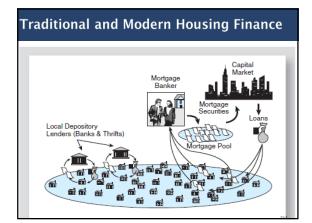
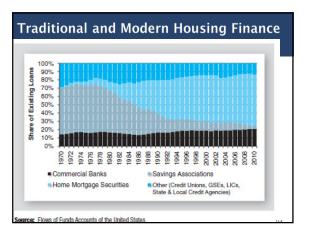


## Mortgages and Mortgage Markets

oan Type	Amount	Percent of Total
Residential (1-4 family)	\$10,336	76%
Apartment (multifamily)	841	6
Commercial	2,249	17
arm	133	1
otal	\$13,559	100%





## Thrifts

- Formerly backbone of home mortgage finance
  - Dominated mortgage lending
  - Extremely localized
  - Fatal flaw: Funded long-term loans with short-term savings

## Thrifts Today

- Most are now banks (acquired or converted)
- Others often have "boutique" roles:
  Mortgage banker Sub-prime lender
  - Commercial loans Multifamily loans
- Emphasis on ARM lending (40% of loans)

## **Commercial Banks**

- Historically: Real estate needs of business clients
  - Business-related real estate loans
  - Home loans
  - Personal investments
- Assumed former roles of savings associations
- Large-scale construction lending

#### Portfolio and Non-Portfolio Mortgage Lenders

- Portfolio Lenders (depository institutions)
  - Banks
  - Thrifts
  - Large credit unions
- Non-portfolio lenders
- Mortgage bankers
- Mortgage brokers
- May include credit unions and small banks

#### Non-Portfolio Lenders: Mortgage Companies

- Mortgage banker: Not a bank accepts no deposits
  - Originates loans to sell
  - Retains right to service the loan for a fee
- Borrows money from Banks to finance (warehouse line of credit)
- Mortgage broker: Brings borrower and lender together for a fee; never owns the loan

## Mortgage Banker

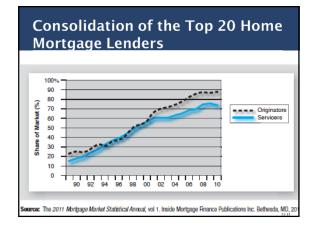
- Originates and owns loans long enough to:
  Sell loans, or
  - Pool and securitize loans
- Servicing is core profit center
- Three-step process:
  - 1. Issue mortgage commitment to potential borrower
  - 2. Close or originate loan (funding loan)
  - 3. Sell loan

#### Mortgage Banker as Servicer

- Collects monthly payments, remits to investor
- Collects and remits payments for property
- taxes, hazard insurance and mortgage insurance
- Manages late payments, defaults, foreclosures
- Receives fee of .25% to .44% (25 to 44 bp)
- Typically accept loss at origination of a loan to obtain servicing rights

### Emergence of Megamortgage Bankers

- Megabanks saw home mortgage lending as profit center
- Cyberelectronics imply huge economies of scale
- Four modes of operation:
  - Traditional "face-to-face" or "retail" lending
  - Wholesale mortgage banking (e.g. buys from mortgage banker)
  - Internet lending
  - Lending through brokers
- Tremendous consolidation in last decade



#### **Evolution of the Secondary** Mortgage Market

- Pre-1970: Limited and informal
- Lack of standardization a barrier
- Large interregional differences in home mortgage interest rates (100-200 bps)
- Rising interest rates could shut down home mortgage lending through disintermediation

#### **Beginning of the Modern Secondary Mortgage Market**

- Fannie Mae (1968): Spun off from HUD to become a primary purchaser of FHA and VA mortgage loans
- Ginnie Mae (1968): Empowered to guarantee "pass-through" mortgage-backed securities based on FHA and VA loans
- Freddie Mac (1970): Formed to purchase and securitize conventional home loans from thrifts

#### Mortgage-Backed Securities (MBS)

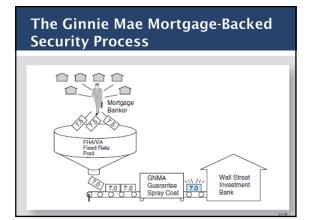
- Multiple mortgage loans in a single pool or fund
- Security entitles investor to pro rata share of all cash flows
- Loans in a given pool will be similar:
- FHA/VA; conventional
- Same vintage (new or recent loans)
- Similar interest rates
- Nearly two-thirds of all new home loans have been securitized in recent years



# The Growth of Home Mortgage

## Role of Ginnie Mae in the Secondary Mortgage Market

- GNMA created first major pass-through MBS program
  - Does not buy mortgages
  - Guarantees timely payment of interest and principal to holders of GNMA securities.
  - Guarantees only securities based on FHA/VA loans



#### Fannie Mae

- Original mission: Secondary market for FHA/VA
- Became privately owned but still U.S. chartered
  - Public mission for housing
  - U.S. Treasury financial credit line available
- Surpasses Freddie Mac in buying conventional loans
- Funded through both debt issues and mortgage securitization
- Has securitized and sold, or owns, about 23% of outstanding home loans
- Taken into conservatorship by U.S. in 2008

