

# **Exchange rate undervaluation, economic institutions and export performance: evidence from firm-level data**

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Foreign exchange policy and sustainable development in low-income countries  
Banque de France-Ferdi, Paris, 14 February 2019

# The paper

Firm-level data for 4 countries from 2003 (or 2006, or 2008) to 2010.

Impact of REER undervaluation on intensive and extensive margins of exports.

## Results:

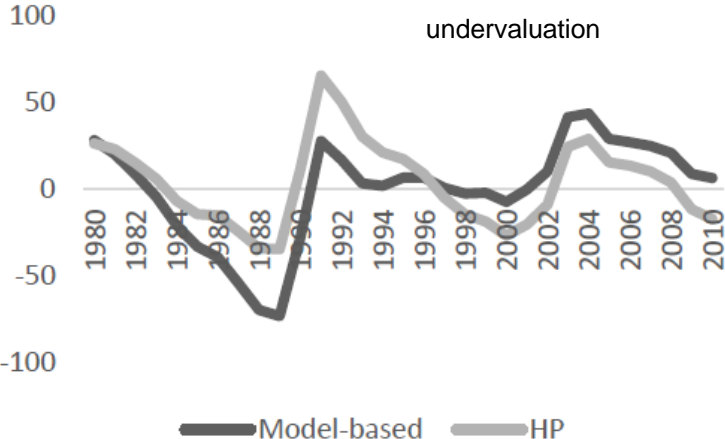
- Intensive margin: positive but non-linear impact of undervaluation; undervaluation can act as a substitute for bad institutions (time to export)
- Number of markets: positive, non-linear impact of undervaluation for large and medium firms; positive effect of time to export for small firms.
- Number of products: no impact of time to export.

**(i) is time to export a fixed or a variable variable cost?**

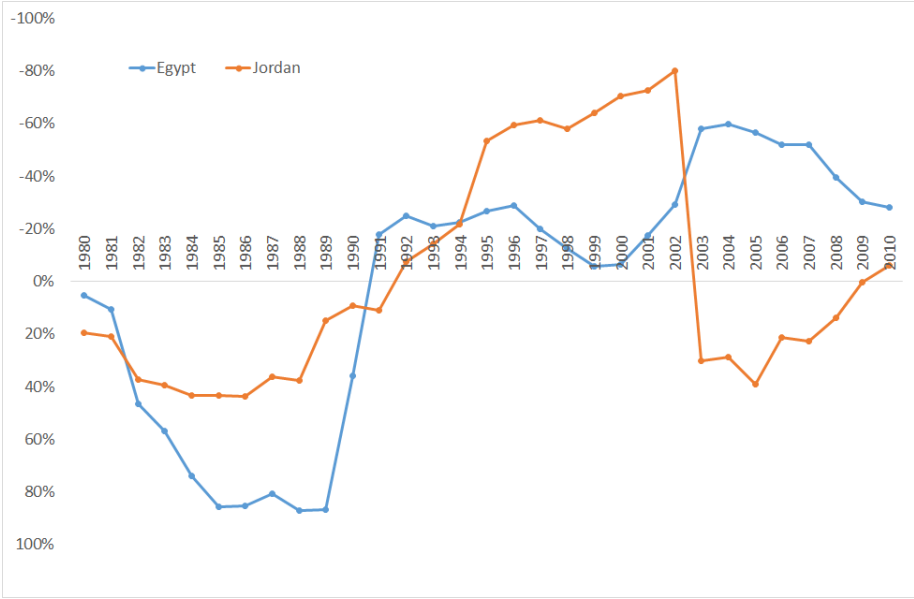
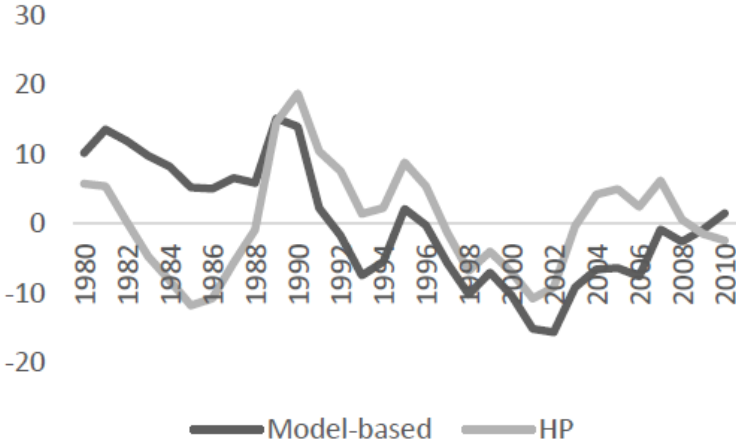
**(ii) impact of REER on the number of firms?**

