Design and regulation of institutions to support MSME Access to Finance

Peter Bardsley
The University of Melbourne

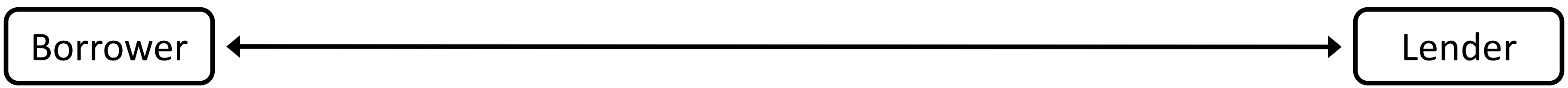
Outline of talk

- 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

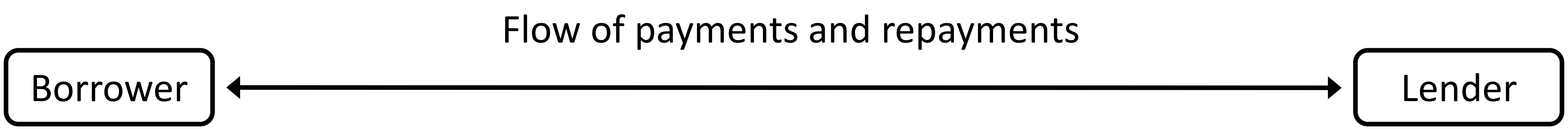
1. how credit markets work

The fundamental relationship

The fundamental relationship



The fundamental relationship

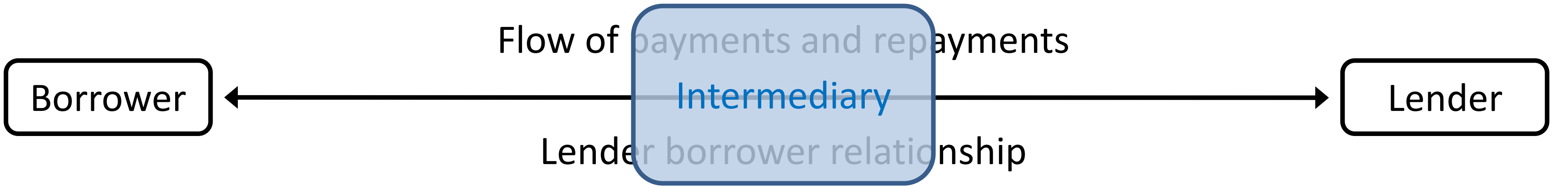


