Microfinance VoxDevLit: Issue 2

Jing Cai, Muhammad Meki & Simon Quinn
(editors)

Erica Field, Cynthia Kinnan, Jonathan Morduch, Jonathan de Quidt, & Farah Said
(co-editors)

2 March 2023

In this review, we use '**microfinance**' to refer to the **provision of formal financial services to poor and low-income individuals**, as well as to **other people systematically excluded from the financial system**.

In this review, we use '**microfinance**' to refer to the **provision of formal financial services to poor and low-income individuals**, as well as to **other people systematically excluded from the financial system**.

We focus on **microcredit** – but note that there are important other forms of microfinance (in particular, **microsaving**, **microinsurance** and **microequity**).

In this review, we use ‘**microfinance**’ to refer to the **provision of formal financial services to poor and low-income individuals**, as well as to **other people systematically excluded from the financial system**.

We focus on **microcredit** – but note that there are important other forms of microfinance (in particular, **microsaving**, **microinsurance** and **microequity**).

Microcredit is offered by **non-government organisations (NGOs)**, **non-bank microfinance companies**, **microfinance banks**, **financial cooperatives**, **rural banks**, and some **state-owned institutions**.

In this review, we use '**microfinance**' to refer to the **provision of formal financial services to poor and low-income individuals**, as well as to **other people systematically excluded from the financial system**.

We focus on **microcredit** – but note that there are important other forms of microfinance (in particular, **microsaving**, **microinsurance** and **microequity**).

Microcredit is offered by **non-government organisations (NGOs)**, **non-bank microfinance companies**, **microfinance banks**, **financial cooperatives**, **rural banks**, and some **state-owned institutions**.

We do **not** focus here on lending services built on **mobile money platforms** – but there is a VoxDevLit on mobile money too!

The **classic microcredit model** typically incorporates the following features:

1. **Group liability**: self-selected groups, with members jointly liable for the loan repayment;

The **classic microcredit model** typically incorporates the following features:

1. **Group liability**: self-selected groups, with members jointly liable for the loan repayment;
2. **Dynamic incentives**: loans are gradually increased to reward good repayment behavior;

The **classic microcredit model** typically incorporates the following features:

1. **Group liability**: self-selected groups, with members jointly liable for the loan repayment;
2. **Dynamic incentives**: loans are gradually increased to reward good repayment behavior;
3. **Frequent instalments**: partial repayments of the loan as a disciplinary device for self-control;

The **classic microcredit model** typically incorporates the following features:

1. **Group liability**: self-selected groups, with members jointly liable for the loan repayment;
2. **Dynamic incentives**: loans are gradually increased to reward good repayment behavior;
3. **Frequent instalments**: partial repayments of the loan as a disciplinary device for self-control;
4. Borrowers are often encouraged to use loans for **self-employment activities**; and

The **classic microcredit model** typically incorporates the following features:

1. **Group liability**: self-selected groups, with members jointly liable for the loan repayment;
2. **Dynamic incentives**: loans are gradually increased to reward good repayment behavior;
3. **Frequent instalments**: partial repayments of the loan as a disciplinary device for self-control;
4. Borrowers are often encouraged to use loans for **self-employment activities**; and
5. Loans are (often) **targeted to women**.

Outline

1. The first generation of microfinance studies
2. Unpacking the classic contract
3. Microfinance institutions
4. Conclusions and open questions

Outline

1. The first generation of microfinance studies
2. Unpacking the classic contract
3. Microfinance institutions
4. Conclusions and open questions

The first generation of microfinance studies

1. Overall impacts of microcredit programs
2. Heterogeneity
3. General equilibrium effects

The first generation of microfinance studies

- Challenges of estimating the program impact:

The first generation of microfinance studies

- Challenges of estimating the program impact:
  - Demand-side biases: people who choose to borrow may be different, or trending differently, than those who choose not to borrow
    - Downward bias: People may borrow when they have experienced, or expect to experience, a negative shock
    - Upward bias: people may borrow when they expect an improvement, or because they are more capable in ways that are difficult to measure

The first generation of microfinance studies

- Challenges of estimating the program impact:
  - Demand-side biases: people who choose to borrow may be different, or trending differently, than those who choose not to borrow
    - Downward bias: People may borrow when they have experienced, or expect to experience, a negative shock
    - Upward bias: people may borrow when they expect an improvement, or because they are more capable in ways that are difficult to measure
  - Supplier-side biases:
    - Lenders make strategic decisions based on factors that are difficult for researchers to fully observe
    - Selection biases can go in either direction

