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Corporate Governance: a Search for Advanced Standards in the Wake of Crisis

THE IMPACT OF INNOVATION AND TECHNOLOGY ON MICROFINANCE SUSTAINABLE GOVERNANCE

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Key Words

- stakeholders;
- ICT;
- risk management;
- outreach;
- mobile banking;
- recession.

Abstract

- Technical or social innovation, concerning also the creation and commercialization of new products, strategies and management, has a deep actual - and especially trendy - impact on microfinance institutions (MFIs), contributing to reshape their business model, with an impact on their overall risk profile.

- Innovation is mostly an opportunity even for MF risk mitigation, considering its pervasive impact on risk factors, even if with some possible unwanted side effects.

Abstract

- **This hardly investigated frontier faces key trendy issues, which are likely to deeply reengineer the relationship among different stakeholders, as it has already happened, on a different and more sophisticated scale, with traditional banking.**

- **To the extent that technology reshapes the equilibriums among different stakeholders, it is likely to have important – albeit under-investigated - corporate governance consequences, softening the conflicts of interest among stakeholders and reinforcing the business model, making it more resilient during recessions, with positive externalities on both sustainability and outreach.**

Introduction

- Microfinance (MF) is spreading everywhere in the world, some 30 years after Yunus' pioneering intuition, but at the same time is rapidly changing, with new opportunities, mainly induced by innovations, but also with unprecedented threats, such as mission drift – the irresistible temptation to abandon social objectives, looking for wealthier clients – or worldwide recession contagion.
- Whereas the impact of risk factors on microfinance is still an under investigated field, somewhat forgetting that money intermediation is intrinsically a risky business, the link between innovation and sustainability and outreach, incorporating risk, is even less explored.

Introduction

- The topic of this paper is so original and interesting, especially forecasting the potential impact of innovation, which may significantly improve MF scalability, making it profitable, strengthening sustainability and pushing outreach towards deeper financial inclusion. Risk mitigation is also likely to improve both sustainability and outreach.
- Technology (represented by M-banking, mobile payments, PDAs …), cutting through complexity, "deatomizes" the business model, making it sounder and more resilient to external shocks, albeit requiring initial investments.

Introduction

- The paper is organized as follows: being the first article on this broad issue, we try to analyze a large framework, starting from technological pollination of ideas and devices and proceeding with the impact of technology on MFIs and on their corporate governance mechanisms.

- MF risks are then investigated, considering in particular the impact of innovation.

Applying Information Technology To Microfinance

- Technology is possibly the most powerful transmittable tool within a globalized world.

- Providing financial services to poor people is costly and this in part because these clients exchange small amounts of money, live in sparsely populated areas and rarely have documented credit histories.

- According to some studies (Ivatury, 2006) MFIs, handling small transaction for dispersed population, have operating costs of 12-15 % of assets, while the similar ratio for banks rarely exceeds 5 %.

Applying Information Technology To Microfinance

- Innovative operating methods are required to reduce transaction and managerial costs.
- To serve these customers profitability, it's necessary to find delivery channels that are inexpensive to set up, in order to handle transactions at low cost and according to poor characteristics.
- Some "direct banking" tecnology channels are represented by ATMs or POS devices able to identify customers and receive instructions for the trasfer of value from an accoun to another

Applying Information Technology To Microfinance

The most developing technology channel is now M-banking: in countries where debit and credit cards, POS devices and ATMs and bank branches are nonexistent, using mobile phone may be a lower-cost way to expand access to financial services.

But it's necessary to underline that MFIs haven't a significant role in the implementation of M-banking services, market largely driven by some large banks.

Applying Information Technology To Microfinance

And this WHY? According to Kumar and al. (2010) MFIs world largely uses unsophisticated backend systems, while the M-banking world uses very sophisticated ones.

CGAP Microfinance Gatway 2013 underline that the successful use of tecnology in MFIs stands as an exception rather than a rule.

Kulik and Molinari (2004) found that the main reason for the poor performance of MFIs is the lack of access to technology.

Applying Information Technology To Microfinance

Many studies put in evidence that, despite the falling cost of hardware and connectivity and the better accessibility to technology, in MFIs there is a problem in developing an adequate Management Information System (MIS).

This lack has deep consequences in MFIs ability to have a timely and proper decision-making process. So, the implementation of an appropriate MIS lies at the heart of MFIs business, becoming a very important strategic aim for MFIs.

The Impact Of Technology On Corporate Governance Issues

- Technology may contribute to soften corporate governance issues and related risk factors, which severely hamper MF development.
- Standard banks in developed countries normally react trying to reduce information asymmetries, using credit scoring analyses, monitoring and asking for guarantees (in the form of sizeable collateral with intrinsic market value).

