Islamic microfinance institutions: pro poor or for profit?

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Outline of the presentation

1. Background
2. Literature
3. Data and methods
4. Results and Discussion
5. Conclusion

- The role of finance in economic development is well established in the literature e.g. King & Levine (1993). However, the advance of commercial financial institutions had little impact on poverty.

- Market failure is the main reason for the emergence of microfinance institutions (Armendariz and Morduch, 2005)

- Todate, the number of MFIs has increased exponentially, so did the number of clients (>200 millions) and variety of funding sources.

- However, microfinance has yet to become the main instrument in the fight against poverty.
  - Poverty remain an issue globally i.e. ± 600m poor in the Muslim world.
  - Impact on poverty alleviation is still debatable (Banerjee et.al, 2013)

Background

- Similar pattern occurs with regard to Islamic finance and economic development.

- Mit Ghamr Savings Bank as the first Islamic financial institution was essentially an MFI.

- However, microfinance or financing to the poor is the 'missing component' in the development of Islamic banking and finance (Dusuki, 2008; Rahman, 2007) > *market failure?*

- The emergence of multitude microfinance institutions in recent years raised a question whether these MFIs have served the poor well, or whether they are also following the footstep of other (commercialised) Islamic financial institutions i.e. ignoring the poor.

- Surge in microfinance literature in mid 2000s; availability of more robust data i.e. MIX Market, CGAP

- Post 2005, empirical works on microfinance gained momentum:
  - competition (Cull et. Al, 2009; Assefa et.a., 2013);
  - outreach and performance (Cull et.al., 2007; Hermes et.al., 2011; Kar, 2011; and Quayes, 2012); as well as
  - mission drift and commercialization (Copestake, 2007; Hamada, 2010, Vanroose and D'Espallier, 2013);

- Commercialization is a new driving force in microfinance sector.
  - Upscaling process (Hishigsuren, 2007)
  - Mainstreaming (Copestake, 2007)

High repayment rate + high rate = high returns → entry of new players and increase competition, esp. commercial banks, commercial investors = *commercialization* → poverty unaffected?!

- The main feature of an Islamic microfinance model is the absence of interest and the use of variety of financing mechanism (El-Komi and Croson, 2013)
  - trade financing using *murabahah*
  - equity partnership of *musharakah*
  - *qardh hasan*
- *Musharakah* is the most suitable for microfinance institutions (Harper, 2012);
  - provides adequate commercial incentive for MFIs (Akhtar, 1997),
  - protects the borrowers from inflation pressure on their assets or investment (Abdalla, 1999),
  - provide a basis for sustainable form of financing (Harper, 1994).
- In practice, most of the Islamic microfinance institutions use *qardh hasan* and *murabahah* (Ahmed, 2002).

- Islamic microfinance is growing rapidly in the past two decades (El-Zoghbi and Tarazi, 2013)

- However, existing studies on Islamic microfinance focus on:
  - Case studies of individual MFIs, i.e. IBBL/Bangladesh (Rahman and Ahmad, 2010), Akhuwat/Pakistan (Harper, 2012).
  - Sector specific MFIs e.g. agricultural bank (Elhiraika, 1996)
  - Experimental modelling of repayment behaviour (El-Komi and Croson, 2013)
  - Country specific studies i.e. Indonesia (Masyita, 2013), Bangladesh (Ahmed, 2002).