The first generation of microfinance studies

Seven RCTs evaluating microcredit programs:

Country	**Bosnia and Herzegovina**	**Ethiopia**	**India**	**Mexico**	**Mongolia**	**Morocco**	**The Philippines**
Study Citation	Augsburg et al. (2015)	Tarozzi et al. (2015)	Banerjee et al. (2015)	Angelucci et al. (2015)	Attanasio et al. (2015)	Crépon et al. (2015)	Karlan and Zinman (2011)
Treatment	Lend to marginally rejected borrowers	Open branches	Open branches	Open branches, promote loans	Open branches, target likely borrowers	Open branches	Lend to marginal applicants
Microloan Liability type	Individual	Group	Group	Group	Both	Group	Individual
Interest Rate (APR)	22%	12%	24%	100%	24%	13.5%	63%
Urban or Rural	Both	Rural	Urban	Both	Rural	Rural	Urban
Target Women?	No	No	Yes	Yes	Yes	No	No
Randomization level	Individual	Community	Community	Community	Community	Community	Individual
Study duration	14 months	36 months	40 months	16 months	19 months	24 months	36 months

Source: Meager (2019)

The first generation of microfinance studies

Key findings:

- Access to microcredit leads to an increase in borrowing, business creation, and investment
- But this does not translate into increases in profit, income, labour supply, and average consumption
- No robust evidence of gains in social indicators such as education and health
- The studies find some evidence of effects on occupational choice, business scale, consumption choice, female decision power, and improved risk management

The first generation of microfinance studies

Caveats:

- Statistical power poses a major challenge to microcredit impact studies
- Measures impacts on "marginal" or "complier" populations of borrowers affected by microcredit expansions
- Impacts vary with social and cultural contexts

Heterogeneity

- There is a lack of evidence suggesting transformative effects of microcredit programs on the average borrowers
- The impact can be heterogeneous across different types of borrowers
  - In Hyderabad, only 49.7% of MF borrowers have any business => many borrow for consumption, not business growth
  - MF may cause weaker businesses to enter
  - MF loans might not be large enough to push many entrepreneurs out of low steady state
- Understanding effect heterogeneity is important: target promising borrowers

Heterogeneity

- Prior business experience (Banerjee et al (2019), Meager (2019))
  - Those who select into entrepreneurship without cheap credit may have business opportunities with relatively higher returns
- Gender
  - Impacts are larger on male entrepreneurs (Fiala (2018))
  - Women face considerable restrictions on how they can use capital
  - Women's capital is typically invested into their husband's enterprise (Field et al (2019))
- **Meager (2019)** provides suggestive evidence that the microcredit impact varies with features of loan contracts

General equilibrium

- Few studies have tackled the general equilibrium (GE) impacts of microcredit programs
- Potential for multiplier effects:

General equilibrium

- Few studies have tackled the general equilibrium (GE) impacts of microcredit programs
- Potential for multiplier effects:
  - Business investment channel:
    - If the impacts of microcredit on business outcomes grow over time, microcredit may stimulate firm investment and demand for labor

General equilibrium

- Few studies have tackled the general equilibrium (GE) impacts of microcredit programs
- Potential for multiplier effects:
  - Business investment channel:
    - If the impacts of microcredit on business outcomes grow over time, microcredit may stimulate firm investment and demand for labor
  - Aggregate demand channel:
    - Many borrowers treat microfinance as a consumption loan (Kaboski and Townsend, 2012)
    - Borrowers consume loans -> increase aggregate demand
    - Microcredit access may cause households to reduce precautionary savings and increase consumption

General equilibrium

- Few studies have tackled the general equilibrium (GE) impacts of microcredit programs
- Potential for multiplier effects:
  - Business investment channel:
    - If the impacts of microcredit on business outcomes grow over time, microcredit may stimulate firm investment and demand for labor
  - Aggregate demand channel:
    - Many borrowers treat microfinance as a consumption loan (Kaboski and Townsend, 2012)
    - Borrowers consume loans -> increase aggregate demand
    - Microcredit access may cause households to reduce precautionary savings and increase consumption
- Estimating the GE effects of microcredit can generate important implications for policy-makers regarding microcredit provision

General equilibrium

- Fully quantifying these effects requires market level variation in access to microcredit:
  - Need a quantitatively large, exogenous shock to credit supply
  - Also need the shock to play out at the level of entire labor markets

