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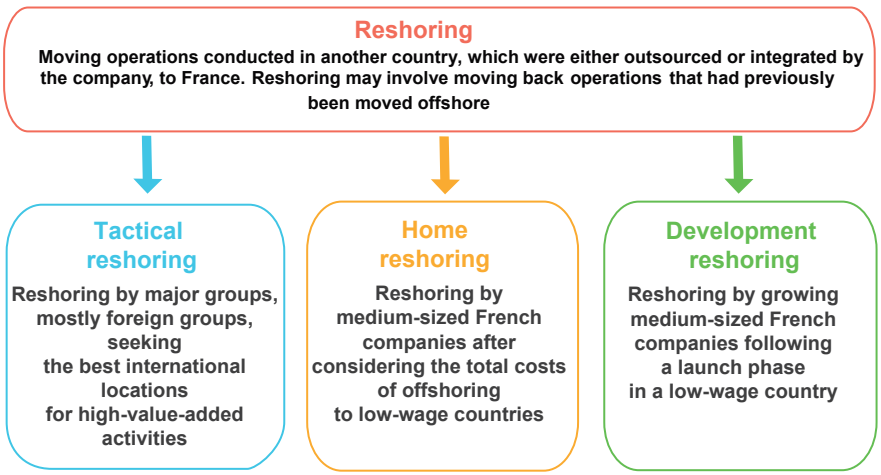
Reshoring: a multifaceted decision involving much more than just labour costs

The renewal of developed countries' comparative advantages has led to a promising, though modest, reshoring trend. In-depth analysis of thirty recent reshoring decisions by companies that have moved some of their operations back to France shows that these companies primarily wanted to improve logistics and product quality, and to enhance their brand image with the Made in France label. The choice of reshoring locations is a simple one. Reshored operations are very frequently moved close to an existing site. Three different economic rationales underlie reshoring decisions: selection of the best international locations for high-value-added activities, consideration of total costs after an offshoring decision based on labour costs alone, and a decision to move production upmarket, following a launch phase in a low-cost country. Companies' reshoring decisions result from economic calculations. Reshoring is compatible with a market economy and it does not increase the cost of households' consumption.

Figure 1: Three reshoring rationales



According to the ILO's 2012-2013 Global Wage Report, real monthly average wages increased by 25% between 2000 and 2011. However, this figure obscures some wide disparities: wages in Asia nearly doubled, whereas they rose by only 5% in developed countries.

This trend is bound to continue. According to a number of forecasts, wages in emerging economies will catch up even further to wages in developed countries over the next twenty years. According to the OECD's Medium-Term Projection Framework (MPF-2014), under the best-case scenario, China could become an "advanced high income country" in the next twenty years, which the World Bank defined in 2013 as a country where gross national income per capita is higher than 12,000 American dollars.

This means that the main grounds for certain offshoring decisions, low wages in emerging countries, have now been weakened as companies incorporate these wage projections into their investment decision-making process. Naturally, labour productivity gains in developing countries have attenuated the impact of these wage rises, but companies offshoring their production to low-cost countries are not seeking high labour productivity. From now on, companies will take a broader view of their production systems in their development strategies, looking at total costs, and not just wage costs.

The American Reshoring Initiative

Rising labour costs in emerging countries, high shipping costs, product quality problems, weak protection of intellectual property, appreciating currencies in low-wage countries and political instability risks have all fuelled a "reshoring" phenomenon *(Figure 1)*.

This seems to be the case in the United States, which has become more attractive as a result of labour productivity gains, moderate wage rises (according to the OECD's unit labour cost estimates) and lower energy costs, thanks to the development of shale gas and oil, which is driving the rebirth of certain energy-hungry industries, such as paper and metal manufacturing. The private-sector Reshoring Initiative, which has received Federal government support, helps companies with a case study to assess the soundness of a reshoring decision and hosts a website with tools to help them with administrative formalities.

France's Colbert 2.0 tool

France's Ministry for Industrial Renewal has developed the Colbert 2.0 tool, which has been available since July 2013 on the website https://www.colbert2-0.fr/. This tool draws its inspiration from the American Reshoring Initiative and enables companies to examine the wisdom of bringing some of their operations back to France. However, it applies a qualitative rationale, in contrast to the Reshoring Initiative's focus on cost comparisons.