- *There is very few studies that extend the scope and analysis across multiple countries and institutions.*

Islamic vs Conventional MFIs

No.	Main Features	Islamic	Conventional
1	Source of funds	External funds, deposits, commercial banks, and **charitable sources (i.e. zakat, waqf)**	External funds, deposits commercial banks
2	Mode of financing	Islamic financial instruments	Credit on interest
3	Outreach (financing the poorest)	Poorest can be included by integrating zakat with microfinancing	Poorest may be discretionally left out.
4	Funds transfer	Good transferred	Cash given
5	Deduction at inception of the contract	No deductions at inception	Part of the funds deducted at inception
6	Target group	**Family**	**Personal**; in most cases, women
7	Objective of targeting women	Ease of availability	Empowerment of women (gender affirmation)
8	Liability of the loan	Recipient and spouse	Recipient
9	Work incentive of employees	Monetary and religious	Monetary
10	Dealing with default	Group/centre/spouse guarantee, and norms	Group/centre pressure
11	Social development program	Religious based	Cultural or economic based

Source: Ahmed (2002)

- **Research question:** This paper aims to examine whether competition and commercialization have any affect on the performance and poverty outreach of Islamic Microfinance Institutions; whether Islamic MFIs would sacrifice their poverty mission and pursue profit to become more sustainable.

- **Hypothesis:**
  - *Hypothesis 1*: Islamic MFIs are less profitable and less sustainable than Conventional MFIs, which will be indicated by negative ROA and ROE, negative OSS (less than 1; 1 being self-sufficient), and positive CPB.
  - *Hypothesis 2:* Islamic MFIs serve less poor people than conventional MFIs, as would be shown by negative NAB, however they will target the poorest and the most vulnerable clients, to be indicated by negative (lower) Avg_Loan size, and higher Percentage of women borrowers.
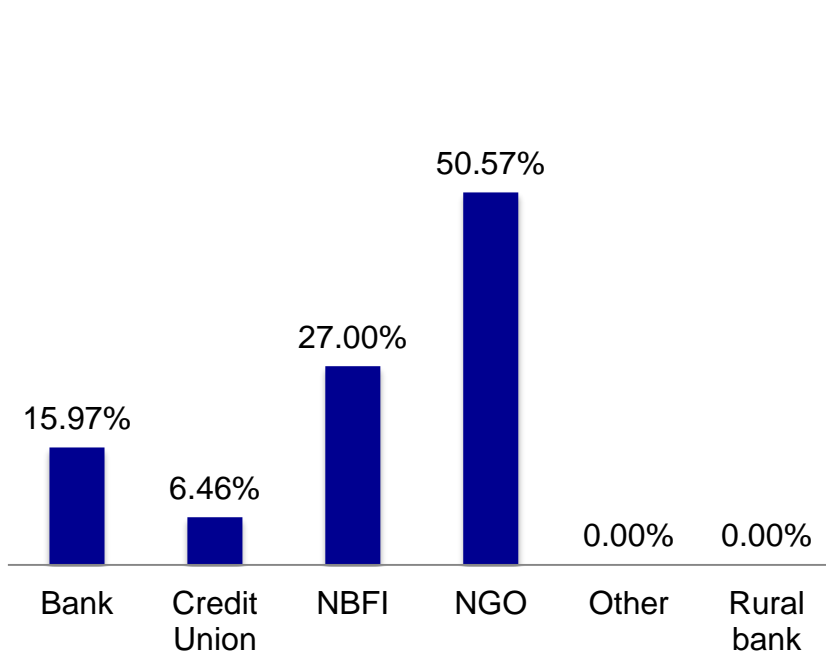
Regional distribution of MFIs (1998 ~ 2013)

Region	MFI Type			
	Conventional	Islamic	Total	I-MFIs share
East Asia and the Pacific	1,888	32	1,920	1.7%
Eastern Europe and Central Asia	2,832	13	2,845	0.5%
Middle East and North Africa	484	151	635	23.8%
South Asia	2,449	70	2,519	2.8%
Total	**7,653**	**266**	**7,919**	3.4%

Source: MIX Market

Data

Legal Status of Islamic MFIs

- Bank: 15.97%
- Credit Union: 6.46%
- NBFI: 27.00%
- NGO: 50.57%
- Other: 0.00%
- Rural bank: 0.00%

