

Keeping it Simple: Financial Literacy and Rules of Thumb

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Growing evidence that large share of population unprepared to make financial decisions

- Widespread lack of financial literacy, particularly among people in the US with low levels of education, minorities and women (Lusardi 2008)
- US households generally unfamiliar with concepts necessary to make efficient savings and investment decisions (Lusardi and Mitchell 2007)
- Very low levels of financial literacy in India and Indonesia (Cole, Sampson, Zia 2009)

Mixed evidence on whether or not financial literacy can be taught

- Some survey evidence (Bernheim & Garrett 2003; Lusardi 2004) that those attending financial training programs subsequently make better financial decisions
 - Especially attendees with low income or education levels
 - But self-selection suggests results overstated
- Duflo and Saez (2004) exploit random assignment to raise savings awareness
 - Find small effects on savings plan enrollment
- Cole, Sampson and Zia find only modest effect of financial literacy training program in Indonesia
- Karlan and Mullainathan find mixed results for vendors in India and the Philippines

Growing questions about efficacy of microfinance

- Effects on business growth and poverty alleviation still unproven
 - Evidence of business growth is mixed
 - Banerjee, Duflo, Glennerster, Kinnan (2009)
 - Karlan and Zinman (2010)
- How can we improve the effectiveness of microfinance?

Focus has been largely on financial frictions

“...rather than waste our time teaching [borrowers] new skills, we try to make maximum use of their existing skills. Giving the poor access to credit allows them to immediately put into practice the skills they already know...” (Yunus 1999)

- Many practitioners have taken a different approach
- This is starting to change from researchers as well
 - Bruhn, Karlan, and Schoar (2010) evaluate individualized consulting services for small businesses in Mexico
 - Karlan and Valdivia (2010) study mandatory business skills training for microfinance clients in Peru

We aim to answer the following questions:

- To what extent can financial literacy training improve firm and individual outcomes for microentrepreneurs in Dominican Republic?
- What is the trade-off between traditional, principles-based accounting training vs. simple, rule-of-thumb methods?

To answer these questions, we conducted a randomized control trial of two training programs

- Worked with ADOPEM, a microfinance institution lending to individuals & small businesses in the Dominican Republic
 - Operates a range of ongoing training programs
 - Wanted to assess efficacy of these programs
 - Expect significant selection bias in who attends such programs
- Randomly assigned training opportunity across 1200 clients
- Two treatments:
 - Traditional, principles-based accounting: similar to programs by FFH, ILO, BRAC
 - Rule-of-thumb methods: simple decision rules
 - Take up rate: 44%

Experimental design aims to begin unraveling mechanisms

- If training does not change management practices or improve outcomes, it could be that:
 - Individuals did not understand or were unable to implement new management techniques after classroom training
 - Individuals understood management techniques but chose not to implement
 - Even when the material is understood and implemented, it does not affect business performance
- Randomly assigned follow-up activities to disentangle these explanations

The median client

- Loan size US\$600
- Average weekly sales of US\$85
 - Bad week US\$50
 - Good week US\$115
- About 60% are sole proprietorships
 - Of the rest, 80% have either one or two employees
- Typical businesses include small retail shops, colmados, beauty salons, and food service

