



Flash Boys: A Wall Street Revolt

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Four years after his #1 bestseller *The Big Short*, Michael Lewis returns to Wall Street to report on a high-tech predator stalking the equity markets.

Flash Boys is about a small group of Wall Street guys who figure out that the U.S. stock market has been rigged for the benefit of insiders and that, post-financial crisis, the markets have become not more free but less, and more controlled by the big Wall Street banks. Working at different firms, they come to this realization separately; but after they discover one another, the flash boys band together and set out to reform the financial markets. This they do by creating an exchange in which high-frequency trading—source of the most intractable problems—will have no advantage whatsoever.

The characters in *Flash Boys* are fabulous, each completely different from what you think of when you think “Wall Street guy.” Several have walked away from jobs in the financial sector that paid them millions of dollars a year. From their new vantage point they investigate the big banks, the world’s stock exchanges, and high-frequency trading firms as they have never been investigated, and expose the many strange new ways that Wall Street generates profits.

The light that Lewis shines into the darkest corners of the financial world may not be good for your blood pressure, because if you have any contact with the market, even a retirement account, this story is happening to you. But in the end, *Flash Boys* is an uplifting read. Here are people who have somehow preserved a moral sense in an environment where you don’t get paid for that; they have perceived an institutionalized injustice and are willing to go to war to fix it.

Flash Boys: A Wall Street Revolt Details

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From Reader Review Flash Boys: A Wall Street Revolt for online ebook

Ashley Katsuyama says

Considering this is about my husband, I might be more than a little biased. :)

Nick Black says

wow. definitely Lewis's best book since Moneyball or Liar's Poker, though I'm waiting to talk to some high-frequency trading friends before i make final judgments. definitely a hell of a book to read here in Lower Manhattan, in the shadow of Wall Street, before going in for an interview at Goldman Sachs. lots of great quotes and superb little vignettes and character studies (the hallmark of Michael Lewis reporting). quite a bit seemed to have been recycled from his pieces for Vanity Fair over the past few years, though (the chapter about Sergey Aleyniko definitely lifted some material directly from VF).

fwiw, a friend of mine at Virtu Financial (who admits being heavily biased, as Virtu is one of the firms called out as exploitative) says that "Lewis's ignorance of how the markets really work made [the friend] sick to his stomach," and couldn't finish the book. so, take things with a grain of salt for now. from my own standpoint, some of Lewis's technological comments seemed ludicrous (passwords in one's bash history? what?). nonetheless, fascinating.

update so i talked to some coworkers who were at Two Sigma (another HFT firm), and they had some pretty good counterarguments, mainly that spreads have been tightened almost to zero, and that many techniques are simply the logical conclusion of natural trading, and have simply made intractable bad practice. both concluded, however, with the statement that "the street is a horrible place, and they are all sharks."

second update this response is worth reading: <http://scottlocklin.wordpress.com/201...>

David says

This book is wonderful; it is well-written, engaging, and the subject is fascinating. I had never given much thought to stock exchanges, trading, and the processes that occur there. Michael Lewis manages to make the subject transparent and *interesting!* He describes the activities of so-called "High Frequency Trading" (HFT), where buy and sell orders to stock exchanges are intercepted and prevented from occurring at the stated price. These HFT activities go on, largely unnoticed, though they account for much of the activity in stock trading. And--they skew the market in a way that robs huge amounts of money from legitimate investors. Also, I learned about the so-called "dark pools", the non-public stock exchanges that the public never hears about. They play a large role in the way big banks earn money from brokers and high frequency traders.

The first half of the book gives the background behind HFT, how it operates and why it is allowed, even encouraged by the big banks. The second half of the book describes how Brad Katsuyama, an executive at Royal Bank of Canada, quit his job to start up a new stock exchange that would do its best to level the playing field. He set up the new Investor's Exchange (IEX), an alternative trading system that does its best to

prevent HFT from profiting. This exchange is now less than a year old, but seems to be doing very well. It is the ONLY stock exchange that actually *publishes its rules*, making the process transparent to investors and brokers.

I didn't read this book--I listened to it as an audiobook. Dylan Baker is that narrator, and he does a very good reading. He certainly kept me engaged, and wishing the book would not end.

