#### Housing Finance Policy Center

#### **Lunchtime Data Talk**

Mortgage Origination—Pricing and Volume: More than You Ever Wanted to Know

Frank Nothaft, Freddie Mac Mike Fratantoni, Mortgage Bankers Association

October 16, 2013













Office of the Chief Economist

# Primary Mortgage Market Survey and Refinancing Report

Urban Institute Lunchtime Data Seminar October 16, 2013

Frank E. Nothaft Chief Economist



#### Data, Data, Data

- Primary Mortgage Market Survey
  - Longest weekly national survey of rates: 42½ years and counting
  - 30-year & 15-year FRMs, 5/1 & 1-year Treasury-indexed ARMs
- Refinance Report
  - Cash-out, Cash-in, Rate & Term
  - Product transition: FRM vs ARM, 30-year vs shorter-term
- Single-family Mortgage Originations: Science and Art
  - Benchmark to latest HMDA
  - Potpourri of data to estimate current-year volume

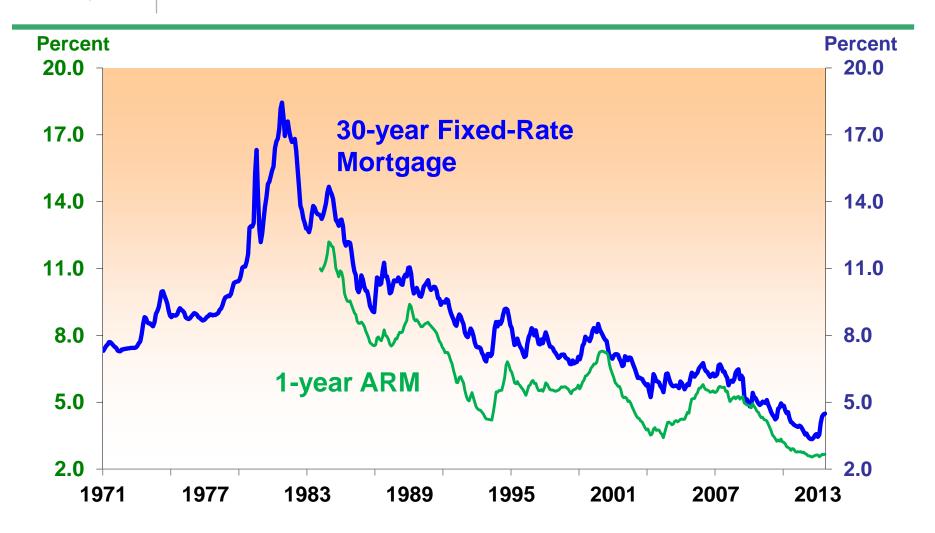


### **Primary Mortgage Market Survey (PMMS)**

- Freddie Mac introduced the weekly PMMS in April 1971
  - Business need was real-time market rates to set secondary market pricing
- Today the PMMS surveys over 100 lenders (representative mix) each week to obtain primary market quotes on 4 conventional products
  - 30-year FRM, 15-year FRM, 5/1 Treasury-indexed Hybrid ARM, 1-year Treasury-indexed ARM
  - 80% LTV, prime-credit, purchase-money, conforming (\$200,000)
  - Survey conducted Monday-Wednesday; Results released every Thursday (day before if holiday)
  - http://www.freddiemac.com/pmms/
- Other PMMS products include monthly Refinance Share and ARM share of applications and annual ARM pricing survey
  - http://www.freddiemac.com/news/finance/tab\_arm.html
  - http://www.freddiemac.com/news/finance/arm\_archives.htm



