European Research Area

EUROPEAN POLICYBRIEF

Based on the

EFIGE Policy Report
THE GLOBAL OPERATIONS OF EUROPEAN FIRMS

SUMMARY

Introduction

The Global Operations of European firms, written by Giorgio Barba Navaretti, Matteo Bugamelli, Gianmarco Ottaviano and Fabiano Schivardi, Carlo Altomonte, Daniel Horgos and Daniela Maggioni, is an EFIGE Policy Report. It has been prepared jointly by Centro Studi Luca d'Agliano (www.dagliano.unimi.it) and Bruegel (www.bruegel.org) for the project 'European Firms in the Global Economy: Internal Policies for External Competitiveness' (EFIGE). This brief summarises the main results and policy implications of the report.

Why is there so much variation in trade performance across European Union countries? Some of the variation results from country-specific features such as macroeconomic policies, market size or infrastructure. Nonetheless, it is firms that are at the heart of European competitiveness. This report addresses the crucial issue of whether the global reach and the international performance of European economies are determined by the characteristics of their firms, independently of other features of national economies.

It finds that industrial structures and differences in the distribution of firm characteristics are instrumental in explaining aggregate country performances in foreign markets.

This report is the first one to explore systematically the interaction between firm and country characteristics, using the newly collected EU-EFIGE/Bruegel-UniCredit survey of 15,000 manufacturing companies in seven EU countries (Austria, France, Germany, Hungary, Italy, Spain and the United Kingdom).

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Evidence and analysis

The study, 'The Global Operations of European Firms', on which this Policy Brief is based, finds that firm characteristics influence the patterns of internationalisation in a surprisingly consistent way across countries. The analysis is based on the newly completed EU-EFIGE/Bruegel-UniCredit survey of 15,000 manufacturing firms in seven countries (Austria, France, Germany, Hungary, Italy, Spain and the United Kingdom)1. Size, productivity, the skill intensity of the work force and the ability to innovate are related to firms' export performance in all countries of the study, in terms of both exporter status and exports as a share of firm turnover. Firm characteristics also relate to the complexity of firms' internationalisation strategies in terms of both the number and the difficulty of export markets served. Finally, firm characteristics also relate to global production decisions, either through foreign direct investment (FDI) or international outsourcing (IO).

The EFIGE project, within which this brief and the broader study have been prepared, aims to address policy questions on the causal link between firm characteristics and internationalisation. This report, as an initial step in this exercise, looks at broad correlations, which are per se extremely insightful and provide new perspectives on the links between firm and country features.

The fact that firm characteristics are central raises new challenges for policymaking in terms of fostering the 'right kind' of characteristics. As an illustrative exercise,, we find that if the industrial structure (in terms of firm size and sectors) of countries like Italy and Spain were equal to that of Germany, the value of the total exports of Italian and Spanish firms would rise considerably – by 37 percent and 24 percent respectively.

This results does by no mean imply that the industrial structures of

European countries should be pushed and moulded towards a hypothetical optimum. It suggests, however, the centrality of structural reforms in facilitating the growth and development of companies throughout Europe. As policies affecting firm growth are multi-faceted, parallel reforms may be required in several areas, such as labour regulation, taxation and reducing red tape.

Particularly in a phase of sluggish demand and reduced fiscal resources, we should not forget the enormous potential of the European single market as the quintessential quasi-domestic space where firms initially grow and reinforce their global competitiveness. Policy action should then aim at easing even further the movement of goods and factors within the EU, resisting calls for local measures that support firms within national boundaries.

This study is of course not the first to stress the importance of firm characteristics. Recent contributions have emphasised both theoretically and empirically the key role of the heterogeneity of firms in explaining internationalisation patterns. However, this is the first time that country, industry and firm characteristics have been jointly analysed using fully comparable cross-country data. In addition, for the first time, it has been possible to study within a single framework the comprehensive span of global operations available to firms: export, imports, FDI and international outsourcing.

1. FIRM CHARACTERISTICS MATTER, NOT PRODUCTS OR HOME LOCATION

A basic ingredient of a country's export performance is how many firms are exporters (the so-called extensive margin). The percentage of exporters in the seven countries under consideration varies. Although in each country most firms with more than 10 employees are exporters, there are major differences, with a roughly 15 percentage point gap between countries with the highest share of exporters (Austria, Hungary and Italy) and those with the lowest share (Germany and France). There are of course country-specific factors explaining these differences – above all, market size – but there are also other less

obvious factors. When, for example, we compare the large continental economies, it is interesting to notice that Italy has an especially high export propensity compared to both France and Germany. This is also confirmed by the report's regression analysis.

When we take into account country characteristics and firm characteristics simultaneously in the regression analysis, we find that firm characteristics are more important than country characteristics. In line with previous empirical literature on firms and trade, we show that firms that are larger in size, have a more skilled workforce, and are more productive and more innovative, are also more likely to export than others, whatever their industrial sector. Unlike previous studies, we show that these patterns are consistent across countries and in fact shape internationalisation trends to a greater extent than country characteristics. Importantly, we also find that the impact of firms' characteristics on the extensive margin of trade is very similar across countries.

