

Microfinance and Financial Inclusion

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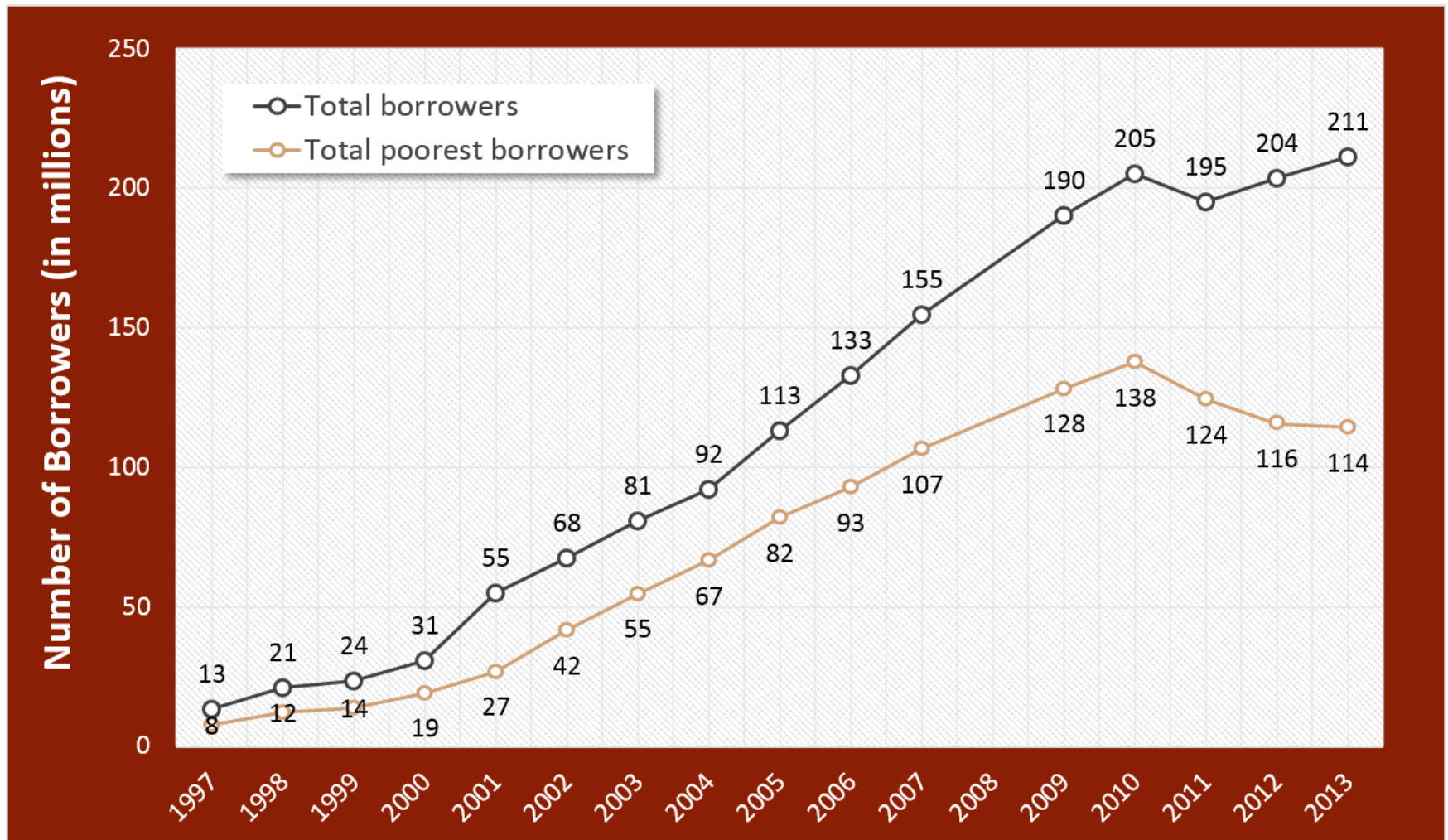
4th IMF Statistical Forum
November 2016

4 statistical views

- 1. People reached:** Microcredit Summit
- 2. Profit/finance:** MIX Market database
- 3. Social and economic impact:** RCTs
- 4. Financial lives:** Financial Diaries

Microfinance as an institutional success

Millions of microfinance customers. Microcredit Summit Campaign.



Customers: Asian, female, not poorest

Microcredit Summit Campaign 2015

Region	No. MFIs	No. Total Clients	No. Total Women Clients	No. Poorest Clients	No. Poorest Women Clients
Sub-Saharan Africa	1,045	15,945,279	8,581,990	8,727,527	5,875,258
Asia and the Pacific	1,119	166,908,164	166,908,164	101,427,062	85,522,494
Latin America & Caribbean	672	17,407,431	10,725,880	2,751,885	2,008,379
Middle East & North Africa	99	5,279,706	2,785,940	1,250,061	908,991
Developing World Totals	2,935	205,540,580	189,001,974	114,156,535	94,315,122
North America & Western Europe	87	168,815	57,000	42,101	23,361
Eastern Europe & Central Asia	76	5,410,152	282,821	112,950	50,218
Industrialized World Totals	163	5,578,967	339,821	155,051	73,579
Global Totals	3,098	211,119,547	189,341,795	114,311,586	94,388,701

90%

54%

45%



- Database includes 3845 institution-years, reflecting 291 million borrower-years.
- Biased toward commercially-focused lenders.
- Sample: 1335 institutions 2005-9.
- Most recent data on MFIs between 2005 and 2009:
 - 930 institutions
 - 80.1 million borrowers.
- **Access to proprietary data**

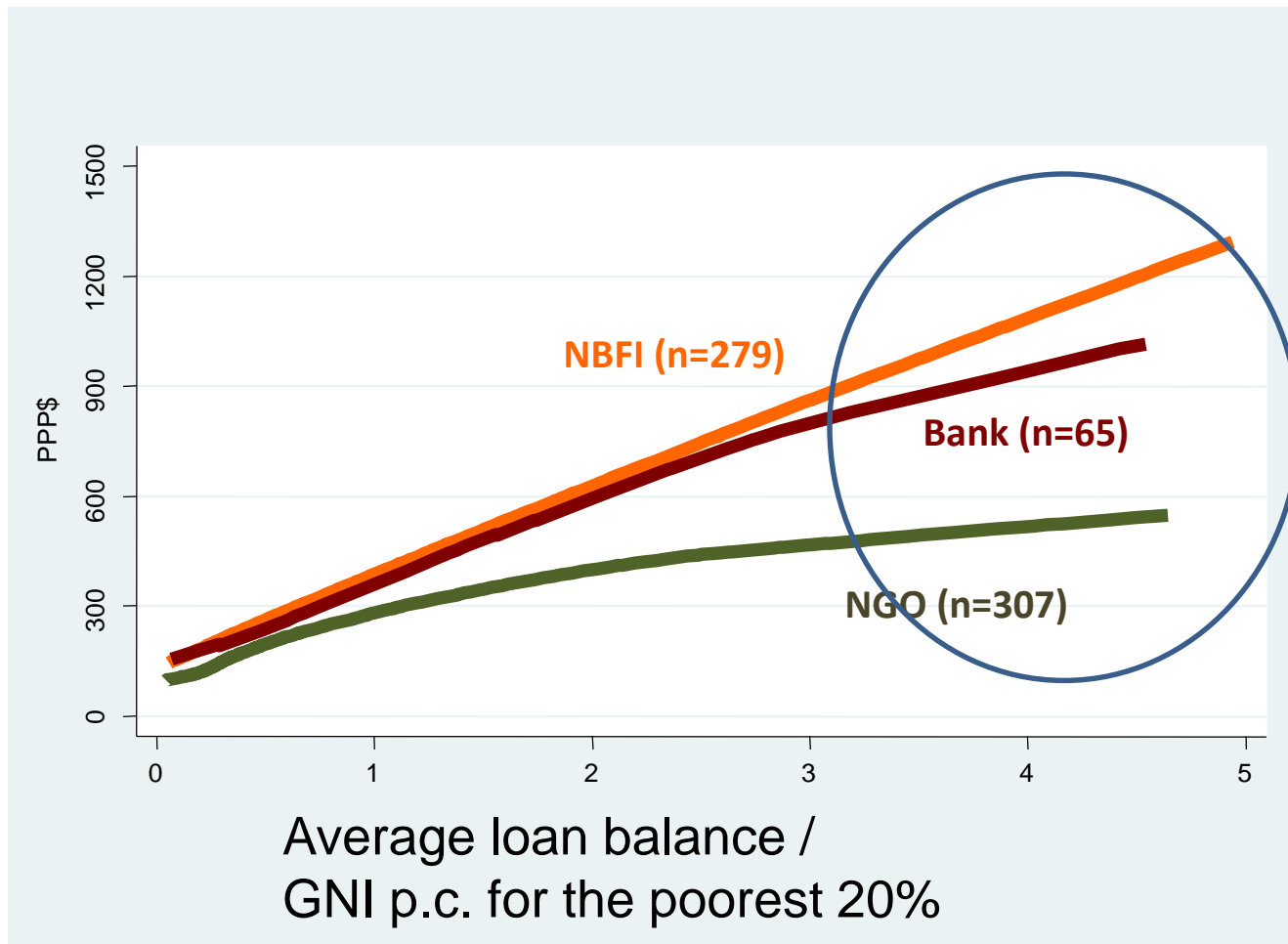
The Microfinance Business Model: Enduring Subsidy and Modest Profit

