

Capital Flows, Cost Competitiveness and the Role of Credit: Heterogeneity Matters

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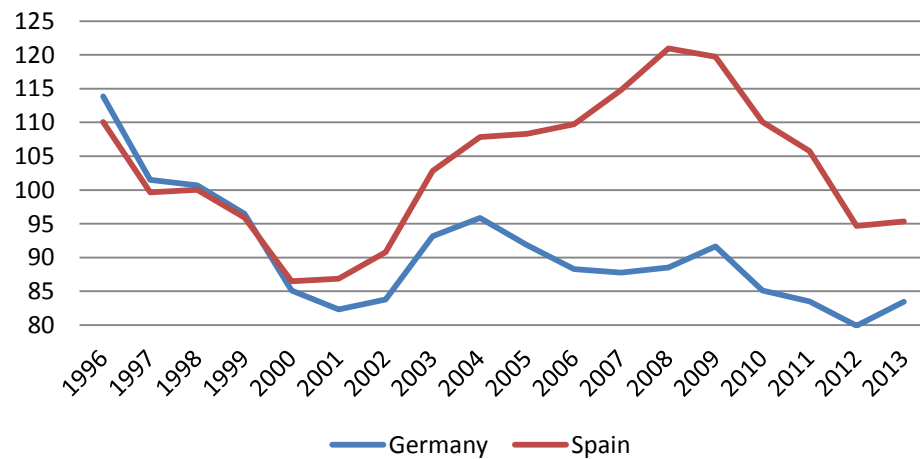
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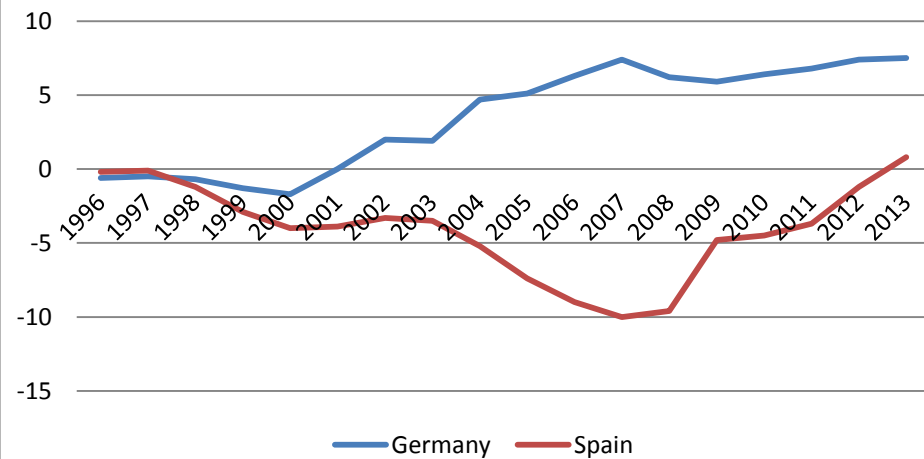
Note: Views expressed in this presentation are those of the authors and do not necessarily reflect official positions of De Nederlandsche Bank nor Eesti Pank.

The story is obvious...

Real Effective Exchange Rate



Current account (% GDP)



...competitiveness issues need to be solved...

- Competitiveness problem in individual countries => financial imbalances such as current account deficits
- Belke & Dreger (2013): "Current account imbalances in the euro area: catching up or competitiveness?", RoIE
- Zemanek, Belke & Schnabl (2009): "Current account imbalances and structural adjustment in the euro area: how to rebalance competitiveness", IZA

[Both reduced form panel estimations]

...or maybe not

- Financial imbalances (external and internal) => competitiveness problem => great sensitivity to shocks from global financial crisis
- Sanchez & Varoudakis (2013) : "Growth and competitiveness as factors of Eurozone external imbalances", WB
- Gabrisch & Staehr (2014): "The Euro Plus Pact. Cost competitiveness and external capital flows in the EU Countries", JCMS

[Panel VARs, Granger causality]

The two stories

- Potentially very different explanations of pre-crisis boom and the crisis outcome

- Potentially important for choice of policy instruments

+

“Does one size fit all?”

