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In Search of Lost Market Shares

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The arrival of powerful new players on world markets –the foremost of these being China– automatically decreases market share for advanced economies. But France's export market share has decreased more than that of other European countries. This is not a result of poor geographic or sectoral specialisation, insufficient exporter support, under-representation of SMEs in exports or credit constraints, but, more fundamentally, is caused by an inadequate "quality/price ratio" for French products on average. When products are of quality, results are exceptional, as demonstrated by the luxury, aeronautical and electrical distribution goods sectors –sectors, with a flagship– and/or by brands, which appear to play a key role.

A country's competitiveness comprises a price dimension and a non-price dimension. Regarding price competitiveness, direct labour costs represent just 23%, on average, of the total value of French exports and 44% when including the cost of labour for domestic intermediate consumption. Price competitiveness is therefore not solely a matter of labour costs for exporting companies. We also need to look at the input side, whether it be at intermediate goods (possibly imported), energy or even services produced in France for exporting companies. The central message here is that competitiveness is everybody's concern, and not just that of industrial companies. Greater efficiency in non-tradable sectors (business services, construction, public services) also contributes to the creation of price competitiveness.

Non-price competitiveness is more difficult to measure; we rely on disaggregated data to provide a diagnosis by product, a micro-economic approach that is particularly well-suited to demonstrate the quality effect. Amongst the OECD countries, France retains a relatively good position in terms of the number of sectors in the top ten for non-price competitiveness (7th). However, we see a drop-off since 2008 with a downturn in a number of sectors.

Non-price competitiveness policies and productivity policies largely overlap, which is why we emphasize the importance of reallocating production factors (labour and capital) to help the most productive companies develop faster. Reforms seeking to reduce the regulation of the goods, services and labour markets need to explicitly take this objective into account. Moreover, the example of luxury goods demonstrates the importance of brands in the creation of non-price competitiveness. The protection of intellectual property rights should be a priority for France and the European Union in international negotiations.

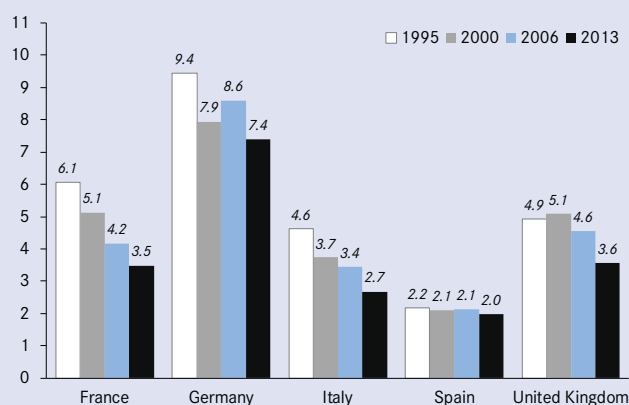This Note is published under the sole responsibility of its authors

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How France is losing market shares

The incursion of so-called "emerging" economies on world markets has automatically led to a drop in market share for all advanced economies. This downward trend of French market share, which is well documented in a number of reports, is therefore in part a reflection of the reconfiguration of world trade. Nevertheless, we should be concerned by the fact that French market share has dropped further than that of other countries in the European Union, with the exception of Italy (graph 1).[1] Between 1995 and 2013, France's market share dropped by 42% for goods and services, as did that of Italy, whilst this figure stood at just 21% for Germany and 27% for the United Kingdom, with Spain retaining an almost stable market share.[2]

1. Changes in world market share for goods and services for the five largest EU countries, 1995 to 2013

Analysis: Exports in goods and services in percentage of world exports including intra-European trade.
Source: The World Trade Organisation.

In this *Note* we focus solely on the export of goods that are central to international trade and for which detailed statistics are available by product and trading partner.[3]

State of play

France's poor performance in the export of goods is sometimes attributed to its poor geographic or sectoral positioning. If this were true, we would need to better identify high-growth countries and sectors so as to reduce loss of market share: large emerging economies, agri-food, health,

new information and communications technology, and sustainable cities.[4]

European countries, which trade a great deal between themselves, suffer from a negative geographic composition effect since Europe is growing at a slower pace than the rest of the world (Asia in particular). No European country has escaped this effect and France is, from this point of view, average over the period from 2006 to 2014 (table 1 and method in box 1). The countries that have been most successful in positioning themselves on emerging markets have suffered slightly less from this "European" effect: this is the case for Germany and Italy. However the geographical effect has a greater impact on Spain and the United Kingdom than it does on France.

As for product specialisation, this generally accounts for very little in the market share variations observed between 2006 and 2014 as shown in table 1. In the case of France however, this specialisation has proved to be an advantage compared to Germany: the geographic disadvantage of French exporters compared with German exporters has been overcompensated by more favourable product positioning. The combined contribution of country specialisation and product speciali-

1. Changes in world market share for goods
2006-Q1 to 2014-Q3 annual average variation in %

	Rate of growth in exports	Annual variation in world market share	of which		
			Geographic Effect	Sectoral Effect	Pure performance
EU-28	4.4	– 1.9	– 0.8	– 0.1	– 1.0
Euro area at 17	4.3	– 2.0	– 0.8	– 0.1	– 1.1
France	3.0	– 3.2	– 0.8	0.7	– 3.1
Germany	4.5	– 1.7	– 0.5	– 0.2	– 1.0
Italy	4.0	– 2.2	– 0.5	– 0.6	– 1.1
Spain	4.5	– 1.7	– 1.1	– 0.1	– 0.5
United Kingdom	2.3	– 3.9	– 0.9	0.4	– 3.3
World	6.2	0.0	0.0	0.0	0.0

Interpretation: Variations are in delta-log. For example, where market share falls from 10 to 9%, the variation recorded is $\ln(9/10) = - 10.5\%$.
Source: World Bank, *Export Competitiveness Database*.

[1] In this *Note* we work on the basis of world market share, including intra-European trade flows. France's market share is the ratio between French exports to all foreign markets (including European) and all global exports (including intra-European).

[2] The drop in French market share stood at 47% for goods (between 1995 and 2014) compared with 21% for Germany, 30% for Italy and 41% for the United Kingdom. We note however that the French performance is average within the OECD.

[3] For an analysis of services exports, please see, for example Gaulier G., E. Milet and Mirza D. (2010): "Les firmes françaises dans le commerce international des services", *Économie et Statistique*, no 435-436, pp. 125-147.

[4] See the Direction générale du Trésor (2012): *Analyse prospective des marchés à l'export, par secteur et par pays*, French Ministry for the Economy and Finance, October.

sation in explaining loss of market share is practically zero in the case of France (– 0.1% average per annum) whilst it is clearly negative for Germany (– 0.7% per annum). Germany's better performance is therefore solely explained by "pure" competitiveness effects: French exporters are less effective than German exporters in selling the same product on the same market.

