By Johan Fourie

FINANCIAL SECTOR

How fintech must disrupt to be effective

Many hope that financial technology will provide high social returns, but to do that it needs to change the status quo rather than just become part of the current financial sector, which is notoriously difficult for new players to enter.

Although few would dispute that a strong financial industry is necessary for a thriving economy, the growth in finance over the last three decades, as a 2015 paper by Thomas Philippon in *The American Economic Review* shows, has not contributed to more efficient capital allocation. The cost of financial services – or more technically: the unit cost of financial intermediation – has remained roughly around 2% for the past 130 years in the US. This is not much different for other countries. Financial innovation has not benefitted consumers in terms of lower costs as innovations in other industries have done.

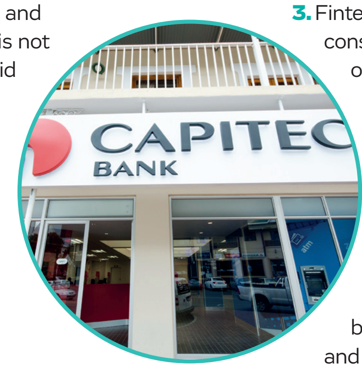
Thomas Philippon
Economist and professor of finance at the Leonard N. Stern School of Business, New York University

Why this happens is not a theoretical puzzle. Innovation in finance is often geared towards rent-seeking and business-stealing by incumbents rather than radical disruptions from new entrants. The problem is that such innovation does not improve the overall efficiency of the system; it results in private returns to incumbents but with low or no social returns. Although this is true for most industries, the ease of entry and competition in most industries make this less of a concern.

Finance, though, is characterised by high barriers to entry. The trend, at least since the 1990s, has been to consolidate further. The number of US banks and banking organisations fell, for example, by almost 30% between 1988 and 1997.

> Finance, though, is characterised by high barriers to entry. The trend, at least since the 1990s, has been to consolidate further. The number of US banks and banking organisations fell, for example, by almost
> 30%
> between 1988 and 1997.

The South African banking sector followed roughly the same trajectory, with one exception: Capitec. Using improvements in information technology, Capitec has managed to reduce fees, which has reshaped the South African banking landscape. But much of finance still remains expensive. Despite the new entrant, South African banks, like their US counterparts, generate large spreads on deposits. As Philippon argues in a recent National Bureau of Economic Research working paper, "finance could and should be much cheaper. In that respect, the puzzle is not that fintech is happening now. The puzzle is why it did not happen earlier."



That is why fintech, or financial technology, is all the rage. The hope is that financial technology – including cryptocurrencies and the blockchain, new digital advisory and trading systems, artificial intelligence and machine learning, peer-to-peer lending, equity crowdfunding and mobile payment systems, to name a few – will result in innovation where the social returns surpass private returns. In other words, fintech must disrupt to be effective.

This sentiment is echoed in a wonderful new book, *Money Changes Everything: How Finance Made Civilization Possible* by William Goetzmann: "While finance can solve great problems, it also can threaten the status quo. It changes who turns to whom in an emergency. It reallocates wealth; it creates the potential for social mobility and social disruption."

A few weeks ago, Ronald Khan of investment management firm BlackRock, gave the biennial Thys Visser Memorial Lecture at Stellenbosch University. Over three nights he delved into the details of investment history, theory and its future outlook. He explained how his firm is already using textual analysis and machine learning techniques – Big Data analysis – to improve their returns on global stock markets, and the impact this will have on the active management industry. I was surprised that he did not mention even once that these innovations will lead to lower costs for consumers, but that the main purpose was seemingly to maintain the high returns (and cost structure) of investment firms.

This type of fintech will not disrupt the industry, and thus won't have the large social returns that creative destruction promises. It will most likely only reinforce the position of the incumbent. What is necessary, then, is to encourage start-ups to enter and compete with technologies that can disrupt. Here, according to Philippon, financial regulation can help. He emphasises three challenges that regulation can help address.

1. Regulation can help to level the playing field for fintech firms. This is complex, however, as some parts of the financial system, like custody and securities settlement, are inherently concentrated. For example, blockchain technology can improve the efficiency of the market, but it could also restrict entry, which will see the incumbent firm increase its rents.
2. Regulation must be forward looking. Regulators must identify the basic features or principles of what the fintech industry must look like within a decade or two, and implement the appropriate regulations when the industry is still small. It will be difficult to regulate once the industry is already established.
3. Fintech will require additional regulations to protect consumers. One example that Philippon uses is the use of robot advisers for portfolio management. The legal challenge here is that no robot will provide fail-safe "advice", but it is highly likely that these robots will be better than their human equivalents.

Just how fintech will disrupt the South African finance industry is anyone's guess. But as long as the incumbents develop their own products (or continue to buy young start-ups), don't expect consumers to benefit soon. If consumers are to benefit, regulators must find a way to make entry and competition a reality in an increasingly complex and technologically advanced industry. ■

editorial@finweek.co.za

Johan Fourie is associate professor in economics at Stellenbosch University.

www.pages.stern.nyu.edu/~tphilipp/
Images: Gallo Images/Getty Images