Design and regulation of institutions to support MSME Access to Finance

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Outline of talk

• I will focus almost solely on lending and borrowing
  – market failures
  – policies and instruments to correct market failures
  – relevance to MFI policy and regulation
  – the framework has relevance for other financial market issues (equity, insurance, ...)

• The talk has three sections
  – Credit markets – how they work and how they fail
  – Market failure and its remedies
  – Selected policy issues
1. how credit markets work
The fundamental relationship
The fundamental relationship
The fundamental relationship

Flow of payments and repayments

Borrower ————

Lender
The fundamental relationship

Flow of payments and repayments

Lender borrower relationship
Borrower

Intermediary

Flow of payments and repayments

Intermediary

Lender

Lender borrower relationship
Financial integration – gains from trade
The key issues

• The fundamental relationship is between an individual lender and an individual borrower
  – Intermediaries and institutions can obscure this fact

• Financial transactions are a form of cooperation
  – This is how financial markets create wealth
  – Financial institutions and regulation exist to facilitate this cooperation

• Financial transactions are voluntary
  – Both sides of the market must benefit
  – Both sides of the market must be protected from risk

• To maximise gains, lenders and borrowers need to be different
  – if we both need funds at the same time then the deal will never work
  – But this means transacting with strangers at a distance
2. market failure and its remedies
Lending to strangers at a distance

- **Adverse selection**
  - I do not know the borrower
  - The borrower is better informed

- **Moral hazard**
  - I cannot observe the borrower’s behaviour
  - I cannot monitor the loan

- **Sovereign risk**
  - I cannot rely on contracts being enforced
  - I cannot rely on the rules not being changed

- **Lending is dangerous and risky**
  - Lenders will only participate if they are protected from these risks
  - Otherwise credit markets will dry up
Adverse selection – Akerlof’s lemons

• **Used car market.**
  – Cars are of variable value, between $0 and $1,000.
  – Some cars are “lemons” and need to be serviced all the time
  – Only the owner knows if their car is a lemon, and its real value
  – To a buyer, all cars look the same
  – **The seller is better informed than the buyer**

• **An example**
  – The value varies between $0 and $1,000
  – The average value of cars in the market is $500.
  – If I pay more that $500, then on average I make a loss
  – If I pay less than $500, then on average I make a profit
  – The market price of a used car will be $500

• **But wait, there is more ...**
Adverse selection II

• If the market price is $500, then sellers with good cars will drop out
  – I know the value of my car, and I will not sell if its value is more than $500
  – So now the value varies between $0 and $500
  – The average value of cars in the market is $250.
  – If I pay more that $250, then on average I make a loss
  – If I pay less than $250, then on average I make a profit
  – The market price of a used car will be $250

• But wait, there is more ...
  – Sellers with cars worth more than $250 will drop out
  – The price will fall to $125, and so on
  – In equilibrium the price falls to zero and the market dries up

• This is called an adverse selection roll up
  – Gresham’s law – bad money drives out good

• Adverse selection is a problem if sellers are better informed than buyers, or if buyers are better informed than sellers
  – It is dangerous to do business with someone who is better informed than you are
Adverse selection III

• Credit markets are like used car markets
  – borrowers are better informed than lenders about whether they are likely to default
  – selling a project to your bank manager is a bit like selling him a used car

• Adverse selection roll up
  – interest rate is set to match the default rate
  – borrowers who expect to default are not deterred
  – good borrowers drop out more quickly than risky borrowers
  – the quality of the borrowing pool deteriorates
  – the default rate goes up
  – so the interest rate has to go up even further to break even
  – the quality of borrowers deteriorates even more
  – a vicious cycle …

• Adverse selection is the most important and most severe market failure that afflicts credit markets
  – it arises whenever borrowers are better informed than lenders
  – The symptoms are high interest rates and a low quality pool of borrowers
  – The effects of moral hazard are similar
Some Remedies

- There are four key mechanisms to mitigate the market failures that afflict financial markets
  - Screening, monitoring and supervision
  - Intermediaries and delegated monitoring
  - Collateral
  - Regulation, governance, legal infrastructure
Screening, monitoring, supervision

- The most important obstacles arise from asymmetric information (borrowers are better informed than lenders)
- The obvious remedy is to deal with information problems directly
  - Screening borrowers to eliminate bad credit risks
  - Monitoring borrowers to detect bad behaviour after they have taken a loan
  - Supervision and enforcement of contracts and agreements
- This is easiest to do if you are close to the borrower
  - Local individuals are in the best position to do this
  - Local money lenders
  - Community based micro-credit methods
- All financial markets rely on these mechanisms. The challenge is to make them work on a larger scale and over greater distances.
Delegated monitoring
Delegated monitoring

Borrower ← Lending intermediary → Lender
Delegated monitoring

Borrower

Lending intermediary

Lender

screening monitoring
Delegated monitoring

Borrower → Lending intermediary ← Lender

Deposit taking intermediary

screening monitoring
Delegated monitoring

Borrower — Lending intermediary — Deposit taking intermediary — Lender

screening monitoring supervision
Delegated monitoring

- Borrower
- Lending intermediary
- Deposit taking intermediary
- Lender

- screening monitoring
- supervision
- prudential regulation
Delegated monitoring