This "pure" competitiveness effect is quantitatively significant. To see this at work, it is possible to compute what France's market share would have been if it had not lost more "pure" competitiveness than Germany between 2006 and 2014. Its loss in market share would thus have been 0.75% on average per annum instead of the 3% loss shown in table 1. This represents a loss of €112 billion for 2014 in terms of the export of goods.[5]

World trade experienced a sharp decline in 2009, followed by a more long-term slowdown after the automatic rebound in 2010. The year 2009 also marked the start of the specifically European economic crisis, which placed European Union exporters in an even less favourable position, given their strong exposure to European Union markets. Table 2 shows that between 2009 and 2014, the contribution made by geographic specialisation to losses in market share practically doubled for all European countries. In France however, this negative effect was offset by a strongly positive product specialisation effect. As such, loss in French market share since 2009 (– 1% per annum on average) is essentially explained, as since 2006, by a competitiveness factor. However, these global developments hide very different realities. One sector in particular –luxury goods– has recorded good trade performance and deserves closer analysis.

Observation 1. Poor French export performance is linked to an inadequate "quality/price ratio", not to poor country or product positioning.

1. Breakdown of market share variations between 2006 and 2014

In order to pinpoint the contribution made by geographic and sectoral specialisations in market share evolution, we made use of the Export Competitiveness Data Base developed by the World Bank in collaboration with the Banque de France and the International Trade Centre (CNCUCED-OMC). The "shift share" method proposed by Gaulier & *al*. (2013)[a] was applied to quarterly data starting in 2006 for 228 countries or territories at the HS-6 level of the Harmonized Commodity Description and Coding Sytem which comprises some 5,000 products. The latest data available was for the third quarter of 2014. Compared with the "traditional shift-share"[b] method, the one used to create this database has a greater frequency of data and takes into account extensive trade margins (increase in the number of products exported or the number of destinations served).

Variations in exports for each category of product/exporting country/importing country/quarter are regressed under the fixed effects of product, exporter and importer enabling the effect of "pure" competitiveness to be isolated by deduction for each exporting country. This "pure" competitiveness effect answers the following question: "What would the variation in exports for a country be if the geographic and sectoral structure of its exports were the same as that of its competitors?"[.c]

2. Changes in world market share for goods
2009-Q1 to 2014-Q3 annual average variation in %

	Rate of growth in exports	Annual variation in world market share	of which		
			Geographic effect	Sectoral effect	Pure performance
EU-28	0.3	– 2.3	– 1.8	0.5	– 1.0
Euro area at 17	0.1	– 2.5	– 1.8	0.5	– 1.3
France	– 1.0	– 3.5	– 1.5	1.5	– 3.5
Germany	0.5	– 2.0	– 1.3	0.5	– 1.2
Italy	– 0.3	– 2.8	– 1.4	0.2	– 1.6
Spain	1.1	– 1.4	– 1.9	0.7	– 0.1
United Kingdom	– 0.2	– 2.7	– 1.6	0.7	– 1.8
World	2.5	0.0	0.0	0.0	0.0

Source: World Bank, *Export Competitiveness Database*.

[a] Gaulier G., G. Santoni, D. Taglioni and S. Zignago (2013): "In the Wake of the Global Crisis: Evidence from a New Quarterly Database of Export Competitiveness", *World Bank Policy Research Working Paper,* no 6733.

[b] Cheptea A., G. Gaulier and S. Zignago (2005): "World Trade Competitiveness: A Disaggregated View by Shift-Share Analysis", *CEPII Working Paper*, no 2005-23. Cheptea A., C. Emlinger, L. Fontagné, G. Orefice and O. Pindyuk (2014): "The Development of EU and EU Member States' External Competitiveness", *CEPII Working Paper*, no 2014-06. Cheptea A., L. Fontagné and S. Zignago (2014): "European Export Performance", *Review of World Economics*, vol. 150, no 1, pp. 25-58.

[c] We would like to thank Gianluca Santoni (CEPII) for extracting the data.

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[5] This calculation is based on the variation when comparing Germany's market share and that of France up to the fourth quarter of 2013. The export "deficit" measured in this way at the end of 2013 is applied to world trade in 2014; 0.76 points of 18,784 x 1,021 / 1.3 with world exports of goods of $18,784 billion in 2013 and world trade growth estimated at 2.1% in value terms in 2014 (CPB, World Trade Monitor estimate). We use an average euro-dollar exchange rate of 1.3.

The counter-example of luxury goods

A labour-intensive industry located –at least in part– in a country deemed to suffer from high labour costs, the French luxury goods industry has proved able to compete with emerging countries and to benefit from the rapid growth of an affluent class within these countries. Two recent studies shed light on this success based on data from the grouping of part of the luxury goods industry within the Comité Colbert.[6] A variety of sectors are covered: tableware, decoration, clothing, drinks, perfumes, jewellery, handbags and shoes, and confectionery.

Three results emerge:
- – advanced countries are less disadvantaged, all other things being equal, in the export of luxury goods than in that of other industrial products: the high-end positioning "protects" them from competition from emerging countries;
- – the export of luxury goods is less sensitive to distance than the average for other products;
- – luxury goods react to a greater extent than other exports to an increase in purchasing power in destination markets, but this is only the case for a handful of exporting countries, including France.

At the centre of this success is one crucial variable: brands. The factor explaining France's difference (as well as Italy and Switzerland) is the number of luxury brands from the exporter country amongst the top 100 global brands. 24 in France compared with 10 in Switzerland, 7 in Italy and just 1 in Japan (*cf*. World Luxury Association).

> **Observation 2.** The sectors which have been most successful in resisting competition rely on strong brands.

Too few exporters?

We have seen above how export growth can be broken down into a geographic specialisation component, a sectoral specialisation component and a "pure" competitiveness factor. Another interesting analysis separates the amplification, over time, of already existing flows (for example exports from France of small Peugeot cars to Denmark), from the creation of new flows (new products, new markets or new exporting companies).

In the short term (from one year to the next), the growth in French exports is overwhelmingly explained by an increase in the flows already in place, known as the intensive mark-up (87.7%)[7]. The remainder (12.3%), known as the extensive mark-up, is new flow creation: 2.4% is the result of the arrival of new companies (net of the departure of companies which were previously present in the export market), and 9.9% the result of companies which were already present in the market but which have added or withdrawn products and/or destination markets to/from their export portfolio. Therefore, over the short term it is not the arrival of new exporting companies that is the principal explanation for growth in French exports.

