

Mapping Rumours and Information Diffusion: Research update 23/03/2017

Since the previous research update, I have made good on the project. I have started practical work on the project in collaboration with Dr Chryssi Giannitsarou (Faculty of Economics) and Dr Nigel Collier (Department of Theoretical and Applied Linguistics). We have had several meetings to discuss the details of the proposed research and have now made a detailed plan on how to take the work forward.

In order to carry out the research, a number of practical tasks need to be carried out. For this reason, we have applied to the Keynes Fund for funding to carry out a pilot study and to employ a research assistant to help us collect data, to subsequently annotate this data and to carry out statistical analysis of the resulting data. Furthermore, once these tasks have been carried out, the assistant will aid us in building and training a model (based on the annotated data) for the purpose of forecasting.

For the purposes of the pilot project, we have decided to focus on a particular kind of financial information/rumours, namely those concerning corporate restructurings (mergers, acquisitions, takeovers etc.). Corporate restructuring is a good topic on which to start, for two reasons. First, it is a well-defined topic with a relatively well-defined ontology (i.e. a set of words and terms that relate to such restructurings, such as “merger”, “acquisition”, “proxy contest”, “hostile takeover”, “LBO” etc.). Second, corporate restructurings constitute a central topic in financial economics and are as such an important field of study in its own right. For these reasons, M&A activity will serve the dual purpose of being a good test topic for our new methodology and an important topic on which new knowledge is of value.

Second, we have decided to expand the analysis to include not only the spatio-temporal mapping of information diffusion but to also explicitly study how the diffusion is influenced with the veracity of the rumours (something that can often be determined ex post). This analysis will be based on new methods developed by Zubiaga et al. (2016) who make use of rumours on Twitter to characterise the spread of information on non-economics news. We are now familiarising ourselves with this literature and studying how they carried out their analysis (in a technical sense).

Reference: Zubiaga , A. et al. (2016): Analysing How People Orient to and Spread Rumours in Social Media by Looking at Conversational Threads, *PLOS ONE*, March 4, 2016.