Typical clients



Attendance is not random

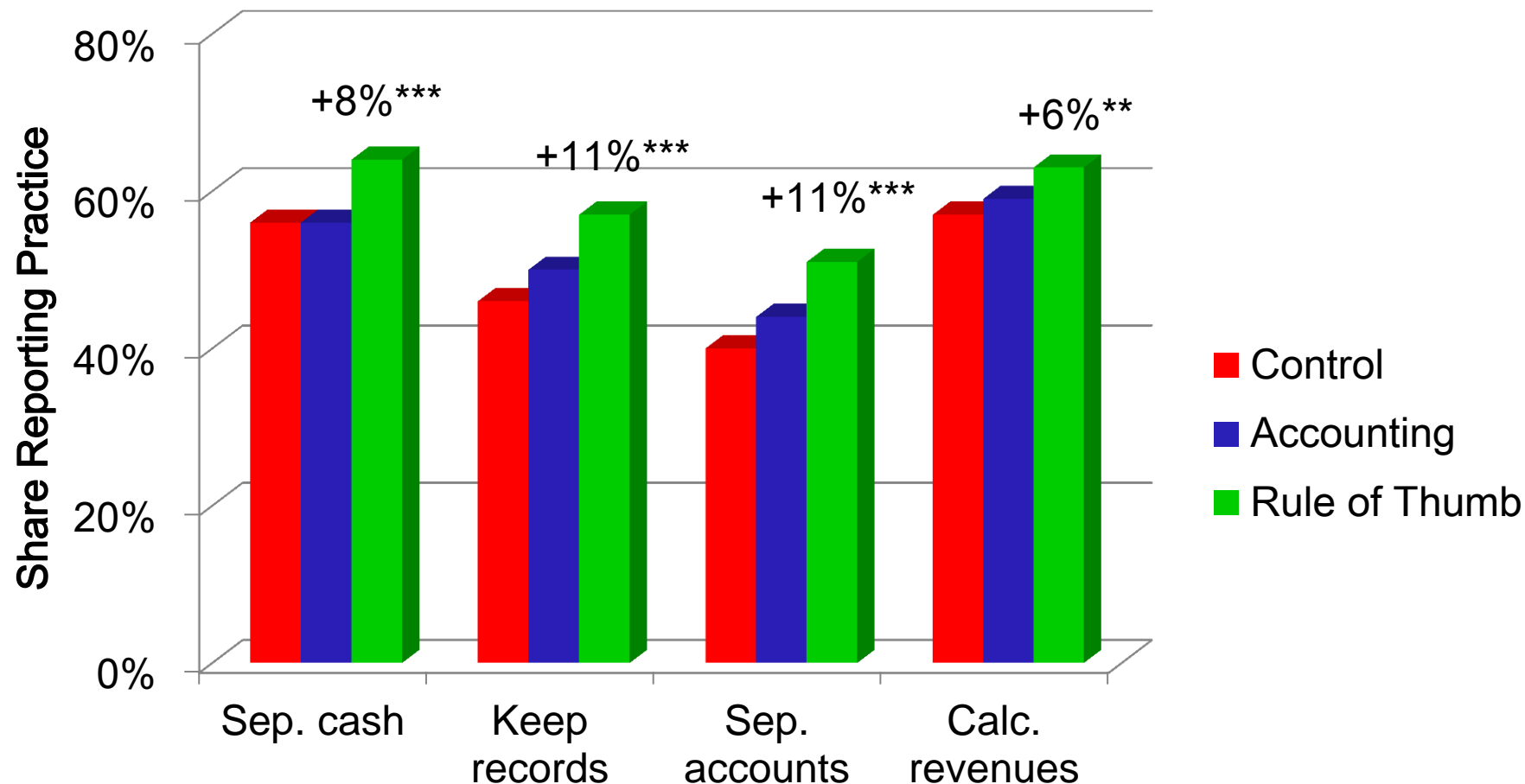
Those who show up are more likely to

- Be women
- Better educated
- Have received prior training and want more
- Smaller businesses
- **With bigger plans**