### PMMS: Longest Weekly, National Survey of Rates



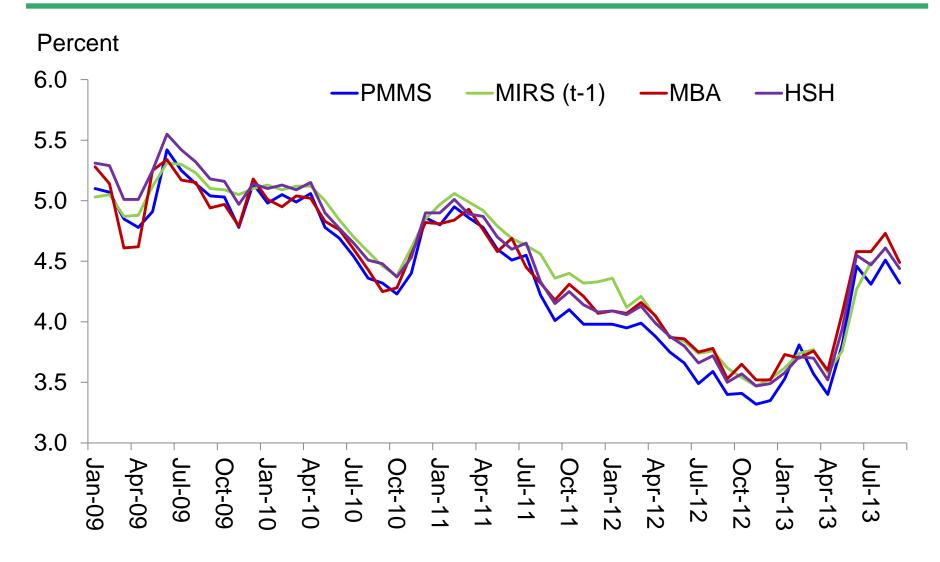


#### **PMMS** Is Widely Used and Cited

- The Conventional Mortgage Rate on Fed's H.15
  - http://www.federalreserve.gov/releases/h15/current/
- Ingredient for defining high-priced loans
  - FFIEC's Average Prime Offer Rate (APOR) used for determining high-priced loans for HMDA reporting and HOEPA statements (http://www.ffiec.gov/ratespread/newcalchelp.aspx#9)
  - New York statute uses PMMS + 1.75% to define 'subprime home loans' (Banking Law §6-m)
- Widely cited in media
  - Nearly 1,000 mentions every week and many, many more tweets



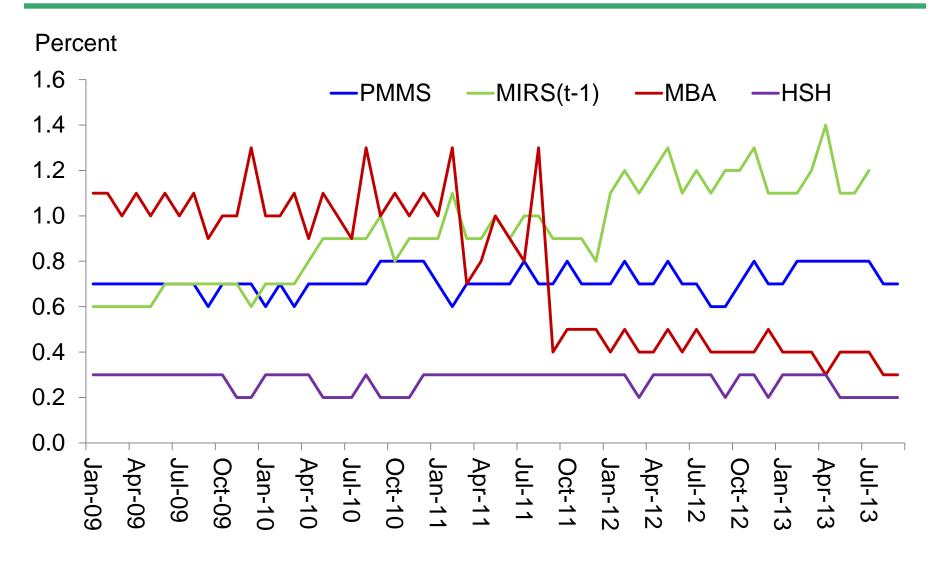
### Selected Contract Rates on Conforming 30-Year Fixed Mortgages



Sources: Freddie Mac, Federal Housing Finance Agency, Mortgage Bakers Association and HSH Associates.



### **Selected Fees and Points on Conforming 30-Year Fixed Mortgages**

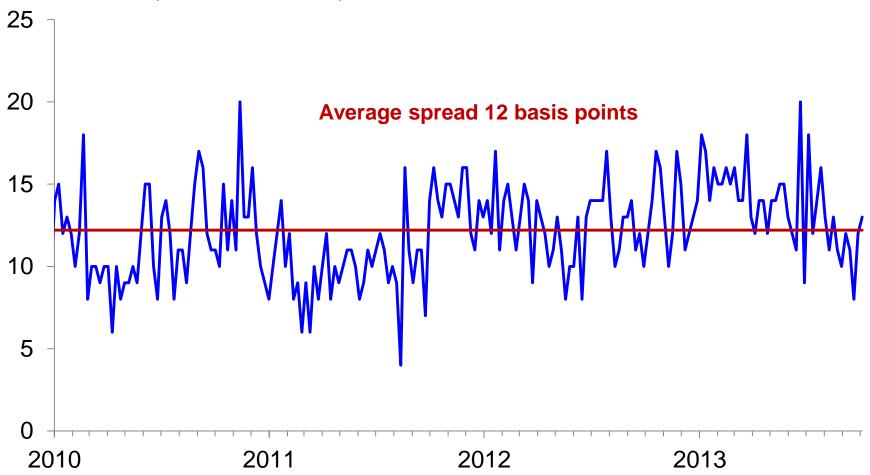


Sources: Freddie Mac, Federal Housing Finance Agency, Mortgage Bakers Association and HSH Associates.



