The Principal-Agent Model with Moral Hazard in the Brazilian Innovation System: The Case of 'Lei do Bem'

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Abstract : The need to adopt some type of industrial policy and innovation in Brazil is a recurring theme in the discussion of public interventions aimed at boosting economic growth. For many years, the country has adopted various policies to change its productive structure in order to increase the participation of sectors that would have the greatest potential to generate innovation and economic growth. Only in the 2000s, tax incentives as a policy to support industrial and technological innovation are being adopted in Brazil as a phenomenon associated with rates of productivity growth and economic development. In this context, in late 2004 and 2005, Brazil reformulated its institutional apparatus for innovation in order to approach the OECD conventions and the Frascati Manual. The Innovation Law (2004) and the 'Lei do Bem' (2005) reduced some institutional barriers to innovation, provided incentives for university-business cooperation, and modified access to tax incentives for innovation. Chapter III of the 'Lei do Bem' (no. 11,196/05) is currently the most comprehensive fiscal incentive to stimulate innovation. It complies with the requirements, which stipulates that the Union should encourage innovation in the company or industry by granting tax incentives. With its introduction, the bureaucratic procedure was simplified by not requiring pre-approval of projects or participation in bidding documents. However, preliminary analysis suggests that this instrument has not yet been able to stimulate the sector diversification of these investments in Brazil, since its benefits are mostly captured by sectors that already developed this activity, thus showing problems with moral hazard. It is necessary, then, to analyze the 'Lei do Bem' to know if there is indeed the need for some change, investigating what changes should be implanted in the Brazilian innovation policy. This work, therefore, shows itself as a first effort to analyze a current national problem, evaluating the effectiveness of the 'Lei do Bem' and suggesting public policies that help and direct the State to the elaboration of legislative laws capable of encouraging agents to follow what they describes. As a preliminary result, it is known that 130 firms used fiscal incentives for innovation in 2006, 320 in 2007 and 552 in 2008. Although this number is on the rise, it is still small, if it is considered that there are around 6 thousand firms that perform Research and Development (R&D) activities in Brazil. Moreover, another obstacle to the 'Lei do Bem' is the percentages of tax incentives provided to companies. These percentages reveal a significant sectoral correlation between R&D expenditures of large companies and R&D expenses of companies that accessed the 'Lei do Bem', reaching a correlation of 95.8% in 2008. With these results, it becomes relevant to investigate the law's ability to stimulate private investments in R&D.

Keywords : brazilian innovation system, moral hazard, R&D, Lei do Bem