Topic 11: Financing Residential and Income-Producing Real Estate

Our main topic of concern in this real estate financing discussion is the mortgage loan. In Illinois, we typically provide for housing finance through a mortgage lending arrangement characterized by a promissory *note* ("IOU") and a *mortgage*, which is a pledge of property as *collateral*; a mortgage loan is a *secured* loan. [The *mortgagor* is the borrower, and the *mortgagee* is the lender. An asset that secures repayment of a debt functions in addition, or *collaterally*, to the borrower's personal promise to pay what is owed. In medieval times a "live pledge" involved a lender's taking possession of assets, perhaps small items like diamonds, that served as security on a loan, while under a "dead pledge," or *mort gage* in old French, the lender did not take possession of the securing property, such that the borrower could continue to use it.] A lender can provide a mortgage loan to a borrower who wants to

- purchase real estate, or
- refinance an existing mortgage loan: to obtain a lower interest rate (wealth benefit), borrow added principal (cash flow benefit), and/or extend the time period over which owed principal must be repaid (cash flow benefit).

A mortgage conveys an interest in real estate, so it must be in writing to comply with the statute of frauds, and a lender will record the mortgage (which generally states the amount borrowed under the note, and sometimes the interest rate) with the appropriate county official to give third parties – most importantly other potential lenders – constructive notice of its security interest. Otherwise if a different lender lent using the same real estate as collateral without notice of the initial lender's claim, and the new lender recorded its claim, it would likely have the right to be repaid first if the overextended borrower could not repay all money owed. Then after the note has been repaid the borrower will record the lender's *release* of the mortgage (the lender might arrange for recording the release and charge the borrower a fee). The lender will not record the note, which does not by itself have title implications.

[In some states (not Illinois), a "deed of trust" is used in place of a mortgage. In a deed of trust situation, a third party (not the lender or borrower) technically holds title to the property, but can not take action based on that title unless and until the borrower *defaults* (misses scheduled payments). The deed of trust arrangement can make taking action against a defaulting borrower easier for a lender. Do not confuse the deed *of* trust with the deed *in* trust used in establishing an Illinois Land Trust, a legal tool whose benefits include keeping actual owners' identities secret.]

For some of the same reasons that real estate serves well as a base for local government taxes (immobile, can not be hidden, improvements tend to stay valuable for long periods of time, can be sold to satisfy lien claims, can produce cash flows through rents), it also serves as good security, or collateral, in a loan situation. (Personal property can serve as collateral as well; the security interest is called a "chattel mortgage.") The pledging of the property as collateral is essential in real estate lending; unsecured loans would not work well for long-term repayment periods during which borrowers' financial strength could change.

Any interest in real estate (*e.g.*, a life estate) can be mortgaged. But the typical case involves the pledge of fee simple interest, with the borrowed funds used to finance the purchase of the property. There can be more than one mortgage on the same real estate (although serious problems can arise if the total loan balance backed by these mortgages comes to exceed the property value). A "purchase money mortgage" secured by a residence, especially if the loan is made by the home seller, sometimes gives the lender special protections under the law that a "home equity" loan on the borrower's built-up equity does not have (like priority in being repaid).

I. Mortgage Lending Concepts: Lender and Borrower Rights, Limitations

A. *Default* – the failure to make a payment by the specified deadline. (Single-family residential mortgage loans usually allow a grace period, perhaps two weeks, but after that the payment is late and the lender can foreclose. With other types of contracts the general rule is that compliance is met if a needed document is mailed by a deadline date, but with promissory notes the general rule is that a payment must be in the lender's hands by the indicated due date or it is late – although if a lender has repeatedly accepted late payments without taking action in the past a court might rule that the borrower can continue paying late.) If there is a default, the lender may initiate steps to have the borrower removed from the property that serves as collateral, so that the lender can be repaid by selling the property. A lender typically begins action against a defaulting borrower after four monthly payments have been missed (a 120-day period of missed payments). [Technically default occurs if a borrower fails to: make a payment on time, pay local property taxes, have insurance on the property, or adequately maintain the property.]

[Guidelines of U.S. government agencies with housing finance mandates, like the Federal Housing Administration and Fannie Mae discussed later, allow a 15-day grace period before a home mortgage loan payment can be treated as late and assessed a late penalty, typically permitted to be about 4% of the amount overdue. (Interesting tidbit: a borrower whose check "bounces" can be required, under Fannie and Freddie guidelines, to make subsequent payments by wire transfer or cashier's check or other secure method.)[1] In some cases lenders practice *forbearance*, allowing a borrower facing financial hardship to delay making payments or make reduced payments for an agreed period, but usually those missed payments plus additional interest must be paid, perhaps through an extension of the original repayment period. Forbearance programs were common after the mortgage "meltdown" of the mid 2000s, and the CARES (Coronavirus Aid, Relief, and Economic Security) Act passed in late March of 2020 directed all servicers of federally-backed home mortgage loans (the majority of mortgage loans) to offer forbearance plans to borrowers facing Covid-related financial hardship. A six-month forbearance period, with a possible six-month extension, was available to any borrower who was current on payments and worked out a plan with the payment-collecting "servicer" by the end of February 2021 (by that plan there would be loans in Covid-related forbearance until the end of February 2022). It is interesting that the terms of a loan generally can be changed when a borrower declares bankruptcy, but not if that loan is a mortgage loan secured by the borrower's primary residence.]

B. *Redemption* – a lender can not simply "throw the borrower out onto the street" after a payment is missed. The lender must take legal action to evict the borrower, including giving public notice in the local general circulation newspaper, for several weeks, of its plan to hold a foreclosure sale. Often the borrower remains in the house, and during the time of such legal proceedings the borrower can regain, or "redeem," her interest by paying the lender any amounts owed and any applicable penalties. The borrower in default has two chances to redeem:

1. *Equitable Right of Redemption* (or Equity of Redemption) – up until the lender holds a foreclosure sale, the borrower can repay any amounts owed (plus penalties and the lender's attorney fees) and thereby again be entitled to treatment as a borrower in good standing. In fact, the word *foreclosure* means that the lender is foreclosing, or terminating, the borrower's equitable (common law, based on court rulings over the years) right of redemption.

2. *Statutory Right of Redemption* – even if the borrower fails to pay amounts owed and a foreclosure sale results, she can "redeem" her interests by repaying all amounts owed during an additional period set by state law. In Illinois the statutory redemption period ends 7 months after the lender's notification that it is foreclosing or 3 months after the court issues a judgment, whichever occurs later – this ending date is likely to be earlier than the old standard of 6 months after the judicial sale. (Under earlier law the redemption period did not even begin until after the sale.) The redemption period can be shorter if the property is abandoned or the lender agrees not to pursue a deficiency judgment, or longer (by 30 days, sort of) if the winning bid at the sale is made by the lender and is for less than the amount owed (since the lender might be expected to seek a deficiency judgment).

So the equitable right lets the borrower "set things straight" with the lender and, if the borrower fails to do so, the statutory right permits him to regain title from whoever got title at the foreclosure sale. (That party often is the lender, since the lender can bid what is owed on the loan without any cost or risk beyond what it already faces, and if the property had value much beyond what is owed it is very likely that the borrower would sell it rather than default on the loan.) So the buyer at the sale will not have good title until after the statutory redemption period.

In Illinois, the first time the lender finds the borrower to be in default, the borrower has 90 days to make missed payments before the lender can foreclose. If the borrower redeems before the foreclosure sale, but then is in default again within five years, the lender can call the loan due in full under the *acceleration clause*. Then a court will generally order the property sold, unless the borrower pays the debt in full within three days.

Note, though, that foreclosure is viewed by lenders as a last resort. If the lender feels that the borrower truly wants to make payments, the lender can arrange for an easier payment schedule (forbearance). Only when other possibilities have failed would a lender be likely to pursue more extreme legal remedies (although a third party loan servicer may have less flexibility to work with the borrower). A lender might even accept a "deed in lieu of foreclosure," in which the borrower voluntarily transfers ownership of the mortgaged property to the lender; the lender agrees not to seek a deficiency judgment in recognition of the reduced costs that follow from the borrower's cooperation (accusations of favoring the mortgage lender can arise if the borrower later declares bankruptcy). To prevent people from "trashing" houses when they expect to default on their loans (a not-uncommon occurrence), the Federal Housing Administration (FHA, a federal agency that helps moderate-income people get mortgage loans) offers up to $3,000 through a "cash for keys" program to a borrower with an FHA-backed loan who cedes to the lender possession of a clean and undamaged house.[2] Even in the best circumstances a defaulter must wait three years after defaulting to get another FHA loan.

C. Lien Theory *vs*. Title Theory – the question is whether the lender receives title to the property or has only a potentially enforceable lien.
1. *Title Theory*, with a defeasance clause – the law in some states grants title to the lender, while a clause in the mortgage specifies that the lender's title is defeated (and transfers to the borrower) when the debt is repaid. Only a few states allow this approach with real estate loans (it places a potentially heavy burden on the borrower), although auto lenders often hold title to a car until all principal has been repaid (then the borrower can get a new "title loan").

2. *Lien Theory* – the law views the borrower as the owner, and the lender has only a lien, or claim on the value. The lender can attempt to gain title through the foreclosure process, but may be prevented through the borrower's equitable and statutory rights of redemption. Illinois is shown in most references as a lien theory state. In a variation on lien theory called *intermediate theory*, the mortgage is viewed as transferring "qualified title" to the lender. Between the lender and the borrower, the lender is considered to have title. But as far as third parties are concerned, the borrower has title. This approach does not differ much from lien theory, though it is easier in some instances for the lender to gain possession of the property during foreclosure proceedings.

II. Features Found in a Home Mortgage Loan
A. Underwriting and reporting standards – Underwriting is the process of analyzing the risk of a loan made to a particular borrower and secured by a specific parcel of real estate (just as we see underwriting of insurance policies).

1. When a potential borrower applies for a loan the lender must check the applicant's income history (through the employer or past years' federal income tax returns) and credit history (with a report from one of the major credit reporting companies Equifax, Experian, or Trans Union). The Fair Credit Reporting Act, passed in 1970, requires credit reports to contain accurate information and provides a process for individuals to challenge aspects of their credit reports that they feel are incorrect. The credit report is accompanied by a *credit score* that summarizes/distills many aspects of the loan applicant's past use of credit, such as total amounts owed, number of credit cards held, and repayment history, into a single number (the score a lender works with might combine what is reported by the three companies). The most popular mathematical model for computing a credit score was developed by Fair, Isaac and Company; "Fico" scores range from 300 to 850. Fico scores – specifically – were once required for loans purchased by federal government mortgage lending giants Fannie Mae and Freddie Mac (discussed below).

Some parties criticize both Fico's monopoly position and the manner in which scores are computed. Fannie and Freddie's regulator, the Federal Housing Finance Agency, has issued rules calling for more credit scoring competition, which has come from Vantage, a joint venture owned by major credit reporting firms Equifax, Experian, and Trans Union – all of which also were to have removed most medical debt from credit reports by early 2023. (But Equifax is going to start including information on "BNPL tradelines" from buying now/paying later.) One criticism of Fico scores is that their focus on multi-year credit history disfavors younger and racial minority borrowers (in 2021 Fannie Mae started letting lenders consider borrowers' rent payment histories in evaluating credit). Experian has introduced the Boost tool that factors users' payments for utilities, telecom, and video streaming services into their credit scores (*vs*. Fico's focus on paying back borrowed money), and Experian also awards points for holding a professional license, a factor some data show correlates with dependability in repaying. Critics say relaxing standards for borrowing puts us on a path toward the risky lending of the pre-crisis period. It also has become easier for people to increase their credit scores by reporting on a government web site – often falsely – that they have been identity theft victims, with negative information then removed from their profiles.

[Note: in *prequalification* a prospective borrower provides informal information to learn approximately how much the lender would be likely to lend; it can help a home buyer know what range of prices is realistic to consider. In *preapproval* the prospective borrower provides verifiable income and credit history information, and the lender gives a firm commitment to extend a loan for a specified maximum amount.]

2. The lender also considers the borrower's expected total monthly housing-related payments and total overall debt payments as a proportion of income. The source of the borrower's down-payment (it might be paid at the sale closing to the lender, which then writes a check for the entire purchase price to the seller) sometimes is an issue, in that a borrower who must rely on gifts for the down-payment can be seen as less reliable – but we might question how a lender can verify that a down-payment was actually saved, especially if it was a gift received several months earlier. (If the borrower reports that the down-payment is a gift, the lender may require the donor to sign a "gift letter" stating that the money truly is a gift, and not a loan the donor expects the borrower to repay – the borrower might have trouble paying both the lender and a gift-giving relative.) Finally, the lender typically has the property appraised – though in the future the use of full appraisals in transactions for moderately-priced houses (*e.g.*, less than $400,000) may become less frequent.