Joint work with Robert Cull, World Bank

Asli Demirgüç-Kunt, World Bank

A major accomplishment: Innovation to reduce cost per customer

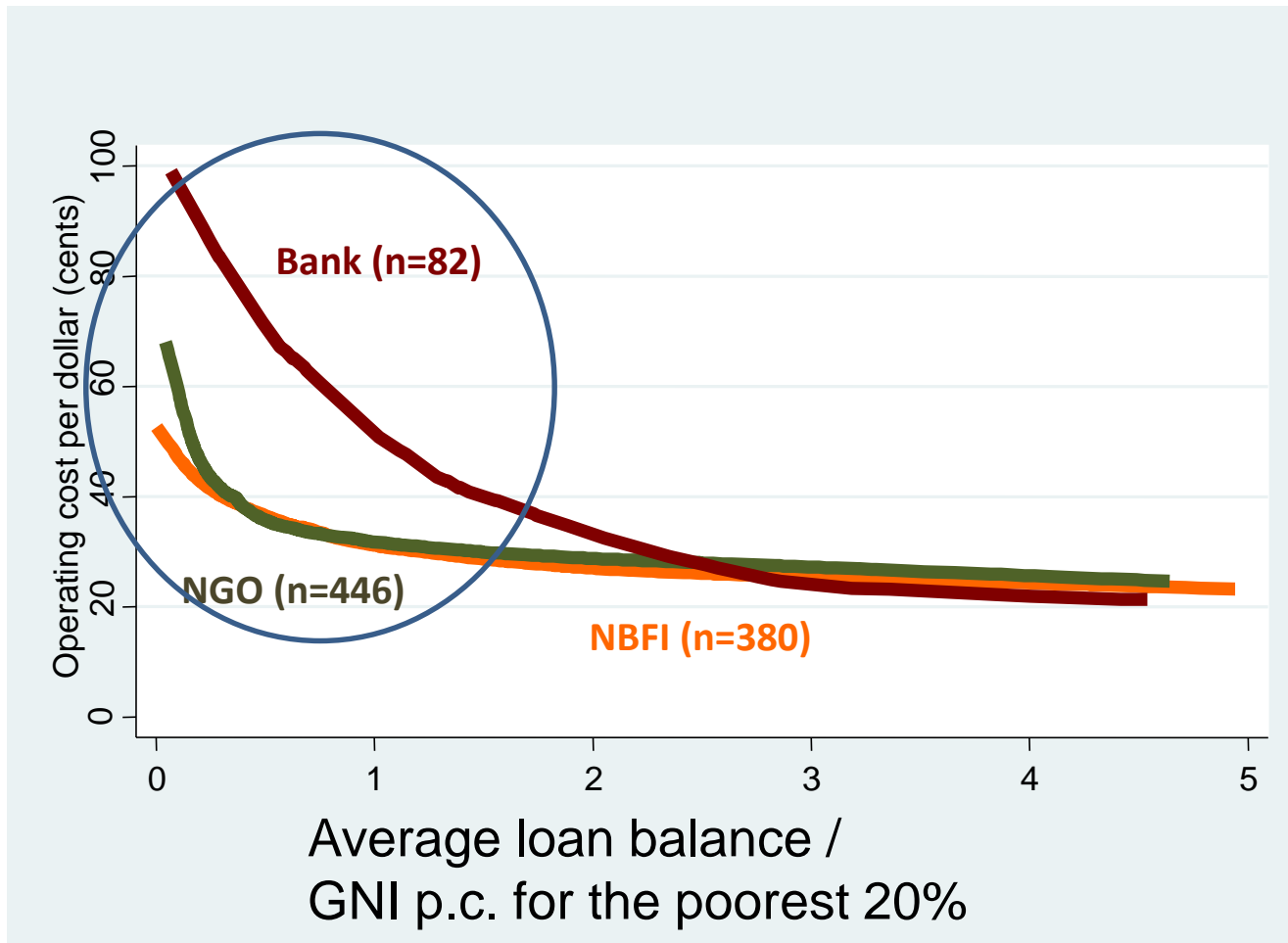
Operating expense per borrower, PPP\$



Large and durable tension:

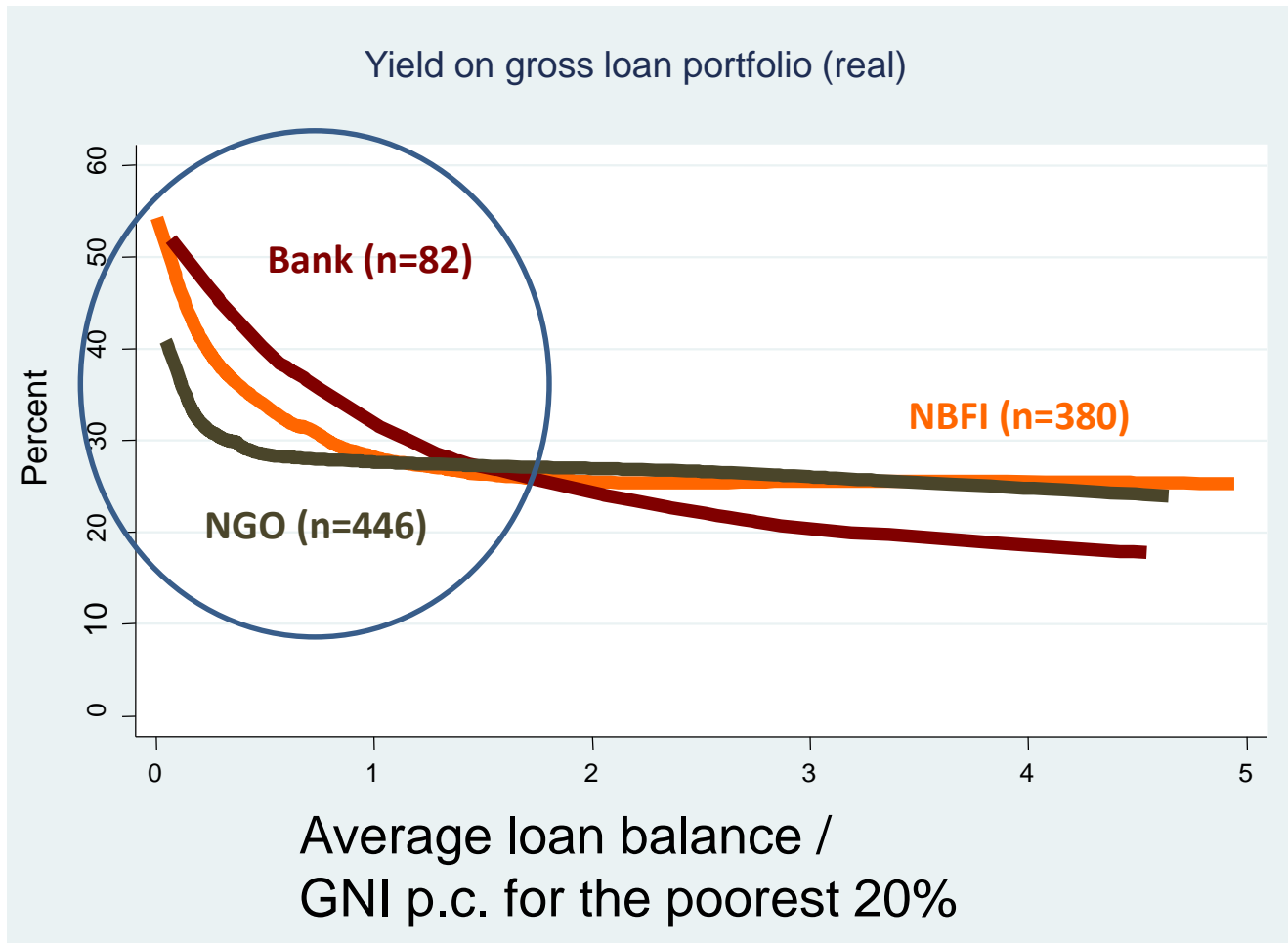
Small transaction sizes mean high cost per unit transacted

