



[The Danger with High Frequency Trading](#)

Video interview with Davide Accomazzo, Adjunct Professor of Finance, Graziadio School of Business and Management

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Start

Danielle Scott: Good day this is Danielle L. Scott, Managing Editor for the Graziadio Business Report Blog. Today is August 12th, 2009 and here with us is David Accomazzo adjunct professor of finance at the Graziadio School of Business and Management. Professor Accomazzo teaches global capital markets and portfolio management and in 2005 he co-founded Cervino Capital Management where he is the principal trader. Professor Accomazzo often writes about markets and economic issues and most recently he wrote for the GBR Blog about the subject of today's interview, the dangers of high frequency trading. Professor Accomazzo thank you so much for being with us here today.

Davide Accomazzo: Thank you.

Danielle Scott: So my first question in layman's terms, can you tell us what is high frequency trading?

Davide Accomazzo: Yes because high frequency trading as a matter of fact, it's a very general term and a lot of things really go under that umbrella and generally speaking it's something that has to do with high velocity trading, computer driven using very sophisticated mathematical algorithms, there's nothing really wrong necessarily with high frequency trading per say. It's just in fact it's mostly a natural progression of technology in that never ending quest for finding liquidity in the market, providing liquid in the market and for helping reducing the market input cost for professional traders, for institutions and for all kinds of investors. The problem is with everything there is occasionally some unintended consequences and also some danger issues and that's why a lot of the media attention lately has been focusing on this problem trying to figure out whether or not there are in fact some potential danger issues for the market.

Danielle Scott: So can you tell us about what these potential danger issue may be and who really stands to lose?

Davide Accomazzo: Yeah well who stands to lose basically is pretty much everyone who is involved in the market, I mean the cost of doing business can be actually instead of being reduced could be made higher for everyone. The cost of potential disasters in the market like, you know, a suddenly liquidity vacuum which I'll explain in a second what that means, it's a real issue. Some of the unintended consequences are such as we progress down the road of, you know, technological improvements, more and more of the trading is now made through machines and through computers to that point that some stocks of some instruments, some markets, they now trade about 60 to even 90% of their daily volume in an electronic way. Now that is potentially dangerous because machines do not, in algorithms, mathematical algorithms, do not necessarily spawn to market conditions and changes in advance and, you know, daily life of markets the same way we human beings do. So the market structure is changing and that can have really potentially bad negative externalities. The other problem that we are now beginning to realize is that technological advances like this can actually offer cover for potential of fraud, so we have a number of potential issues like what they call for example flash quotes or teaser quotes that is something that traders that are engaged in high frequency trading, some of them have privileged access to for example quotes and they will see quotes up for bid or ask for stock that is put up for sale for purchase before anyone else that's an unfair advantage and they can act upon that quote in, you know, arbitration and unfair profit. Another case like teaser quotes because we're now moving from the

universe of human being into a universe of machines, speed is tremendous; we're talking about milliseconds, stuff that we cannot even process as human beings. So you have millions of trades are being processed in milliseconds and we have this teaser quotes where a machine will put out a quote for just one or two milliseconds just to gauge the market reaction and then the quote will disappear but by doing so, the machines finds out about the certain interest or not in that particular stock by other slower traders and then they can act upon that. Again, these are changes in the structure that are not necessarily positive and they can create unfair advantages for some traders. Not to mention for example that high frequency trading is very expensive so it, you know, produces a promise of activity you can only engage in that type of trading if you have the resources to buy those very powerful and very expensive machines and also the collocation fees, the only way you can actually engage in that trading, that type of trading is to actually have your machine and your server located at the exchange or one of these electronic platforms. In that case there is a very expensive collocation fee that gets paid to the electronic exchange, not everyone can of course access that. So now you're creating a two tier market where somebody can access that and someone else cannot, so to me the retail investor, the normal investor like you and I cannot really do that and then there's also another issue where a lot of the volume is being created it's what I will call toxic volume, it's not really good liquidity that is being provided to the market. These traders do not really out scheme the game, they come in and out of the game, you know, millions of times a day for milliseconds and so all that liquidity can disappear in a moment. So the lobby of high frequency trading that is pushing their agenda in saying well we're providing liquidity, we're providing a service to the market which generally speaking can be right but in many cases it's actually not real liquidity, just stocks in volume that can disappear immediately and probably will disappear when you need it the most. So you're running now a risk of a liquidity vacuum which I was referring to a moment ago where there is a need for liquidity and the volume is just not there, it just disappears and then you will have a dramatic increase in price. I would like to remember that in 1987 when we had the crash and the black Monday it was a bad day and it was going to be a bad day for fundamental reasons but it was never going to be such a bad day when the market fell about 22% in a day. If it wasn't for the unintended consequences of computerized trading and program trading and portfolio insurance that was then and every time there's a change in the market structure there can be unintended consequences and I think this time around we might be running the same risk unless we take some potential, I should say action. Now there's one more problem that comes with that and I think that's outright illegal and that is the problem with rebates, a lot of this volume is again it's stock safe, it's unnecessary because a lot of these high frequency traders they don't know trade for profit like you and I will do, they trade for rebates meaning that this electronic exchange is this liquidity aggregators, they will pay a rebate to these traders to just come and trade on their platform. So if you can actually trade and

