

Economy and Society >

Volume 45, 2016 - [Issue 3-4](#)

3,669 Views

55 CrossRef citations to date

39

Altmetric

Original Articles

High-frequency trading, algorithmic finance and the Flash Crash: reflections on eventalization

Christian Borch 

Pages 350-378 | Published online: 18 Jan 2017

 Cite this article  <https://doi.org/10.1080/03085147.2016.1263034>



Sample our
Economics, Finance,
Business & Industry Journals
>> **Sign in here** to start your access
to the latest two volumes for 14 days

 Full Article

 Figures & data

 References

 Citations

 Metrics

 Reprints & Permissions

Read this article

Share

Abstract

The Flash Crash of 6 May 2010 has an interesting status in discussions of high-frequency trading, i.e. fully automated, superfast computerized trading: it is invoked both as an important illustration of how this field of algorithmic trading operates and, more often, as an example of how fully automated trading algorithms are prone to run amok in unanticipated frenzy. In this paper, I discuss how and why the Flash Crash is being invoked as a significant event in debates about high-frequency trading and algorithmic markets. I analyse the mediatization of the event, as well as the variety of eventalizations of the Flash Crash - the different ways in which the Flash Crash is being mobilized as an illustrative event. I critically discuss the impact often associated with the Flash Crash - and on that basis, inquire into why the event nonetheless attracts so much attention. I suggest that a key reason why the Flash Crash is widely discussed is

that eventualizations of 6 May 2010 evoke familiar tropes about the fear of technology and the fear of herding. Finally, and given their emphasis on herding, I argue that the Flash Crash eventualizations may contribute to discussions within economic sociology about resonance in quantitative finance.

Keywords:

Émile Durkheim events Flash Crash herding high-frequency trading Gabriel Tarde

Acknowledgements

Previous versions of this paper were presented at seminars and workshops at the University of Konstanz; the Department of Sociology, New School for Social Research; and the Institute for Public Knowledge, New York University. I am grateful to the participants and audiences for their valuable feedback. I owe special thanks for helpful comments to Nathan Coombs, Kristian Bondo Hansen, Ann-Christina Lange, Donald MacKenzie, Emilio Marti, Robin Wagner-Pacifici and the anonymous Economy and Society referees. I would also like to thank Thomas Lauronen and Benjamin Schwarz for research assistance, as well as my interviewees for taking the time to discuss their work with me. The usual disclaimers apply.

Disclosure statement

No potential conflict of interest was reported by the author.

ORCID

Christian Borch <http://orcid.org/0000-0001-8217-5880>

Notes

1 Later flash crashes that have received a lot of attention include the flash crash in US Treasuries on 15 October 2015 and the flash crash in the British pound on 7 October 2016. However, in this paper, I focus on the May 2010 Flash Crash since this is the most famous and widely debated flash crash event.

2 The drop was registered in the so-called 'order book', which lists a trading venue's buy and sell orders in a way that visualizes the market at any given moment. I stress this experiential anchoring of the market because high-frequency trading, which reportedly was partly to blame for the Flash Crash, takes place at timescales beyond human perception (see Borch et al., [2015](#)). So, on one level, high-frequency trading, in its actual operations, renders financial markets non-experiential. On another level, however, high-frequency trading orders leave visual traces in the order book, and thus lend themselves to human experience.

3 Reflecting this initial confusion, market participants engaged in active internet searches in order to understand what was happening. Bloomberg reported that 'Yahoo! Inc., Google Inc. and at least one brokerage [Charles Schwab Corp] sustained slowdowns on Web pages that provide financial information as US stocks tumbled and users swarmed the Internet for market updates' on 6 May 2010 (Womack, [2010](#)).

4 Katsuyama later developed the New York-based IEX exchange (approved by the SEC), which similarly aims to neutralize the speed advantage of high-frequency traders.

5 Golumbia ([2013](#), p. 295) similarly characterizes the Flash Crash as a black swan event.

6 In one important respect, the analysis by Golub et al. differs significantly from that of both Sornette and von der Becke, and Johnson et al. Whereas the latter focus on how the interplay of algorithms is responsible for flash crashes, Golub et al. ([2012](#)) argue that most flash crashes occur as an effect of particular types of market regulation, specifically the use of so-called Intermarket Sweep Orders (cf. Johnson et al., [2013](#), p. 6). For a similar finding, see McNish, Upson and Wood ([2014](#)).