Age of Islamic MFIs

- Mature: 46.51%
- New: 24.81%
- Young: 28.68%
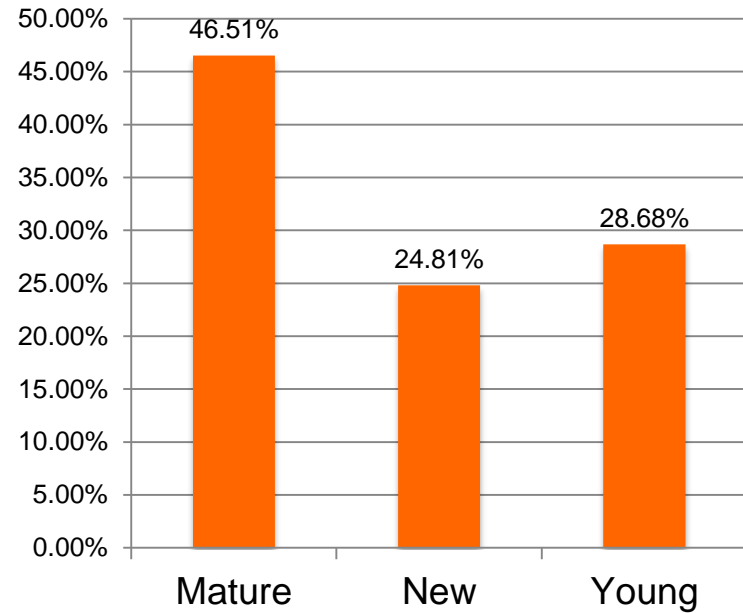
Mature: > 8 years
New: 1 to 4 years
Young: 5 to 8 years

The model follows Kar (2011) and Cull et al. (2007), to estimate performance, poverty outreach, and risk of Islamic MFIs:

$$Y_{it} = \alpha + \beta_1\, MFIType + \beta_2\, Yield + \beta_3\, Outreach + \beta_4\, PortfolioQuality + \beta_5\, Age + \beta_6\, Region + \beta_7\, ProfitOrientation + \varepsilon_{it}$$

Where:

- Y represents dependent variables for two categories:
  - **Sustainability:** Return on Assets, Operational Self Sufficiency, Cost per borrower.
  - **Outreach:** Scale of outreach (Number of Active Borrowers); Depth of outreach (Average loan balance per borrower to GNI/Capita and Percentage of female borrowers)
- Independent variables include profitability variables (ROA; Yield on Gross Loan Portfolio), Outreach; Portfolio quality; and vector of time invariant/dummy variables (MFI Age; Region; and Profit orientation status)
- ε is error term.

