

## Young men, testosterone and the financial mess

### The calming effect of women and older men

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What the trading floors in the financial markets need are more women and older men to make them more stable, says John Coates, a former trader himself and now a research fellow at the Judge Business School at the University of Cambridge.

They could act as a counter-balance to the more exuberant, testosterone-fuelled behaviour of the younger men, who typically dominate on the trading floors.

Coates recalls a story in which two rogue elephants were rampaging through a village and the authorities used a helicopter to lower an older male elephant into the area. Straight away, the two younger elephants calmed down. It's a good analogy, says Coates, for what you need on a trading floor.

"On the trading floor women are kind of party-poopers, as are older men. There's a lot of impatience on the trading floor with people who don't buy into the excitement. ... But I think that's what you need. You need young and old, men and women."

Coates and two colleagues, Mark Gurnell and Aldo Rustichini, analysed the connection between the levels of testosterone in male traders in the "high-frequency" end of the market where huge decisions have to be made in a matter of seconds or minutes.

They found that traders with a high measure of prenatal androgens (male sex hormones) made on average six times the profits of traders with a low measure and lasted in the business several years longer.

But there was a negative side to this biologically-powered exuberance.

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Coates' interest in the link between biology and traders' behaviour was awakened when he observed them during the dot-com boom. "They showed symptoms of mania. They were over-

confident, euphoric, delusional, racing thoughts, diminished need for sleep.” He also noticed that the women on the trading floors “seemed relatively unaffected by the excitement.”

He became curious to find out why people could change suddenly during boom periods. “I was looking for a chemical that was building up in the bodies of these traders that was causing them to become over-confident and to take too much risk.”

While his research is in its early stages, he is already beginning to see a possible connection between male behaviour and bubbles in the financial markets.

“If it is true that these hormones have a big impact on traders’ behaviour then it is possible that bubbles are a male phenomenon.”

In particular, he adds, this would apply to young traders, probably in their mid-20s, who would be at an age when testosterone levels are at their peak. “It starts falling after your mid-40s and early 50s. It peaks around the age of 21 and the average age of the traders in my study was about 26.”

Can this over-reliance on young men, fuelled by testosterone, be one of the major causes of the instability we see today in the financial markets?

“I think that what I saw in the dot-com bubble, common sense and the data we have raised so far and also other research suggests that having just a narrow slice of the population represented in the trading community probably leads to more herding behaviour and more instability. If you had a better balance between men and women and also between young and old, I’m pretty convinced that that would be a more stable financial system.”

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Another question that caught Coates’ attention was why trading floors are mostly male, which he thinks is connected to the short-term nature of trading. He also says that women might be more likely to do well in a long-term trading environment.

“The longer period of time you have to analyse a trade and to position it, the more time you have for your analysis and the holding period, the chances are the more you’re going to find women involved.”

In another study, Coates says, a group of researchers examined 50,000 brokerage accounts and looked at the relative performance of men and women, discovering in the process that men over-

traded their accounts. “They traded a lot more than the women, which is a sign of over-confidence (believing you can beat the markets).”

Each time they traded, they triggered a commission, resulting in the fact that they underperformed women by about 2.5% over a five-year period. “This is a huge difference,” says Coates.

If the banking world shifts to more long-term trading, women may well benefit. “I think they probably won’t end up doing a lot of the short-term trading that is so prevalent right now. But if you changed the reward structure so that people were rewarded on their long-term performance, then you’d probably find the markets selecting for people who have a longer term view of the market. Then you’d probably see more women rising in the ranks.”

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*John Coates is a research fellow at the Judge Business School, Cambridge University. He previously ran a trading desk for Deutsche Bank. His study was published in Proceedings of the National Academy of Sciences.*