Colbert 2.0 is based on an in-depth analysis of thirty recent reshoring cases conducted by the Ministry for Industrial Renewal in 2013. The cost of the reshoring operations conducted by the companies surveyed varied widely: the average reshoring cost stood at €7.5m, but individual reshoring project costs ranged

from €30,000 to €40m. Sixty per cent of these companies reported that they received central government support (Oséo, business development loans, aid from local authorities, etc.). Interviews were used to analyse their organisational structures, their markets, their previously offshored operations and their reshoring processes, especially the reasons behind their reshoring decisions.

Improving logistics, product quality and brand image

Cutting costs was by far the leading reason cited by two-thirds of the companies that had previously moved their operations offshore. However, the comparative advantage of low-cost countries is waning and the remaining wage differential is no longer a key criterion for companies reshoring operations to France.

The interviews with the thirty companies surveyed revealed many reasons for reshoring. The first reason, cited by two thirds of the companies, was to improve logistics *(Table 1)*. These companies were often "disappointed" by the shipping times and costs incurred through offshoring. The next two most frequently cited reasons for reshoring are product quality and brand image. Companies reshore their production to France to reduce manufacturing defects, which lead to high return and scrapping rates, to tailor production to customer needs and to improve "after-sales service". Frequently cited marketing-related reasons for reshoring include the "Made in France" brand and the various green and sustainable development labels.

The other regularly cited reasons for reshoring include synergy, which four out of ten companies mentioned. This means capitalising on the proximity of the different units in the value chain, such as design and manufacturing. Similarly, 30% of the reshoring companies wanted to be closer to a customer or a supplier. Three out of ten companies also reshored their operations to take their products upmarket or, more broadly speaking, to produce new products. One quarter of the companies reported that they reshored their operations to achieve economies of scale, by increasing their capacity utilisation rate at existing sites in France, and to capitalise on the know-how of the French labour force.

Table 1: The eight leading reasons for reshoring

Reasons for reshoring	%
Logistics	67
Image/Marketing	53
Product quality	53
Synergy	40
Proximity to customer/supplier	30
Developing product innovations	30
Skilled labour force	27
Economies of scale	27

Source: DGCIS, DATAR. Calculations: DGCIS.

Reshoring companies choose locations near their existing sites

The location of reshored operations is primarily determined by the proximity of the company's other sites. Eight out of ten companies surveyed decided to locate their reshored units at their existing sites in France or in new sites nearby *(Table 2)*. Local attractiveness ultimately counts for little in reshoring location choices – rather, it drives initial location choices.

Table 2: Choice of reshoring locations

Geographical criteria	%
Moving close to an existing site	83
Moving into existing premises	60
Real estate opportunity	23
Purchase of a going concern	10
Infrastructure quality	10
Availability of skilled labour force	7
Other	13

Source: DGCIS, DATAR. Calculations: DGCIS.

Three different economic rationales underline reshoring decisions

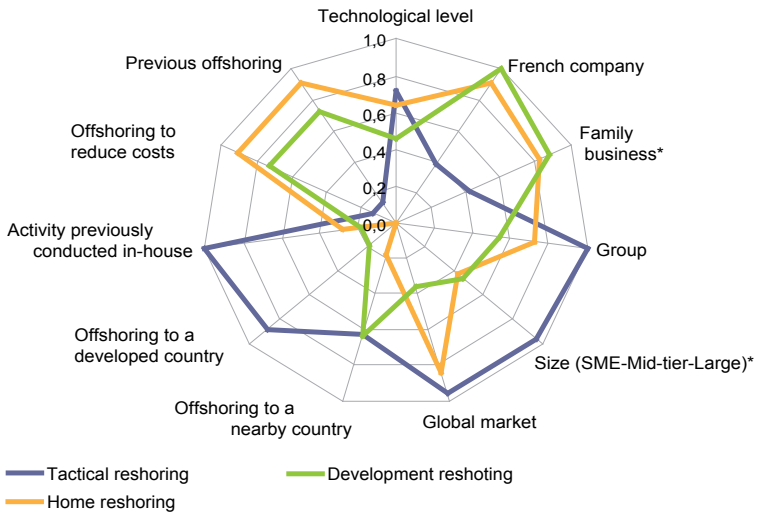
More detailed statistical analysis *(Box 1)* of the thirty reshoring cases reveal three groups of companies corresponding to three reshoring rationales *(Figure 1)*. The companies are grouped according to the *similarity of their characteristics* (size, nationality, etc.), the previous situation of the reshored operations (in a developing country, sub-contracted production, following a prior offshoring decision, etc.) and the *reasons for reshoring* (quality, logistics, etc.) and *conditions* (recruiting problems, problems in relationships with employees/unions, etc.) *that led to the reshoring decision.*