Summary statistics

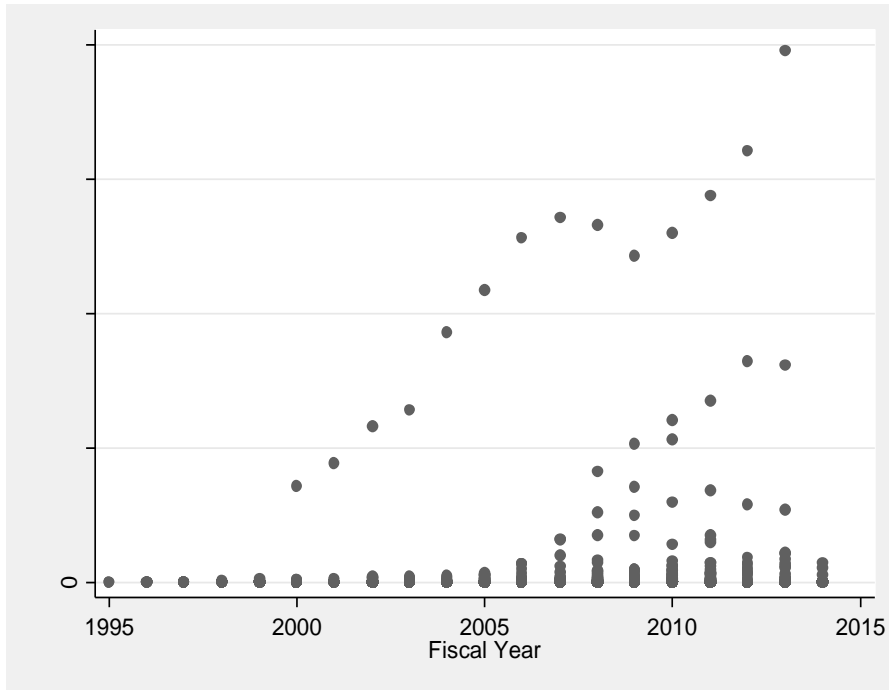| Variable	Conventional			Islamic		
	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
return on assets	5764	**0.012**	0.161	207	***-0.028***	0.174
operational self sufficiency	6399	1.152	0.877	239	1.254	0.438
log cost per borrower	5266	4.217	1.523	196	4.603	1.184
log Number of Active Borrowers	6948	8.714	2.299	246	8.924	1.882
avg. loan balance per borrower	6914	**4268.119**	145883.2	245	***911.233***	1117.733
avg. loan balance per borrower to GNI/capita	6868	**1.582**	46.806	242	***0.585***	0.78
percentage of women borrowers	5180	0.619	0.263	191	0.563	0.228
MFI type - conventional	7653	1	0	266	0	0
MFI type - islamic	7653	0	0	266	1	0
yield on Gross Loan Portfolio - real	4293	0.243	0.165	125	0.256	0.129
Operating expense to loan portfolio	5752	0.229	0.445	210	0.358	0.588
Portfolio at Risk > 30 days	5846	**0.058**	0.15	209	***0.119***	0.403
write off ratio	5172	0.014	0.068	186	0.015	0.053
age_new	7354	0.202	0.401	258	0.248	0.433
age_young	7354	0.225	0.417	258	0.287	0.453
age_mature	7354	0.574	0.495	258	0.465	0.5
non - profit status	7212	0.592	0.491	260	0.65	0.478
for - profit status	7212	0.408	0.491	260	0.35	0.478
legalstatus_bank	7587	0.133	0.339	263	0.16	0.367
legalstatus_creditunion	7587	0.181	0.385	263	0.065	0.246
legalstatus_nbfi	7587	0.294	0.455	263	0.27	0.445
legalstatus_ngo	7587	0.342	0.475	263	0.506	0.501
legalstatus_ruralbank	7587	0.035	0.184	263	0	0
legalstatus_other	7587	0.015	0.123	263	0	0
region_EAP	7653	0.247	0.431	266	0.12	0.326
region_EECA	7653	0.37	0.483	266	0.049	0.216
region_MENA	7653	0.063	0.243	266	0.568	0.496
region_SA	7653	0.32	0.467	266	0.263	0.441