General equilibrium

- A recent wave of papers uses quasi-experiments and RCTs to measure the GE effects of microcredit:

General equilibrium

- A recent wave of papers uses quasi-experiments and RCTs to measure the GE effects of microcredit:
  - **Kaboski and Townsend (2012)**:
    - Thailand's "Million Baht Village Fund" program - injected more than 25,000 USD into villages for lending
    - Large impacts on consumption and wages
  - **Burke et al. (2019)**: providing access to credit to farmers in Kenya during harvest time affects local prices through helping farmers delay grain sales
  - **Fink, Jack and Masiye (2020)**: access to lean-season credit increased consumption and village-level wages
  - **Breza and Kinnan (2020)**: a major lending shock in India significantly decreased daily wages and consumption

General equilibrium

- Macroeconomic effects of economy-wide microcredit (Buera et al (2020)):

General equilibrium

- Macroeconomic effects of economy-wide microcredit (Buera et al (2020)):
  - Use a model to simulate and quantify microcredit impacts on key macroeconomic measures of development
    - Short-run: increases income and capital but lowers TFP (entry of low productivty entrepreneurs)
    - Long-run: lowers saving and interest rate rises + higher wages $->$ small increase in the number of businesses but quality improved
  - Small long-run impact of microcredit on output (higher capital and lower TFP offset each other)
  - But the vast majority of the population experiences welfare gains, especially the poor and marginal entrepreneurs

Outline

1. The first generation of microfinance studies
2. Unpacking the classic contract
3. Microfinance institutions
4. Conclusions and open questions

Outline

1. The first generation of microfinance studies
2. Unpacking the classic contract
3. Microfinance institutions
4. Conclusions and open questions

Group lending

In the classic microcredit model, loans were made to individuals, but there was **joint liability** within a small group.

Group lending

In the classic microcredit model, loans were made to individuals, but there was **joint liability** within a small group.

- Early theoretical work demonstrated the benefits in **mitigating adverse selection and moral hazard** by providing **peer screening, monitoring, and an enforcement mechanism** that exploits local information (Stiglitz 1990, Varian 1990, Besley and Coate 1995, Ghatak and Guinnance 1999, Ghatak 2000).

Group lending

In the classic microcredit model, loans were made to individuals, but there was **joint liability** within a small group.

- Early theoretical work demonstrated the benefits in **mitigating adverse selection and moral hazard** by providing **peer screening, monitoring, and an enforcement mechanism** that exploits local information (Stiglitz 1990, Varian 1990, Besley and Coate 1995, Ghatak and Guinnance 1999, Ghatak 2000).
- **Giné and Karlan (2014) and Attanasio et al. (2015)** provide experimental evidence that individual liability does not lead to worse repayment outcomes.

Group lending

- Comparing these results to the previous theoretical literature, one possibility is that — even without joint liability — group-based lending nonetheless leverages sufficient **social capital** to ensure good repayment.

Group lending

- Comparing these results to the previous theoretical literature, one possibility is that — even without joint liability — group-based lending nonetheless leverages sufficient **social capital** to ensure good repayment.
- This **"peer pressure without legal pressure"** can come about from a range of other features, such as group meetings and public repayments, which many MFIs have maintained, while dropping joint liability (de Quidt et al. 2016).

Dynamic incentives

- **'Incremental lending'**: providing initial small loans, with access to larger loans (and potentially better loan terms) conditional on good repayment behaviour, with exclusion from future loans otherwise.

Dynamic incentives

- **'Incremental lending'**: providing initial small loans, with access to larger loans (and potentially better loan terms) conditional on good repayment behaviour, with exclusion from future loans otherwise.
- There is also an extensive theoretical literature showing the benefits of dynamic incentives for maintaining high repayment rates (Besley 1995).

Dynamic incentives

- **Giné et al. (2010)** use framed field experiments with Peruvian microentrepreneurs to show that adding dynamic incentives to any loan contract **decreases the rate of default**.

Dynamic incentives

- **Giné et al. (2010)** use framed field experiments with Peruvian microentrepreneurs to show that adding dynamic incentives to any loan contract **decreases the rate of default**.
- **Giné et al. (2012)**, in a field experiment in Malawi, show that an intervention that improved the lending bank's ability to implement dynamic repayment incentives (**fingerprint identification**) led to better repayment rates, and **reduced both adverse selection and moral hazard**.