scratch a trade just, you know, trade for even you will still make money because you get, you know, a fraction of a penny from the exchange for just trading. So if you can figure out a mathematical algorithm that will allow you to trade a million times a day for even you'll still end up making money because you get this rebate from the exchange and now I think that's a very deceitful practice because first of all it's a cost the exchange is bearing which now will pass to the customers people like you and I. It creates an incentive for high frequency traders to trade in an unnecessary type of volume which then rises the risk of a liquidity vacuum. So again all these issues combined I think that really are a change in the market structure and potentially creating a very negative outcomes. I mean the SEC's already investigating some of those things like flash quotes are now on the radar screen but we know how occasionally misguided the SEC has been so.

Danielle Scott: So they're investigating but are there any real regulations in place at this point and if there aren't what do you think should be in place?

Davide Accomazzo: I think there is a number of actually very simple things that can be done to at least sort of moderate the problem and again a lot of the issues can be just unintended consequences. I'm not talking about conspiracy theory here in any possible stretch of the imagination but flash quotes and teaser quotes they are being investigated by the SEC and it looks like they're going to be banished so that's a very good step. The other problem for example is after the 1987 crash we put on certain things like curbs and circuit breakers so that if the intraday volatility of the market is going to accelerate then certain circuit breakers will kick in which will force the machine to shut off so you can only trade human being with human being and not program trading. I think things like that that may help us slow down the rhythm and the pace of the market should things get out of hand, I think that would be very much helpful. Rebates I think it's a practice that should be eliminated, I find it wrong and it just incentivizes the wrong type of volume, we'll see if that happens though.

Danielle Scott: So today, what can we do, is there anything that investors can do to mitigate the risks of high frequency trading?

Davide Accomazzo: Well as a retail investor, there isn't much you can do but I think that the most important thing is to be aware of the problem, to be vocal and to require transparency. I think one of the major problems with the markets and whether we're talking about high frequency trading or some <inaudible> that we've been going through for the last couple of years have a lot to do with the lack of transparency and I think the more we become engaged in understanding the financial world, our own personal



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finances, how markets work, the more transparency we will be requiring and I think the better things will work. I always tell my students for example that we're at the point where the financial markets have become so sophisticated that it is no longer possible for anyone to really just delegate their finance, say "Well I got people, they manage my stuff." You really have to be aware of what's going on, you have to know the situation, you have to understand the markets so that you can have the conversation with the people that professionally manage your money but I think you really have to be on top of the game, you have to demand transparency that would be the, you know, the sort of the main advice that I would give. The other thing would be to be extremely careful, until some of those things are fully worked out and some regulations put in place, I think you have to be as always very aware of risk management whatever you do with your portfolio whether you're an active trader or a less active trader I think that risk management has to be on top of your list.

Danielle Scott: Well Professor Accomazzo thanks again so much for your time and good luck with your research.

David Accomazzo: Thank you very much.

Danielle Scott: This is Danielle L. Scott for the GBR Blog, find us online at gbr.pepperdine.edu/blog.

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