On the other hand, over a ten-year period, the extensive mark-up accounts for 53.5% of export dynamics: 26.2% as a result of new companies entering the export market and 27.3% through the multiplication of products or markets by those already in place. Over this period, the intensive mark-up accounts for just 46.5% of the growth in all exports. The difference between a short-term analysis and an analysis over a period of 10 years lies in the fact that the new export flows are small in size but liable to grow rapidly overtime (due to drastic selection of best entrants, with the remainder exiting the market fairly quickly) to such an extent that after 10 years, these initially weak flows become significant.

France's weak export performance does not result from a different distribution between the development of existing markets (which would have be maintained) and entering new markets (which would have been insufficient –see the drop in the number of exporting companies between 2000 and 2009, graph 2). The very strong reliance of French exports on a small number of exporting companies is a phenomenon that is characteristic of advanced economies,[8] and the share of the export dynamics between intensive and extensive mark-ups is similar in other countries. Moreover, the French performance is not the result of a peculiar under-representation of SMEs in our exports: one third of the value of French exports outside of the European Union was accounted for by SMEs in 2011. This is lower than for Italy (49%) but higher than for Germany (28%) and falls within the European average.[9]
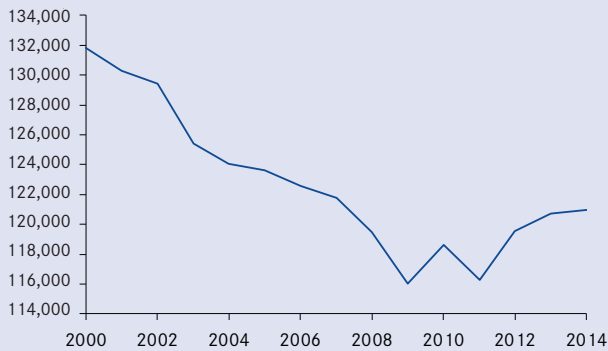
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[6] *Cf*. www.comitecolbert.com. Please see Martin J. and F. Mayneris (2015): "High-End Variety Exporters Defying Distance: Micro Facts and Macroeconomic Implications", *Journal of International Economics*, to be published and Fontagné L. and S. Hatte (2014): "European High-End Varieties in International Competition", *CEPII Working Paper*, no 2014-27. The results of these two studies are confirmed, in the special case of Champagne by Crozet M., K. Head and T. Mayer (2012): "Quality Sorting and Trade: Firm-Level Evidence for French Wine", *Review of Economic Studies*, vol. 79, no 2, pp. 606-644.

[7] See Berman N., V. Rebeyrol and V. Vicard (2015): "Demand Learning and Exporter Dynamics", Ban*que de France Working Paper*, no 551, May.

[8] In 2003, the top 5% largest French exporters accounted for 73% of the country's exports. The corresponding figure was 81% for Germany and 69% for the United Kingdom. Italy was slightly lower at 59%. Please see Mayer T. and G. Ottaviano (2007): "The Happy Few: The Internationalisation of European Firms. New Facts Based on Firm-Level Evidence", *Bruegel Blueprint Series*, vol. III. This extreme concentration remains true at a more detailed level: in 2008, the largest 10 French exporters represented just over 20% of total exports; in Spain this figure exceeded 40% and in Italy it stood at approximately 10%, see: Berthou A., E. Dhyne, M. Bugamelli, A-M. Cazacu, C.V. Demian, C-V., P. Harasztosi, T. Lalinsky, J. Meriküll, F. Oropallo and A.C. Soares (2015): "Assessing European Firms' Exports and Productivity Distributions: The CompNet Trade Module", *ECB Working Paper*, no 1788, May.

[9] See Cernat L, A. Norman-López and A. Dutch T-Figueras (2014): "SMEs Are More Important than You Think! Challenges and Opportunities for EU Exporting SMEs", *Chief Economist DG TRADE Note*, no 3, September.

2. Number of exporting companies in France
2002 to 2014

Source: French customs.

Export support policies

As we have seen, the creation of new export flows is a key element in export dynamics at least within a 10 year time-frame, if not in the short term. These new flows may come from large companies developing new products or investing in new markets. They may also come from SMEs that are first-time exporters. There are three reasons which would justify public intervention in this area.

Information costs

According to recent theories on international trade,[10] first-time exporters face fixed information-gathering costs which weigh proportionately more on small companies than on large ones. Numerous SMEs do not export because their productivity is inadequate to cover this fixed cost. Governments may therefore wish to support those SMEs closest to the productivity threshold to enable them to export, given that the start-up cost has only to be borne once. Government action is however faced with a number of problems (box 2): it is difficult to identify companies close to the productivity threshold enabling them to export; a large number of first-time exporters are not able to retain their place in target markets, which reduces the return on government intervention;[11] if a multiplicity of support packages for growing overseas leads to the replacement of the entry cost to a foreign market (subsidised by the government) by a research cost for an adequate sup-

port mechanism (supported by the SME) the net effect on export capability could be uncertain. In fact, the complexity of mechanisms in France is regularly highlighted by assessment committees in spite of rationalisation efforts.[12]

In any event, export support policies as they are currently structured fail to explain the worsening of the French balance of trade. The businesses involved are generally small in size and contribute only modestly to external trade; in addition, external trade has declined whilst support mechanisms have improved. The significant government support (estimated at some €600 million in 2012)[13] has recently shifted away from first-time exporters towards companies that already have overseas activities, with the aim of increasing their exports and the number of their subsidiaries abroad.

Imperfections in the credit market

A second justification for government intervention deals with the financial constraints on SMEs, especially when they invest in order to reach export markets. Assessing these interventions in terms of financing poses the same problems as those related to support (identifying the reference group).

Whereas government intervention in terms of financing affects a sizeable proportion of exporting companies (see box 2), it is unlikely that financing is a decisive factor in regaining French market share. According to Bricongne & *al*. (2012),[14] during the 2008 world financial crisis, French exporting companies were less affected by the discontinuation of funds than by the fall in international trade: over 60% of the fall in French exports was due to the "net intensive mark-up" of the largest exporting companies (the "top 1%"), which were barely affected by credit restrictions. The credit squeeze was directly felt by companies that were already in financial difficulty and for which restrictions on loans related to the crisis were an aggravating factor; however as their number was low, the impact was limited.

Externalities

A last justification for export aids is based on the presence of positive external effects on companies upstream and downstream of the exporting company. Enabling a company to export has a multiplying effect insofar as it is able to share information with other potential exporters, or simply serve as

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[10] Mélitz M. (2003): "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity", *Econometrica*, vol. 71 , no 6, pp.1695-1725.

[11] According to Bentejac and Desponts (2013) around one third of first-time exporters (not having exported in the previous five years) survive beyond one year. This proportion is 70% for businesses which are members of a group. See Bentejac A. and J. Desponts (2013): *Mission d'évaluation sur l'efficacité du dispositif d'appui à l'internationalisation de l'économie française*, Ministère du Commerce extérieur (French Ministry of Foreign Trade), La Documentation française, June.

