



## The Triggers of Competitiveness

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*"Countries do not compete, produce and trade. Firms do."*

### Session 1 – Investing to compete: what are the bottlenecks?

Mr. Altomonte started his presentation pointing out that competitiveness has been often advocated as a miraculous solution to the crisis. However, both a unique definition of competitiveness and an unbiased measure able to capture this concept are missing. According to him, the definition of competitiveness has to be centred on the firm instead of a country's performance, as countries do not export nor produce. Based on a microeconomic approach, competitiveness can be defined as the ability of firms in a given country to mobilise and efficiently employ the productive resources required to produce and offer goods and services to markets. Competitiveness hence is nothing else than "a poetic way to say productivity", as in Krugman's definition.

Mr. Altomonte further noted that the distribution of any competitiveness indicator is rightly-skewed so that using averages to construct macroeconomic indicators leads inevitably to have a systematic structural bias in the results. In this respect, a policy targeting the average performance of firms is not appropriate. What matters indeed is to raise the number of firms whose performance is above the cut-off point and to allocate more resources to those firms.

Efige is the first survey that allows a true cross-country comparison of competitiveness indicators at the firm level. The evidence collected shows that internationalized firms tend to be larger; they are endowed with more capital and are more productive than the average in the sampled firm population. The relationship between competitiveness and exports, however, is weaker when competitiveness is measured in terms of unit labour costs instead of just productivity. In this case, firms with high unit labour costs can equally export large quantities of products. This may be due to the skills of workers engaged in the production of high-quality products on the one hand and, on the other hand, on the fact that high-quality products are in high demand on international markets. By contrast, there is a strong link between productivity and foreign investment, as only the most productive firms are found to make productive investments on foreign markets.

The key question is how to make firms more productive, allowing them to export more. When looking at firms that have been able to switch from a low to a high productive profile during the crisis, the most successful ones are those characterised by small dimensions but high growth rates, stronger innovation, and the predominance of equity in their capital endowment.

The EFIGE results convey the following key policy messages:

- being part of the global value chain is positively correlated with competitiveness;
- total factor productivity is correlated with balance-sheet observable productivity measures;
- stronger innovation, wage dynamics linked to productivity and higher proportion of equity financing are factors that increase the likelihood of being an exporter.

Mr. Coznet analysed in more detail firms' export performance. Exporting in fact is not a commonplace activity, only few firms do export. A natural question to be raised is "why exporting is so difficult?" The data from the EFIGE project suggest that the key drivers of export activities are lower costs, high quality and an extensive product range.

The comparison between firms within the same industry and the same country indicates that firms investing more in R&D are more likely to be international. In particular, product innovation seems to be fundamental, whilst the same cannot be argued for process innovation. Focusing on quality, empirical evidence shows that internationalisation is positively correlated with the quality of products. An assessment of the French champagne industry points out that the producers of high quality champagne export more and to a larger number of destinations. This study however shows that price is an equally important variable. Quality itself is not sufficient to explain the heterogeneous performance of firms.

In the economic literature there is still no agreement on how to weigh up quality and price competitiveness. There is still no agreement on the direction of the relationship between export prices and market distance. According to Mr. Coznet, a third model where best firms have the best average price/quality ratio may solve this apparent puzzle. In this case, higher quality firms having the lowest price and higher quality firms in low quality industries would be the best exporters.

Mr. Di Mauro commented on the two talks stressing the implications for research and for policy. Economic research has shown that a macro-assessment of competitiveness can be biased, as it is affected by spurious correlation. Moreover, it is generally acknowledged that micro indicators should complement macro variables and focus not just on price variables. The question as to what the actual focus should be is still open. Some researchers devote attention to variables targeting competitiveness outcomes; these are defined in different ways, e.g. trade results, long-term productivity. Others focus on the development of competitiveness indicators and are divided between those looking at price competitiveness and those concerned with non-price competitiveness.

What economists do not still know with precision and need to understand is how input-indicators are linked to outcomes. In other words, economists should devote attention to understanding the impact of moving from indicators to outcomes. A first step in this direction is ComptNet, a project developed by the ECB in the framework of the Eurosystem, in collaboration with the World Bank and the OECD. Its main objective is to integrate information on global value chains with aggregate and firm level data.

