

Title	Sources of the market microstructure noise : an empirical analysis.
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Abstract	Overall, this research project has led to substantial results which have been compiled in a working paper [1], that is in minor revision for Journal of Business and Economics Statistics. I have also presented my results at two conferences (EcoSta 2018, Hong Kong and CMStatistics 2018, Pisa) and discussed my results and further possible research with Mathieu Rosenbaum and Thibaut Mastrolia at the Ecole Polytechnique, Paris. I also gave a seminar presentation at the Ecole Polytechnique about possible connections between this project and a previous work. This empirical research also required important computational power, which is why I acquired a computer (Azus Zenbook Pro 15) toward the end of the project to speed up the estimation/database handling process. This helped a lot and enabled me to conduct my investigations on sources of the microstructure noise on an extensive database and on a long time span (9 years of data). From a technical point of view, this project has been fruitful and proved, among others: that the microstructure noise can be almost fully regressed on a group of only 5 variables; that the most significant determinant of the noise is the "signed quoted spread" of the price process; that the regression parameters feature themselves daily variations, intraday seasonality, and that they can be mainly explained by price discreteness and the so-called "bid-ask" bounce phenomenon. Details can be found in [1]. [1] Disentangling sources of market microstructure noise, in revision for Journal of Business and Economics Statistics, PDF available on demand.
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研究課題 (日本語)						
Sources of the market microstructure noise : An empirical analysis.						
研究課題 (英訳)						
Sources of the market microstructure noise : An empirical analysis.						
1. 研究成果実績の概要						
Overall, this research project has led to substantial results which have been compiled in a working paper [1], that is in minor revision for Journal of Business and Economics Statistics. I have also presented my results at two conferences (EcoSta 2018, Hong Kong and CMStatistics 2018, Pisa) and discussed my results and further possible research with Mathieu Rosenbaum and Thibaut Mastrolia at the Ecole Polytechnique, Paris. I also gave a seminar presentation at the Ecole Polytechnique about possible connections between this project and a previous work. This empirical research also required important computational power, which is why I acquired a computer (Azus Zenbook Pro 15) toward the end of the project to speed up the estimation/database handling process. This helped a lot and enabled me to conduct my investigations on sources of the microstructure noise on an extensive database and on a long time span (9 years of data). From a technical point of view, this project has been fruitful and proved, among others: that the microstructure noise can be almost fully regressed on a group of only 5 variables; that the most significant determinant of the noise is the “signed quoted spread” of the price process; that the regression parameters feature themselves daily variations, intraday seasonality, and that they can be mainly explained by price discreteness and the so-called “bid-ask” bounce phenomenon. Details can be found in [1]. [1] Disentangling sources of market microstructure noise, in revision for Journal of Business and Economics Statistics, PDF available on demand.						
2. 研究成果実績の概要 (英訳)						
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3. 本研究課題に関する発表						
発表者氏名 (著者・講演者)	発表課題名 (著書名・演題)	発表学術誌名 (著書発行所・講演学会)	学術誌発行年月 (著書発行年月・講演年月)			
Simon Clinet	Testing if the market microstructure noise is a function of the limit order book	EcoSta 2018 Conference	2018/06			
Simon Clinet	Efficient, transaction and mid prices: Disentangling sources of high frequency market microstructure noise	CFE-CMStatistics 2018 Conference	2018/12			
Simon Clinet	Statistical inference for the doubly stochastic process	Ecole Polytechnique-ENSAE Seminar	2019/01			