[12] See Bentejac and Desponts (2013), *op. cit*., Cour des Comptes (2011): *Le soutien public aux entreprises exportatrices*, Annual Report and Inspection Générale des Finances (2013) " Pour des aides simples et efficaces au service de la compétitivité", *IGF (French General Inspection of Finance) Report*, no 2013-M-016-02, June.

[13] See Bentejac A. and J. Desponts (2013) *op cit*.

[14] Bricongne J-Ch., L. Fontagné, G. Gaulier, D. Taglioni and V. Vicard (2012): "Firms and the Global Crisis: French Exports in the Turmoil", *Journal of International Economics*, vol. 87, no 1, pp. 134-146.

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2. Government export support policies

In France, a large number of stakeholders are involved in helping companies grow their business overseas and over 90% of medium-sized businesses and SMEs which are already trading internationally or are about to do so (2% of the total of all companies) state that they use at least one support body.[a] The processes cover two major types of support packages:

- Advisory: information, access to international contacts or partners in the target market, attendance at trade shows, employment assistance through the "post-graduate students for international business" programme etc. Business France (previously Ubifrance) provides trade advice and support to some 9,000 businesses each year to which is to be added the networks of French chambers of commerce located overseas and that of the Department of Finance, the diplomatic network, foreign trade advisers, as well as sectoral agencies (agriculture, cultural products, etc.), help provided at the regional and local levels and supranational schemes for promoting exports coming from the European Union;

- Financing and insurance: public intervention is essentially carried out by BPI France and by Coface. Three schemes, targeting approximately 1,000 companies per year, are provided by BPI France: export development loans (unsecured loans guaranteed by public funds); cash flow loans (export loans, buyer-credit); bank loan guarantees. Coface offers credit insurance (as a private insurer) and assistance in surveying potential markets (on behalf of the State). It boasted 37,000 customers in 2013.

Crozet & *al*. (2013)[b] have assessed the direct impact of a small number of services provided by Ubifrance and

Coface on the export performance of French companies between 2005 and 2010, by comparing those companies receiving support with their peers (same characteristics in terms of sector, size and productivity) not receiving support. According to this study, the main impact of the assistance in surveying potential markets provided by Coface appears to be an increase in export volumes for exporters already in place (about + 20%) and in the number of destinations (approximately one additional country). Support packages set up by Ubifrance and which focus on coaching a group of companies appear to be the only ones that encourage companies to get started in international trade; both schemes have an impact on exported volumes that is similar in size, but the latter appears to be short-term while assistance in surveying markets has a more sustainable impact. These results are in line with that of other countries,[c] although it should be noted that all studies (including this one on France) are quite sensitive to the choice of control group. These results are also in line with surveys carried out by Business France and BPI France.

[a] A survey of 250 SMEs and medium-sized businesses, see Bentejac and Desponts (2013) *op. cit*.

[b] Crozet M., T. Mayer, F. Mayneris and D. Mirza (2013): "Efficacité des dispositifs de soutien à l'exportation des firmes françaises", *CEPII Working Paper*, no 2013-03.

[c] Cadot O., A.M. Fernandes, J. Gourdon, J. and A. Mattoo (2011): "An Evaluation of Tunisia's Export Promotion Program", *IGC-DECTI Workshop, The World Bank*, 14 October. Volpe Martincus C. and J. Carballo (2008): "Is Export Promotion Effective in Developing Countries? Firm-Level Evidence on the Intensive and the Extensive Margins of Exports", *Journal of International Economics*, vol. 76, no 1, pp. 89-106. Van Biesebroeck J., E. Yu and S. Chen (2015): "The Impact of Trade Promotion Services on Canadian Exporter Performance", *Canadian Journal of Economics*, to be published

a demonstration model for close competitors. Recent studies confirm the existence of these positive effects.[15] However, competitiveness clusters do not seem to have a knock-on effect on R&D, the number of patents or turnover. Some studies do demonstrate the positive impact of competitiveness clusters on the probability to continue exporting for exporters in these clusters. However, these companies are more dependent on the cluster's "lead" company and their membership within clusters does not seem to have protected them during the 2008-2009 financial crisis.[16]

Compared with other European countries, France is at the upper range of government export support (box 3). The types of support mechanism are similar from one country to another. However, French support schemes are characterised by a larger share of services invoiced to companies.

Observation 3. A wide range of government export support mechanisms are available to French SMEs. Even though they would gain from being further rationalised, these mechanisms are not the primary answer to the erosion of French market share.

Inadequate non-price competitiveness

"Pure" competitiveness, as defined above, comprises a price dimension and a non-price dimension. Price competitiveness is the result of unit production costs (labour costs, energy costs, cost of capital, intermediate consumption etc., net of productivity gains), mark-ups and nominal exchange rates.

[15] Koenig P., F. Mayneris and S. Poncet (2010): "Local Export Spillovers in France", *European Economic Review*, vol. 54, no 4, pp. 622-641.

[16] See Askenazy P. and P. Martin (2014): "Promouvoir l'égalité des chances à travers le territoire", *Note du Conseil d'analyse économique*, no 20, February, which recommends an independent assessment of competitiveness clusters and a reduction in their number, and Bellégo C. and V. Dortet-Bernadet (2013): "La participation aux pôles de compétitivité : quelle incidence sur les dépenses de R&D et l'activité des PME et ETI ?", *INSEE (French National Institute of Statistics and Economic Studies) Working Paper*, no G2013/06.

3. Support policies for growing overseas in some European countries

In **Germany** the promotion of exports is by and large in the hands of the Ministry of the Economy with a 2012 budget of EUR138.4 million. A large share of this is invested in organising trade fairs and exhibitions (40%) and in the consular networks of 120 bilateral chambers of commerce (27%). The latter have 2,200 staff and 50,000 member companies spread over 80 countries. Support schemes at federal level are also based on financial advisers at embassies and on the German Trade and Invest agency, an agency of the Ministry of the Economy with some 300 agents and a budget of EUR17 million. Companies are supported at State or Länder level by local chambers of commerce; in the most industrialised Länder, specific advisory bodies support locally-based companies in exporting. In addition, companies receive guarantees and credit insurance (EUR30 billion in 2011) of which 75% is allocated to trade with emerging and developing countries; this budget supports export growth but also covers industrial policy, foreign policy and employment protection objectives.

The **Italian system** is supported by the Ministry of Foreign Affairs and the Ministry of Economic Development, the former having a coordinating role based on its diplomatic networks whilst the latter is responsible for granting export aid (supporting promotional work, preferential loans or credit insurance products, in particular for SMEs). This system was reformed in 2013 to recentralise certain skills which had been devolved to the regions, with the aim of making processes more transparent and efficient. Financial support granted by the Italian State has been halved over the past years, reaching EUR33 million in 2012.