A borrower always has a legal obligation not to commit "waste" that could reduce the value of the lender's security interest, through destructive acts or failing to do essential maintenance or pay property taxes. Standards sometimes followed, especially in keeping with guidelines of the secondary mortgage market – which dictate how a lot of residential loan documentation is created – include:

- The borrower can not borrow more than 80% of the home's appraised value unless the borrower provides insurance protection for the lender through the federal government's Federal Housing Administration/FHA (or a guarantee from the Department of Veterans Affairs/VA), or through a private mortgage insurance (PMI) company. Even with insurance, the borrower typically has to make some kind of down-payment, even if only 2 – 5% of the purchase price, to have some money at risk in the transaction and show she is able to save.

- The borrower's total monthly expenses toward housing (loan payments, insurance, owners' association fees, but not maintenance or utility bills) should not exceed 28% of the household's gross income, and the total monthly payment obligations (housing expense plus credit card and other loan payments) should not exceed 36%.

However, the subprime lending crisis of the early 2000s was characterized by a steady relaxing of these standards. Loans came to be available with the borrower putting down essentially no money, and the percentage-of-income standards (or at least requiring proof of that income) did not appear to be seriously adhered to in many cases.

3. Laws That Apply to Home Mortgage Loan Underwriting
- Equal Credit Opportunity Act (ECOA): prohibits discrimination in dealing with loan applicants, requires lender to notify applicant of whether a loan has been approved or denied within 30 days of the application.
- Consumer Credit Protection ("Truth in Lending") Act and Real Estate Settlement Procedures Act (recall TILA-RESPA Integrated Disclosure "TRID" from our Closing discussion): require lenders to give loan applicants good-faith estimates and ultimately full information on their costs of borrowing in dollar and percentage terms, require lenders to give applicants copies of appraisals if asked for, restrict lenders from demanding excessive deposits in escrow/impound accounts, and prohibit lenders from getting "kickbacks" from service providers like title insurers that they might recommend to home mortgage loan "consumers."
- Flood Disaster Protection Act: lender must notify the borrower if a house being considered is in a federally-identified flood hazard area, and the borrower must buy flood insurance if the house is in such a location.

B. The documentation in general – must meet requirements of a contract, be in writing, describe the parties and the property, and contain a reference, within the mortgage, to the promissory note.

C. The *note*, or promissory note – the borrower's promise to repay the money borrowed, plus the specified interest. Too often we talk of the "mortgage" as though it were the operative financial instrument ("pension funds invest in mortgages"), whereas the promissory note is what entitles the lender to a stream of payments.

D. The *mortgage* – this is the pledge of the property as security, or collateral. Even though we speak of the "mortgage" market, the mortgage serves only as a second line of defense, in case the borrower violates the provisions of the note. In fact, if the borrower defaults and the collateral is not sufficient to satisfy the debt, some states (including Illinois) officially allow the lender to seek a *deficiency judgment* against the borrower for the amount of debt remaining unpaid after the property has been sold. However, our state has an interesting mix: deficiency judgments are permitted, but we are a *judicial foreclosure* state (meaning that a court must approve the sale, *vs.* a *power of sale foreclosure* process, viewed as better for lenders because a sale can proceed without a court order, although the quality of title a buyer receives after a court-approved foreclosure sale is more secure). So collecting a deficiency can be difficult for a lender. In fact under Illinois statutes a judge can refuse to recognize ("confirm") that a foreclosure sale has taken place if the judge sees any part of the process as having been unjust to the borrower (no standard must be met), and in practice judges in Illinois generally do not grant deficiency judgments to lenders on home mortgage loans – though the borrower may have to pay court costs and attorney fees.[3]

If a judicial sale is to be held a notice must be printed in the local general circulation newspaper for at least 3 weeks, during a period starting 45 days and ending 7 days prior to the sale's scheduled date. The borrower has a legal duty of upkeep on the property until the matter is settled. In the unlikely case that the property is sold for more than the lender is owed (plus accompanying costs), the borrower can file a motion with the court to receive the surplus.

[Interesting points: First, a borrower being foreclosed on generally gets to stay in the premises for free, unless (s)he is doing intentional damage or failing to maintain the property. One news account stated that the period between missing a first payment and being removed from the home can be up to 18 months. Also, under federal and Illinois laws a judicial or "sheriff's sale" need not be conducted directly by the county sheriff's office; a court can appoint a party like a real estate broker as a "commissioner" or "public trustee" to handle an open or sealed-bid auction sale, or even a more traditional sale with a specified minimum price. Under Illinois law a tenant in a foreclosed property can remain until the end of a *bona fide* – arm's length, fair market rent, unrelated parties – lease period's term of up to one year.]

E. *Covenants* – the borrower promises to do various things, such as maintaining the property, and paying annual property taxes and home owner insurance premiums. (A county's property tax lien has priority over a mortgage lien, and an uninsured building that burns down leaves a lender with a security interest in an empty lot.) In fact, failing to do those things might technically constitute defaulting on the note, and the lender could foreclose, with a less severe step being for the lender to pay those amounts, and bill the borrower for reimbursement and added costs. (Property tax and casualty insurance premium payments may be handled by the lender through "impound" or "escrow" accounts, primarily when the lender provides more than 80% of the money a borrower uses to purchase a house, such that the lender may worry that the borrower has insufficient motivation to make those payments.)

F. There may be a *prepayment clause*, stating that a penalty is levied if the borrower repays the loan too soon. Lenders tend to enforce this clause only if the borrower refinances through another lender. Alternatively, a clause could explicitly state the borrower's right to make partial or full early repayments of principal without penalty. (Under Illinois state law, and also under Fannie Mae/Freddie Mac regulations, there typically can be no prepayment penalty on standard residential mortgage loans. These penalties tend to exist only with loans on income properties and some *subprime* home mortgage loans that are made to borrowers who do not have strong loan repayment histories. Rules enacted by the federal Consumer Financial Protection Bureau in 2014 limit any such penalties to the first three years of the amortization period and to 2% of the outstanding balance owed (1% in the third year), and the borrower must explicitly agree to the penalty and be offered an alternative loan without a prepayment penalty.

G. There is likely to be an *acceleration clause*, stating that as soon as the borrower is found to be in default, the entire loan balance becomes due and the lender can begin the foreclosure process. (Without this protection, the lender would have to sue an overdue borrower month after month for individual payments over many years.)

H. There is likely to be an *alienation*, or *"due-on-sale" clause*, stating that the borrower must repay the loan in full if the property is sold; borrowers with typical home mortgage loans can not allow new buyers to "assume" the loans (have rights and obligations on the loans transferred to new buyers), or at least would need lenders' explicit permission – such that selling the property forces acceleration. Why? Experience shows that home loan borrowers repay their loans, on average, far earlier than the ends of their initially scheduled terms; 30-year loans often are repaid after 6 – 12 years when borrowers refinance, sell, or inherit money and prepay. So in a competitive market 30-year loans should tend to have interest rates quoted based on interest rate risk for a period of 10-ish years rather than a full 30. But if the loans were freely assumable it would be "heads borrower wins, tails lender loses:" if market interest rates were higher at the date of sale than the contract rate on the home seller's loan the buyer would assume the seller's loan and deny the lender the ability to re-lend that principal at the higher interest rate, but if market interest rates were lower than the contract rate on the seller's loan the buyer would get a cheaper new loan. (The alienation clause is not triggered if someone inherits the property, or obtains it as part of a divorce settlement.)

Courts historically seemed to understand default risk, but not interest rate risk. In 1978 California's supreme court stated that due-on-sale clauses would not be enforced in the state unless the lender could show that "enforcement is reasonably necessary to protect against … the risk of default."[4] In 1982 Congress overrode laws in California and other states that had made alienation clauses unenforceable;[5] these states' legislatures or courts did not understand how allowing loans to be assumed in violation of acceleration clauses, even when the parties assuming the loans had acceptable credit histories, destroyed value by undermining lenders' predictive models and the interest rate pricing that resulted. It is interesting that loans insured by the Federal Housing Administration, and "VA" loans issued to military veterans with payment guarantees from the U.S. Department of Veterans Affairs, generally are assumable.

A veteran buyer can assume a veteran seller's VA loan and the seller can get another VA loan for her own new home purchase; or a non-veteran buyer can assume a veteran seller's VA loan but then the seller can not get another VA loan, because the buyer holds the one VA loan to which the veteran seller is entitled. Perhaps the federal government has consciously chosen to bear the interest rate risk that loan assumability creates as an added potential benefit for those who serve in the armed forces. (FHA and VA loans are discussed in section IV below.) A loan on real estate owned by a corporation is likely to accelerate if the corporation still owns the property but "beneficial" ownership of the corporation (shares of common stock) changes.

I. There may be a *subordination clause*, stating that the lender will allow another, future lender's claim to have a higher priority. A borrower with an existing "first" mortgage loan could obtain a "second" mortgage loan, sometimes called a home equity loan, if principal owed on the first loan is not too high a proportion of the secured property's value. If the house is now worth $200,000 and the balance owed on the first loan is only $110,000, the borrower could get a second mortgage loan for up to $50,000 without bringing total mortgage debt above $160,000 = 80% of the value. Then if the borrower later replaces the first loan with new senior loan, the second loan still is subordinate. If a house is sold or the borrower is foreclosed on, a first mortgage loan is repaid with the sale proceeds before a subordinate second mortgage lender receives any payment – even if the subordinated loan was taken out before the "first" loan with the senior status. So a subordinated lender risks being unpaid if a more senior lender forecloses and the sale generates too little to repay both lenders.

(Dates when mortgages are recorded often determine their seniority, but a subordination agreement can change that ranking. A loan that a home seller provides to a buyer to cover part of the purchase price, called a "purchase money mortgage," generally has priority over a traditional lender's loan unless the seller signs a subordination agreement. A "junior" loan might gain senior status if the borrower and senior lender change the terms of their loan without the subordinated lender's approval. In a "wrap-around" loan arrangement, the borrower makes a larger payment to the subordinated lender, which in turn pays the senior lender, to give the subordinated lender assurance that payments to the senior lender are being made.)

J. The mortgagor's obligation to make the scheduled payments on the note do not end just because the collateral property has been destroyed by a fire or other cause, though lenders sometimes offer assistance such as allowing a few late payments without penalty. Promissory notes that conform to Fannie Mae/Freddie Mac guidelines require the borrower to make appropriate repairs unless the lender agrees to an alternative plan. (Home owner associations also tend to require residents to rebuild homes that are destroyed.) If major reconstruction is required the lender typically receives the insurance proceeds and pays them to the contractor as rebuilding takes place.

III. The Mortgage Lending Markets

As noted, a party borrowing money to buy real estate signs a *promissory note*, which is accompanied by a *mortgage*. The note is a form of secured *bond*, a type of *security*. [Here we refer to *security* in its noun sense, not in its adjective sense as in a *security* interest discussed earlier. A practical definition of *security* when used as a noun is a reallocation or reconfiguration of rights involving assets.]

In any discussion of securities markets, it is helpful to distinguish *primary* markets from *secondary* markets. In a *primary* market, money providers acquire financial claims that did not exist before (new securities are issued), and money users obtain access to money they did not have before. In a *secondary* market, previously issued securities are sold among parties that "invest" in securities – no new financial claims are created, and no new money is made available to the ultimate money users.

A. Primary Mortgage Market

In the primary market for *corporate securities*, corporations create and issue new bonds or shares of stock. These securities are purchased by parties that did not previously hold financial claims against these companies (or perhaps that want to increase the level of their financial claims against these companies), and the companies receive new money that they did not have the use of before. [Generally, a big organization issues the security.]

In the *primary mortgage market*, borrowers sign (and thereby create) new notes – people go to lending institutions and obtain new mortgage loans. So notes come into existence that did not exist before, and borrowers receive new money that the community of borrowers did not have the use of before. Thus, money is channeled from surplus savings units to the hands of parties wishing to *buy, improve,* or *refinance* real estate. The primary mortgage market traditionally involved localized lending arrangements between property owners and depository institutions that were lending money deposited with them by local savers. [The borrower, generally a small party borrowing funds to buy a house/refinance an existing loan, issues the security when signing the promissory note.] (Be careful not to confuse primary and secondary mortgage markets with first and second, *i.e.*, senior and subordinated, mortgage loans.)