Profitability (ROA)
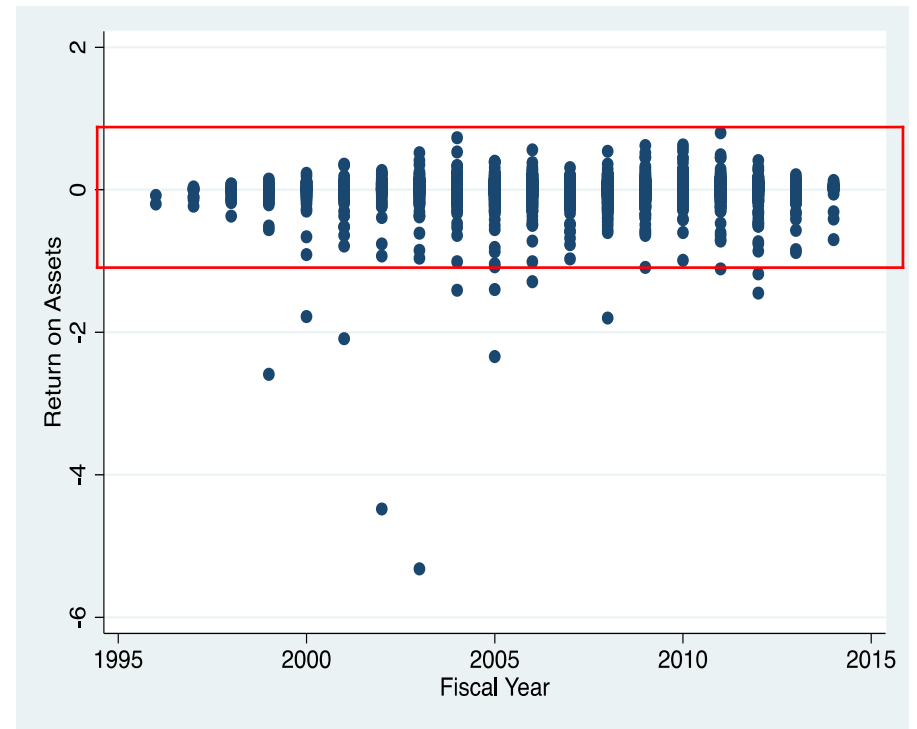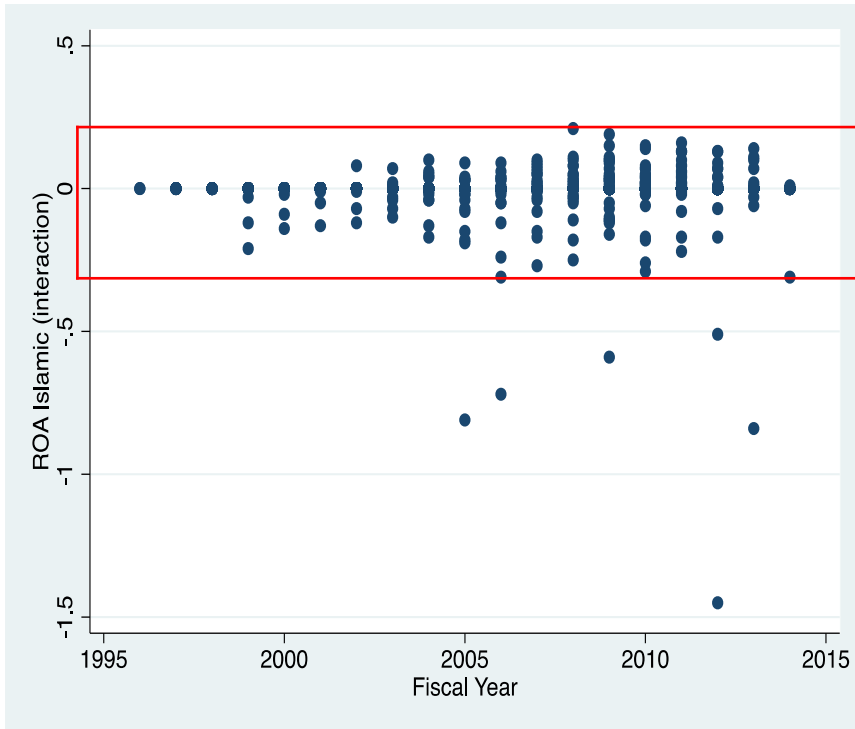
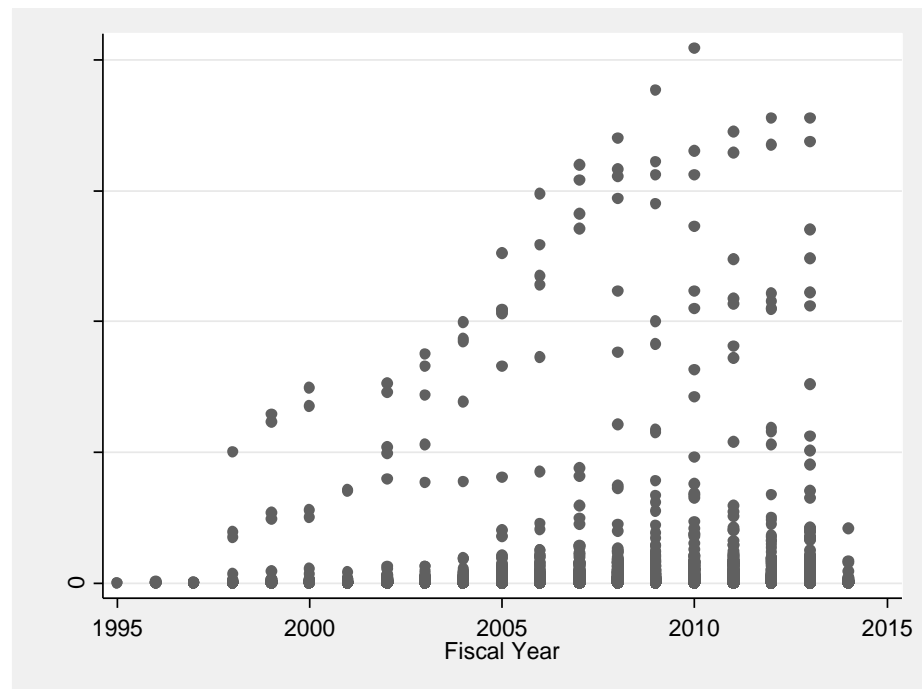# Outreach   (scale/NAB)

