## "Are "New" and "Old" EU Members Becoming More Financially Integrated? A Threshold Cointegration Analysis"

## Tigran Poghosyan CERGE-EI and University of Groningen

## **Non-Technical Summary**

In this paper we propose a new empirical methodology to assess the degree of financial integration for a selected number of "new" EU member states with Germany and its evolution over time. Most of the previous studies address the issue of financial integration using the law of one price as a theoretical background for the empirical analysis. However, one of the key assumptions behind the law of one price - the absence of transaction costs necessary for making arbitrage across countries – is unrealistic in practice. As a result, the previous evidence on the financial market integration in the "new" EU member countries is inconclusive.

This paper conjectures that various market frictions - including language barriers, different legal structures, cultural and language differences, asymmetric information barriers - result in transaction costs that hamper arbitrage across financial markets in different countries. Not accounting for these barriers may lead to the biased results in the previous attempts to evaluate the degree of financial integration. The threshold cointegration methodology applied in this paper allows to estimate the degree and evolution of transaction costs in the financial markets of the "new" EU member countries due to these market frictions. The declining dynamics of the transaction costs is interpreted as evidence in favor of stronger financial integration.

Our main finding is that financial linkages between "new" and "old" EU member states (benchmarked by Germany) have strengthened over time. This finding is valid for each of the four financial segments (TBill, interbank, deposit and loan rates) under consideration, although findings vary across countries and segments. Our estimation results suggest that money markets are the most integrated ones, followed by TBill and deposit markets. Loan markets exhibit the lowest degree of integration. These differences are related to the transaction costs necessary to make arbitrage across countries, which differ from market to market.

The increasing degree of financial integration has important practical implications for the "new" EU member states. More integrated financial markets imply that the benefits from adopting the euro will increase over time. Financial linkages are anticipated to strengthen even further with the introduction of euro due to elimination of transaction costs necessary for hedging against risks related with unexpected currency fluctuations.

Keywords: financial integration; threshold vector error-correction; "new" EU member states