Dannii Elle says

In all honesty I picked this up as Wall Street and the stock market are something I have an interest in but little actual knowledge of. Whilst definitely an interesting read and providing the right amount of shock factor, I felt like I was just skimming some areas without digesting any of the information. Maybe this is to do with my own limited understanding, but it felt like the core story was dragged and repeated to reach the subsequent length. This over-telling led to any feeling of shock at the corruption detailed becoming muted and my enjoyment waned a little as the book progressed. This story is definitely one worth reading but be pre-warned that there is a fair amount of repetition.

Trish says

Michael Lewis has given us another great read, leaving us pondering big issues about the latest wall street scam and the point of society. In today's world, the information he shares about high-frequency trading (HFT) on Wall Street feels dated before it arrives on the page...before we read it...before we can act on it. At first I was aghast that information about the, in effect, skimming or taxing of trades on the [any] stock market was old—this stuff was recognized in 2010! Why are we just learning about it?!

But of course now I realize that the folks that knew about it weren't talking—why would they? And the market was going up, so taxes on increases weren't as onerous to investors as it would have been had they been losing their shirts. But also, Brad Katsuyama was setting up his own exchange, IEX, to do something to counter the activity. It would not have made as satisfying to discover the problem without a solution being presented.

Katsuyama gathered a collection of folks no one could make up in their wildest dreams and sought ways to hamper the effects of high-frequency trades on investors. Lewis calls Katsuyama "an American hero" in his April 1 interview with Charlie Rose. Katsuyama was Canadian-born and came to Wall Street for the Royal Bank of Canada. He was successful as a trader, making about two million dollars a year in salary and bonuses, but noticed odd things happening to his trades about 2007. Lewis shares what happened to Katsuyama's thinking as he explored the reasons for the artifacts he was noticing on his screen as he traded.

This is an interesting story, but the most interesting part of the story is undoubtedly what comes next. Three days after the publication of Lewis' book, Attorney General Holder announced the DOJ has an on-going investigation into high-frequency trading on stock exchanges. While the activities of high-frequency traders may or may not be strictly illegal, there is no doubt about its corrosive and costly effects.

Traders knowledgeable about the scandal acknowledge that something much like this skimming has been going on since the market began over a century ago, and will probably go on again in another form if this

instance is regulated out of existence. Many of the traders introduced in this book are filled with awe at the perspicacity and persistence of HFT traders and wonder if the incentives were changed if the activities would modulate.

As it happens, this fishtails nicely into Jaron Lanier's discussion about the internet in general, in Who Owns the Future? In that book Lanier suggests that modifying incentives (he gives possible ways to do that) would make a different landscape for those eager to participate in the economy. Financial remuneration is not the only incentive attractive to human beings. After all, how much can one person spend? On the other hand, the accumulation of vast sums of money in the hands of a few can cause major societal disruption. This is not simply a case of ill-gotten funds as in days of old. Computers have changed a lot of things, and the changes are exponential.

It's a new world, and Lewis excavates a small corner to reveal talented folks beavering away at the underpinnings of our, and the world's, financial pillars. This was one heck of a fascinating wake-up call.

The NYTimes Sunday Magazine on 4/6/14 had pictures of the IEX staff and Brad Katsuyama and a short synopsis of the whole story. The book is better, but time is money.

Riku Sayuj says

It's All Rigged Folks!

The seemingly democratic 'market' is a class system and the name of the game is speed. There is a hierarchy of speed in place and the haves are looting the have-nots.

Taleb made a name for himself ridiculing the markets, the experts and the traders - attributing whatever money these blokes made to dumb luck. Nobody can game the market, he said. We all liked that. Yes, they might make money, but they sure as hell do not deserve to be smug doing so. Plus, at least we can also play in the same markets and have the same long odds.

Lewis asks to look closer and exposes that the markets are not just populated by lucky dupe-artists trying to pass themselves off as smart, but by super-tech ninjas with unknown super powers. Ok, so these guys not only make money but are also gaming the market so that they cannot lose at all? They are borderline illegal in making their money? Now we cannot play in the market at all? Not only is Wall Street primarily for the top guns, but is it also becoming more and more an exclusive club where the rest enter only to be skinned?

