

Discussion: Trade and Investment under Policy Uncertainty: Theory and Evidence

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The analysis and conclusions set forth are those of the authors and do not indicate concurrence by other members of the research staff or the Board of Governors.

Policy uncertainty matters for exports

- Uncertainty affects investment and entry into export markets
- Portuguese exports dramatically increased after EC membership
 - Applied tariffs did not change much
 - Most of the trade growth was on the extensive margin
- EC membership substantially lowered trade policy uncertainty faced by exporters

- Portuguese EC integration
 - 1960 EFTA founded (1979 Spain signs on)
 - 1986 Portugal joins the EC; Free trade by 1993
 - Other restrictions eliminated by 1996

Stylized facts

- What do we see in the data?
 - Portugal more open : 30% to 50% from 1950s to 80s
 - 1985-1992 exports grew by 90%
 - Trading firms 22% in 1986 to 26% in 1992
 - Employment by firms that trade grew by 200,000
- Strong effect on trade orientation towards preferential partners
 - Trade share increase w/ EFTA and then decline after EC
 - EC trade share 52-72% from 85-92 (47-57% ex Spain)
 - Real export growth substantial
 - Gross entry into trading 42% vs. 35% (net 28 vs. 22%)
 - Larger for preferential markets (particularly Spain)
 - See this in intensive margin for firm/destination level
 - Can't explain with gravity model

Model

- Model
 - Optimal stopping problem
 - Sunk costs create real option value of waiting
 - Direct impact of uncertainty will arrive via investment/entry rather than on the intensive margin.
 - Policy shock with arrival rate γ ($\gamma=0$ policy permanent)
 - $\tau \in [1, \tau^H]$ ad valorem tariff
- Implications:
 - Credible agreement more valuable
 - FT and uncertain is worse than FT and certainty
- Given, $\Pi_e(\tau^*, c) - K = \Pi_w(\tau^*, c)$, we can solve cutoff cost c^u , which is negatively related to $\delta\gamma$
- Estimation equation: (does $\gamma_{post} < \gamma_{pre}$)

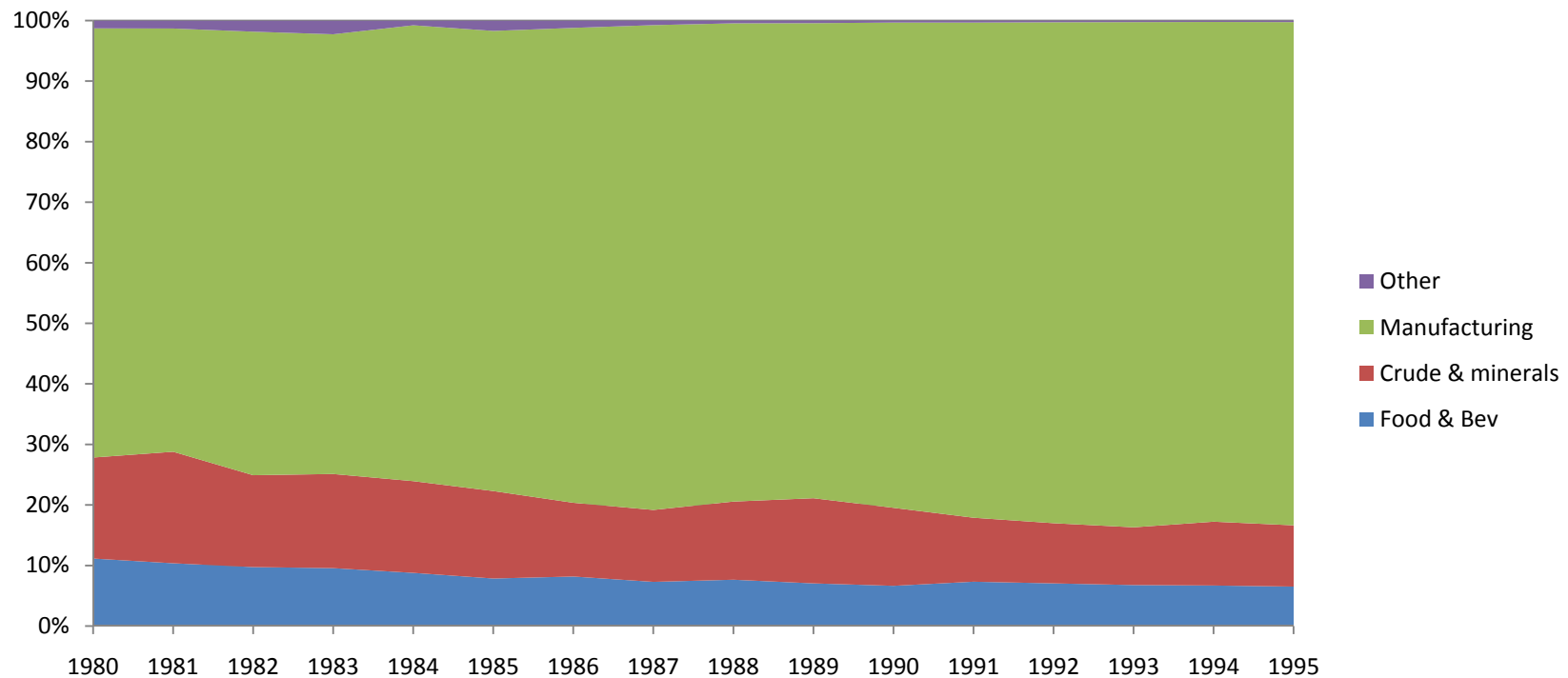
$$\Delta_t \ln n_{iV} = (b_{\gamma_{post}} - b_{\gamma_{pre}}) EC_i \frac{(\tau_{OiV}^{-\sigma} - \tau_{hiV}^{-\sigma}) / \tau_{OiV}^{-\sigma}}{\sigma - 1} + b_\tau \Delta_t \ln \tau_{iV} + a_i + a_V + \tilde{u}_{iv}$$

