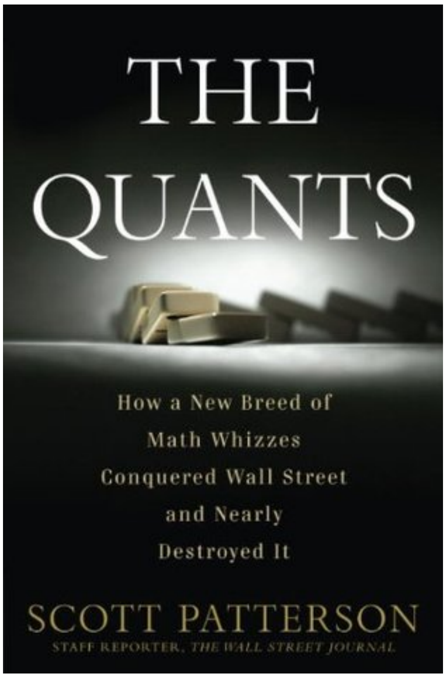

The Quants: How a New Breed of Math Whizzes Conquered Wall Street and Nearly Destroyed It

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In March 2006, the world's richest men sipped champagne in an opulent New York hotel. They were preparing to compete in a poker tournament with million-dollar stakes. At the card table that night was Peter Muller, who managed a fabulously successful hedge fund called PDT. With him was Ken Griffin, who was the tough-as-nails head of Citadel Investment Group. There, too, were Cliff Asness, the sharp-tongued, mercurial founder of the hedge fund AQR Capital Management, and Boaz Weinstein, chess "life master" and king of the credit-default swap.

Muller, Griffin, Asness, and Weinstein were among the best and brightest of a new breed, the quants. Over the past twenty years, this species of math whiz had usurped the testosterone-fueled, kill-or-be-killed risk takers who'd long been the alpha males of the world's largest casino. The quants believed that a cocktail of differential calculus, quantum physics, and advanced geometry held the key to reaping riches from the financial markets. And they helped create a digitized money-trading machine that could shift billions around the globe with the click of a mouse. Few realized that night, though, that in creating this extraordinary system, men like Muller, Griffin, Asness, and Weinstein had sown the seeds for history's greatest financial disaster.

From the Compact Disc edition.

The Quants: How a New Breed of Math Whizzes Conquered Wall Street and Nearly Destroyed It Details

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From Reader Review The Quants: How a New Breed of Math Whizzes Conquered Wall Street and Nearly Destroyed It for online ebook

Joy says

I'm a bit naive when it comes to the Wall Street world of statistical arbitrage and collateralized debt obligations, so I learned something new on every page of this book. I'm not sure I followed all of the different players and why exactly my mortgage is more expensive than my house, but this was definitely an interesting (and mostly accessible read) about how our economy ended up in the dumps and whet my appetite for more. Also, perhaps the stock market wasn't really a good idea in the first place and neither was computers, statistics, or poker. I think my rating would really be a 3.75, but I think from now on I'm against decimal points too. And milliseconds.

Luaba says

one of the most comprehensive book on the most recent financial collapse, written in an exciting way. And one does not have to be a ph.d to understand it.

Nicholas Nash says

Very well written and highly entertaining. Must read. Great real-life characters.

David says

The author of this book makes a big deal of the fact that the major players in his story treated stock price time series like Gaussian random variables. And they lost big time in 2008. Two of the minor players in the book, Nassim Taleb (author of The Black Swan: The Impact of the Highly Improbable) and Benoit Mandelbrot (of fractal fame, and author of The (Mis)Behavior of Markets and Fractals and Scaling In Finance) had an entirely different concept. They treat stock prices as distributions with very large tails. (They did alright in 2008.) Well, duh!! Why didn't any of the "genius" quants understand this very basic concept? They all adopted a super-simplistic mathematical model that was in vogue, and got themselves and their companies into a heap of trouble. Were they geniuses? Well, in a sense they were, since they were able to get incredibly high-paying jobs. But on the other hand, they seem to have been mathematical lemmings.

Lucas Peres says

Uma descrição dinâmica, e eu sou suspeito por gostar, já que é parte do meu dia a dia profissional. Mas as ideias mostradas no livro e o desespero perante as crises deixaram a leitura MUITO boa!

Brad Mills says

This book is pretty dense. I wouldn't recommend it to a casual reader. I am starting an algorithmic trading fund, so I liked this book because I am trying to get more focused information on the history of algorithmic trading on Wall St and with traditional investment firms.

If you're looking for entertaining stories about wall st and trading, this is not really the book for you.

It's a great backstory that walks you through the original algorithmic traders on wall st and how their quantitative analysis strategies evolved from trying to beat the dealer at blackjack or game the roulette wheel, to running the world's financial markets.

Not so much about high speed trading, this book talks a lot about the theory of using computer algorithms to trade and find an "edge" against human traders.