- We need some model structure to learn about transmission mechanisms that can inform policy

- No prejudice on REER \Rightarrow CA or CA \Rightarrow REER

This paper

- Investigate the effect of a current account shock on the real effective exchange rate and vice versa with a role for demand and credit
 - See competitiveness (REER) and imbalances as endogenous variables
- Conduct a data driven exercise in four variable VAR model
- Ensure the data is trend and season free
- Analyse 11 euro area countries in a panel and at the individual country level
- Data at the quarterly frequency from 1995:Q1- 2014:Q2
- Results panel model
 - CA shock: no clear effect, some evidence negative at short horizon
 - REER shock: no clear effect, some evidence negative at longer horizon
- Individual country level → heterogeneity
 - E.g. Spain shows very different dynamics than Germany
 - Effects are much larger than the panel model suggests

Variables and data transformation

Four endogenous variables

- Real effective exchange rate (cost competitiveness)
- Current account (capital flows)
- GDP growth
- Credit growth

Quarterly data from 1995:Q1-2013:Q4

Nonstationarity, so

1. HP filter
2. Seasonal adjustment

Approach common in business cycle literature

No obvious theory that justify cointegrating relationships in a VECM

Empirical methodology

VAR model

- Lag selection, four lags (one year)
- A-theoretical and data driven
- Generalized impulse response functions (GIRF)
 - No obvious ordering from theory (many possibilities)
 - Ordering does not matter in GIRFs
 - Cholesky decomposition leads to broadly similar results

Model estimated as:

- Panel with country fixed effects
- Country-specific models

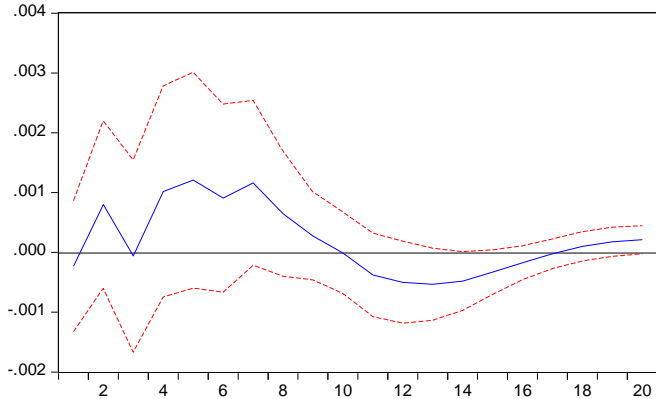
Specification tests reasonably well in individual country models, but reject panel model

Explanatory power quite high in many regressions

Panel results

CA shock, REER response

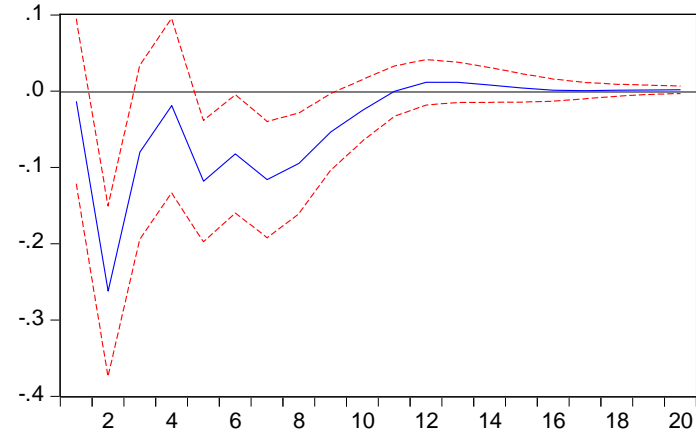
Response of LREERGAP_ULC_HP1600_SA to Generalized One S.D. CABGAP_HP1600_SA Innovation



Credit shock

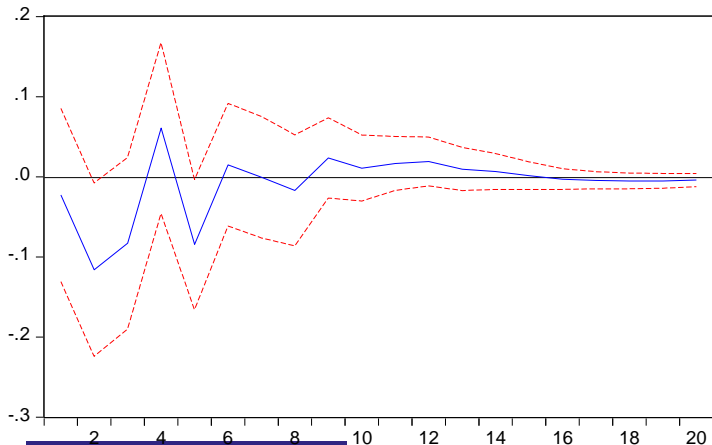
Response to Generalized One S.D. Innovations ± 2 S.E.

