## A copula-based approach to financial contagion

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Several financial crises have underlined the fact that markets tend to be more dependent during a crisis than they are during calmer periods. This situation is usually referred to as contagion, a notion which has recently attracted the attention of several researchers working on finance due to its dramatic effects. In the literature, several methodologies have been proposed for formalizing the notion of contagion and testing whether it is occurred.

Here, we define some notions of contagion between two financial markets by using copulas, which are, as known, objects that describe the dependence among random variables. Moreover, possible ways for testing the presence of contagion will be discussed.

The talk is based on a joint work with Piotr Jaworski (University of Warsaw, Poland).

## References

- B.O. Bradley and M.S. Taqqu. Framework for analyzing spatial contagion between financial markets. Finance Letters, 2(6):8–16, 2004.
- [2] F. Durante and P. Jaworski. Spatial contagion between financial markets: a copula-based approach. Appl. Stoch. Models Bus. Ind., in press, 2009.
- [3] K. J. Forbes and R. Rigobon. No contagion, only interdependence: measuring stock market comovements. *The Journal of Finance*, 57(5):2223–2261, 2002.
- [4] M. Pericoli and M. Sbracia. A primer on financial contagion. *Journal of Economic Surveys*, 17(4):571–608, 2003.

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