• Notice: at each stage we need to monitor the borrower, not the lender
• This can be useful in thinking about how to design institutions
• The role of policy is to put in place regulatory systems (e.g., Basel) and the legal infrastructure to support these delegated monitoring and supervision relationships.
  – What is needed will differ at different levels
Collateral

• Collateral is something of value that can be seized by the lender to guarantee that the borrower will repay.
• Which is more important: the value of the collateral to the borrower or the lender?
• Collateral serves two functions
  – It provides some protection to the lender
  – It changes the behaviour of the borrower
    – Changing behaviour is the more important of these functions
• Collateral that is more valuable to the lender than the borrower can actually have a negative effect
  – It may reduce incentives to screen and monitor
  – It may have little effect on incentives to repay
    – Credit guarantees can have this effect
• Since the value to the borrower is more important, we can be creative
  – The important innovations in micro credit have been in this area
Collateral and the poor

• Collateral plays an essential role in virtually all credit markets.
  – Since the poor have few assets, lack of collateral is a principal reason for exclusion from credit markets

• Social capital
  – Although they have little physical capital, even the very poor usually have significant social capital through their social networks and relationships.
  – One of the great discoveries by the micro-credit innovators is the development of group lending mechanisms through which social capital can be put at risk if borrowers default.
  – This mechanism also directly addresses the informational market failure

• Reputational capital
  – A powerful incentive for good behaviour is access to credit in the future, which can be harmed by default
  – A series of very small loans can be used to develop significant reputational capital which can be pledged to guarantee repayment

• Physical capital
  – Once some wealth is accumulated (land, vehicles, jewellery) then this can be used as collateral

• A stepping stones approach
Supporting collateral – the policy framework

• A setting stones approach to collateral can be a very powerful mechanism to achieve financial inclusion and financial integration
• Creating the institutional and regulatory infrastructure to support the role of collateral is a key policy goal
• Legal infrastructure to support physical collateral (asset registers etc)
• Credit bureaus
• Regulatory issues relating to information and privacy
  – Privacy concerns versus information sharing to address asymmetric information
  – Incentives and requirements for lenders to share information
3. Some policy issues
should MFI’s accept deposits in their own right?

• Glass Steagall Act 1933, repealed 1999
  – separated deposit taking from investment banking
  – global financial crisis 2007-10

• There is no market failure argument to monitor and supervise depositors. These arguments apply to borrowers, not lenders

• There is no economic justification for depositors not to have access to high quality, prudentially regulated deposit taking institutions
  – delivered through deposit taking agencies, post office agencies, telephone banking ...

• Access to good savings institutions can greatly improve welfare

• MFI’s are poorly placed to act as deposit takers (but well placed to act as agents)
  – lack of diversification
  – high cost of prudential regulation
  – conflict of interest
should MFI’s accept deposits in their own right?

• What about cooperatives?
  – Historically and institutionally important
  – Well placed to supervise borrowing, poorly placed to accept deposits
  – Often function only with high levels of Government subsidy
  – Policy suggests that they should be encouraged to evolve towards more modern modes of financial integration

• What about forced savings?
  – a form of collateral
  – generates information
  – but: no reason that deposits cannot be pledged, and information shared
  – can prop up weak institutions

• What about generating funds to lend?
  – ultimately, lending must be a sustainable, profitable business
  – inefficient to source funds locally (diversification)
  – transitional policies may be required, but it is more appropriate that these be funded by Government and NGO’s than by local forced savings
Will borrowers borrow too much?

• Borrower sovereignty
  – Informed consent
  – Financial literacy, consumer protection
  – Ex ante / ex post evaluation

• Getting into trouble, ex post, is not evidence that access to credit did not create value for both sides
  – the correct way to evaluate a decision is when the decision is made, not with hindsight
  – that is, ex ante
  – I know that sometimes I may have a car accident; this does not mean that I would be better off if I did not have access to a car

• When might borrowers borrow too much?
  – Not understanding the deal
  – Limited liability
  – Competition between lenders with inadequate information sharing
  – Underpricing of risk, and inappropriate incentives to lend (quantity vs quality targets)
  – Sovereign risk
  – Enforceability of contracts
Sovereign risk

• Sovereign risk - causes
  – Populism
  – Corruption
  – Bad behaviour by financial institutions
  – Government subsidies for inappropriate behaviour (picking winners, credit guarantees, ...)
  – Policy that is susceptible to corruption

• Defences
  – Financial literacy, consumer protection,
  – Dispute resolution mechanisms
  – Good governance of financial institutions
  – Credit bureaus and information sharing
  – Regulation
addressing symptoms, not causes

• Picking winners
• Credit guarantees
• Interest rate caps and inappropriate product regulation
• Inappropriate metrics and incentives (eg quantity not quality)
• Parochial regulation that impedes financial integration
final points

• Look below the surface
• Diagnose and rectify market failures
• Lending and borrowing are fundamentally different
  – management of lending requires sophisticated mechanisms and local knowledge
  – borrowing (deposit taking) can be managed by agents
• Recognise and support the key mechanisms:
  – delegated monitoring by financial intermediaries
    • regulation, governance, incentives for intermediaries
  – relational, reputational and physical collateral
    • credit bureaus, legal infrastructure to support collateral and information sharing
  – security of contract and enforcement
    • financial literacy, responsible lending, management of corruption and sovereign risk