# Measure of undervaluation

(a) Egypt



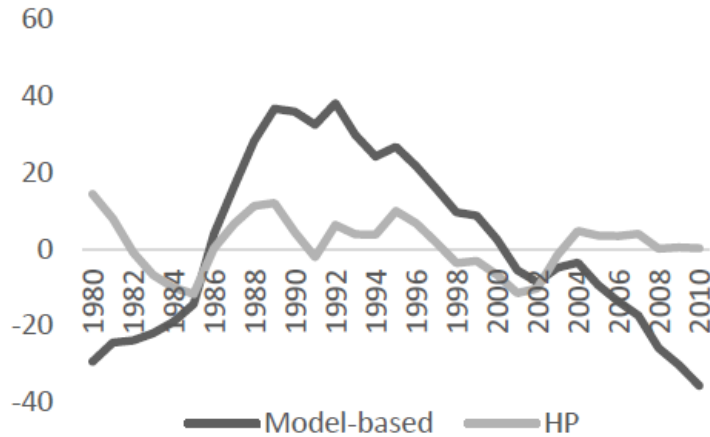
(b) Jordan



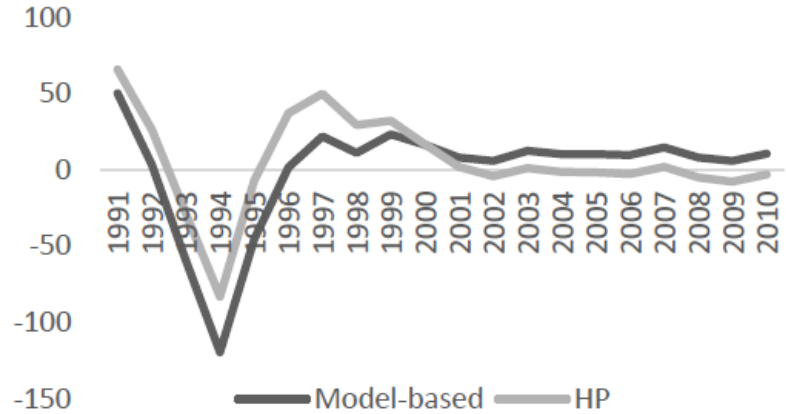
Source: CEPII-EQchange.

