

The Happy Few: New Facts on the Internationalisation of European Firms

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From sectors to firms

On 7 November 2007 a new report by Bruegel and CEPR was launched in Brussels. The report is the first systematic, cross-country firm-level research of the features of European firms that compete in international markets. It highlights a striking consistency in the findings across countries.¹ The heated debate over the globalisation of the world economy has long been focused on which sectors experience success in the international competition while others lose ground and are eventually submerged by import competition. The report shows that, increasingly, both success and failure stories can be found within the same sector. More generally, the analysis of firm-level data reveals new facts that are essential for future policy-making to foster competitiveness and for the ongoing process of trade liberalisation.

Superstar exporters

The first relevant and striking fact arising from the data is that top exporters are superstars: a very small club of firms account for the vast majority of exports in each European country. Table 1 shows that in the sampled countries the firms involved in export activities are few in number and, among these few, only a handful of firms account for the bulk of aggregate exports. For each country the columns of Table 1 report the contributions of the top 1%, 5% and 10% exporters. The numbers are quite astonishing. In the exhaustive samples available for Belgium and Norway, the top 1% exporters account for more than 45% of aggregate exports; the top 5% exporters account for more than 70% of aggregate exports; and the top 10% exporters account for more than 80% of aggregate

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¹ The countries covered are Belgium, France, Germany, Hungary, Italy, Norway and the UK.

exports. Results for Germany, Hungary, Italy and the UK, in which the samples are restricted to large firms, are less extreme. However, comparing the exhaustive sample and the restricted one (results between parentheses) for France, suggests that the focus of those countries' datasets on relatively large firms explains such a finding. In general, the top 1%, 5% and 10% exporters account for no less than 40%, 70% and 80% of aggregate exports. This can be referred to as the 'superstar exporters' phenomenon.

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Firm-level data allow the report to get additional information on such phenomenon. For example, comparing France with Germany shows that the greatest contribution to German exports comes from firms exporting between 50% and 90% of their turnover. In France on the contrary, a larger contribution to exports comes from either firms exporting from 10% to 50% of their export or entirely globalised firms that export more than 90% of their turnover. These new data support previous research showing that one of the strengths of Germany's industrial structure compared to that of France lies in the larger set of medium-sized firms heavily involved in exporting.

The talent of internationalised firms

Firms involved in international activities score better than other firms on various performance measures, thus revealing the 'talent of internationalised firms'. Table 2 reports employment, value-added, wages, capital intensity and – where available – skill intensity 'premia' defined as ratios of exporters' (resp. FDI-makers') over non exporters' (resp. non-FDI-makers') values. The message conveyed by the table is clear: in all

Table 1 Share of exports for top exporters in 2003 and total manufacturing

Country of origin	Top 1%	Top 5%	Top 10%
Germany	59	81	90
France	44 (68)	73 (88)	84 (94)
United Kingdom	42	69	80
Italy	32	59	72
Hungary	77	91	96
Belgium	48	73	84
Norway	53	81	91

Source: EFIM2007 Report

Notes: The data on Germany, UK, Italy, Hungary and France cover large firms only, Belgium and Norway samples are exhaustive. Numbers in parenthesis are percentages on the exhaustive sample, which is also available for France.

Table 2 Exporters and FDI makers exhibit superior performance

Country of origin	Employment premia	Value-added premia	Wage premia	Capital intensity premia	Skill intensity premia
Exporters' premia					
Germany	2.99 (4.39)		1.02 (0.06)		
France	2.24 (0.47)	2.68 (.84)	1.09 (1.12)	1.49 (5.6)	
United Kingdom	1.01 (0.92)	1.29 (1.53)	1.15 (1.39)		
Italy	2.42 (2.06)	2.14 (1.78)	1.07 (1.06)	1.01 (0.45)	1.25 (1.04)
Hungary	5.31 (2.95)	13.53 (23.75)	1.44 (1.63)	0.79 (0.35)	
Belgium	9.16 (13.42)	14.8 (21.12)	1.26 (1.15)	1.04 (3.09)	
Norway	6.11 (5.59)	7.95 (7.48)	1.08 (0.68)	1.01 (0.23)	
FDI-makers' premia					
Germany	13.19 (2.86)				
France	18.45 (7.14)	22.68 (6.1)	1.13 (0.9)	1.52 (0.72)	
Belgium	16.45 (6.82)	24.65 (11.14)	1.53 (1.2)	1.03 (0.82)	
Norway	8.28 (4.48)	11 (5.41)	1.34 (.76)	0.87 (0.13)	

Source: EFIM2007 Report

Notes: The table shows premia of the considered variable as the ratio of exporters over non exporters (standard deviation ratio between parentheses). Germany, France, the United Kingdom, Italy, and Hungary have large firms only, Belgian and Norwegian data are exhaustive.

countries and on almost all counts, exporters are generally better performers than purely domestic firms. The premia are even larger for those firms that invest abroad. The difference between internationalised firms and the rest of the economy is particularly pronounced for employment and value added. There is, nonetheless, some variation across countries. For example, exporters premia are noticeably lower for France (2.4 and 2.6) and Italy (2.2 and 2.1) than Belgium (9.1 and 14.8) and Norway (6.1 and 7.9). This is probably due to the fact that the French and the Italian datasets feature relatively large firms only, which gives highly selected samples of non-exporters. The wage premium is, instead and probably for the same sample selection reason, consistently smaller but exporters still tend to pay wages that are 10–20% higher than non-exporters.