7 Observing this particular feature of the econophysics literature on the Flash Crash may be seen as a supplement to the characterization of econophysics offered by Jovanovic and Schinckus ([2013](#)). In their illuminating genealogy of this new field, they especially stress 'econophysics' major distinguishing feature, which is the use of stable

Lévy processes' ([2013](#), p. 444), but place less emphasis on the particular types of language that econophysicists deploy alongside their statistical approaches.

8 This connection between the systemic risks of high-frequency trading and its embeddedness in strategies in which the market is tweaked to benefit a few (in particular, to the detriment of human traders) is echoed in a recent MIT Technology Review paper: 'High-frequency traders are able to make pennies off of individual trades but execute them millions of times a day, while regular investors are left in the dust. And it could be a destabilizing force, where software gone haywire erases huge chunks of a company's value in a matter of minutes. That has happened enough that it has a name: a flash crash' (Reilly, [2016](#)).

Additional information

Funding

This work was supported by the Danish Council for Independent Research's Sapere Aude Grant for the project 'Crowd Dynamics in Financial Markets'.

Notes on contributors

Christian Borch

Christian Borch is Professor of Sociology at the Department of Management, Politics and Philosophy, Copenhagen Business School, Copenhagen, Denmark. His research interests include crowd theory, financial markets and urban sociology. His current work focuses on algorithmic finance. Christian Borch is the author/editor of several books, including *Foucault, crime and power: Problematisations of crime in the twentieth century* (Routledge, 2015); *Urban commons: Rethinking the city* (ed. with Martin Kornberger, Routledge, 2015); *Architectural atmospheres: On the experience and politics of architecture* (Birkhäuser, 2014); and *The politics of crowds: An alternative history of sociology* (Cambridge University Press, 2012), which was awarded the 2014 Theory Book Prize by the American Sociological Association. He is currently working on a book entitled *Avalanche modernity: Crowds, cities, markets*.

Related Research Data

[The Emergence of Econophysics: A New Approach in Modern Financial Theory](#)

Source: History of Political Economy

[Facebook and Finance: On the Social Logic of the Derivative](#)

Source: Theory Culture & Society

[Moore's Law versus Murphy's Law: Algorithmic Trading and Its Discontents](#)

Source: The Journal of Economic Perspectives

[The regulation of high-frequency trading: A pragmatic view](#)

Source: Journal of Banking Regulation

[Market Crowds between Imitation and Control](#)

Source: Theory Culture & Society

[Derivatives and the Wealth of Societies](#)

Source: Unknown Repository

[The Rules of Sociological Method](#)

Source: Unknown Repository

[The psychology of suggestion: A research into the subconscious nature of man and](#)

Related research

People also read

Recommended articles

Cited by
54

[What is an algorithm? Financial regulation in the era of high-frequency trading](#) >

Nathan Coombs

Economy and Society

Published online: 20 Sep 2016

[Cultures of high-frequency trading: mapping the landscape of algorithmic developments in contemporary financial markets](#) >

Ann-Christina Lange et al.

Economy and Society

Published online: 20 Sep 2016

[‘Making’, ‘taking’ and the material political economy of algorithmic trading](#) >

Donald MacKenzie

Economy and Society

[View more](#)

Information for

- [Authors](#)
- [R&D professionals](#)
- [Editors](#)
- [Librarians](#)
- [Societies](#)

Opportunities

- [Reprints and e-prints](#)
- [Advertising solutions](#)
- [Accelerated publication](#)
- [Corporate access solutions](#)

Keep up to date

Register to receive personalised research and resources by email

 [Sign me up](#)

- 
- 
- 
- 
- 
- 

Open access

- [Overview](#)
- [Open journals](#)
- [Open Select](#)
- [Dove Medical Press](#)
- [F1000Research](#)

Help and information

- [Help and contact](#)
- [Newsroom](#)
- [All journals](#)
- [Books](#)

Copyright © 2026 Informa UK Limited [Privacy policy](#)

[Cookies](#) [Terms & conditions](#) [Accessibility](#)

Registered in England & Wales No. 01072954
5 Howick Place | London | SW1P 1WG

