, the decline in its relative position in terms of quality and high-technology products. The report underlines the risks that France faces from weak R&D efforts, weak links between research and industry and lack of 'venture capital' (particularly in biotechnology). The identified weaknesses and the decline in the trade balance in high-technology and high-quality products are an illustration of this. A constant drive towards research and innovation is needed in order to put

French industry in a position to withstand the price competition imposed by the South, to diversify its products and reposition itself on segments representing worldwide demand.

Economic policy recommendations

In light of the recent increase in competitiveness problems, particularly in high-quality and high-technology products, the authors conclude that difficulties are bound to increase. Deindustrialisation (the decrease in the share of industrial employment) may be a natural phenomenon, but that does not mean that the closing of production units may not have considerable local effects, especially since they tend to take place in regions that are already affected by industrial restructuring. It is also clear that competition from the South affects the lowest skilled workers, that the initial geographic and sector specialisations of Europe and France put them at a disadvantage and that we are witnessing increasing challenges to establish technological positions, accompanied by job losses in research, analysis and computer technology.

The report clearly argues for a fresh industrial policy that will help to overcome the handicaps associated with the weakness of research, insufficient specialisation, labour reallocation problems and the relative lack of venture capital in France. In short, it is a question of rebuilding comparative advantages in French industry.

The proposals put forward conform to three levels: European, national and regional, while complying with a clear principle of subsidiarity.

At the European level, the report reviews the basic figures: European R&D represents 2% of GDP and higher education accounts for 1.4% of GDP –far short of the best international standards and the targets set at the Barcelona Summit. The report argues in favour of pragmatism, which requires that cooperation be established between a small number of states and priority given to the creation of 'European champions' in the defence and high-technology sectors, the knowledge economy, the environment, energy and transport. The models we should be promoting are obviously EADS or STMicroelectronics and the report calls for the rapid implementation of the 'European company' in order to preserve Europe's industrial policy centres, particularly R&D. A European 'Small Business Administration' must also be set up to support the development of small businesses (an important difference between the United States and Europe is that new businesses have a much smaller chance of developing in Europe) and to offer legal, financial and management advice as well as financial aid. Finally, the report recommends that a European science agency be set up, with a primary focus on scientific assessment rather than programme management, and the ability to identify innovative knowledge and technology at the European level.

At the national level, there is a need to improve the macroeconomic environment and aggressively promote the French presence in fast-growing emerging countries (assisted by a promotion of exports or FDI) while taking care not to disperse resources. The report also stresses the need to rehabilitate scientific and technological culture given the increasing disaffection of young people for science and technology. According to the authors, the responsibility for this largely rests with universities, which are too parochial and have proved to a large extent incapable of protecting young people from unemployment (including PhD). The problem can only be tackled through the creation of European university networks, the implementation of a higher education policy and increased students exchange. The need to promote and facilitate partnerships between public and private sectors must in fact become a national preoccupation. The Bayh Dole Act in the United States (which encourages the promotion of university research by industry) is cited as an example. It is recommended that public procurement be used at both the European and the national levels, particularly for innovative small businesses, in order to supply emerging markets with innovative products.

The territorial dimension is also discussed. A policy direction in favour of industrial sectors that will give French industry some leeway against globalisation must aim to develop special zones dedicated to business networks, linking universities, public and private research, large groups and small businesses. The fact that the impact of globalisation on industry is often most painfully felt at the local level and often in areas that are already weakened by the departure of traditional industries makes this all the more important. Regional industrial background must be developed to create these 'clusters' based on public/private and industry/research partnerships.

The report discusses the financial markets and their possible role in the development of industry/research 'complexes'. It recommends the adoption of unified accounting standards, easier access to capital for small businesses (development of 'business angels') and the setting up of a European watchdog to encourage the unification and specialisation of European financial market places that are not yet big enough to allow the development of a specialised financial market.

Comments

Patrick Artus re-examines the definition of deindustrialisation in order to highlight measurement problems. Not all FDI corresponds to industrial relocation aimed at creating a presence in fast-growing markets, and not all relocation is accompanied by FDI (in the case of some overseas outsourcing). However, a bigger concern for the author is measuring the impact of relocation on deindustrialisation. Traditional measures comparing the employment content of imports and exports or the trade balance position tend to underestimate the real impact of the phenomenon, since part of its development is recent (the loss of quality of French exports) and import figures may be artificially low due to sluggish demand in recent years. Patrick Artus also stresses that the worrying phenomenon is not so much the share of imports from emerging countries (which, in any case, remains low), as the stagnation of French market share in the same countries and the risk that skilled service jobs such as IT and accountancy in France and other developed countries will move overseas. For all these reasons, Patrick Artus's commentary suggests that the phenomenon is much more serious than the report suggests.

Jacky Fayolle also returns to definition-related issues, suggesting that the blurring of the boundary between industry and services renders difficult a strict definition of industry, and therefore deindustrialisation. Productivity growth does not seem to be slowing in industry, whereas it is flat in services and we do not possess the relevant criteria to judge the performance of a knowledge based economy in which industry and services are closely associated. The analysis of policies implemented since the first oil shock establishes that while they have helped maintain high productivity gains in industry, they have not enabled France to engage in the right geographical or sector specialisations. Having spelled out some of the characteristics of relocation (by multinationals or non-multinationals, defensive or offensive and following the geographic regions in which they occur) in order to differentiate their impact in terms of employment, Jacky Fayolle is critical of European industrial policies. Competition policies have been implemented to assist the construction of a single market, but they have not taken into account the new interactions between research, industry and services that characterise the knowledge based economy. The dissociation of competition policies from other policies (particularly in terms of research) has impeded Europe's capacity to build comparative advantages through better international specialisation.

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