Data and Uncertainty Measure

- Data
 - Trade Policy sources from tariff schedules
 - Portuguese Census for transaction level trade data
 - Exports, firms exporting, firm-level exports
 - Macro variables
 - Output, prices, exchange rates
- Construct an empirical measure of uncertainty
 - τ_{hi} is pre-EC GATT tariff
 - τ_{Oi} is applied tariff before EC

Several Small Points

- True, multilateral agreements do not regulate all types of trade policy, but neither do PTAs
 - Steel safeguards might not be the best example?
 - Antidumping cases against PTAs?
- This is all manufacturing (85% share of total goods exports)

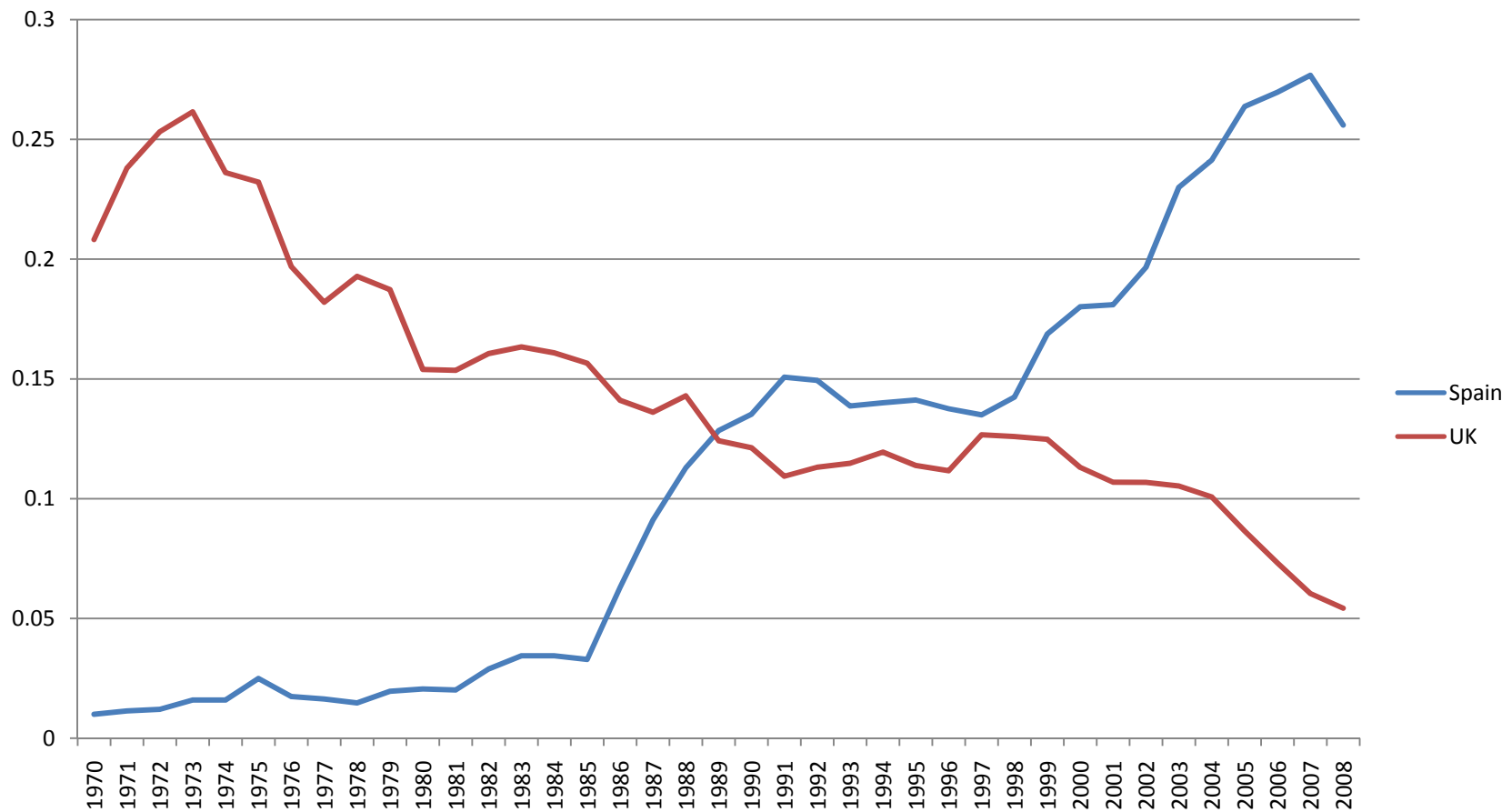


Relativity?