Operating expense per dollar lent



Response: raise prices on the low-end

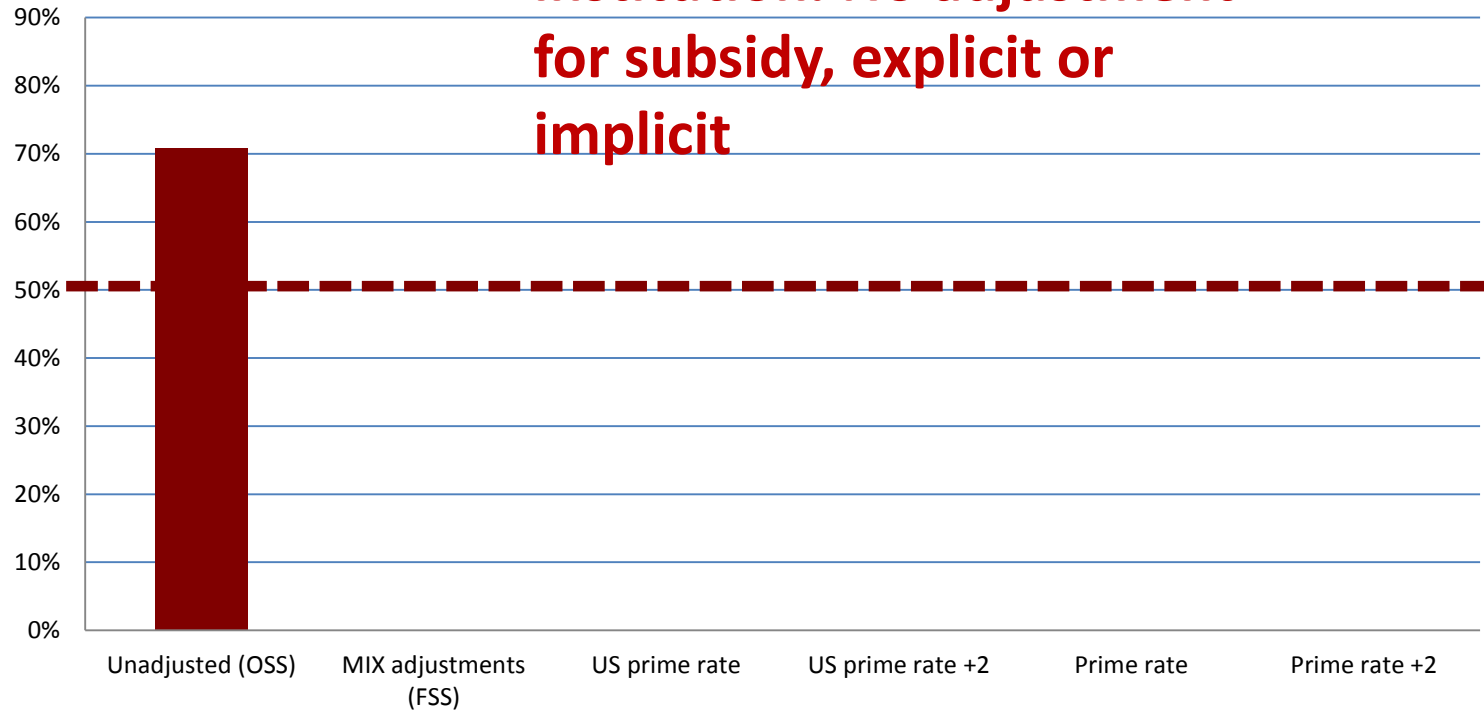
Average real interest rates



What institutions report

% of institutions that are profitable

Profit as reported by institution. No adjustment for subsidy, explicit or implicit



Profit

Accounting profit: Is revenue (including grant income) greater than expenses?

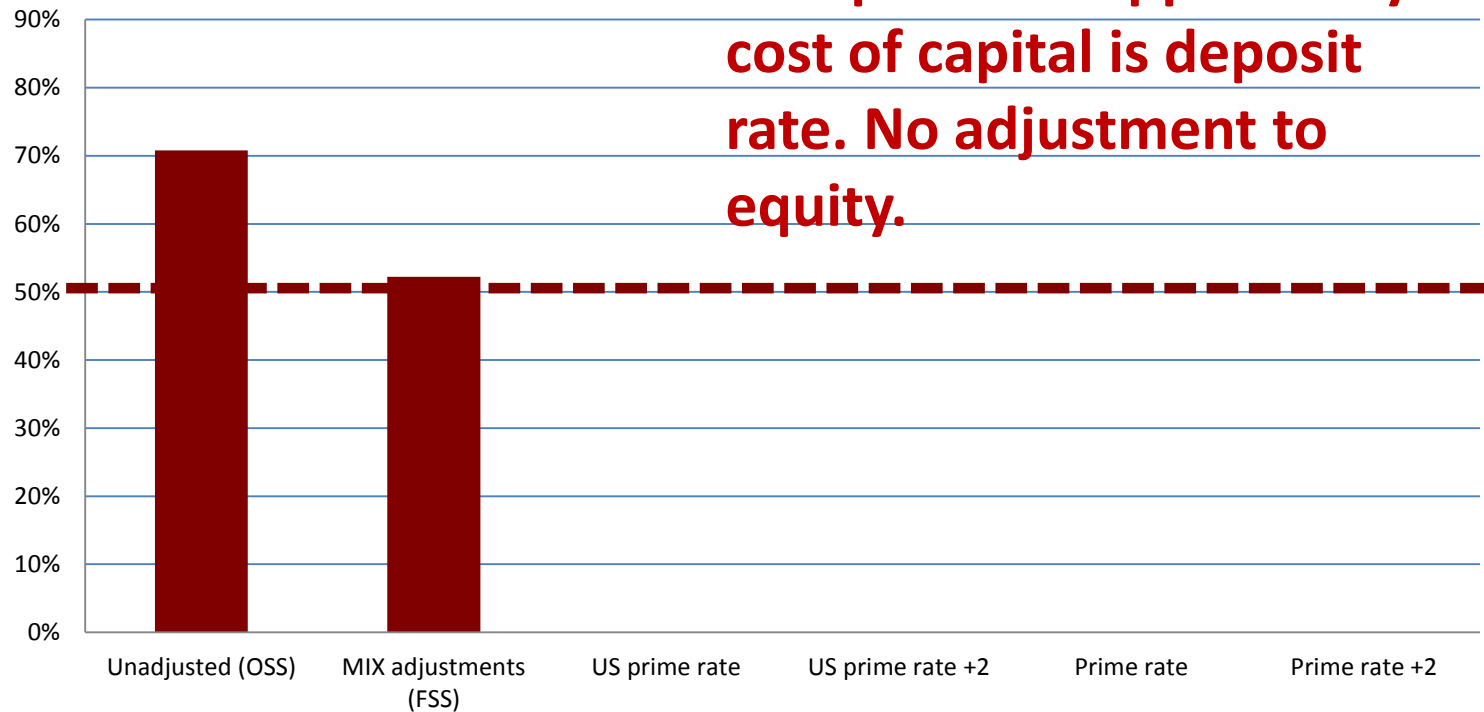
Economic profit: Is business income greater than expenses (valued at the opportunity cost of inputs)

Q: Would institution earn profit if they *operated the same way* but had to pay the market rate of capital?

What the MIX Market reports

% of institutions that are profitable

Adjusted to account for cheap credit. Opportunity cost of capital is deposit rate. No adjustment to equity.



Our adjustments

Subsidy =

Opportunity costs for **equity capital**

- Profit before tax

+ Adjusted in-kind subsidy

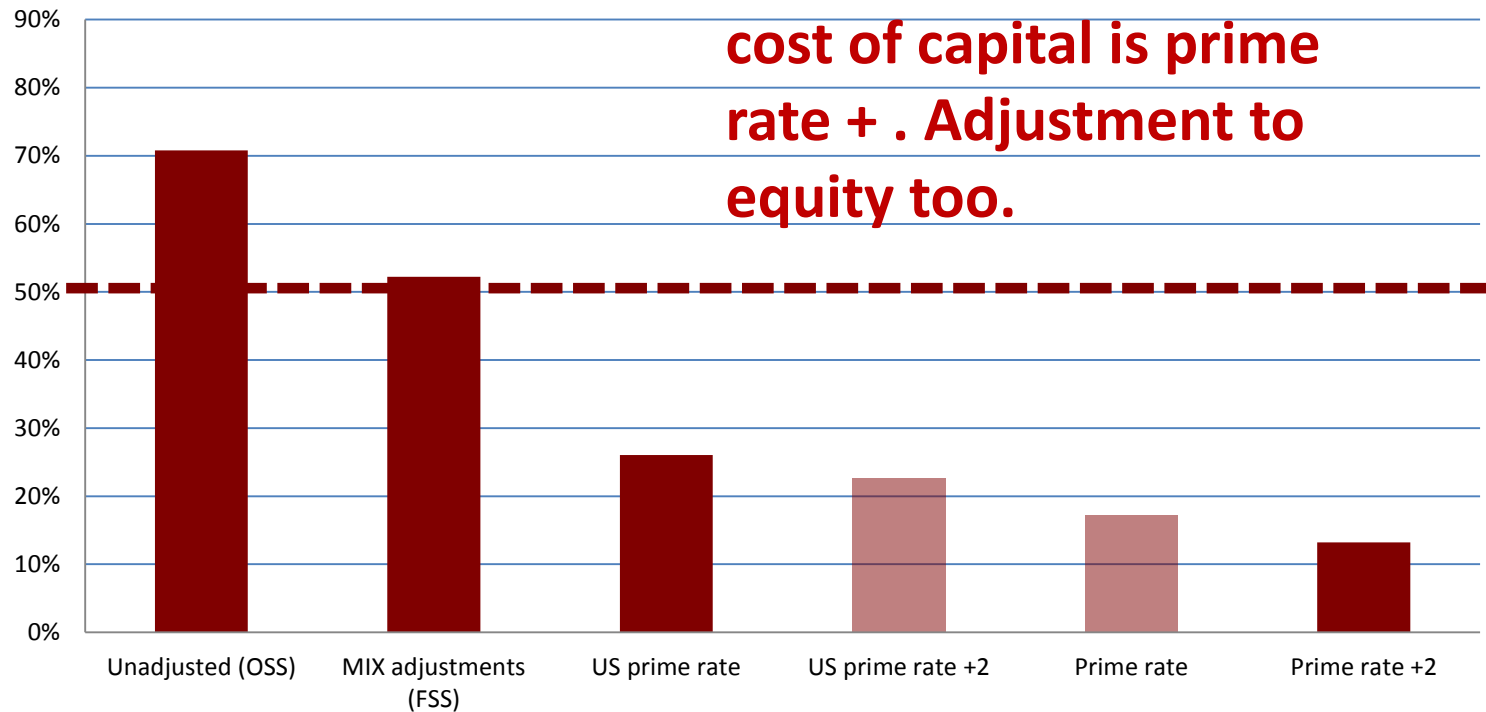
+ Opportunity costs for **loan capital** (opp. cost of capital - actual paid rate)