Response of CABGAP_HP1600_SA to LCREDIT_REAL_HP1600_SA

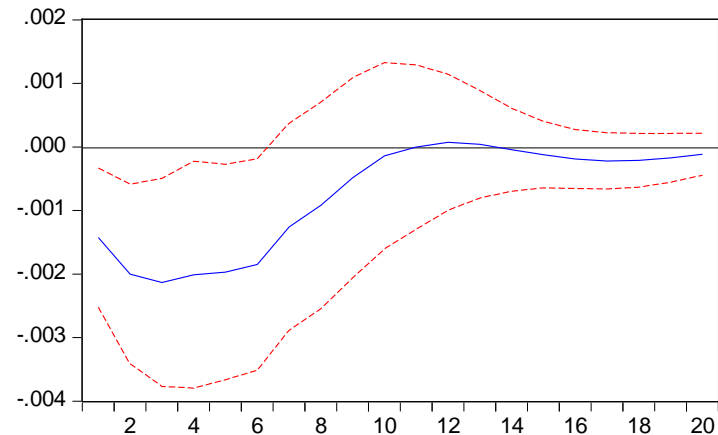


REER shock, CA response

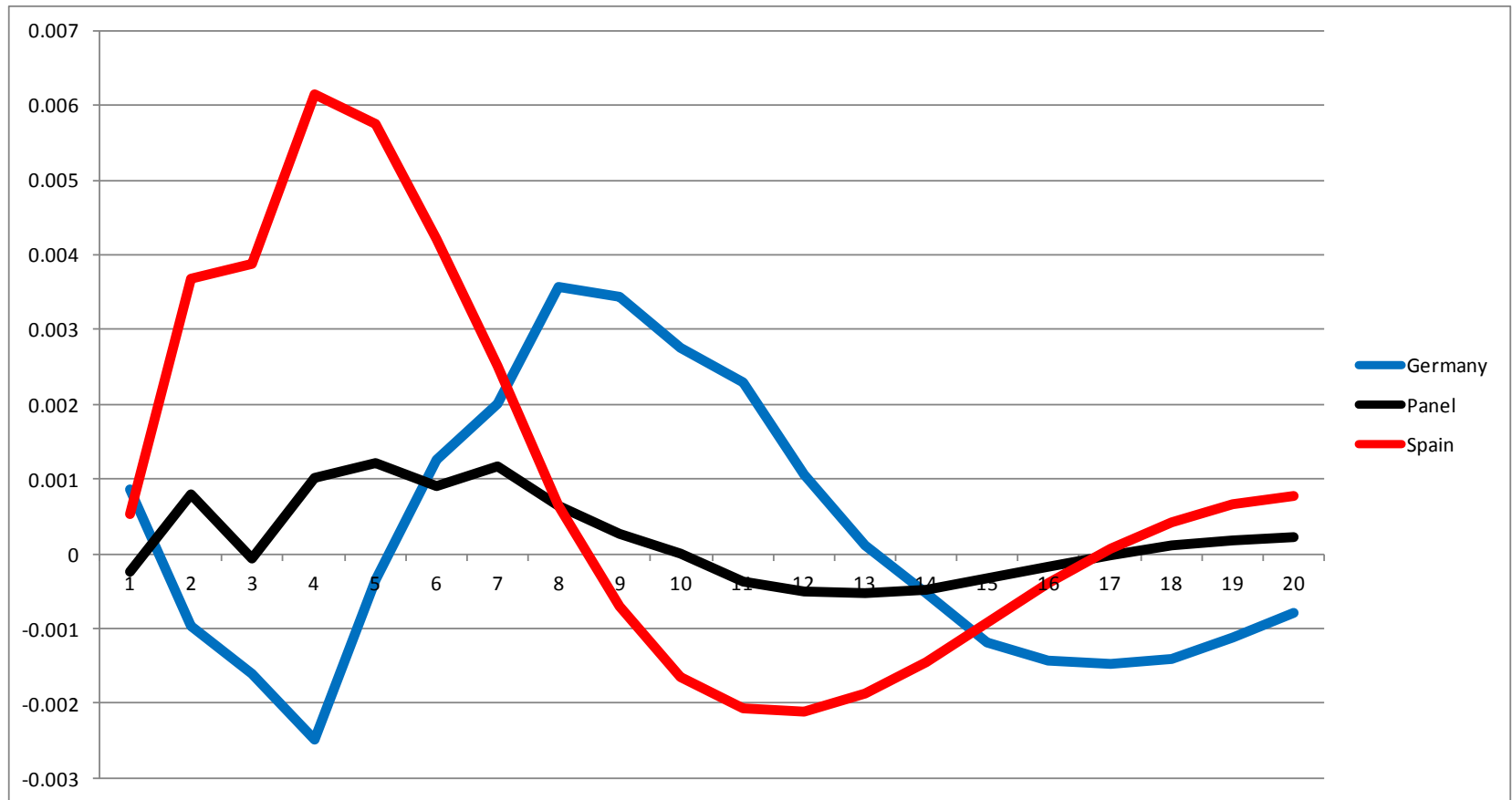