1. *Types of institutions* where the real estate borrower/lender interaction begins:
   - Depository institutions: commercial banks, savings banks, savings associations, credit unions – there can be a maturity mismatch problem (short-term savings deposit liabilities being used to fund long-term mortgage loans – that is the issue that destroyed the savings and loans in the 1980s, and created crises at big commercial real estate lending banks Silicon Valley and Signature in March of 2023), aside from shorter-term construction and development loans. In fact banks, especially larger banks, are much less active as direct home mortgage lenders in the U.S. than they were before the housing and lending crisis of the mid 2000s, lending now primarily to borrowers with the strongest credit histories.[6] As of early 2024 there were 4,587 federally insured (FDIC) banks,[7] and as of late 2023 there were 4,645 federally insured (NCUA) credit unions,[8] in the U.S.
   - Mortgage bankers, which originate loans and then quickly sell the promissory notes in the secondary mortgage market, discussed below; think of giant U.S. home mortgage lender Rocket (initially called Quicken, owned by Dan Gilbert who also owns the NBA's Cleveland Cavaliers) and the separate subsidiary mortgage lending operations of many commercial banks.
   - Mortgage brokers that do not originate loans, but earn commissions for matching borrowers to any of numerous lending institutions the brokers work with; United Wholesale Mortgage (CEO is Mat Ishiba, primary owner of the NBA's Phoenix Suns and WNBA's Phoenix Mercury) and Lending Tree seem to follow this model, while loanDepot seems to operate as both a mortgage banker and mortgage broker. Mortgage brokers took on a prominent role as residential mortgage lenders in the 1980s, amid changes in lending market regulation. Depositories and mortgage banks/brokers in recent years have increasingly conducted mortgage lending business over the internet rather than in "bricks and mortar" facilities.
   - Life insurance companies, whose long-term liabilities (the obligation to pay money to surviving beneficiaries in future years when policy holders die) correspond fairly well to the maturities of long-term (especially commercial property) real estate loans.

- Pension funds, which have a long-term focus like life insurance companies do, and generally are not directly taxed on the interest or other investment returns they receive.
- Real estate investment trusts (REITs), corporations that amass large amounts of money to invest by collecting small sums from large numbers of shareholders, and then lend on or purchase real estate; they must pay 95% of their investment earnings out as dividends to the shareholders (or else pay income tax at the entity level).
- Individuals can provide loans also, but generally do so only in financing property they wish to sell (perhaps through contract for deed arrangements).

2. *Mortgage Insurance*: As noted, residential mortgage loans are insured by private firms (which issue private mortgage insurance, or PMI) and by a federal government agency known as the Federal Housing Administration, or FHA. (The related federal Department of Veterans Affairs, or VA, program for military veterans technically provides a guarantee of payment of part of the principal owed, not an insurance policy that requires premium payments.) A borrower needing mortgage insurance (typically someone making a down-payments of less than 20% of a residential property's appraised value) pays a monthly insurance fee, at least until some portion of the loan has been repaid (if loan carries PMI) or for the loan's remaining term (if loan is FHA) [though some lenders will offer loans with low down-payments and no PMI requirement in exchange for higher annual interest rates].

Also, because each parcel and each borrower are unique, it is difficult for a primary mortgage market lender to provide money for the purchase of a home in a distant location – it is hard to evaluate the property and the borrower. But when a third-party with unquestioned financial strength agrees to make the expected payments if the individual borrower can not, then the lender can confidently lend money outside its home area (primarily by buying *securities* through the *secondary mortgage market*). Lenders also can justify lending more money on individual properties, and accepting smaller down-payments, if third-party insurers bear part of the risk of the borrower's not repaying.

B. Secondary Mortgage Market

In the secondary market for corporate securities, previously-issued stocks and bonds are bought and sold among individual and institutional investors; no new money makes its way into the hands of the issuing companies. But these issuers do not mind, because the secondary market's existence provides *liquidity* that allows the primary market to function (who would buy a company's newly-issued common stock if it would not be easy to sell later?). In the *secondary mortgage market*, previously issued notes are sold by local banks and other originators, and purchased by parties (government-related mortgage-oriented organizations, or mutual funds, pension funds, and life insurance or other insurance companies) whose portfolio choices lead them to seek to collect payments on mortgage loans. Local banks and other loan originators get their money back, to reinvest (by making new loans) and earn related fees. The purchasers may buy individual notes, or they may buy claims on *pools* of loans, in the form of mortgage-related (or mortgage-backed) securities. The secondary mortgage market changed the source of money for home mortgage loans from limited local savings deposit dollars to the mammoth global capital markets; a home mortgage loan in an Illinois community might ultimately be funded by a mutual fund headquartered in New York, or a pension fund in a European country. (A promissory note buyer has the right to collect payment from the borrower, who never negotiated with the note buyer, under the *subrogation* principle also seen in insurance.)

As is true in the stock and bond markets, primary mortgage market note issuers (the borrowers who create the notes when they sign the loan documents their lenders have prepared) care deeply about secondary mortgage market activity even though the borrowing community gets no money directly from the secondary market. The role of the secondary mortgage market is to channel money from where it is abundant to where it is needed, thereby providing *liquidity* to the real estate financing function. Reducing liquidity risk reduces the rate of return that money providers expect to receive for making real estate loans. So in a competitive market lenders lend to borrowers at lower interest rates. (A bank that makes a loan can charge a lower interest rate if it faces less risk, and one risk is the chance that the bank will want to get its money back – cash out of the note – but will be unable to find a buyer. With an active secondary mortgage market, there is essentially always a ready buyer for promissory notes issued by real estate borrowers – if the originating lenders have provided the right documents for the borrowers to sign.)

In a more general sense, we can think about mortgage lending as being characterized by three activities:

- *Brokerage*: getting those who want to borrow together with potential sources of money, and doing the initial paper work (such *underwriting* functions as checking the borrower's credit history and income, getting title work done, and having the property appraised).
- *Intermediation*: channeling money from surplus savings units to borrowers.
- *Servicing*: collecting payments, and handling any post-closing problems that arise.

In earlier times, these functions were all handled by local banking institutions. (A local bank would run ads in the newspaper to attract borrowers, would lend them money from the bank's savings deposits, and would collect the loan payments over time.) The secondary mortgage market facilitates having specialization in each of the three areas. Specialization can promote efficiency; it is especially important with regard to intermediation, because of:

Regional mismatches – capital deficits in rapidly growing areas (with many who wish to borrow, but few with large accumulated savings balances) would prevent buyers from being able to finance their home purchases if they had to rely on local savings deposits. The secondary mortgage market moves money from where it is abundant to where it is needed.

Institutional mismatches –

- Depository institutions traditionally accepted short-term deposit liabilities, then lent long-term to real estate buyers. Through the secondary mortgage market, investors with long-term liabilities (*e.g*., pension funds) can purchase notes from originators (directly, or indirectly through mortgage-backed securities discussed later) and thereby provide a better matching of asset/liability maturities.
- In fact, the traditional role of depository institutions as home lenders has changed from largely one of earning an interest spread (the intermediation function) to largely one of collecting fees as loan originators and servicers (the brokerage and servicing functions). Depositories have suffered *disintermediation* (the loss of deposits) both through *regulatory* reasons (Regulation Q, which capped interest rates depositories could pay, led people to move savings dollars to money market and other mutual funds in the 1980s when interest rates soared), *demographic* reasons (older people save through their pension and 401-k/403-b/IRA plans), and changes in financial technology (people who once would have held bank deposits now trade securities commission-free).
- The investment focus of some institutions has changed; for example, life insurance companies have become less active as direct real estate lenders, while becoming more active as purchasers of mortgage-backed securities.

IV. Secondary Mortgage Market Agencies and Firms

A. *Federal Housing Administration* (FHA) – before the Great Depression, home mortgage loans typically carried five-year maturities (some sources say the range was five to seven years), and payments were of interest only (there was no paying back or "amortization" of principal), so a "balloon payment" of the entire principal balance had to be made at the end of the five years – often with the proceeds of a new loan. But with so many job losses and declining home values amid the economic turmoil of the 1930s, many borrowers could not afford to continue their payments and did not qualify to refinance, and having paid only interest they had built no additional equity and thus owed more than their homes were worth. As a result, there were widespread foreclosures and losses of family homes.

FHA was created by U.S. government in 1934 to provide long-term, amortizing (principal repaid along with interest during the loan's term) home mortgage loans with fixed interest rates. Its role today is providing payment insurance (borrowers pay an up-front fee of 1.75% of the amount borrowed, plus an annual premium of .45% to 1.05% of the original principal – bigger for higher loan-to-value ratio loans) so lenders will make loans with low down-payments (as little as 3%) on moderately-priced homes. The 1.75% fee can even be borrowed as part of the loan proceeds. The monthly premium payment continues throughout the loan's term, as long as any principal remains owed. The 2024 (increased considerably from 2023) upper limit for a single-family/four-family residence FHA loan in most locales, including Illinois, is $766,550/$1,474,400 (higher-cost Chicago area used to have higher limits but now has the same as downstate, while super-costly San Francisco's limits are $1,149,825/$2,211,600).[9]

B. *Department of Veterans' Affairs* (VA) – successor organization to the Veterans' Administration (also called VA), which was created in 1944 to assist World War II veterans in matters including buying homes. Today VA provides payment *guarantees* so military veterans can get loans for 1-4 family residences with low or no down-payments – can involve zero out-of-pocket costs, if they roll the fees into the principal they borrow. (Technically it is not insurance, since borrowers pay up-front fees of 2.3 to 3.6% of amounts borrowed unless they are disabled, but no ongoing premiums). VA will repay up to 25% of principal if the borrower defaults; in a "no-bid" the VA pays the amount it has guaranteed on a defaulted loan, and then does not seek a portion of the sale proceeds. Since January of 2020 there has been no maximum VA loan amount (previously it generally was $484,350, with a down-payment of up to 25% required on higher amounts borrowed), but borrowers must meet lenders' credit criteria, so not every veteran will be able to borrow a large amount with a VA guarantee and no direct down-payment.

C. The U.S. Department of Agriculture's *Rural Development Guaranteed Housing Loan* Program – the USDA's RD loans through the Rural Housing Service are like a blend of FHA and VA loans, but for buyers with moderate incomes buying homes in communities that lie outside metropolitan areas and have populations no larger than 35,000. Dollar limits are the same as those for FHA loans, but in a manner similar to VA the Section 502 Single Family Housing Guaranteed Loan Program provides guarantees; there is no insurance premium to pay. The program has become very popular in rural and even some suburban areas, because it allows for down-payments as low as zero for a borrower with an acceptable credit score.

D. The U.S. Department of Housing and Urban Development's *Office of Public and Indian Housing* – PIH provides guarantees, through the Section 184 loan program, for loans on 1-4 family residences made by participating lenders to borrowers of American Indian, Native Alaskan, or Native Hawaiian descent. Loan maximums generally are in the $300,000 to $500,000 range, depending on local housing costs in counties across the U.S.

E. *Private Mortgage Insurance* (PMI) Companies – private carriers also can offer insurance when a high percentage of the purchase price of a residence is borrowed. PMI has some advantages over FHA coverage, including no up-front fee required, and the right to stop paying monthly premiums when the balance owed drops to 78% of what the appraised value was when the loan was obtained. Well known PMI providers include Mortgage Guaranty Insurance Corporation, National Mortgage Insurance, and Genworth. Annual PMI premiums can run from about .5% to more than 2% of the principal initially borrowed (based on the down-payment and borrower's credit score), paid as a lump sum or as part of the monthly payments.

So if the premium on a $240,000 loan is 1.25% per year the borrower would pay (.0125 x $240,000) ÷ 12 = $250 per month as a mortgage insurance premium, on top of the regular payment. Thus the penalty for borrowing a higher proportion of the money to pay for a home of a given price will be considerably larger monthly payments, because the mortgage insurance premium must be paid on top of payments that already are higher because of a higher interest rate (lending more of the purchase price is riskier for the lender) and more principal to amortize.

Note: large players FHA and VA, smaller players USDA and Office of PIH, and the private mortgage insurers are not direct participants in the secondary mortgage market; not all loans insured or guaranteed by these government or private organizations are sold into the secondary market by their originators. But the *standardization* and *payment assurances* present in FHA and VA loans were essential to the growth of the secondary mortgage market. After all, real estate values are heavily influenced by local market conditions, so investors would be unlikely to purchase the right to collect payments on home loan promissory notes issued in distant communities they are unfamiliar with unless the documents could not present unwanted surprises, and the payments were assured by a dependable party. (FHA, VA, RD, and PIH loans can be included in securitized pools of loans guaranteed by Ginnie Mae; see below.)

F. *Federal National Mortgage Association* (FNMA, or "Fannie Mae") – established in 1938 as a U.S. federal government agency. We can think of it as being primarily an organization that buys loans from originators, often large banks, then bundles together a group of notes, and then sells to investors the rights to collect guaranteed payments on these loan "pools" (called mortgage-backed securities, or MBS). So instead of owning $1 million worth of notes, an investor might hold the right to collect $1 million worth of the principal payments, plus interest, on a much larger $100 million pool of notes (the investor gets a more predictable payment stream that way). Initially it purchased only FHA loans, but when the Veterans Administration was established after World War II FNMA started buying VA loans as well. In 1954 Fannie Mae was "privatized" through the issuance of nonvoting stock. But it retained ties to the government (as a GSE, or government-sponsored enterprise, with government borrowing privileges, and federal officials on its board of directors). In 1968 it took a further step toward becoming a private company, with shares of common stock traded on the New York Stock Exchange. In 1972 Fannie Mae was authorized to buy *conventional* loans (meaning not FHA/VA/RD/PIH) as well as the FHA/VA loans in which it long specialized. The company started issuing mortgage-backed securities in 1981; prior to that time it made money by buying notes and holding them "in portfolio," earning a higher interest rate on those notes than it paid to borrow money in the bond market (where it paid a very low interest rate because of its federal ties). In fact, the organization was such a prominent bond market borrower that traders on the open-outcry exchange trading floors of the day found it convenient to shout "Fannie Mae" rather than something longer – thus the origin of this official nickname.

