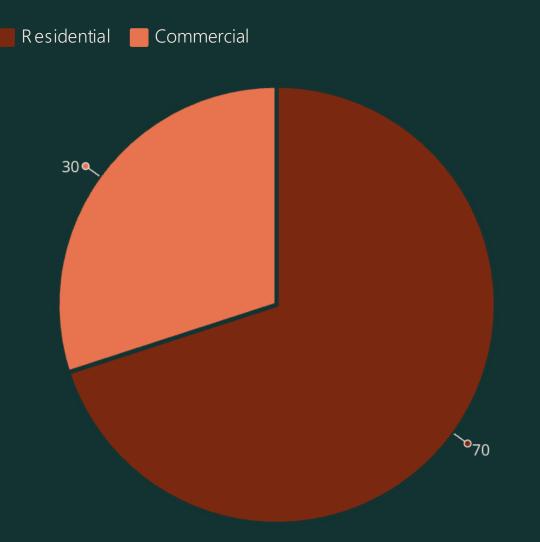
## Mortgages from an Investment Perspective

Real estate debt creates two investment products: levered property equity and debt secured by property. Each appeals to different investors based on risk tolerance and income needs.



### The Debt Market Landscape as of 2023



The U.S. debt market exceeds \$53.3 trillion, with about 30% based on mortgages. During COVID-19, mortgage-backed securities briefly surpassed Treasury securities as the largest fixed-income issuance.



## U.S. Mortgage Debt Overview \$19.8T \$5.9T

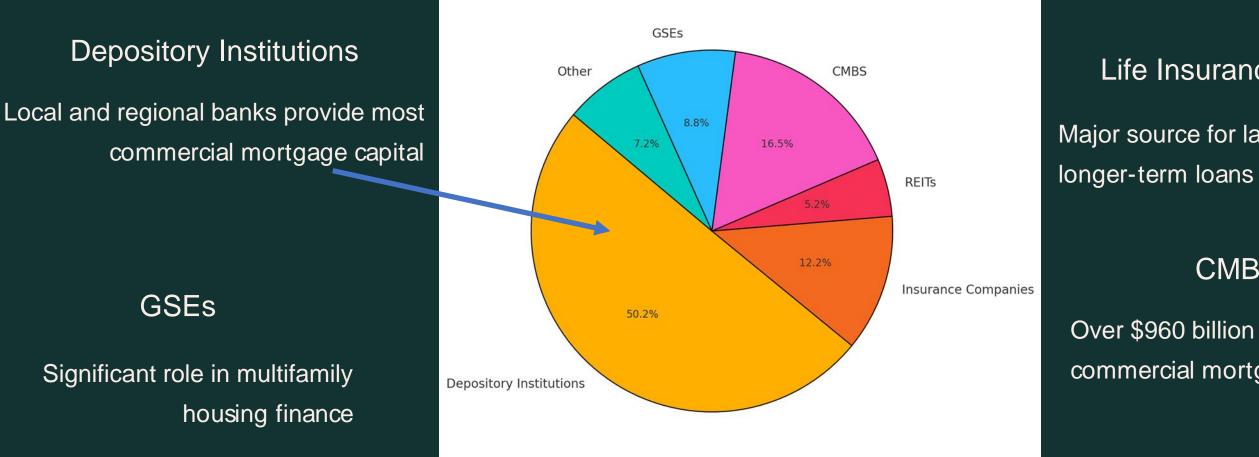
Total Mortgage Debt Outstanding in the U.S. as of 2023