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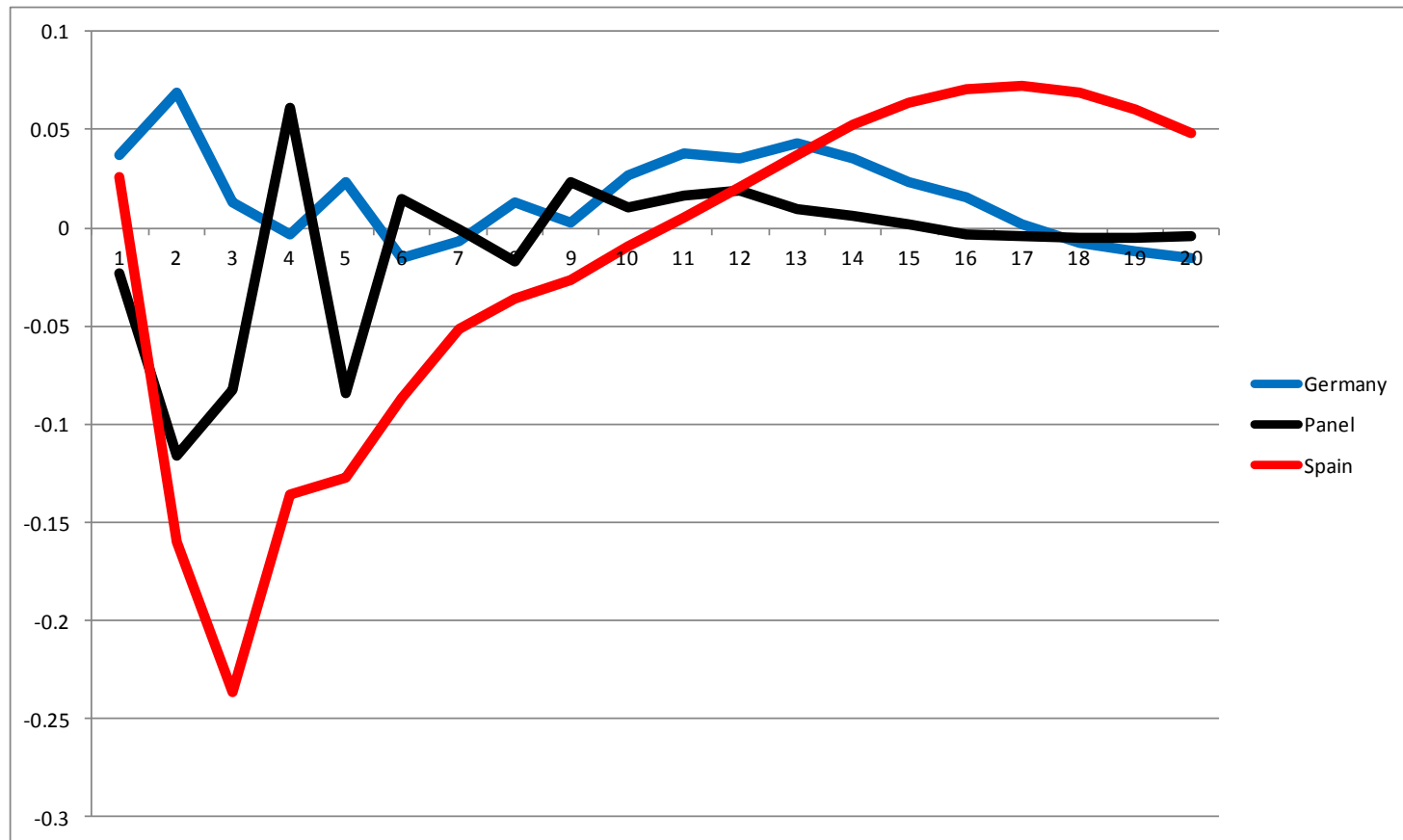
Response of LREERGAP_ULC_HP1600_SA to LCREDIT_REAL_HP1600_SA



