Is there a role for domestic demand pressure on export performance?

Paulo Soares Esteves and António Rua

Paulo Soares Esteves

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Outline of the presentation

1. **Two main motivations**

   - Economic literature

   - Recent evolution of Portuguese exports market shares

2. **Main results**

   - Domestic demand have a negative effect on export performance

   - This effect is asymmetric, being stronger when domestic demand is falling

3. **Hints for future work**

   - Relevant for other countries?

   - Try to confirm these results with micro data when available.

1. Two main motivations

1.1 Recent economic literature findings

Fact 1 - In the past, several papers have tried to include supply side effects when modelling exports, including domestic demand to explain the behaviour of exports:
Seminal references include Ball et al. (1966), Artus (1970, 1973).

(i) Inflationary pressures

(ii) Constraints on utilization capacity

(iii) Substitutability between domestic and foreign markets (exports as an excess supply function as in traditional international trade theory)

(iv) Investment oriented towards the more dynamic market

1.1 Recent economic literature findings

Fact 2 – In spite of those results, exports continue to be modelled considering side.

$$E = 1.D^* + \alpha\ RER$$

Fact 3 – Recent findings from microeconomics at firm level, for example.

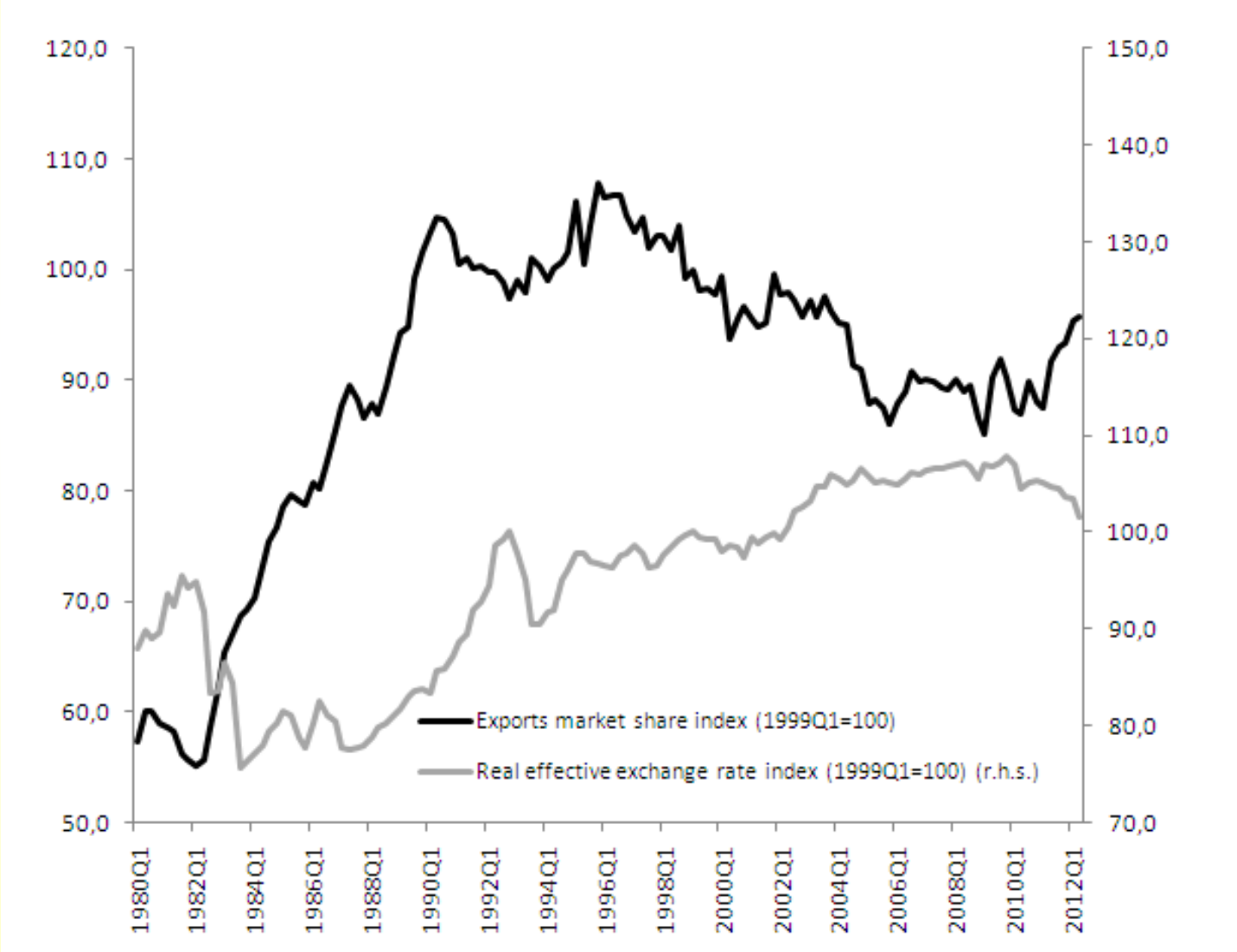
- substitution between domestic and foreign sales
[e.g. Vannoorenberghe (2012, JIE)]

