



Policy Brief

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The World Is Technologically Revolutionizing, Yet I Am Not Innovating!!

Executive Statement

The objective of this policy brief is to influence the ministry of trade and commerce in Kenya to facilitate strengthening the link between inward foreign direct investment and innovative activity in the country. Evidence suggests that research and development intensity exerts a positive and significant influence on the rate of product innovation especially via domestic access to finance and firm's level of foreign capital participation. It is however noted that foreign direct investment negatively impacts innovation. Furthermore, access to finance is positively associated with innovation. The policy entry point is that the government of Kenya should aim at investing more in research and development along with better access to domestic finance and increased foreign capital participation at the firm level.

Introduction

Since undergoing economic political reforms from 2002, Kenya has shown the potential of becoming an emerging economy with a rapidly growing manufacturing and exporting base. For further development of the Kenyan economy, technological progress is crucial. In this regard two features of the economy are particularly notable: First, Kenya has become an important location for research and development (R&D) and innovative activity by domestic firms at least since the early 2000s. Secondly, Kenya has become an unimportant host country for inward foreign direct investment (FDI), indeed, she receives the least compared to the rest of the East African countries.

A domestic firm receiving an injection of foreign capital can be expected to face lower financial constraints which may hinder innovation. Also, it may bring with it an inflow of technology. After all, multinational enterprises (MNFs) are assumed to have a superior technology compared to domestic firms hence, a foreign capital inflow through an acquisition, joint venture or some other form of capital transfer may lead to the installation of the foreign technology in the domestic firm. Both of these processes could manifest themselves in increasing innovative activity.

Inward FDI may also affect innovation through impacting credit opportunities or technology transfer. As to the former, increased inflows of FDI can change credit opportunities for domestic firms and therefore, affect their innovation activity. In terms of technology transfer, the superior knowledge brought into the economy through FDI may leak to domestic firms through, worker movements, imitation and adaptation among others. These firms may then be able to engage in more innovation activity.

Unfortunately, the efforts of Kenya to attract foreign direct investment have not yielded much in terms of innovation development. Today in Kenya, firms operate under various constraints, which stand on the way to the achievement of innovative activity. There are, for example, shortage of funds, weak link between R&D institution and firms, low culture of science and technology and low FDI levels among others.

Methodology

To investigate these issues empirically we use a rich panel data set of some 240,000 domestic enterprises in Kenyan Key FDI receiving firms for the period 2003 to 2012. The study adopts an empirical model where a domestic firm either innovates at some point in time with good results of innovation or it does not. The analysis process involves two steps: In step one we generate residual factors from linear regressions of each endogenous variable on the instrumental variables as well as other exogenous determinants. The residual terms are correction terms for the endogeneity problem. To provide evidence in favour of the hypothesis that instrumented variables are indeed endogenous, step two estimated the residual terms from step (i) as well as additional instruments.

Findings

That research and development intensity is an important factor in determining the rate of product innovation is evident. This is as expected because research and development intensity is a major input in the product innovation process.

It is also evident that firms with some foreign capital participation and better access to domestic finance innovate more. This may be due to spillover of new technology from these MNFs or the reduction in financial constraints associated with MNFs capital injection. More importantly, the joint use of access to finance and the availability of R&D as well as the use of a domestic firm's level of foreign capital participation and R&D make these factors more useful determinants of product innovation.

Although, theory suggests that foreign direct investments may transfer technology, this study confirms that firms do not benefit from inward foreign direct investment but from foreign capital participation. Overall, previous studies on foreign direct investment claim that the target countries of foreign direct investment receive very few benefits from foreign direct investment because most benefits are transferred to the multinational firm's country.

Implications

The results of this study reveal very useful insights. That foreign capital participation, domestic access to finance and R&D intensity exerts a positive and significant influence on the rate of product innovation indicates that, R&D intensity is a major input in the product innovation process. It also suggests that broader access to finance and the level of foreign capital participation in each firm is likely to result in increased firm innovation and multiple growth opportunities. Finally, the positive interaction of foreign capital participation and R&D and again the interaction of domestic access to finance and R&D enhanced this result. This has the implication that there may be benefits derived from the joint use of these key variables due to the influx of new technology or the reduction in financial constraints associated with the capital injection since firms with some foreign capital participation were more likely to engage in product innovation. Local firms derive no technological benefit from FDI inflows implying that foreign capital participation in each firm should be Kenya's concern and not the amount of FDI inflows into the country.

Recommendations

Rather than just focus on FDI inflows to improve domestic innovative activity, policy makers should focus more on getting the firm-level fundamentals right - improve firms linkage with R&D institutions (i.e. universities and research centers). Providing credit for the most promising firms, lowering interest rates and reducing borrowing barriers among others promotes growth for enterprises. The level of foreign capital participation in each firm could be encouraged by implanting policies that allow MNCs to participate in the local capital market and other investments ventures.

References

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