The game is thus:

You see the ticker price on your screen and place an order to buy some shares. The order is then transmitted electronically to the exchanges to satisfy your order. However, it is going to take some time getting there, and just like Flash does in those comics, there are traders who can check on your order, run ahead of it and place an order themselves to buy the same shares, then turn back and be waiting for your order when it

arrives so that they can sell the shares you need to you. They take no risk this way since they engage in the market only when they have an assured buyer/seller.

“As soon as you realize this,” he said, “as soon as you realize that you are not able to execute your orders because someone else is able to identify what you are trying to do and race ahead of you to the other exchanges, it’s over,” he said. “It changes your mind.”

It was as if only one gambler were permitted to know the scores of last week’s NFL games, with no one else aware of his knowledge. He places bets in the casino on every game and waits for other gamblers to take the other side of those bets. There’s no guarantee that anyone will do so; but if they do, he’s certain to win. So yes, some can play the market and make no losses whatsoever for years on end, precisely because they take no risk.

Go here for a detailed summary, it is worth understanding: <http://online.wsj.com/news/articles/S...>

Now, this is an interesting concept and it is also a story that needed to be told, but it did not require these many pages to do it in. Lewis drags the story to such an extent that it almost grinds to a halt at times. The detailed story on the laying of the high speed cable, the story about the engineer who helped GS in managing their HFTs, the rise of the wallstreet-nobody, etc. adds nothing to the core story, which is about how a bunch of good guys from wall street (gasp!) tracked down what was happening and did their best to put an end to it.

Most of Lewis' books have stuck to the story of one guy or a group of people working their way through a maze, being very clever doing so, and coming out with game-changing revelations. That works. But this time around the material was not large enough (perhaps because Big Finance is more closely guarded than most fields?) and, quite unfortunately, Lewis decided to pack some peripheral stories in. It added nothing and diluted the sense of adventure. It just made the core detective story less exciting. I would have preferred this helping in half the number of pages, or less. Much of it was a waste of time, but the message was not:

The Core Message:

The entire history of Wall Street was the story of scandals, linked together tail to trunk like circus elephants. Every systemic market injustice arose from some loophole in a regulation created to correct some prior injustice. No matter what the regulators did, some other intermediary found a way to react, so there would be another form of front-running.

First, there was nothing new about the behavior they were at war with: The U.S. financial markets had always been either corrupt or about to be corrupted. Second, there was zero chance that the problem would be solved by financial regulators; or, rather, the regulators might solve the narrow problem of front-running in the stock market by high-frequency traders, but whatever they did to solve the problem would create yet another opportunity for financial intermediaries to make money at the expense of investors.

The final point was more aspiration than insight. For the first time in Wall Street history, the technology existed that eliminated entirely the need for financial intermediaries. Buyers and sellers in the U.S. stock market were now able to connect with each other without any need of a third party. “The way that the technology had evolved gave me the conviction that we had a unique opportunity to solve the problem,” he said. “There was no longer any need for any human intervention.” If they were going to somehow eliminate the Wall Street middlemen who had flourished for centuries, they needed to enlarge the frame of the picture they were creating. “I was so concerned that we were talking about what we were doing as a solution to high-frequency trading,” he said. “It was bigger than that. The goal had to be to eliminate any unnecessary

intermediation.”

Drive out the middle-men, even as they cry doom at the prospect of a market without liquidity? That is what IEX and the ultra-computerization brand of anti-predator customer solidarity and equality presented by Lewis is really advocating. If you think about it, that is a body blow to some of the most cherished concepts of capitalism itself.

Pouting Always says

Honestly investment and stock exchange is something that bores me to death so I was putting off having to read this one for a while and today I forced myself to get it over with. I was surprised to find that the book was really interesting though, I had no clue about High Frequency Traders or dark pools or even the arrest of Sergey Aleynikov which is honestly absurd. I think the information was accessible and easy to understand but I don't think it would be interesting to anyone who didn't have some interest in the engineering or math of the whole thing. I did feel bogged down by the details though especially of the people involved and their back stories. I know the whole purpose of the book was to talk about the small group of people trying to change things but I thought all the logistic stuff was the most interesting aspect of the book.

Andrew Smith says

I gave this a decent go - about 25% of it - but I just couldn't get past the fact it's just way too slow and much too boring. It's also very technical, in terms of explaining how high-frequency trading in the US equity market was rigged. And though the author takes time to try to explain it, the explanation is so protracted and woven into discussions between various brainiacs that I lost the will long before I fully understood what was going on.

