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Ethical Concerns of High Frequency Trading

Financial markets are very important to global economics and have been around for a long time. Along with everything else, how financial operations take place has changed in the information age. Electronic stock trading has changed the ease of trading for everyone. Anyone with a computer and an internet connection can now easy trade all day long. This is great! More people can invest and it’s easier for them to do so, but electronic trading has been evolved by more eager traders. High Frequency Trading (HFT) and Algorithmic Trading has taken over a majority of modern trading volume and is currently estimated to take up over 70% of all trades(Times 2012). This means that at least 70% of all trades are done by computers automatically. It relies heavily on sophisticated technologies and algorithms to very rapidly trade securities. The main idea behind HFT is to make a lot of very small trades that each will hopefully result in a small profit, sometimes only a fraction of a cent. If you can make enough trades with a small profit, eventually you will have a significant amount of profit. There is a lot of controversy over HFT due to the fact that it is primarily being done completely by computers without any human control. People set the conditions for a trade, but the computer executes everything automatically.

Given the potential risks if anything should happen to the financial markets, it is scary that so much is happening outside of human control. 2,000,000 trades per second is impossible for human beings, but for computers it is easy(Forbes 2013). HFT can work, but if something goes wrong the damages can be catastrophic. In 2010, the Dow Jones industrial average dropped 1000 points in a matter of minutes because of a small bug in the trading code(Times 2012). The SEC has been looking into new rules to prevent HFT accidents such as requiring regular testing of trading software. It is clear that the financial markets have evolved faster than the regulations that govern them, a situation that is the epitome of what James Moor calls a “policy vacuum.”

High Frequency Trading may not be important to the average person, but like a lot of things, its effects can affect us all. When the financial markets fail because of a programmer’s mistake, people will lose their money, their jobs, and their trust in the economy. The SEC has an obligation to keep up with technology before it ruins the lives of thousands if not millions of people. At least they have recognized that there is a policy vacuum and have started to attempt to fill it, but investment banks who stand to make a lot more money with less regulations will not be the ones to pressure the SEC for change. Unregulated business practices can often be unethical and largely unknown to the public. One big step in filling the policy vacuum may simply be public awareness. The so called “Flash Crash” in 2010 comes up a lot in discussion about HFT, and is an important indicator of what could happen if things go wrong with this technology, and why it is so important that policies are made to ensure economic stability.

Since trading is perfectly legal by itself, and HFT is basically just trading very fast, there seems to be no need to regulate it any differently than normal trading. This idea is at the core of the field of computer ethics. Is doing something that has been done for a long time different now that new technology is involved? I would argue that it is, and different policies need to be made to support new activity.

Currently HFT is treated simply as an electronic trade. Whether trades happen once a month or a thousand times a second, they are the same under the law. There is a difference in how these trades play out however. A computer making many trades can be hard to stop if things start going bad. The first line of defense is circuit breakers that can stop the bleeding should things drop too fast. As far as I can tell this is the only real existing precaution. Personally I don't think this is good enough. Sure it's good that we have a way to stop things from getting out of control when they go bad, but I think it would be better if we could prevent things before they happen. I picture these circuit breakers like air bags in a car. If they go off, it means that you have already crashed. Maybe if the cars breaks were better, it might not have crashed at all. Similar to car crashes, crashes in the trading markets are inevitable, but also preventable. Since the algorithms that execute most of the trades are very complex, there is no way of knowing how they will react to different inputs. Every company involved has a different technology and a different algorithm they use for trading, and they try to keep it as secret as possible to get a competitive edge. So many inconsistencies make it difficult to come up with a policy that will work effectively. For this reason, I think High Frequency and Algorithmic trading should be made illegal for the time being. That way we would have more time to figure out a proper solution without risking financial meltdown. HFT could be allowed in the future, but certain conditions should be met for it to be ethical.

There should be a certain amount of transparency involved with the algorithms used, whether it is public or simply disclosed for approval by the SEC or some other governing body. This would make sure that the algorithms are safe and legal. There would also needs to be accountability from companies doing HFT. If their operations are causing markets to drop rapidly because of some mistake a computer made, there has to be some form of justice for it. I would recommend something similar to James Moor's “Just Consequentialism” for an ethical point of view on this topic. It fits perfectly because it focuses on the consequences of policies, but within constraints of justice. Moor uses the metaphor of a ship sailing in uncharted waters steering toward the right direction as an example of computing policy, and to set sail sort of speak, I think we should go back to the start by banning HFT. Then after much discussion and debate, we can set sail and start moving in the right direction.

This action would mostly effect the companies currently participating in high frequency trading. I am sure that they would be against this action as they would stand to lose a lot of money, or just lose the opportunity to make money. As for everyone else, I think it is the best option. The average person doesn't or can't do HFT and won't be directly effected by banning is temporarily. This is one area where we can't afford to have a policy vacuum. A good and effective policy must be in place before HFT can be allowed.

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