The Q&A session after the first round focused on the most appropriate policies to allow firms to by-passing the productivity cut-off, the possible role of efficiency wages, and the role of bank finance when the temporal dimension is exploited.

## Session 2 – South versus North and the impact of the crisis

Mr. Barba Navaretti looked at the microeconomic significance of the present macroeconomic euro zone. The members of the Economic and Monetary Union (EMU) facing the greatest troubles in these days are characterized by low growth in GDP per capita and current account deficits. The latter in particular refer to these countries' incapacity to acquire competitiveness. Current account positions have changed since the introduction of the Euro. More precisely, countries that have historically relied on external devaluations have found it more difficult to realign real exchange rates and internal prices than the other countries.

Trying to go beyond the macroeconomic level, looking at industry level is not sufficient. In fact there is no straightforward evidence coming from sector-level evidence. Firm level data are the only truly informative sources. There is strong cross-country variation when it comes to firm size. For instance, German firms are on average 50% bigger than the EU-wide average, whilst firms in Italy and Spain are under-dimensioned. Concerning exports, instead, the main findings from the EFIGE survey are that French and German exporters export relative larger quantities of high value products, while Spanish and Hungarian firms lag behind the other European countries. Italian firms, on their side, show a high export propensity relative to their dimension. Confirming the importance of going beyond aggregate evidence, firm characteristics are able to explain 64% of these differences, while sectoral features explain 29% and county features the remaining 7%.

A simple exercise can reveal the role of the industrial structure for export capacity. Assigning the German industrial structure to firms operating in other countries would boost total exports in states where firms are under-dimensioned. Italian firms, for instance, would become a sort of super-exporters. Even if any kind of miraculous recipe for firm growth does not exist, some impediments to growth may be removed. Moreover, decomposing labour productivity growth, it becomes evident that most of this growth has been driven by larger firms. The evidence shows small changes in market shares, a result that hides large heterogeneity across sectors with successful firms gaining in market shares and all others losing them. Finally, as concerns productivity, even small firms have been able to increase productivity, as by becoming smaller they also turned more efficient. At national level, however, this has meant a loss in growth potential.

Mr. Halpern underlined how the differences between EU countries and other industrial countries have widened since the beginning of the crisis. While the crisis was a uniform shock, countries answered in diversified ways. The contraction of exports was severe in some countries, and less in others. In some countries the collapse of exports reflects the drop in sales, whilst in others it is less severe than the actual fall in sales.

Employment dropped above all in firms where sales have dropped the most. Moreover controlled firms were those who suffered the most in terms of employment, while financial constraints have been more biting in the case of firms that normally rely on external finance.

All in all, some countries supported more domestic demand and suffered from the strongest drops in exports. Firms having a dominant position have survived the crisis the best. Two central questions have to be addressed: i) why supposedly competitive firms turned out to be not competitive during the crisis? ii) Is destruction really creative?

Mr. Ottaviano opened the round table discussion following the second panel. According to him, what emerged from the two speeches is that dynamics do matter a lot. Only net effects (the sum of the dynamics obtained by enlarging firms and those of shrinking firms) are visible at aggregate level though. This makes it necessary to focus on firms' performances using microeconomic data.

Firms that are active on international markets turned out to be the best performers when it comes to productivity. Being in a value chain has isolated firms from the effects of the crisis, especially in the case of firms located next to the final demand. Vertical specialisation, along with targeting the downward part of the chain, seems to be the main policy suggestion coming from the results of the EFIGE survey.

According to the ex CEO of the French car maker Renault, Mr. Pélata, the internationalisation of firms leads to shifts in production. Notably production goes where prices are lower. In the case of Renault, for example, labour costs for blue collars in France are too high even taking into account government subsidies to R&D. By delocalising production, Renault has been able to bring back to France the results of the restructuring process and allow the group to survive the French taxation system, which is highly business unfriendly. In the car industry, in fact, French and Italian carmakers are those that are suffering the most because they have to face high labour taxes and to avoid de-localisation at the same time. According to Mr. Pélata, European governments should reduce labour taxes, ease industry restructuring, support the "delocalisation of basic manufacturing goods" close to Europe, continue to improve the innovation of eco-friendly systems, facilitate inter-companies cooperation within branch, and ease real estate supply.