There's really interesting backstories behind the role that the quants played during "Black Monday" in the 80s, the collapse of LTCM in the late 90s, the 2007/2008 derivatives bubble.

I did not realize that most of the financial voodoo products like CDOs, credit default swaps, options trading, etc were mostly instruments created by quant traders.

Nassim Taleb, the author of The Black Swan makes an appearance a few times in this book.

If you google "wall street trading floor" you will see the pictures of barren wall st trading floors with a tiny fraction of traders compared to what you'll probably remember from the movies. This is thanks to "the quants".

Computer algorithmic trading systems have depreciated the traditional wall st trader.

We are now in an era where Artificial Intelligence is shifting the market once again...who knows how this will work out.

Overall, this was a great book with lots of solid information about the previous generations of hedge funds and trading methods used by the biggest funds in the world.

It gets boring sometimes, it probably could have been about 30% shorter.

Ob-jonny says

This book describes some of the causes of the financial crisis at the most fundamental level. It's an oversimplification to state that the financial crisis was caused by the banks behaving badly. It's more satisfying to know the details and the human interaction and decision making that went into it. The hedge funds weren't the only cause of the financial crisis which was more due to the housing bubble, merging of big banks, and excessive leveraging. But the hedge funds were the guys who did much of the risky gambling that wiped out trillions of dollars of the nation's wealth. It's amusing to learn about the details of how their models broke down and how these supposed geniuses got caught with their pants down. Starting in late 2006 they were experiencing 25-sigma events every week. The sigma is defined relative to the standard deviation where 1-sigma is roughly 33% probability, and 2-sigma is 5% probability. A 25-sigma event is like 1 chance in 10 to the 20th power. It's funny that these people's models were so flawed as to witness these events happening that were predicted to be impossible. That's why they lost so much money. They were leveraging money in such a way that a slight loss would wipe them out due to margin calls. In reality, these 25-sigma events had more like an 80% probability given the fact that the adjustable rate mortgage payments were guaranteed to explode 2 years after they were sold. The characters in the book were real people and not all of them were very interesting, as you might imagine with math-nerds. But this book is interesting in that it shows how these people who thought they were so smart were still not able to think outside of the box and see how the system they were used to was about to be turned upside down.

Bryan Kibbe says

As someone that does not normally traffic in world of high finance or the jargon associated with it, I found this book to be fascinating and eye-opening. Patterson crafts a compelling narrative about the rise and fall of an extremely talented set of mathematicians and economists that came to dominate stock markets with quantitative modeling, sophisticated computer algorithms, and rapid fire computer based trading. Indeed, Patterson's grim conclusion suggests that perhaps the recent stock market collapse of 2007-2008 is not so much the end of "the quants," as he calls them, but rather only the signal of a new iteration of quants that may soon come to dominate Wall Street once again, and bring with them new potential for catastrophic failure of the markets. Without pomp or bombastic language, Patterson has crafted a subtle and thoughtful warning about and critique of the state of modern finance, which he deftly weaves into the narrative of those individuals that he chronicles throughout this book. I would highly recommend this book to anyone who finds soundbite media coverage of the economy lacking, and instead would like a more in-depth account of precisely what might have gone wrong in our economic systems over the past 5 years, or past 50 years if we really start to interrogate the genealogy of the present problems.

Andy says

(Disclaimer: I worked in derivatives on Wall Street for several years, though this book is more focused on stat arb, not my area.)

This book reminded me of When Genius Failed, not only in content matter but in style. This isn't a great thing, as I thought both books were hampered by some corny dramatics. In both cases the authors picked an inherently exciting topic; let the excitement tell itself and spend your energy telling us things we don't know rather than trying to inject more adrenaline into it. I'd rather the author kill every silly poker anecdote, every reference to the megalomania of Griffin and Asness, and instead talk some more about the basic principles of stat arb or convert arb, basic quant formulas and relative pricing approaches, I'm not expecting a textbook but when I read something I want it to walk away with as many new insights as possible.

The weirdest thing is the author's insistence on returning to the contrived theme of "The Truth," which far as I can tell simply refers to the ability to consistently beat the market, making it sound like Street quants were strange acolytes who thought of their work in reverent, near-religious terms. I've never met anyone who actually thinks like this; most quants or quantitative thinkers tended to think about their work with some scientific dispassion. Arguably that was actually the problem, because they were either too inflexible about violations of their assumptions (or failed to communicate the importance of flexibility to others), but I guess that didn't make as exciting of a story?

Style over substance, occasional insights clumsily wiped out by an unnecessary compulsion towards excitement.

Phil Simon says

I've read more than a few books on Wall Street's latest fiasco. Much like [[ASIN:0393338827 The Big Short: Inside the Doomsday Machine]], The Quants makes what would be a dry narrative more interesting by focusing on characters as much as arcane stock market theories. While I liked Lewis' book a bit more, the Quants more than holds its own. I enjoyed learning more about the history the sub prime mess.