- the existence of sunk costs could explain some persistent in exporter status
[Impullitti, Irarrazabal and Opromolla (2012, JIE forthcoming)]

1. Two main motivations

1.2 Recent evolution of Portuguese exports market shares

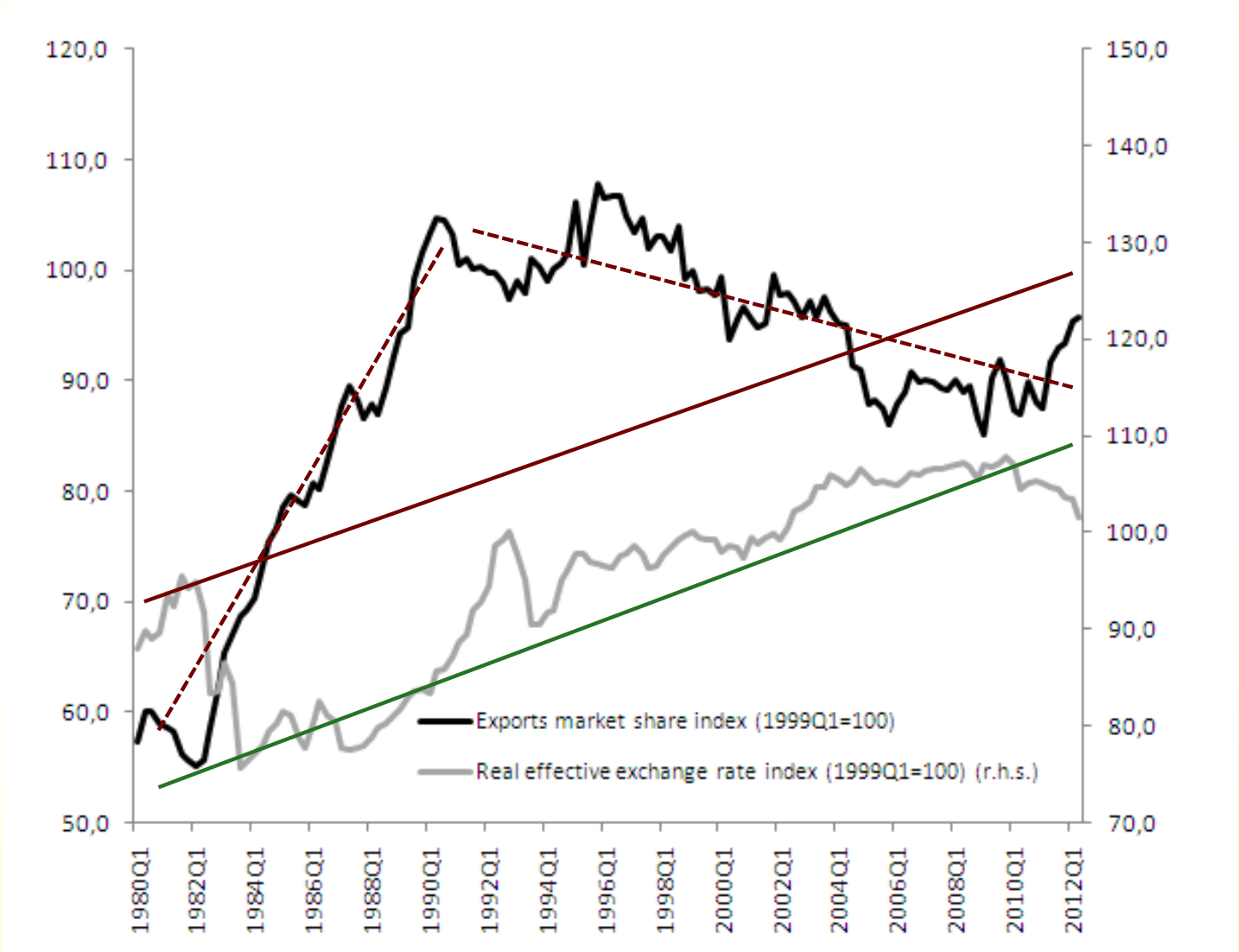
(i) A look at the Portuguese export market shares over the last 30 years