### HSH Conforming 30-year Fixed Mortgage Contract Rate Spread to PMMS



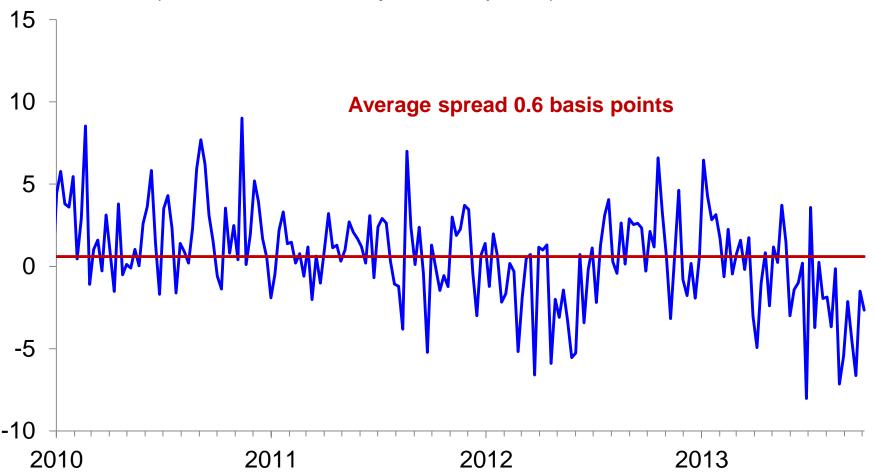


Sources: Freddie Mac and HSH Associates.



## **HSH Conforming 30-year Fixed Mortgage Effective Contract Spread to PMMS**

Basis Points (HSH less PMMS, adjusted for points)

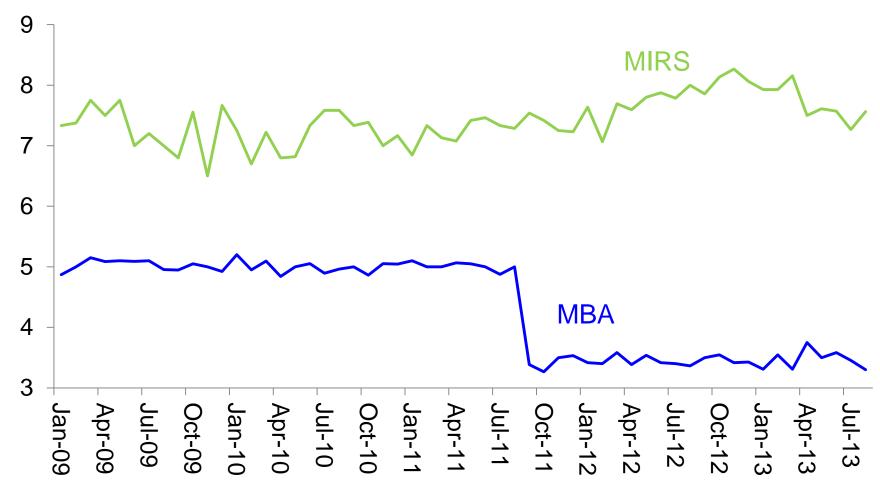


Sources: Freddie Mac and HSH Associates; assumes the MBA's conversion factor between The contract rate and fees & points



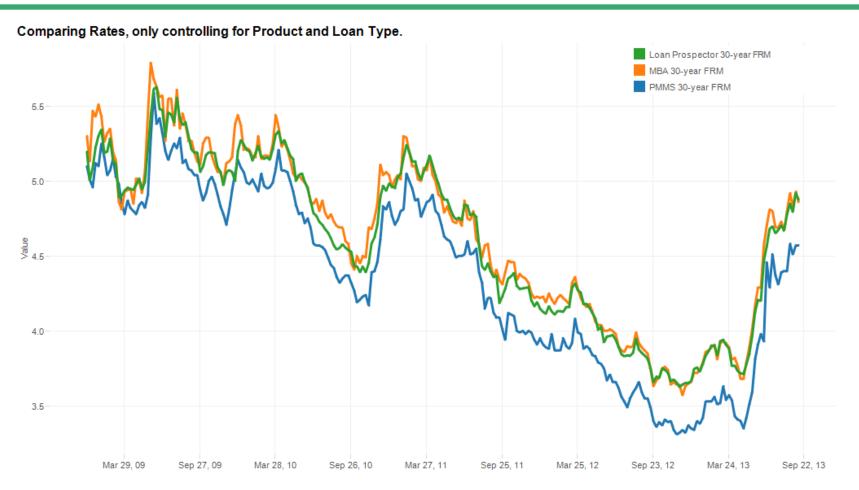
## **Conversion Factor Between Fees & Points and Interest Rate for Conforming 30-Year FRMs**

