

The Right Amount of Income Variability

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/>

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Small poor entrepreneurs in the developing world are vulnerable to a range of negative shocks and constraints associated with a lack of development. They spend most of their lives coping with frequent income disruptions, balancing expenses, and making difficult trade-off decisions. This is not without implications; some studies suggest that entrepreneurs' preoccupations with pressing budgetary concerns and income variability could leave them with a reduced mental capacity to guide their decision making in business management.

In the framework of a DFID-funded research project entitled '*Enabling Innovation and Productivity Growth in Low Income Countries* (EIP-LIC)', a team of researchers from Tilburg University explored the issue of income variability in Vietnam and which possibly impedes the cognitive functioning of low-income individuals. The research was conducted through a field experiment inducing thoughts about finances to a sample of small low-income retailers in their local setting. The intervention consisted of asking retailers to think about scenarios describing a financial situation they might encounter in their daily lives.

The experiment was carried out in May 2015, in Tam Bac Market, one of the biggest markets in Hai Phong, in northern Vietnam. The original working paper is entitled '*The Right Amount of Income Variability: Evidence from Small Retailers in Vietnam*' (2016) by Patricio S. Dalton, Nguyen Nhung and Julius Rüschenpöhler¹.

Research approach and findings

The results, confirmed in earlier literature, suggest that a lack of financial resources does not necessarily impede cognitive functioning. Cognitive performance in financially stressful situations is not affected by absolute poverty as measured by wealth or income.

Instead, what seems to create cognitive stress is the subjective feeling of poverty together with the variability of income. Cognitive performance in financially stressful situations has an inverted U-shaped relationship with income variability: being exposed to very low or very high income variability can be detrimental for cognitive capacity. There seems to be an optimal income variability which maximises the cognitive capacity of the retailers when they face financially stressful situations, which impede their cognitive functioning.

This points to the existence of an optimal degree of income variability. Retailers who are used to facing some intermediate degree of fluctuation in their revenues reach the highest cognitive performance when they are

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

confronted with financially stressful situations. The effect of income variability on the cognitive function of low-income retailers remains valid even for the poorest retailers.

Policy implications

The research has policy implications to safeguarding the cognitive functioning of people on low incomes. The underlying idea is to avoid their cognitive functioning being unintentionally harmed as a result of financial, fiscal or income generating policies and programmes.

Assuring an optimal amount of income variability to assure maximum cognitive functioning: the effectiveness of policy and programmes that focus on the beneficiaries' lack of financial resources, for instance, could be increased if income variability is also given careful consideration.



In concrete terms, it is preferable for policies and programmes to include an assessment of the optimal (context-specific) income variability. This depends, amongst other factors, on the macro-economic environment and beneficiaries' educational background. Finding, monitoring and assuring the right amount of income variability may substantially increase the effectiveness of a given policy or programme.

Alternatively, in measuring the impact of finance policies and programmes, an indirect indicator of success can be an increase in cognitive capacity in combination with income variability. This equally relates to entrepreneurial activity. Risk taking is central and related to cognitive capacity in terms of understanding and interpreting the economic context. Thus maximum cognitive capacity, risk taking and innovation are all linked to optimal income variability.

Stability and maintaining the status quo of income variability is also an issue to be considered in new policies and programmes. For instance, new fiscal policies can in fact create additional cognitive stress if they bring lower or higher income variability. This is the case if government regulations change often or are unclear, which often happens in LICs, and was signalled in the various cases in the EIP-LIC qualitative studies in Vietnam. Entrepreneurs complained a great deal about unclear and constantly changing government policies and regulations, which brought changes in income variability – “time and again the government regulation is a headache.”

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 take place in 10 African and Asian countries (Bangladesh, Ethiopia, Ghana, India, Indonesia, Kenya, Tanzania, South Africa, Uganda and Vietnam). The policy implications of 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.