At times, I had a hard time keeping track of the characters. Patterson is a gifted writer and I hope that he churns out more texts.

Wes Devauld says

As a book that reads as a narrative of the growth of mathematics in finance, as well as a who's who of the largest players in the industry, this book deserves 4 out of 5 stars. The book is easy to read and the author is very capable in making his point. The friendly narrative reads almost as a planned fiction with a well planned and executed story. It would probably be an enjoyable if read by someone that does not have a hard science background.

The reason for the low rating is two fold: The authors mistreatment of mathematics, and amazingly spiteful bias towards anything he calls a Quant.

To the first point, the author appears to be trying to artificially scare the reader about the mathematics used in finance. At one point, he lays out the second law of thermodynamics, so he appears to be aware that his audience is able to consume ideas from hard science. Then, the author will take simple mathematical concepts and introduce them in a manner that makes it appear that the concept is somewhere between witchcraft and hogwash. Saying that the financiers use the 'so called "correlation"', or using a drunkard as an analogy in the creation of a random walk is an obvious attempt to deride the tools, and not the practice.

To the second point, anyone that the author labels as a Quant is vilified, whereas anyone that did not have a hand in the fall of structured securities was labelled as a mathematician. Taleb and Mandelbrot are both mentioned several times as mathematicians, although only once is Taleb called a Quant. After I noticed the pattern, it was transparent that the author intended Quants to be bad, and mathematicians to be good.

The blame is squarely placed on traders that make use of mathematical models, missing the contribution of leverage to the financial crisis. The author does mention leverage a couple of times in the book, then proceeds to ignore its contribution and paint the mathematical models as the sole problem with today's markets.

Remo says

Este libro explica un montón de cosas sobre la crisis de 2008, entrando tras un montón de puertas que yo creía que siempre habían estado cerradas. Es una lectura muy interesanet y muy bien llevada sobre cómo

afectó el crack a los *hedge funds*, fondos de inversión sin reglas escritas sobre cómo invertir el dinero. Fondos de inversión discrecionales, podríamos llamarlos. En ellos, los más afamados traders se llevan cada año el 2% de lo que gestionan y el 20% de lo que ganan, operando en mercados guiados por alta matemática que busca pequeñas discrepancias en los mercados o bien tendencias que nadie más ha visto para obtener beneficios.
El libro comienza narrando las vidas de los principales managers de hedge funds, cómo se conocieron y formaron, cómo lanzarosn sus fondos, y cómo todos se pegaron la gran galleta en 2007, 2008, 2009 y subsiguientes.
El libro destroza la hipótesis de Fama de los mercados eficientes y cuenta un montón de cosas interesantes. Tiene algunos fallos de bulto, como cuando describe el carry trade (estás largo de yenes, no corto, cenutrio) y alguna otra, pero en general se lee muy bien.

Szplug says

Meh. The pervasive *Poker Theory* forces Patterson into a straightjacket as regards his casting decisions—colourful though these depicted characters prove to be—and he assigns the label *Quant* to those who do not seem to merit it and blame for the economic crisis of 2008 to these same *Quants* in what, in my humble opinion, is a mostly erroneous and misplaced determination of guilt. The background story itself is quite intriguing, as is the proliferation of mathematical modeling in financial markets, but the entire affair contained too much sizzle and too little steak.

Dev Scott Flores says

I don't think I've ever witnessed the reviews of a book which more pointedly reflect the personal biases/grievances/et al of the reviewers as this one does ... I worked a floor down from one of the main "characters" in this book from 2002-2007, so I know lots of these "types" in the real world and I don't think my experience has colored my perception of this as being an engaging & entertaining narrative. Some of these concepts could have been explained more easily - others, more thoroughly - but I felt the author's choice in most instances was appropriate within the parameters of providing narrative flow. Sure, the individual characterizations run the gamut from Tom Wolfe to Nicholas Nassim Taleb "lite" but, overall, I thought it was fairly balanced, pleasurable, informative, and quick read.

I'm glad I didn't bother reading any of these reviews ... sometimes I think people forget reviewing a book is supposed to be about the BOOK and not them!

Max Stone says

Jeebus this book was pretty bad. I felt compelled to read it because I know some large fraction of the characters involved, but I don't really recommend it for anyone.

For starters, a lot of the facts are not overly factual.

Next, if you already know about the quant kerfuffle, there is very very little you will learn from this book. And if you don't know about the quant kerfuffle, why on earth would you want to?

He takes random potshots at people (e.g. what does he have against Eugene Fama (efficient markets economist)?

I think the worst thing is that he conflates the quant crisis of 2007 with the general enormous disaster (in financial markets; in the real economy) of 2008, particularly when talking about Boaz, who had a stat arb business (2007) but was most active in credit markets (2008). There are connections but it's just not the case that the quant crisis of 2007 caused the 2008 problem in any meaningful sense (it is more true that there are some common causes of both, but that isn't his angle so much).

Booo.