

Discussion of Peter Claeys's paper on "Uncertainty spillover and policy reactions"¹

Jacopo Cimadomo
European Central Bank

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¹The opinions expressed herein are those of the authors and do not necessarily reflect those of the the European Central Bank and the Eurosystem.

This paper

- ▶ Effects of macroeconomic uncertainty shocks on economic activity (C, I)
- ▶ New measure of uncertainty, based on one-year-ahead forecast errors for GDP growth, unemployment, inflation
 - ▶ Consensus forecast data for G7 countries: 15 forecasters for the period 1990-2014
 - ▶ Six principal components extracted for this sample (forecast errors)
 - ▶ Second factor used as uncertainty index (first factor comoves with business cycle → endogeneity)
- ▶ Estimate the effects of uncertainty shocks on a panel of 50 advanced and emerging economies

Main findings

1. Uncertainty shocks have depressing effects of the economy (C, I), albeit small
2. Stronger effects in emerging economies than in advanced economies
3. More developed financial markets dampen the negative shock effects
4. ...this is reinforced by active fiscal policy (if fiscal space is available)
5. ...while monetary policy can cushion the shock effects better under a fixed exchange rate peg

Comments

1. Construction and interpretation of the uncertainty index
 - ▶ Alternative index (RCC, 2016)
2. Empirical analysis
3. Findings

The uncertainty index: really 'global' ?

- ▶ Uncertainty index extracted from a panel of advanced economies: this reflects uncertainty in this set of countries, rather than 'global' uncertainty
- ▶ What about, e.g., Asian (1997) or Russian (1998) crisis and their transmission to advanced economies?

Uncertainty or forecast accuracy?

- ▶ Total panel of 480 forecasters for six advanced economies (1990-2014)
- ▶ Apply two criteria:
 1. Some forecasters left the sample (closures, mergers, etc.) → eliminate forecasters than have been in the sample for less than 24 months
 2. No gap between two forecasts larger than six months

Table 1. Number of forecasters in CE, January 1990-October 2014.

country	(a) total	(b) maximum	(c) selection
US	120	87	4
Japan	95	55	2
Germany	67	58	2
France	64	48	5
UK	111	82	1
Italy	54	49	1
total	480	395	15

Notes: total number of forecasters in CE database; and the number of forecasters that satisfy the double criterion of continuous forecasting for at least 24 months with no gaps larger than 6 months.

Uncertainty or forecast accuracy?

- ▶ Why reducing so much the number of forecasters?
- ▶ Aim is to capture how uncertainty is reflected in forecast *in a given period of time*, maybe not so important if a forecaster has left the sample, or if it has released the forecast only at long intervals
- ▶ Rather than global uncertainty, this may capture forecast accuracy of single forecasters (which may be affected by several other factors)

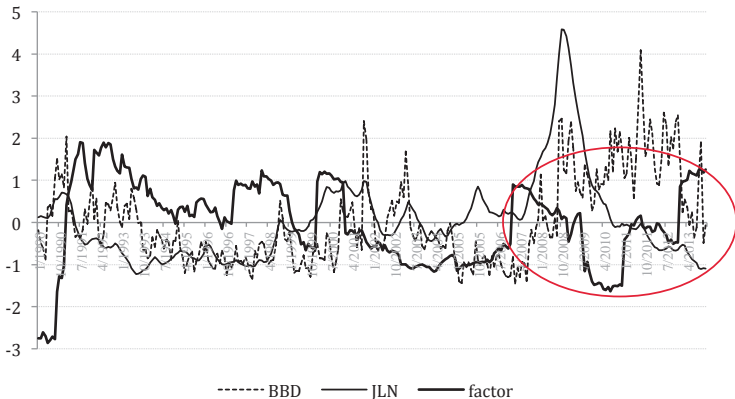
Uncertainty index as second factor

- ▶ Six principal components extracted for the sample (forecast errors)
- ▶ Second factor used as uncertainty index (first factor comoves with business cycle \rightarrow endogeneity)
- ▶ Why not the third or fourth factor ...or a combination of factors two to six?