In the **United Kingdom**, export support is organised jointly by the Ministries of Trade and Foreign Affairs, *via* UKTI (UK Trade and Investment - the equivalent of Business France). This is based on a regional organisation of 12 agencies dispersed throughout the country. The UKTI has a budget equivalent to EUR368 million for 2014-2015, i.e. more than double the 2013-2014 budget. It has nearly 2,300 employees, half of which are based abroad. Moreover, the British model is based on cooperation with private service providers and chambers of commerce located abroad (for example the China Britain Business Council). Sectoral priorities (health, defence, creative industries, oil and gas and agribusiness) and geographic priorities (high growth emerging markets) were set out. 54,190 companies used one or more of the UKTI services between October 2013 and September 2014 (compared with 25,400 in 2011) including 11,430 first-time exporters. The latter have access to a number of free services or grants, for example export advice from a UKTI expert, financial help in attending exhibitions and trade shows overseas and access to market research for overseas. Other services are to be paid for, as with the Overseas Market Introduction Service (which offers a number of schemes using on-site UKTI experts) or Postgraduate Students for International Business introduced in 2014. Via UK Export Finance, businesses that have not been able to secure insurance on the private market were able in 2013 to benefit from insurance products amounting to approximately £2 billion.

Non-price competitiveness may be considered as a residual in that it is the part of demand that is not explained by price. It has a variety dimension (horizontal product differentiation, different yoghurt flavours for example) and a quality dimension (vertical product differentiation, more or less creamy yoghurts for example).

The fact that non-price competitiveness is not directly measurable makes any diagnosis rather precarious, particularly when it is based on aggregated data.[17] Here we have adopted a micro-economic perspective: we compare changes in non-price competitiveness for products exported by France to those of other major OECD countries on the basis of disaggregated data by product for the period 2000 to 2013. The non-price competitiveness indicator used reflects product characteristics which see increased demand at a given price. The idea is that consumers are ready to pay a higher price for products with attributes –other than price– which they value strongly: brand, company image, exporting country, quality of associated services, reputation, product reliability, design etc. Details of the method are set out in box 4.

France ranks 7th in the OECD

We limit ourselves here to sectors which represent more than 1% of exports for each country under consideration. Table 3 sets out the 10 leading sectors for non-price competitiveness in France and Germany in 2013. The sectors are classified by decreasing ranking within the OECD. As such, France's number one sector in terms of non-price competitiveness is aeronautics, in which France ranks top amongst the OECD countries. This non-price competitiveness is assessed at 2.4: in this sector, French exporters could set prices more than twice as high what they would be if their quality was identical

[17] See for example Borey G and B Quille (2013): "Comment s'explique le rééquilibrage des balances commerciales en Europe ?", *Note de Conjoncture de l'INSEE*, June, pp. 19-40.

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4. Measuring non-price competitiveness

Bas, Martin and Mayer (2014) have adapted the method developed by Khanelwal, Schott and Wei (2013) in order to estimate the quality of exported products at the HS-6 level (over 5,000 products) using bilateral international trade data.[a] The data used here is that of BACI, a database developed by the CEPII based on the United Nations' COMTRADE data.[b] Estimates concentrate on the 50 exporting and importing countries with the highest flows of trade.[c] To compare countries similar to France, we have concentrated on exporting countries which are members of the OECD.

Non-price competitiveness is estimated on the basis of a demand function which depends negatively on prices, with a constant elasticity of substitution, and positively on non-price products' attributes (including perceived quality):

$$x_{kint} + \sigma_k \, p_{kint} = \beta \, PIB_{it} + \lambda \, D_{in} + \alpha_{knt} + \varepsilon_{kint}$$

where x_{kint} and p_{kint} are logarithms of the quantity and price (unit values) of a product k exported by country i to destination n in year t.

The method has been changed to take into account bilateral determinants of international trade such as distance, shared language, border effects and colonial links, grouped together in the term D_{in}. In addition, the fixed effect α_{knt} includes demand as well as the degree of competition in the destination country. Finally, the equation controls for the effect of the country of origin's size. The elasticity of substitution between products σ_k is from Broda and Weinstein (2006).[d]

Estimated non-price competitiveness q_{kint} is the residual of the equation ε_{kint} standardised by the elasticity of the corresponding product: $q_{kint} = \varepsilon_{kint}/(\sigma_k - 1)$. A equivalent residual reveals higher non-price competitiveness when related to products with low elasticities for which price variations have little impact on sales. This measure of non-price competitiveness is then aggregated by sector (102 sectors).

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[a] Bas M., P. Martin and T. Mayer (2014): *Report on Main Directions of Research Towards Better Assessment of Competitiveness*, Mapcompete. Khandelwal A., P. Schott and S. Wei (2013): "Trade Liberalization and Embedded Institutional Reform: Evidence from Chinese Exporters", *American Economic Review*, vol. 103, no 6, pp. 2169-95.

[b] For a detailed description of this data please see Gaulier G. and S. Zignago (2010): "BACI: International Trade Database at the Product-Level, The 1994–2007 Version", *CEPII Working Paper*, no 2010-23.

[c] The list of countries is set out in Bas, Martin and Mayer (2014) *op. cit.*, table 1.

[d] Broda C. and D. Weinstein (2006): "Globalization and the Gains from Variety", *Quarterly Journal of Economics*, vol. 121, no 2, May.

