1096-H1-216 **Andy Niedermaier***, 1 New York Plaza, 33rd Floor, New York, NY 10004. *Orderly Chaos (in the Stock Market).*

"Those darned high-frequency traders! They caused the Flash Crash! They must be stopped!" This has been a pretty common sentiment since the events of May 6, 2010. And for good reason! *You* weren't furiously buying and selling stocks during the crash, were you? No, *computers* were!

Well, actually, it's a *little* more complicated than that. What I'd like to do is take some time to talk about the Flash Crash, the market regulations that have evolved in its wake, and some of the math one can use to measure the impact of such regulation. Ultimately my goal is to illustrate the complexity of the core set of logistical problems that securities exchanges face today, and how quantitative traders (like myself!) think about market structure. (Received August 20, 2013)