# HOW DO MICROFINANCE AND ECONOMIC DEVELOPMENT MUTUALLY SUPPORT EACH OTHER? A PANEL VAR APPROACH IN DEVELOPING ECONOMIES.

(ARIAL, 10 FONT SIZE, BOLD, ALL CAPS, CENTERED)

Mehdi Mahmoudi<sup>1</sup>, Nicolae-Bogdan lanc<sup>2</sup>

<sup>1</sup> Paris-Panthéon-Assas University
<u>Mehdi.Mahmoudi @u-paris2.fr</u>
<sup>2</sup> Paris Sorbonne Nouvelle University
<u>nicolae-bogdan.ianc @sorbonne-nouvelle.fr</u>

Abstract: This paper explores the relationship between microfinance and economic development using a cross-country dataset of 60 developing countries for the period 2000-2018. We employ the Panel VAR model, estimated by the generalized method of moments (GMM). Microfinance institution (MFI) indicators are categorized into social performance variables and financial performance variables. Social performance variables include the number of clients served (NOB) and the percentage of women borrowers (PFB), while financial performance indicators consist of the portfolio at risk (PAR), operational self-sufficiency (OSS), and operating expenses (OPX). Economic development is assessed using the Human Development Index (HDI), which integrates economic indicators like Gross National Income per capita (GNI) with social indicators such as life expectancy at birth (LE) and educational attainment (EDI). Our findings indicate that social performance variables positively influence economic development, and shocks to financial performance variables significantly impact the human development index. Additionally, our results confirm the existence of a Granger causal relationship between microfinance and economic development.

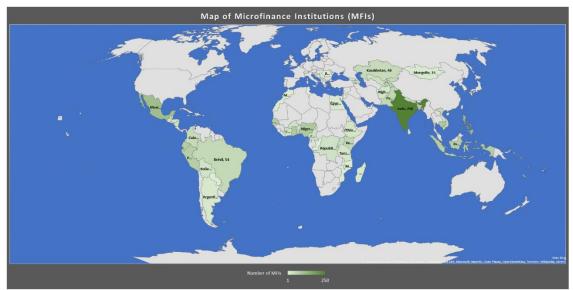
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#### **GENERAL GUIDELINES**

# INTRODUCTION (ARIAL, 10 font size, bold, all caps)

In the space of a few decades, given its promising qualitative and quantitative results, Microfinance has taken a predominant role at the international level, mainly in developing countries

In this respect, **our three contributions are**: to provide to the current literature and research first, as far as we know, generalizable empirical evidence of causality between microfinance and economic development, using the Generalised Method of Moments (GMM). This contribution is all the more important as there is no consensus among practitioners and researchers on the size of the effects of Microfinance on economic development. Our **second contribution** is to establish if there is any Granger causality between our main variables, i.e. microfinance and economic development. **The third contribution** is to differentiate between the effects of, on the one hand, the social performance and, on the other hand, the financial performance on the economic development variables.



Source: Authors' calculations based on public databases.

## **METHODOLOGY**

This study aims to address this problem using a Panel VAR model based on a procedure developed by Abrigo and Love (2016). P-VAR is based on the Generalized Method of Moments (GMM), allowing the model to account for simultaneous conditions. Furthermore, it can be applied to empirically distinguish between the ways in which financial and macroeconomic variables are transmitted to economic activity. We use orthogonal impulse response functions (OIRF) to identify exogenous shocks and follow a conventional Cholesky decomposition.

#### **FINDINGS**

Our analyses reveal a causal relationship between the social performance of microfinance institutions (MFIs) and economic development, as measured by the Human Development Index (HDI). Specifically, our results show that increases in both the number of clients and the percentage of women entrepreneurs positively impact the development index. Conversely, when the HDI rises, the number of clients and women entrepreneurs tends to decrease.

# **CONCLUSIONS**

Our findings suggest that for MFIs, development programs, and socially conscious investors to achieve their 'double bottom line' objectives, it is crucial to align social and financial performance strategies. On one hand, the relationship between MFIs' social performance and economic development highlights the long-term impact of microfinance on economic growth. On the other hand, this growth, driven by microfinance, also improves the social performance of MFIs, indicating a mutually beneficial outcome for the microfinance sector.

### **REFERENCES**

Abrigo, M. R. and I. Love (2016). Estimation of panel vector autoregression in stata. The Stata Journal 16 (3), 778-804.