1. Two main motivations

1.2 Recent evolution of Portuguese exports market shares

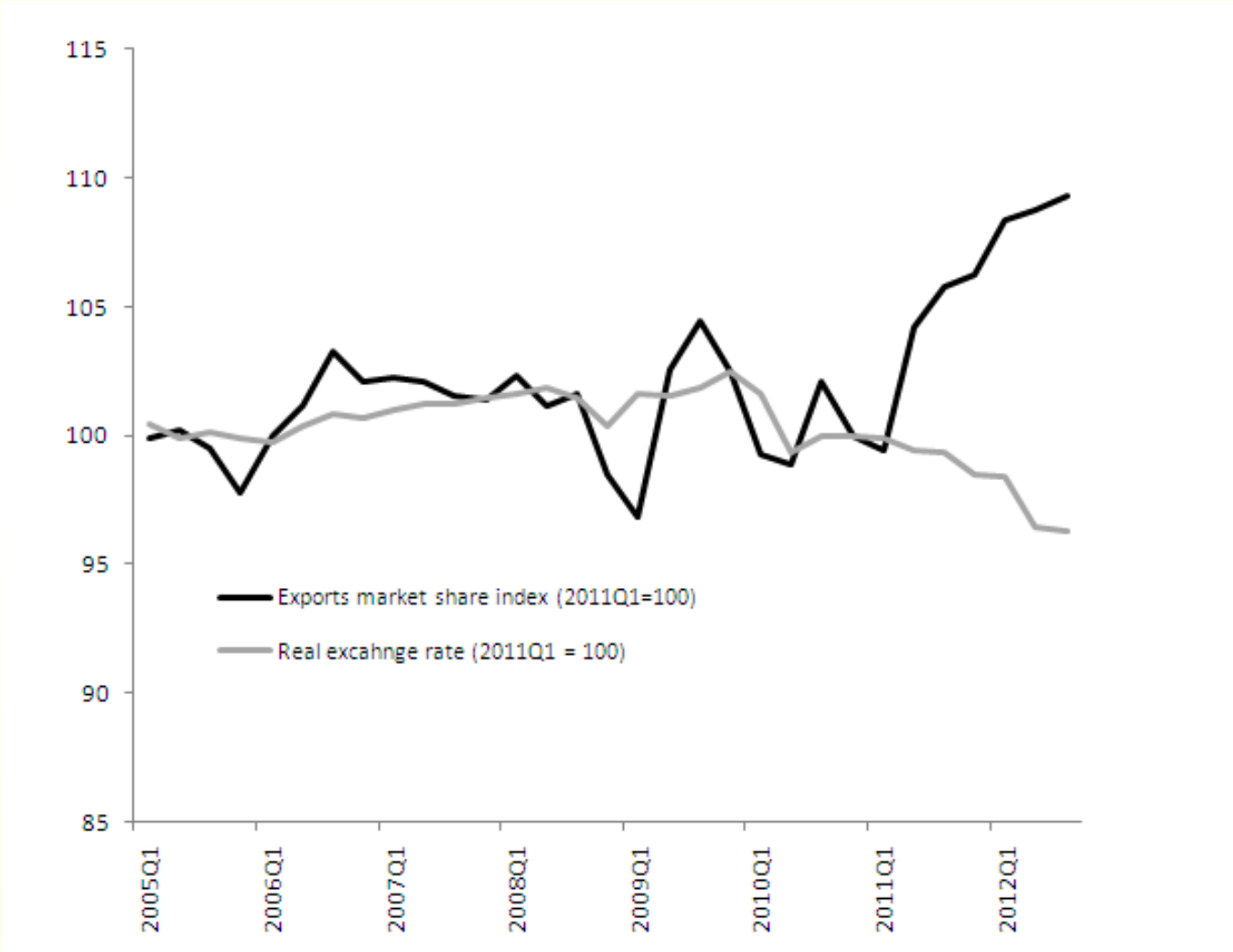
(ii) Difficult to define a long-run relation between export market share and real exchange rate