- Can something be said about the relative growth rates? We see exporters growing, but what about the overall economy?
- Increase fraction of firms exporting and increase employment 200,000 in exporting firms, but what about overall employment and overall firm entry?
 - Overall employment increased about 600,000
 - Could these questions be answered by linking to firm-level data?
 - Entry/exit rate differential
- What about gravity from US to EU with post 1986 dummy?

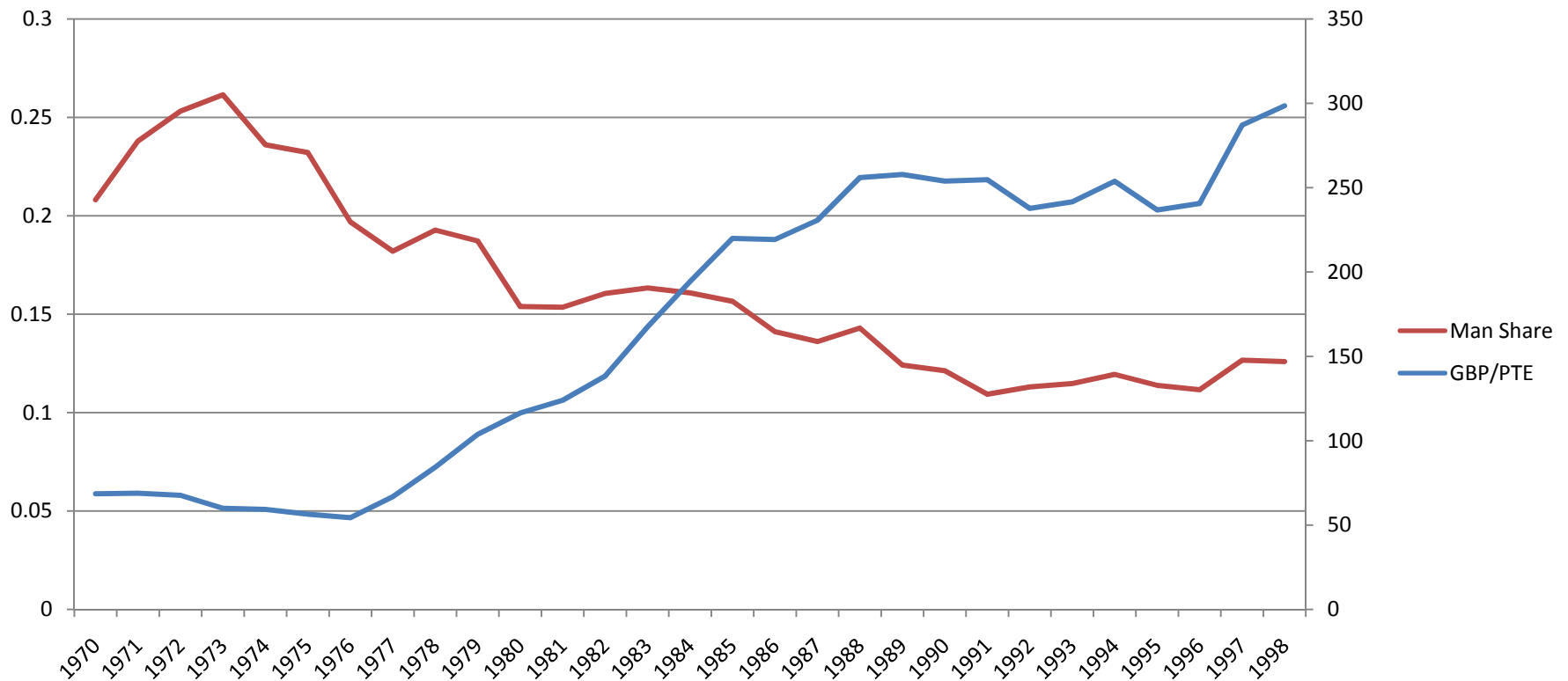
London Calling

- Is there trade diversion between UK and Spain?
 - Granted, there is also a strong case to be made for trade creation. Real trade has increased.



London Calling

- What does export firm entry growth (figure 3) look like for England? What about a decomposition of real exports into firms and exports per firm?
- Do you get the same results if you remove Spain?
- Pound appreciation



What about overall risk and development?

- Could a macroeconomic shift in risk cause similar outcomes?
 - The Overall risk in Portugal is lower.
 - Employment volatility falls close to half when comparing the periods before and after 1986.
 - Change in leadership?
 - What about EU structural funds?
 - 3% GDP and 16% of capital formation
 - Emergence of low wage export platform?
 - Trade finance? Export Promotion?
- More directions: lumpiness in trade, Spain and UK (relative uncertainty), heterogeneous beliefs, integrate with plant level data, applications to vertical specialization and imports