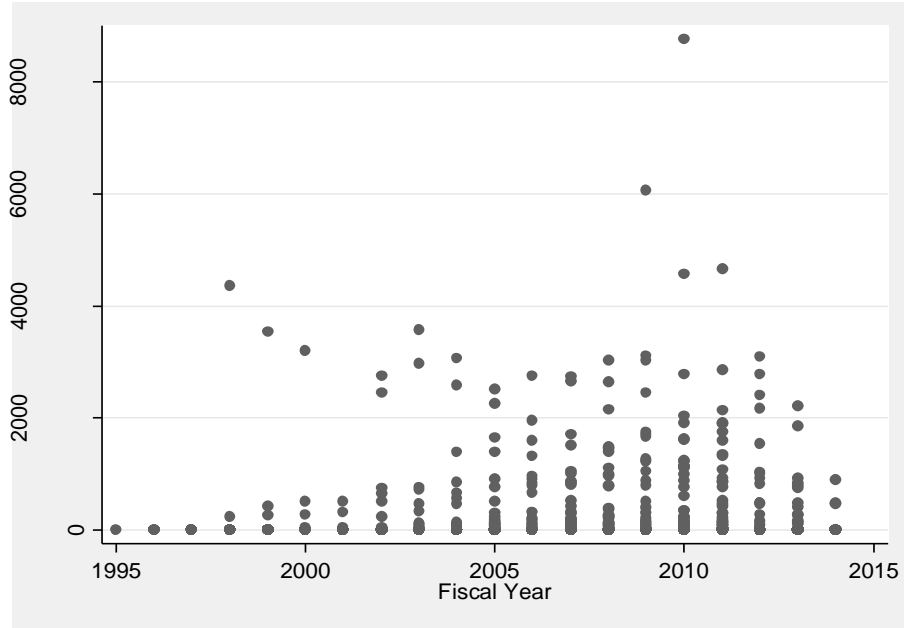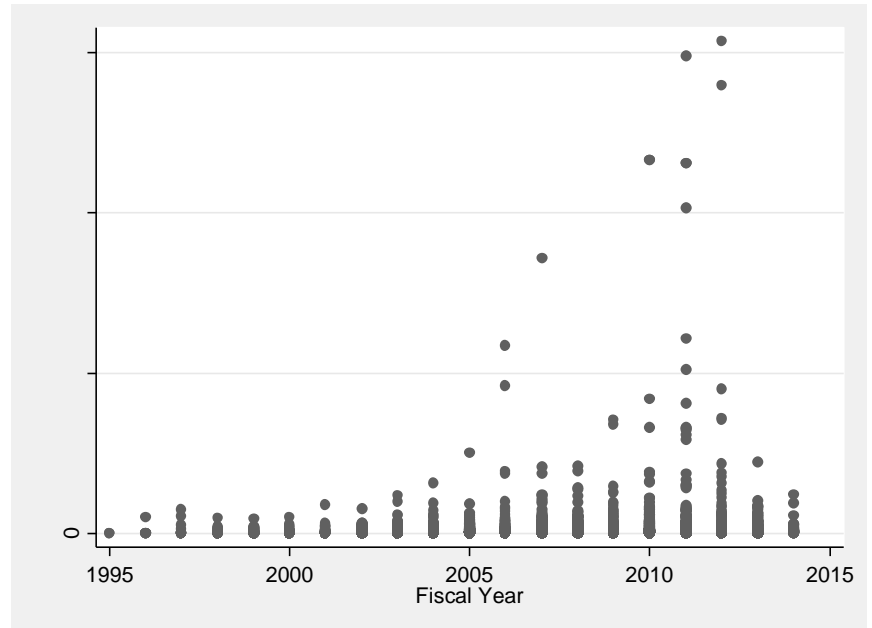
Islamic MFIs