Preferred opp cost of capital = local prime rate

What economics/finance suggests

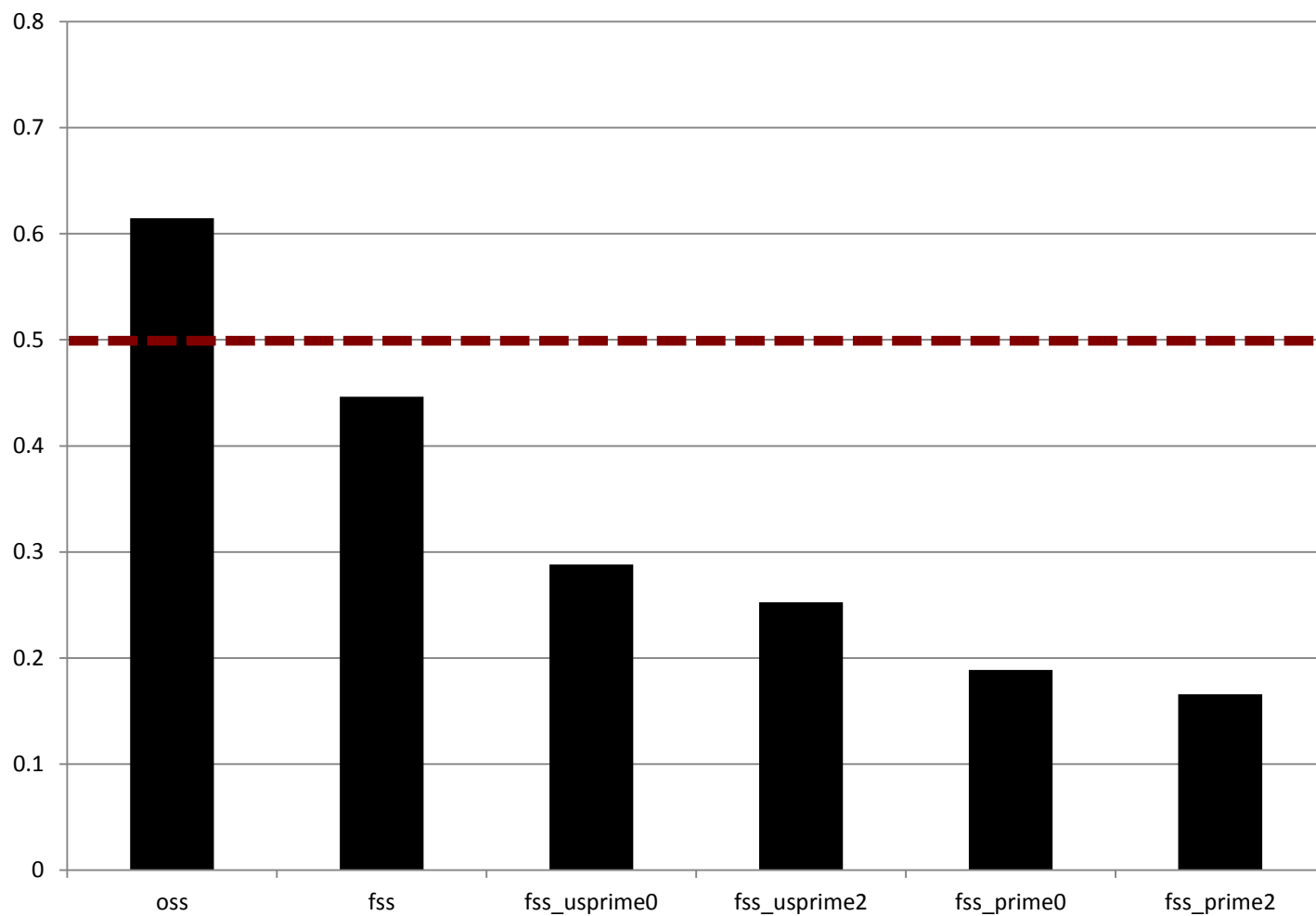
% of institutions that are profitable

Adjusted to account for cheap credit. Opportunity cost of capital is prime rate + . Adjustment to equity too.



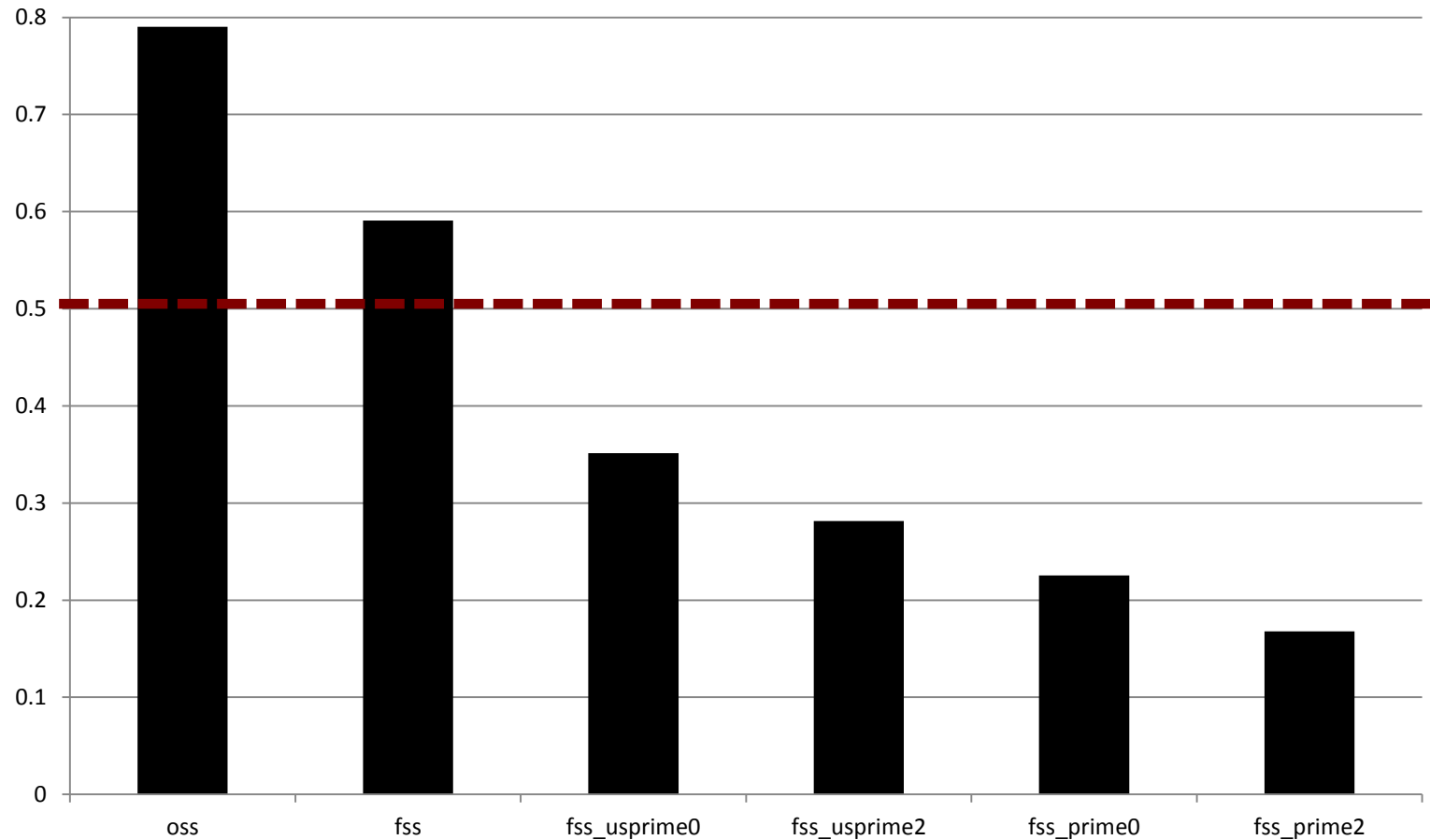
Younger institutions (under 10 years)

