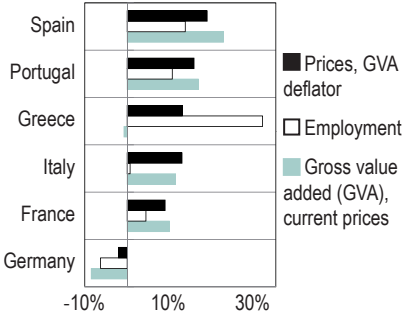# Monetary Integration and the Nontradable Sector: A European Disease?

Sophie Piton
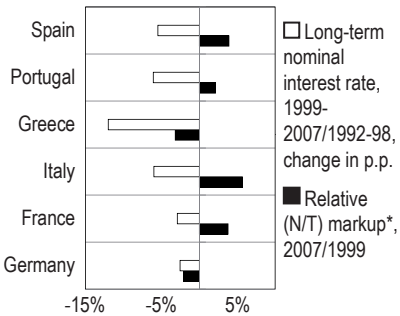CEPII & Paris School of Economics
sophie.piton@cepii.fr

Stylized facts

The drift of the nontradable (N) relative to the tradable (T) sector between 2007/1999...

...was fostered by changes in relative N/T markup and nominal interest rate

* markups are proxied by profit margins.
Source: author's calculations using Eurostat, BACI, IMF and STAN.

Contribution

Theoretical model: small open economy, combined effect of monetary and market integration on the allocation of resources across sectors.

Stylized facts: consistent measure of the hypertrophy of the nontradable sector (prices, output, employment, markup).

Literature review

Monetary integration & resource allocation:
Hypertrophy of the N sector (Giavazzi & Spaventa, 2010) increases financial fragility of small open economies (Kalantzis, 2015).

Market structures & imbalances in the EA:
T sectors have converged but N sectors remain fragmented (Estrada et *al*., 2013); product market regulations impact real exchange-rate variations within the EA (Bénassy-Quéré & Coulibaly, 2014).

Model

A two-sector small open borrowing economy

● **Two sectors:** tradable sector T (perfectly competitive), nontradable sector N (with imperfect competition).

● **Two factors of production:** labor (sectoral mobility), capital (imperfect sectoral and international mobility).
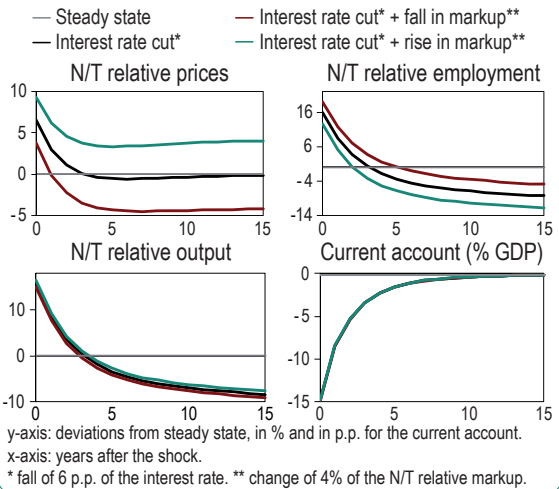
Monetary integration lowers the interest rate and shifts factors of production from T to N

● **Demand-boom**: higher T consumption sustained through imports as N goods must be produced domestically.

● Increased N/T relative prices: **lower real borrowing costs in the N sector**.

Product market deregulation in the N sector reduces the N/T relative markup and thereby the N/T relative price

● Decreased N/T relative prices: **higher real borrowing costs in the N sector** (fall in N/T relative nominal output), but **higher real consumption of N goods** (increase in N/T relative employment).

Simulations

y-axis: deviations from steady state, in % and in p.p. for the current account.
x-axis: years after the shock.
* fall of 6 p.p. of the interest rate. ** change of 4% of the N/T relative markup.

Policy implications

Since the 2008 financial crisis, in the EA periphery, increased interest rates have contributed to internal rebalancing...
N/T relative prices decrease after an increase in the interest rate, deregulation in the N sector, or an increase in the price of T goods (inflation in the EA).

...but labor reallocation happens at a high social cost as the N sector is more labor intensive than the T sector.

In Germany, deregulations in the N sector would not help to reduce the current account surplus
Reduced N/T relative markup decreases N/T relative price (unless productivity in the T sector increases) and shifts labor and capital from the T to the N sector

Further analysis

● To what extent do differences in markup and interest rate variations explain the heterogeneity across EA countries?

● What is the cost of sectoral reallocations?

● Extend theoretical model to incorporate full labor mobility.

● To what extent do variations in markups affect the sectoral allocation of resources? Firm-level data (Orbis).