

The impact of collateral

- Collateral are assets that the bank can obtain if the borrower defaults
- This would be assets in addition to those the bank could obtain as part of the default process
- Collateral increases the costs of default to borrowers
- Collateral reduces the losses of default to the bank

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The use of collateral

- If the risk to banks is reduced, this should reduce the loan rate
- Borrowers weigh up the reduced loan costs against the potential loss of the collateral in default
- We will look at the motivation for companies to provide collateral and banks to demand collateral
- ▶ Banks may also use collateral they have obtained to obtain loans themselves and we will look at why borrowers would agree to that

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Providing collateral

- Not all borrowers provide collateral, despite the loan coats being lower
- ► The motivation for borrowers to provide collateral will be explored and how banks can use this decision to their advantage
- ▶ Banks have to offer contracts with and without collateral for borrowers to have a choice and we will see that this is an equilibrium

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Discussion of model results

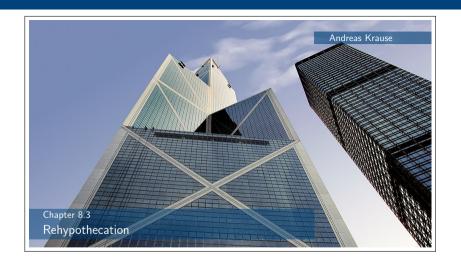
- Low-risk companies provide collateral and high-risk companies prefer to not provide collateral
- Banks will offer contracts that allow them to distinguish the type of borrower
- ? If we observe that a borrower does not provide collateral, can we conclude it is high-risk?
- ! Collateral can only be provided if it exists; many companies will have no collateral to offer or it is already pledged for other loans

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Re-use of collateral

- Collateral obtained from a borrower could be used by banks as collateral in their own borrowing
- This is referred to as rehypothecation
- Borrowers might lose their collateral if the bank fails to repay its loan and will have to agree to this process

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Discussion of model results

- ▶ Banks can make additional profits using the collateral for their purposes, allowing them to offer loans they would otherwise find not profitable
- Borrowers benefit by gaining access to loans they would otherwise not have
- ? Why would a company ever not agree to rehypothecation as long as the value of the collateral is below the repayment of the loan?
- ! The value of the collateral to the company might be higher than the value to the bank, for example essential equipment or patents

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Summary of key results

- Collateral can be used to distinguish borrowers with different risks, reducing adverse selection
- Collateral can be more widely used by banks, reducing the impact of moral hazard
- Collateral affects information asymmetry and incentives, allowing loan markets to be more efficient

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