The importance of Foreign shocks on Money Market Rates: Event Study Magnitude Restrictions
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Discussion

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Discussion
Propose a new approach to restrict parameter estimates of a structural VAR using confidence bounds on spill-over-parameters obtained from an event study regression.

Apply this methodology to estimate spill-over effects between four main short-term rates (EONIA, FedFund, MUTAN, SONIA) in 67 500-day rolling window estimations of the SVAR and using approx 50 events (such as CB interest rate cuts and CB announcements) for identification.

Overall results suggest that

1. The method provides tighter error bands on the estimates of impulse responses than an alternative method based on $\pm 1$ bounds.

2. Economic implications seem reasonable and meaningful:
   - Shocks originating from the US (and UK) have biggest spill-over effects.
   - Japan shocks do not have significant spill-over.
   - US (and Japan) rates are mostly ($> 80\%$) explained by their own shocks.
   - Euro area rates largely affected by US shocks prior to sovereign crisis.
The methodology

- **Structural VAR:** \[ A_0 Y_t = A_1 Y_{t-1} + B \epsilon_t \]

- **Reduced-form VAR:** \[ Y_t = A_0^{-1} A_1 Y_{t-1} + A_0^{-1} B \epsilon_t \]

- Identification restrictions required to estimate parameters of \( A_0, B \) from covariance matrix of reduced-form shocks \( u_t = A_0^{-1} B \epsilon_t \). Why?

- Because \( \Sigma_u \) is symmetric (and fundamental shocks \( \epsilon \) are not observed) cannot identify all the elements of impact matrix \( S = A_0^{-1} B \), which encodes the potential asymmetric effects of \( \epsilon \) shocks on the components of \( Y \).

- What identification restrictions can one impose to recover admissible values of \( S \)?
  - In previous paper impose spillover coefficient from i to j less than 1.
  - In this paper, propose Event study methodology restrict admissible range.

- **Event methodology** consists in selecting a set of events seen as exogenous US, UK, EU, or JP monetary policy shocks (e.g., CB rate cuts, announcements, LEH bkcy...)

- Estimate regression on event days: \[ \Delta R_i = A_0^{i,j} \Delta R_j + \epsilon_i(t) \] to get
  - direct point estimate of \( A_0^{i,j} \) used to identify parameters of impact matrix.
  - confidence bounds used for identification in SVAR estimation.
Empirics

- The methodology assumes that same SVAR structure drives economy during high-frequency rare events and low frequency economic cycles.

- Can the methodology account for global factors driving joint dynamics of short rates (e.g., global risk-aversion, uncertainty)

→ what impact on estimated spill-overs?

→ can the method be extended to include such variables (VIX, variance, term-premium, credit spreads...) in the VAR and Event study.

- How different are the results on relative importance of country fundamental shocks relative to different identification approaches (say Cholesky based on importance of factor eigenvalue, or ...)?
Conclusion

- Interesting and valuable methodology

- Sensible results

- Introduce global factors (VIX, Variance, Risk-aversion, Spreads...)?

- Assumption that SVAR also governs responses to specific rare events?

- Choice of events (e.g., LEH Bcy) as a monetary policy shocks?