G. *Federal Home Loan Mortgage Corporation* (FHLMC, which was long known as "Freddie Mac" – and changed its corporate name officially to Freddie Mac in 1997) – established in 1970 as a U.S. federal government agency. We can think of Freddie Mac as being, like Fannie Mae, essentially an organization that buys loans from originators, often smaller banks and credit unions, bundles together a group of loans, then sells investors the rights to collect more predictable payments by buying MBS backed by the loan "pools," with payments guaranteed by Freddie.

Freddie Mac was created, when there already was a Fannie Mae, because in 1970 most of the loans originated by banks and thrifts were not of the FHA/VA variety (65% of home loans were originated without government insurance or guarantees). So Congress created Freddie Mac to provide a secondary market for conventional loans (which Fannie Mae could buy also, but tended not to). Freddie Mac became privately-owned in 1989, as a provision of FIRREA's restructuring of savings and loan regulations.[10] Thus both Fannie Mae and Freddie Mac came to be privately-owned but government-sponsored enterprises/GSEs that could buy conventional or FHA/VA loans, but Fannie Mae tended to specialize in FHA/VA loans and Freddie Mac tended to focus on conventional loans.

Like Fannie Mae, Freddie Mac holds some loans in portfolio, while also issuing mortgage-backed securities on which they guarantee that investors will receive promised payments. Freddie is somewhat smaller than Fannie, but has developed a reputation as being more innovative in creating new mortgage-related investment instruments.

(For example, Freddie Mac issued mortgage-backed securities before Fannie Mae did, and it pioneered the use of collateralized mortgage obligations, discussed later, which reconfigure loan payments in such ways as interest/principal or short/intermediate/long term.) The two organizations definitely play an outsized role in housing finance; in early 2023 Fannie Mae and Freddie Mac together provided guarantees on far more than half of the loans that constitute the $11.5 trillion American home mortgage market; one source pegged the figure at 70%.[11]

Since 2013 both organizations have issued "credit risk transfer" securities (Fannie Mae does so via its Connecticut Avenue Securities subsidiary), through which hedge funds and other large private sector investors bear some of the costs of meeting the two GSEs' guarantees to mortgage-backed security buyers if defaults by mortgage loan borrowers exceed specified levels – so returns to "CRT" investors are higher (lower) if borrower defaults are fewer (more) than had been expected. CRT bonds are a "structured finance" instrument (different investor groups face different levels of exposure to a particular risk, here repayments on an identified group of home mortgage loans). So these securities help Fannie and Freddie meet their guarantees, but do not themselves carry Fannie/Freddie guarantees; they are classified as high-risk or "junk" bonds. Interest payments to CRT bond holders are variable, rising and falling with market interest rates (even though the underlying mortgage loans carry fixed interest rates); when market interest rates rose sharply in late 2022 Fannie and Freddie were repurchasing CRT bonds to reduce their interest costs. The two GSEs also issue securities that transfer, to outside investors, some of the interest rate risk that arises from holding long-term notes in their portfolios.

Fannie Mae and Freddie Mac both came under scrutiny in the mortgage market crisis of the 2000s. Some of the criticism related to the fact that they competed in private markets and paid their top executives lavish private sector salaries, while enjoying "implicit" government guarantees (the investment markets believed the federal government would repay money owed by the two companies, even though it was not a true federal obligation) that allowed them to borrow money cheaply (to be re-lent at higher interest rates in the mortgage lending market), grow rapidly, and earn ever-higher profits that led to even higher management compensation. (The 2023 *Fortune 500* list showed Fannie Mae as the largest U.S. company based on assets held, and Freddie Mac as the third largest. To generate high profits by earning an interest spread on assets, they have to hold a lot of assets – with those assets being the promissory notes they buy in the secondary mortgage market.)

Both firms were political organizations as much as they were financial firms – with major lobbying initiatives and the hiring of former high level federal government employees as executives, to keep legislators supportive of Fannie and Freddie's advantaged situations. As some market observers warned of the dangers of a system with private gains and public guarantees, and as some federal administrators and regulators tried to rein Fannie and Freddie in (efforts toward that end continue today), the pair were indeed defended by powerful allies in Congress, who got generous campaign contributions and liked seeing support for housing that did not show up as a cost to be defended in the federal budget (any debts were officially these "private" companies' obligations – a major reason for Fannie Mae's 1968 stock issue was to take its substantial debt off the government's books).

Both organizations suffered massive losses during the mortgage meltdown, and both were placed under federal government "conservatorship" in 2008 (where they remained as of spring of 2024).[12] The implicit guarantee on Fannie/Freddie debt became explicit, and American taxpayers became "senior preferred" stockholders in the two GSE's. The Housing and Economic Recovery Act (HERA) of 2008 created the Federal Housing Finance Agency (FHFA), a new federal agency, as the regulator for Fannie Mae and Freddie Mac. FHFA combines the duties of the former Federal Housing Finance Board (created by FIRREA to replace the Federal Home Loan Bank Board in overseeing the Federal Home Loan Banks; see below) and Office of Federal Housing Enterprise Oversight (OFHEO, created in 1992 to oversee Fannie/Freddie). Fannie/Freddie now each has a 9-13 member board of directors appointed by FHFA; prior to conservatorship each had an 18-member board, with 13 members elected by the stockholders and five appointed by the President of the United States.

While it is easy to criticize some practices that led to Fannie Mae and Freddie Mac's excessive growth and the resulting problems during the crisis, their prominent role in the secondary mortgage market has brought about a standardization in loan underwriting that makes loan terms more predictable for borrowers and makes mortgage loan promissory notes (and especially securities collateralized by such notes) a more attractive investment – thereby enhancing liquidity for loan originators, and in turn keeping interest rates lower for home loan borrowers. The documentation for a home mortgage loan made anywhere in the country is likely to consist of forms approved by Fannie Mae and Freddie Mac; even a lender that does not plan initially to sell a note in the secondary market knows that it may want to retain the ability to sell it later, should liquidity needs arise.

H. The Federal Home Loan Bank (FHLB) system is another GSE, now regulated by FHFA, that started out as a government agency; the current role of the eleven Federal Home Loan Banks (originally there were twelve) is to make large loans to direct home mortgage lenders so they have the liquidity to make more loans. The FHLB of Chicago also makes grants of up to $10,000 toward down-payments for first-time home buyers (as does the Illinois

Housing Development Authority). The individual FHL Banks are cooperatives owned by member institutions that then can borrow from the FHL Banks ("advances" to borrowers total almost $1 trillion); eligible members include commercial banks, credit unions, and insurance companies – not "nonbank" mortgage bankers, brokers, or Real Estate Investment Trusts at this time, but FHFA was considering their inclusion in a fall 2022 review of the system. The Banks even have their own trade association, the Council of Federal Home Loan Banks. Critics say home lenders can more effectively gain liquidity by selling notes in the secondary mortgage market, and point out that the FHLBs' largest borrowers in recent years have been financial giants like JP Morgan Chase and Met Life that should have other ready liquidity sources. Critics also note that the FHLBs can borrow cheaply in the bond market because of the same "implicit" federal government guarantee that allowed Fannie Mae and Freddie Mac to grow so large.

[Yet another government-sponsored enterprise is the Federal Agricultural Mortgage Corporation, a private company chartered by the federal U.S. Department of Agriculture's Farm Credit Administration; "Farmer Mac" facilitates a secondary market for loans on farm land and rural residences by buying notes, issuing MBS based on those notes' cash flows, and guaranteeing payments on securities issued by other secondary market note buyers/securitizers. Student Loan Marketing Association is a fully private firm that now lends to students directly, but started out as a GSE to provide a secondary market for student loans; it has long been known as "Sallie Mae." Then just to show how far this nickname scheme has been taken: fully private mortgage loan processing software company Electronic Mortgage Affiliates is informally known as "Ellie Mae," and large private mortgage insurer Mortgage Guaranty Insurance Corporation (MGIC) has sometimes been called "Magic" or "Maggie Mae."]

I. *Government National Mortgage Association* (GNMA, or "Ginnie Mae") – established as a U.S. federal government agency in 1968, when Fannie Mae was privatized – to take over Fannie's prior role of encouraging loans to low-income borrowers by agreeing to buy the notes from those loans at face value, even if their market values were lower because of interest rate changes. Since 1970 Ginnie Mae's primary role has been as a federal government entity (a unit within the Department of Housing and Urban Development) that *provides payment guarantees on securities* backed by FHA, VA, RD, and PIH loans. The securities generally are issued by banks or investment firms; Ginnie Mae today does not make loans, buy notes from loan originators, or create mortgage-backed securities. GNMA obligations always have carried the *full faith and credit* of the United States. In fact, this guarantee is so important that the instruments are called "Ginnie Maes" even though GNMA is not the issuer. (Per the organization's web site, it "facilitates the creation of mortgage securities by a varied network of mortgage lender/servicers, but does not itself buy loans or issue MBS," and "issuers obtain the right to issue MBS carrying Ginnie Mae's guarantee by entering into a guarantee agreement with Ginnie Mae.")[13]

The Ginnie Mae guarantee is needed (on MBS issued by parties other than Fannie or Freddie), even though loans already are government-backed, because of potential problems for investors: administrative delays (if the security issuer can not make timely payment, Ginnie Mae will) and possible shortfalls (VA does not guarantee the full amount of the loan, but Ginnie Mae does). GNMA bills itself as the fourth line of defense: if the home borrower, FHA/VA/RD/PIH, and MBS issuer are unable to pay, then GNMA assures payment to the investor. It will provide a guarantee on a pool if the loans all have similar maturities and interest rates, all are insured by FHA (or guaranteed by VA/RD/PIH), and the issuer pays application and ongoing guarantee fees. [Requiring the underlying loans to be similar helps keep the cash flows more predictable for investors.] The issuer then sells "pass-through" securities that carry an interest rate 50 basis points less than on the loans. The issuer (or other *servicer*) gets 44 basis points, and Ginnie Mae gets 6 basis points for its guarantee. (A basis point is 1⁄100 of 1%, so 50 basis points is ½ of 1%.)

With the government's full faith and credit, securities guaranteed by Ginnie Mae therefore are just as free of default risk as are U.S. Treasury securities. However, yields (expected returns) on "Ginnies" generally are higher than those seen on long-term "Treasuries." One reason is that mortgage-backed securities carry considerable interest rate risk; many home borrowers refinance and repay their mortgage loans when interest rates fall, and the investors get paid back early just when they do not want to be receiving principal to reinvest. This component of the higher yield is called the "option-adjusted spread," reflecting home mortgage borrowers' option to call their notes (meaning prepay principal owed), and this option becomes widely exercised when interest rates decline and cheaper replacement loans can be obtained. Another reason for higher yields on Ginnies relative to Treasuries is that holders of U.S. Treasury securities do not have to pay state income tax on the interest they earn, whereas interest earned on mortgage-backed securities guaranteed by Ginnie Mae, as with those issued by Fannie Mae or Freddie Mac, is subject to state income tax.[14] The reason would seem to be that while interest on Treasuries comes directly from the U.S. government (and the U.S. Supreme Court has ruled that states can not tax the federal government), the parties actually paying the interest earned on MBS are the private households that borrowed the money to buy residences.

J. *Private investment firms* also create mortgage loan pools and issue mortgage-backed securities, often secured by "nonconforming" loans (those that do not meet Fannie Mae/Freddie Mac purchase guidelines, such as "jumbo" loans – above $766,550 for 2024 in most places, including all of Illinois, though high-price areas like San Francisco have $1,149,825 limits for single-family houses, the same limits seen with FHA loans).[15] [Fannie and Freddie observe the same loan limits as FHA, so a jumbo loan does not qualify for FHA insurance and thus generally must be accompanied by PMI if the down-payment is less than the 20% or other minimum the lender requires.] Loans made on second homes, on income properties, or to self-employed people also generally will not be purchased by Fannie or Freddie. To be attractive to investors, "private label" securities based on nonconforming loans generally must carry ratings from the well-known bond-rating agencies (securities seen as having higher risk generally provide higher expected returns, as in all investment situations).

K. *Mortgage Electronic Registration System* (MERS) – the result of a lender's need to record every mortgage with local government in the county where the securing property is located, to give third parties constructive notice of the lender's claim and the priority of its claim over those of other lenders (typically established by date recorded), could be the need for recording the assignment of the mortgage rights to the new lender each time a note is sold in the secondary mortgage market. MERS was formed in 1995 to address that problem. The corporation keeps track of who holds notes sold in the secondary market, and who services them; lender claims then can be traced through the MERS data base, so that individual local public re-recording with each loan sale need not occur.

