Export competitiveness factors in the Eurozone countries: the Italian case[*]

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Abstract

International competitiveness is a driving factor of growth. World trade has been characterized by wider geographical participation and increasing global value chains, reflecting the dynamism of the emerging economies and the international fragmentation of production. We estimate the impact of several price and non-price competitive factors on the export performance of nine Eurozone countries in the years 1994-2013. These indicators include the dynamics of potential demand, nominal effective exchange rate, relative producer prices, relative unit labor cost, relative quality of exported goods, investment, position in and participation to global value chains. Focusing on Italian competitiveness, we find that Italian firms benefit from a favorable geographic composition of exports, resulting in a dynamic potential demand, and a strategic position at the top of the global value chains; however, they are penalized by increasing unit labor cost relatively to the other Eurozone countries.

1 Introduction

Export performance has become a main driver of growth in advanced countries, especially in the Euro Area, severely hit by the lack of internal demand during the crisis.

Trade growth has been driven by structural changes, in particular by the rise of emerging economies and the international fragmentation of production: emerging countries are contributing for more than 70% of World growth; and trade in intermediate inputs between firms represents more than half of total trade in goods and services[1].

At the same time, these structural changes are affecting and redefining the factors that determine firms' competitiveness in the international markets. On one side, the number of competitors has increased; on the other, the geographical composition of trade is moving towards emerging economies. Moreover, the way in which firms participate to the global value chains plays a significant role in explaining countries' performance, since imports and exports are tightly linked together: imports of intermediate inputs are, in part, incorporated in exports and, vice versa, intermediate exports enter in other production processes abroad. These factors add to, and interact with, the list of cost, price and quality drivers of competitiveness.

We quantify the impact of several competitiveness factors on the export performance of nine Euro Area countries[2] in the years 1991-2013, using a panel data regression model. We then apply the estimation results to the Italian case, by computing the contribution of all factors to the Italian export dynamics.

Our paper adds to the literature on the drivers of countries' export performance. We contribute in several ways to the competitiveness debate.

First, we construct country-specific, quarterly indicators that capture the dynamics of several variables: in particular, the potential demand, that measures the impact of the geographical composition of exports; the relative quality of exported goods (measured by the dynamics of unit values relative to producer prices of exported goods); the position in and participation to the global value chains (proxied for by the evolution of imported and exported intermediate goods relative to total exports).

Second, we decompose the real effective exchange rate into two components, a nominal effective exchange rate and a relative price-cost index (in the manufacturing sector), and we evaluate separately the impact of the relative dynamics in producer prices and in unit labor cost, jointly with the nominal exchange rate.

Third, in our preferred model specification we estimate jointly the effect of selected factors, both standard and non-standard. Thus, we are able to evaluate the impact on export performance of

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[1] Between 56% and 73% of overall trade for advanced countries (see **?**).

[2] Austria, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Spain.

countries' competitiveness in a broad sense.

The main results of the paper are as follows.

There is a unitary elasticity of exports to potential demand: an increase of the latter applies one-to-one to the former. On top of that, countries' export growth is affected by global export performance, suggesting a spatial autocorrelation of flows.

The elasticity of exports to the relative unit labor cost index is significantly higher than the elasticity to the producer price index; this difference doesn't show up when comparing the corresponding real effective exchange rates.

Non-price competitiveness factors do play a role in explaining export performance: relative improvements in the quality of exported goods and higher investment rates have a positive effect. Moreover, the type of participation to global value chains matters: a better export performance is associated with a shift towards to the top of the chains, that is a stronger position as supplier of intermediate goods relatively to as buyer from abroad; on the contrary, an increase in total participation to the chains (both as supplier and client) is associated with lower export growth. This finding is coherent with the fact that increasing imported intermediate goods represent an additional cost to firms that is not captured by the evolution of the unit labor cost. A different approach to this issue is to correct the standard real effective exchange rate formula taking into account global value chains participation, in order to capture the change in competitiveness due to outsourcing[3].

Finally, we evaluate the impact of these competitiveness factors on the Italian export performance. On the positive side, the geographic composition and mobility of Italian exports has favored the growth of potential demand, in line with the growth of German potential demand. Moreover, Italian exports have benefited from other non-price competitive strengths: a growing quality of exported products and a strategic position at the top of the global value chains. On the negative side, there are the well-known Italian competitive disadvantages in terms of rising unit labor cost and low investment.

[Literature review]

2   Data

[TO BE WRITTEN]

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[3]See e.g. **?**.

