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# 18 Rebalancing the Eurozone and national competitiveness

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*Eurozone exports were hit hard by the great trade collapse. This chapter argues that while the importance of restoring competitiveness and rebalancing current accounts is now widely recognised, there is also a need to take a broader view focussing not only on price competitiveness but also on productivity performance. It favours structural reforms and urges that rebalancing is not considered a purely demand-side phenomenon.<sup>1</sup>*

Although the global trade downturn was highly synchronised, Eurozone exports were particularly hit, with stronger losses in market shares than those of other main advanced economies. Partly owing to the relatively high openness of the Eurozone, structural competitiveness problems that predated the crisis may have been the most important cause. Understanding the nature of those problems and the differences in competitiveness across Eurozone countries is an important input into the rebalancing debate.

While the importance of restoring competitiveness and rebalancing current accounts is now widely recognised, we argue that there is a need to take a broader view on competitiveness, focussing not only on price competitiveness but also on productivity performance. To this end, we argue in favour of structural reforms aimed at enhancing the competitive environment within the European Union. Like others in this volume (Aggarwal and Evenett; Lim), rebalancing should not be considered a purely demand-side issue.

## Measuring national competitiveness

In spite of being a widely used term in the public debate, there is no agreed-upon approach on how to define and measure national competitiveness. Opinions tend to diverge rather widely on which concept of competitiveness is more appropriate and under which circumstances. Partly as a result, a very broad range of indicators is available.

In general terms, competitiveness can be defined as the ability of a country to compete successfully in international markets. Focussing mostly on export performance, traditional approaches usually refer to standard indicators of price

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<sup>1</sup> Comments by our ECB colleague, Chiara Osbat, are gratefully acknowledged.

and cost competitiveness, as measured by differently deflated effective exchange rate indicators. While developments in price competitiveness have always been important drivers of an economy's ability to compete in international markets, other factors have become increasingly important in the face of the structural changes engendered by globalisation. These relate, among others, to the export specialisation and to the geographical orientation of a country's exports.

An assessment based on traditional indicators is subject to a number of pitfalls. While acknowledged in general, the relevance of non-price factors for a country's export performance and their interaction with price competitiveness is rarely fully spelled out. Moreover, rather than being considered as a systematic critical element of export performance, non-price competitiveness is treated more as a residual. This is at odds with the casual observation that – in sophisticated economies – product quality and branding play an important role. More generally, the traditional approach tends to overemphasise export performance, while, at best, trade has to be considered just as a means to achieve welfare maximisation, as proxied by higher value added per capita or lower unemployment. Against this background, we complement the traditional analysis based on cost and price indicators with a model-based framework where national competitiveness is defined as the productivity of the firms located in a given country. In this context, the most competitive economy is considered to be the one with the best prospects for “generating” highly productive firms. Critical elements that enhance this broader competitiveness concept include (i) structural country characteristics, such as the degree of labour and product market flexibility, technological diffusion and innovation, as well as (ii) firm-level determinants such as organisational models. Furthermore, aggregate productivity will generally rise with the openness of a country to foreign competition.

## **Evidence from traditional competitiveness indicators**

Developments in Eurozone trade and competitiveness over the last decade were markedly shaped by globalisation trends. In particular, the emergence of cost-competitive countries as major exporters has increased the degree of competition, resulting in export market share losses of the Eurozone and other advanced industrialised economies. Although the decline in shares is partly mechanical, the Eurozone registered stronger losses than other developed economies. This appears to be associated with unfavourable trends in price competitiveness. If measured in terms of relative export prices, Eurozone price competitiveness deteriorated by around 10% between 1999 and 2008 (based on average levels in the three pre-crisis quarters, see Chart 1, left panel). By contrast, the US, Japan and, to a lesser extent, the UK all recorded significant gains in price competitiveness over the same period - broadly in line with exchange rate trends (see Chart 1, right panel). The financial crisis came as a severe additional shock: Mainly reflecting the sharp decline in global demand, the fall in Eurozone exports was amplified by unfavourable developments in price competitiveness, amid a broad-based

appreciation of the euro until October 2009. As a result, the Eurozone continued to lose export market shares over this period.

