

Discussion of

“Globalization and Inflation: Structural Evidence from a
Time Varying VAR Approach”
(F. Bianchi, A. Civelli)

by Sandra Eickmeier (Deutsche Bundesbank)

SNB, August 2013

Scope

- Authors test the „Globalization Hypothesis“ (GH)
 - Domestic output gap (yd) less important for inflation with globalization.
 - Foreign output gap (yf) and import prices more important.
- ... by fitting (country-specific) time-varying param VARs to domestic inflation, yd , yf , the exchange rate and the short-term interest rate in 18 countries over 1971-2006.

The three parts of the analysis and findings

- (i) Reduced-form coeffs → no support for GH
- (ii) IRFs of inflation to yd and yf shocks → Positive effects on inflation, but responses to both shocks have become smaller over time. → partial support for GH
- Not surprising, as effects of yd and yf on inflation are determined by many things. Therefore:
- (iii) Panel regressions of IRFs of inflation to yd and yf shocks on trade openness, „economic integration“/“business cycle coordination“, fixed effects and a time trend. → $corr$ directly influences IRFs positively; trade openness matters only for countries with large $corr$. → partial support for GH

Contributions / general assessment

- Rich study
 - time and the cross-section dimensions,
 - many countries (VAR for 18 advanced and emerging countries, weights for 50 countries to form foreign y^f)
- Analysis more structural than reduced-form Phillips curve-based studies (e.g. Borio/Filardo (2007)).
- Overall sensible choices (identification scheme, variables included in the VAR)
- Very well written, already polished

Overview of comments

- „Economic integration“/“business cycle coordination“ measure *corr*
- Some modeling aspects
- Minor comments

„Economic integration“ / “business cycle coordination“ measure

- Authors regress IRFs of inflation to y_d and y_f shocks on trade openness and $corr$.
- $corr$ measured as correlation between VAR residuals of the y_d and y_f equations.
- For most countries, $corr$ is large at the beginning of the sample period and declines over time.

„Economic integration“ / „business cycle coordination“ measure cont.

- Interpretation of *corr*?
- (i) Spillovers within a quarter
 - How correlated with trade openness?
 - Financial integration, which leads to faster spillovers?
 - (Forward-looking) macro policies and other structural characteristics of the economy? → Not necessarily related to „economic integration“ / „business cycle coordination“
- (ii) Relative occurrence of common vs. idiosyncratic shocks
 - → Not necessarily related to „economic integration“ / „business cycle coordination“

„Economic integration“ / „business cycle coordination“ measure cont.

- Why does *corr* decline over time? What does it reflect?
- (i) Trade leads to more business cycle correl., less clear for fin. integration (e.g. Baxter/Kouparitsas (JME, 2005), Kose et al. (AER, 2003), Kalemli-Ozcan et al. (JoF, forthc)).
 - → Could replace *corr* by fin. integration measure in panel regression
- (ii) Fewer common relative to idiosyncratic shocks?
Kose *et al.* (JIE, 2005): 1973-1985 „common shock“ period; since 1986 „globalization“ period
 - → Do changes in *corr* coincide with specific common/idios. shocks?
 - → Include common shock measures (e.g. oil supply shocks) in VAR or panel regression
- (iii) Other changes?

„Economic integration“/“business cycle coordination“ measure cont.

- *corr* is estimated.
 - → Could this be taken into account in the panel regressions?

Some modeling aspects

- Could you save on degrees of freedom?
 - Reduced-form coeffs (figures 4, 5) are often not significant or do not vary significantly over time. Why not testing and setting coeffs to 0 or assuming that they are constant?
 - Why not assuming that yf is exog. at least for some countries?
 - Panel VAR with tv params, assuming either a panel-type hierarchical prior or a factor structure for the coefficients (survey by Canova/Ciccarelli (Adv. in Econometrics, forthc.))
- This would allow you to extend the model
 - by other foreign variables (e.g. foreign MP rate), f.ex. through an exogeneous block. → more consistency across models/countries
 - by domestic and foreign unit labor costs. → Eickmeier/Pijnenburg (OBES, 2013): global ULCs (capturing supply-side global labor mkt and productiv. developments) matter more for inflation than yf .

Some modeling aspects cont.

- How helpful is the theoretical model (equation (2))?
 - Theoretical restrictions on the params are not imposed in the empirical model.
 - Coeffs depend on home bias, Calvo price setting param, intertemp. elasticity of substitution, labor supply elasticity in the utility function of the consumer, etc. (footnote 9). These are not taken into account explicitly in panel regression analysis later.

Minor comments

- Could you **extend the sample** beyond 2006 to analyze
 - why there was no deflation during the GFC,
 - why inflation has not picked up despite loose monetary policy after the GFC,
 - the role of globalization and trade collapse?
 - Matheson/Stavrev (EL, 2013): greater importance of import price inflation (and more stable inflation expectations) for US inflation
- How important are yd and yf shocks? → **Variance decompositions, tv shock volatilities**
- Why do you show, in the reduced-form analysis, only the coeffs of the first lag and not the sum of the coeffs of all (two) lags?

Minor comments cont.

- You investigate whether openness matters more for the relation btw. yf and inflation for more integrated countries ($corr$ is a **threshold variable**). Rationale?
- **How important are the weights used to form yf ?**
 - You use weights which not only account for direct, but also trade linkages with third countries following Loretan (2005) (nice!).
 - In GVARs: if N is large (here: 50), weights do not matter much.

Summary

- Rich, well-written paper on an important topic (the GH)
- Results ambiguous.
 - May be not surprising as effects of y_d and y_f on inflation are driven by many things, incl. globalization.
- Scope for improvement / future work
 - Panel regressions / interpretation of *corr*
 - Is it necessary to estimate so many params? Can you include instead additional relevant variables?
 - Relationships after 2006?