The employment premium for German exporters is in line with those of France and Italy. The United Kingdom employment premium for exporters is instead almost zero, which is a puzzling exception compared to all other countries and indicators. This probably comes from the fact that the sample of UK firms is even more biased than others in favour of large firms.² Given that

its sample is also restricted to large firms, Hungary is an outlier (as it also is in terms of the percentage of firms that export more than 90% of their turnover). Quite large premia characterise employment (5.3), value-added (13.5) and wages (1.44). Capital intensity and productivity, however, feature rather low premia.

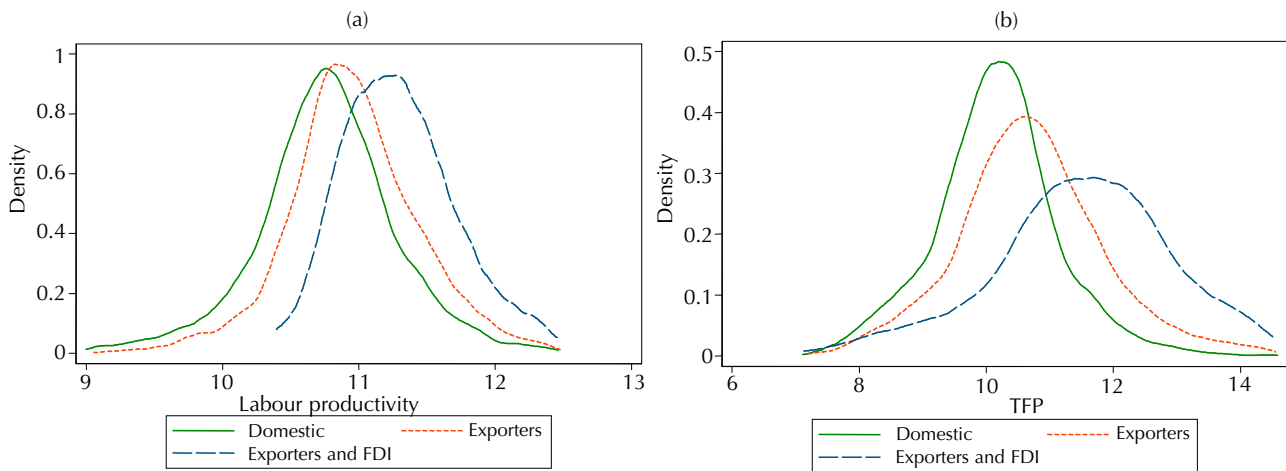
The analysis can be refined by comparing firms that not only export but also invest abroad with those that only export or only operate in their domestic markets.³ Figure 1 shows the productivity distributions for the three types of firms in Belgium. The panels in the figure correspond to two alternative productivity measures. In particular, panel (a) considers output per worker ('apparent labour productivity'). Panel (b) refers to the amount of output that varies across firms independently from their differences in labour and capital employed. Economists call this residual 'total factor productivity' (TFP) and they use it as a measure of firm competitiveness.

For the three types of firms, each panel shows the shares of firms ('density') that attain each productivity level. In other words, the panels depict the probability of picking a firm with a certain productivity level when

² Sample selection is less likely to explain the cross-country behaviour of FDI premia as French premia are quite large.

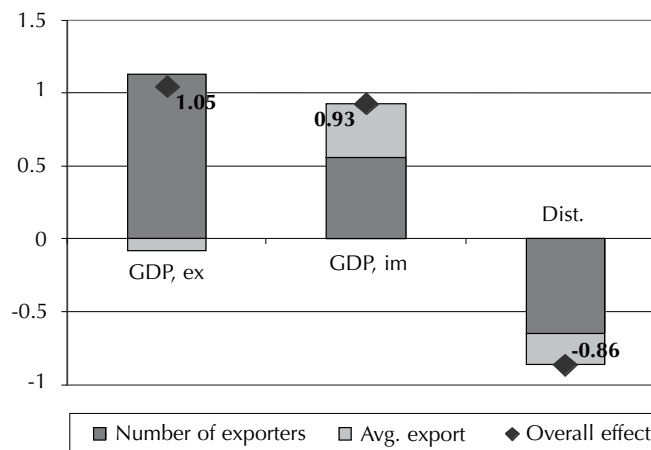
³ In the samples, nearly all FDI-makers are also exporters.

