

### Session II: Common shocks and macroeconomic resilience of the economies - Discussion

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Around a Decade After the Crisis:
Heading to the New Global Cycle and Monetary Policy Normalization

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#### Aim:

- How the gradual exit from QE in the United States affects emerging market economies (EMEs)
- Focus exclusively on the spill-overs via the long-term interest rates between the U.S. and a vast group of EMEs

### **Methodology:**

term structure model and OLS regressions



### Main results:

- Bond yields in EMEs are much more strongly associated with changes in U.S. bond risk premia than with changes in risk-neutral yields
- Countries with a large share of non-residents in the government debt market appear to be more sensitive to U.S. term premia shifts
- Behaviour of U.S. bond term premia is well explained by the volatility of long-term interest rates implied from interest rate options, as well as the expected level of future inflation and uncertainty around it



### **Strengths:**

- Contribution to empirical literature which deals with spill-overs through longterm interest rates ...especially for the EMEs
- Useful and detailed explanation of components of yield curves and how they are determined
  - Useful elaboration of transmission channels of QE impact on the yield curve by signalling and portfolio rebalancing effect
- Results potentially useful for interpreting the recent history. They provide
  answer why EME assets have been strongly affected during the "taper tantrum"
  episode and yet have barely moved in October 2017 when the Fed began
  winding down its massive bond portfolio
- Relevant policy implications:
  - Understanding what has driven recent developments in sovereign yields is of particular interest for policymakers
  - Prospective tightening of monetary conditions in the U.S. is likely to spill-over to EMEs only insofar as it brings about a rise in Treasury risk premia



#### Comments...

- There is quite some heterogeneity within the EMEs group and you use principal components analysis, you might lose important information when searching for common factors (data dimensionality reduction)
- One possible solution is to split EMEs in subgroups, for example by exchange rate regime, debt to GDP, net investment position, share of nonresidents in government debt market, or by region (CEE, BRICS, Non-CEE) etc. and then take PC for each group of countries. The obtained PCs for each group of countries you can compare with US expected short-term rate and term premia
  - Grouping by region (CEE) is used only in correlations between the components of 10Y government bond yields, but not in the remaining part of the analysis
- Your analysis is limited to interest rates only, EMEs interest rates for sure are driven by other factors and not only by US interest rates



#### Comments...

- Analysis can be done by using dynamic panel data approach. Try to specify
  a model with macroeconomic fundamentals or determinants of bond yields
  for EMEs (debt-to-GDP ratio, inflation, short-term real rates, external
  position-NFA (competitiveness) including US bond yield (both shortterm rate and term premia) as a global factor. This represent another
  approach to avoid PC analysis and serves as robustness check.
- "Determinants of EM yields sensitivity to US term premia shifts" you conclude here based on regression with only 17 observations (in the regression try CA to GDP instead of CA only). Try to generate recursive estimates of beta coefficients and use explanatory variables with quarterly frequencies to increase the number of observations
- OLS regressions seem to have residual autocorrelation
- No robustness check for the main results



#### Aim:

- Investigate how institutions and regulation affect the resilience of countries to macroeconomic shocks
- Great Recession and its consequences for European countries is taken as a case study

### **Methodology:**

- hierarchical non-parametric model (latent class analysis)
- multinomial logit model elastic net approach to select relevant predictors (explain differences of latent classes)



### **Main results:**

- EU countries can be classified into 4 latent classes based on their macroeconomic developments
- Countries in a given class exhibit a similar pattern of economic growth and labour market developments during and after the crisis
- The latent classes of countries differ by political stability, pre-crisis fiscal space, low protection of temporary contracts and government effectiveness
- Quality of institutions and regulation are crucial for the resilience of countries to shocks
  - Generosity of unemployment benefits seem to not influence resilience



### **Strengths:**

- Novel two-step methodological approach is used
  - splitting countries into latent classes
  - demonstrating that countries in different latent classes systematically also differ in quality of regulation and institutions
- Hierarchical non-parametric curve-fitting model, for the first time applied to study macroeconomic resilience
- Relevant policy implications:
  - policy recommendations for countries what measures to take in case of future adverse shocks
  - it shows how important are institutions, regulation and structural policies



#### Comments...

- Little discussion on the empirical method What are the advantages of using this particular model? You elaborate about adding the time dimension for splitting countries in latent classes, but more expanded explanation would help here
- In the econometric model you transform variables relative to 2007 year, but in the estimation results, interpretation is given comparing the developments with 2008. Try to make consistent comparison.
  - Pre-crisis peak is in 2008, how this would affect the results if you transform variables relative to 2008
- Definition of pre-crisis level might be crucial for this kind of analysis
- Number of latent classes is chosen arbitrarily and not model given, how do you explain this?
- No significant differences between model-based moments and sample moments for latent classes
- You may try to include other indicators, such as economic stimulations: for example capital expenditures to GDP to see their association with macroeconomic resilience



# Thank you for your attention!