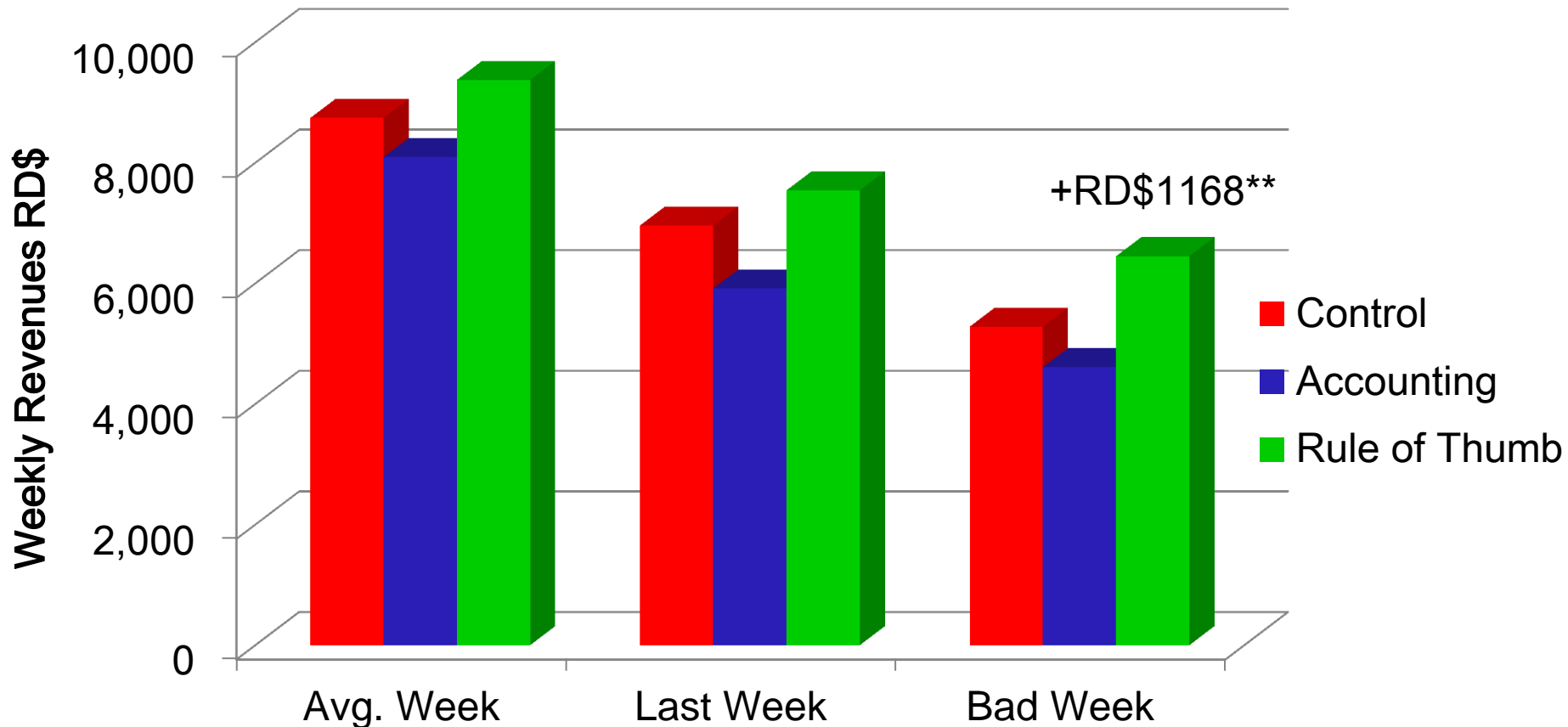
All this suggests our concerns about selection were well founded