An originator that knows it will sell the note (the mortgage transfers with the note) can even record and show MERS as the initial lender (technically the "nominee" of the originating lender) in the public records. A mortgage identification number that stays the same throughout each loan's life, no matter how many times the note is sold, allows lenders, loan servicing organizations, and home owners to find information about loans through MERS. The company was criticized during the mid 2000s mortgage meltdown when some distressed borrowers claimed the MERS system made it difficult for them to find who held their notes so they could try to arrange loan modifications.

(It is interesting that MERS is owned by New York Stock Exchange owner Intercontinental Exchange, which also owns the related Simplifile system for electronically recording documents, and in addition owns loan servicing software company Black Knight and loan processing software company "Ellie Mae," mentioned earlier.[16] "ICE" obviously wants to play a major role in all aspects of the U.S. home mortgage lending market.)

V. Callability/Early Repayment of Debt

Before we talk about mortgage-backed securities it might be helpful to consider the early repayment of loans. "Callability" is the financial world's term for the right to buy something under conditions that are spelled out, at least in part, in advance. (The counterpart of *call*, meaning the right to buy under predetermined conditions, is *put*, the right to sell under predetermined conditions.) In some cases callability is the right to buy *back*, under agreed terms, something previously sold to another party, including a borrower repurchasing a bond or promissory note that it sold earlier to a lender when a loan was originated. The key feature of callability in a lending situation is the borrower's right to buy the bond or note back from the lender prior to an initially designated repayment date. Lenders generally do not want borrowers to call their obligations, *i.e*., to repay lent principal before the specified maturity date. That is true with $2 billion corporate bond issues and $160,000 home mortgage loans alike.

The idea that a lender does not want to be repaid early may be counterintuitive; after all, is getting money back sooner not better? In some limited lending situations, the answer would be yes – for example, if you expect to be paid a fixed number of dollars, no matter when it is to be received, you want to get it as quickly as possible. Think of someone who lends $10,000 at a 0% annual interest rate for one year to a friend facing financial difficulties; the reluctant lender would be thrilled to get the entire $10,000 back after two months. First, that lender's overriding concern may have been default; if you fear never being repaid at all it is better to lie awake at night worrying for two months than for twelve. More importantly, from the standpoint of financial principles, if you are earning a periodic rate of return less than your periodic opportunity cost of capital (which earning 0% surely would be; money invested always has a positive opportunity cost – unless interest rates are negative, as seen in some European countries in recent years), you want to recoup your principal as quickly as possible to reinvest in a wealth-creating project.

But in the more typical arm's-length financial marketplace lending situation, the lender does not want to get back lent principal early, but rather wants that principal to be committed and earning a nice, high annual rate of interest, over the specified period until maturity, from a borrower whose dependability has been confirmed through careful credit analysis. That is true of a mutual fund that buys $50 million of the $2 billion corporate bond issue, and of a local bank that makes a $160,000 home mortgage loan (buys the promissory note the borrower signs) alike. A lender that is repaid early must find a new borrower to lend to, for the remainder of an original commitment period whose ending date likely reflected when the lender expected to need cash (to pay life insurance claims, make a down-payment to buy a house, or meet other business or household cash needs that various lenders can face).

At the same time, what a borrower wants is the ongoing use of money at a nice, low annual interest rate – true of a major corporate bond issuer, and of a prospective home owner who signs/issues a promissory note (with an attached mortgage) and borrows by selling that note to a lender. So what most often motivates a big or small borrower to repay principal early is the newfound availability of cheaper replacement principal when market interest rates have fallen – the borrower *refinances* the debt (*calls* an existing bond or note), using new money borrowed at the lower interest rate to repay the principal previously owed. Then the borrower goes into the future owing the same amount of money, but paying a lower price (lower annual interest rate) for the use of it, while the original lender gets its principal back just when it does not want to; it must re-lend that principal at a lower annual interest rate (or re-lend to a riskier borrower to get the previously-earned interest rate, in a competitive market). [And borrowers *generally* will not prepay principal just when lenders wish they would: when market interest rates have risen. However, the alienation clause discussed earlier requires a home mortgage loan to be repaid in full when the securing house is sold, so there is some prepayment of mortgage loans even when interest rates have risen, since some houses are sold even when low interest rates are not spurring market activity, as when a sale is necessitated by a job transfer.]

Thus lenders would have a natural desire to penalize borrowers for repaying principal early. For callable corporate bonds to be attractive to buyers, usually they must have "call protection periods" (the borrowing company must wait until some years have passed before repaying any principal/buying bonds back early) and "call premiums" (money in addition to the principal that the lender collects if it receives early repayment), along with carrying higher agreed-on "coupon" interest rates. But because of federal government lending organizations' (Fannie Mae, Freddie Mac) practices and "consumer protection" provisions in state laws, home mortgage loans usually can not have call or prepayment penalties. (Residential mortgage loan interest rates likely are generally higher than they would be if home lenders could directly penalize early repayment. And loans on commercial real estate do carry early repayment penalties.)

Let's look at early repayment with some simple numerical examples. Think of a lender that initially lent $5,000 for two years at a 6% annual interest rate, with terms calling for the borrower to pay .06 x $5,000 = $300 in interest at the end of year 1 and then another $300 in interest, along with the $5,000 in principal (the essential return *of* the investment), at the end of year 2. Today marks the end of year 1. The borrower just paid the agreed initial $300 in interest, and now wants also to repay immediately the $5,000 principal that remains owed – and once all principal has been repaid no more interest can be charged, so a payment of $5,000 (on top of the $300 in interest already paid) today will bring the loan arrangement to a close. Should the lender be happy to receive repayment of the $5,000 principal a year earlier than initially agreed to? The answer depends on how the lender's current annual required rate of return (or cost of capital, or opportunity rate) compares to the annual interest rate being paid on the loan.

Available rate of return exceeds interest rate paid on loan. First, think of a case in which the lender's opportunity rate now is higher than the loan's 6% annual interest rate; perhaps market interest rates recently have risen. It makes intuitive sense that the lender would be happy to get the principal back early, to re-lend at the same level of risk but for an 8% annual interest rate. In numerical terms, sticking with the original plan and receiving $5,300 in a year has a present value to the lender, if we use today's 8% annual opportunity rate as the discount rate, of

$$\$5{,}300\left(\frac{1}{1.08}\right)^1 = \$5{,}300\ (.925926) = \$4{,}907.40.$$

The lender would rather receive $5,000 today than to remain in a plan whose expected payoff's value today (its present value) is less than $5,000. Or consider a different possible motivation: the lender perceives that recent financial problems have made this particular borrower a riskier party to be a lender to, such that the investment should be generating an 8% annual rate of return instead of the agreed-on 6%. The lender would give any borrower who poses this level of risk only $4,907.40 today in return for an expected $5,300 payment in one year, while the current borrower is willing to hand the lender $5,000 today instead of paying $5,300 in one year. Whether the lender's required annual rate of return has risen to 8% from the initial 6% because of market trends or because of issues unique to the borrower in question, early repayment gives the lender $5,000 for a note that has a value to the lender of only $4,907.40; thus, being paid early brings a net present value of $5,000 – $4,907.40 = $92.60. Because NPV is positive the early receipt of principal creates wealth for the lender, here in the amount of $92.60.

A more extreme example occurs when the borrower is not required to pay interest, as in the described case of someone helping a friend in need. Think of a $5,000 two-year loan with a 0% annual interest rate; as year 1 ends today the borrower in effect pays $0 as year 1's agreed-on interest and then wants to repay the remaining $5,000 owed (pay the 0% interest loan back a year early). The PV to the lender of receiving the originally expected $5,000 payment in a year is

$$\$5{,}000\left(\frac{1}{1+r}\right)^1 = \text{something less than } \$5{,}000,$$

with that value becoming smaller (and thus the NPV of being paid back $5,000 today becoming greater) as the lender's opportunity rate r increases with higher perceived risk. A lender should always be happy when a 0%

interest loan, or any lending commitment that calls for being repaid only a pre-specified number of dollars (such as holding a zero-coupon bond or the principal-only piece of an IO/PO strip, discussed below), is repaid early, and the value of the early repayment is greater if the lender's fear of not being repaid at all is higher (and thus we would use a higher risk-based opportunity rate in discounting any initially agreed-on payments to a present value). If the lender is supposed to collect $5,000 from the friend in a year and big concerns about the friend's totally defaulting cause the lender to attribute a 22% annual opportunity rate to the situation, then the PV of the agreed-on payment is

$$\$5,000\left(\frac{1}{1.22}\right)^1 = \$5,000\ (.819672) = \$4,098.36,$$

such that the friend's offer to repay the full principal today replaces a position worth $4,098.36 with one worth $5,000 (a $5,000 cash payment today), for a $5,000 – $4,098.36 = $901.64 NPV of being repaid a year early.

Available rate of return does not exceed interest rate paid on loan. Now move to a case in which the lender's annual opportunity rate declines to 4% from the 6% that prevailed when the note was negotiated; perhaps market interest rates generally have been falling, or it could be that recent improvements in the borrower's circumstances cause the lender to view its exposure to default risk as lower than what it had perceived when the note was negotiated. It makes intuitive sense that the lender would be happy to keep the $5,000 in the hands of a solid borrower paying a 6% annual rate, preferring not to be repaid early and have to re-lend that principal for the remaining year at a lower 4% annual rate for the same level of risk exposure. In numerical terms, the present value to the lender of waiting and receiving the initially expected $5,300 in a year, if we use the new 4% annual opportunity rate in discounting, is

$$\$5,300\left(\frac{1}{1.04}\right)^1 = \$5,300\ (.961538) = \$5,096.15,$$

which is more than the $5,000 sum the borrower is offering today. Being repaid a year early forces the lender to cash in a position worth $5,096.15 for $5,000; the net present value is $5,000 – $5,096.15 = – $96.15 (the negative sign on the NPV indicates that early repayment causes the lender to lose $96.15 in wealth). Here we see why home mortgage lenders usually are unhappy when borrowers prepay; the most common means of prepaying is refinancing when interest rates have fallen, and the lower market interest rates that motivate the borrower to refinance cause the early receipt of principal to be a negative NPV situation for the lender, which must reinvest the received principal at a lower return rate. (We will examine the borrower's NPV from refinancing an existing mortgage loan in Topic 12.)

Finally, what if the lender's annual opportunity rate remains at the same 6% called for in the loan contract (the general level of interest rates has not changed in the past year, and the borrower is perceived to be no more or less risky than it was when the loan was originated)? Intuition suggests that the lender should be equally happy keeping the $5,000 principal in the current borrower's hands or getting it back today and lending it to a new, equally risky borrower at the same 6% annual interest rate. The numbers show that waiting and receiving the expected $5,300 in a year has a present value to the lender, if we use the unchanged 6% opportunity rate as the annual discount rate, of

$$\$5,300\left(\frac{1}{1.06}\right)^1 = \$5,300\ (.943396) = \$5,000,$$

exactly equal to the $5,000 the borrower wants to pay today to terminate the arrangement. In receiving the early repayment the lender gets $5,000 to replace a position worth $5,000; the net present value is $5,000 – $5,000 = $0 (a $0 NPV means the investor neither grains nor loses wealth, but merely earns a periodic rate of return equal to the periodic cost of capital or opportunity rate). It might seem that the lender should be largely indifferent to being repaid early. However, having to locate a new dependable borrower a year earlier than had been expected imposes a cost on the lender (true, even though not mentioned, in the cases discussed above as well), a negative value that causes the early repayment to be a negative net present value situation for the lender even if the interest rate earned remains the same – unless the lender fully covers those costs in the separate loan application fees it levies on any new borrower. The cost of having to find an acceptable new borrower earlier than had been anticipated is one reason why lenders charge prepayment penalties when they are able to – and why we theorize that lenders charge higher interest rates on home mortgage loans generally, as an indirect means of covering that potential cost of being repaid early, than they would charge if explicit prepayment penalties could be levied. In home mortgage lending there tends to be little default risk (equity cushion, sometimes a third party guarantee, people strive not to lose their homes), but substantial prepayment risk – borrowers often refinance their loans when interest rates have declined.

VI. Residential Mortgage-Backed Securities

The U.S. home mortgage lending market is huge, with approximately $11.5 trillion in outstanding debt – only the $24 trillion U.S. Treasury debt market is bigger. (Much less debt is secured by income-producing real estate, about $2.7 trillion, such that you might see reference to a $14 trillion combined mortgage lending market.) Because the home mortgage market is so big and the notes are standardized to meet Fannie Mae and Freddie Mac guidelines, the investment community has been able to design some very creative mortgage-backed security structures. Some commonly-discussed types of mortgage-backed securities (sometimes more precisely specified as *residential* mortgage-backed securities, or RMBS) are *pass-throughs* and *collateralized mortgage obligations* (CMOs).

