## brevissimos cindes 1

## Innovation policy and innovative performance: an assessment of the recent Brazilian experience\*

Pedro da Motta Veiga\*\*
Sandra Polónia Rios\*\*

July 2011

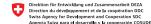
An overall concern with the loss of competitiveness of the Brazilian industrial sector combined with the "primarization" trend of Brazilian exports have stimulated a debate on the innovative performance of the Brazilian industry, and its role as far as the quality of the Brazil's economic international insertion is concerned. The Brazilian innovation policy is part of the debate on the menu of domestic policies to be implemented to face those trends, particularly within the context of lasting exchange valuation.

A number of analysts of the Brazilian innovation policy consider that, with the new instruments introduced at the end of the 90's, Brazil has a comprehensive and diversified set of incentives and instruments, the main purpose of which is to foster R&D activities within firms. In this sense, Brazil would have overcome by good measure the policy gap which used to distance the country from other developing and developed countries.



<sup>\*</sup> This text summarizes the main conclusions of the publication Breves Cindes 52, Innovation policy and innovative performance: reflections on Brazilian recent experience available at <a href="https://www.cindesbrasil.org">www.cindesbrasil.org</a>





<sup>\*\*</sup> CINDES - Centro de Estudos de Integração e Desenvolvimento.

Brevissimos Cindes [i+d]

In contrast with the diversification and expansion of a number of mechanisms to support innovation and technological development in Brazil, the innovative performance of the Brazilian industry has been somewhat disappointing. An analysis of information collected from Technological Innovation Surveys (PINTEC) conducted by IBGE between 1998 and 2008 shows the persistence of a low degree of innovation and innovative efforts, which seems incompatible with the evolution of policy initiatives by the public sector.

What do we gather from a comparison between innovation policies and companies' innovative performance in Brazil?

- first of all, despite the diversification and improvement of Brazilian policy instruments in recent years, those initiatives are not reflected in a significant boost of corporate efforts in the innovation area;
- second of all, the greatest Brazilian weakness in the innovation area continues to be the concentrated on the firm dimension, i.e., the low degree of innovation and innovative efforts as compared to the performance observed in OECD member countries and developing countries considered to be successful in this area; and
- last but not least, innovation efforts seem to be concentrated on large companies and on a small number of sectors, most of them producers of goods of mid-high technological intensity.

How to explain this situation? Without disregard for the possibility that existing instruments and the institutionalism of policy in the innovation area may still be improved and that such evolution in the "supply" of incentives may have positive effects to intensify firms' innovation efforts, there are two explanations which emphasize the dimension of the demand for innovation (and for policy incentives).

The first one links the poor innovative performance of Brazilian companies to structural characteristics of the production sector, and particularly of manufacture. According to this view, part of the Brazilian performance in terms of innovation can be associated to the industrial structure, the most innovative sectors being under-represented in the Brazilian industry.

In this view, the structural change in the industry towards sectors where competitive strategies are based on innovation would be a prerequisite to the increase of the innovation rate of the Brazilian industry. Innovation would be disseminated as corporate strategy, as a variable deriving from the structural change supposedly fostered by trade and industrial policies. This point of view emphasizes the sectoral dimension of innovation – arising from different degrees of importance given to innovation in firms' competitive strategies, according to sectoral competition patterns – and establishes that a boost in firms' innovative efforts directly depends on the evolution of the industrial structure towards innovation-intensive sectors.

However, it is possible to value the sectorial dimension of innovation without necessarily defending a strategy of structural change in the industry. In this case, there are those defending the structure of comparative advantages as a basis for innovation strategy. In this view, the innovation policy would have to consider as prioritary sectors those showing a high export performance and strong potential for growth in the international markets.

The second point of view states the existence of a low degree of coordination and even of consistency between the innovation policy and policies which might contribute to increase the contestability of the domestic market and the exposure of Brazilian companies (via exports, imports and investments Brevissimos Cindes [i+d]

abroad) to international competition. This view is based on the hypothesis that competition is maybe the most powerful incentive to the integration of innovation to firms strategy, and that public policies not directly related to innovation, but focused on increasing the degree of contestability of markets in general may contribute to make innovation a growth strategy economically attractive to companies in comparison to less expensive alternatives, such as privileged access to government benefits or elimination of competition through regulatory barriers.

Such policies would also favor the diffusion of innovation benefits beyond the boundaries of the innovative company, limiting in the benefit of economy and society as a whole the market power granted by innovation. According to this view, if trade and competition policies do not act to promote competition in the domestic market, innovation policies are unlikely to succeed. And it is highly improbable that the benefits of technical progress will be disseminated to the economy and industrial sector.

Both views are not necessarily opposed to each other, and it is possible to think of a combination of instruments and policies contemplating objectives associated to each of them. However they diverge if that the structural change of the industry – defended by the first variant of the "sectoral" view – is seen as requiring, in order to take place, the setting of a domestic environment in which innovators maintain high levels of market power in the domestic market and benefit from a reasonable level of protection against the competition of imports.