Commercial Mortgages Funding income-producing properties

Multifamily Mortgages A significant portion of commercial debt

# \$2.1T

### **Commercial Mortgage Capital Sources**





### Life Insurance Companies

Major source for larger properties and

### CMBS

Over \$960 billion in securities backed by commercial mortgage pools



## Multifamily Mortgage Funding

### GSE Funding

Government Sponsored fund approximately 24% of multifamily development

### CMBS Funding

Commercial Mortgage-Backed Securities provide about 25% of multifamily funding

### Other Sources

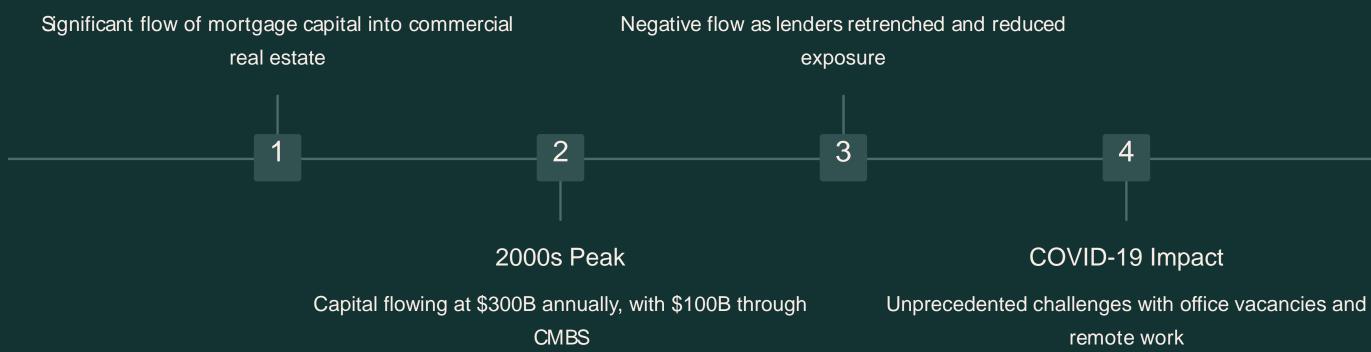
Banks, life insurance companies, and other lenders provide the remaining 51%



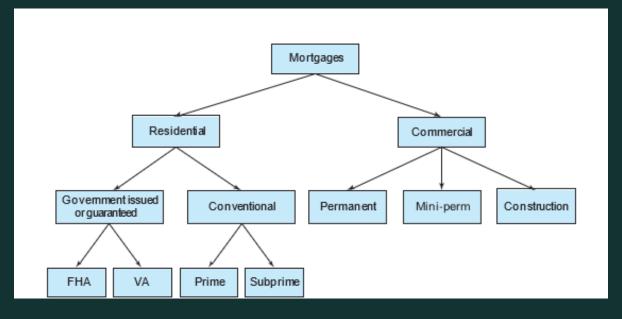
### Cyclical Nature of Commercial Mortgages

1980s Boom

2008 Crash







### Residential Mortgages

- Smaller individual loans but more numerous
- No income from property
- Borrowers are typically non-professionals
- Properties are relatively homogeneous
- More government involvement

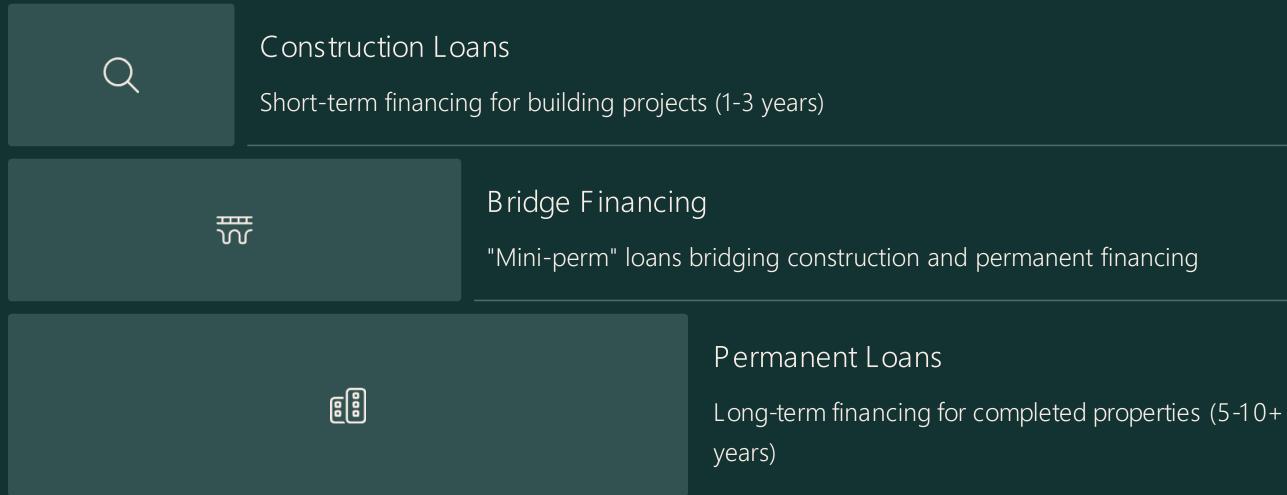
### Commercial Mortgages

- Larger individual loans but fewer in number
- Property generates income to service debt
- Borrowers are often financial professionals
- Properties tend to be unique
- Less government involvement

