



Industry Specific REER in CEE

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Content

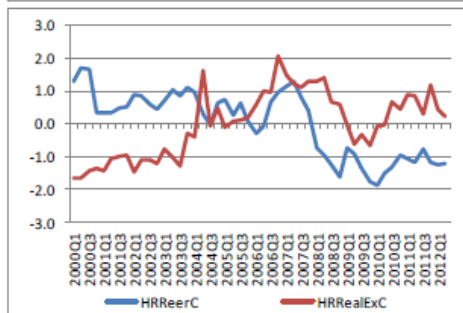
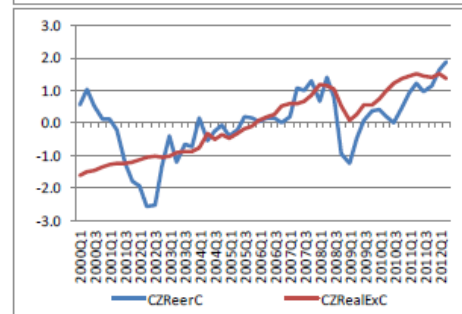
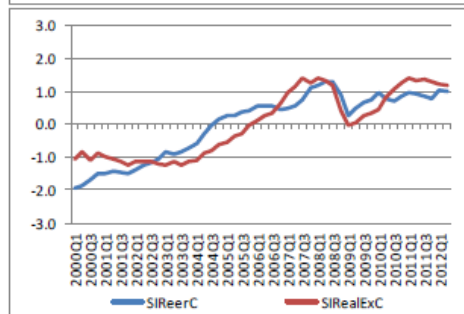
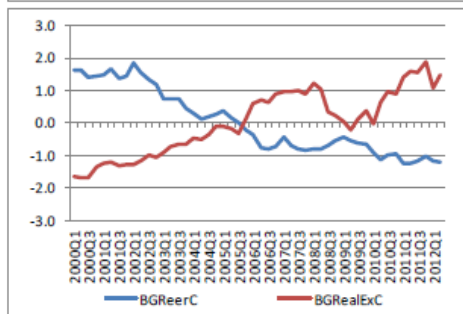
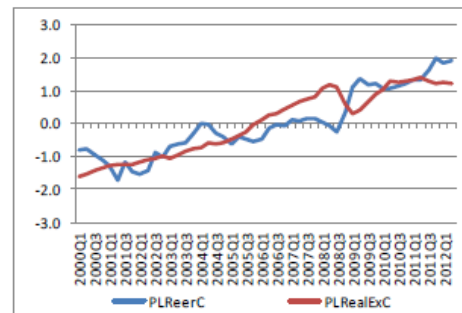
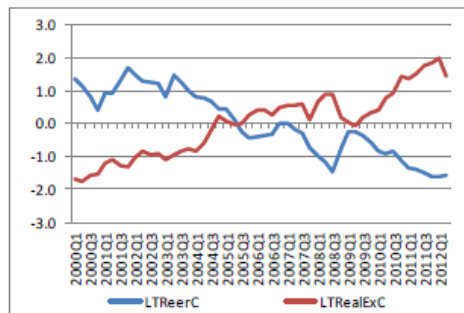
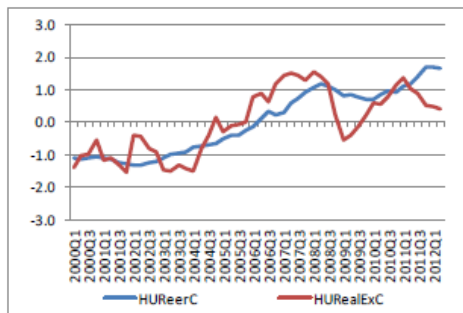
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Introduction

- ❑ Many studies examine the extent to which aggregate REER changes affect the economic performance
- ❑ Focus on aggregate indicator can be misleading because it ignores specific characteristics among industries
- ❑ In some CEE countries aggregate REER and exports movements are counter-intuitive
- ❑ Aim of the paper/exercise:
 - To construct the REER at industry level for selected CEE countries
 - To examine if such indices could provide additional information on the dynamics of inter-country and intra-industry competitiveness

Aggregate REER and exports

C Manufacturing



Literature

□ Goldberg (2004)

- Constructs industry-specific real exchange rate indexes for the US
- Argues that REER at industry level explain the relationship between exchange rate and firm profitability in US better than REER at aggregate level.

□ Lee and Yi (2005)

- Measure Korea's real effective exchange rates at industry level.
- Analyze the influence of REER on export volume, finding substantially different relationships across industries.

□ Alexandre et al. (2009)

- Compute and compare aggregate and sector specific exchange rates for Portuguese economy.
- Find that sector specific exchange rates are strongly correlated with aggregate indices, but much more informative in explaining changes in employment.

