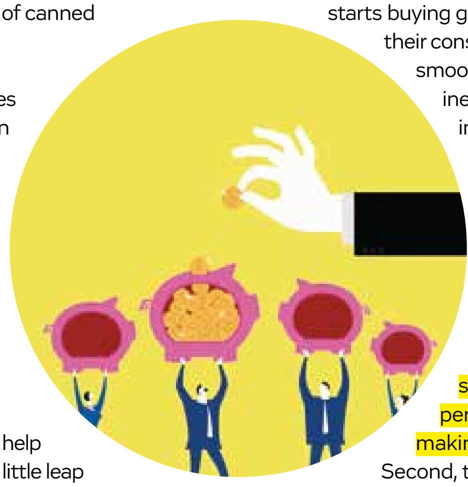
By Johan Fourie

SHOPPING TRENDS

# Why is spending inequality on the rise?

In the US, spending inequality – the difference in how much households spend at grocery stores – is on the increase. Is technology to blame?

One of the things I realised soon after marriage, is that my wife and I have different strategies when it comes to grocery shopping. I like to stock up, buying bulk on the cheap, while she prefers to visit the store more frequently, acquiring only what is necessary for the next few days. This of course means that we never run out of canned beans, but often out of milk.



Such choices are at the heart of economics. Understanding how, why and when a buyer chooses a product or service is often the difference between a thriving and failing business. That is why every successful firm, from banks to health insurance to mobile communications companies, spend considerable resources these days analysing big data to understand and "nudge" customers into behaving in a specific way.

Even general retail, a sector often caricatured as unaffected by technological change, now has to adjust to new technological possibilities, like sensing technologies that track the movement of customers as they browse a store. Technology can help retailers to optimise store layout. It can also, with a little leap of the imagination, allow for advertising that recommend new products when a new customer walks past based on the content of their previous purchases, of their existing basket or of the purchases of their friends that is connected to them on social media.

Imagine buying shampoo, and receiving a prompt: "Your friend, Herman, purchased [X shampoo brand] in this store five days ago." Then there is a plethora of other technologies that are likely to revolutionise the shopper's experience, from mobile payments (in South Africa: wiCode or SnapScan), to digital receipts (another South African start-up: Pocketslip), to online shopping.

There is no doubt that these new technologies will shape the way we make decisions about what, how and where to buy our groceries.

But technology is not the only thing that affects our spending behaviour. A new NBER Working Paper by three authors affiliated to US universities, identifies an interesting trend in the US over the past four decades: the rise of spending inequality, or a widening gap between how much different households spend when they go shopping.

We usually measure inequality by comparing peoples' incomes. But presumably we are also interested in how people spend their incomes: are there huge differences between how much some households spend vis-à-vis others, and do these differences increase over time? And it seems like this is indeed the case: the difference in household spending patterns in the US seem to be on the increase. Some families seem to be spending a lot more than others.

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One suggestion for the rise in income inequality is the impact of technology. But this is where the authors find an interesting result: the reason for the rise in spending inequality, they argue, is not because of growing differences in consumption caused by greater levels of income inequality, but instead because Americans go shopping less frequently. They explain it as follows: if a household starts buying groceries once a month instead of once a week, their consumption may not change (they stockpile to smooth consumption), but the measured spending inequality will change because some households in surveys will appear as if they spend a lot, while others will appear as if they spend nothing. This difference was less dramatic when households went shopping every week, and so it appears as if inequality is on the rise.

Using various datasets, the authors find two distinct trends to support this theory: first, the number of shopping trips that Americans make has been steadily falling since 1980. In contrast, the average expenditure per trip has been steadily rising. Americans are making fewer, but larger, shopping trips on average. Second, the quantity of goods Americans buy have been rising, while the amount of time spent shopping has declined. All of this, the authors conclude, points to higher levels of stockpiling by Americans.

What explains this changing behaviour? Surprisingly, it is not technology innovation, which is often considered the source of disruption. Instead, the authors show, the increasing stockpiling is a result of the emergence of warehouse stores, like Costco, that sell larger quantities of goods at lower unit prices.

Technological improvements like mobile payments, digital receipts and online shopping are aimed at reducing transaction costs, making it easier and cheaper for consumers to do their grocery shopping. Such lower costs should result in a higher frequency of shopping. Yet, the trends, at least for the US, point in exactly the opposite direction: fewer visits to the supermarket, with consumers preferring to buy in bulk and on the cheap.

Perhaps South African consumers behave differently. Perhaps the digital revolution will reverse these trends quickly; once your fridge can order canned beans automatically from the local supermarket when supplies run low, we won't need to buy in bulk. But any retailer worth their salt would do well to be aware that the promise of technology can often overshadow deeper forces pulling in the other direction. Technology reduces transaction costs, but the benefits of buying bulk seem to outweigh the costs. Now to convince my wife. ■

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