#### Freddie Mac

- Chartered by Congress
- Deals exclusively in conventional loans
- Securitized all loans purchased until recent years
- Financially similar to Fannie Mae
- Has securitized and sold, or owns, about 15% of outstanding home loans
- Taken into conservatorship by U.S. in 2008

#### Importance of Fannie Mae and Freddie Mac

- Have brought about standardization in:
  - Mortgages and mortgage notes
  - Appraisal forms and practices
  - Underwriting procedures and standards
  - Also, influence practices and standards in nonconforming mortgage markets

#### Importance of Fannie Mae and Freddie Mac

- Have increased liquidity of mortgage markets
  - No interstate differentials in mortgage interest rates
  - No home lending disruptions when interest rates rise
  - New sources of mortgage funds in security investors
- Heavily influence what type loans lenders make

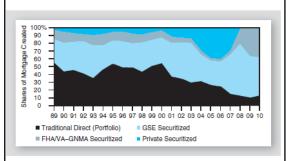
#### **Private Mortgage Conduits**

- Grew out of the market for non-conforming "Jumbo" loans
- Small market share until sub-primes emerged
- Grew explosively post-2000, mainly for subprimes
- Diminishing rapidly as sub-prime diminish
- Likely to continue as a conduit for "Jumbos"

#### The U.S. Home Mortgage System Today -Four Channels

- Local depository lending (very limited)
  Home Equity loans via credit unions
- FHA/VA GNMA securitization process
- Conforming conventional GSE process
- Non-conforming conventional private security process

## Market Shares of the Four Channels of Home Mortgage Lending



#### Where Do You Get a Mortgage Loan in Today's Complex System?

- No simple answer, except to shop aggressively
- Portfolio lenders may offer cost and interest rate advantage
- Brokers may offer service and down payment advantage
- Depository lenders may have best ARM offers
- Non-depositories may have best fixed-rate offers
- SHOP!

### Lenders' Underwriting Decisions

- Underwriting: Process of determining whether the risks of a loan are acceptable
- Three "Cs" of traditional underwriting:
  - Collateral: URAR appraisal
  - Creditworthiness: Credit report
  - Capacity: Ability to pay (payment ratios)

#### Traditional Payment Ratios for Mortgage Underwriting

- Housing expense ratio = PITI/GMI
  - *PITI* is principal, interest, (property) taxes and insurance
  - *GMI* is gross monthly income
  - Recent convention set maximum at:
    - 28% for conventional loans
    - 29% for FHA
  - Known as "front-end" ratio

#### Traditional Payment Ratios for Mortgage Underwriting

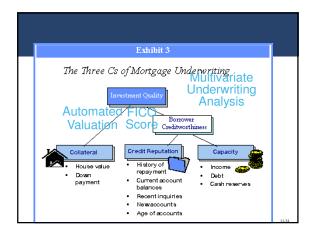
- Total debt ratio = (PITI + LTO) ÷ GMI
  - LTO is long-term obligation
  - Recent convention set maximum at:
    - 36% for conventional loans
    - 43% for FHA
  - Known as "back-end" ratio
- Note: GMI is critical. Its computation is closely regulated by ECOA

# Thinking about buying a house?

 Keep your LTO as low as possible if you want to maximize the amount of your mortgage The Three Cs of Mortgage Underwriting Borrower Creditworthi Credit atios Credit Reputation Ca History of repayment House value Income Do**wn** payment Debt Current account Cash reserve: balances Recentinquiries Newscounts Age of accounts .

## Modern Home Loan Underwriting

- Automated underwriting is dominant
  - Creation of single statistical score
  - URAR appraisal for to "automated valuation"
  - Credit report displaced by credit score
- Single underwriting index incorporates: house value, credit score, income and obligation data



## Subprime Lending

- Many households unable to qualify for "affordable" home loans
- Subprime originally targeted three borrower deficiencies:
  - Lack of income documentation
  - Weak credit
  - Seeking financing for 100% LTV or higher

## Subprime Lending (continued)

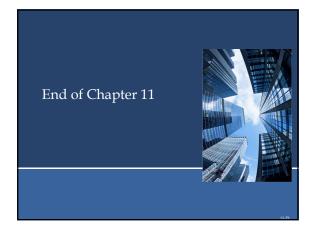
- More expensive than standard home loans
- Polar views of subprime lending:
- Fills compelling, legitimate need (beats credit cards)
- Hunting ground of predatory lenders
- In any case, spun out of control, and to disaster

## **Qualified Mortgages**

- In response to the "mortgage meltdown" following the 2008-2012 house price declines, mortgage credit has been tightened
- Top quality applicants have no problems getting loans, and interest rates are very low by historical standards
- The required documentation for borrowers has increased significantly
- The Consumer Financial Protection Bureau (created by congress) has defined a type of mortgage known as a Qualified Mortgage (as of January 1, 2014)

## **Qualified Mortgage**

- No negative amortization allowed
- No IO payments allowed
- The points and fees on a mortgage over 100,000 can not exceed 3%
- Limits the fees that someone can earn for steering you to a QM (cannot earn more on a non-QM)
- All FHA/VA and conforming loans must be QM (for next 7 years)
- Must show a borrower can afford the loan over the life of the loan (cannot be qualified on the Teaser Rate).
- Back end ratio cannot exceed 43%



7