

**Determinants of generics' market growth**Bruno Martins¹, Pedro Pita Barros¹, Luís Catela Nunes¹¹ Nova School of Business and Economics, Lisboa, PORTUGALContact: bdf.martins@gmail.com

Objectivos (Objectives): In the last ten years, the Portuguese governments have made several policies aimed at developing the generic pharmaceutical market, which was nearly inexistent. In fact, more than fifty measures were taken with this purpose. The goal of the government relates to decreasing the costs with pharmaceuticals both to consumers and to the National Health System, without undermining the quality of the treatment. The fact that such a high number of measures have been taken suggests that there is no exact solution to boost this market. However, no formal analysis of how effective these were has ever been made, which may lead to wrong policymaking, the adoption of policies that have no effect on the market and, therefore, are a waste of resources. In this paper we propose to study the impact of all the policy measures adopted.

Metodologia (Methodology): Using information for generics sales and market share (in retail prices and volume), we estimate a diffusion curve using a parametric approach for the period from January 2000 (January 2003 for market share information) to October 2010. This curve is estimated using logistic regression in which policy measures are included in the diffusion rate using dummy variables, one for each measure. The logistic function allows us to estimate both the impact of time, accounting for the natural development of the market, and the impact of the measures on the diffusion rate of the generics market, creating an additional boost to the diffusion, while taking into account the seasonal effect. Moreover, this method also allows us to estimate two more parameters of interest, namely the upper asymptote, which represents the maximum dimension of the market, and the inflection point that represents the period of maximum growth.

Resultados (Results): Our results show that, in a general way, the development of the generics market has been following its own dynamic, due to the natural flow of time. Indeed, only a small part of the measures had an impact in the market. Moreover, this impact was not always positive as some of them seem to decrease the diffusion rate. In addition, statistically significant effects are more easily found when the market is considered in prices rather than in volume, as expected, since several policies address specifically pharmaceutical drugs prices. Additionally, the generics market in terms of value was found to be already reaching its limit while in terms of volume it is still in expansion.

Conclusões (Conclusions): All in all, there is no single policy measure that has an unquestionable impact on the generics markets. Nevertheless, the large numbers of measures taken by governments in the last ten years do not seem to be fulfilling its objective.