From the discussion it emerged that delocalising production allows maintaining home the "soul" of an industry, which is the group of designers and advanced engineers in charge of giving birth to new ideas. Impeding delocalisation and imposing too high taxes on wages, on the contrary, seemed to be the best recipe a government can follow for losing competitiveness.

### **Session 3 – Financing innovation: the role of innovation and financial systems in shaping competitive advantages**

Mr. Schivardi assessed cross-firm differences in ownership, financial and control structures. Difference in R&D expenditures between European countries can be explained by country (institutions, average educational attainment, etc) or firm characteristics (firm size distribution, ownership, etc).

Innovation is mostly a function of how this is financed. Innovation indeed is a risky activity. Debt is not the most appropriate financing instrument for innovative activities. In continental Europe, there is a high number of family enterprises financing innovation by means of bank credit. In this regard, Italy stands out. While family

ownership is not a problem in itself, family- owned and controlled firms generally undertake less R&D investments. This is because owners of family firms have undiversified preferences, are usually very concerned about keeping the control of the firm and are thus more risk-averse.

More diversified and market based financing could help firms become more innovative. Equity does play an important role in this sense along with venture capital. As a result, the challenge ahead for European governments is to diversify financing sources, incentivise the role of equity as a main source of innovative activities, increase the contestability of control and increase firms' participation in the stock market.

Mr. Véron acted as discussant. In his opinion, the perception of financial constraints is just one part of the story explaining the link between the financial system and growth. Most R&D activities have intangible outcomes. For intangible goods, there are no collateral that a firm can give as guarantee when borrowing money. In the US there are credit funds investing in junior products, while in Europe this is not possible. In Europe only banks can finance firms, as there is no intermediate form of financing that can be placed between bank credit and equity.

Europe should focus on financing innovation. Moreover, it should address the question of banking versus non-banking credit, allowing for regulated forms of credits that can more flexibly adapt to the need of innovating firms. This half-way form of credit could show especially important in the next years, when banks will have to brutally deleverage in order to comply with Basel III regulation.

The taxation system should be equally discussed. Continuing the comparison between the EU and the US, the government purchases innovation from firms rather than subsidising it. In Europe the tax structure is inexplicably biased in favour of credit and family ownership. This results in a distorted allocation of resources as well as poor rates of private financed R&D.

### **Policy debate – Where is the problem and how to fix it?**

The Greek Minister of Education, Lifelong Learning and Religious Affairs, Ms. Diamantopoulou, recalled her experience as Commissioner of Employment, Social Affairs and Inclusion. At the time, her cabinet gathered 79 indicators in all fields with the purpose of monitoring growth. How to measure competitiveness and growth hence is not a new theme. Speaking about how to sustain competitiveness and growth nowadays seems impossible, on the one hand, it is the only way through which Europe could come out of the crisis.

As Gramsci said, when the old is dead, the new is coming true. This one however is a period of destruction with no reconstruction. Greece has lost 15% of its GDP in the last two years. Notwithstanding a 2.7% of budget still devoted to R&D, it is difficult to achieve any improvement in times of social unrest. To give an example, 17% of professors resigned in one year because of changes in retirement schemes. The hiring rate has been a modest 1%.



These are not normal times for democracy. There is a balance between EU institutions and member states that has to be clarified. At the beginning of the crisis, there were political answers, even above what was expected. From that moment, however, the behaviour of EU institutions and EU member States has not been linear.

Economic governance and fiscal sustainability are welcome if applied for healthy long-term sustainability. Now debt and deficit considerations seem to be the only ones that are taken into account in any field. An example is the debate on conditionality regarding structural funds. When the Lisbon strategy was launched, there was no macroeconomic conditionality for structural funds. It is not possible to pass from an extreme to the other. Of the 79 indicators developed at the time that were able to give just a rough idea of a country situation just few indicators are left and these are only those based on deficits and debts. Pushing for reforms in countries having debt problems will not lead to ideal results.