## Residential vs. Commercial Mortgages

n number vice debt essionals

### Permanent vs. Construction Loans





## Legal Structure of Mortgages

#### Promissory Note

Image: A start of the start

Establishes the debt obligation between borrower and lender

Mortgage Deed

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Secures the debt by conveying potential ownership of collateral

Recording

Establishes priority claim to the collateral property

## Mortgage Legal Theories

Lien Theory States

Lender holds a lien on property, giving right to force foreclosure sale if borrower defaults

Borrower retains title to property until foreclosure

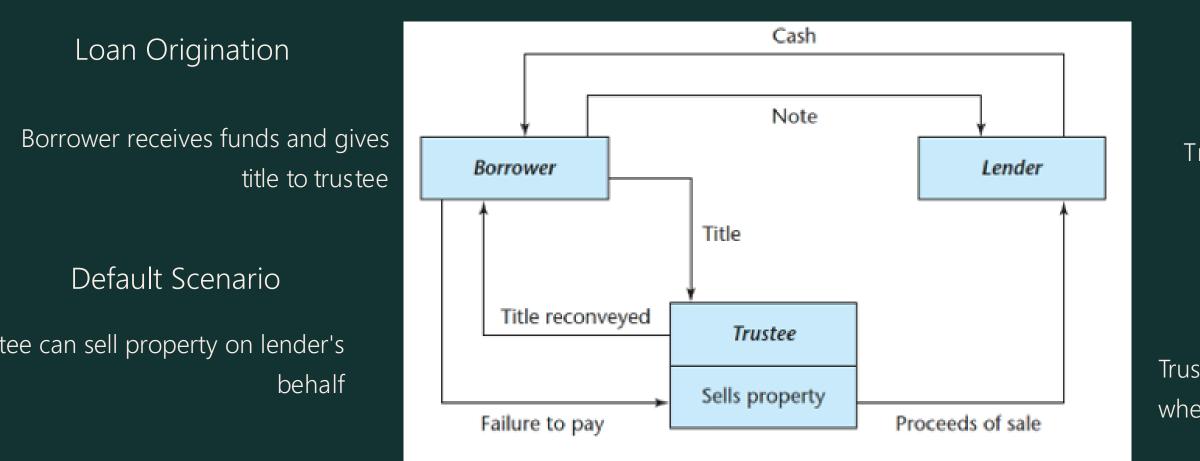
Title Theory States

Lender holds ownership title until loan is paid off

Borrower only retains right of use and possession while meeting obligations

Allows lender to take possession more quickly in default

### Deed of Trust Structure



#### During Loan Term

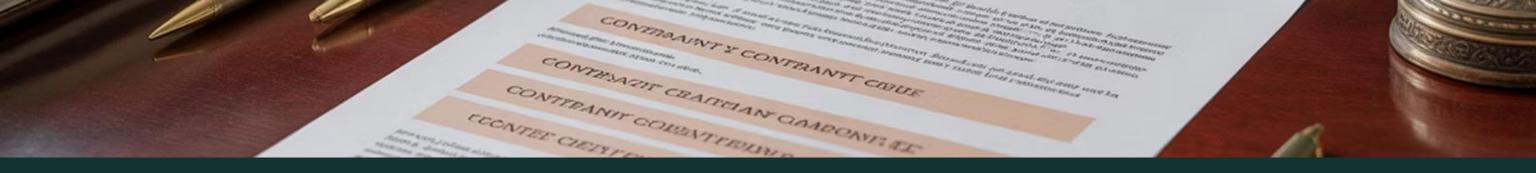
Trustee holds title for lender's be

#### Loan Repayment

Trustee returns title to borrower when loan is paid

## Priority of Claims in Foreclosure





### Common Mortgage Covenants

#### Promise to Pay Ś

Borrower's commitment to repay principal, interest, and penalties

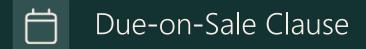
Good Repair Clause ٦

Requirement to maintain property in good condition



#### Acceleration Clause

Allows lender to demand full loan balance immediately under certain conditions



Enables loan acceleration when property is sold



## Additional Mortgage Provisions

#### Prepayment Clause

Grants borrower right to pay off loan before maturity, often with penalties in commercial loans