Rule of Thumb training improves financial practices



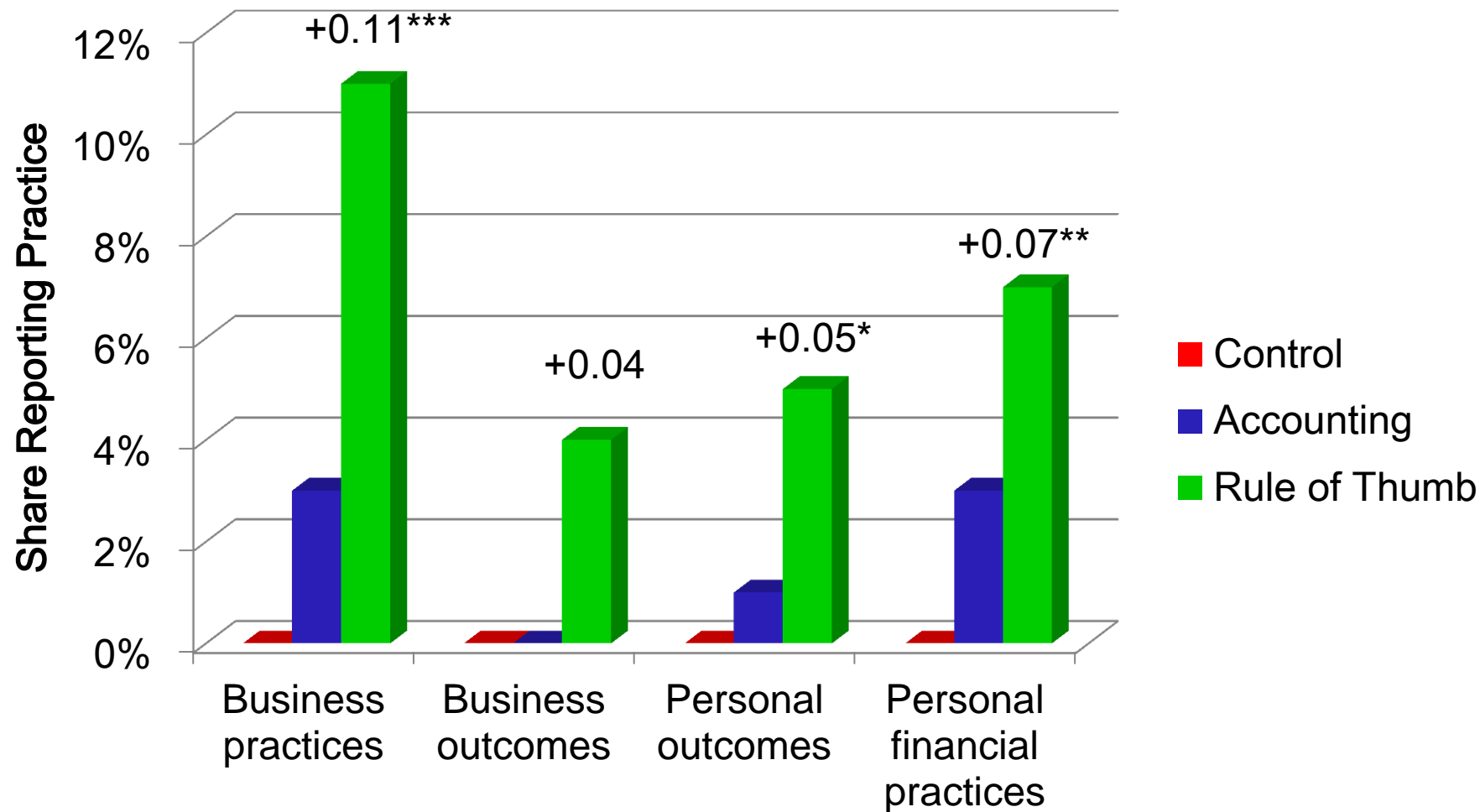
* Denotes significance at the 10%-level, ** at the 5%-level, and *** at the 1% level of effect relative to control.

Rule of Thumb also improves revenues in bad weeks



* Denotes significance at the 10%-level, ** at the 5%-level, and *** at the 1% level of effect relative to control.

Standardized effects show significant effects on business and personal financial practices



* Denotes significance at the 10%-level, ** at the 5%-level, and *** at the 1% level of effect relative to control.

Neither treatment has a significant impact on **institutional** outcomes

No change in:

- Loan size
- Loan type
- Repayment performance
- Retention

Construct objective measures of reporting quality

- Want to rule out survey & Hawthorne effects as explanation for reported differences in management practices
- Construct index of financial reporting errors
 - Bad period sales greater than average or good
 - Average period better than good
 - Average period profits better than good period sales
- 45% of subjects make at least one mistake; 11% make three or more
- Also look at different measures of profits

Rule of thumb reduces errors; accounting has large effect, but only for highly educated

	Accounting		Rule of Thumb	
	(1)	(2)	(3)	(4)
<i>Dependent Variable: Any Reporting Errors^b</i>				
Treatment	-0.03 (0.04)	0.03 (0.05)	-0.09*** (0.03)	-0.08* (0.04)
High Education		0.02 (0.06)		0.02 (0.07)
Interaction		-0.16* (0.09)		-0.02 (0.09)

Rule of Thumb has robust effects

- Follow-up & intensity may matter for accounting treatment
 - Irrelevant for Rules of Thumb
- Rule of Thumb has strongest effect for
 - Those who express least interest in training
 - Those whose starting practices were the worst
- Effect appears independent of education

Conclusion & Points to Remember

- No effect in this setting from traditional accounting training
 - Neither on business practices nor performance
 - Some positive results when augmented with intensive follow-up and for more well educated
- Easy-to-implement, rule of thumb training
 - Improves management practices
 - May also improve business performance, particularly in bad periods; mechanism remains unclear
 - More robust: works even with low education or initial ability
 - But cannot make claims about finding global best practices
- More is not necessarily better

Thank you!

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