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Barriers to Innovation and Firm Productivity in the Caribbean

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The emerging evidence as micro data becomes available for the Caribbean is that innovation and productivity are quite low and are acute constraints to economic growth and development. It may therefore be assumed that firms in the region potentially face high barriers to innovation. PROTEqIN makes it possible to empirically investigate innovation barriers in the Caribbean.

Examining innovation barriers is important for both policy makers and the private sector:

- It is useful for designing and implementing appropriate policies and incentives for firms to engage in innovative activity and reduce market failures to innovation.
- It is important for the firm since this would provide valuable information to entrepreneurs and managers when crafting innovation strategy.

Three main firm categories may be considered:

1. Innovators- firms engaged in innovative activity and have successfully innovated and view barriers as important.
2. Potential innovators- firms that did not start or started but not successfully completed innovation and rank barriers as important.
3. Non-innovators-firms that did not undertake any innovative activity and rank barriers as not important.

Barriers hinder innovation for innovators and potential innovators only. Innovators experience barriers to increasing current innovative activities. Potential innovators face barriers to the take-off of innovative activity.

This paper investigates innovation barriers related to finance, market, knowledge and policy and regulations factors facing firms in 13 Caribbean Small Island Developing States (SIDS) and its impact on innovation and productivity.

The data show that 26% of firms surveyed are innovators, 59% are potential innovators and 15% are non-innovators.

The study modelled the firm's innovation decision, its innovation expenditure and its innovation output along with the impact of the innovation output on productivity.

All four barrier categories make the decision to innovate difficult. These results therefore suggest that, in general, barriers to innovation limit a firm's decision to innovate. Also, all four barrier categories negatively affect firm innovation expenditure. These results suggest that, in general, barriers limit a firm's innovation expenditures.

In terms of firms introducing an innovation all four barrier categories were negative and therefore reduced the probability of a product or process innovation. The cost barrier dummy variable coefficient was the largest. A firm facing cost obstacles was 46% less likely to introduce a product or process innovation. Knowledge barriers reduced product and process innovation by 25%, while the corresponding figure for policy and regulation barriers was 34%.

There was no significant impact on labour productivity.

The PROTEqIN data and this study show that in the Caribbean, while the number of innovative firms is relatively low there are a considerable number of potentially innovative firms. These firms face cost, knowledge, market and policy barriers to innovation. Government policy to reduce innovation barriers can increase the number of innovative firms and consequently the level of innovation and productivity in the region. Additionally, firms can develop innovation strategies which consider these barriers and thereby increase the chances of success and economic pay-off from innovative activity. [Read More](#)