3   Determinants of export performance

[TO BE WRITTEN]

Table 1: **Foreign demand and real exchange rates**

Table 2: **Producer prices, unit labor cost and unit values**

Table 3: **Quality, global value chains and investments**

4   Decomposition of Italian export performance

[TO BE WRITTEN]

Table 1: Potential demand and real effective exchange rate

	Export growth		
	Time lags	Production price	Unit labor cost
	t_0	0.99***	0.98***
Potential demand	t_{-1}	0.27***	0.29***
	long term	*1.00****	*0.98****
Residual world export	t_0	0.59***	0.54***
	long term	*0.47****	*0.41****
	t_0	-0.15***	-0.28***
Real effective exchange rate	t_{-1}	-0.23***	-0.20*
	t_{-2}	-0.11*	-0.05
	long term	*-0.39****	*-0.41****
R-squared		X	X
Number of countries		9	9
Number of observations		1998	1998

Panel regression for nine Euro area countries (*Italy, France, Germany, Netherlands, Portugal, Spain, Ireland, Finland and Austria*) over the period 1991Q1-2013Q2. All variables are in first (log) differences. We use quarterly national account data (Eurostat) of the volume of exports of goods. *Potential demand* of goods for each country is computed as the weighted average of real imports of 38 trading partners, where the (rolling) weights represent the country's export shares (UN Comtrade) in three different time periods (1990-99, 2000-2008 and 2009-2013). We use the *price-competitiveness indicator* of the Bank of Italy. We compute *Residual world exports* as the difference between the growth of world exports and of potential demand (CPB, OCSE and UN Comtrade). *Unit labor cost* (European Commission) and *producer prices* (Bank of Italy) refer to the manufacturing sector.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 2: Price, cost and value factors

Export growth

	Time lags	Production prices	Unit labor cost	Unit value
Potential demand	t_0	0.98***	0.99***	1.02 ***
	t_{-1}	0.27***	0.29***	0.28***
	long term	*1.00***	*0.99***	*1.03***
Residual world export	t_0	0.59***	0.54***	0.54***
	long term	*0.47***	*0.42***	*0.43***
Nominal effective exchange rate	t_0	-0.18***	-0.12***	-0.17***
	t_{-1}	-0.22***	-0.12*	-0.09***
	t_{-2}	-0.13**	-0.07	-0.10
	long term	*-0.42***	*-0.24***	*-0.28**
Prices, cost and unit values	t_0		-0.67***	0.12**
	t_{-1}	-0.27**		0.09
	t_{-2}			
	long term	*-0.22**	*-0.52***	*0.17**
R-squared		X	X	X
Number of countries		9	9	9
Number of observations		2664	2664	2664

Panel regression for nine Euro area countries (*Italy, France, Germany, Netherlands, Portugal, Spain, Ireland, Finland and Austria*) over the period 1994Q1-2013Q2. All variables are in first (log) differences. We use quarterly national account data (Eurostat) of the volume of exports of goods. *Potential demand* of goods for each country is computed as the weighted average of real imports of 38 trading partners, where the (rolling) weights represent the country's export shares (UN Comtrade) in three different time periods (1990-99, 2000-2008 and 2009-2013). We use the *price-competitiveness indicator* of the Bank of Italy. We compute *Residual world exports* as the difference between the growth of world exports and of potential demand (CPB, OCSE and UN Comtrade). *Unit labor cost* (European Commission) and *producer prices* (Bank of Italy) refer to the manufacturing sector. Relative *price, cost and unit value factors* are computed with respect to 38 trading partners.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 3: Quality, global value chains and investment

	Time lags	Export growth	
Potential demand	t_0	1.00***	1.02***
	t_{-1}	0.32***	0.26***
	long term	*1.01***	*1.02***
Residual world export	t_0	0.56***	0.49***
	long term	*0.42***	*0.38***
Nominal effective exchange rate	t_0	-0.14*	-0.04
	t_{-1}	-0.11	-0.05
	t_{-2}	-0.07	-0.18**
	long term	*-0.24**	*-0.21**
Unit labor cost	t_0	-0.63***	-0.62***
	long term	*-0.48***	*-0.49***
Quality	t_0	0.12**	
	t_{-1}	0.11*	0.11
	t_{-2}	0.03	
	long term	*0.20**	*0.09*
Position in GVC	t_0		0.10***
	long term		*0.08***
Partecipation to GVC	t_0		-0.15***
	t_{-1}		0.05*
	long term		*-0.08***
Investment	t_0		0.08**
	long term		*0.06**
R-squared		X	X
Number of countries		9	9
Number of observations		3330	4950

Panel regression for nine Euro area countries (*Italy, France, Germany, Netherlands, Portugal, Spain, Ireland, Finland and Austria*) over the period 1994Q1-2013Q2. All variables are in first (log) differences. We use quarterly national account data (Eurostat) of the volume of exports of goods. *Potential demand* of goods for each country is computed as the weighted average of real imports of 38 trading partners, where the (rolling) weights represent the country's export shares (UN Comtrade) in three different time periods (1990-99, 2000-2008 and 2009-2013). We use the *price-competitiveness indicator* of the Bank of Italy. We compute *Residual world exports* as the difference between the growth of world exports and of potential demand (CPB, OCSE and UN Comtrade). *Unit labor cost* (European Commission) and *producer prices* (Bank of Italy) refer to the manufacturing sector. Relative *unit labor cost* is computed with respect to 38 trading partners. *Quality* is computed as the difference between the growth of unit values and of production prices (Eurostat), relative to 38 trading partners. The *position in the global value chains* is computed as the ratio between exports and imports of intermediate goods (non-oil). The *participation to the global value chains* is the share of the sum of intermediate goods import and export on total exports.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.