Similar results are generated when we focus on the intensive margin of exports that is on exports as a proportion of total turnover, conditional on being an exporter. Again, firm characteristics matter more than country characteristics: among the former, size, productivity, innovation and human capital are the dominant factors. The share of exports increases from less than 30 percent for firms with 10-19 employees up to 40-65 percent for the largest firms.

In summary, firm characteristics – size, productivity, innovative activity, workforce skills – are the primary determinants of export performance, more so than country characteristics. Firm characteristics indicate the probability of a firm being an exporter, and of the share of turnover attributable to exports. This analysis broadly holds true whichever country is under consideration.

2. EXPORTING IS NOT ENOUGH: EUROPEAN FIRMS PURSUE COMPREHENSIVE STRATEGIES FOR GLOBAL MARKETS AND GLOBAL PRODUCTION

The propensity to export and the share of exports in a firm's total activity provide just part of the overall picture of the internationalisation of firms. The global operations of European firms are very heterogeneous and entail very complex and dissimilar internationalisation patterns. We begin by looking at other aspects of exporting activity.

Almost all exporting firms sell the greatest part of their production in the EU15 market, the closest proxy to a domestic market. But far fewer go to more distant destinations such as the US or the difficult and fast-growing markets of China, India or Latin America. This pattern is seen for all sample countries. Distant destinations are more costly to reach and often involve higher risks and other barriers than closer-at-hand EU markets. Moreover, when we track the activity of firms in distant destinations, more marked differences relating to country of origin seem to emerge. For example, in China and India, two markets that most exporters probably still have to enter, German firms have gained a competitive advantage (10 percent more German than Italian firms export to China and India). Again, we must ask if this is due to firm characteristics or to a country-of-origin characteristic that benefits all German exporters. The regression analysis reported in the report confirms that firm characteristics (size, productivity, innovation, human capital) are relatively more important than differences between home countries. This is even more so for distant destinations. This suggests that the prominence of Germany comes, at least in part, from having firms with the 'right' characteristics to export to China and India.

A different indicator of the complexity of exporting activity is the number of destination markets at the firm level. We have already argued that a greater share of German firms export to fast-growing emerging countries. On average, German firms perform better than those in other countries: they export to three countries more than Italian and French firms. Yet, when we take into account firm size categories, it is striking how the number of markets invariably rises, for each country of origin. This pattern persists in the econometric analysis reported in the full study, where we control for other firm characteristics, such as productivity, skill intensity and the sectoral

composition of the samples.

German leadership becomes even clearer when we focus on the proportion of firms with FDI commitments. Again, firm size plays a key role: in Germany the percentage of firms involved in FDI increases from 1.5 percent of the smallest firms to 32.8 percent of the largest. Similar patterns are found in the other countries.

To close the circle, it is interesting to note that firms that are involved in foreign production are also the main exporters, particularly to emerging economies. More than a quarter of the exports of France, Germany and Italy to China and India originates from French, German and Italian companies that also have invested in manufacturing there. International production therefore complements exporting because it makes expansion into new markets easier, particularly those that are difficult and distant.

3. RECONCILING AGGREGATE AND FIRM-LEVEL EVIDENCE: INTERNATIONALISATION PATTERNS DIFFER MAINLY BECAUSE COUNTRIES DIFFER IN THEIR INDUSTRIAL STRUCTURES

How can we reconcile the finding that internationalisation patterns are predominantly driven by firm characteristics, with the evidence that, overall, countries perform very differently in terms of their exports and global production strategies? The main reason is that the industrial structure and the characteristics of firms are different in each country of origin. This is immediately apparent if we compare the size of exporters in the largest continental EU economies. French and German firms also tend to be larger when we move down the ladder of exporters, almost to the sixth decile. Thus, second-tier exporters are on average larger in France and Germany than in Italy and Spain and, especially in Germany, they contribute more to total exports.

To further corroborate this evidence, we ask what the export performance of France, Italy and Spain would be if they had the same industrial structure as Germany. We carry out this exercise in a very simple way. We look at the size and sectoral composition of total

employment for our samples in each county. We keep the size of the manufacturing sector fixed in terms of total employment, but reshuffle workers so as to replicate the German distribution in terms of firm size and sector. In doing so, we combine the German industrial structure with the individual export propensity of firms in each country6.

We then look at the resulting change in the total value of exports in the three countries. Total export value increases substantially in Spain (+24 percent) and Italy (+37 percent). For France, the increase is small, given that the two countries have comparable industrial structures.

We then decompose this variation, to see how much of it can be attributable to the change in the size distribution, and how much to the reweighting of the sectoral composition. In Italy most of the change is attributable to the modification of the firm size structure within industries. This is consistent with the strong prevalence of small firms in this country. Although Italian SMEs display a relatively high export propensity, on average their contribution to internationalisation remains substantially lower than that of larger firms. The sectoral effect is less notable, given that Italian firms are leading exporters in traditional industries. In Spain, two thirds of the growth in exports would instead be attributable to the sectoral reallocation of employment and one third to size consolidation. The major impact of the sectoral reallocation for Spain implies that a relatively large share of its employment is today in industries with relatively low export propensity.