The Europe 2020 strategy is interesting and above all reserves a higher share of the EU budget for research. Dubious, however, is its capacity to stop the brain drain. Europe has to deliver rules, but also hope. With social unrest in a country and social unrest between countries it is not possible to achieve any kind of desirable output.

Mr. Allen argued that micro data can help in drawing the right policy responses to the crisis. Different indicators have to be used for different purposes though. Imbalances indicators can only detect if there are disequilibria. Structural indicators on the contrary could actually reveal growth constraints and appropriate remedies. Due to differences in the economic structure of countries, the impossibility to have truly comparable data makes the use of indicators part of an ideal world, more than of the real world.

Policies boosting productivity change the competitiveness scenario. There is a wide range of things to do. The question is simply what policies should be undertaken for supporting more effective firms and what policies for allowing firms to move towards higher levels of productivity. The answer can come from a mix of social and regulatory policies. For sure, welcome are policies decreasing the administrative burden faced by firms, especially start-ups. Moreover, as high productive firms are already recompensed by their innovative activities, governments should undertake pro-competitive policies increasing firm's productivity. In addition, they could also implement policies that help SMEs growing, for instance encouraging them to take the risks associated with innovation and improving financing opportunities so as to decrease the probability of failure.

Mr. Frost started his speech describing what kind of stormy things surround the present situation. When the last UK government was appointed, the UK was affected by different kinds of imbalances: household debt, banking sector crisis, and property bubbles to name just a few.

The UK government priorities have been to first rebalance the debt; then to stimulate innovation, supply chain development, and a concrete shift of the industrial structure of the country from banking to the manufacturing sector.

In some fields, the policies undertaken by the UK government have been a winning strategy. For example, the least productive firms have been accompanied to exit with no big trauma, the challenges of globalisation have



been addressed encouraging firms to be part of global value chains, and the equity to debt ratio has been increased in many sectors.

In some other areas, careful reflection is still highly needed. Attention should be paid to driving policy conclusions from the crisis experience. The right policy answer to address a certain issue can be different in normal times. The focus of policymakers should be on firms that are productive in general more than exporters in particular. A well-functioning domestic economy at micro level is essential to restore growth.

Mr. Garcia analysed in more detail the Spanish competitiveness problems, using three competitiveness indicators: unit labour costs, export shares, and the trade balance. Spain lost cost competitiveness between 1999 and 2007 due to higher wages and lower productivity. Looking at productivity, between 2004 and 2007 Spain got closer to Europe. Construction and manufacturing were the two main drivers of this catch-uping process, but the former burst in 2007. An important High contribution to total factor productivity comes from human capital.

To explain the gap in productivity, Mr. Garcia considered patents and regulation. R&D innovation doubled in 2004 and maintained its share even with budget cuts in 2010-2011. Small and medium enterprises suffered more than larger companies, which had the resources to get by without reforms. Central wage bargaining was reformed, with firms agreements substituting sectoral agreement aiming at aligning real wages and productivity growth. There was also a strong rise in mark-ups in the non-tradable sector. Despite all these developments, there was a good performance in export shares, including the services sector. The overall trade balance also turned positive.

Mr. Hampton identified three clear trends: leaders in any particular industry are doing better than their competitors, there has been an increase in concentration and an increase in turbulence of markets. In the Schumpeterian era, competitiveness was built upon exponential growth of technology. Technology of building and collecting data is important. On its own however, data is noise. You need technology to understand and analyse the data. Patterns in the data are fundamental to understanding dynamics. Mr. Hampton went on to single out three crucial elements in this process: understanding the data, enforcing a copyright regime to improve innovation and protecting the data. Finally, a balance between personal data for personal purposes and aggregate data should also be kept in mind.

The discussion following the session looked at the recent development in the absorption of structural funds and at how EU funds can be best used to help a country restore its competitiveness and growth potential. Some discussion concerned also the paradox in Mr. Garcia's presentation for which the Spanish trade account reached its balance between 2008 and 2010, in a period of crisis. This paradox is explained by the trade performance of large firms that have not been touched by the crisis, being hence an additional proof of the fact that average figures can be strongly biased and not much telling.