

# 1 Introduction

The law of the number portability enables to the user of mobile telephony the right to bear a number in case the changing of operator. Consequently, the change of operator, with this law, does not signify any more the right to abstain to bear a number and thus, reduces the switching cost in the due market.

The switching costs inherent to the market characteristic or of the product are capable to furnish market power to the companies in industries where they exist. This is due to the impediments existing in the consumption replacement of a product to another similar. These impediments vary on several ways. The learning difficulty of a tool, the existence of contracts that impede the dissociation of the buyer by a stipulated period and the impediments posed by incompatible accessories with other products of the same type would be some of them. To conquer this market power, the companies many times compete more aggressively on a first moment, to lately take advantage of the locked in consumers charging major prices.<sup>1</sup> The present study will stick on measuring the effects of the law of the number portability in the telephonic market.

The framework of the model to be used is largely based in the paper of Paul Klemperer (1987 b). The author analyses what occurs in a duopolistic structure where there are switching costs using a theoretical model containing two periods, which can be interpreted as the maturation period and the developed industry, respectively. The effects of these costs have an ambiguous characteristic as per the author. The maturity of the industry is the main cause of this ambiguity. The distinction among the periods occur, then, while in the first the concurrence is stimulated to the obtaining of a market share and in the second, the companies

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<sup>1</sup> This behavior is observed in Klemperer (1987 a) and in Klemperer (1987 b), being that in Klemperer (1989) the author observes that the occurrence of a new entry results on equilibrium in price wars. Be it, prices reduction in a very first moment to lately glimpse an increase of same. Other paper that verifies an ambiguity due to the switching cost is the paper of Basso (2009).

take advantage of this conquer and act in a similar way to the monopolist due to the existence of the switching cost.

The main focus is to mensurate the effect of the number portability to attend the existing ambiguities in accordance with the theory to help the decision-making process of later public politics. The empiric results confirm the existing ambiguity in this market with switching cost. As a reduction in the switching cost cools the competition in immature markets being this effect observed with the company's profit raising, the same reduction has an opposite effect in the competition in mature markets, resulting in lower profitability in this context. To the effect of public politics, this information is paramount. This study makes us to look that one cannot only worry with the type of public politics, but also with the moment of the occurrence of same.

The study is broken down in seven sections. It will consist of the second one the theoretical literature, the data description with the next descriptive statistics and in the following section it will be approached a theoretical model. The fifth section will consist of the main results, the robustness test is the next and finally, the last section will deal with the work conclusion and the presentation of the main results.