Conventional MFIs

Outreach (depth/Avg loan balance)

Results – Sustainability

Profitability/Sustain ability Regression Results

VARIABLES	Return on Assets	Operational Self Sufficiency	Cost Per Borrower
mfitype_islamic	-0.014	**0.139****	0.419***
	(0.017)	(0.051)	(0.123)
yieldonGLP_real	-0.010	0.013	-0.136
	(0.012)	(0.086)	(0.123)
log_cpb	**-0.022*****	-0.012	
	(0.003)	(0.012)	
log_NAB	0.000	-0.006	**-0.086*****
	(0.001)	(0.006)	(0.014)
avg_loanbalanceperborrowergni	**0.001***	-0.003	**0.072*****
	(0.001)	(0.003)	(0.018)
percentofwomenborrowers	-0.003	**-0.175*****	0.044
	(0.007)	(0.052)	(0.079)
operatingexpenseloanportfolio	**-0.048****	-0.012	
	(0.016)	(0.023)	
PaR_30days	-0.064	-0.053	0.214
	(0.044)	(0.047)	(0.242)
writeoffratio	**-0.291****	0.600	**4.634*****
	(0.102)	(0.511)	(0.929)
Age dummy	Y	Y	Y
Profit orientation dummy	Y	Y	Y
Regional dummy	Y	Y	Y
Constant	0.183***	1.428***	6.034***
	(0.019)	(0.105)	(0.145)
Observations	2,006	2,022	2,022
R-squared	0.215	0.016	0.632

Standard errors in parentheses
*** $p<0.001$, ** $p<0.01$, * $p<0.05$

Outreach Regression Results

VARIABLES	Log_Number of Active Borrower	Avg_Loan balance To GNI/Capita	Percentage of Women Borrowers
mfitype_islamic	**0.457***	**-0.474***	**-0.140***
	(0.217)	(0.221)	(0.024)
returnonassets	**0.550**	0.923	-0.051
	(0.168)	(0.494)	(0.053)
returnonequity	0.006	-0.019	0.004*
	(0.013)	(0.018)	(0.002)
operationalselfsufficiency	-0.042	-0.050	**-0.041***
	(0.047)	(0.071)	(0.010)
log_cpb	**-0.367***	**1.061***	-0.001
	(0.048)	(0.414)	(0.005)
yieldonGLP_real	**-0.882***	0.362	**0.408***
	(0.233)	(0.238)	(0.037)
PaR_30days	-0.316	-0.311	**-0.085**
	(0.528)	(0.397)	(0.027)
writeoffratio	-0.358	**-4.190***	0.033
	(1.462)	(1.858)	(0.150)
Age dummy	Y	Y	Y
Profit orientation status dummy	Y	Y	Y
Region dummy	Y	Y	Y
Constant	10.029***	-4.485	0.621***
	(0.296)	(2.311)	(0.037)
Observations	2,469	2,452	2,010
R-squared	0.329	0.101	0.098