Not for me I'm afraid, I gave up on this one.

Steve says

The new book by Michael Lewis criticizing high-frequency trading has created quite a stir. I'm imaging what a PR response might look like, though not an entirely serious one. It's structured in FAQ format, but the questions aren't really frequently asked so much as ones I'd like to answer. The ideal audience would be the inquiring readers of *Flash Boys* open to a counterbalance.

Q: Who is this Michael Lewis guy and why has this book been making such a splash?

Lewis is an influential writer with a talent for making his readers feel smart. It's like they've been given inside access to some previously hidden world. Depending on the book, it could be

- an intimate understanding of how richly compensated alpha males at a trading desk on Wall Street dominate the poor schlubs (*Liar's Poker*)
- how a cash-constrained baseball executive can use statistics to cobble together a winning lineup (*Moneyball*)
- how the geniuses of modern day football came to realize the importance of a great left tackle in protecting the quarterback's butt (*Blind Side*), or
- how a select few investors could foresee the folly of investing in subprime mortgages doomed to default (*The Big Short*)

And he does this in a readable way. He explains complicated mechanics in understandable terms, he identifies heroes and villains, and he structures his narrative like any good writer would, building to conclusions after couching them as mysteries or puzzles for his brainy protagonists to solve.

While *Flash Boys* features many of those same traits, it seems less like good investigative journalism this time. In fact, it feels more like marketing literature, or maybe a prosecuting attorney's closing argument. Lewis has been criticized for not having spoken to anyone who knew about HFT (high-frequency trading) from the other side of the fence. That's the *raison d'être* for this FAQ of sorts.

Q: Let's wade in the same way Steve Kroft did with Lewis in his *60 Minutes* interview. What's the headline here?

Essentially this: Michael Lewis is going to sell a whole bunch of books and will end up, by dint of some serious negative spin, manipulating public opinion way more than HFT has ever manipulated markets.

Q: Is the industry reeling from the critical language? You and your market rigging ilk are evidently a “cancer”; nothing but “parasites”. In addition, in an impressive burst of lawyerly bombast, financial fraud attorney Andrew Stoltmann describes you as “little more than digital piranhas, creating feeding frenzies that can send the market into volatile, spasmodic fits” leaving “a trail of carnage.”

Yeah, but aside from that we're not so bad. Seriously, it's frustrating when you know something is, at worst, light gray and someone with a microscope comes along training his lens on the black pixels only, saying "Oh, look how black it is; and hey, there's another one." And it doesn't help when the lens is smudged so that each one he focuses on seems darker than it really is.

Q: You'll admit Lewis did a good job choosing his hero, right? If there's such a thing as Boy Scouts of Canada, I bet Brad Katsuyama earned every one of their badges. He's bright, hard-working, earnest, and no doubt set the standard for what the Royal Bank of Canada called “RBC-nice”. He's the one who explained to Lewis and others what was happening when he attempted do a big trade. A split second after he'd enter his order, the market dried up on him. The quantities displayed on his screen at his targeted price were disappearing before he could get all he wanted.

You're right about Brad. He does come across well. To be honest, though, at first he was a little naïve. He was somehow expecting that his order for say 100,000 shares wouldn't have an immediate price impact that reflected the new knowledge of a big and abiding appetite. Even back at that time, most sophisticated players in the market knew they'd have better luck breaking their order up, trading chunks here and there at different

times and different exchanges as liquidity would allow rather than spooking the market with an order size that was bound to change the equilibrium price in an instant.

Q: Yeah, but what about the front-running, where speed demons would take their knowledge of Brad's intention to buy and go to other exchanges to buy ahead of him, driving up the price and making Brad pay more to get all the shares he wanted?

OK, first of all, please use quotes when you use the term front-running. In fact, don't use it at all. Front-running, properly defined, is an immoral and illegal act where a brokerage firm uses knowledge of its own customers' orders to jump ahead of them in the market in anticipation of easy profits when the customer transactions cause the price to change. Anybody doing that truly is scum. They've broken the fiduciary trust, may make their customer pay more by the time the order gets to market, and have stolen privileged information to advantage themselves.

