Accepted Manuscript

Systemic co-jumps

Massimiliano Caporin, Aleksey Kolokolov, Roberto Renò

PII: S0304-405X(17)30133-2
DOI: 10.1016/j.jfineco.2017.06.016
Reference: FINEC 2792

To appear in: *Journal of Financial Economics*

Received date: 4 March 2015
Revised date: 1 August 2016
Accepted date: 29 August 2016

Please cite this article as: Massimiliano Caporin, Aleksey Kolokolov, Roberto Renò, Systemic co-jumps, *Journal of Financial Economics* (2017), doi: 10.1016/j.jfineco.2017.06.016

Systemic co-jumps☆

Massimiliano Caporin[a], Aleksey Kolokolov[b], Roberto Renò[c]

[a] *University of Padova, Department of Statistical Sciences*

[b] *SAFE, Goethe University Frankfurt*

[c] *University of Verona, Department of Economics*

Abstract

The simultaneous occurrence of jumps in several stocks can be associated with major financial news, triggers short-term predictability in stock returns, is correlated with sudden spikes of the variance risk premium, and determines a persistent increase (decrease) of stock variances and correlations when they come along with bad (good) news. These systemic events and their implications can be easily overlooked by traditional univariate jump statistics applied to stock indices. They are instead revealed in a clearly cut way by using a novel test procedure applied to individual assets, which is particularly effective on high-volume stocks.

Keywords: Jumps, Return predictability, Systemic events, Variance Risk Premium
JEL: C58, G11, C14

☆A previous version of this paper circulated with the title "Multi-jumps". We thank Federico Bandi, Kim Christensen, Fulvio Corsi, Tolga Ergun, Giampiero Gallo, Giulio Girardi, Cecilia Mancini, Giovanna Nicodano, Loriana Pellizzon, Francesco Ravazzolo, Cesare Robotti, the editor, the anonymous reviewers of this paper, and the participants to the 8th Annual SoFiE conference (Aarhus, 24-26 June 2015), the GSE Summer Forum (Barcelona, 11-12 June 2015), the 6th ICEEE (Salerno, 21-23 January 2015), the XV Workshop in Quantitative Finance (Florence, 2013), the 7^{th} Financial Risk International Forum in Paris (20-21 March, 2014), the workshop Measuring and Modeling Financial Risk with High Frequency Data in Florence (19-20 June, 2014), and at the seminar at CREATES (Aahrus, 2014) and the SEC (Washington, 2015) for useful discussions. All errors and omissions are our own. The first author acknowledges financial support from the European Union, Seventh Framework Program FP7/2007-2013 under grant agreement SYRTO-SSH-2012-320270, and from Global Risk Institute in Financial Services and the Louis Bachelier Institute under the project *Systemic Risk*. The second author acknowledges financial support from the Riksbankens Jubileumsfond Grant Dnr: P13-1024:1, the VR Grant Dnr: 340-2013-5180 and the University of Padova grant CPDA 143827. The third author acknowledges financial support from Institute Europlace de Finance (EIF) under the research program *A New Measure of Liquidity in Financial Markets*.

Email addresses: massimiliano.caporin@unipd.it (Massimiliano Caporin), alexeiuo@gmail.com (Aleksey Kolokolov), roberto.reno@univr.it (Roberto Renò)