Important characteristics of these types of mortgage-backed (or mortgage-related) securities include:

- Rearrangement of cash flows (recall that an important feature of home mortgage loans is that borrowers typically can make early repayments of principal – sometimes referred to as an "implied call feature" – without incurring a direct early repayment penalty such as the "call premium" seen with corporate bonds).
- Credit enhancement (the assurance that the provider of money will be able to collect the promised interest and principal payments). Credit enhancement typically is in the form of a *letter of credit* (the security issuer's guaranteed right to borrow) from a bank, or else one of the following:
  - *Guarantees* – a third-party (private or government) promises to pay
  - *Overcollateralization* – more in assets than is issued in securities (as though a manufacturing company borrowed $10 million and then pledged $15 million worth of machines as collateral)

A. *Pass-Throughs*

The investor has an undivided interest in a pool of mortgage loans. There is no reconfiguration of payments the borrowers make on the notes; each investor is given its proportionate share of expected/scheduled repayment of principal, unexpected/early repayment or "prepayment" of principal, and interest owed on remaining outstanding principal as they are received; the servicer simply *passes through* anything received (minus a small servicing fee).

Borrowers pay a higher interest rate (*e.g.*, 5%) than investors receive (e.g., 4.5%). The difference goes to the servicer and to credit enhancement (perhaps in the form of a fee to Ginnie Mae). Just as other bonds are rated for their credit-worthiness, private label pass-throughs, which do not carry government agency payment guarantees (Fannie Mae, Freddie Mac, Ginnie Mae), are also rated (by Moody's, Standard & Poor's, DBRS Morningstar, and Fitch, which got into this business by acquiring a ratings unit of Chicago-based Duff & Phelps, a pioneer in rating mortgage-backed securities).

Note: the cash flows on a pass-through are very uncertain. We should not view such an instrument as "risk-free" simply because it has Ginnie Mae's backing. Prepayments will be received just when the investor does not want them (and not be received when the investor hopes for them), so there is considerable prepayment or reinvestment risk that results from borrowers refinancing their loans and paying back the principal when interest rates are low. In fact, the interesting feature of investing in standard pass-throughs is that there is essentially no *default risk* (because of third-party guarantees), but there is a tremendous amount of *interest rate risk* (because borrowers prepay when the interest rate they can obtain by refinancing with a new loan is lower than the interest rate on the existing loan).

It is difficult to securitize (create securities relating to) a pool of loans if there is no guarantee of payments through Fannie Mae/Freddie Mac/Ginnie Mae. One solution is to issue as a "senior/subordinated" pass-through. The credit-enhancement here is overcollateralization; for example, investors have a $94 million claim on $100 million of loans. The originator or other subordinated party collects the other $6 million only after the senior position's claim has been satisfied. But because the risk is reduced, the $94 million claim may sell for, say, $95 million (the expected cash flows are discounted based on a lower required periodic rate of return). The originator thereby earns $1 million if it collects all payments; the originator is "putting its money where its mouth is."

B. *Collateralized Mortgage Obligations* (CMOs) – in a CMO, the servicer rearranges the payments received on loans in the pool, which are very uncertain overall (because we do not know how interest rates will change, and thus what early principal repayment will be), into individual *tranches* (a French word for *slices*) that can allow for more certainty, at least for some providers of funds. Tranches also can provide for a redistribution of risk; sub-prime loans are not held in pass-throughs, but CMOs can hold them, since tranches of lower seniority can be created and sold to investors willing to take additional risk if they can expect a correspondingly higher periodic rate of return. The result is to increase the demand for mortgage loans, thereby driving up their price (and, at the same time, driving down the interest rates that borrowers have to pay), and to shift risk to parties better able to bear it than loan originators are. (More broadly-based Collateralized Debt Obligations, or CDOs, are securities that can include cash flows from borrowers' repaying car loans, credit card debt, or other types of liabilities, along with mortgage notes.)

Whereas pass-throughs provide a *pro-rata* distribution of money collected on the underlying loans, CMOs can provide a *sequential distribution*. In a sequential approach the CMO issuer creates a series of bonds (tranches) with varying expected maturities. This arrangement (developed in 1983 by Freddie Mac and some Wall Street firms) provides an accelerated repayment of principal on earlier tranches of a security issue backed by the payments on 30-year home mortgage notes, so that what once had seemed to be a long-term commitment became the basis for a viable investment option for traditionally short-term investors. Holders of bonds in the shortest-term tranche get their principal back in a concentrated manner: all scheduled and prepaid principal received *on all loans in the pool* go to the first-maturing tranche's investors until they have been fully repaid after just a few years (later tranches get only interest on the principal they continue to have at risk, until it is their turn to get the concentrated principal payments). Then the servicer directs all principal received to investors in the next tranche until it has been repaid. The uncertainty regarding principal prepayment prevents knowing exactly when each tranche will be repaid in full, but at least short/intermediate/long-term investors can select tranches that match their general maturity preferences.

Another CMO structure could involve a pool of loans that have above-average expected default risk, with claims held by senior tranches that are paid their returns first, and a series of subordinated tranches that are not paid until more senior investors have been compensated (with higher expected returns for the riskier tranches). This type of structure (lending of this type is called "structured finance") proved problematic during the mortgage meltdown. The tranches are bonds, which were difficult to sell without being rated by the major bond rating agencies. The ratings agencies frequently awarded AAA ratings to more senior tranches of securities backed by home loan pools that included subprime loans, on the grounds that even subprime loans had experienced few defaults historically. But then investors suffered losses on these AAA bonds when defaults greatly exceeded predictions, likely because lenders had made subprime loans in far greater numbers and much more aggressively than had ever occurred before.

Yet another CMO structure could be the Interest Only/Principal Only (or IO/PO) strip. A tranche is set up to give one investor group all the interest collected on a pool of loans, while another tranche earns for its investors all the principal. This arrangement is a useful tool in managing interest rate risk. The IO portion has *negative duration* (its changes in value are opposite those of typical fixed-income investments, rising when market interest rates rise and falling when market interest rates fall), because the amount of interest collected depends on how much principal remains outstanding – which, in turn, goes down when market interest rates fall and borrowers prepay their loans by refinancing. So IOs can help stabilize overall returns on a portfolio containing more typical fixed-income securities. The PO portion has what we might think of as a super-positive duration: principal to be recouped is a fixed amount (the total the borrowers whose loans are in the pool borrowed), and when a fixed dollar amount is to be received we want to get it as soon as possible (which happens when market interest rates fall and mortgage borrowers refinance and prepay). So when market interest rates go down (up), IO values go down (up) and PO values go up (down).

CMOs can be backed by pools of loans or by mortgage-backed securities (a "layering" of MBS cash flows).

C. *Swaps* – a loan originator trades loans for a mortgage-related security backed by the same loans just sold. (These should not be confused with *interest rate swaps*, another risk management tool.) Their purpose is:

- Enhance liquidity – securities are more liquid (think of a holder needing to sell) than are individual loans
- Alter the intermediation position while retaining servicing rights
- Meet regulatory capital standards (proportion of equity financing needed), which are more lenient for banks that hold Ginnie Maes instead of whole mortgage loans

VII. Financing Income-Producing Real Estate

The system for extending the higher dollar loans on income-producing property differs in many ways from the much larger overall market for extending the generally smaller loans on single-family residential properties. The huge and well-organized secondary market for residential mortgage loans has led to standardization of home loan instruments, while commercial mortgage loans are more likely to have terms that are specifically negotiated with the banks, insurance companies, pension funds, real estate investment trusts (REITs), or bond market participants that provide the financing. [All loans on income-producing property tend to be called commercial real estate, or CRE, loans, including those secured by income-producing residential or industrial (manufacturing or warehouse) property, even though "commercial" in some contexts refers to retail and office real estate.] A CRE lender might even have an option to convert some debt it is owed to equity, and receive some of the profit that a successful property generates.

For newly-built improvements involving both single-family residential and income-producing property we might see different lenders specializing in the construction *vs.* permanent or "take-out" stages, but specialized knowledge can be more important with income-producing properties, in light of the generally higher dollar amounts and longer construction periods involved. Construction loans might have maturities of one to two years, and they tend to carry interest rates higher than do permanent loans because of the lack of income generated during the long building stage, and uncertainty over how well a project will turn out and what market conditions will be when it is finished – although permanent financing also usually must be arranged fairly far in advance of when the project is completed, often in coordination with the construction financing, or else a short-term "bridge loan" might have to be obtained until permanent financing can be in place. As with residential construction loans, the borrower having an income property built does not get the money all at once, but rather through partial "draws" over time as the building phase progresses, though instead of perhaps three draws on typical single-family construction the financing on a more complex income property likely would call for a much larger number of partial payments.

Permanent loans for income-producing real estate often have amortizations shorter than the 30 years commonly seen with single-family property with its active secondary market for 30-year notes; amortizations might be 20 or 10 years. But then such loans' maturities might be even shorter, such as 5 years (with an interest rate reflecting a short-term rate benchmark), to keep the loan maturities close to the durations of the leases that tenants of these types of properties generally sign – since the borrower depends on rent received from the tenants to repay the loan. (An amortization period longer than the loan's maturity means we pretend the payments are stretched out over 20 years to keep each payment more affordable, but then a large lump-sum "balloon" payment is owed after just 5 years, at the maturity date.) Borrowers in these situations often obtain the balloon payments by refinancing, but a concern with planning to refinance is that the strong market conditions that allowed for favorable financing initially may have reversed when it is time to refinance a few years later. One report stated that large numbers of office property loans, often made by midsized banks, were scheduled to mature by early 2026, with many borrowers finding it difficult to refinance (and thus losing their properties) amid higher interest rates and declining rent revenues.[17]

Among various CRE lenders, banks tend to make loans for the shortest periods, since their liabilities (the deposits they lend) are fairly short term. Life insurance companies tend to make loans for longer periods, since their liabilities (money owed to survivors when policy holders die) are longer term, but to lend only on high quality properties. Riskier loans (accompanied by more restrictive terms) often are made by lenders that will securitize the notes into *commercial mortgage-backed securities* to be sold in the bond market, as discussed below.

The underwriter of a loan on a single-family residence focuses on the borrower's income, with the home's value playing a secondary role, since borrower income is the basis for the regular payments the lender wants to receive. Underwriting for a CRE loan relates more to the property's income-generating abilities, with the borrower's financial strength playing a secondary role. (Even the type of property can have an impact. During the Covid-19 economic shutdown lenders had difficulty collecting payments on retail property loans as many tenants' in-store sales plummeted and some major store chains even went bankrupt, and on office building loans as less office space was rented with more people working from home. But industrial and apartment property loans did not present the same problems – producers kept producing, and residential tenants usually had job or unemployment checks to pay rent with.) Key measures analyzed in income-producing real estate lending are the *loan-to-value ratio* (percentage of property value paid for with borrowed money), which lenders often want to keep at 70% or lower, and the *debt coverage ratio* (cushion of the property's net operating income over the principal and interest *debt service* payments required on the loan), which lenders often want to see at a multiple of 1.3 or higher. But there can be tradeoffs; DCR increases with the lower payments over a longer amortization period, but the longer time frame also increases uncertainty regarding the borrower's ability to refinance or sell for enough to make the needed balloon payment. So a higher DCR in these circumstances might be accompanied by a required lower LTV and/or a higher interest rate.[18]

When an income property is sold the loan might be assumed by the buyer (the buyer then is directly obligated to make the payments; the lender typically would have the right to amend some of the terms, or even to disapprove assumption by a buyer seen as a higher credit risk), or the property could be purchased subject to the loan – then the buyer is not directly liable for paying, so it is a form of "nonrecourse" financing not seen in home lending, but the buyer will likely lose the property to foreclosure if payments are not made. (It may be counterintuitive, but lenders often prefer to make nonrecourse loans on income-producing real estate, because when borrowers default the lenders want to foreclose quickly and discourage incentives for borrowers to take legal steps to delay the process. A court might require restitution on a nonrecourse loan if the borrower has engaged in fraud or other inappropriate conduct. Risk is higher for the lender on a nonrecourse loan, of course, with a higher interest rate charged accordingly.)

But foreclosure can bring its own problems for a lender. If the real estate market is strong the borrower has no need to default, and if it is weak the lender that forecloses will not likely be able to sell the property for a price that covers all it is owed. A CRE lender might offer the borrower a "discounted payoff" of the loan for less than the principal still owed; or might attempt a workout that gives the borrower a lower interest rate, reduced principal to repay, or an extended time to pay, with a deed in lieu of foreclosure given to the lender if a workout attempt is unsuccessful (the borrower cooperates with the lender to get the property into the lender's hands). The lender's confidence in the borrower can help determine which steps are taken; this is where the borrower characteristics can matter. If an income-producing real estate borrower defaults on payments the lender might have the right to direct the borrower's tenants to pay their rent directly to an account controlled by the lender. (A CRE loan might have a condition stating that the business borrower is in default if it does not stay open and in operation, even if monthly payments are being made – a situation with some similarities to what we saw with some income property leases.) Escrow or impound accounts, which provide for the lender to directly pay important amounts the borrower will owe to third parties, sometimes are used with loans on income-producing real estate, as they are with high loan-to-value home loans.