While price competitiveness has been a critical factor shaping the relative export performance for the Eurozone as a whole, some countries experienced rather strong improvements in price competitiveness, yet saw steady losses in their export shares (see Chart 2).

To explain such divergences, traditional competitiveness analysis has considered non-price related factors, such as differences in the degree of cross-country openness and sectoral export specialisation.

There are remarkable differences between Eurozone economies in terms of their openness to other Member States and to the rest of the world (intra- vs. extra-trade openness, see Chart 3). This could have important implications for export performance at the country level, either by directly affecting developments in price and cost competitiveness or indirectly through the degree of competition. However, differences in intra- or extra-orientation of trade do not appear to be very important in determining the overall price competitiveness of individual countries. Historically, there has been a very high correlation between developments in individual countries' price competitiveness indicators computed vis-à-vis only the other Eurozone countries and those computed with respect to the rest of the world. This suggests that the price competitive position of individual Eurozone countries within the Eurozone, which is determined mainly by the evolution of domestic prices and costs, tends to be mirrored in extra- Eurozone competitiveness as well.

While price competitiveness improvements appear to be a necessary condition, they may however not be sufficient to improve export performance. Therefore it is also critical to look at a country's export composition, in order to assess whether it is consistent with (perceived) comparative advantage and whether it is concentrated in fast-growing global market segments. As measured by the Balassa Index (BI) – the Eurozone is strongly specialised in medium-high-tech exports – in line with the export structures of Germany, France, Italy and Spain (see Table 1). While this specialisation has benefited the Eurozone overall, since world demand was rather strong for those sectors (particularly for machinery and equipment and motor vehicles and transport equipment), it is striking and somewhat surprising that, overall, Eurozone countries have not shown an increasing specialisation in fast-growing high-tech sectors. While this might reflect structural rigidities that constrain the ability of Eurozone firms to adjust rapidly, it could also reflect the fact that Eurozone firms have so far not been under significant pressure to make substantial changes to their specialisation. By contrast, Greece, Portugal and, to a lesser extent, Italy appeared to specialise rather strongly in low-and medium-tech sectors (e.g. textiles), suggesting that these countries are more directly exposed to competition from low-cost countries, and in particular from China. Such observations are also consistent with the significant export market share losses of Greece, Portugal and Italy since 1999.

## **A more holistic approach to competitiveness: A micro-based framework**

As mentioned above, there are strong arguments in favour of complementing the competitiveness analysis based on traditional measures with a more holistic approach. More specifically, we consider the results from a model-based framework that captures three broad sets of factors: (i) firm-level, such as the technological ability to utilise a given factor endowment; (ii) country-related, such as institutional efficiency barriers to entry in a sector and demand conditions; and (iii) geography and trade frictions – i.e. how accessible the country is to international competition and, at the same time, how accessible foreign markets are for domestic producers and exporters.

To this end, two types of competitiveness measures are computed. The first is an “overall” measure of competitiveness and corresponds to the observed productivity of the firms, which would depend on all sets of factors identified by the model. The second – “producer” competitiveness – measures the impact of technology and institutional factors after filtering out the effects of geographical location. This captures the ability of countries to generate highly productive firms, abstracting from their respective market size and level of accessibility.

The results of the calibrated model show that the most competitive (in accordance to the “overall competitiveness” indicator) countries are the ones that are centrally located (Belgium, The Netherlands) or that combine technological superiority with easy market access (e.g. Finland, see Table 2, columns 1 and 2). These findings are in line with a theoretical model predicting that countries that are large or easily accessible to firms from trading partners should exhibit a tougher competitive environment and a stronger ability to channel resources from low to high productivity uses. On the other hand, more peripheral countries such as the Mediterranean countries rank low because of a less central location with respect to their export markets and a possible technology disadvantage, which may be also a signal of high entry cost for foreign firms.