The analysis findings uphold the three types of reshoring decisions identified in the preliminary study overseen by the Ministry for Industrial Renewal in 2013 *(see "Further Reading")*. *"Tactical reshoring"* is implemented by major groups following an analysis of the different sites under consideration. In contrast, *"home reshoring"* is implemented by companies that have been disappointed by their previous offshoring experience and affected by changing market conditions. *"Development reshoring"* is implemented by companies that launched production in low-cost countries and have returned to France to shift to more upmarket goods.

Tactical reshoring

Tactical reshoring decisions are implemented by major foreign groups *(Figure 2) with high levels of technology,* selling to global markets. These decisions are made after careful deliberation. These groups want to select the best sites as part of the management of their international locations. Low labour costs are not a consideration in their strategy. Operations that have been reshored to France were often initially located in developed countries where labour costs are not an advantage. Indeed, the reasons given for these groups' reshoring decisions *(Figure 3)* include needing a skilled

Figure 2: The three types of companies reshoring operations to France



Key: All of the development reshoring in the thirty cases examined concerned French companies.

* Since these variables have more than 2 modes, their values cannot be read as a percentage, but as approximations of their level.

Source: DGCIS, DATAR. Calculations: DGCIS.

labour force for high-value-added activities, moving closer to suppliers or customers, and achieving economies of scale. The groups' brand images, which are already firmly established, are not a consideration in their reshoring decisions. These groups run into few reshoring problems, particularly with regard to human resources *(Figure 4)*. Reshoring often means moving operations to the groups' existing sites, and fairly often the decision concerns R&D, rather than production.

Home reshoring

Companies' *home reshoring* decisions, quite unlike *tactical reshoring* decisions, follow disappointing results that emerge over time after moving manufacturing operations previously located in France offshore. The first disappointment is that production cost savings turn out to be smaller than originally thought because of the hidden costs stemming from manufacturing defects and high shipping costs. Offshoring also leads to counterfeiting problems. Companies' home reshoring decisions also stem from a desire to improve their brand images by touting a green label or a Made in France label. Companies also want to have more control over the intellectual property rights related to their innovations. Home reshoring decisions may also be triggered by investment opportunities in France.

The companies concerned by home reshoring are mostly French and smaller than the groups engaging in tactical reshoring. These companies are more likely to be family businesses.

Development reshoring

Finally, *development reshoring* concerns family-owned French SMEs selling on the domestic market or neighbouring markets. They initially offshored their production to low-wage emerging countries *(Figure 2)*.

In most cases, these companies' growth includes a launch phase in another country, before reshoring becomes possible in a mature development phase during which they consolidate their market positions. These companies' reshoring decisions are aimed at developing their products, taking them upmarket and improving logistics by cutting shipping times and costs. They also concern process innovations *(Figure 3)*. Reshoring primarily concerns manufacturing sites, and rarely R&D sites. The reshored operations are located close to the companies' existing sites *(Figure 4)*.

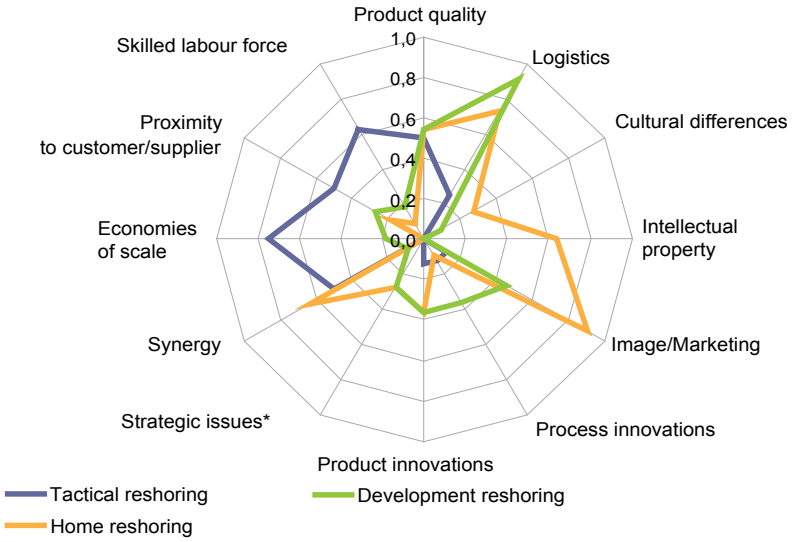
The impact on jobs and control over technological know-how