Prepayment penalties are more common on fixed interest rate income property mortgage loans than on their residential counterparts; they sometimes work like call premiums on corporate bonds, with an initial period during which prepayment can not be made, followed by permitted prepayment with a penalty that declines as the years pass over the loan's remaining life. (It could even be a "yield maintenance" penalty high enough to replace all of the lender's foregone payments, known as a "make-whole" call premium in corporate borrowing.) Of course, these kinds of protection for the lender are likely, in a competitive market, to result in a lower interest rate charged to the borrower. Variable interest rate CRE loans usually do not carry early repayment penalties, since borrowers are not motivated to repay just when the lender does not want to be repaid. CRE borrowers often prefer variable rates because the initial interest payments are lower while the lack of penalties offers more repayment flexibility, though lenders may require variable rate borrowers to hedge or "cap" the risks of rising rates that the borrowers might have difficulty paying – as happened to some borrowers as interest rates repeatedly rose in 2022 and 2023. (Caps are derivatives; their value is derived from interest rate movements. A lender making a variable rate loan might use a corresponding derivative called a "floor" to assure that it collects enough interest to cover its costs if rates fall.) Because an income property purchase can require such large dollar amounts, a particular institution might serve as an organizing "lead" lender and enlist other participating lenders to provide the total needed financing to a buyer.

Loans for income-producing real estate also can be complicated by the inclusion of high dollar amounts of things that are personal property (business equipment, or think of all the appliances for a large apartment complex), or at least might be classified as personal property, during some periods in a new project's development until those items become fixtures. A lender's security interest in items other than real estate generally follows rules spelled out in the Uniform Commercial Code rather than the laws that apply to real estate mortgage finance, and whether an item is treated as a fixture or personal property in a given transaction can depend on the intent of the seller and buyer.

Income property loans often are sold directly by originators to investors, but financial firms also have had some success in bundling commercial property mortgage loans into commercial mortgage-backed securities (CMBS, as opposed to the more standardized residential RMBS discussed earlier), which promote liquidity for originators of income property loans and allow more diversification opportunities for investors. Because CMBS do not have the payment guarantees from Fannie Mae/Freddie Mac/Ginnie Mae so often provided on RMBS backed by standard residential loans, CMBS investments carry default risk (especially the riskier tranches of multi-tranche issues, in which some investors get paid before others). And because CMBS are a type of bond, they typically will not be purchased by cautious bond buyers unless they have been rated, like other non-federal bonds are, by one or more of the well-known bond rating agencies noted earlier (just as the RMBS sometimes issued by private investment firms have to be rated to be easily sold). Controversy has arisen over the potential conflict of interest in a system in which bond issuers pay the firms that rate them – even getting preliminary feedback on likely ratings before deciding which ratings firm(s) to employ.

As suggested above, CMBS cash flows may be broken into tranches to allow the security buyers more flexible choices on payment structures and risks, with lower-risk tranches carrying higher ratings, as seen with collateralized mortgage obligations in the RMBS market. Just as investors can monitor activity in the stock market by looking at the values of various stock market indexes (Dow Jones, S&P 500), they can monitor the CMBS market through a series of CMBX indexes. They can even speculate by engaging in trades relating to the index values, such as short-selling a particular index if they think the prices of a particular type of CMBS are poised to decline.

A commercial mortgage-backed security issue can be secured by multiple properties of the same type, such as a group of rental houses, or sometimes multiple properties of different types. A CMBS issue might even be based on a single borrowing organization with a single underlying real estate asset, usually a signature commercial property (as opposed to residential RMBS, with each bond holder's claim always backed by the monthly payments from a huge number of home loans). These "single-asset bonds" can be especially risky compared to CMBS with more diversified underlying asset bases, because investors' claims depend on the cash flows generated by – or ultimately the resale value of – just one property, such as a major hotel or office building. Bonds totaling $975 million, backed by the famous Fontainebleau Hotel in Miami Beach, lost value when revenue from the hotel's lodging, restaurant, and other businesses plummeted during the Covid-19 economic shutdown in early 2020, and the borrower tried to negotiate a temporary forbearance on interest payments.[19] Bonds backed by the Mall of America also suffered missed interest payments during that period,[20] and a $300 million loan on Chicago's Palmer House Hotel was foreclosed on in fall 2020 after several months of missed payments to holders of bonds backed by the loan.[21]

A final form of income property lending we might note is *mezzanine* financing. Just as a mezzanine is a partial floor located between a building's first two stories (perhaps with a seating area or café), mezzanine financing falls in the range between debt and equity (in business finance preferred stock is sometimes called a form of mezzanine debt). Often mezzanine financing on income producing real estate is unsecured, so the note is not accompanied by a mortgage that is recorded to give the world notice of the borrower's obligation. If this debt exists on top of loans secured by the real estate, then the lender faces heavy risk, and the interest rate charged is accordingly higher.[22]

VIII. Some final observations

- Because of the strong influence of the secondary mortgage market, the paper work done in connection with residential mortgage loans has become standardized. Primary mortgage market instruments are designed to conform with the secondary market's needs; those that do not conform might not be salable in the secondary market. So borrowers have very little ability to negotiate terms or conditions on basic home mortgage loans. This standardized documentation facilitates the creation of mortgage-backed securities; securitizers can buy residential borrowers' promissory notes without worrying that the notes will contain unusual/unexpected terms.

- Home mortgage loan interest rates had been very low in recent years, reaching all-time lows in fall of 2021, about 2.65% annually for 30-year, fixed-rate commitments, but they started rising steadily coming into 2022 as the Federal Reserve increased interest rates to address inflation, rising to 7.08% by November 10, 2.7 times as high in less than a year. After dipping a bit in subsequent months, the 30-year rate was at a high 7.79% on October 26 of 2023 (at a lower 6.87% on March 21, 2024). When your ancient instructor worked in mortgage lending in the late 1970s, an annual interest rate for a 30-year loan in the 7.5 to 8.5% range would have been considered reasonable (the highest annual rate on record for 30-year fixed-rate loans was 18.63%, when interest rates in general peaked with expected high continued inflation late in 1981).[23] The low interest rates of recent years led large numbers of home borrowers to refinance. The Federal Reserve's repeated increases in rates over 2022 and 2023 led to serious reductions in refinancing activity, which had driven much of home mortgage lenders' (especially non-bank lenders') growth in business and employment, and profitability, in in the recent past. In fact the steep decline in refinancing activity, along with reduced home buying, that accompanied 2022 and 2023's rapid interest rate run-up led mortgage lending firms to terminate employees, many of whom had to repay six-figure signing bonuses they had received during the boom years of all-time low rates (the bonuses had been structured as loans that would be forgiven after the recipient had worked for a period such as two years).[24]

- A home mortgage borrower seeking a reduced monthly payment might refinance if the interest rate available on a new loan is below the rate being paid on the existing loan – but refinancing requires the high costs of creating a brand new loan, so deciding whether to refinance involves a careful net present value analysis (see Topic 12). Another way to reduce monthly payments is to *recast* the loan; the borrower makes an always-allowed early repayment of principal ($5,000 to $20,000 might be required), and then after charging a relatively small service fee (since no new note is created) the lender recomputes payments, typically for the remainder of the original term, based on the lower remaining principal.[25] (While there are some advantages to having FHA and VA loans, generally they can not be recast.)[26] Recasting does not change the interest rate paid, but does require repaying a chunk of principal that refinancing does not, so the recasting decision might involve an opportunity cost analysis; if interest rates across the economy have risen we might question why someone would take, let's say, $8,000 out of a 6% savings account to pay down $8,000 in principal on a 5% mortgage loan. Of course, a borrower can always pay principal back early, with no fee owed, but if there is not a formal recasting then the result is for payments to stay the same, with full repayment achieved earlier than the end of the original term.

- Home mortgage borrowers' traditional ability to refinance without a direct cost (bearing only the cost of getting the replacement loan) created the same type of "heads borrower wins, tails lender loses" situation we noted with home buyers' potentially assuming their sellers' loans: if market interest rates decline a borrower refinances to a cheaper loan and dumps principal into the lender's lap when the lender must reinvest for a lower return, while if rates in the market rise the lender would love to see the borrower refinance to a higher rate, but that generally does not happen (borrowers do occasionally refinance to higher interest rate loans, typically to "cash out" some built-up equity at a cost still less than most other money sources would carry at that time).

- When home owners refinance the motivation generally is obtaining a lower interest rate, to reduce subsequent monthly payments. Owners of income-producing real estate, on the other hand, often refinance as a means of getting some cash from the investment without having to sell, and without having to recognize income and pay income tax. Think of an income property bought several years ago for $1,000,000: $300,000 in owner's money and a $700,000 loan. Now the property is worth $1,400,000, and only $600,000 is owed on the loan. If lenders would be comfortable with a 70% loan-to-value ratio the owner could get a new loan of .7 x $1,400,000 = $980,000, repay the existing $600,000 loan, and keep $380,000 (minus transaction costs, which could include an early repayment penalty on the original loan). The amount kept would not be treated as taxable income, because it is debt that must be repaid, but the property's operating income would be *expected* to service the higher debt (not guaranteed, of course, so some risk is involved). If all goes well the owner gains liquidity: immediate use of money that otherwise would stay tied up in the property's value until a later sale date. Of course, the added amount refinanced must be repaid with interest, so the question may be whether the owner's periodic opportunity rate on the extra dollars borrowed is sufficiently above the interest rate on the loan.

Consider this simplified example. The owner borrows the added $380,000 noted above, netting $340,000 after meeting related costs. The new loan carries the same 5.8% annual interest rate that the original loan did. If the expected holding period is 10 more years, then by the sale date the added amount owed will be $380,000 x $(1.057)^{10}$ = $661,505.52. But today's cost of that obligation, if the investor's opportunity rate is 8.2% annually, is $661,505.52 ÷ $(1.082)^{10}$ = $300,788.24: a present value cost less than the $340,000 immediately received.

- As noted earlier, credit reporting organizations are private companies that collect information on people's credit habits (amounts borrowed and from whom, repayment histories – a function that used to be carried out by locally-based "credit bureaus"). Traditionally, factual information was simply reported to lenders, who then could choose how much emphasis to place on specific bits of information, such as a late credit card payment a few months ago. But now the three major nationwide credit reporting organizations use mathematical models to predict, based on a numerical credit score, whether a particular borrower is likely to have financial problems and make late payments. This use of *credit scoring* has generated controversy amid charges that the models can unfairly discriminate against certain classes of borrowers under the guise of being scientific. Controversy also has arisen from credit scores' use in non-lending situations, such as setting homeowner's insurance premiums.

- Problems arose in the mid 2000's mortgage lending crisis from "low-doc" (low-documentation) loans, with less documentation than Fannie Mae and Freddie Mac required on loans they would purchase. These loans could be arranged more quickly, and sometimes worked well for self-employed borrowers or others whose income varies from year to year and thus is difficult to document. But a lender's risk on these "Alt-A" loans (a step above subprime) obviously could be higher than for standard loans, so the interest rate generally was higher as well, unless the borrower had a sufficient down-payment and a strong credit history. In the worst cases these arrangements were "no-doc" or "liar's loans," or even "Ninja" loans (no income, job, assets), with the borrower reporting figures that were inaccurate, or at least inadequate for the lender to make an informed decision.

- A controversy seen in the runup to the mortgage meltdown was the charge that some lenders engage in *predatory lending*. The general issue is whether lending institutions are making loans with conditions that are burdensome to low-income borrowers. But the term does not seem to be clearly defined; examples offered have ranged from the truly disturbing (lenders encouraging unsophisticated borrowers to refinance when they receive no financial benefit from doing so after paying heavy fees) to the more expected and mundane (charging higher interest rates and fees in keeping with the higher risk of *subprime* lending on homes or consumer purchases).

- What surely should be classified as predatory lending was some mortgage companies' practice, again in the pre-crisis days of the early 2000s, of placing borrowers into loans they had little prospect of repaying, typically with the goal of earning higher commissions on more dollars lent. Instead of documenting borrowers' income and credit histories, the lenders arranged low-documentation ("low-doc") and no-documentation ("liar") loans that bypassed longstanding underwriting rules; whatever income a borrower reported to support a desired loan amount would be accepted as valid. Also helping borrowers appear able, on paper, to meet required payments on these subprime loans were artificially low "teaser" interest rates set for the first year or two of the repayment period, followed by an adjustment to high interest rates (and increased monthly payments) in later years to reflect the fact that these were risky loans.

