

Scanning capabilities and the impact of environmental characteristics

Policy brief DFID/Tilburg University research: *'Enabling Innovation and Productivity Growth in Low Income Countries' (EIP-LIC)*.

<http://www.tilburguniversity.edu/dfid-innovation-and-growth/>



Firms in low income countries (LICs) face highly uncertain business and institutional environments, frequent changes in industry structures and enhanced competitive dynamics. In order to understand the opportunities and challenges within such an environment, extant theory argues that firms need to develop scanning capabilities. These are crucial in a firm's dynamic capabilities, defined as the ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. The effect of the environment on the development of scanning capabilities in LICs, however, is unclear.

Scanning capabilities are widely viewed as a crucial step in aligning firms' strategies with their external environment, which is expected to enhance those firms' performance in dynamic environments. The capability to monitor the environment closely enables firms to adjust swiftly to unforeseen circumstances. In LICs, the environment is much more uncertain than in high income countries. This research seeks to investigate whether such an uncertainty results in enhanced development of scanning capabilities.

A team of researchers from Radboud University Nijmegen studied the relationship between environmental characteristics and scanning capabilities in Kenya, Tanzania and Uganda. The study is part of the DFID-funded research project entitled *'Enabling Innovation and Productivity Growth in Low Income Countries' (EIP-LIC/PO5639)*, implemented by Tilburg University and Radboud University Nijmegen in The Netherlands. The original working paper of the study is entitled *'Making Sense of Industry Characteristics as Drivers of Dynamic Capabilities'* (2015) by Annelies van Uden, Joris Knobben and Patrick Vermeulen¹.

Research approach and findings

Based on a sample of 473 manufacturing firms in Kenya, Tanzania and Uganda, the research team found that some environmental characteristics in these countries hinder rather than stimulate the development of firm scanning capabilities. In particular, highly unstable environments characterised by high levels of dynamism (large fluctuations in the level of sales within an industry) and informal competition have a paralysing effect on the development of scanning capabilities.

Thus, environmental characteristics can hamper the development of firm capabilities.

Policy implications

¹ The paper is accessible at the project's website (<http://www.tilburguniversity.edu/dfid-innovation-and-growth/>).

As markets change and industries become increasingly dynamic, firm owners and managers need to adjust their existing routines and invest in capabilities to scan their changing environment. However, the research shows that firms in LICs face such an uncertain environment that it paralyses these capabilities. Firms do not invest in scanning capabilities as this high level of uncertainty restrains them from taking action. The research suggests that policy and programmes could address two key environmental characteristics which have a hampering effect on the development of firms' scanning capabilities.



The first concerns fluctuations in the level of sales within an industry.

Although it is not to be expected that governments will be able to change the dynamic environment in the short run, policies and programmes could provide tools and skills to better anticipate and grasp business realities, in particular fluctuating levels of sales. Government agencies could provide easy access to market information with a view to organising markets more effectively. Another policy approach would be to address the owners' and managers' lack of knowledge and skills in aligning their strategies with business realities. Having a well thought-out business plan and management strategy that allows for proactive decision making lessens the chance of becoming paralysed in dynamic environments. Firms and managers of these firms could be trained to be better able to respond proactively to this uncertainty.

The second characteristic hampering the development of firm scanning capabilities concerns the paralysing effect of informal competition. In the qualitative studies of EIP-LIC, it was observed that many owners considered informal competition to be *"unfair because these companies do not pay taxes and have lower operational and production costs."* Governments should strengthen their efforts to formalise the informal enterprise sector. The cost of this additional effort is likely to be offset by increased tax revenues, amongst other benefits.

Moreover, mainstream firms would be better able to compete with the informal sector, if it were more observable. Although dual economies are common in LICs, it is generally the case that as countries develop, the informal sector will become less important. However, the firms interviewed considered their informal counterparts as an unregulated micro-entrepreneurial sector "here to stay" rather than as a disadvantaged residue of segmented labour markets. Therefore it is crucial that policies and programmes take a clear position on the informal sector and provide the best available information about the informal sector to owners and managers.

This policy brief is the product of a research project funded by the British Department for International Development (DFID) entitled *'Enabling Innovation and Productivity Growth in Low Income Countries'* (EIP-LIC). The project is implemented by Tilburg University (The Netherlands) and explores SME-level innovation in Low Income Countries (LICs) and factors that contribute to or limit its diffusion. Data collection and research collaborations took place in 10 African and Asian countries (Bangladesh, Ethiopia, Ghana, India, Indonesia, Kenya, Tanzania, South Africa, Uganda and Vietnam). The policy implications of this research are presented in a series of policy briefs, targeted at a broad audience of policy makers within governments, business and development agencies with a view to quantifying research outcomes and promoting evidence-based policy making.