

“Estimating financial institutions’ intraday liquidity risk: A Monte Carlo simulation approach” by Carlos Leon


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- **Very good work which give a valuable quantitative tool for the estimation of institution´s maximum intraday liquidity needs**
- **The importance of intraday liquidity has been progressively recognized by different Authorities**
- **Key elements of the work**
 - ✓ Deal with uncertainty  Monte Carlo Model
 - ✓ Modelling jointly the intensities of executed and received payments (Poisson distributions), and the correlation between them. Time dependent estimations
 - ✓ Bootstrapped historical simulation method for generating the monetary value of each payment
 - ✓ Two type of institutions
 - *Commercial banks*
 - *Booker-dealers firms*



Some questions and reflections about the work

- **Which data have been used for the estimation of the parameters?.**
- **Which strategy is planned to be follow for the back-testing exercise?**
- **Results very dependent on the magnitude of the initial balance**
- **Taking into account that the results show more exposure to liquidity risk for Booker-dealers firms, because of the low value of the initial balances:**
 - **Would be desirable to introduce some kind of regulations to overcome this problem or alternatively to change the system rules of the infrastructure to make these participants more resilience to potential liquidity shocks?**
- **One of the proposal for future lines of work would consist on the estimation for a long period. Taking into account that the objective of the work is focuses in the intraday dimension, I would suggest to change this long period for a broad set of one day estimations, and by this way getting all the seasonal characteristics of the initial balances and the payments.**

Estimating financial institutions' intraday liquidity risk



Some questions and reflections about the work

- **Very interesting the research project proposal by the author of a joint simulations for several participants. In this context could be also possible to simulate a failure of sending payments from one large participant and see what could be the effects on the liquidity needs for the rest of participants.**
- **Another possibility with the current single participant estimation, could be to impose stress and deterministic scenarios, in such a way that for some time intervals the intensity of receiving payments were set to 0.**