The Impact Of Technology On Corporate Governance Issues

- Since MF borrowers are normally unable to give any worthy guarantee, these problems normally are even more acute in a context that has also to take care of greater information fallacies, even due to IT and other technological deficiencies and weak judicial systems

The Impact Of Technology On Corporate Governance Issues

Conflict of interest / deviating behaviour	Brief description
Adverse selection	The micro-lender finds it difficult to discriminate between risky and safer micro-borrowers. Clearing systems and computerized credit histories help softening this problem.
Moral hazard	A classical "take the money and run problem", since micro-borrowers might try to abscond with the bank's money or not to get fully engaged in the project for which they have been financed or misallocate money for other purposes. Again ICT devices may ease cross checking and tracking of operations.
Strategic bankruptcy	False information that the borrower gives about the outcome of his financed investment, stating that it has failed even if it is not true only in order not to give back the borrowed money. Cross checking and ICT controls soften these problems.
Cross borrowing	Poor clients, taking profit from information asymmetries, borrow from an intermediary to pay back older loans contracted with others. Clearing systems coordinated by Central banks, if operating in real time, consistently downsize the issue.

Impact Of Innovation On Microfinance Risks

Microfinance biggest risks	Impact of innovation and management technology
1 Credit risk	IT technology can have a significant impact in detecting and monitoring credit quality, with credit scoring and sharing of information.
2 Reputation	Friendly and accessible technology can improve reputation.
3 Competition	Technology creates digital divide between haves and haves not; competition increases with comparability, speediness and other innovative products and processes. Early innovators get competitive lead and may disrupt older players.
4 Corporate governance	It may soften conflicts of interest, as illustrated in the dedicated paragraph
5 Political interference	Little if any impact.
6 Inappropriate regulation	Little if any impact. Regulator supervision and audit may become easier (if all information is available faster), but new audit skills will be required owing to the speed of movement of mobile transfers of money.

Impact Of Innovation On Microfinance Risks

Microfinance biggest risks	Impact of innovation and management technology
7 Management quality	Technology increases skills and productivity.
8 Staffing	Staff competencies change Staff is more productive but more expensive.
9 Mission drift	Temptation to reach wealthier and more technological clients may increase.
10 Unrealisable expectations	Technology changes strategies, with mixed impact on any potential outcome.
11 Managing technology	Technology is a specific issue of quality of management; according to CSFI (2011) "the problem of getting technology right is moving up the risk scale. MFIs face tough decisions on the management of their IT systems and their delivery strategies in the near future. (…) A microfinance analyst said it was a case of «Invest in technology or cease to exist in five years». Concerns about this Banana Skin were strongest in Africa and the European Union".
12 Profitability	Technology and digital procedures may strongly contribute making the business model more scalable, cutting variable costs (with an increase in fixed IT costs, which may raise the break-even point) and easing monitoring; productivity should also improve.

Impact Of Innovation On Microfinance Risks

Microfinance biggest risks	Impact of innovation and management technology
13 Back office	The "dirty job behind" is likely to be profoundly changed by technology and computerized systems of recording; it may also be centralized and dematerialized, with economies of scale and experience.
14 Transparency	Written and recordable IT procedures are a key starting point for transparency and softening of information asymmetries.
15 Strategy	Technology and innovation may have a deep impact on management, reshaping and rethinking strategies, reconsidering the whole value chain, target products and clients, etc.
16 Liquidity	Technology improves awareness and accountability, with a potential impact even on liquidity, which may be better handled and foreseen.
17 Macro-economic trends	Little impact, even if technology may reduce segmentation factors among different MFIs, so making them less insulated from macroeconomic shocks, but also creating opportunities for better reaction to positive trends.
18 Fraud	Fraud is linked to (lack of) transparency (# 14), and may be more easily detected with IT procedures, allowing for better monitoring. As mentioned earlier, speed of movement of money may make fraud detection more difficult and too late.

Impact Of Innovation On Microfinance Risks

Microfinance biggest risks	Impact of innovation and management technology
19 Product development	New products and especially innovative product delivery (e.g., M-banking and its endless by-products) may be conceived as a result of innovation
20 Ownership	Little if any impact, even if shareholders may change, giving room to ICT players
21 Interest rates	They do not depend on technology but again may be better detected and handled. If costs reduce, NGO MFIs, at least, may cut interest rates, driving down industry rates
22 Too much funding	Overfunding can be accounted and monitored with proper IT bookkeeping
23 Too little funding	Same as above (# 22)
24 Foreign exchange	Linked to macroeconomic trends (# 17) and interest rates (# 21)

Conclusion

- **This paper is addressing, in a multidisciplinary and innovative comprehensive way, apparently weakly related topics such as MF governance and IT issues, within recessionary cycles.**
- **Experience teaches that technology needs being conceived, designed and implemented with a mixed approach, both top down and bottom-up and with horizontal integration of the MFI with external ICT providers, with synergistic and scalable outsourcing.**

Conclusion

- Out of the pocket technology (smart-phones with germinating apps are like mobile phones some years ago, originally unaffordable but then rapidly and cheaply spreading) is an entry barrier for both providers (MFIs, backed by their technological partners) and clients (users).
- Any technological device that can soften information asymmetries, increasing consciousness, is likely to bring strategic added value, even with cost reduction.