



# The importance of research for progress

The importance of research and development (R&D) investment has become more evident every day, among the factors directly related to the good economic performance of the so-called emerging countries around the turn of the 20th to the 21st centuries. Although there could be quite large differences between the economic growth models of these nations, for instance, consider the differences between South Korean and Chinese models, all of such models are based upon substantial investments in the production of knowledge.

International university rankings have indicated, in recent years, an increasing participation, among the best positions, of education institutions from emerging countries, such as Taiwan, Hong Kong, China, South Korea, among others, thus reinforcing the clear connection between significant investments on scientific and technological production and an ever increasing competitiveness of the country's industrial base.

The realization of this direct correlation with the economy performance has forced European Unity countries to establish, in 2006, the goal of reaching 3% of their gross national product (GNP) in R&D spending until 2010. In that particular year, South Korea spent 2.9% of its GNP and the European average reached only 1.8%.

Brazil has very good news with regard to its scientific production. Our position among the nations, in terms of international level scientific production, has been steadily improving, from 20th place in 2000 to 15th place in 2007, and finally reaching 13th place in 2008, ahead of The Netherlands, in 14th place, and Russia, in 15th place.

Despite the fact that such indicators may have several flaws, one cannot fail to recognize that the growth has been significant. Furthermore, it has been the result of an outstanding dedication from the scientific community, especially if we incorporate the information that, only in recent years, Brazil has reached 1% of GNP investment level in science and technology applications.

In this context, in 2007, the federal government has established the goal of reaching the 1.5% of GNP mark in R&D investment until 2010. There is no complete evidence, at this point, that the initiative has reached its desired goals. Furthermore, it may not be relevant because, regardless of the results, we will still be quite far from the investment levels sought by other nations in terms of a direct impact in the production of knowledge as well as of its consequences in the competitiveness of the country's economy.

The data from the present decade indicate that the three state universities from the State of São Paulo contribute 40% of the overall Brazilian scientific production. Without prejudice with regard to the state government actions for the past 21 years, it is fair to state that such unrivaled performance is intrinsically related to the fact that such universities are the only ones in Brazil to effectively profit from the university autonomy established in Article 207 of the Federal Constitution in terms of teaching and scientific matters as well as in terms of budgetary, financial, estate and accounting issues.

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The present global scenario demonstrates that the Brazilian research and higher education institutions cannot avoid their responsibility in the efforts for economic and social development in accordance to the principles of sustainability, continuous improvement in the quality of life, environmental conservation and reduction of social inequalities. Furthermore, such scenario evidences that participation in this process is also a challenge for both public authorities and the industrial sector in the country.