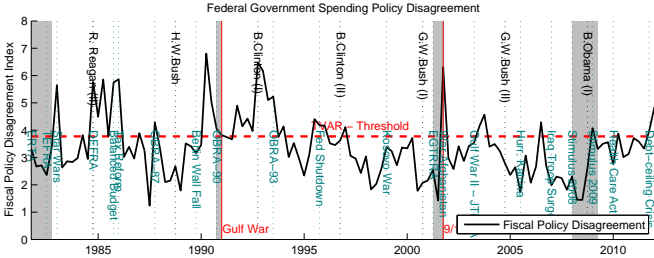
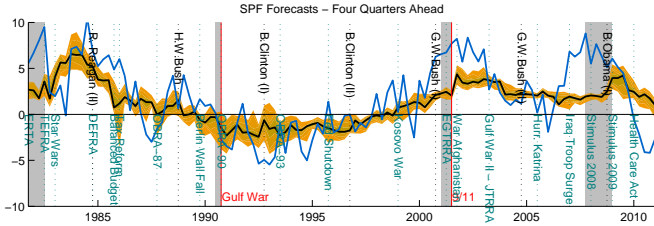
Interpretation of the uncertainty index

- ▶ Which narrative to interpret the dynamics of the index?
- ▶ Why predominantly negative since 2000? What about the Global Financial Crisis?

(b) Baker *et al.* (2016): BBD - Jurado *et al.* (2015): JLN versus Factor 2.



Alternative measure: RCC (JME, 2016)



Empirical analysis

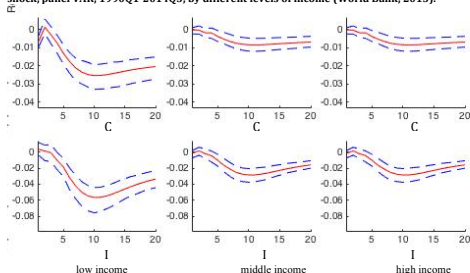
$$(3) \quad \begin{bmatrix} 1 & 0 & 0 \\ \alpha_{0,i,t}^{21} & 1 & 0 \\ \alpha_{0,i,t}^{31} & \alpha_{0,i,t}^{32} & 1 \end{bmatrix} \begin{bmatrix} U_{i,t} \\ C_{i,t} \\ I_{i,t} \end{bmatrix} = \mu_i + \sum_{l=1}^L \begin{bmatrix} \alpha_{l,i,t}^{11} & 0 & 0 \\ \alpha_{l,i,t}^{21} & \alpha_{l,i,t}^{22} & \alpha_{l,i,t}^{23} \\ \alpha_{l,i,t}^{31} & \alpha_{l,i,t}^{32} & \alpha_{l,i,t}^{33} \end{bmatrix} \begin{bmatrix} U_{i,t-l} \\ C_{i,t-l} \\ I_{i,t-l} \end{bmatrix} + \epsilon_{i,t}.$$

- ▶ Uncertainty index is included as an endogenous variable in the PVAR. However, it is common to all countries (\rightarrow uncertainty index as exogenous in the VAR?)
- ▶ Macro variables in emerging economies influence the index in future periods
- ▶ Why not including a measure for the fiscal stance and monetary policy indicator directly in the VAR?

Findings

- ▶ Countries with high income/financial development: uncertainty shocks not very detrimental. Comparison with Baker, Bloom, Davis (2016) and rel. literature?

Figure 3. Response of consumption and investment to an orthogonalized global uncertainty shock, panel VAR, 1990Q1-2014Q3, by different levels of income (World Bank, 2015).



- ▶ Surprising finding that countries with low public debt have more severe effects of the shock. Why?
- ▶ Export diversification and exchange rate regime do not seem to generate big difference

Thank you