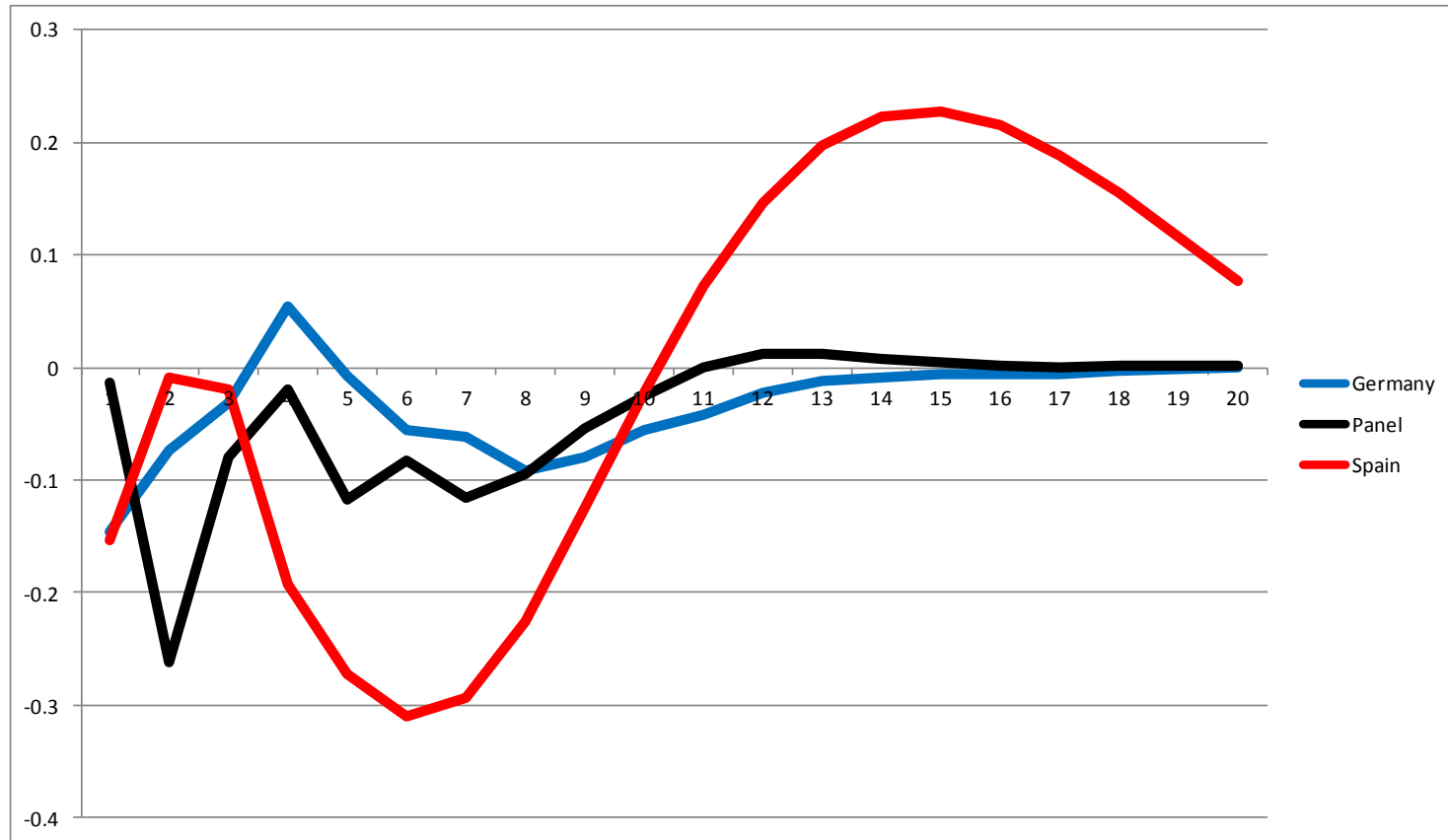
Current account shock => REER response



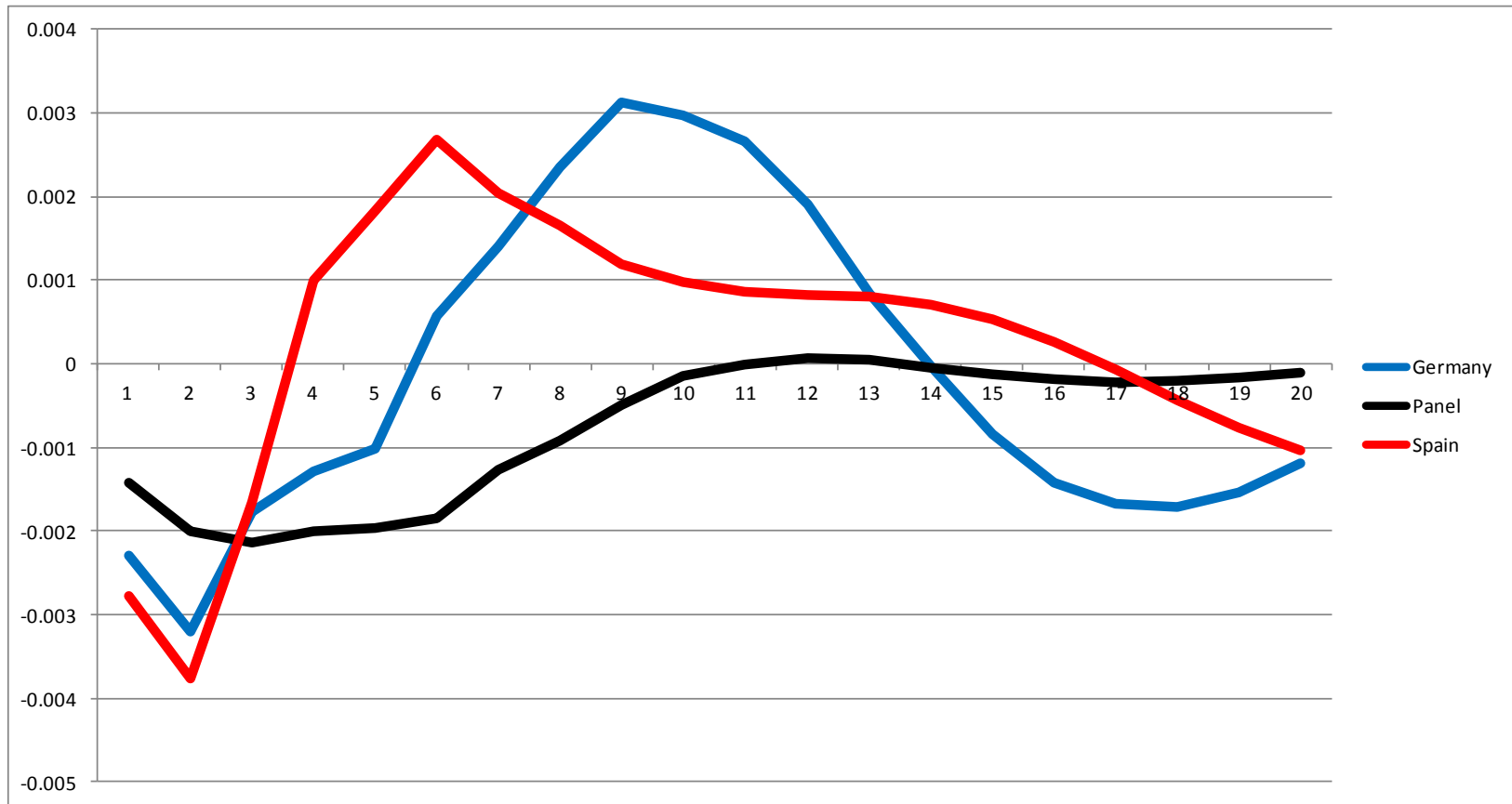
REER shock => Current account response



Credit shock => Current account response

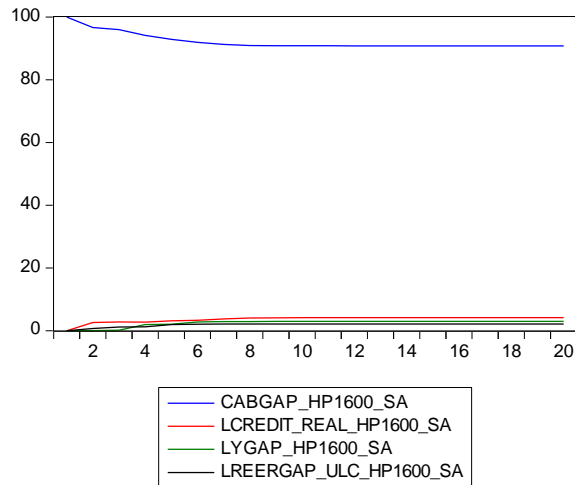


Credit shock => REER response

