## WHAT MAKES CONSUMERS SWITCH MOBILE TARIFFS?

This article summarises "Loss Aversion on the Phone" by: Christos Genakos, Costas Roumanias and Tommaso Valletti

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Navigating through thousands of mobile phone tariff plans to find the best one is far from easy in today's telecommunications market. Having an "expert" friend calculate the tariff with the largest savings for you definitely helps. However, as new research from Christos Genakos, Costas Roumanias and Tommaso Valletti demonstrates, the psychological pressure to avoid losses helps you even more.

There are over 70 million customers that have selected one of the 7,000,000 mobile tariff plans available in the UK today. Most likely, some customers are not in the best contract for them and would be better off switching to a more appropriate tariff. However, with such a large number of contracts available, consumers are faced with confusion and might avoid switching altogether, harming themselves and the competitive process among firms along the way. Understanding what kind of information would help them switch is important for policy makers and regulators, such as Ofcom.

The predominant thinking among regulators and competition authorities worldwide is that this is mainly an information and a computational problem. That gave rise to many accredited schemes for third-party price-comparison sites covering the mobile, but also several other industries (e.g., banking, electricity, credit cards, etc.). The aim of these schemes is to increase consumer confidence about how to find the best price for the service they wish to purchase, and to increase market transparency by providing or facilitating expert guidance. Sort of like an "expert" friend who could tell you how much you would save by switching to the best tariff for you. That would surely help solving the problem!

In this study, we present novel evidence explaining how people select their contracts in the mobile telecommunications industry. We use individual-level panel information of approximately 60,000 mobile phone users in the UK between 2010 and 2012. We got unprecedented access to Billmonitor.com (henceforth BM), the leading mobile phone price comparison site in the UK, which was the first company to receive such an accreditation award for mobile phone services. Consumers in our sample subscribe to monthly plans with a fixed payment component (the monthly rental) that includes several allowances (for call minutes, text messages, data usage, etc.). Upon registration with BM, consumers receive personalized information on the exact amount they could save by switching to the best contract for them. This information is calculated by an optimizing algorithm devised by BM that is allowed to look into consumers' past bills. In other words, in our sample consumers *know* precisely how much they can save by switching to the best tariff plan for them, since this computation is done by BM on behalf of the consumer.

BM is able to find better plans for many consumers who could save substantial amount of money by switching to alternative plans. Consumers with savings fall in two categories. Those who happen to exceed their allowance and pay extra fees, called "overage" fees, and could save money by switching to a higher, more inclusive, plan. And those who could also save money by switching instead to a lower, less inclusive tariff if their consumption is systematically lower than their allowance. If the only problem was information acquisition, then consumers of both types should switch with the same probability upon receiving their personalised information.

However, our conjecture, based on the pioneering work of Kahneman and Tversky (1979) that established prospect theory as an alternative tool to analysing choice under uncertainty, was that consumers will react differently due to loss aversion: individuals evaluate economic outcomes not only according to an absolute valuation of the outcomes in question, but also relative to subjective reference points. Paying more than the monthly rental (that serves as a natural reference point) is experienced as a loss. It should be a more "painful" experience and should prompt consumers to switch with higher probability than they would if they could save the exact same amount by switching to a lower tariff.

Using the data on BM's customers, we evaluate what affects people switching contracts over time. We look at switching within operator, in order for switching to be seamless and not constrained by contractual clauses. We show that potential savings are a significant determinant of switching. Indeed, having an expert friend help you calculate how much you can save increases the probability that you switch contracts. More importantly though, and in line with our loss-aversion conjecture, we find that, controlling for savings, switching is six times more likely if the customer was charged overage fees. In other words, the psychological pain of paying over and above what you expected to pay as a fixed monthly fee is an even greater motivator to switch, in addition to the conventional economic reasoning that only savings information should matter.

What is even more fascinating is that consumers in our environment do not just face a large number of contracts. These environments are, almost by definition, uncertain, as there is a random element in people's behaviour that determines what is ultimately consumed and charged. This uncertainty brings with it an element of risk. Placing risk aversion vis-à-vis loss aversion is of economic importance, as, in many real-life environments, the potential of both gain and loss is most likely to co-exist with risk.

In situations of choice under uncertainty, prospect theory first foregrounded the importance of loss versus gain, whereas expected utility theory typically assumes a uniform attitude towards risk. Although a large body of literature has focused on assessing the relevant merits of the two theories (e.g., Rabin, 2000; Fehr and Göette, 2007), to the best of our knowledge, no one has attempted to account for both with field data. We believe that this is important, as we do not see loss aversion and risk aversion as antagonistic, just as we do not necessarily see loss aversion and traditional expected utility theory as mutually exclusive. In principle, they can both help us

understand the determinants of choice. Given the appropriate data, it becomes an empirical question to test whether the predictions from either theory are consistent with the data, as well as the extent to which they can help predict observed behaviour. In this study, we allow both risk and loss aversion to affect consumers' choices.

Testing for the influence of both, we actually find that risk aversion cannot explain mobile phone consumers' switching, as traditional expected utility theory would suggest, whereas loss aversion remains strong and significant under all specifications examined. More precisely, we find that individuals seem to be risk-averse in the domain of gains and risk seekers in the domain of losses: this differential risk attitude, resulting in an S-shaped behaviour of their value function, is consistent with prospect theory.

Our results not only shed light on an important ongoing academic debate, but also, from a practical point of view, put the use of price-comparison sites in a new perspective. We suggest that regulators hoping to rely on price-comparison engines to discipline market prices using shared data should first investigate what giving "good advice" means in a context that includes loss aversion. Consumers also switch for behavioural reasons that have little to do with savings, but that still could be consistent with optimal individual behaviour. Just informing consumers about potential savings, may not prompt the healthy competitive switching that regulators would like to nudge. According to our results, savings are not necessarily the first thing even well-informed consumers are looking for. Rather, they like a fixed reference point that leaves little room to bill shocks.

## References

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