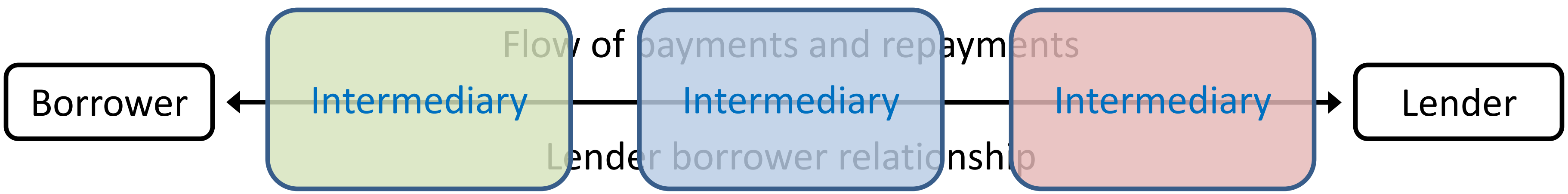
The fundamental relationship

Flow of payments and repayments

Borrower ⟷ Lender

Lender borrower relationship


Flow of payments and repayments
Borrower
Intermediary
Lender
Lender borrower relationship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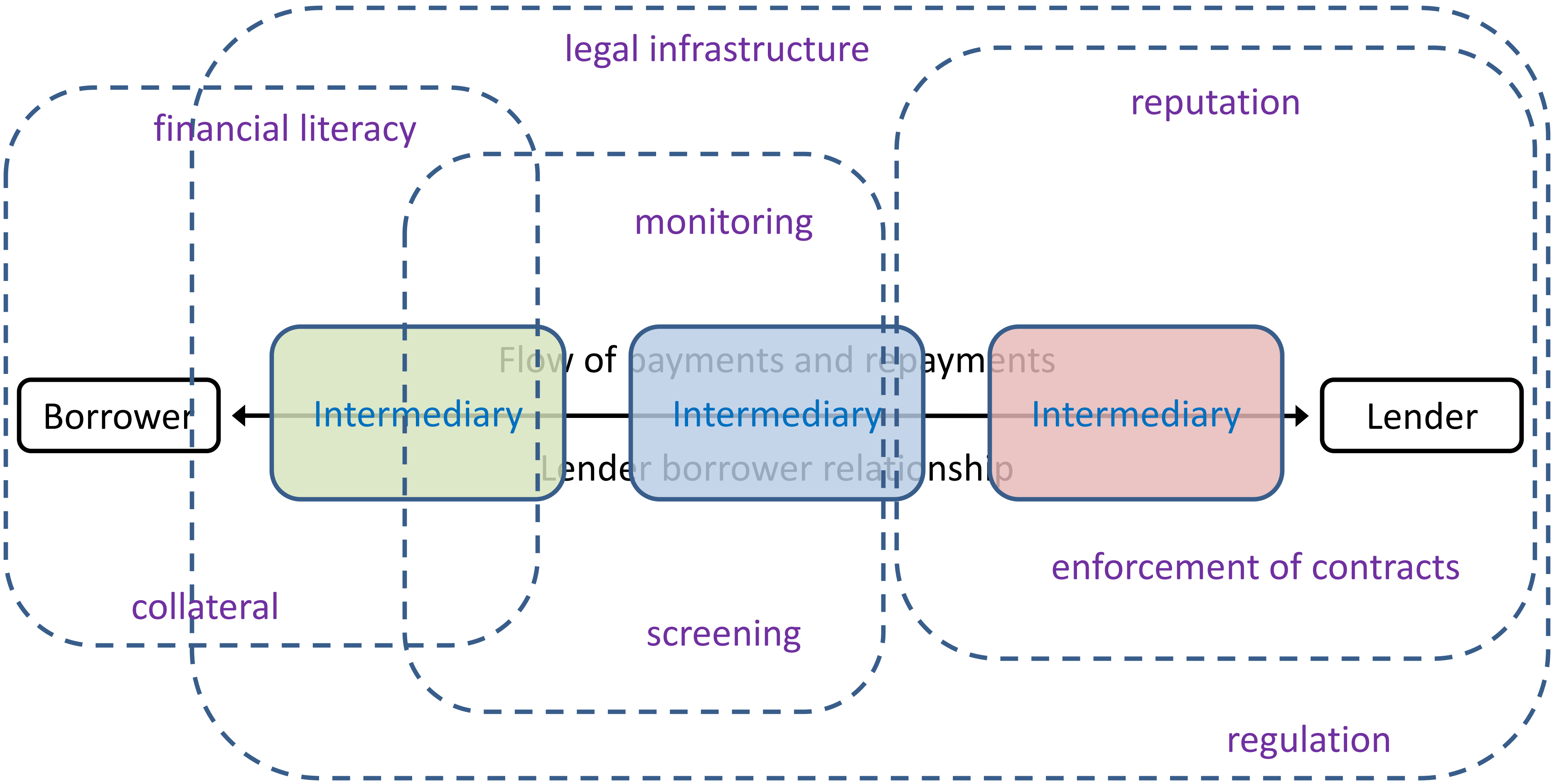
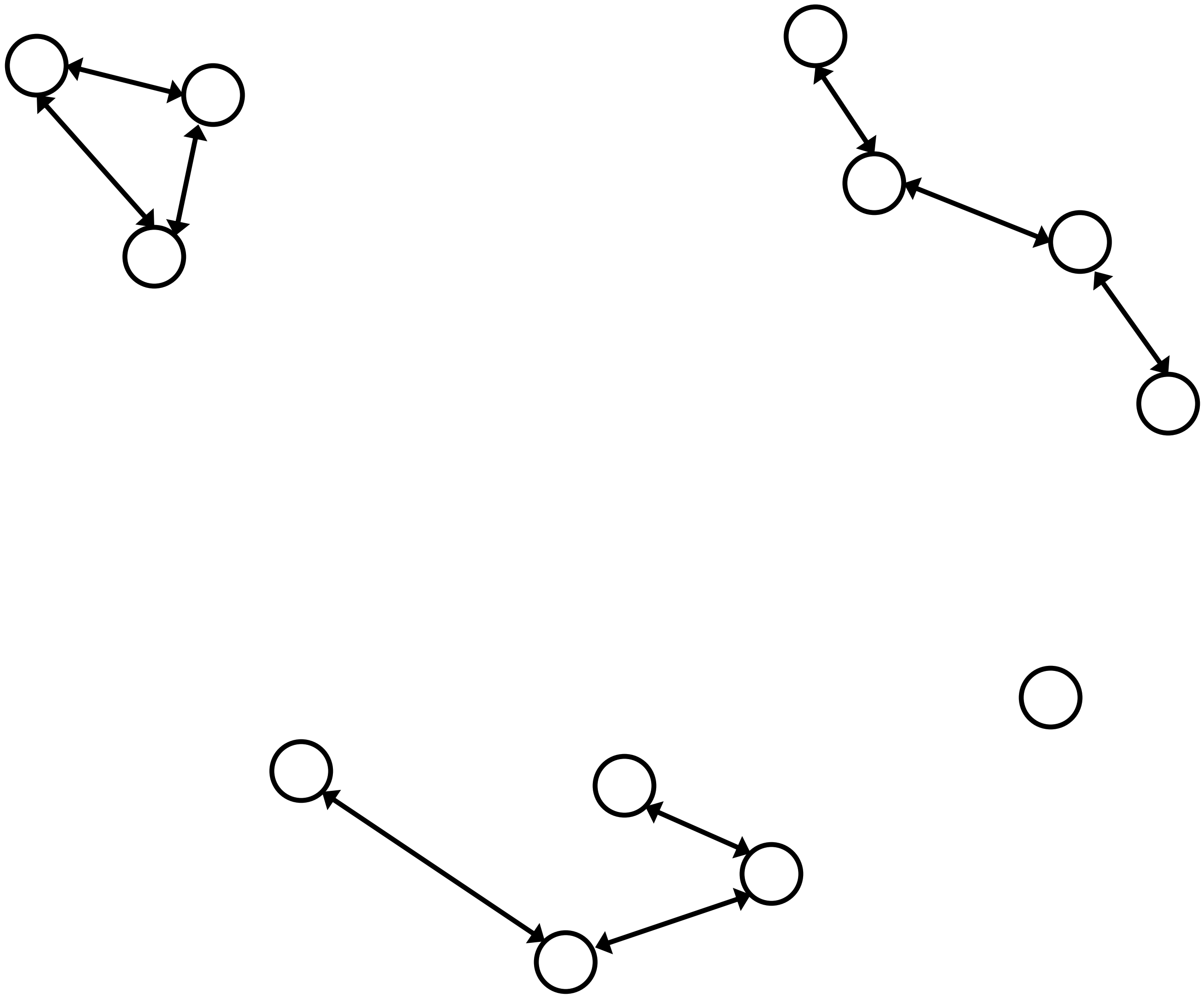
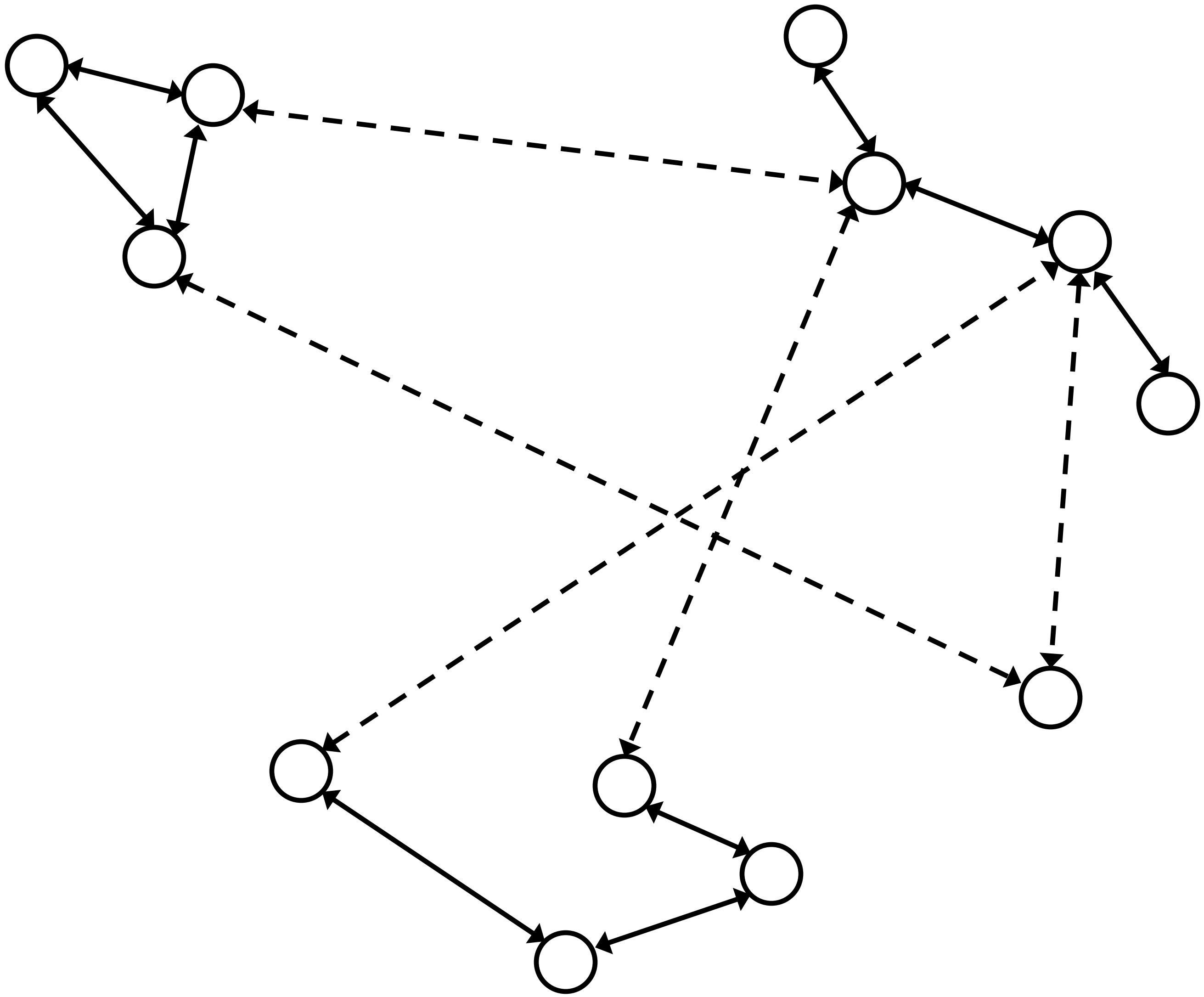