Percentage profitable, n=284



Older institutions (10 years +)

Percentage profitable, n=680

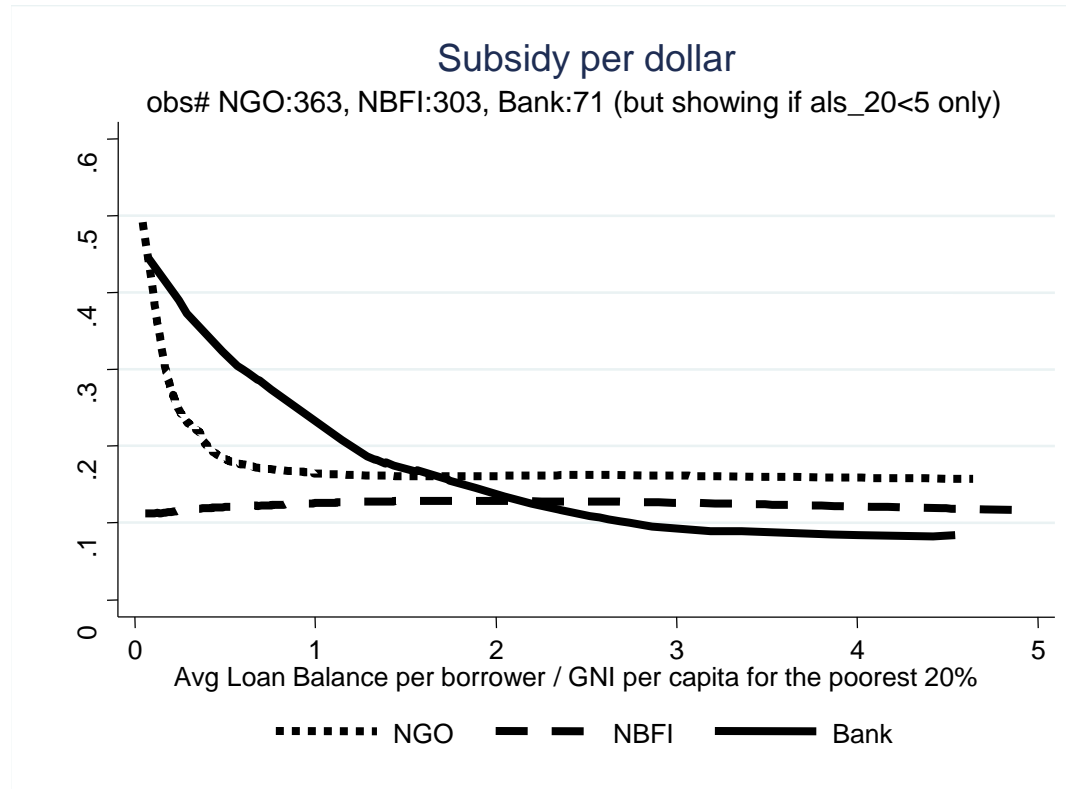


**Subsidy is badly allocated
(from a social perspective)**

Fairly flat: Subsidy per dollar lent

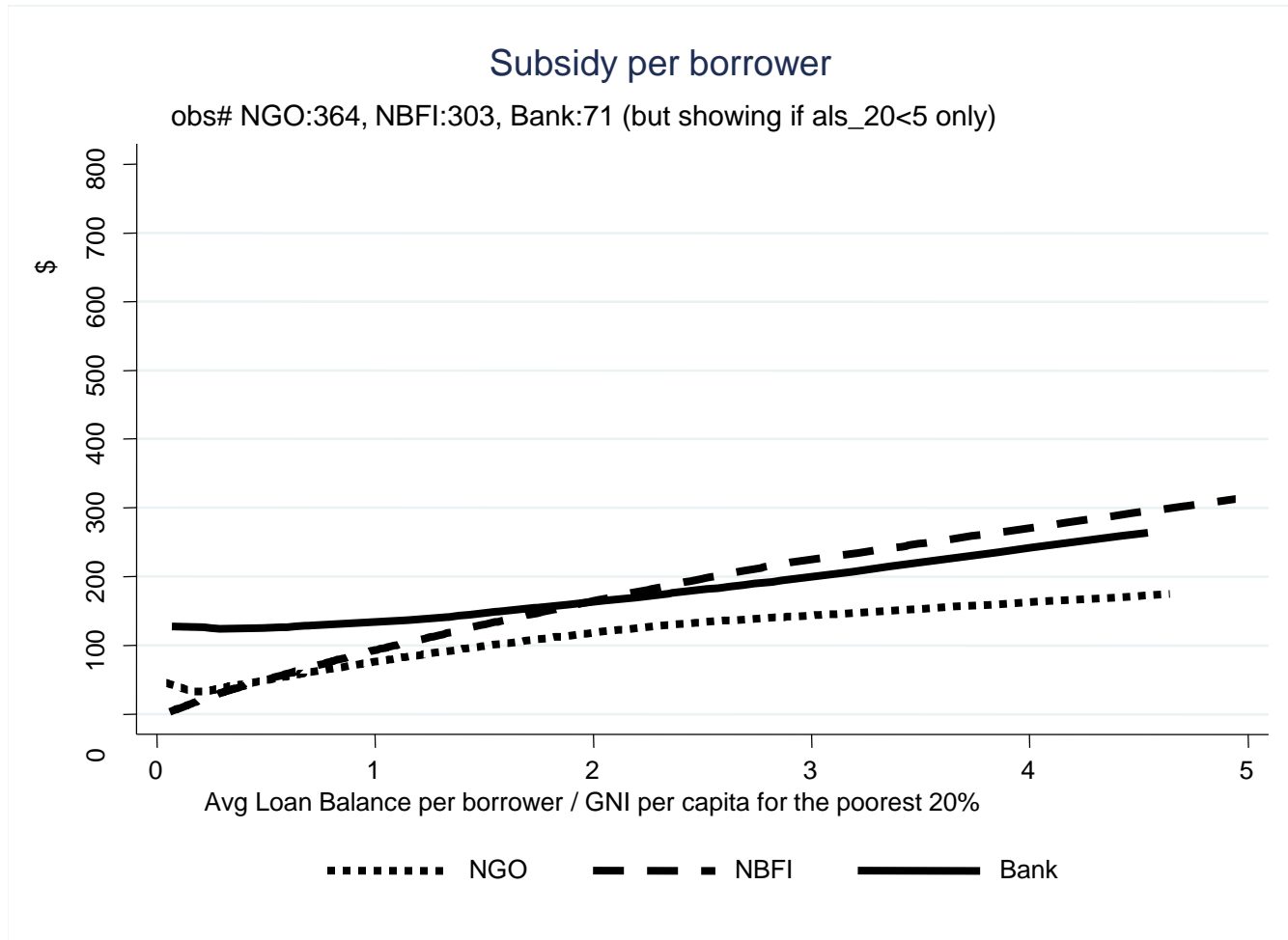
γ =local prime (obs = 972)

Subsidy
per dollar



Upward sloping: Subsidy per borrower

γ =local prime



Simple subsidy math

	Loan size	Subsidy per dollar lent	Implicit subsidy per loan
NGO	\$200	20%	\$40
Bank	\$1400	10%	\$140