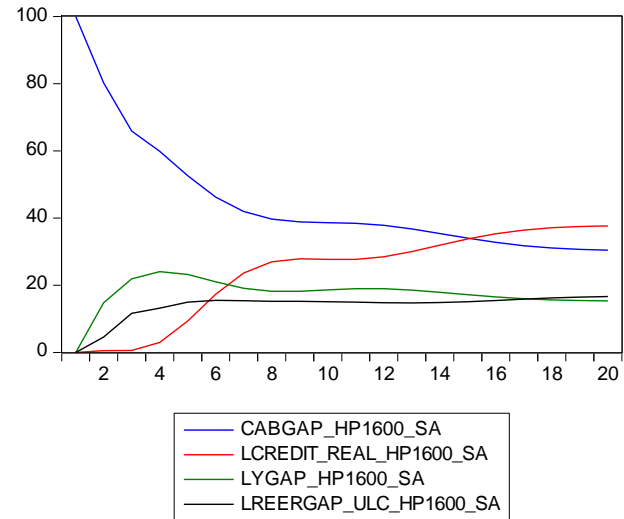


Variance decomposition panel (l) & Spain (r)

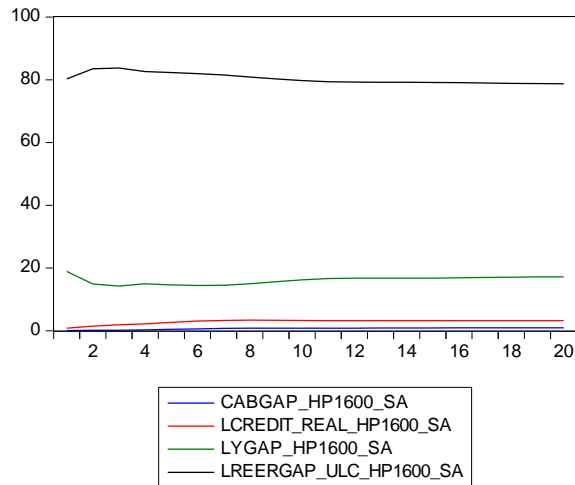
Variance Decomposition of CABGAP_HP1600_SA



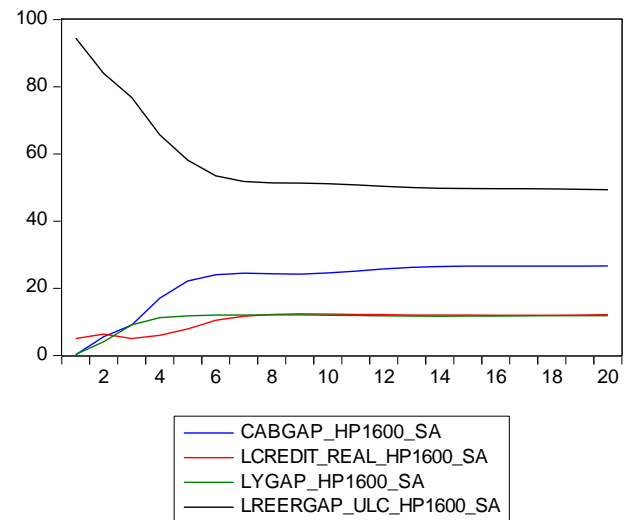
Variance Decomposition of CABGAP_HP1600_SA



Variance Decomposition of LREERGAP_ULC_HP1600_SA



Variance Decomposition of LREERGAP_ULC_HP1600_SA



Room for discussion

- Reasonable approach
- Interpretation of results?
- Ideally we include new CompNet indicators in our model...but is there a new indicator available at the quarterly frequency?
- How to place this study within CompNet research