

Export competitiveness factors in the Eurozone countries: the Italian case

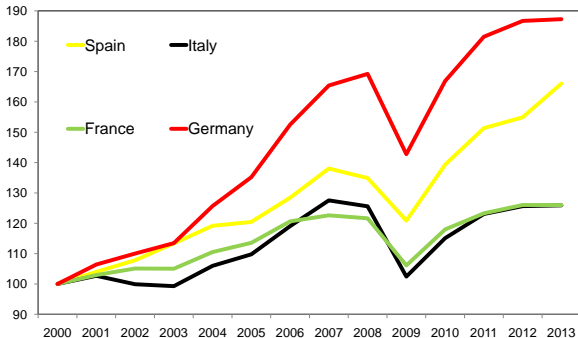
CompNet Workshop
Rome, 13-14th March 2014

Cristina Pensa and Matteo Pignatti

Confindustria Research Department

Motivation

(exports of goods, volume index 2000=100)



Source: Eurostat.

- What are the drivers of export performance in the EA countries?

Strategy

- Large literature
 - Very recently: Christodouloupoulou and Tkavec (2013) and Giordano and Zollino (2013)
- Broad range of competitiveness indicators
 - Foreign potential demand
 - Price-cost indicators
 - may offer (very) different insights
 - the Italian puzzle
 - Quality
 - GVC participation
 - Investment

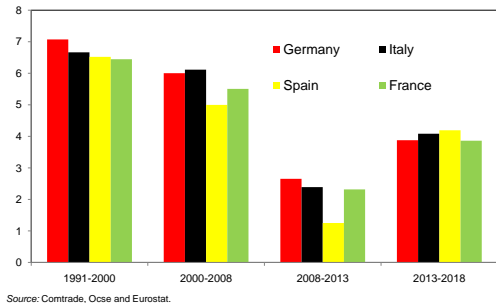
Specification

- Group of nine Euro area countries:
 - Italy, Germany, France, Spain, Netherlands, Portugal, Austria, Ireland, Finland
- Quarterly data over the period 1991Q1-2013Q2
- Panel regression
- Let X be the volume of exports of goods:

$$\Delta \log(X_{i,t}) = \alpha + \beta \Delta \log(X_{i,t-1}) + \sum_{j=0}^2 \gamma_j \Delta \log(\text{Reer}_{i,t-j}) + \sum_{j=0}^1 \lambda_j \Delta \log(\text{PD}_{i,t-j}) + \dots + \varepsilon_{i,t}$$

- Split the Reer into two components: Neer and relative Price/Cost

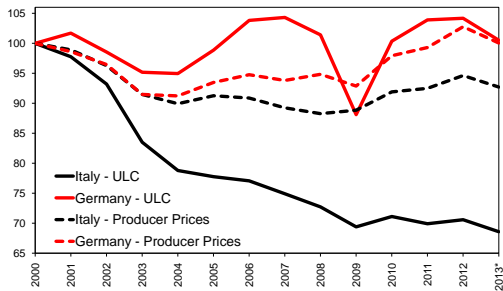
Italian potential demand in line with German one (average yearly growth rate)



- Weighted average of the growth of imports in 38 trading partners (variable weights are country's export shares)
- From 2000 to 2013, +4,4% yearly in Italy and Germany, +4,1% in France, +3,5% in Spain

Italian price/cost competitiveness: two tales

(Manufacturing, inverse of Reer, index 2000=100)



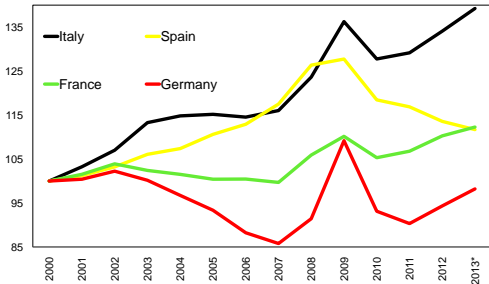
* First three quarters.

Source: Bank of Italy and European Commission.

- From 2000 to 2013, Italy lost wrt Germany 7,3 pp in competitiveness according to PPI and 32,0 pp according to ULC

Italian ULC keeps rising

(Manufacturing, labor cost over hourly productivity, index 2000=100)



*1st semester 2013 over 1st semester 2012.
Source: Eurostat.