When abstracting from the geographical position and focussing on producer competitiveness (see Table 2, column 2), the Netherlands ranks first: it appears to have a strong technological advantage and a sound institutional environment thus being able to generate highly competitive firms. As particularly the case of the second-ranked country Sweden shows, being at the periphery does not per se represent a problem for a country, unless it is compounded by clear relative technological and institutional disadvantages that hamper firm productivity. In this context, it is worth noticing that the Mediterranean countries, namely Spain, Italy and Portugal, are consistently in the lower part of the competitiveness ranking, no matter how this is measured. This points to the presence of parallel negative impacts of all the determinants of competitiveness identified in the model, namely geographical location, market access, technological and institutional (dis)advantage. At the same time, some centrally located countries, such as Belgium, show a rather substantial worsening in terms of producer competitiveness compared to their ranking in terms of overall competitiveness,

signalling possible technology disadvantages and/or institutional bottlenecks that are partially offset by its central location.

## **Conclusion**

Reducing global imbalances and re-establishing sustainable external accounts remains a key priority. Having underlined the difficulty to fully explain export performance in the context of increasingly integrated global product markets, our analysis generally calls for policy responses to be aligned with the complexity of the factors underlying country competitiveness. More particularly, to address the divergences within the Eurozone, it is important to stress that the policy responses should go beyond restoring solely price competitiveness.

As the prospects for improving the overall country competitiveness in the medium term more broadly depend on the outlook for aggregate productivity growth, Eurozone countries should foster innovation and continue to enhance the flexibility of national goods and labour markets, including a healthy process of selection of the most productive firms. At the same time, strengthening market integration within Europe will create larger local markets, attract foreign competitors, and foster firm productivity, also through smoother labour force adjustment across sectors.

Finally, all Eurozone economies would benefit from embracing openness to international trade, including imports, thus resisting protectionist pressures. Such a more wide-ranging approach will ultimately lead to aligning Eurozone exports to comparative advantage, thus contributing to readjustment of global imbalances.

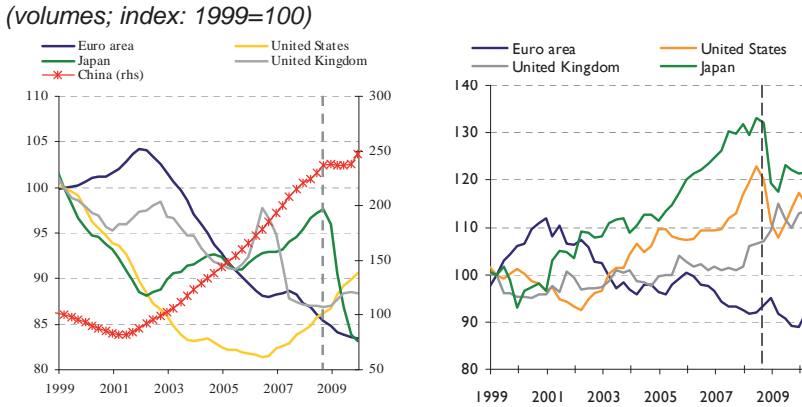
*The views expressed in this article are solely those of the authors and do not necessarily reflect those of the ECB.*

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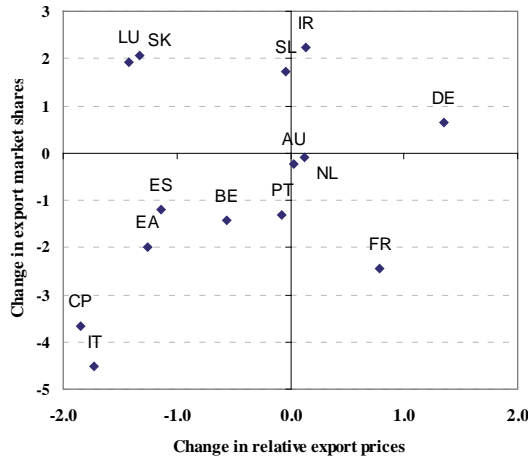
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Chart 1. Export market shares and relative export prices of major advanced economies (volumes; index: 1999=100)



Source: Authors' calculations based on IMF and Eurostat data. Note: Relative prices are defined as the ratio of a weighted sum of competitors' export prices to domestic export prices (both expressed in domestic currency). Lower values signal a loss in competitiveness. The latest observation refers to 2009Q4 (for export market shares) and 2010Q1 (for relative export prices). The vertical dotted lines correspond to September 2008 (i.e., the breakdown of Lehman Brothers).