Standard errors in parentheses
*** $p<0.001$, ** $p<0.01$, * $p<0.05$

Risk factors regression results

VARIABLES	Portfolio at Risk > 30days	Portfolio at Risk > 90days	Loan Loss Rate	Write-off Ratio
mfitype_islamic	0.090	**-0.014***	-0.014	0.005
	(0.087)	(0.005)	(0.010)	(0.010)
returnonassets	**-0.202***	-0.011	0.019	**-0.049**
	(0.054)	(0.024)	(0.012)	(0.017)
log_NAB	-0.001	-0.001	0.001	0.000
	(0.003)	(0.001)	(0.001)	(0.000)
avg_loanbalanceperborrowergni	-0.001	0.001	-0.001	**-0.000**
	(0.001)	(0.001)	(0.001)	(0.000)
percentofwomenborrowers	**-0.033***	**-0.021***	-0.036	-0.001
	(0.015)	(0.009)	(0.034)	(0.003)
yieldonGLP_real	-0.018	**-0.035**	0.011	**-0.010***
	(0.016)	(0.013)	(0.012)	(0.005)
log_cpb	0.005	0.003	**0.008***	**0.004**
	(0.004)	(0.002)	(0.004)	(0.001)
operatingexpenseloanportfolio	**-0.016**	-0.003	0.001	0.010
	(0.005)	(0.003)	(0.003)	(0.009)
personnelexpenseloanportfolio	0.003	0.005	0.025	0.002
	(0.010)	(0.008)	(0.015)	(0.004)
Age dummy	Y	Y	Y	Y
Profit orientation status dummy	Y	Y	Y	Y
Region dummy	Y	Y	Y	Y
Constant	0.069*	0.059***	-0.022	-0.003
	(0.028)	(0.017)	(0.013)	(0.006)
Observations	2,042	2,180	2,200	2,056
R-squared	0.041	0.020	0.005	0.079

Conclusion

- The results to the main question on the effect of commercialization on profitability and poverty mission are somewhat inconclusive. However, the argument that Islamic MFIs still true to their poverty mission holds.
  - **Performance** > Islamic MFIs are more self sufficient (+OSS), but suffers from low profitability (negative ROA; high cost per borrower).
  - **Outreach** > Islamic MFIs servs their poverty outreach objectives, especially in terms of scale of outreach (+NAB) and also part of the depth of outreach (lower Average loan size). Unfortunately, they also have lower percentage of women borrowers.
- The results are consistent with existing literature.
- The results support the hypothesis that Islamic financial institutions serve not only commercial purposes but also socio-economic objectives i.e. **pro-poor.**

- <u>Limitation</u>: smaller number of Islamic MFIs in the dataset (3%) may affect the quality and strength of the analysis.

- This research has identified few areas of concerns for future researches on Islamic MFIs:

  – Lack of cost efficiency among Islamic MFIs and weak profitability performance, despite intensive/depth of outreach.

  – The nominal/actual number of poor people reached out by Islamic MFIs is far less than conventional MFIs >> *hence a good reason for Islamic MFIs to grow in size, outreach, and create real impact on poverty alleviation*.

  – Some of the encouraging performance measures, such as self sufficiency or depth of outreach, should be used as stepping stones for achieving sound double bottom lines.

  – In the end, sustainable and poverty oriented MFIs would contribute to global poverty eradication and shared prosperity.

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THANK YOU.