Figure 1 FDI-makers are more productive than exporters



Source: EFIM2007 Report.
 Note: Data for Belgium

Figure 2 The margins of aggregate exports



Source: EFIM2007 Report.
 Note: Data for Belgium and France

the firm is randomly drawn from each type. The two panels send the same message: a randomly drawn FDI-maker is likely to be more productive than a randomly drawn exporter, which in turn is likely to be more productive than a randomly drawn domestic firm. This type of finding is not specific to Belgium. For instance, it has been shown to exist also for Italian exporters compared with domestic Italian firms.⁴

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Take a walk on the extensive side

The superstar exporters phenomenon concerns the scarcity of firms involved in global trade. A country's export and FDI performance, however, varies greatly across different destination markets. Such differences in

bilateral trade and foreign direct investment can be explained both by the number of firms exporting ('extensive margin') and the average export, imports and FDI per firm ('intensive margin'). For instance, France exports much more to Germany than to Thailand, mostly because Germany, being both larger and more proximate, is an 'easier' market to target. But is the larger export flow due to more firms exporting to Germany, or is it due to a similar number of firms exporting much larger volumes? The answer to this question has very important implications in terms of the policies needed if one wants to promote French exports to Thailand. In the former case, policy-makers should implement policies targeted at expanding the export base, in the latter they should promote larger volumes by incumbent exporters. Figure 2 shows strong evidence that the extensive margin (i.e. the number of exporters) is more important for a country's aggregate trade and FDI. In particular, the bar chart represents the contribution of firm extensive ('Number of exporters') and intensive ('Avg. Exports') margins to the overall effects (black dots) of three key drivers of bilateral exports: the size of the exporting country ('GDP, ex'), the size of the

⁴ See *CEPR Policy Insight* No. 8, 'Openness to Trade and Industry Productivity Dispersion'.

importing country ('GDP, im') and reciprocal distance ('Dist.'). The overall effects are standard: close to 1 for GDPs and close to -0.9 for distance. In other words, if country A is 10% larger than country B, then on average it attracts 10% more exports than B from other countries. Analogously, country A exports on average 10% more than B to other countries. Moreover, if A is on average 10% farther away from other countries than B, then it trades 9% less than B with them.

More interestingly, the results of the decomposition show that the reactions of the firm extensive margin of trade to sizes and distance are much larger than those of the intensive one. For instance, the decrease in the number of firms accounts for 75% of the impact of distance on trade flows. In the same spirit, the increase in trade value associated with the increase in the importer's size comes mostly (60%) from the increase in the number of exporters to this country. Note also that the entire effect of the exporter's size on trade comes from the number of its exporting firms.

New ideas for policy-makers

These findings based on firm-level data give a new perspective to European policy-makers who want to improve the competitiveness of European firms. First, international competition triggers a selection process where more productive firms replace less productive firms, which benefits countries' productivity, GDP and wages. Second, what matters most for a country's trade performance is, first of all, how many of its firms engage in export, not the average export per firm. Today, governments put a lot of effort into promoting already big exporters to new markets. The findings above suggest that policies that increase the number of firms competing internationally, by lowering barriers to export and fostering performance in terms of employment and productivity, are more important. Finally, even small (fixed) trade costs matter since they reduce the number of exporters. Policies like the Single Market,

which lower trade costs and favour access to export, are thereby beneficial for productivity and wages.

Against this background, the report highlights six policy priorities:

1. *Promote intra-industry competition*
Trade and FDI opening triggers a selection process whereby the most productive firms substitute the least productive ones within sectors. This is good for productivity, GDP and wages even when it does not lead to sectoral specialisation.
2. *Increase the number of exporters and multinationals*
What matters most for a country's trade and FDI performance is first of all how many of its firms engage in export and FDI. So governments should focus on policies that broaden the export base.
3. *Forget the incumbent superstars*
To broaden the export base the exiting superstar exporters and multinational are less important. Instead of travelling to far-off places with superstars, heads of government should rather work on lowering barriers to export and FDI. Trade missions do not generate much trade.
4. *Nurture the superstars of the futures*
Governments should not only try to have more exporters and multinationals but should also try to make small exporters and multinationals grow.
5. *Keep up the fight against small trade costs*
Small (fixed) costs of internationalisation matter because they reduce the number of exporters and multinationals.
6. *Assess the export and FDI potential of your industries*
Some industries are more likely than others to react to shocks through adjustments in the numbers of exporters and FDI makers. Hence, they feature larger unexploited export and FDI potentials.

More on EFIM

In 2006, six research centres from six EU countries created a network under the coordination of Bruegel and CEPR. In 2007 the network has been extended to include two additional research centres from two more countries. The aim of the network is to work on policy relevant questions that are best treated using firm-level trade and FDI data: What are the features of European firms that successfully compete in international markets? What policies can further foster their performance? What policies can promote the participation of other European firms that are currently excluded from international markets? How can European firms best cope with the adjustment required by globalisation? What policies can smooth that adjustment? The network is called EFIM after its central research theme: 'European firms and international markets'.

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