Q: Back to the issue at hand, is whatever this thing is that you don't call front-running fair? Brad, our authority on what's "nice", didn't think so.

A certain segment of the market probably *does* consider itself put out by these fast-changing conditions. But we need to look at the situation from a broader perspective. Once I explain I hope you'll see why not everyone agrees with our "nice" friend.

Q: Is this something we can understand by way of the company Lewis made up to illustrate his point – Scalpers Inc.? They're the ones who would hastily get in ahead of every investor order, buy up all the shares, then sell them to the investor at a higher price after front-running running in front of them.

Grrr – "running in front of" – for that I'm going to double the length of my response. So, in Lewis's unrealistic example we're to believe that those rascals at Scalpers Inc. somehow know with great certainty that the poor honest investor has a certain size trade to do, somehow skips ahead in line to snap up those shares, raises the price and imposes its insidious tax, all without risking a dime. Bzzzzzt! Wrong. I'm sure Lewis would argue that this example was concocted for pedagogical purposes, meant only to illustrate net effects that we see. But it's so far off the mark that it's very misleading. First of all, for the big investor's hand to have been tipped, a chunk of their order had to have traded. Then, Scalpers Inc. would have to make an educated guess about what the future price impact would be from the unknown remaining order size. From there, Lewis would have you believe that a sort of queue jumping would occur. Not true. The best they could do would be to go to another exchange to see if it's worth crossing the bid/ask spread to bet on whether they predicted the big investor's demand and possible price impact correctly. The Scalpers Inc. team is at its luckiest when they guess right about the price move and some of the participants quoting at the various exchanges (often HFT players themselves) hadn't reacted yet either because they were slow or they disagreed about what the fair price should be. In this scenario, the big investor is likely to see the market back away from its order (meaning that market makers are cancelling the rest of their quotes at that price level). Again, that's just a natural reaction to what is now viewed to be a new fair value from the market equilibrium.

Q: That makes sense, but it's a lot to chew on all at once. Can you back up just a skosh to cover how these markets are structured and who does what, when, where and how?

Sure. The first thing to understand is that everyone wants to buy low and sell high.

Q: OK, wise guy. You do know the meaning of skosh, right?

Your archaic patois suggests that maybe I should start with intermediaries, specialists, market makers and bid/ask spreads. As you (probably) know, market intermediaries have served a useful function since the days cavemen were trading mastodon futures. Be they human or algorithmic, the goal is to provide liquidity by committing to buy at a lower price and sell at a higher price, serving as a conduit to facilitate trade. Of course it would be easy money if motivated buyers and sellers consistently and in synchrony came along to buy at your higher selling price and sell at your lower buying price. However, the spread between those two prices has to be big enough to compensate for the times when it's only sellers coming along; and poor you, you've bought something falling in price without any buyers to sell your inventory to at the higher price. Of course, the market maker can be hurt in rising markets, too, with a short position that's getting more and more expensive to buy back. The more the market makers can do to reduce those risks, the more willing they are to cut the distance between their buying and selling prices in order to attract extra business. Spreads are now razor thin. This is a huge benefit for the rest of the market, and apparently an underappreciated one.

For anyone who has made it this far, and wants to see more, the faux FAQ continues here. In it, we cover such topics as the trend not being your friend, picking up pennies in front of steamrollers, whether or not HFT liquidity is a canard, Insider Trading 2.0, and name-calling invoking such figures as Marie Antoinette, Hitler and Bernie Madoff.

Brian Yahn says

Michael Lewis explains how the stock market became such an incomprehensibly unfair system as a natural byproduct of human greed and animosity.

At one brief point in history, we viewed investing as a way to make the world better off for everybody involved. But then Wall Street's greed took over, starving for instant gratification, and turned investing into a zero-sum game: the only way they see a win is if ordinary, hard working, productive members of society lose.

In Flash Boys, the financial system is operating as a singular short-sighted monster striving to bring the entire world to its knees. But a few white-knight Wall Streeters are revolting against the beast, and they're winning. It's like David vs Goliath except with higher stakes. Michael Lewis turns the story of Brad Katsuyama and IEX into the Hero's Journey to the promised land.