Bottom line: Subsidy per borrower

Alternative cost of capital = local prime interest rate

Most recent observations 2005-2009

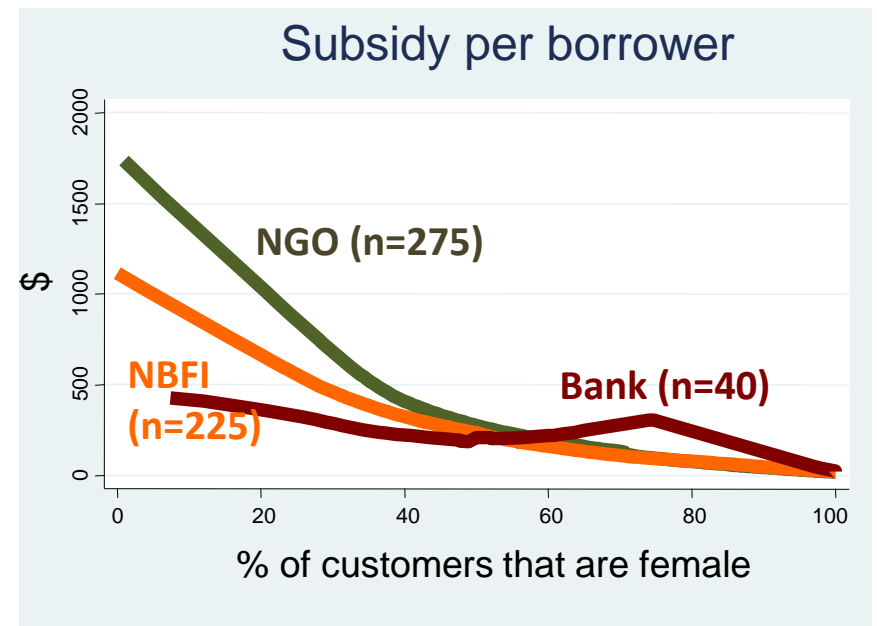
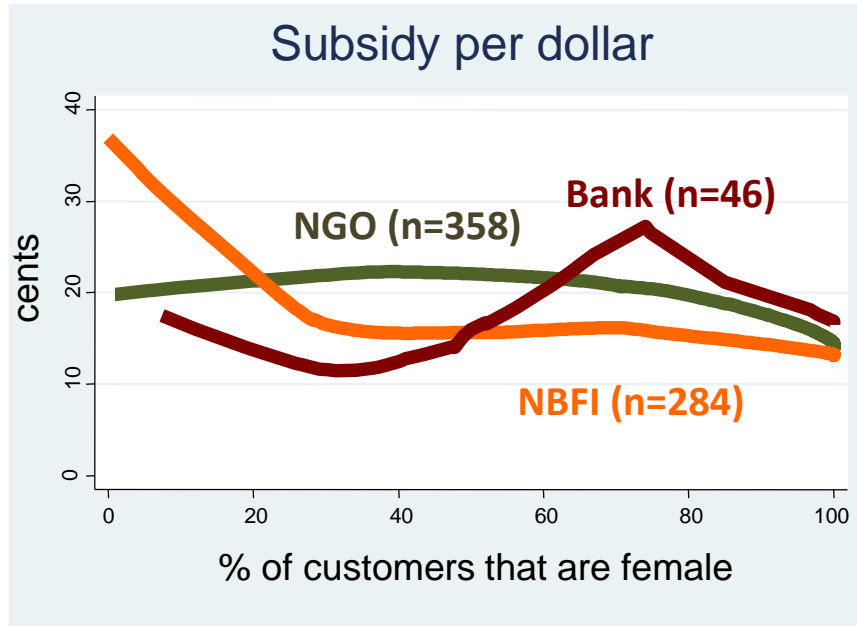
	Mean	25th percentile	Median	75th percentile	Obs
Full sample	132	0	26	102	1002
For-profit	178	0	14	107	365
Bank	275	20	93	417	72
NBFI (for-profit)	201	0	22	117	221
Not-For-profit	108	0	32	98	629
NGO	101	3	23	75	371
NBFI (non-profit)	133	10	51	147	92

Small High

Adjustment for market returns to equity

Subsidy and gender: by institution

Women receive less subsidy than men

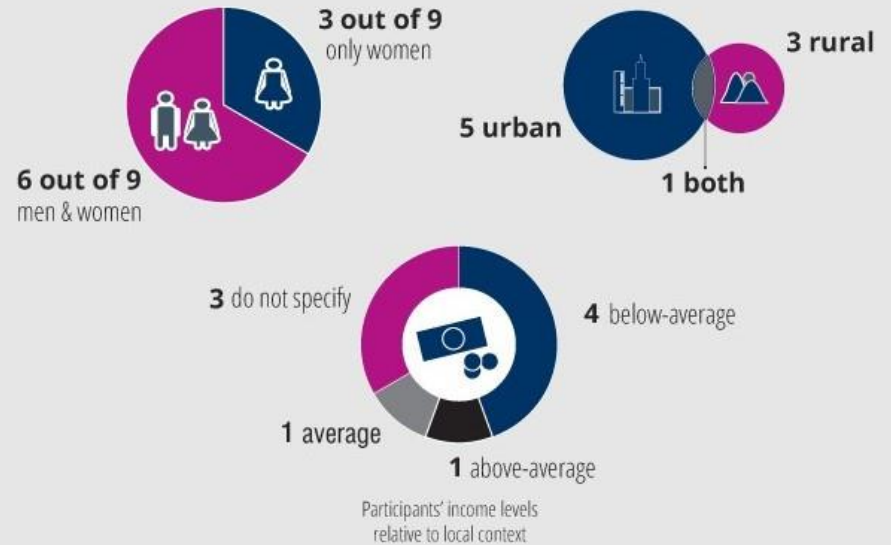


Modest subsidy, modest impacts

WHERE



WHO



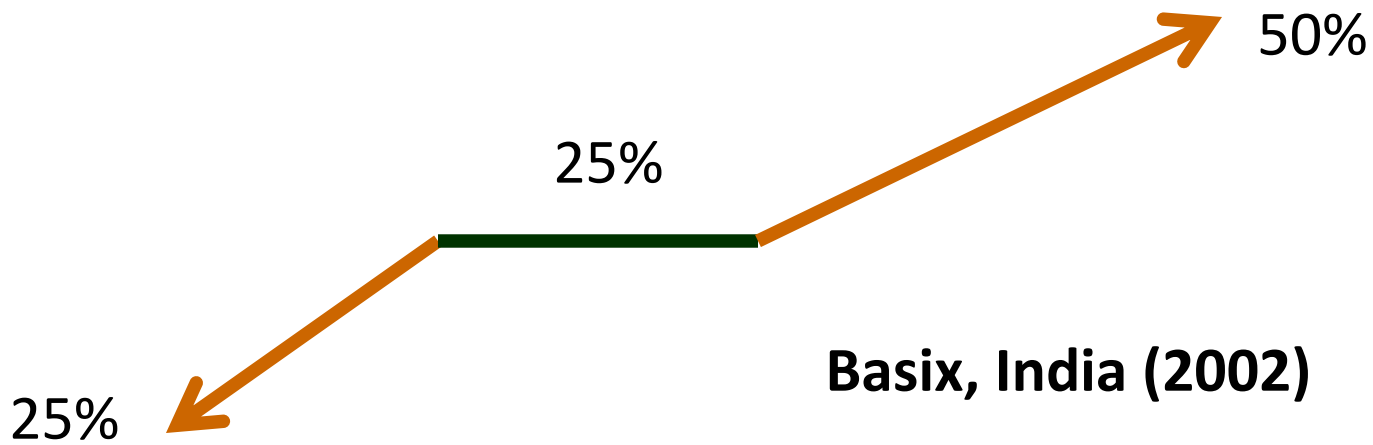
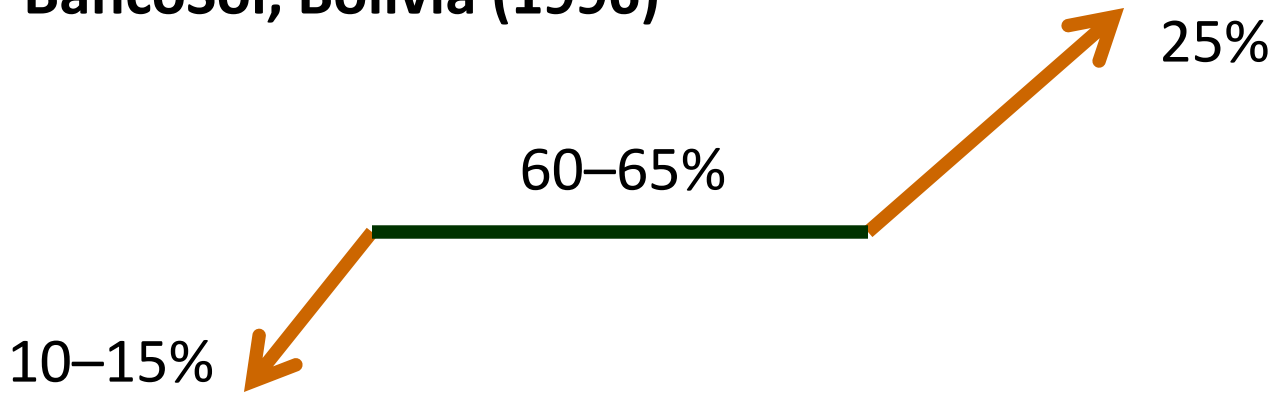
RESULTS

■ Increase ■ No change □ Not measured

	REVENUES	INCOME	CONSUMPTION
1 Mexico	Increase	No change	Increase
2 Morocco	Increase	No change	No change
3 Bosnia-Herzegovina	No change	No change	No change
4 South Africa	No change	Increase	Increase
5 Pakistan	No change	No change	No change
6 India	No change	No change	No change
7 Mongolia	No change	No change	Increase
8 Philippines 1	No change	No change	No change
9 Philippines 2	No change	No change	No change

Expert views: what to expect?

BancoSol, Bolivia (1996)



Spandana

Banerjee, A. V., Duflo, E., Glennerster, R., & Kinnan, C. (2015). "The miracle of microfinance? Evidence from a randomized evaluation," *American Economic Journal: Applied Economics*, vol 7(1): 22-53.