3. The 10 leading sectors for non-price competitiveness, France and Germany, 2013

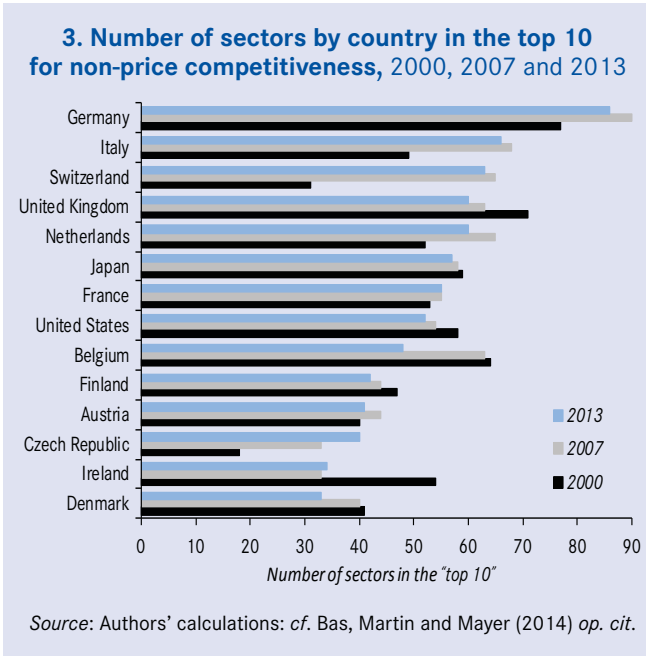|	Market share within the OECD as a %	Sector share of total country exports as a %	Non-price competitiveness[a]	OECD Ranking
France				
Aeronautics	10.2	3.4	2.4	1
Leather goods	25.6	1.3	7.3	2
Wine	28.0	2.4	2.2	3
Electrical distribution equipment	6.0	1.7	4.5	3
Automotive spare parts	6.2	6.0	1.4	5
Dairy products	14.6	2.2	1.2	5
Clothing	9.3	1.1	1.2	5
Plastics	7.5	3.9	1.1	7
Other metal products	5.8	2.2	1.2	7
Plastic products	6.4	2.8	1.3	8
Germany				
Automotive spare parts	22.6	8.0	3.4	1
Non-ferrous metals	16.4	3.6	1.4	1
Plastic products	20.4	3.3	2.8	1
Automotive vehicles	16.8	3.0	1.6	1
Other metal products	21.5	3.0	2.2	1
Electrical distribution equipment	24.2	2.5	34.2	1
Machinery, other	20.7	2.3	3.7	1
Machine-tools	27.4	2.3	2.1	1
Precision instruments	21.1	2.2	21.4	1
Electronic components	17.1	1.8	25.6	1

Note: [a] Price equivalent. For example, the figure "2" means that in the sector being considered, exporters may set prices that are twice as high as they would be if their quality was identical to the average for OECD countries.

Sources: Authors' calculations: *cf.* Bas, Martin and Mayer (2014) *op. cit.* and the WTO.

The three sectors in which France is most competitive in the non-price dimension are aeronautics, leather goods and wine. In Germany, these sectors are automotive spare parts, non-ferrous metals and plastic products. These top three sectors represent 15% of German exports, compared with just 7% of French exports. In addition, Germany ranks top in the OECD in three sectors, whilst France ranks second in leather goods and third for wine. Moving down the list, Germany remains the No. 1 in its first ten sectors, whilst France falls to eighth position in the OECD in its tenth sector (plastic products). Germany therefore clearly ranks ahead of France in terms of non-price competitiveness. This is even more disadvantageous for French exports given that amongst the ten most competitive sectors in non-price criteria, four are common to both countries: Germany is our closest competitor and outperforms us in terms of non-price competition.

We now turn to the top 10 countries in terms of non-price competitiveness for each sector. In 2013, France had 55 sectors (out of 102 analysed) in the OECD "top 10" (graph 3), placing it in seventh position overall in the OECD, a relatively good

to the average for OECD countries. This advantage stands at 7.3 in the leather goods sector, in which France ranks second amongst the OECD countries in terms of non-price competitiveness.

(and stable) position.[18] The graph shows that Germany is out in front with 85 sectors in the "top 10". Italy, Switzerland, the Netherlands, the United Kingdom and Japan are all slightly ahead of France but to a lesser degree (between 57 and 65 products). The USA performed slightly less well than France (51 products).
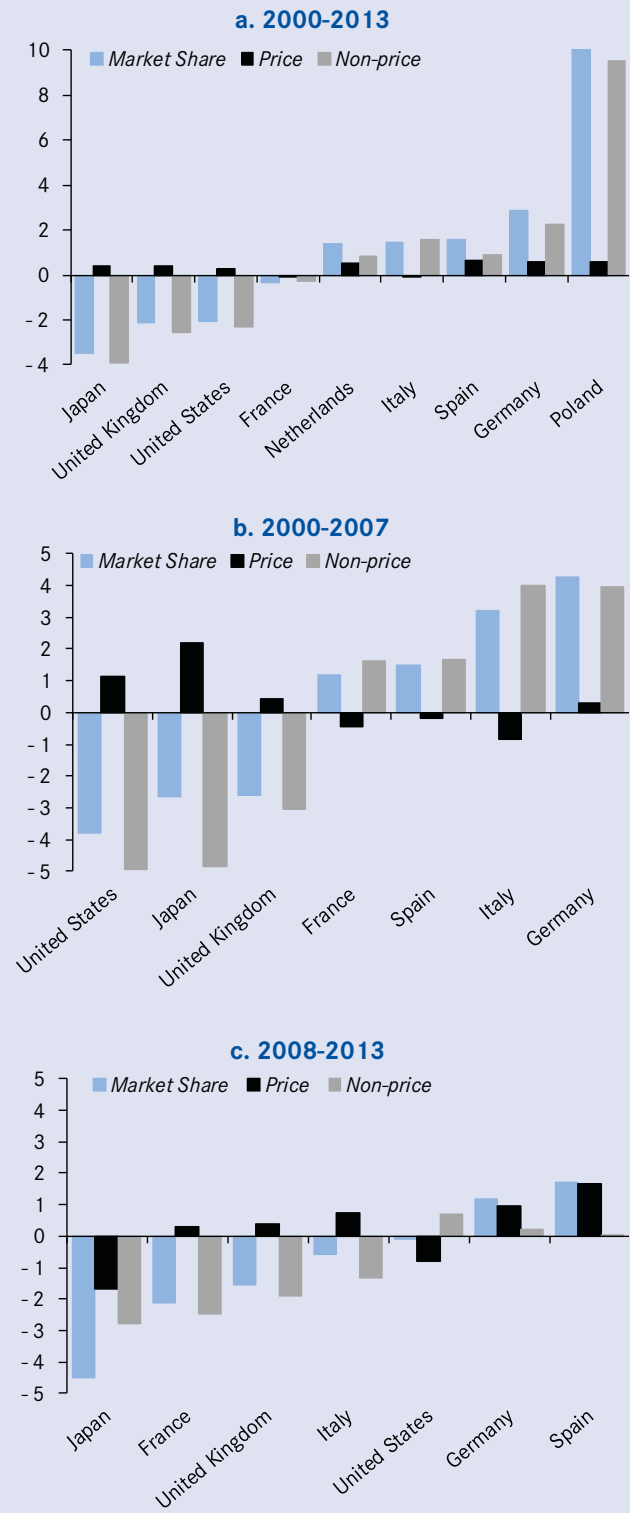
3. Number of sectors by country in the top 10 for non-price competitiveness, 2000, 2007 and 2013

Source: Authors' calculations: *cf*. Bas, Martin and Mayer (2014) *op. cit.*

Graph 4a breaks down the market share variations of several OECD countries into variations due to price competitiveness and non-price competitiveness, for the period 2000-2013. Here we examine market share compared with the OECD average, and therefore between comparable countries. This graph compares Japan, the United Kingdom and the USA on the one hand, which lost greater market share than the OECD average, and Germany and above all Poland on the other hand, which lost less than average market share and even gained market share (in the case of Poland and more generally Central and Eastern European countries, Mexico and Turkey which are not represented on the graph). In both cases, changes in market share seem to be primarily explained by non-price competitiveness, which decreased in the first group and increased in the second. France finds itself in an intermediate position which, nonetheless, masks contrasted changes between sectors[19] and over time.