- Italian ULC gap: +2,7 pp yearly vs Germany, 1,7 pp vs France and Spain

Potential demand and real effective exchange rate

Export growth

	Time lags	Production price	Unit labor cost
Potential demand	t_0	0.99***	0.98***
	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***
Real effective exchange rate	t_0	-0.15***	-0.28***
	t_{-1}	-0.23***	-0.20*
	t_{-2}	-0.11*	-0.05
	long term	-0.39***	-0.41***
R-squared		0.44	0.48
Number of observations		730	664

Price, cost and value factors

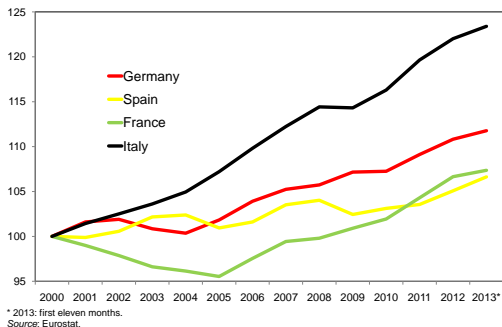
- Split Reer into Neer and relative price/cost indicator

Export growth

	Time lags	Production prices	Unit labor cost
Potential demand	t_0	0.98***	0.99***
	t_{-1}	0.27***	0.29***
	long term	1.00***	0.99***
Residual world export	t_0	0.59***	0.54***
	long term	0.47***	0.42***
Nominal effective exchange rate	t_0	-0.18***	-0.12***
	t_{-1}	-0.22***	-0.12*
	t_{-2}	-0.13**	-0.07
	long term	-0.42***	-0.24***
Prices, cost and unit values	t_0		-0.67***
	t_{-1}	-0.27**	
	t_{-2}		
	long term	-0.22**	-0.52***
R-squared		0.44	0.48
Number of observations		730	670

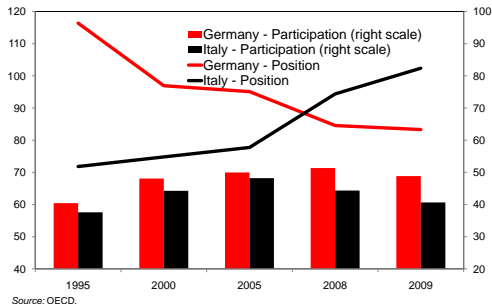
Italian exports ahead in quality improvement

(export unit values over export producer prices, index 2000=100)



- Consistent with results in Henn, Papageorgiou and Spatafora (2013)
- From 2000 to 2013, +1,6% yearly in Italy, +0,9% in Germany, +0,6% in France, +0,5% in Spain

GVC Participation and position



- GVC participation: foreign VA used in exports (upstream) plus internal VA supplied to other countries' exports (downstream), divided by total exports
- GVC position: upstream over downstream component

Quality and GVC indicators

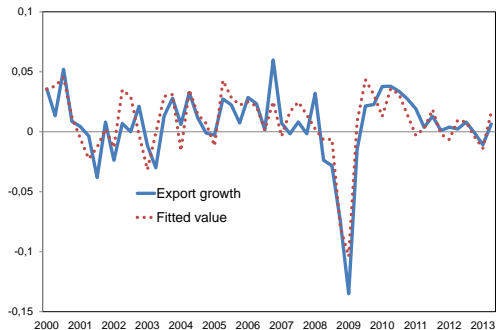
- Relative quality index wrt 36 trading partners, using producer prices as proxies for export producer prices
- GVC participation proxied by the sum of exports and imports of intermediate goods (non oil) over total exports (non oil)
- GVC position proxied by the ratio of exports over imports of intermediate goods (non oil)
- Real fixed investment captures private domestic demand and increases productive capacity (private consumption not significant)

Quality, global value chains and investment

Export growth

	Time lags		
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***
Participation 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		0.49	0.58
Number of observations		620	500

Model fit for Italy



- Average yearly impact on export growth of the factors' dynamics (in pp):
 - ULC $-0,95$, PPI $+0,10$
 - Quality $+0,27$, GVC position $+0,12$, GVC participation $-0,06$, investment $-0,06$

Summary and way forward

- Relative ULC plays a significant role in explaining export performance in the EA countries, especially in Italy
- Other factors are important: quality, GVC, investment
- Robustness checks
 - Is Italy special?
- Better indicators for quality and GVC
- Different impact on intra-EA and extra-EA exports