PERFORMANCE MEASUREMENT OF SOUTH ASIAN MICROFINANCE INSTITUTIONS

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Abstract

This thesis studies microfinance institutions (MFIs), which are a special type of financial institution that pursue the dual objectives of outreach and financial sustainability. The study evaluates the social and financial efficiency of a panel data set of 372 MFIs in Bangladesh, India, Nepal, Pakistan and Sri Lanka, covering the period 1998 to 2013, using performance ratios and other techniques.

The thesis introduces two new ways of measuring the social objectives of MFIs. The comparative results show that these new outreach indicators provide a better explanation of social performance of MFIs than those commonly used in the literature. We employ these new measures alongside financial sustainability to assess the performance of different types of MFIs in achieving their dual objectives. The results show that non-regulated and profit-oriented MFIs perform relatively well in terms of the dual objectives but face higher operating expenses, creating conflict between outreach and financial sustainability.

In addition, the social and financial efficiency of MFIs are evaluated using data envelopment analysis (DEA) and stochastic frontier analysis (SFA). For DEA, to obtain more robust results, a double bootstrap approach is used and we find that the financial efficiency of these institutions appears stronger than their social efficiency. Cost efficiency estimates show that, on average, South Asian MFIs are operating with the same financial and social efficiency scores, while institutional and country differences matter more for financial efficiency than for social efficiency. The results also suggest that, on average, MFIs exhibit increasing returns to scale in financial sustainability but not when

performance relative to the social objectives is measured. Similarly, improved technological progress is more evident for financial than social efficiency.

The impact of women in various roles and corporate governance on the efficiency of MFIs is investigated for the first time. The presence of female loan officers is found to have a positive effect while female board members and female borrowers show a significant negative impact on financial and social efficiency of MFIs. We find a strong positive association between the governance of an MFI and its financial and social efficiency. We find similar effects of governance and gender roles on efficiency using both the DEA and SFA approaches.

Dedicated to my mother (AMMI GEE)
and my husband (ABU AWLADI)

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List of Abbreviations

MFIs – Microfinance institutions

DEA – Data envelopment analysis

SFA – Stochastic frontier analysis

PFBs – Percentage of female borrowers

PFOs – Percentage of female loan officers

PFMs – Percentage of female board members

RQ – Research question

PAR 30 – Portfolio at risk greater than 30 days

OER – Operating expense ratio

CAR – Capital to assets ratio

GNI – Gross national income

LNAB – Logarithmic value of number of active borrowers of MFIs

LAST – Logarithmic value of total assets of MFIs

DMATURE - Dummy of mature MFIs

GDP – Gross domestic products

ROA – Returns on assets

OSS – Operational self-sufficiency

ALBPBG – Average loan balance per borrowers divided by gross national income

GLS – Generalised least square model

TE – Technical efficiency

SE – Scale efficiency

BCC - Banker, Charnes and Cooper

CCR - Charnes, Cooper and Rhodes

CRS – Constant returns to scale

VRS – Variable returns to scale

COC – Cost of physical capital

CPL – Cost of labour

COB – Cost of borrowings

RTS – Returns to scale

DMUs – Decision making units

FEAR – Frontier efficiency analysis with R

MIX market – Microfinance information exchange market

SBM – Slacks based measure

C-GAP – Consultative to Assist the Poor

Translog - Transcendental Logarithmic

MSB - Market share of microfinance borrowers

MSBA - Market share of microfinance borrowers adjusted

MENA – Middle East and North America

i.e. – Id Est (that is)

e.g. – Exempli Gratia (for example)

NGOs - Non-government organizations

SHFs - Shareholder firms

COOPs - Microfinance banks

PPP - Purchasing power parity

SBP - State Bank of Pakistan

SECP - Security and exchange commission of Pakistan

CBOs - Community-based organizations

FISA - Financial Intermediary Societies Act