  The notes were sold into the secondary mortgage market to buyers who expected overextended borrowers to be able to sell their houses for enough to repay any amounts owed, on the logic that "real estate values always go up." The plan unraveled when so many borrowers at one time were unable to make their monthly payments, especially after their interest rates reset to the higher levels, that empty foreclosed homes flooded the markets in many communities, and real estate values actually declined, severely in some locations. Regulators imposed stricter underwriting rules after the meltdown, but recent years have seen a troubling trend toward relaxed standards as housing prices have rebounded and lenders' fears have subsided. (We knew that real estate values can fall, as they did in the early 1980s when interest rates shot up, causing home buyers to bid lower prices to keep their payments affordable. That period also was when the savings and loan industry began to collapse, as the interest rates S&Ls had to pay on savers' maturing short-term accounts came to exceed the rates being earned on the long-term loans those deposits had funded. This same effect was seen in the failed Silicon Valley and Signature banks in March 2023; the banks used short-term deposits to make long-term CRE loans or buy long-term RMBS or U.S. government bonds, and they did not have the cash on hand to pay depositors (often with high-dollar, uninsured deposits) who wanted to withdraw money when interest rates were rising.)

- Someone with an investment portfolio could pay for a house by selling investments and paying cash, of course. But an alternative form of housing finance has long been to borrow against the value of stocks and bonds in a securities brokerage account; under that plan securities that have appreciated in value do not have to be sold to generate the needed money, capital gain taxes do not have to be paid, and returns earned on the securities offset the cost of borrowing. There is no mortgage; the securities, rather than the house, serve as collateral on this type of "margin" loan. No appraisal has to be done, and loan application/processing fees are far lower than on a standard mortgage loan. The interest rate also might be lower than what would be seen on a typical mortgage loan, because the lender's risk is so low – the brokerage firm does not have to go through a foreclosure process to get the right to sell securities under a margin loan; the annual interest rate might be about 1.5% above the federal funds rate at which banks make short-term loans to each other). The interest paid might even qualify as an investment expense that the borrower can deduct from adjusted gross income in computing taxable income for U.S. federal income tax purposes.[27] The 21st Century twist on this old plan is to borrow against the value of cryptocurrency, perhaps through a De-Fi (decentralized finance) platform that keeps the borrower's identity confidential.[28] A risk to the borrower under a securities or crypto-based plan is that a decline in the assets' value could trigger a "margin call" that requires selling some of the assets under adverse market conditions.

- In mid-2022 there was a low supply of available single-family houses in many locations; reasons included purchases of existing units by investors and newly remote workers, and a shortage of labor and materials for building new units. Homes for sale often received bids from multiple potential buyers, sometimes at prices substantially above sellers' asking prices. Buyers who could pay fully in cash, without having to borrow, were frequently the ones whose offers sellers accepted, because of less uncertainty and a quicker expected closing (and no appraisal that might complicate the transaction was required). Winning buyers also sometimes agreed to forego inspections. (Substantial increases in interest rates by the end of the year curtailed buying activity considerably.) An all-cash buyer might get the money by selling other assets or getting a short-term "bridge loan" secured by his or her current home's equity (or by borrowing against the values of stocks or crypto, as discussed above), which was repaid after the sale. Or they could have reached out to relatives, but there were also companies that would advance the cash to a buyer for a fee – or perhaps purchase on a buyer's behalf; a "power buyer" like New American Funding or Ribbon Home would buy a house for a client and then rent it to them until permanent financing could be arranged. Under either plan buyers then tended to get more traditional mortgage loans, once the transactions were complete, to repay their initial sources of cash. But when interest rates rose in 2022 the business model faced some strains; buyers had difficulty getting standard loans, and the power buyers were stuck being landlords longer than expected, or owning homes they did not want.[29]

- A loan a home buyer gets from parents or other relatives should be formalized with appropriate documentation and, as in all mortgage lending situations, the mortgage should be recorded. A company called National Family Mortgage advises family lenders on loan structuring and provides year-end statements on interest paid/received for federal income tax purposes (interest the borrower pays is income to the lender, and possibly an amount that reduces taxable income for the borrower).[30] Interest must be charged, or the federal government will view the transfer as a gift disguised as a loan, which could cause estate tax headaches for the lender – though the parent or other lender can give a borrower up to $18,000 per year as a gift with no estate tax problems (two parents could give daughter and son-in-law a combined $72,000, which the borrowers could then use to make payments on the loan – just like parents could give the young couple $72,000 toward a down payment, or for making payments on a traditional loan). For March of 2024 the IRS minimum "applicable federal rate" for long-term family loans was 4.31%[31] (average annual market interest rate on 30-year fixed-rate loans was almost 7%).

  A parent or other relative also could help with financing by cosigning or guaranteeing a borrower's loan. A cosigner typically has all the obligations of a primary signer, but does not have an ownership stake that provides some control over the property (of course owning the real estate jointly carries its own risks). A guarantor has responsibility only if the loan goes into default.

- Crowdfunding of real estate loans: Groundfloor, a division of crowdfunding platform Wefunder, advertised in March of 2024 that it offers "short-term, high-yield" real estate-backed lending opportunities (first lien) to all, with investments as small as $10 accepted and returns having averaged 10% annually over multiple years. The organization's web site states that a lender can choose the desired level of risk, and that repayments tend to be received after about nine months – suggesting that borrowers have been doing short-term projects, like house rehabs.[32] It will be interesting to see how the reported results hold up in an era of higher interest rates.

- A loan to purchase a rental house could well carry an annual interest rate 300 to 500 basis points higher than a loan for the purchase of a residence. At the end of 2022 rates on home loans hovered just under 7% annually, while loans on rental houses carried 10% to 12% annual interest rates.

- In November 2022 the Illinois Housing Development Authority used a federal government grant to renew a Covid shutdown program to help financially struggling home mortgage borrowers. The Illinois Homeowner Assistance Fund provides a borrower with up to $60,000 toward making loan payments or paying property taxes, homeowner association fees, or homeowners' insurance costs. The borrower does not have to repay the funds received, but the payments typically must be made directly to the mortgage lender, taxing authority, *etc*.

IHDA also provides down-payment assistance, ranging from $6,000 (need not be repaid if the home is kept for 10 years) to $10,000 (repaid after 30 years, or when the home is sold or the loan refinanced if before 30 years).

- The secondary market for nonconforming home mortgage loans ("jumbo" notes too large to be purchased by Fannie/Freddie) became constrained during the Covid crisis, as "correspondent" banks that traditionally had purchased jumbos from originators stopped doing so, and investment firms stopped bundling jumbo loans into private label mortgage-backed securities. Competition usually keeps interest rates quoted by different lenders pretty similar, but the lack of competition in those unusual circumstances led to borrowers seeing a range of interest rate offers, with some banks quoting lower rates to customers who held large savings balances.

- Since the financial crisis of the mid-2000s, traditional banks' home mortgage lending has tended to focus on higher-income borrowers. Middle/lower-income households' loans have come increasingly from "nonbank" lenders; the best-known is mortgage banker Quicken/Rocket Mortgage. Nonbank lenders originate loans and sell the notes in the secondary mortgage market, often servicing the loans they have sold (earning fees by collecting loan payments and passing the money along to the note buyers), though the mortgage servicing rights (MSRs) sometimes are sold to third parties. A servicing company actually pays for the right to service a pool of loans, in anticipation of profiting from the fees collected. (Those fees terminate when loans are repaid, as happens on a large scale when interest rates in the market decline and many borrowers refinance their existing loans. When interest rates rise fewer people get loans, but fewer existing borrowers prepay, so servicers collect more in fees. So a mortgage lending operation that both originates and services home mortgage loans has some elements of diversification in its sources of income.)

- One obligation the servicer may owe in return for the fees it collects is to fully pay the note-holding investors each month even when borrowers fall behind, and in the spring 2020 economic shutdown borrowers with loans backed by the federal government (*e.g*., FHA-insured, or included in securities guaranteed by Fannie Mae or Freddie Mac) were granted several months of forbearance and many stopped making payments, and loan servicers faced severe liquidity problems as they waited for cash to come in from borrowers' resumed monthly payments, or from reimbursement by the federal guarantors if defaults occurred. (Fannie and Freddie agreed to relieve the servicers and pay investors after four months of missed borrower payments.)

- Native American tribal lands or the land on reservations generally is owned by federal trusts, under the Indian Reorganization Act of 1934 (allegedly enacted to protect tribes from losing land to fraudulent claims), and tribal members who want to buy or build homes on those lands must lease the land from the government. Resulting problems with using the land as collateral restricted traditional lenders from making home mortgage loans on native lands; title complications arise because of the underlying land being owned directly by the government trust and only indirectly by the home owner. But there are some lenders that specialize in making these complex types of loans. The U.S. federal Department of Housing and Urban Development (HUD) created the Indian Home Loan Guarantee Program in the 1990s to address problems members of indigenous tribes encountered in getting home mortgage loans on tribal lands. But borrowers still face complications, including delays caused by the need for approvals from the applicable tribes and the Bureau of Indian Affairs.

- HUD also has a "Good Neighbor Next Door" purchase program (not really a loan program) that allows firefighters, police officers, emergency medical technicians, and pre-K through high school teachers to buy HUD-owned homes in designated "revitalization" areas for discounts of 50% from market values. The idea, of course, is to encourage people with particular skills or backgrounds to live in areas where their influence can add special value. The buyer pays cash or obtains a traditional loan (conventional, FHA, VA). If the purchased home is maintained as a primary residence for three years, afterwards the owner can sell the property for its full market value and retain any amount that does not have to be repaid to a lender. A special Freddie Mac program lets police/fire, teachers, and health care workers buy houses with very low down-payments.

- Freddie Mac has developed an Islamic mortgage loan, designed to comply with Islamic law's prohibition on charging or paying interest. The home buyer and the lender become joint owners, and each month the buyer makes a principal payment, plus a rent payment for using the lender's portion of the property.

- Fannie Mae has created "location-efficient" mortgage loans that allow higher loan-to-value ratios for families living near bus or train stations in large urban areas. The logic is that someone who does not have to spend money maintaining a car can afford to spend more servicing a mortgage loan. At least one major lender has offered loans on solar-heated houses with favorable terms; the thinking is that the risk to the lender is reduced because the lower energy bills will leave the home owner with more money to apply toward loan payments.

- Loans on mobile homes have been found to be less subject to prepayment than traditional home loans, because the smaller principal amounts involved bring about less benefit for those who could refinance to lower rates.

- Special "residential transitional" or "flip" loans are available to people who buy houses to rehabilitate and then resell quickly. These loans tend to be short-term (a year or less in original maturity) and carry high interest rates.

- Another past home mortgage lending controversy involved charitable organizations helping home buyers get down-payments. A home seller (sometimes a builder) registered with a charitable agency, such as Illinois-based Partners in Charity or the Nehemiah organization. A buyer approved by the agency bought a house from a registered seller. The agency gave the buyer enough money for a down-payment and closing costs (roughly 5% of the purchase price), so the buyer needed no cash for the transaction; a lender willingly made the loan because of FHA backing. Then the seller made a tax-deductible donation equal to the down-payment and closing costs (plus a small premium) for the charitable agency to use in future transactions. Lawmakers feared sellers undermined the charitable intent by tacking their "contribution" costs on to the prices they charged. Government auditors also felt these programs showed excessive default rates. 2008's Housing and Economic Recovery Act (HERA) outlawed deductibility if the donor will benefit from a contribution made to a housing assistance group, though the contribution might be treated as a selling cost toward reducing the capital gain on a home sale (rarely taxed anyway, since a capital gain of up to $500,000 on a home sale generally is not taxed).

- Yet another controversy of an earlier era was *mortgage revenue bonds* – in the late 1970s, many municipalities across the country issued them. Local governments used their municipal borrowing powers to issue bonds, then used the proceeds to make mortgage loans and spur their local housing markets. The loans carried low interest rates in a competitive market, because the interest was tax-free to recipients. Fairness issues arose because the total amount of money available typically was very limited, so not everyone who wanted one of these loans could get it. The allocation process usually involved waiting in line, camping out for several days outside a participating lending institution's office to be at the front of the line when the loans' official application day arrived – the way tickets to major rock concerts used to be distributed. Were those who could afford to take time off work to wait in the camping-out line, perhaps using vacation or personal days, truly the neediest or most deserving of this type of housing finance assistance?

- Specialized institutions can facilitate the acquisition, selling, and financing of large-scale income producing properties (or portfolios of these properties). Dallas-based Eastdil Secured LLC (with offices in Chicago and other locations as well), which describes itself as a "global real estate investment bank," has divisions that handle sales, debt and private equity financing, and the issuance of commercial mortgage-backed securities.

- First/senior loans that are secured by residences, and made by federally insured depository institutions or insured/guaranteed by federal agencies, generally are not subject to state usury laws that limit interest rates charged, because of a U.S. federal banking and lending deregulation law passed in 1980.[33]

- In the mid-2010s to early 2020s some European home owners actually made money on their mortgage loans. To promote economic growth the European Central Bank set short-term interest rates below 0% (pay to save, get paid to borrow) in 2014, and a borrower with a variable interest rate could end up earning money on her mortgage loan if the margin added to the negative index yielded a net negative interest rate. Spanish law prevented banks from paying borrowers, but many mortgagors in Denmark and Portugal had been receiving monthly payments from their lenders for a number of years.[34] •

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