1. Two main motivations

1.2 Recent evolution of Portuguese exports market shares

(iii) Difficult to understand the gains of market shares that are going on



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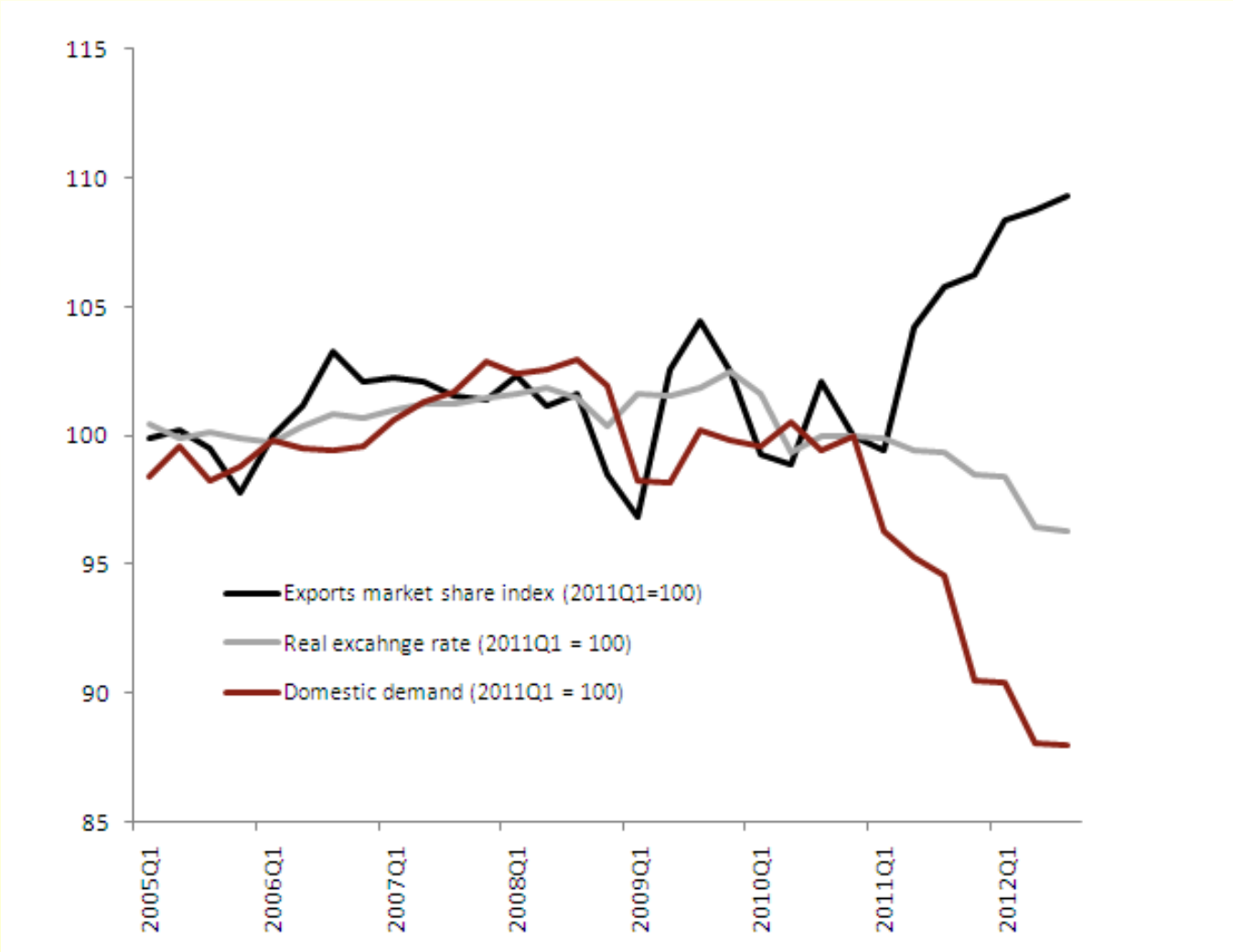