# Measure of undervaluation

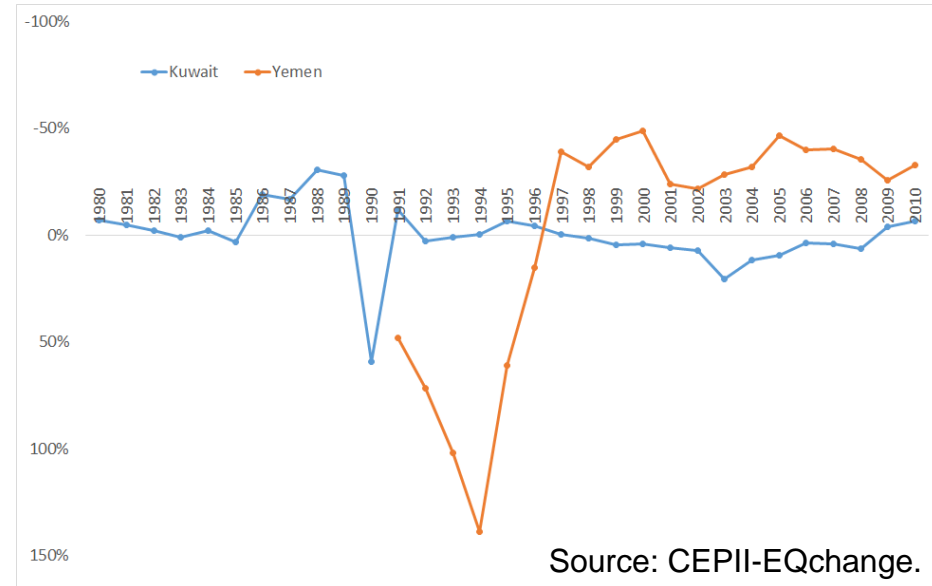
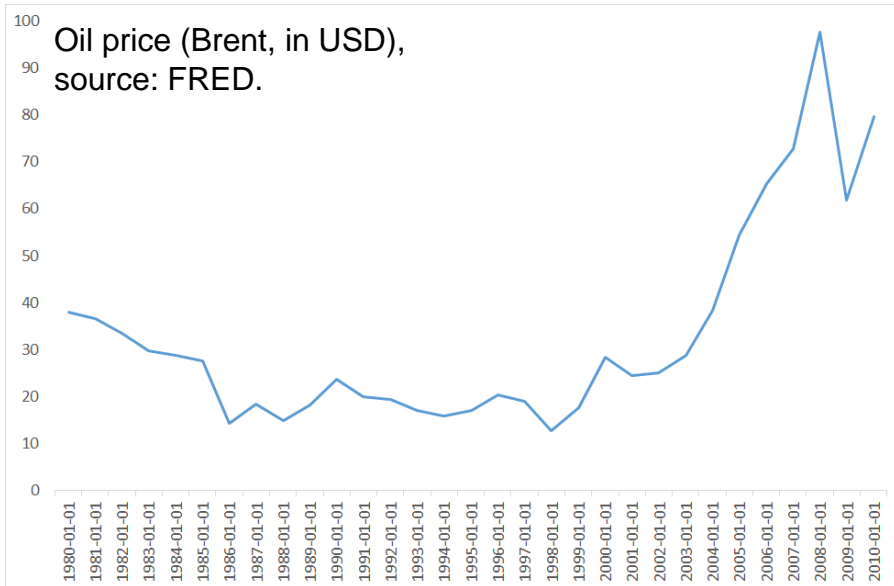
(c) Kuwait



(d) Yemen



Is the REER (based on CPI) a good proxy for competitiveness in these countries?



Source: CEPII-EQchange.

# Econometric methodology

$$\begin{aligned} \ln(\text{ExpMRG}_{fijt}) = & \beta_0 + \beta_1 \ln(\text{GDPcap}_{it}) + \beta_2 \ln(\text{Pop}_{it}) + \beta_3 \ln(\text{GDPcap}_{jt}) + \beta_4 \ln(\text{Pop}_{jt}) + \beta_5 X_{ij} \\ & + \beta_6 (\text{Time to exp}_{it}) + \beta_7 \text{Underval}_{-1} + \beta_8 (\text{Underval}_{-1})^2 + \gamma f + \varepsilon_{fijt} \end{aligned} \quad (2)$$

→ Deviations of firm-level exports in the time and market dimensions

## Questions:

- Time fixed effects? (2009!)  $ij$  fixed effects (rather than  $X_{ij}$  controls)?
- Why both GDP per capita and population?
- Is GDPcap in current dollars?
- No time-varying explanatory variable at firm level?
- No  $ijt$  control? (bilateral RER, import tariffs)
- $jt$  controls could be replaced by  $jt$  fixed effects
- Extensive margins: what when  $\text{NumDest}_{fijt}$  or  $\text{NumProd}_{fijt} = 0$ ? PPML? Probit model?

# Orders of magnitude

(intensive margin, model 1)

## Impact of undervaluation

- All: 10% undervaluation  $\rightarrow$  +0.17% on exports; 50% undervaluation  $\rightarrow$  0.4%
- Small: 10% undervaluation  $\rightarrow$  +0.34% on exports; 50% undervaluation  $\rightarrow$  1.69%

$\rightarrow$  Non-monotonic?

$\rightarrow$  Trade-off with purchasing power?

## Impact of institutions (days to export)

- All: 10% additional days to export (+2)  $\rightarrow$  -5.7% on exports
- Small: 10% additional days  $\rightarrow$  -3.61% on exports

$\rightarrow$  Can undervaluation substitute for weak institutions?