Spandana (India) evaluation

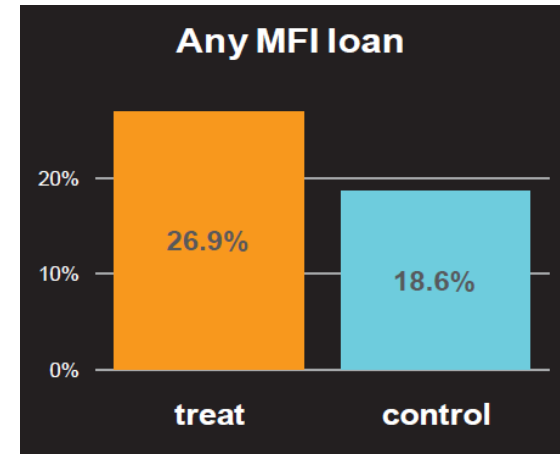
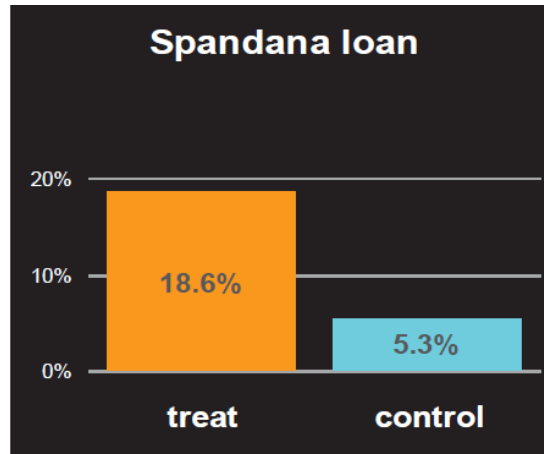
Abhijit Banerjee: “Assessing the Current Crisis in Microfinance and Avoiding the Next One”

- Spandana: Traditional microcredit program
 - Group liability
 - Weekly or monthly repayment
 - Starting loan is Rs. 10,000 (~\$250)
 - Interest rate changed over the period but was around 12% per year (nondeclining balance; ~24% APR)
- Spandana was already a large MFI
- Not previously operating in Hyderabad.
- Agreed to randomly phase in operations in Hyderabad.

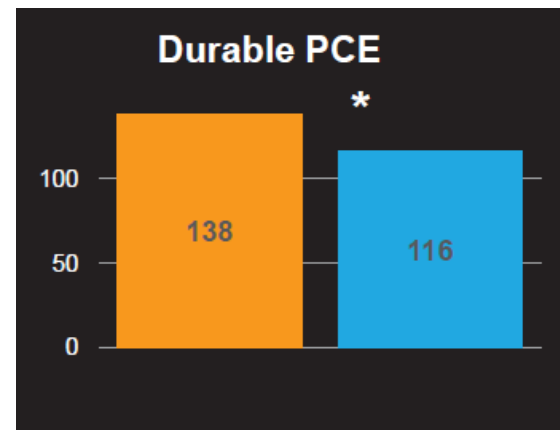
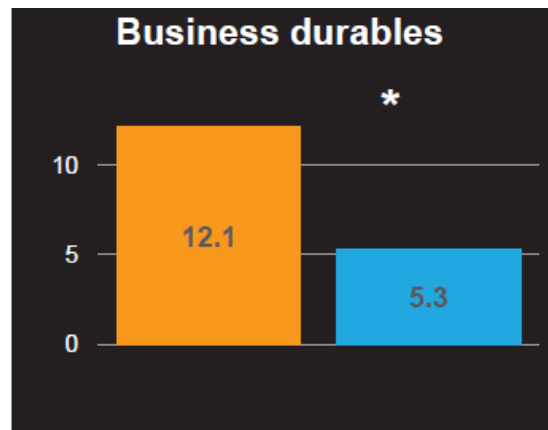
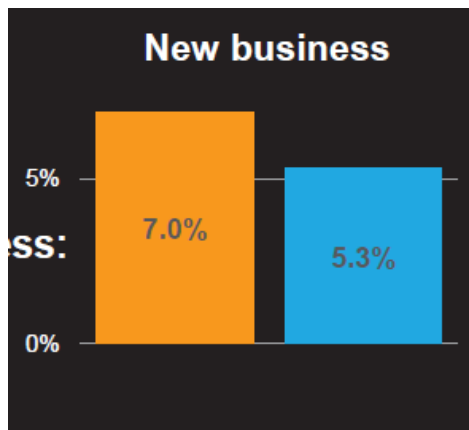
Spandana (India) evaluation

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Low loan take up



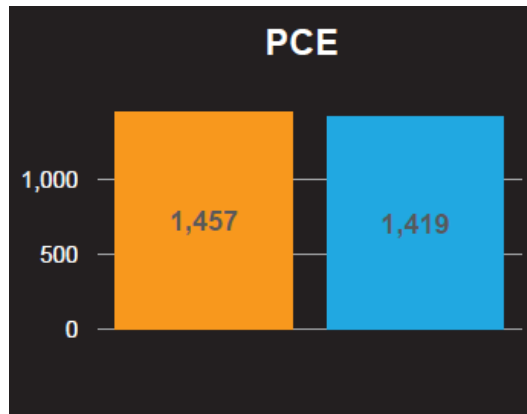
Impact on business



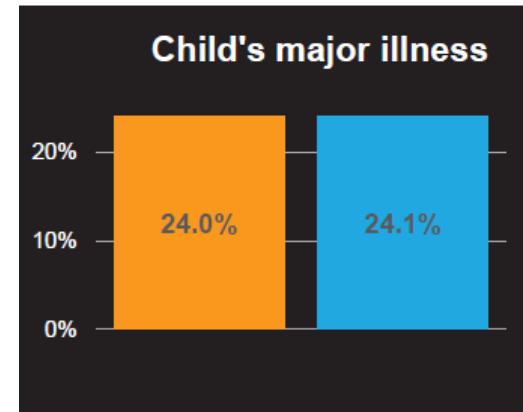
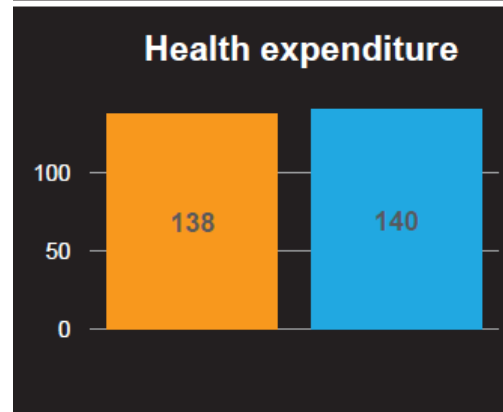
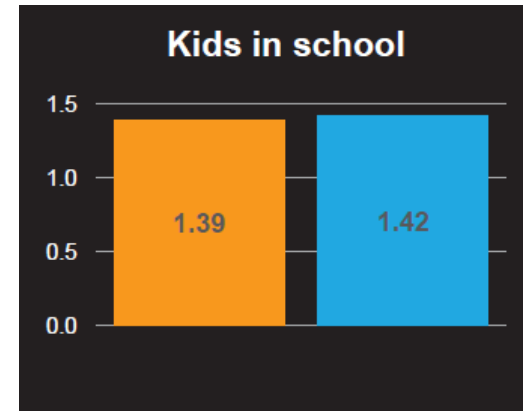
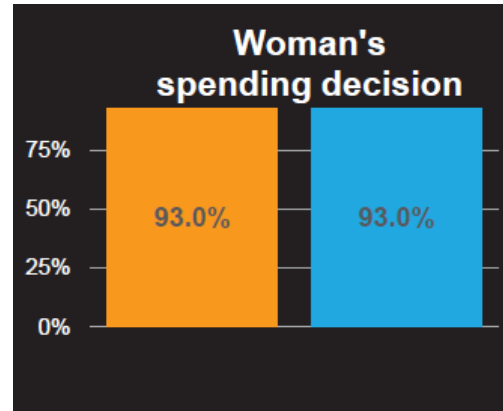
Spandana (India) evaluation

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But...



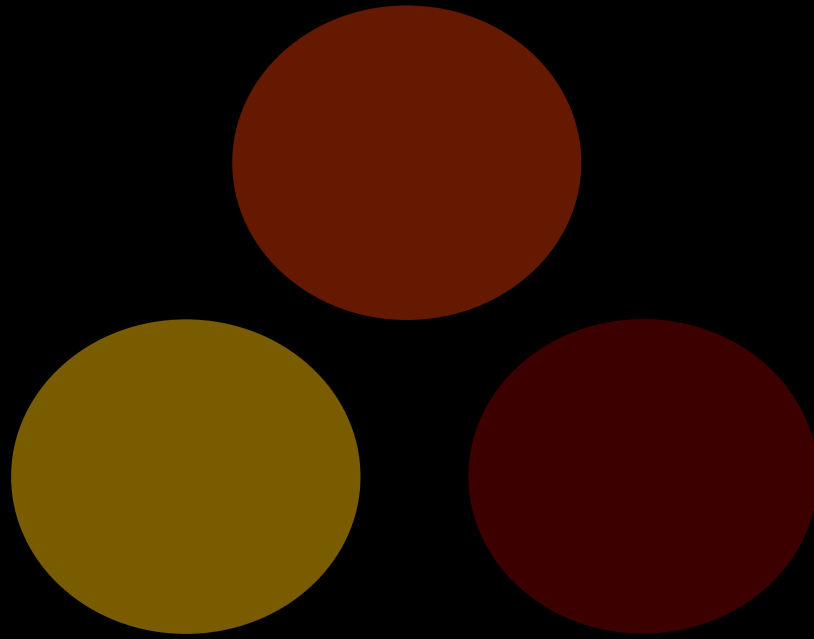
Per capita expenditure



Impacts – an assessment

- **Marginal** (impacts on expanding to new customers)
 - Gives little sense of **infra-marginal** impacts (impacts on existing, core customers)
 - **Not clear how to map** from marginal to infra-marginal in same place, or from one place to another