#### Subordination Clause

Makes loan subordinate to other loans, even if recorded earlier

Exculpatory Clause

property

### Creates non-recourse loan where lender can only claim the collateral



### **Default and Foreclosure Process**

**Default Occurs** 

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Borrower violates mortgage agreement, typically by missing payments

**Forbearance Option** 

Lender may delay action, allowing borrower time to resolve issues

Litigious Actions

Court proceedings that may lead to foreclosure sale

Non-litigious Resolution

Alternatives like loan modification or deed in lieu of foreclosure





### Costs of Foreclosure



Legal Expenses

Typically around 10% loan balance but can be be higher



Property

Deterioration Maintenance issues and

and tenant problems during foreclosure

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**Reputation Effects** 

Negative impact on both borrower and lender reputations



#### Time Costs

Lost revenue and interest during lengthy process (typically 1+ year)

## Non-litigious Resolutions



Lenders prefer to resolve problems without litigation. Options include loan transfers to new borrowers, short sales where property sells below mortgage balance, and deed in lieu of foreclosure arrangements.



### Workout Strategies

Loan Rescheduling

Extending loan term or providing temporary payment holidays

#### **Debt Forgiveness**

Reducing principal in exchange for equity participation or higher future yield

#### New Partners

Bringing in additional equity or debt partners to strengthen the deal

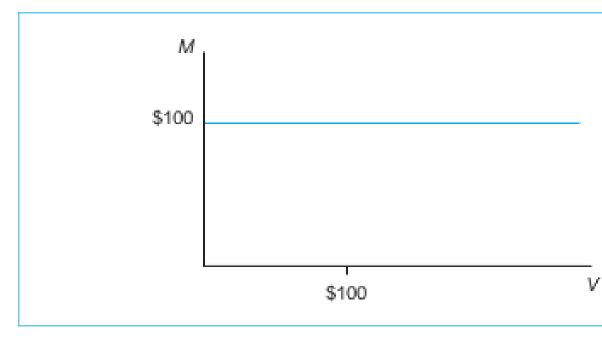
**Specialized Mediation** 

Using workout specialists as advisors, brokers, and mediators

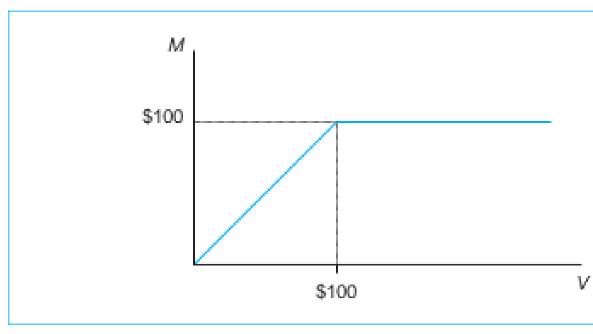
### The Borrower's Put Option

A put option gives its holder the right without obligation to sell a specified underlying asset at a specified price. In the context of a nonrecourse mortgage, the underlying asset is the collateral property, and the borrower's ability to default on the loan effectively gives him the ability to sell the property to the lender at a price equal to the outstanding loan balance.

By defaulting on the loan, the borrower is said to "put" the property to the lender, thereby ridding himself of a liability equal, at least in book value, to the outstanding loan balance. PANEL A Without Limited Liability



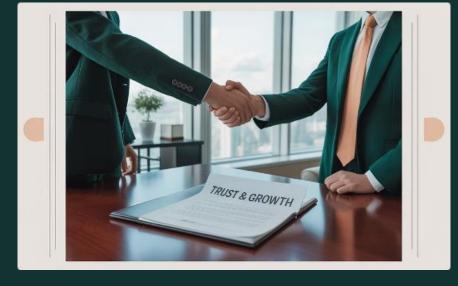
#### PANEL B With Limited Liability (showing effect of borrower's put)



## Strategic Default Considerations







#### Underwater Loans

When property value falls below loan balance, rational default becomes likely

### Negotiation Leverage

Foreclosure costs give borrowers leverage to force workout deals

**Reputation Effects** 

Both sides consider long-term reputation impacts in default decisions