... but has dropped in several sectors since 2008

From 2000 to 2007, French market share dropped a little less rapidly than the OECD average (graph 4b). Over this period, French price competitiveness worsened (partly due to the appreciation of the Euro), but this is offset by a net increase in non-price competitiveness. Over this same period, Germany

4. Relative annual variations in market share and price and non-price competitiveness component, in %

a. 2000-2013

b. 2000-2007

c. 2008-2013

Interpretation: Relative change compared with the OECD average.
Source: Authors' calculations: *cf*. Bas, Martin and Mayer (2014) *op. cit.*

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[18] The conclusions on relatively high export unit values in the case of France is confirmed by Fontagné L., G. Gaulier and S. Zignago (2008): "Specialization Across Varieties and North–South Competition", *Economic Policy*, vol. 23, no 53, pp.51-91. The authors deal with non-European trade.

[19] The top two French sectors in terms of non-price competitiveness –aeronautics and leather goods– have shown strong increases in this competitiveness since 2000. Please see non-price competitiveness for a number of French sectors at the online sectoral focus, www.cae-eco.fr

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improved its price competitiveness thanks to wage modera-tion and the delocalisation of the less competitive segments of its production chain. But the marked increase in its non-price competitiveness demonstrates that Germany used this period to increase the quality of its products. This observation downplays the view that Germany has carried out a strategy based solely on reducing related costs over this period.

Over the period 2008 to 2013, France performance was far below the OECD average, even though its price competitive-ness improved slightly (graph 4c). Its non-price competitive greatly deteriorated. It is possible that the pre-2008 non-price competitiveness improvement was primarily driven by a selec-tion effect: given the decline of price competitiveness during this period, only the most productive exporters and those with high non-price competitiveness were able to survive, which is consistent with the drop in the number of exporters recorded up to 2009 (graph 2) and the drop in industry mark-up rates.[20] As of 2008, whilst France's cost-competitiveness improved slightly, the lack of innovation, investment and an upmarket shift (difficult when mark-ups are weak) seem to have led to a non-price competitiveness fall-out. Although still in the "top 10", a number of sectors have declined for France: electrical distribution equipment, wine, automotive spare parts and fur-nishings.

> **Observation 4.** Amongst the OECD countries, France enjoys relatively good (7th in the OECD) non-price competitiveness, but this competitiveness has declined since 2008. Germany is in pole position amongst the OECD countries.

How can market share be regained?

Debates on competitiveness tend to focus on explanations to France's export underachievement of lesser importance (poor geographic or sectoral specialisation, credit constraints or insufficient exporter support) and give insufficient promi-nence to the most important quantitative factor: the quality/price ratio of products.

Price competitiveness

Price competitiveness is understood differently according to whether we are looking at the euro area markets or the non-euro area, even if we need to put this distinction in perspec-tive insofar as France is in competition with countries in the euro area in non-euro area markets.

Exchange rate

Competitiveness in non-euro area markets strongly depends on the euro exchange rate. Estimates of data from French companies suggest that, all other things being equal, a 10% depreciation of the euro compared with a partner country outside of the euro area increases the sales value of the ave-rage exporting company to that country by some 5 to 6%. This increase –which generally takes place in the same year as the depreciation– arises mainly from an increase in export volumes (4 to 5%) and the remainder (0.5 to 1%) from an increase in mark-ups on each unit sold (*via* a slight increase in the price in euros).[21] Overall, the impact of a 10% depre-ciation of the euro on the value of exports is greater –some 7 to 8%– as this depreciation not only improves the position of exporters already in the market but also encourages new companies to enter export markets. From March 2014 to March 2015, France's effective exchange rate depreciated by approximately 6%. Applying a simple rule of three suggests that our exports should increase by 4 to 5%.

Labour and intermediate consumption

What then are the cost components thanks to which French economic policy can stand out from its competitors in the euro area? The debate tends to focus on direct labour costs in exporting sectors, whilst a breakdown of the value-added of exports shows that only 23% of export value is attributable to labour cost in the export sector directly concerned. Labour cost in other areas used in domestic intermediate consump-tion represents 21% of export value. The remaining 56% comes from intermediate consumption (excluding labour cost from domestic intermediate consumption) including impor-ted products (25% of export values). These figures encourage an examination of imports as a way of optimising the value chain, of smoothly increasing the price of electricity which weighs heavily on some exports[22] and, finally, of controlling the costs associated with services which have increased greatly over the past 10 years compared with Germany due not only to labour costs but also the still high level of obs-tacles to competition in the service sector.[23]

More generally, it should be emphasised that the entire French economy contributes to the creation of price com-petitiveness. Improving the way that the housing market works, for example, contributes to competitiveness insofar

[20] See Martin, J. and I. Méjean (2014): "Low-Wage Countries' Competition, Reallocation Across Firms and the Quality Content of Exports", Jou*rnal of International Economics*, vol. 93, no 1, pp. 140-152. Aghion, Ph., Cette, G. and E. Cohen (2014): *Changer de modèle*, Odile Jacob.

[21] See Bénassy-Quéré, A., Gourinchas, P.O., Martin, Ph. and G. Plantin (2014): "L'euro dans la 'guerre des monnaies'", *Note du Conseil d'analyse économique*, no 11, January.

[22] See Bureau D., L. Fontagné and P. Martin (2013): " Énergie et compétitivité", *Note du Conseil d'analyse économique*, no 6, May.

[23] See the Conseil d'analyse économique (French Council of Economic Analysis) (2014): "Quelles réformes pour la France ? Les préconisations du CAE", *Note du Conseil d'analyse économique*, no 15, July.

as an increase in rents and property prices weighs heavily on household budgets and over time leads to increases in salaries. This line of reasoning can be extended to all services in the sheltered sector including government offices: the entire French economy is affected by the question of price competitiveness, not just front-line exporting companies.

"CICE targeting"

The Employment Competitiveness Tax Credit (CICE) implemented at the start of 2013 following the Gallois report on French industrial competitiveness,[24] has as its explicit purpose to stimulate employment and improve business competitiveness. We concentrate here on this second objective.