2. Main results

2.1 Error correction mechanism models

Symmetric effects

$$\begin{aligned}\Delta X_t - \Delta D_t^* = {} & \underset{(3.61)}{0.79} + \underset{(4.16)}{0.29}\Delta D_{t-4}^* - \underset{(-2.12)}{0.36}\,\Delta DD_{t-1} + \\ & - \underset{(-2.45)}{0.32}\,\Delta DD_{t-2} - \underset{(-2.21)}{0.036}\left(X_{t-1} - D_{t-1}^*\right) + \\ & - \underset{(-3.24)}{0.10}\,E_{t-1} + \underset{(1.07)}{0.0073}\ln Trend\end{aligned}$$

Asymetric effects:

$$\Delta DD_t = \begin{cases}\Delta DD_t^+ \text{ if } \Delta DD_t > 0 \\ \Delta DD_t^- \text{ if } \Delta DD_t < 0\end{cases}$$

$$\begin{aligned}\Delta X_t - \Delta D_t^* = {} & \underset{(3.09)}{0.75} + \underset{(4.56)}{0.29}\Delta D_{t-4}^* - \underset{(-2.51)}{0.67}\,\Delta DD_{t-1}^- + \\ & - \underset{(-2.26)}{0.50}\,\Delta DD_{t-2}^- - \underset{(-1.37)}{0.31}\,\Delta DD_{t-2}^+ + \\ & - \underset{(-2.10)}{0.038}\left(X_{t-1} - D_{t-1}^*\right) - \underset{(-2.42)}{0.091}\,E_{t-1} + \\ & + \underset{(0.70)}{0.0057}\ln Trend\end{aligned}$$

2. Main results

2.2 First differences models

Symmetric effects

$$\begin{aligned}\Delta X_t - \Delta D_t^* &= \underset{(2.02)}{0.0044} + \underset{(1.94)}{0.15}\Delta X_{t-2} + \underset{(2.18)}{0.14}\Delta X_{t-3} + \\ &\quad - \underset{(-4.54)}{0.53}\ \Delta D_{t-2}^* + \underset{(3.61)}{0.29}\Delta D_{t-4}^* + \\ &\quad - \underset{(-1.29)}{0.090}\Delta E_{t-4} - \underset{(-2.24)}{0.29}\ \Delta DD_{t-1}\end{aligned}$$

Asymetric effects:

$$\begin{aligned}\Delta X_t - \Delta D_t^* &= \underset{(0.55)}{0.0019} + \underset{(2.12)}{0.16}\Delta X_{t-2} + \underset{(2.14)}{0.13}\Delta X_{t-3} + \\ &\quad - \underset{(-4.64)}{0.53}\ \Delta D_{t-2}^* + \underset{(3.46)}{0.28}\Delta D_{t-4}^* + \\ &\quad - \underset{(-1.33)}{0.096}\Delta E_{t-4} - \underset{(-2.92)}{0.60}\ \Delta DD_{t-1}^- + \\ &\quad - \underset{(-0.33)}{0.079}\Delta DD_{t-1}^+\end{aligned}$$

2.3 Stability analysis

i) Results are basically the same when the recent period is excluded.

ii) Better results when selecting a sample from 1990 onwards (results will be included in the next version of the paper).

- Stronger and more significant effect of domestic demand.
- Stronger asymmetry.
- Stronger long-run relation, without be necessary to include the log Trend deterministic variable.

3. Hints for future work

- Try to evaluate this type of effects for other countries, in particular for economies under adjustment where domestic demand is falling significantly

- Try to validate these results with micro data when possible. Three questions:

  (i) Are firms increasing export intensity?

  (ii) Are more firms exporting?

  (ii) Are new firms more oriented to foreign markets?