In typical fashion, the story starts as a plot-based thriller, becomes an incomprehensible mystery of high frequency stock trading, then a parable of what's gone wrong with civilization, and finally it ends on a bleak note of hope: that the good guys will come out ahead and bring all of society with them, like has always happened in the past.

The biggest problem for me is that, what Michael Lewis is known for, explaining crazy complicated things in a way anyone can understand, he doesn't really even attempt here. He's both short on details about high frequency stock trading and repetitive. He spends a lot of time explaining the obvious, like how granting unfair access to information to private parties corrupted the entire system. But gloses over almost everything else, including--more or less--the resolution, how Brad Katsuyama and IEX are actually fixing it.

Sam Quixote says

Michael Lewis returns to his familiar stomping grounds of Wall Street to report to the rest of the world that, shock, stockbrokers are as corrupt as ever, even after the 2008 crash!

Flash Boys looks at the phenomenon of high frequency trading and its complex corruption. The image of brokers wearing blazers shouting on trading floors is long defunct with brokers these days staring at computer screens in locked rooms, the trades happening on screens in microseconds. The new dichotomy is that whoever has the tiniest advantage of a fraction of a second's speed makes the most money.

It's a complex book - at least to me, someone who has almost no knowledge of how the stock market works! - though Lewis does his best to explain it to the layman. Basically fibre-optic cable needs to be in as straight a line as possible to achieve the highest speeds so a line was built between New York and Chicago that was exactly that, giving those firms who used it the advantage of a few fractions of a second, translating into billions in profit every year.

The system is that someone places an order to buy shares at a price, the high frequency trader intercepts the order and buys shares at a slightly cheaper price, completing the order and pocketing the difference, usually a penny or so on the dollar - but these numerous micro-transactions adds up tremendously. And it's kinda illegal, especially once "dark pools" were created - private stock markets where the buyer doesn't see what the brokers are up to and no records are kept, making the skimming easier to do.

Lewis' protagonist, so to speak, is Brad Katsuyama, a broker at Royal Bank of Canada (eh?), who saw the unfairness of this system and sought to redress the balance with a new model stock market called IEX. His new model was designed to make things more fair, more transparent, while also making the market more stable to avoid crashes like in 2008.

It's inspiring that guys like Katsuyama would try something like this especially as many people have the idea of Wall Street being a place of unrepentant greed, ego and corruption - which it largely is. Goldman Sachs once again comes off looking like the biggest, sleaziest, most evil collection of fucks in the world, the kind of human garbage which make atheists like me wish there really is a hell for them to burn in for eternity. But it looks like IEX worked and Katsuyama made a real difference.

I usually enjoy Lewis' books as he takes on some major topics and makes them accessible and interesting, like in The Big Short (about the 2008 crash) and Boomerang (the aftermath of said crash) - both highly recommended by the way.

Unfortunately Flash Boys, while a logical next step in documenting the financial chaos of our times, was a bit too esoteric for me. It felt overly complex particularly as I'm not especially interested in the stock market and have no dealings with stocks/shares anyway, so it seemed a bit irrelevant from my perspective. As a result it also seemed overlong and more than a bit boring. I zoned out quite a bit even though I tried my best to get a handle on the subject.

I think readers who would enjoy Flash Boys should be very interested in finance and the stock market, beyond the level of the dilettante. Still, I applaud Lewis' efforts to keep the masses informed on the nitty gritty shittiness that Wall Street keep trying to get away with. Flash Boys wasn't a book that spoke to me very deeply but I'm glad there are guys like Michael Lewis and Brad Katsuyama out there, using their wits and skills to keep fuckers like Goldman Sachs in line.

Darwin8u says

“Shining a light creates shadows”

? Michael Lewis, Flash Boys

There was a temptation to write my review before I had finished reading. To get there first before other reviewers. This race to be first, however, sometimes requires a pause, a reflection, about what speed, transparency, fairness actually requires from individuals and companies. The world of finance is often opaque. Between executing a trade with your broker and another individual accepting that trade through their broker there is a ghost world operating on micro-slices of a second. It is a world filled with algorithms that are all focused on a zero-sum game where the individual seems to lose every single trade. It is a wild west where everyone is getting the shaft, except for the large banks and the high-speed traders.

“Every systemic market injustice arose from some loophole in a regulation created to correct some prior injustice.”