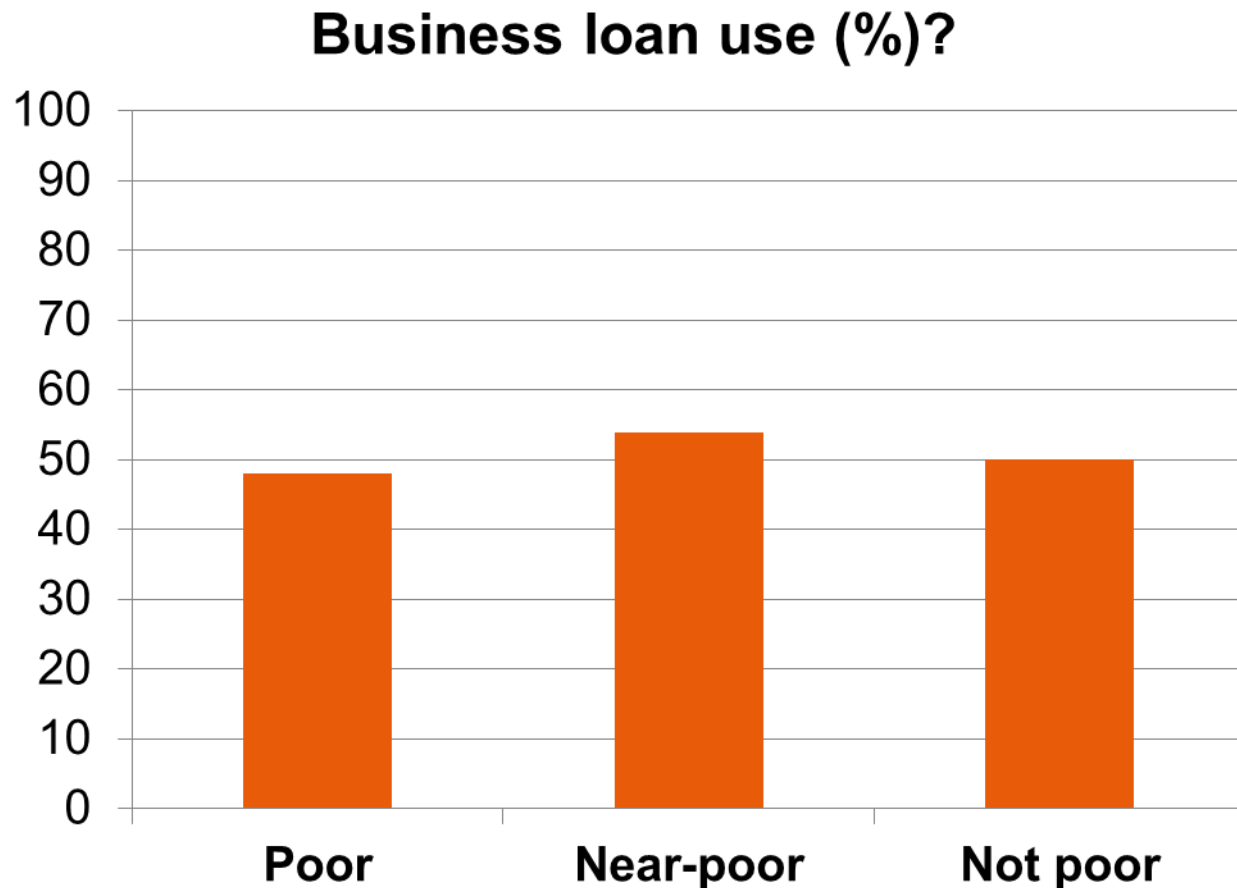
Biggest financial needs

Portfolios of the Poor (2009)

3 needs that drive much of the financial activity:

1. **Managing basics:** Cash-flow management to transform irregular income flows into a dependable resource to meet daily needs
2. **Coping with risk:** Dealing with the emergencies that can derail families with little in reserve
3. **Raising lump sums:** Seizing opportunities and paying for big-ticket expenses by accumulating usefully large sums of money

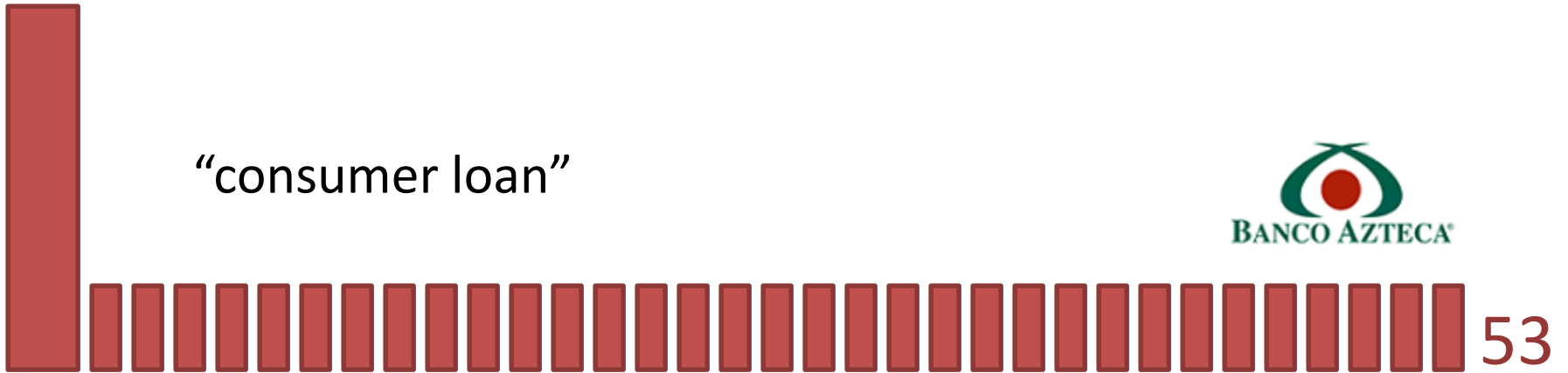
Are most loans for business investment? Evidence from **Indonesia**



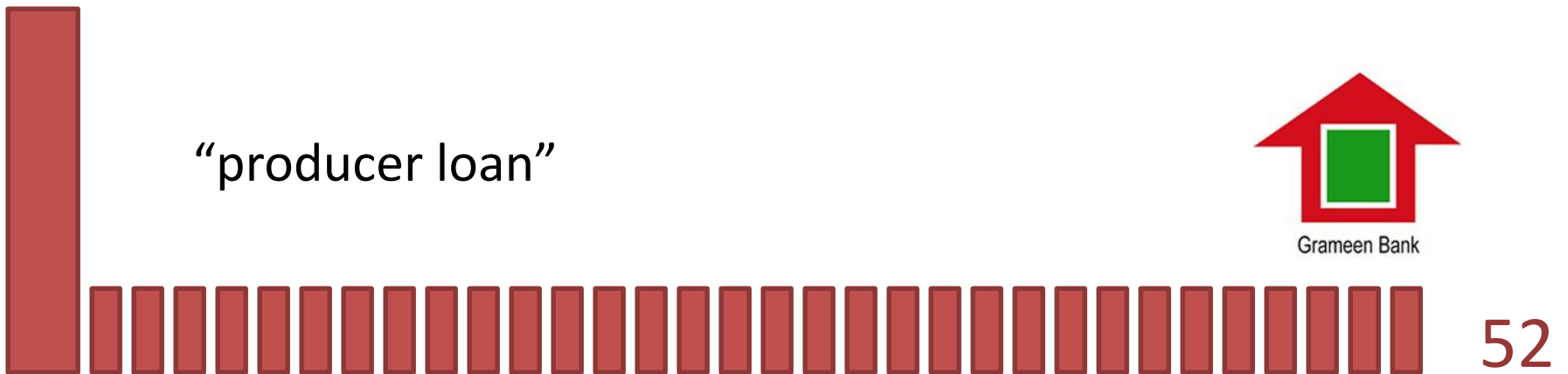
Don Johnston and Jonathan Morduch, *The Unbanked: Evidence from Indonesia*. *World Bank Economic Review* 2008.

Installment lending

“consumer loan”



“producer loan”



Taking consumer finance seriously...

- Allows micro-lenders to serve people with **jobs**
 - hospital orderlies, nannies, cooks, factory workers, drivers, agricultural laborers, construction workers, clerks, craft workers, and others.
- Allows micro-lenders to (openly) meet the wider needs of entrepreneurs.



Summary

- Remarkable institutional success
- Not a widespread commercial success
- Not focused so sharply on the poor
- Modest impacts but modest subsidies
 - Possibly favorable cost-benefit ratio
- Next steps: build from recognition of households' broader financial needs, especially consumer finance/saving

Thank you

www.financialaccess.org
www.usfinancialdiaries.org