Dynamic incentives

- **Giné et al. (2010)** use framed field experiments with Peruvian microentrepreneurs to show that adding dynamic incentives to any loan contract **decreases the rate of default**.
- **Giné et al. (2012)**, in a field experiment in Malawi, show that an intervention that improved the lending bank's ability to implement dynamic repayment incentives (**fingerprint identification**) led to better repayment rates, and **reduced both adverse selection and moral hazard**.
- Further experiment evidence of positive repayment effects is provided by **Karlan and Zinman (2009)** from South Africa.

Dynamic incentives

- **Giné et al. (2010)** use framed field experiments with Peruvian microentrepreneurs to show that adding dynamic incentives to any loan contract **decreases the rate of default**.
- **Giné et al. (2012)**, in a field experiment in Malawi, show that an intervention that improved the lending bank's ability to implement dynamic repayment incentives (**fingerprint identification**) led to better repayment rates, and **reduced both adverse selection and moral hazard**.
- Further experiment evidence of positive repayment effects is provided by **Karlan and Zinman (2009)** from South Africa.
- However, with the proliferation of MFIs and **increased competition**, the power of dynamic incentives is blunted, particularly in urban areas with high mobility of populations (Morduch 1999, McIntosh et al., 2005, de Quidt et al. 2018)

Repayment (in)flexibility

- Standard microcredit contracts typically require **regular repayments** at a fixed frequency – usually beginning shortly after the initial disbursement.

Repayment (in)flexibility

- Standard microcredit contracts typically require **regular repayments** at a fixed frequency – usually beginning shortly after the initial disbursement.
- Lenders may benefit from clients **committing** to a regular repayment schedule, but it isn't clear that such repayment rigidity is helpful for all borrowers (especially those with profitable but **riskier investments** that take time to bear fruit).

Repayment (in)flexibility

- Standard microcredit contracts typically require **regular repayments** at a fixed frequency – usually beginning shortly after the initial disbursement.
- Lenders may benefit from clients **committing** to a regular repayment schedule, but it isn't clear that such repayment rigidity is helpful for all borrowers (especially those with profitable but **riskier investments** that take time to bear fruit).
- Repayment flexibility can benefit borrowers in two ways (Battaglia et al, 2018):

Repayment (in)flexibility

- Standard microcredit contracts typically require **regular repayments** at a fixed frequency – usually beginning shortly after the initial disbursement.
- Lenders may benefit from clients **committing** to a regular repayment schedule, but it isn't clear that such repayment rigidity is helpful for all borrowers (especially those with profitable but **riskier investments** that take time to bear fruit).
- Repayment flexibility can benefit borrowers in two ways (Battaglia et al, 2018):
  1. Easing **credit constraints** (by allowing clients additional time to repay, and thus providing to accumulate a larger lump sum), and/or
  2. Offering **implicit insurance** (by allowing clients to defer repayment if facing an adverse shock).

Repayment flexibility

- **Field et al. (2013)**, using an experiment in India, show that a repayment grace period at the start of a loan leads to sustained benefits for clients (including higher-return 'lumpy investments'), but greater defaults for the MFI.

Repayment flexibility

- **Field et al. (2013)**, using an experiment in India, show that a repayment grace period at the start of a loan leads to sustained benefits for clients (including higher-return 'lumpy investments'), but greater defaults for the MFI.
- **Battaglia et al. (2018)** present an innovative variation on the idea of a grace period: they allow it to be exercised at any time. Using a field experiment in Bangladesh, they find strong evidence for the 'implicit insurance' channel, as well as large benefits for borrowers, and *lower* defaults.

Repayment flexibility

- **Field et al. (2013)**, using an experiment in India, show that a repayment grace period at the start of a loan leads to sustained benefits for clients (including higher-return 'lumpy investments'), but greater defaults for the MFI.
- **Battaglia et al. (2018)** present an innovative variation on the idea of a grace period: they allow it to be exercised at any time. Using a field experiment in Bangladesh, they find strong evidence for the 'implicit insurance' channel, as well as large benefits for borrowers, and *lower* defaults.
- **Barboni and Agarwal (2023)** implement an experiment in India where the treatment group was allowed to *choose* between a standard (rigid) contract and a flexible contract that was costlier in terms of annual interest rate. They also find improved borrower outcomes, both in terms of business performance as well as repayments.

