

# Study of the correlations between stocks of different markets

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## Abstract

Correlations of stocks in time have been widely studied within the econophysics community. Both the Random Matrix Theory approach and the graphical visualization of so-called Minimum Spanning Trees [1] show the clustering of stocks according to industrial sectors. We will demonstrate the results of both techniques for the same set of data (FTSE traded stocks). In addition we will present a study of correlations between different market indices of many countries around the world [2]. In this case the clustering occurs in geographical terms. Our current work concerns the behaviour of stocks traded in different countries. A study of their correlations will reveal the impact of globalisation.

## References

- [1] R. Coelho, S. Hutzler, P. Repetowicz and P. Richmond, "*Sector analysis for a FTSE portfolio of stocks*", Physica A 373 (2007) 615-626
- [2] Ricardo Coelho, Claire G. Gilmore, Brian Lucey, Peter Richmond and Stefan Hutzler, "*The Evolution of Interdependence in World Equity Markets - Evidence from Minimum Spanning Trees*", Physica A 376 (2007) 455-466

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