

Essays on Macroeconomic Comovement and the Term Structure

Pierangelo De Pace

Currency Union, Free-Trade Areas, and Business Cycle Synchronization (*Job Market Paper*). Since the 1970s the characteristics of international business cycles have changed and deeper economic integration has modified the features of cross-country comovement. We formally test for correlation shifts in measures of real economic activity and economic/financial integration. Especially for some specific subgroups of countries, we find evidence of higher correlations in Europe following the creation of the EMU in 1999. We detect more pronounced correlations at least between Mexico and the US in North America after the enforcement of the NAFTA in 1994. We do not, however, find rising synchronization between Hong Kong and the US pursuant to the introduction of a linked exchange rate system – still in effect today – at the end of 1983. Results are derived from an econometric framework based on nonparametric iterated stationary bootstrap methods, whose statistical reliability and performance we carefully assess.

The Cyclical Properties of Disaggregated Capital Flows (with Silvio Contessi and Johanna Francis). We describe the second-moment properties of the components of international capital flows and their relationship (covariance and correlation) to business cycle variables of 22 emerging and OECD countries. Disaggregated flows have different volatility properties, with debt being the most volatile and FDI the least volatile. We show that (a) inward flows are procyclical, outward and net outward flows are countercyclical for most industrial and emerging countries while, for the G-7, both inward and outward flows are procyclical and net outflows are countercyclical; (b) inward FDI flows are procyclical in industrial countries, countercyclical in emerging countries; and (c) there is no clear pattern for other equity flows and debt. Using formal statistical tests, we document changes in variability, covariance, and correlation of capital flows with a set of macroeconomic variables for G-7 countries. We find mixed evidence of changes over capital account liberalization episodes and breaks in international business cycles, and a clear increase in variance for all types and signs of flows. We estimate breaks at unknown dates in the conditional variance of each capital flow to find that they differ considerably from the breaks associated with capital account liberalization and financial globalization.

GDP Growth Predictions through the Yield Spread. Time-Variation and Structural Breaks. We use TVP models and real-time data to describe the evolution of the leading properties of the yield spread for output growth in five European economies and in the US. We evaluate the predictive performance of the yield curve and investigate whether the recent disappearance of the leading properties in the US can be linked to the reduction of perceived inflation risk in bond markets. Furthermore, we identify structural breaks in the marginal processes of term spreads and 10-year government bond yields to document how they relate to the dynamics of the predictive power of the term structure. Econometric analysis shows that: (i) the marginal predictive content of the term spread is not always significant over time and across countries, (ii) to some extent, the term spread often contributes to the forecast performance of simple models in Europe, not in the US, (iii) inflation risk exhibits instability and generally declines over time. This is compatible with the view that a decreased variability of shocks to spreads and yields at long maturities may have accompanied the vanishing of the leading properties.