Trade-offs in contract design

- **Brune et al. (2022)** provide contrasting evidence and a note of caution, using a field experiment in Colombia. In contrast to the previous papers, they offer flexible contracts to first-time borrowers. This may uncover a large number of potential clients who are financially excluded unless flexible products are offered from the beginning, but the authors find little evidence of this, and results suggest **greater defaults for flexible-repayment clients**. Their evidence thus aligns with the established microlender practice of offering rigid contracts to first-time borrowers.

Trade-offs in contract design

- **Brune et al. (2022)** provide contrasting evidence and a note of caution, using a field experiment in Colombia. In contrast to the previous papers, they offer flexible contracts to first-time borrowers. This may uncover a large number of potential clients who are financially excluded unless flexible products are offered from the beginning, but the authors find little evidence of this, and results suggest **greater defaults for flexible-repayment clients**. Their evidence thus aligns with the established microlender practice of offering rigid contracts to first-time borrowers.
- There is clearly a **trade-off** between the benefits of flexibility to some borrowers, and the benefits to rigidity and the **fiscal discipline** it may instil, both for lenders, and for some borrowers who may value that fiscal discipline due to its implicit **commitment value** (Rutherford 2000, Collins et al. 2009, Morduch 2010, Bauer et al. 2012, and Afzal et al. 2018). The question of **which innovations to offer**, when, and to whom – remains an important open area of research in microfinance contract design.

Timing of loan and repayments

- One implication of the classic model is that, since repayment begins before any feasible investment of the funds bears fruit, the classic microcredit contract appears to be inappropriate for households without a **diversified and steady income stream**, particularly for households exposed to highly seasonable occupations such as **agriculture** (Morduch, 1999).

Timing of loan and repayments

- One implication of the classic model is that, since repayment begins before any feasible investment of the funds bears fruit, the classic microcredit contract appears to be inappropriate for households without a **diversified and steady income stream**, particularly for households exposed to highly seasonable occupations such as **agriculture** (Morduch, 1999).
- **Burke et al. (2019)** use a field experiment in Kenya to show the **importance of timing**. The authors demonstrate that lack of access to credit for farmers limits their ability to deal with large and regular fluctuations in local grain prices over time, which often forces farmers to "sell low and buy high".

Timing of loan and repayments

- One implication of the classic model is that, since repayment begins before any feasible investment of the funds bears fruit, the classic microcredit contract appears to be inappropriate for households without a **diversified and steady income stream**, particularly for households exposed to highly seasonable occupations such as **agriculture** (Morduch, 1999).
- **Burke et al. (2019)** use a field experiment in Kenya to show the **importance of timing**. The authors demonstrate that lack of access to credit for farmers limits their ability to deal with large and regular fluctuations in local grain prices over time, which often forces farmers to "sell low and buy high".
- Other evidence on the interaction between liquidity constraints, seasonality, and credit timing is provided by **Shonchoy (2014), Casaburi and Willis (2018), Fink et al. (2020) and Beaman et al. (2020)**.

Asset-based microfinance

- It is now well-established, through a body of experimental field work, that the **returns to providing appropriate fixed assets** to microenterprises are high and sustained. This is true of urban microenterprises (De Mel et al. 2008, De Mel et al. 2012, Fafchamps et al. 2014, and Hussam et al. 2020), and of asset transfers in rural agricultural settings (Banerjee et al. 2015b, Bandiera et al. 2017, and Balboni et al. 2020).

Asset-based microfinance

- It is now well-established, through a body of experimental field work, that the **returns to providing appropriate fixed assets** to microenterprises are high and sustained. This is true of urban microenterprises (De Mel et al. 2008, De Mel et al. 2012, Fafchamps et al. 2014, and Hussam et al. 2020), and of asset transfers in rural agricultural settings (Banerjee et al. 2015b, Bandiera et al. 2017, and Balboni et al. 2020).
- It remains an open question, however, whether high returns can also be achieved through credit products; if so, this could open exciting possibilities for providing large fixed assets in a way that is financially sustainable for microfinance institutions. A few recent papers consider this kind of asset-based microfinance.

Asset-based microfinance

- **Jack et al. (2023)** work with a Kenyan dairy savings and credit cooperative and show that moving away from the standard collateral requirement (where clients have to provide collateral for one third of the loan, and guarantors for the remaining two thirds) to one where 96% of the value of the loan is collateralised through the asset itself leads to substantially greater take-up and outcomes.