The yearly EUR20billion of CICE tax credits represents, in principle, an overall reduction in labour cost of 3% for those companies concerned. Exporting companies therefore have the choice between: lowering their export price and therefore increasing their price competitiveness and market share, or raising their mark-ups and offering wage increases. We still lack hindsight in knowing how French companies have reacted, although the results of surveys shed some light insight.[25] But we know that this CICE tax credit covers wages up to 2.5 times the legal minimum salary (SMIC), a threshold chosen so as to affect the industrial companies accounting for a large share of exports and whose employees are, on average, higher paid than in the service industries. At these levels of remuneration, (skilled) employees face a relatively low risk of unemployment: employees having graduated from secondary school are faced with an unemployment rate close to 5%. In these circumstances exemptions reducing, *a priori*, labour cost by 1% could result in an increase in salaries of 0.9%.[26] *A posteriori*, the fall in labour costs would therefore only be 0.1% for employees subject to a low unemployment rate. The possible gain in price competitiveness or increase in mark-ups would therefore be limited. These results suggest that the effect of CICE tax credits on wage dynamics should be assessed and, if this analysis were to show a stronger growth in wages above 1.5 times the legal minimum wage after these tax credits have been set up, then the benefit of these tax credits and the responsibility agreement should be re-focused on wages lower than 1.5 times the legal minimum.

The counter-argument generally put forward is that decreasing costs on low wages primarily benefits the non-tradable sector –retail or personal services, for example. Exporting companies, which are generally industrial companies, employ more workers at relatively high salaries. By not affecting higher salaries, the CICE tax credit would be missing its competitiveness objective. However, as we have seen, a large proportion of export value is made up of incorporated services, including a share of low-skilled services (cleaning, security, catering and transport). A decrease in the cost of low-skilled labour is therefore an important component in price competitiveness.

Recommendation 1. Assess the impact of CICE tax credits on wage dynamics. If there is stronger growth in relatively high wages after CICE tax credits have been implemented then reductions in social security contributions should be concentrated on lower wages.

Non-price competitiveness

Non-price competitiveness policies largely overlap with productivity policies which also involve stimulating innovation and increasing quality. This is why we can here refer to the recommendations made by the CAE regarding training and research.[27] This is, in particular, the case with professional training which should also be considered as an investment for increased competitiveness and an upmarket shift.

However, as demonstrated by the example of luxury goods, brands play a specific role in exports by offsetting cost disadvantages and eliminating the handicap of geographic distance. Intellectual property rights issues should be a priority in international trade negotiations in which Europe is engaged, and this should be clearly affirmed by the French authorities. The rejection of the Anti-Counterfeiting Trade Agreement (ACTA) by the European Parliament in July 2012 is, from this point of view, particularly concerning in contrast with its signature in 2011 by Canada, the USA, Japan, Korea, Singapore, New Zealand and Morocco.

Recommendation 2. Make defending intellectual property rights a priority in international negotiations.

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[24] Gallois L. (2012): *Pacte pour la compétitivité de l'industrie française*, Report for the French Prime Minister, La Documentation française.

[25] *Cf.* INSEE (French National Institute of Statistics and Economic Studies) outlook paper on the use of CICE tax credits (2014). Generally, companies state that they will use this tax credit to increase their operating profits; for 58% of industrial companies and 52% of service companies this extra resource will be used mostly for investment.

[26] Cahuc P. and S. Carcillo (2014): *Alléger le coût du travail pour augmenter l'emploi : les clés de la réussite*, Institut Montaigne. See also Plane M. (2012): "Évaluation de l'impact économique du CICE", *Revue de l'OFCE (French Economic Observatory)*, no 126, or Bock S., P. Lissot and S. Ozil (2015): "Matis : une maquette d'évaluation des effets sur l'emploi de variations du coût du travail", *Document de Travail de la DG Trésor (French Treasury) Working Paper*, no 2015/02, March, which uses a decreasingly elastic profile of employment in relation to cost according to wage level.

[27] Artus P., C. García-Peñalosa and P. Mohnen (2014): "Redresser la croissance potentielle de la France", *Note du Conseil d'analyse économique*, no 16, September; Fontagné L., P. Mohnen and G. Wolff (2014): "Pas d'industrie, pas d'avenir ?", *Note du Conseil d'analyse économique*, no 13, June.

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However, productivity is not just a question of design and innovation. Recent studies suggest that an important part (between one quarter and one third) of differences in productivity between companies and between countries is simply due to the quality of company management.[28] France ranks seventh amongst the OECD countries in terms of the average quality of its company management. Compared with countries like Germany or the USA, it is nevertheless characterised by a large proportion of small companies with weaker management quality on average and therefore lower productivity.

Lastly, growth in the productivity, and therefore competitiveness, of a country comes largely (50% according to recent studies) from reallocating production factors from underproductive towards more productive companies. Rigidity in the employment and goods markets limit this reallocation.[29] Measured at company level for each French industrial sector, the average difference between wages and productivity increased by almost 15% in real terms between 2002 and 2007.[30] This phenomenon of companies not working at optimum size is most marked at around 50 employees, reflecting a threshold effect. But this worsening is no more marked in the area of this threshold. Other possibilities need therefore be considered such as the cost of redundancies, bankruptcy law and goods and services market regulations.[31]

Recommendation 3. In deliberations on structural reforms, the impact of these reforms on the reallocation of production factors (labour and capital) to the more productive companies should be explicitly taken into consideration.

Finally we can see that export performance is, for a large part, a simple reflection of the efficiency of the national production system, such that competitiveness policies overlap with policies to improve productivity. ●

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[28] Please see Bloom N., R. Renata Lemos, D. Sadun and J. Van Reenen (2014): "The New Empirical Economics of Management", *CEP Occasional Paper*, no 41.

[29] Aghion & *al*. (2008) show the link between rigidity in the labour and goods markets and productivity. Dostie & *al*. (2009) suggest that the reallocation of production factors could explain between 50 and 70% of overall growth in productivity of these factors. See Aghion P., P. Askenazy, R. Bourlès, G. Cette and N. Dromel (2008): "Distance à la frontière technologique, rigidités de marché, éducation et croissance", *Économie et Statistique*, vol. 419, n° 1, pp. 11-30. Bérubé C., B. Dostie and L. Vihuber (2013): *Estimation de la contribution de la réallocation de la main d'œuvre à la croissance de la productivité au Canada*, Centre sur la productivité et la prospérité (Centre for Productivity and Prosperity), HEC Montreal, September.

[30] Fontagné L. and G. Santoni (2015): *Firm Level Allocative Inefficiency: Evidence from France*, Mimeo.

[31] A recent study by the IMF demonstrates that regulations reducing competitiveness on the goods and services market have a negative impact on productivity growth. See the International Monetary Fund (2015): *World Economic Outlook*, pp. 104-107.