All in all, the evidence indicates that the main differences between countries are dictated by their industrial structures. Similar firms behave similarly across countries, but Germany has a structure that favours the internationalisation of its economy to a much greater extent than Spain or Italy. In particular, the greater presence of medium and large firms in Germany means that the German economy has a greater international dimension.

Increasing the size of firms does not mean that firms should become especially large. Firms with around 50-100 employees contribute

greatly in export terms. It is medium-sized firms that make up the backbone of export performance for most European countries.

Also these results are informative, but do not mean that counries with smaller firms should force or provide incentives for growth. The size of firms reflect sometimes optimally, several country features. The key implication here is that business environments hindering growth also affect negatively international operations and country competitiveness.

Naturally there are other persisting differences between countries not related to their industrial structures. For example, as discussed previously in section 2, Italian firms have a higher export propensity than firms in other countries, whatever their size and sector. Also the large size of the German domestic market has an impact on the strategies of German firms. Still, these effects are dominated by those deriving from differences in the industrial structure.

Policy implications and recommendations

The findings presented in this Policy Report lends support to fostering structural reforms that allow firms across the board to grow and develop sophisticated technologies, skills and forms of management.

It is hard to disentangle the causal link between firm characteristics and performance and international activities and we do not aim to do so at this stage. Analysis of this new data is only starting. Nonetheless, our results so far, which are mostly based on broad correlations, already suggest several areas worth deeper investigation.

1. Firm growth and consolidation, particularly of small-medium companies, could generate a considerable increase in the value of European exports. Firms in industrialized economies are less and less able to compete by cutting costs and prices. They increasingly rely on other competitive factors: quality, technology, branding and so on, which are costly to acquire. Moreover, the broadening of the global span of markets forces firms to operate in several regions, often also to produce abroad. These patterns raise the cost of global

competition, often beyond the means of small firms. Consequently, structural reforms that foster firms' growth and favour their move towards sophisticated forms of management, organisation and innovation, favour export growth.

2. Advocating the growth in size of small and medium-sized enterprises does not imply that companies should all become very large. They must be large enough to carry out complex global operations, including global production. A big share of firms in the 50-250 employees category exports, serve a number of markets and have foreign production. Medium sized firms contribute considerably to export performance in most European countries.

3. Structural reforms may be required in several areas, such as labour regulation, taxation and reducing red tape. Also targeted sector-specific training and research programmes can foster export-oriented activities. Several of these measures may have a European dimension and partly be coordinated. Particularly in a phase of sluggish demand and reduced fiscal resources, we should not forget the enormous potential of the European single market as the quintessential quasi-domestic space where firms initially grow and reinforce their global competitiveness. Policy action should then aim at easing even further the movement of goods and factors within the EU, resisting calls for local measures that support firms within national boundaries.

4. Obstacles hindering firms' growth should be lifted through structural policies. But policy measures forcing aggregation and growth could be wasteful and ineffective. Industrial structures often reflect characteristics of the business environment and cannot change unless the business environment also changes. Therefore policies aimed at directly inducing changes in the industry and size composition of activities (vertical industrial policies; incentives for aggregation etc.) could likely be of little effect.

5. Global production strengthens global sales, particularly to

emerging markets. Through foreign production, firms can often reduce production costs and make entry into distant and difficult markets easier for themselves. China and India are the countries where European firms most frequently have production facilities outside the EU. Policymakers may want to bear this in mind. Attempts to prevent the transfer of production abroad could severely hinder export growth. At the same time such measures would weaken the global competitiveness of national firms, with long-term negative effects on domestic employment.

Research parameters

Scientific approach

- Investigate the interactions between the strategic decisions of European firms determining their international competitiveness.
- Study the feedbacks between the ability of firms to compete in foreign markets and their reliance on local as well as global production networks.
- Identify the bottlenecks to internationalisation stemming from firm size, innovation, access to financial markets, governance and organisational modes, the skill composition of the labour force, regional characteristics.
- Understand the impact of European integration on the external competitiveness of European firms with a special focus on the effects of the single currency on firms' trade and production decisions.

The EU-EFIGE/Bruegel-UniCredit survey

The EU-EFIGE/Bruegel-UniCredit survey has gathered both qualitative and quantitative information at the firm level by means of a detailed questionnaire containing more than 150 items related to the international operations of firms and collected via CATI (Computer Assisted Telephone Interview) and CAWI (Computer Assisted Web Interview) approaches. In order to ensure that the collected data is

standardised and statistically representative, an initial target was set of around 3,000 firms for France, Germany, Italy and Spain, 2,100 firms for the UK, and 500 firms for smaller countries (Austria and Hungary), ie a total of 15,100 valid questionnaires. The exact numbers by country deviated slightly from the targets as the result of appropriate samplingprocedures. Survey questions cover the following drivers the competitiveness of European manufacturing firms: size and productivity; organisation; geographical scope; skills and tasks; innovation; financial constraints; and use of the euro.

PROJECT IDENTITY

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