Asset-based microfinance

- **Jack et al. (2023)** work with a Kenyan dairy savings and credit cooperative and show that moving away from the standard collateral requirement (where clients have to provide collateral for one third of the loan, and guarantors for the remaining two thirds) to one where 96% of the value of the loan is collateralised through the asset itself leads to substantially greater take-up and outcomes.
- **Bari et al. (2021)** provide expertimental evidence from Pakistan, also using a contract structure where the asset served as collateral for the loan (which allows for a significantly higher borrowing amount), and find significant increases in business performance and household consumption.

Asset-based microfinance

- An interesting area of research for lenders and policymakers is to explore innovative alternative methods for collateralisation. This is a theme explored by **Gertler et al. (2021)**, who find improved repayment outcomes from 'digital collateralisation' – in which repayment failures trigger 'lock-out' from an asset, rather than physical repossession.

Asset-based microfinance

- An interesting area of research for lenders and policymakers is to explore innovative alternative methods for collateralisation. This is a theme explored by **Gertler et al. (2021)**, who find improved repayment outcomes from 'digital collateralisation' – in which repayment failures trigger 'lock-out' from an asset, rather than physical repossession.
- Of course, as in any context in which a borrower provides collateral, lenders and regulators in this space need to be aware of potential hardships that defaulting borrowers face – both hardships triggering default and hardships caused by lockout. This is a point considered by **Gertler et al.** – who argue, through a theoretical model, that "an intermediate degree of lockout can be welfare maximising".

Outline

Outline

1. The first generation of microfinance studies
2. Unpacking the classic contract
3. Microfinance institutions
4. Conclusions and open questions

Microfinance institutions: A key link in the chain

Cull et al (2018) describe data from **1335 MFIs**, between 2005 and 2009 – jointly serving **about 80 million borrowers**.

Microfinance institutions: A key link in the chain

Cull et al (2018) describe data from **1335 MFIs**, between 2005 and 2009 – jointly serving **about 80 million borrowers**.

They find:

1. The **costs of making small loans to poorer clients are high**.

Microfinance institutions: A key link in the chain

Cull et al (2018) describe data from **1335 MFIs**, between 2005 and 2009 – jointly serving **about 80 million borrowers**.

They find:

1. The **costs of making small loans to poorer clients are high**.
2. **Subsidies are often necessary** to deliver services when revenues do not cover costs.

Microfinance institutions: A key link in the chain

Cull et al (2018) describe data from **1335 MFIs**, between 2005 and 2009 – jointly serving **about 80 million borrowers**.

They find:

1. The **costs of making small loans to poorer clients are high**.
2. **Subsidies are often necessary** to deliver services when revenues do not cover costs.
    - The median institution receives **five cents of subsidy per dollar lent**, and **US$51 of subsidy per borrower**.

Microfinance institutions: A key link in the chain

Cull et al (2018) describe data from **1335 MFIs**, between 2005 and 2009 – jointly serving **about 80 million borrowers**.

They find:

1. The **costs of making small loans to poorer clients are high**.
2. **Subsidies are often necessary** to deliver services when revenues do not cover costs.
    - The median institution receives **five cents of subsidy per dollar lent**, and **US$51 of subsidy per borrower**.
    - The distribution is highly skewed: the **average subsidy is 13 cents per dollar**.

Microfinance institutions: A key link in the chain

Cull et al (2018) describe data from **1335 MFIs**, between 2005 and 2009 – jointly serving **about 80 million borrowers**.

They find:

1. The **costs of making small loans to poorer clients are high**.
2. **Subsidies are often necessary** to deliver services when revenues do not cover costs.
   - The median institution receives **five cents of subsidy per dollar lent**, and **US$51 of subsidy per borrower**.
   - The distribution is highly skewed: the **average subsidy is 13 cents per dollar**.

Cull et al conclude that subsidies are likely to remain a persistent feature of microfinance provision – and they therefore encourage a **transparent conversation about their use**.

Loan officers and organisational incentives

Rigol and Roth (2021) run a field experiment with a large Chilean lender.

They test how **organisational incentives for loan officers** affect **graduation of promising borrowers**.

- Under the status quo, loan officers could **endorse** lenders to move to the graduation portfolio – but would then risk **losing compensation**.

Loan officers and organisational incentives

Rigol and Roth (2021) run a field experiment with a large Chilean lender.

They test how **organisational incentives for loan officers** affect **graduation of promising borrowers**.

- Under the status quo, loan officers could **endorse** lenders to move to the graduation portfolio – but would then risk **losing compensation**.
- The authors tested two variations in loan-officer contracts:
  - **Mitigation**: Graduated borrowers were counted as if they remained in the portfolio; and

Loan officers and organisational incentives

Rigol and Roth (2021) run a field experiment with a large Chilean lender.