Chart 2. Developments in export market shares and price competitiveness across Eurozone Member States (annual average changes over 1999Q1- 2009Q4; percent)

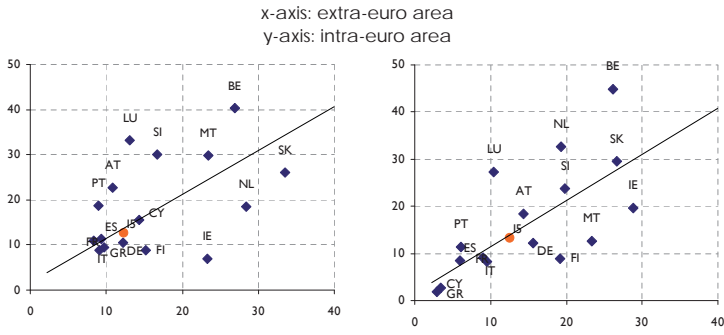


Source: Authors' calculations based on Eurostat data. Note: Price competitiveness is proxied by relative export prices (competitors' export prices divided by the country's export prices). A positive (negative) number implies a gain (loss) in price competitiveness

Chart 3. Extra and intra-Eurozone trade openness (percentage of GDP; average over 1999-2008)

Imports

Exports



Source: Eurostat.

Table 1. Export specialisation by country and sector (Balassa Index, average 2005-2008, based on values in USD)

	EA	BE	DE	IE	GR	ES	FR	IT	NL	AT	PT	SI	SK	FI
High-technology industries (HT)	0.8	0.7	0.8	2.1	0.5	0.4	1.0	0.4	0.5	1.2	0.5	0.6	0.6	1.0
Medium-high-technology industries (MHT)	1.2	1.0	1.4	0.9	0.5	1.3	1.1	1.3	1.2	0.8	0.9	1.5	1.4	0.9
Medium-low-technology industries (MLT)	0.9	1.4	0.8	0.2	1.6	1.0	0.8	1.0	1.0	0.9	1.0	0.7	1.0	1.2
Low-technology industries (LT)	1.0	1.0	0.8	0.7	1.7	1.1	0.9	1.1	1.0	1.2	1.5	1.1	0.8	1.0

Source: Authors' calculations based on CHELEM data.

Note: High-tech (HT), medium-high-tech (MHT), medium-low-tech (MLT) and low-tech (LT), based on OECD classification. Eurozone refers to both intra and extra-Eurozone exports.



Table 2. Broad measures of competitiveness of the manufacturing sector (based on data for 2003-2005)

Countries	Overall competitiveness	Producer competitiveness
Finland	1	3
Belgium	2	6
Netherlands	3	1
Sweden	4	2
Germany	5	5
France	6	9
Denmark	7	4
Austria	8	8
United Kingdom	9	7
Italy	10	11
Spain	11	10
Portugal	12	12

Source: Authors' calculations, following Ottaviano, Taglioni and di Mauro (2009). Note: Two types of competitiveness measures are computed: "overall" competitiveness and "producer" competitiveness. The former measures the actual competitive position of countries as determined by, among other factors, relative size, location and the level of barriers to imports and exports. Producer competitiveness captures the ability of countries to generate highly productive firms, abstracting from its market size and accessibility.

## About the Authors

**Filippo di Mauro** is Head of the External Developments Division of the European Central Bank (ECB), which he joined in 1998. His division is in charge of the international forecast, medium term FX analysis and the balance of payments of the Euro area. Filippo started his career in 1984 at the Research Department of the Central Bank of Italy, following a short period of consulting at the OECD. Prior to joining the ECB, he also held various economist positions at the International Monetary Fund (IMF 1986/87 and 1994/96) and the Asian Development Bank (1990/94). Publications include papers on Computable General Equilibrium models for Developing countries, International linkages, Global VAR Modelling, commodity prices indicators, external debt issues, fiscal policy indicators, external trade and competitiveness.

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