legal infrastructure
reputation
financial literacy
monitoring
Flow of payments and repayments
Borrower
Intermediary
Intermediary
Intermediary
Lender
Lender borrower relationship
enforcement of contracts
collateral
screening
regulation

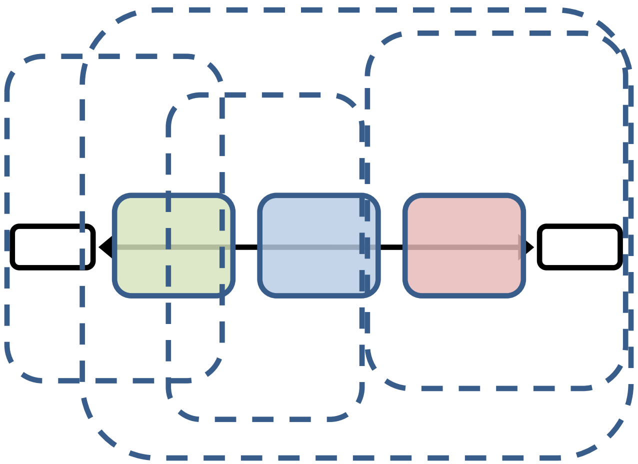




Financial integration – gains from trade

The key issues

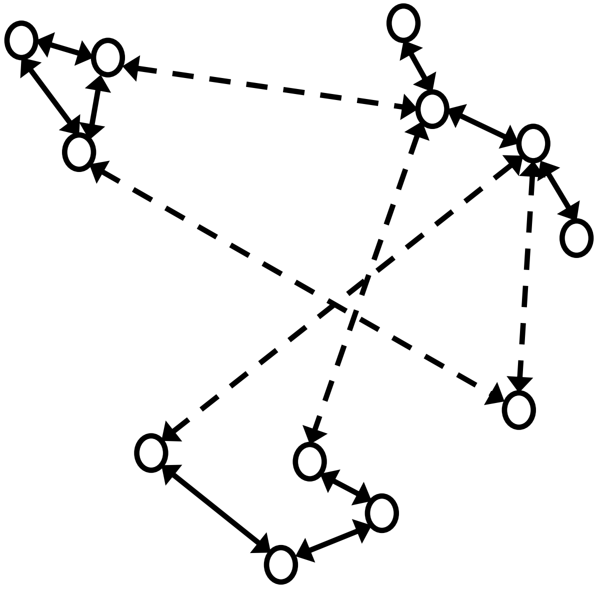
- The fundamental relationship is between an individual lender and an individual borrower
  - Intermediaries and institutions can obscure this fact
- Financial transactions are a form of cooperation
  - This is how financial markets create wealth
  - Financial institutions and regulation exist to facilitate 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