They test how **organisational incentives for loan officers** affect **graduation of promising borrowers**.

- Under the status quo, loan officers could **endorse** lenders to move to the graduation portfolio – but would then risk **losing compensation**.
- The authors tested two variations in loan-officer contracts:
  - **Mitigation**: Graduated borrowers were counted as if they remained in the portfolio; and
  - **Mitigation plus Recognition**: Added rewards if graduated borrowers subsequently performed well.

Loan officers and organisational incentives

Rigol and Roth (2021) run a field experiment with a large Chilean lender.

They test how **organisational incentives for loan officers** affect **graduation of promising borrowers**.

- Under the status quo, loan officers could **endorse** lenders to move to the graduation portfolio – but would then risk **losing compensation**.
- The authors tested two variations in loan-officer contracts:
  - **Mitigation**: Graduated borrowers were counted as if they remained in the portfolio; and
  - **Mitigation plus Recognition**: Added rewards if graduated borrowers subsequently performed well.

Loan officers and organisational incentives

Rigol and Roth (2021) run a field experiment with a large Chilean lender.

They test how **organisational incentives for loan officers** affect **graduation of promising borrowers**.

- Under the status quo, loan officers could **endorse** lenders to move to the graduation portfolio – but would then risk **losing compensation**.
- The authors tested two variations in loan-officer contracts:
  - **Mitigation**: Graduated borrowers were counted as if they remained in the portfolio; and
  - **Mitigation plus Recognition**: Added rewards if graduated borrowers subsequently performed well.

The combined effect of the '**mitigation plus recognition**' was to **increase by about 34% the net present value of graduation loans to endorsed borrowers**.

Local knowledge and high-return microenterprises

- **Hussam et al (2020)** use **community screening for productive borrowers** in India.
  - The authors **asked local entrepreneurs to rank their peers' profitability and growth potential**.

Local knowledge and high-return microenterprises

- **Hussam et al (2020)** use **community screening for productive borrowers** in India.
    - The authors **asked local entrepreneurs to rank their peers' profitability and growth potential**.
    - The authors then **randomly distributed cash grants**.

Local knowledge and high-return microenterprises

- **Hussam et al (2020)** use **community screening for productive borrowers** in India.
  - The authors **asked local entrepreneurs to rank their peers' profitability and growth potential**.
  - The authors then **randomly distributed cash grants**.
  - Community members' rankings were **highly predictive of marginal returns** – and **outperformed a machine learning tool**.

Local knowledge and high-return microenterprises

- **Hussam et al (2020)** use **community screening for productive borrowers** in India.
  - The authors **asked local entrepreneurs to rank their peers' profitability and growth potential**.
  - The authors then **randomly distributed cash grants**.
  - Community members' rankings were **highly predictive of marginal returns** – and **outperformed a machine learning tool**.
- **Bryan et al (2022)** compared a **doubling of loan size** (control group) with a **quadrupling of loan size** (treatment group), in Egypt.

Local knowledge and high-return microenterprises

- **Hussam et al (2020)** use **community screening for productive borrowers** in India.
  - The authors **asked local entrepreneurs to rank their peers' profitability and growth potential**.
  - The authors then **randomly distributed cash grants**.
  - Community members' rankings were **highly predictive of marginal returns** – and **outperformed a machine learning tool**.
- **Bryan et al (2022)** compared a **doubling of loan size** (control group) with a **quadrupling of loan size** (treatment group), in Egypt.
  - The authors find "**mostly null average impacts of the larger loans**" – but important **heterogeneity** and thus **misallocation**.

Local knowledge and high-return microenterprises

- **Hussam et al (2020)** use **community screening for productive borrowers** in India.
  - The authors **asked local entrepreneurs to rank their peers' profitability and growth potential**.
  - The authors then **randomly distributed cash grants**.
  - Community members' rankings were **highly predictive of marginal returns** – and **outperformed a machine learning tool**.
- **Bryan et al (2022)** compared a **doubling of loan size** (control group) with a **quadrupling of loan size** (treatment group), in Egypt.
  - The authors find "**mostly null average impacts of the larger loans**" – but important **heterogeneity** and thus **misallocation**.
  - This heterogeneity is discovered only when including **psychometric and cognitive data – demographic and business performance data does not suffice**.