The job losses linked to offshoring are often smaller than generally supposed. France's National Statistics Institute, INSEE *(see "Further Reading")* estimates that an average of 15,000 manufacturing jobs were lost to offshoring each year between 2000 and 2003. This represents only 0.37% of manufacturing jobs, or 16% of the manufacturing job losses estimated at an average of 90,000 per year over the same period.

On the other hand, it is hard to estimate the potential number of new jobs stemming from reshoring. At this point, the reshoring movement is promising, but the number of reshoring operations carried out is still too small to have much of an impact on employment. The number of new jobs created in the first year of the thirty reshoring operations analysed here (see above) ranges from 0 to 185, with a median value of 10 new jobs. The thirty reshoring operations analysed resulted in a total of 800 new jobs. Furthermore, the reshoring operations frequently involve manufacturing activities where automation offsets the higher labour costs in France, and limits the number of new jobs created. However, tactical reshoring may have an impact on skilled jobs.

Besides, the three reshoring rationales seem to be strongly linked to control of technological know-how: this means keeping the know-how in-house in the case of home reshoring and development reshoring, moving design and manufacturing units closer together for better control of innovation in the case

Figure 3: Reasons for reshoring to France

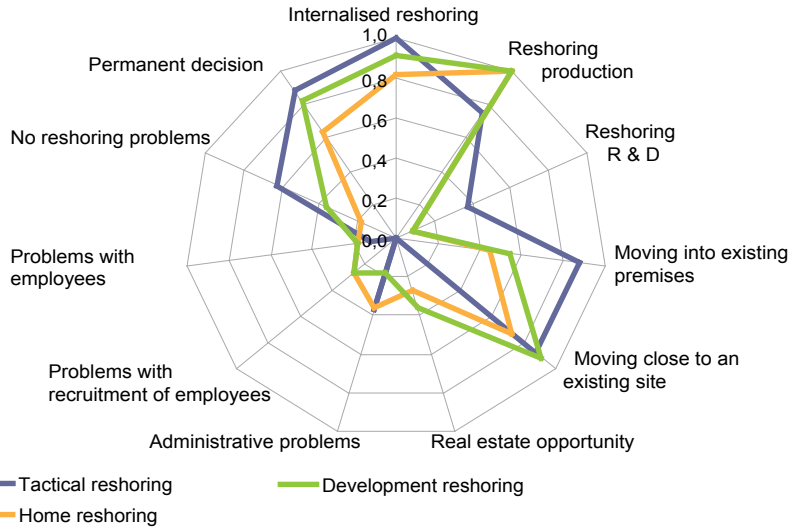


Key: Of the thirty cases examined, 91% of the home reshoring decisions were made for reasons relating to image and marketing (Made in France, green sustainable development label).

* Examples: securing the supply chain, control of know-how, maintaining the business.

Source: DGCIS, DATAR. Calculations: DGCIS.

Figure 4: Nature and conditions leading to reshoring operations to France



Key: Of the thirty cases examined, 88% of tactical reshoring decisions involve moving to existing premises and 19% involve reshoring R & D.

Source: DGCIS, DATAR. Calculations: DGCIS.

of tactical reshoring and development reshoring, and needing skilled labour in the case of tactical reshoring.

Brand image: another major reshoring consideration

Product quality is a major consideration for reshoring *(see Table 1)*. This is a complex issue involving such matters as design, robustness and related services. Other, less tangible characteristics may influence consumers' perceptions of products.

For example, consuming products made in France results in energy savings compared to products manufactured in emerging countries, largely because shipping distances are shorter and because manufacturing techniques may be more energy efficient and emit less carbon.