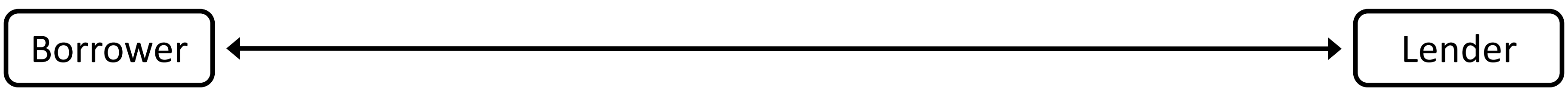
Some Remedies

- 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

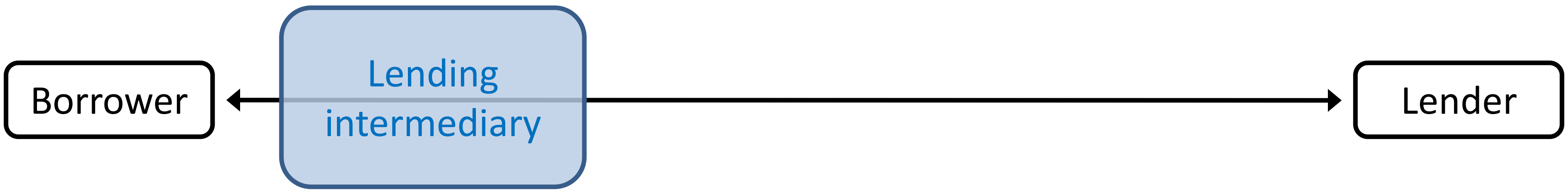
Screening, monitoring, supervision

- 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



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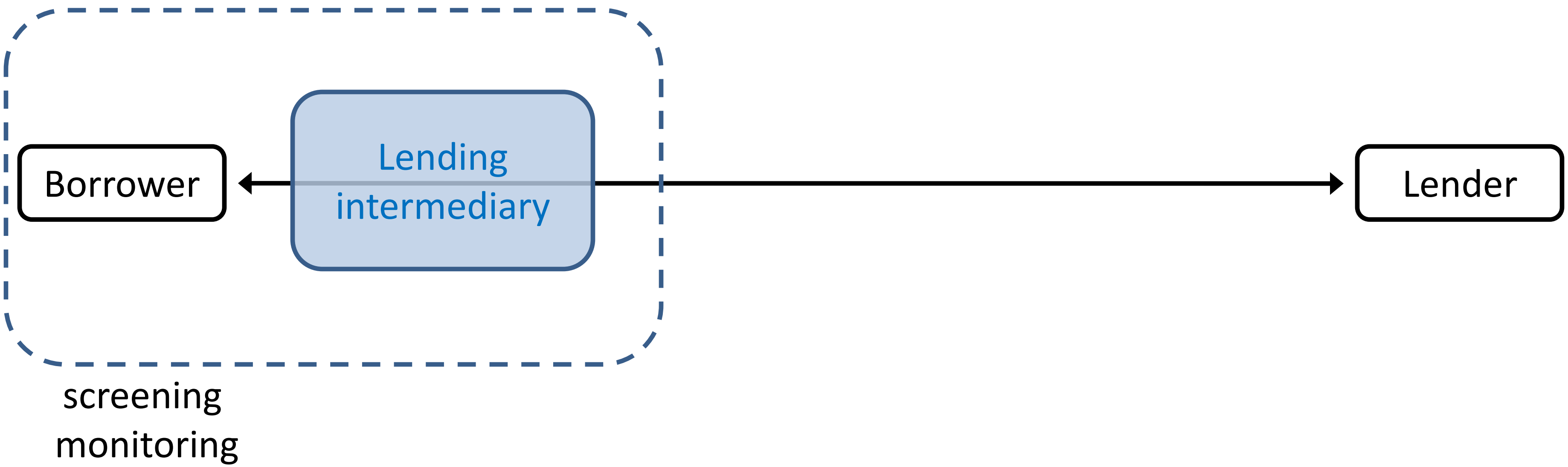

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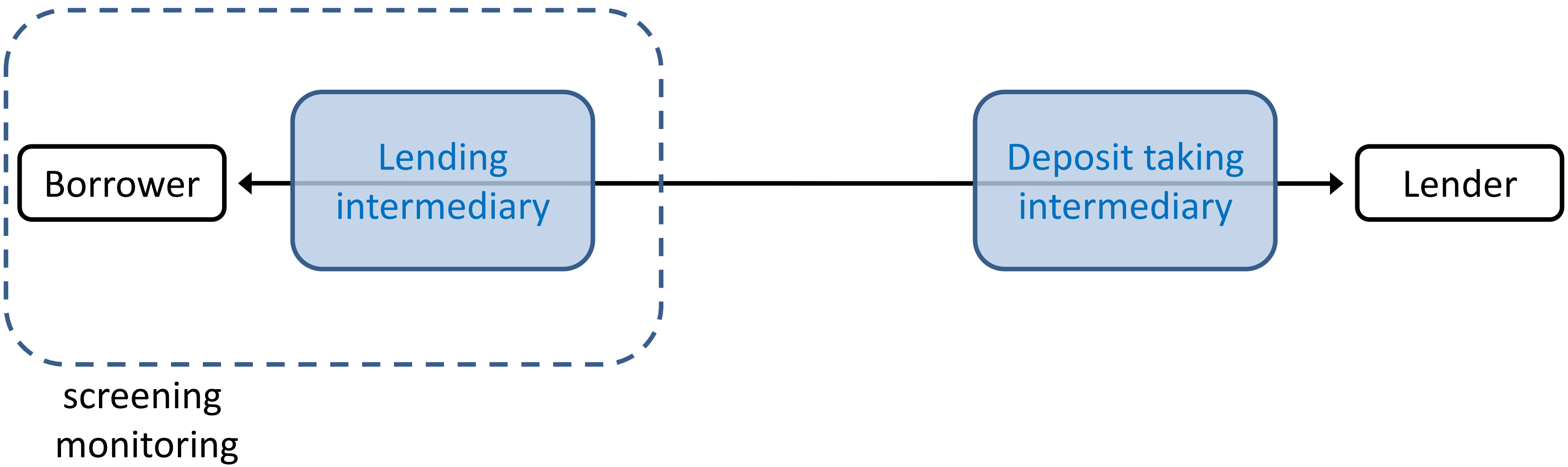