Trader-agent Intermediated Lending

- **Maitra et al (2017)** hypothesise that **MFIs are unable to successfully screen out unproductive borrowers**.

Trader-agent Intermediated Lending

- Maitra et al (2017) hypothesise that **MFIs are unable to successfully screen out unproductive borrowers**.
    - The authors propose **trader-agent intermediated lending** – where the MFI delegates borrower selection to an agent chosen from **informal traders and lenders in the community**.

Trader-agent Intermediated Lending

- Maitra et al (2017) hypothesise that **MFIs are unable to successfully screen out unproductive borrowers**.
  - The authors propose **trader-agent intermediated lending** – where the MFI delegates borrower selection to an agent chosen from **informal traders and lenders in the community**.
  - TRAIL agents receive a **commission of 75% of the interest paid by recommended borrowers**.

Trader-agent Intermediated Lending

- **Maitra et al (2017)** hypothesise that **MFIs are unable to successfully screen out unproductive borrowers**.
  - The authors propose **trader-agent intermediated lending** – where the MFI delegates borrower selection to an agent chosen from **informal traders and lenders in the community**.
  - TRAIL agents receive a **commission of 75% of the interest paid by recommended borrowers**.
  - TRAIL caused a **27% increase in production of the main cash crop** and a **22% increase in farmer incomes**.

Outline

1. The first generation of microfinance studies
2. Unpacking the classic contract
3. Microfinance institutions
4. Conclusions and open questions

Outline

1. The first generation of microfinance studies
2. Unpacking the classic contract
3. Microfinance institutions
4. Conclusions and open questions

Five key lessons

1. **The ‘traditional’ model of microcredit does not have transformative effects on its borrower pool.**

Five key lessons

1. **The 'traditional' model of microcredit does not have transformative effects on its borrower pool.** However...
   - This kind of contract may be valued for **liquidity** and **implicit insurance**.
   - Some sub-groups may find this contract valuable.

Five key lessons

1. **The 'traditional' model of microcredit does not have transformative effects on its borrower pool.** However...
    - This kind of contract may be valued for **liquidity** and **implicit insurance**.
    - Some sub-groups may find this contract valuable.
2. **For many clients, a key attraction of microcredit is the opportunity to accumulate a lump sum.**

Five key lessons

1. **The 'traditional' model of microcredit does not have transformative effects on its borrower pool.** However...
   - This kind of contract may be valued for **liquidity** and **implicit insurance**.
   - Some sub-groups may find this contract valuable.

2. **For many clients, a key attraction of microcredit is the opportunity to accumulate a lump sum.**
   - '**Grace periods**' are therefore likely to be valuable in many contexts.
   - For graduated borrowers, **microfinance may be too 'micro'**.

Five key lessons

1. **The 'traditional' model of microcredit does not have transformative effects on its borrower pool.** However...
   - This kind of contract may be valued for **liquidity** and **implicit insurance**.
   - Some sub-groups may find this contract valuable.
2. **For many clients, a key attraction of microcredit is the opportunity to accumulate a lump sum.**
   - '**Grace periods**' are therefore likely to be valuable in many contexts.
   - For graduated borrowers, **microfinance may be too 'micro'**.
3. **It remains an open research question how microcredit can retain its basic advantages while being more flexible and tailored.**

Five key lessons

4. **Microcredit contracts must often be understood in the context of intra-household pressures.**

Five key lessons

4. **Microcredit contracts must often be understood in the context of intra-household pressures.**
   - Contracts that allow clients **greater autonomy over the use of the lump sum** – in particular, contracts designed for women – may prove particularly beneficial.

Five key lessons

4. **Microcredit contracts must often be understood in the context of intra-household pressures.**
    - Contracts that allow clients **greater autonomy over the use of the lump sum** – in particular, contracts designed for women – may prove particularly beneficial.

5. **Different microcredit contracts have different uses for different borrowers.**

Five key lessons

4. **Microcredit contracts must often be understood in the context of intra-household pressures.**
    - Contracts that allow clients **greater autonomy over the use of the lump sum** – in particular, contracts designed for women – may prove particularly beneficial.
5. **Different microcredit contracts have different uses for different borrowers.**
    - Some microcredit supports **business expansion**, which much goes into **consumption**.

Microfinance VoxDevLit: Issue 2

Jing Cai, Muhammad Meki & Simon Quinn
(editors)

Erica Field, Cynthia Kinnan, Jonathan Morduch, Jonathan de Quidt, & Farah Said
(co-editors)

2 March 2023