Risk Sharing Channels in OECD Countries: a Heterogeneous Panel VAR Approach

P. Asdrubali
John Cabot University and EC

S. Kim
Seoul National University

F. Pericoli
European Commission - Joint Research Center

P. Poncela*
European Commission - JRC and Universidad Autónoma de Madrid

ABSTRACT

We propose a new empirical strategy for increasing the accuracy in the measurement of international consumption risk sharing channels. To this aim we generalize the approach by Asdrubali and Kim (2004), by adopting a Heterogeneous Panel VAR model. Within this framework, the coefficients representing the extent of risk sharing achieved through the different channels are free to vary across countries. In addition, we introduce a new risk sharing channel – namely, government consumption – which makes our empirical model more rigorous and allows us to deepen our understanding of the role of country governments in the absorption of macroeconomic shocks. Our empirical analysis, for a set of 21 OECD countries over the time span 1960-2016, helps us to identify the geographical structure of risk sharing and to better describe the economic drivers of risk sharing at country level. On the whole, our results demonstrate that the amount of country heterogeneity is significant. The extent of risk sharing in the presence of GDP shocks is strikingly different across countries; the impact risk sharing estimate of each country ranges from below 10% to over 50%. In addition, dynamics are also quite diverse across countries; for example, risk sharing through lending and borrowing, while quite effective on impact for all countries, provokes dis-smoothing for about a third of our sample from the second year onwards. Finally, government consumption tends to play a dis-smoothing role. We believe that our approach is of particular interest for policy makers, as it allows identifying the strengths and the weaknesses of the institutional and behavioral risk sharing mechanisms at work in different countries.