



# Bauerle's Bank Notes

## Summoning the Future: Part 3

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Since he left his brief stint as a junior trader at Solomon Brothers 30 years ago to describe the company's gunslinger culture in Liar's Poker, author Michael Lewis has made a career tracing Wall Street's ups and downs. Lewis's narratives consistently have three elements: a grandiose scheme to make outsized profits by creating or cornering a market, sharp-elbowed competition among Alpha males to do so, and eventual collapse of the scheme and the Alpha males' careers and psyches. Almost 20 years after Liar's Poker's publication, Solomon CEO John Gutfreund barked at Lewis over a reunion luncheon, "Your fucking book destroyed my career, and it made yours."

As a body of work, Lewis's writing also reflects the transformation of Wall Street from a fraternity of men like Gutfreund who put their banking partnerships' money at risk to an algorithm-based economy in which humans are irrelevant and the money at risk is someone else's 401-k account. Flash Boys: A Wall Street Revolt traces the rise of high frequency trading and its practitioners' quest to achieve market advantage measured in microseconds of time.

By the early 2000's stock trading was spread across 13 exchanges, typically industrial buildings in New Jersey filled with computers, not people, trading securities. The SEC's 2007 Regulation National Market System "required brokers to find the best market prices for the investors they represented." [\[i\]](#) Designed to prevent front-running [\[ii\]](#), Regulation NMS invited a different type of front-running. Because Regulation NMS required orders to be sent to all 13 exchanges, the first broker to learn of an order could front-run it at the expense of the customer who placed it and brokers who traded on exchanges that received the order later. Speed of access to order flow became the holy grail. A cadre of high frequency trading (HFT) firms arose to exploit speed, or lack of it.

The Reg NMS ideal of preventing humans from rigging markets by substituting neutral computers as trading robots became a game of having the biggest, bad-ass computer and shortest fiber optic link from trading platform to exchange, all in order to rig the market. Ironically, Wall Street titan Goldman Sachs found itself on the outside looking in, netting \$300 million in 2008 from high frequency trading compared to \$1.2 billion garnered by hedge fund Citadel. Writes Lewis, "The simple reason Goldman wasn't making much of the big money now being made in the stock

market was that the stock market had become a war of robots, and Goldman's robots were slow."<sup>[iii]</sup>

The best parts of the HFT racket were that it required comparatively little capital and offsetting trades were made so quickly that the HFT companies' risk of loss was nearly nil. They had the answers to the test before the teacher handed it out.

The remainder of Flash Boys describes the ensuing arms race. The biggest banks including Goldman raced to catch up, hedge funds and other big market players sponsored a customer-friendly exchange of their own, and the HFT shops strived to stay ahead of the sheriff's posse.

The only person Lewis identifies as suffering adverse legal consequences is Sergey Aleynikov, a Russian-born computer programmer who is described as the best programmer Goldman had. When he tires of "patching the elephant" (his phrase for his work on Goldman's legacy computer systems), he leaves to help create a hedge fund. Goldman brings down on him the heavy artillery of Cy Vance, Jr., the Manhattan district attorney and a socially pedigreed member of the Wall Street club. Aleynikov goes to prison for appropriating Goldman's elephant code.

From our perspective, the point of the Flash Boys story is not Lewis's recurrent themes that Wall Street is corrupt and insiders flourish while the less well-connected take the pain. Rather, the lesson is that it is fantasy to believe a robot-guided future will save us from human error and misbehavior. Technologists who espouse that view are not necessarily out to deceive us, or themselves. Their handicap is their singular focus is on the means of markets, rather than the goals and behavior of market participants. Tech people are most comfortable when they are solving technical problems, isolated from the noise of the market. Human conflict, politics and difficult-to-define ideas like fairness they find tedious and unsatisfying because they are messy.

Of Sergey Aleynikov, Lewis wrote (and I do not think he was disparaging him), "He was a little-picture person, a narrow problem solver. 'I think he didn't know his own value,' says the recruiter [who hired him away from Goldman]. 'He compensated for being narrow by being good. He was that good.'" <sup>[iv]</sup>

The ray of hope Flash Boys offers us is served up by the unnamed head of one of the HFT firms. Speaking of Goldman Sachs and its peers, the executive says disparagingly and with no apparent irony, "When one of these people from the banks interviews with us for a job, he always talks about how smart his algos [algorithms] are, but sooner or later he'll tell you that without his customer he can't make any money." What a refreshing idea.

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[i] Lewis p. 96.

[ii]"Front running is the unethical practice of a broker trading an equity in his personal account based on advanced knowledge of pending orders from the brokerage firm or from clients, allowing him to profit from the knowledge. It can also occur when a broker buys shares in his

personal account ahead of a strong buy recommendation that the brokerage firm is going to make to its clients."

<http://www.investopedia.com/terms/f/frontrunning.asp>

[iii] Id at 135-36.

[iv] Id at 144.