Furthermore, half of the products imported from low-cost countries come from China, India and Bangladesh. Working conditions in France are very different from those in such emerging countries in terms of labour rights, social security, child labour, etc. A product made in France has a much better "social content" than a product manufactured in Bangladesh, for example.

French consumers are increasingly concerned about these characteristics of products. According to a survey conducted by Crédoc in 2013 *(see "Further Reading")*, two thirds of French consumers reported that they were willing to pay more for manufactured products made in France, compared to fewer than half of French consumers surveyed in 2005. According to the same survey, the change stems in part from a better perception of the quality of manufactured products made in France.

This means that brand image is a major consideration in reshoring decisions. In fact, 90% of the companies implementing tactical reshoring cite the Made in France brand image as a reason for their decision.

Reshoring and the Made in France policy are compatible with the market economy

The reshoring trend and consumers' new expectations have given rise to the Made in France policy. This concept must be fully understood; otherwise, it will be open to unfounded criticism. For example, some economists implicitly equate the Made in France policy with closing our borders to imports from low-cost countries. This was the case in the recent CEPII report *(see "Further Reading")*, which states that the Made in France policy will increase households' expenses by €100 to €300 per month. This analysis must be rejected; specifically because it is based on a calculation in which all low-priced consumer goods imported from "offshoring countries" are replaced with goods produced in France deemed to be of equivalent quality but costing more.

This notion of equivalent quality does not consider the environmental and social content of products. Furthermore, the Made in France policy does not mean restricting consumption to French products exclusively, which would be impossible and harmful for the domestic economy. Nor does it mean reshoring all of the activities carried out offshore by subsidiaries or subcontractors of French companies. Reshoring is the result of private initiatives by companies, even though the availability of government support may be a factor. Furthermore, reshoring manufacturing of consumer goods in France does not create any obligation for French consumers to buy these goods. Consumers select their "shopping basket" by maximising their utility under their budget constraints. If they consume more French products, it is because of an economic calculation that considers the prices and characteristics of all of the products on the market, whether they are imported or manufactured in France.

Christophe BELLEGO

Box 1: A statistical method identifies three main types of reshoring decisions

The contents of the thirty interviews of companies that reshored operations to France were standardised to ensure rigorous identification of a list of variables describing certain aspects of reshoring decisions. The complete list of the variables identified during the interviews is defined in precise detail in a dictionary that can be found in an appendix to this report on the website http://dgcis.gouv.fr. All of the variables are weighted equally in this statistical analysis since the companies did not rank them by economic importance.

Statistical classification methods are used to divide the companies surveyed into classes, so that the companies in the same class are as similar as possible and the companies in different classes are the least similar possible. The similarities are determined on the basis of a set of variables that characterise the companies. The companies are clustered using a Euclidian distance for continuous variables and a "simple" binary similarity coefficient for discrete variables. The algorithm used in this case is the hierarchical classification method. It is a nested classification system that constructs classes incrementally. At the start, there are as many classes as there are companies in the sample. The algorithm groups the two most similar companies of the N companies, giving us N-1 classes, of which only one contains two companies. Then the procedure is reiterated. The minimum superior ultrametric (complete link method) is then used to calculate the distance of the new class containing two companies from the other classes. The reiterations continue until the optimum number of classes is obtained. The optimum choice of classes results from a trade-off between two objectives: a minimum number of classes and homogenous classes. This trade-off is made at the statistician's discretion, using a "dendrogram", which provides a visual representation of both the number of classes provided by the algorithm and their homogeneity.

Three natural classes emerged and provided a good distribution of all of the companies in the sample. The three groups of companies are comparable in size. Given the small number of companies in the sample, the findings presented in this report are more an expression of orders of magnitude rather than precise statistics. They underscore the three types of reshoring highlighted in the report "Relocalisations d'activités industrielles en France" *(see "Further Reading")*.

Further reading

- ***Flux de main-d'œuvre, flux d'emploi et internationalisation*, Insee report, 2007.**
- ***Relocalisations d'activités industrielles en France*, Pipame (Dgcis-Datar), survey, July 2013.**
- ***(Not) Made in France*, 20 June 2013, Lettre du CEPII no. 333.**
- ***L'attachement des français au Made in France*, Crédoc, March 2014.**

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