Construction of the real effective exchange rates

- Trade data basis for weights calculations
 - data on trade in manufacturing industry
- Choice of trading partners to be included in the indices
 - relative importance of the respective countries as trading partners
 - availability of the data
 - 27 European Union member countries
- Type of weighting scheme
 - export trade weights
- Choice of deflators to obtain the real indices
 - producer price indices

The relationship between REERs and exports at industry level

□ Model and data

$$\Delta X_t^i = \alpha + \beta_1 \Delta REER_t^i + \beta_2 \Delta REER_{t-1}^i + \dots + \beta_5 \Delta REER_{t-4}^i + \beta_6 \Delta Y_t^* + \varepsilon_t$$

where:

Δ ... first difference in logarithms of all variables

X ... the real value of domestic exports

$REER$... the real effective exchange rate,

Y^* ... the real gross domestic product in the European Union-27

i ... 1,2....18 are 17 specific manufacturing industries and total manufacturing industry

t ... the quarters from 2000Q1 to 2012Q2

ε ... error term

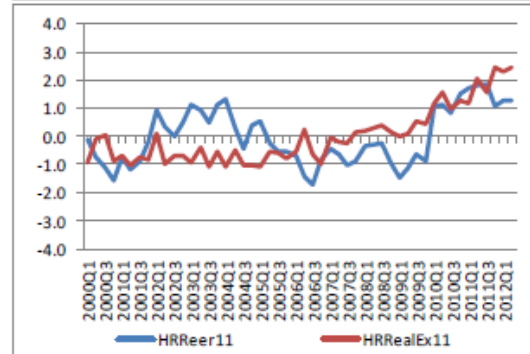
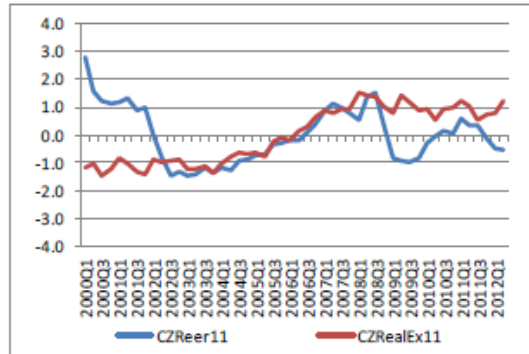
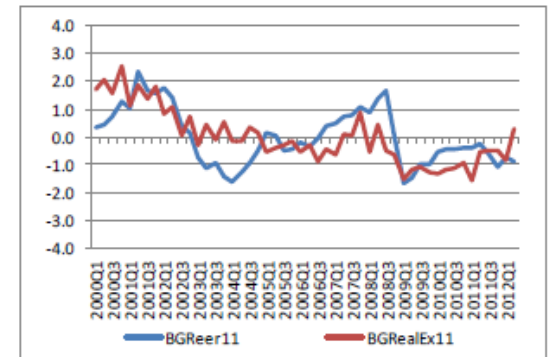
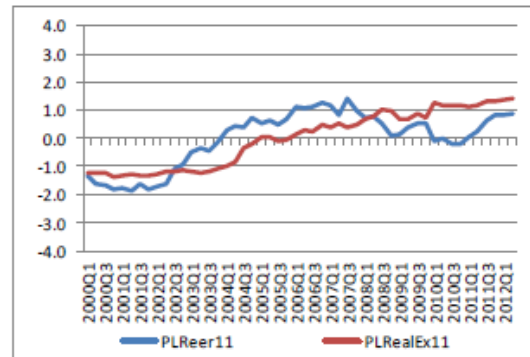
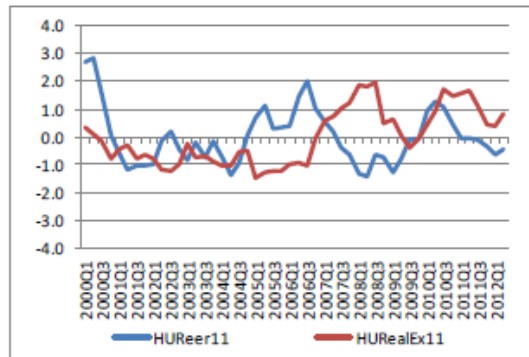
The relationship between REERs and exports at industry level

□ Estimation results

- At the aggregate level, the REER seems not to be relevant in explaining the changes in real exports
- Statistically significant and positive influence of REER on real export exists in some industries, particularly in traditional, low-technology industries
- This is not the case in in high and medium-high-technology manufacturing industries

Industry specific REER and exports

11 Manufacture of beverages



Conclusion

- The REER indices at industry level seems to be more informative than those on aggregate level
 - Divergent movements between industry specific REER indices
 - Econometrical analysis suggests that the results for some industries are consistent with the theory, especially in traditional, low-technology industries
- Need for further research
 - Improve REER indices construction
 - Expand analysis to other countries
 - Other econometrical techniques to examine the empirical importance of such indices
- The real effective exchange rates only relate to one aspect of international competitiveness

Thank you!