No one is better at exploring the technical world of money and finance on Wall Street (and in Sports) than Michael Lewis. His talent is most obvious in his ability to spot inconsistencies, absurdities, and flaws in a system and explain them using great characters and narratives that the characters tell themselves. There is no Moneyball without Billy Beane, there is no Blind Side without Leigh Tuohy and Michael Oher, and there is no Liar's Poker without John Meriwether and John Gutfreund. There would also be no Flash Boys without Sergey Aleynikov, Brad Katsuyama and Ronan Ryan.

“The U.S. financial markets had always been either corrupt or about to be corrupted.”

These characters MAKE this book great. Lewis, however, is what makes this story vibrantly great. He is a master of the New New Journalism narrative, a master of timing, and a master of getting to the story before the other suckers do. And... he appears to do it not just because he is fantastically good at it, but from all appearances because, like Brad Katsuyama, Lewis actually gives a micro-F about making the system deliver on its promise.

Ed says

I'm a longtime fan of Michael Lewis, but with this book he's finally jumped the shark.

Reading this book I found myself at first laughing *with* Lewis, then laughing *at* Lewis, and then wanting to throw the book in the trash, because he gets the history of HFT completely wrong.

Instead of listing my complaints I'd direct readers to better analyses, like these from Manoj Narang, Cliff Asness, Matt Levine, Matthew Phillips and Michael Peltz.

Lewis would do well to heed the advice of (his cousin) Nicholas Lemann, former dean of Columbia

University's journalism school, on the care that need be paid to "framing" a narrative—which Lewis completely botched in *Flash Boys*.

<http://www.ialjs.org/wp-content/uploads/>

Future historians will look back upon this age of HFT hysteria and wonder how it came to pass that Brad Katsuyama, a major-money-center bank employee who was paid \$2 million/year to manage an unprofitable division (?!), was heralded as a hero of the common man, while Dave Cummings, a Kansas City programmer who almost singlehandedly broke NYC's monopoly control of stock trading, was depicted as a villain.

http://en.wikipedia.org/wiki/BATS_Global_Ocean_Exchange

Mara says

On Reading & Rating

For my money (which, since I'm neither a Wall Street tycoon, nor a Russian coding genius, isn't a whole heck of a lot) this isn't **Michael Lewis'** best work. My reading experience was a mix of fascination and frustration. Why the latter? Lewis covers (and condemns) a whole bunch of different things. Agreement aside, as a human who reads books, this lack of distinction is what resulted in the bulk of my star-docking (I'd give it a **2.5/5** if half-stars were street legal around here) and, I'm guessing, some of the backlash against the book among insiders. Lewis' books often seem to spawn 'for' and 'against' camps, but with this one I can't for the life of me figure out where I fall!!

I was hoping to have come to a resolution before attempting to write a review, but, as time passes, it seems like that's just not in the cards...

Since *Flash Boys* evoked some pretty heated internal debates between Mara and *Other Mara* I'm gonna let you know where I'm coming from (by all means, feel free to skip ahead—I'll even spoiler-ize this section it all the more skipable for you).

(view spoiler)

In reality neither I nor the voices in my head know much about the logistics of trading beyond the scope of this book, but what follows is a list of some of the points of mental contention.

1. The Need for Speed

While I'm very pro Net Neutrality and public access to public goods, I had trouble discerning an appropriate analogue for Dan Spivey and his super straight, super fast, fiber optic cable.

Let's say that information travel is like human travel. If information highways are the equivalent of, well, highways, then yes, everyone should have equal access. However, there are people who are willing to pay a premium to get to and from wherever they need to be more quickly and more reliably—perhaps by helicopter or private jet. Heck, us common folk can cough up cash to get better bandwidth, so that much seems fair.

However, what about all the eminent domain stuff? Well, I don't know. Is this any different from 'air rights' transactions?

2. Information Asymmetry

Let me start by zooming out a bit here. Some games are games of "*perfect information*." Chess is probably the most commonly cited, but backgammon, and tic-tac-toe both share the same requisite attributes: both players are completely aware of the state of the game at all times.

In order to avoid launching into a treatise on Bayesian Nash Equilibrium and such, I'm gonna just lump games like poker or crazy eights, or the Prisoner's Dilemma in together as games of *imperfect/incomplete information*.