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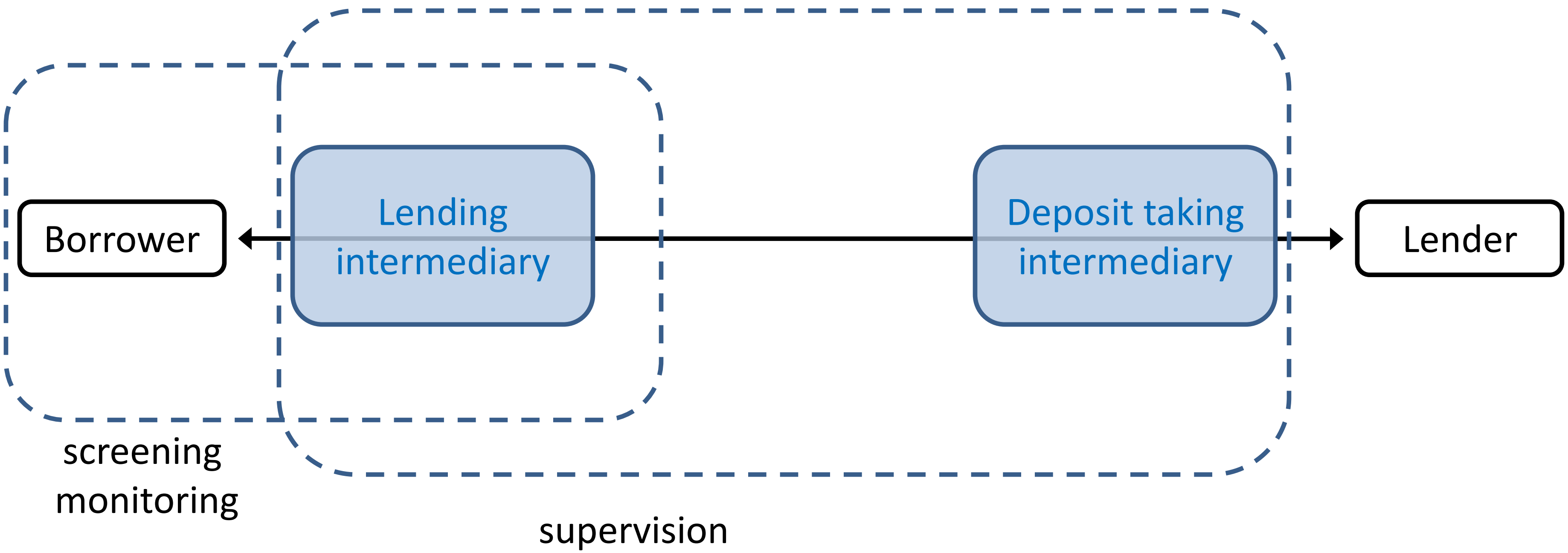

