

## School of Business Research Seminar Series 2019-2020

## "Federal Reserve Communications Sentiment's Impact on Target Rate Discovery"

Dr Juan Arismendi-Zambrano – Department of Finance, Economics and Accounting

Date: Thursday 5, December 2019
Time: 1pm-2pm

**Venue: CB3 Callan Building** 

## **Paper Abstract**

We construct a communication risk profile of the US Federal Reserve Chairmen by measuring their communications' sentiment. Sentiment is measured by a text sentiment categorisation method that projects text into a dictionary of words with associated sentiment (movie critics, tweets opinions) by using, a i) naive Bayes classifier software, ii) maximum entropy, and iii) support vector machines (SVM) classification techniques (Pang et. al. 2002). Communication's sentiment impact into the volatility of the interest rates is analysed. Results show that there is a significant difference in the sentiment of the communications, and that the sentiment plays a role in diminishing the volatility of the Federal Reserve announcements.

## **About the Speaker**

Dr. Juan Arismendi Zambrano is Lecturer (Assistant Professor) at the Department of Economics, Finance and Accounting at the National University of Ireland, Maynooth and Visiting Research Fellow of the ICMA Centre, University of Reading.

He has a PhD in Finance (Quantitative Finance) from the ICMA Centre, Henley Business School (AACSB, AMBA, EQUIS). He is certified as PRM (Professional Risk Manager - PRMIA), FRM (Financial Risk Manager - GARP), CQF (Certificate in Quantitative Finance – 7City - Wilmott), Series 65 Investment Advisor Law Examination, and as Investment Advisor by the Certificate of Investment Management from the Chartered Institute of Securities and Investment (Unit 6 FSA Principles of Financial Regulation + Unit 5 Investment Management) from the United Kingdom.

He has published in Finance, Numerical Algebra, Statistics, and Physics journals such as: `Journal of Banking and Finance', `International Review of Financial Analysis', `Emerging Markets Review', `Applied Mathematical Finance', `Numerical Linear Algebra with Applications', `Journal of Multivariate Analysis', and `Chaos Solitons & Fractals', and his work has been presented in conferences such as the European Finance Association Annual Meeting and the Financial Management Association. His actual research interests include Empirical Asset Pricing, Quantitative Finance, Multivariate Systemic Risk Modelling, Sentiment Analysis and Artificial Intelligence in Trading Systems.