Information asymmetry, on the other hand, exists when one party has more or better information than another. And, FYI, we deal with transactions of asymmetric information all the time! I don't care if you go on car fax, or get a whole bunch of quotes from contractors before remodeling your kitchen—even if we have *access* to information, we deal with people who could, theoretically, screw us over because they simply know more.

Of course, there are different types of information asymmetry when it comes to financial markets. For example, "*insider trading*" is an example of information asymmetry that, in most cases, is illegal.* Most of the time when one refers to "information asymmetry" it's not a good thing, but it seems to me (and, again, I'm no expert) that certain types of information asymmetry make the world go round. It's not that it's always innocuous, it's just that we allow (and encourage) it on so many other levels. The market would be static if everyone thought that they had the same amount of information (or less than) everyone else out there. *Right?* (Seriously, I'm asking...)

3. The Fight for Fairness

My dad, who read this book a while back, contended that before *something* (high-frequency trading, I'll assume), the market used to be a level playing field. My knee-jerk reaction was that this simply wasn't true. But, then again, there are many different types of unfairness (and I'll have to ruminate on this some more before I figure out what exactly these are).

This is definitely the part of the book about which I feel most conflicted. Other than *Brad Katsuyama*, the Patron Saint of Fairness, who exactly are the good guys supposed to be in this all?

I don't know how much input (if any) Michael Lewis was allowed to give on the cartoon above, but it captures perfectly what rankled my nerdy feathers most—the idea that, basically, it's these computer-using hoodlums that are responsible for the injustices of Wall Street.

4. Dark Pools and Fiduciary Duty

As far as this part goes, I just felt like I need more information than I was given—dark pools seem shady (they have the word 'dark' in their titles, after all), but I also don't know how a client's investment ends up there.

Though I'm taking it into a new context, I'm gonna make use of an analogy Chris Stucchio laid out in "*A Fervent Defense of Front-Running HFTs*" (the thesis of which, BTW, I'm not totally sold on). In the context of a competition (and, let's be real, the stock market is definitely a competitive arena) the rules of engagement are different depending on the relationship between the parties involved.

So, if *Mickey* (who is Rocky's coach) punches *Rocky* in the face, that's bad. It's unfair, and, as Chris put it, that would mean that Mickey is an asshole. Conversely, if *Apollo* punches Rocky in the face, this does *not* make him an asshole. Actually (and here I'm taking it a step further than Chris did), Apollo would be an asshole if he *didn't* at least *try* to punch Rocky in the face. There are people counting on him to do just that!

Questions? Comments? Snide remarks?

So yeah, I'm just going to leave it there with this loosely related boxing analysis that I haven't even tied back in with the book. I don't want this to add to my growing list of languishing, half-finished reviews, so I'm putting it out there, half-baked thoughts and all.

In addition to snide remarks, I'd be happy to field any further reading recommendations, especially anything that begins to describe normal, "just" behavior in and on Wall Street (and those fast, straight wires running across the globe) because, damn, is that stuff ever difficult to find!

If *you* found this book interesting I highly recommend checking out Steve's two-part review (learning and laughing always pair nicely).

* Thanks a lot SEC—turns out there *is* legal insider trading, which is just confusing.

Dianne says

Really well-done non-fiction that reads like a fictional thriller. Michael Lewis humanizes his exposé of high-frequency trading and the state of the U.S. stock market by focusing on a few key characters and their stories. There is a lot of financial information to grasp here, but Lewis is an absolute master at sensible analogies that transform extremely complex transactions into ones that are easy to comprehend.

Very disheartening on one hand - human nature at its worst - and at the same time uplifting - there are still good guys out there looking out for us. Highly recommended reading - I'll bet most people aren't aware of what is going on in our markets and how scary it is.

One tiny footnote on page 164 that cracked me up - when the "hero" of this book, Brad Katsuyama, creates a new trading exchange dedicated to institutionalizing fairness in the markets, he names it the Investor's Exchange, which was shortened to IEX. The owners, "in the interest of clarity, had hoped to preserve the full name but they discovered a problem doing so when they set out to create an internet address: investorsexchange.com. To avoid that confusion, they created another." (quoted verbatim from the book). You can't make this stuff up.