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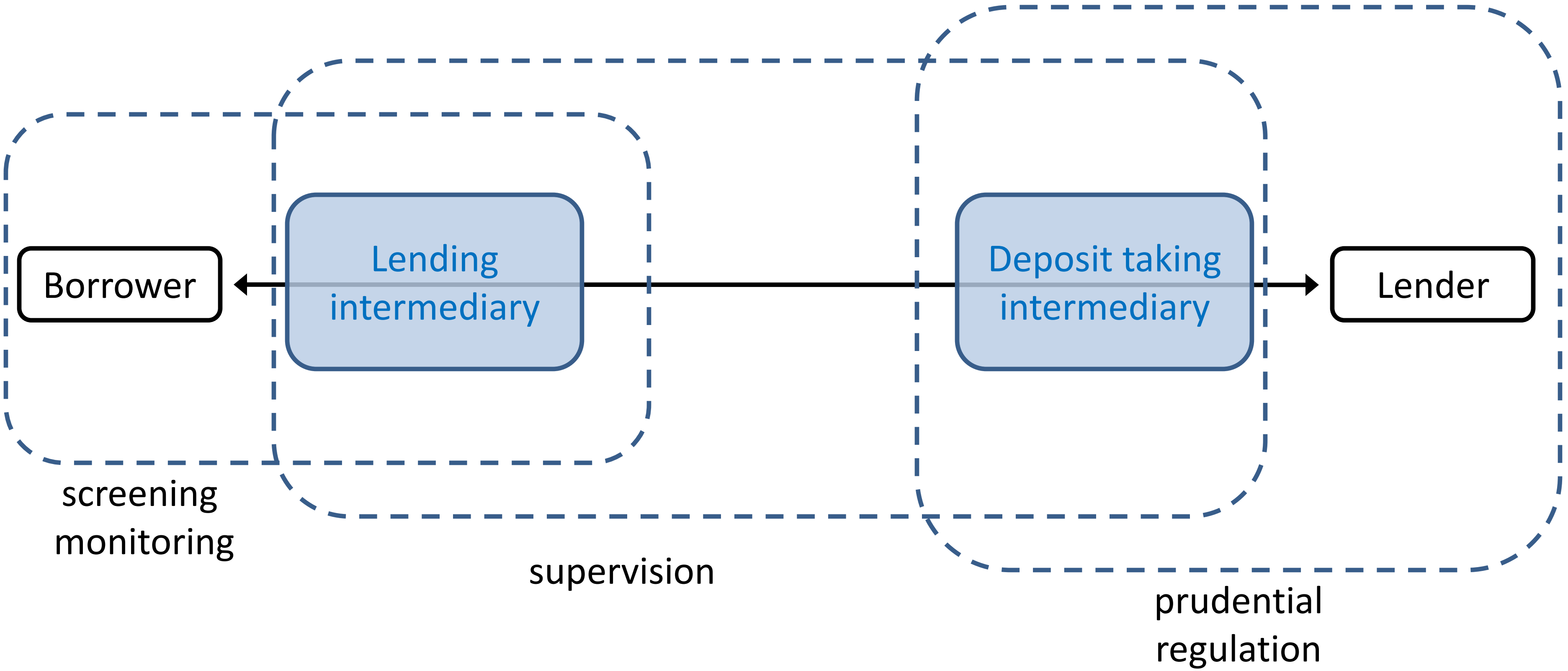
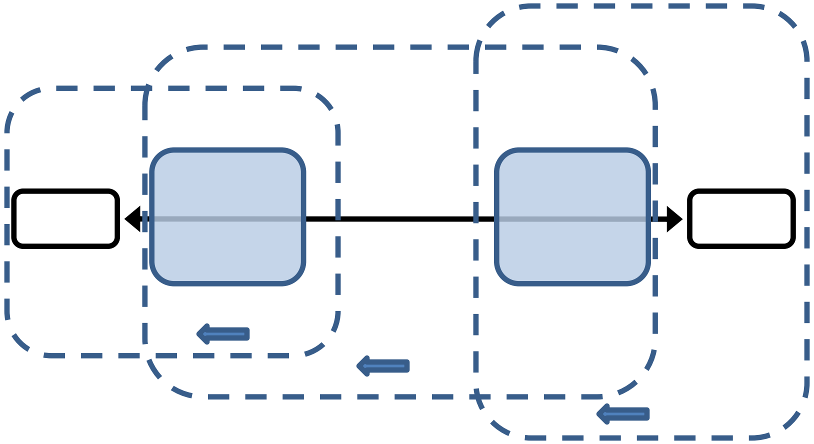


Delegated monitoring

- 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 (eg 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