#### Conversion Factor ("DVO1")





### Why are PMMS' Contract Rates Lower Than MBA's?



Sources: Primary Mortgage Market Survey, Loan Prospector (LP) Applications, and the MBA Weekly Applications Survey. All rates are for 30-year fixed rate mortgages. For LP applications, the rate is the average contract rate for the week.



### Loan Product, Purpose, Amount, and Credit Characteristics Explain Most of Difference

Difference in Application and PMMS Mortgage Rates After Controlling for Loan Purpose, Loan Amount, and Credit Characteritics.

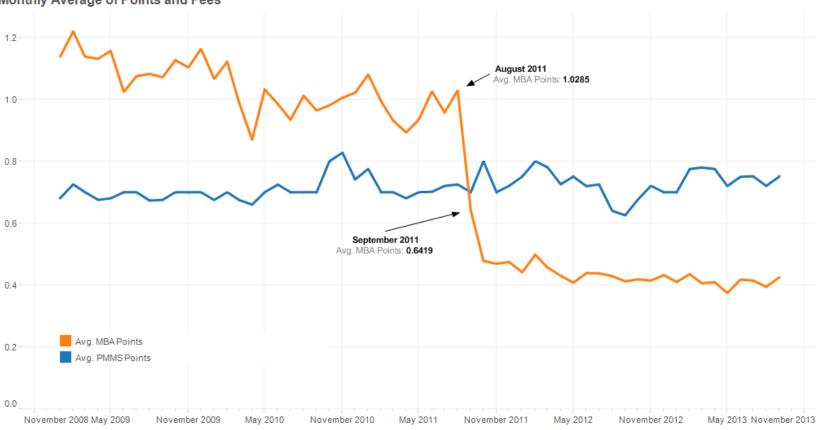


**Sources:** Primary Mortgage Market Survey, Loan Prospector (LP) Applications, and the MBA Weekly Applications Survey. All rates are for 30-year fixed rate mortgages. For the MBA and PMMS, the average monthly rate is the average monthly rate is the average contract rate for the quarter.



### **Need to Adjust for Points as Well**

In the Summer of 2011, MBA points and Fees dropped suddenly. Monthly Average of Points and Fees

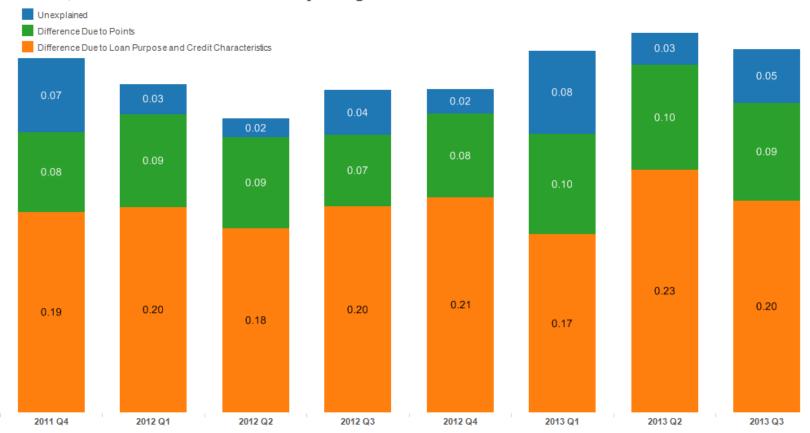


Sources: Primary Mortgage Market Survey and the MBA Weekly Applications Survey. All data are for 30-year fixed rate mortgages.



### Adjusting for Points, Mean Difference = 5 bps

Difference in Application and PMMS Mortgage Rates After Controlling for Loan Purpose, Loan Amount, Credit Characteritics and Adjusting for Points.



**Sources:** Primary Mortgage Market Survey, Loan Prospector (LP) Applications, and the MBA Weekly Applications Survey. All rates are for 30-year fixed rate mortgages. For the MBA and PMMS, the average monthly rate is the average of the weekly rates. For LP applications, the average monthly rate is the average contract rate for the quarter.

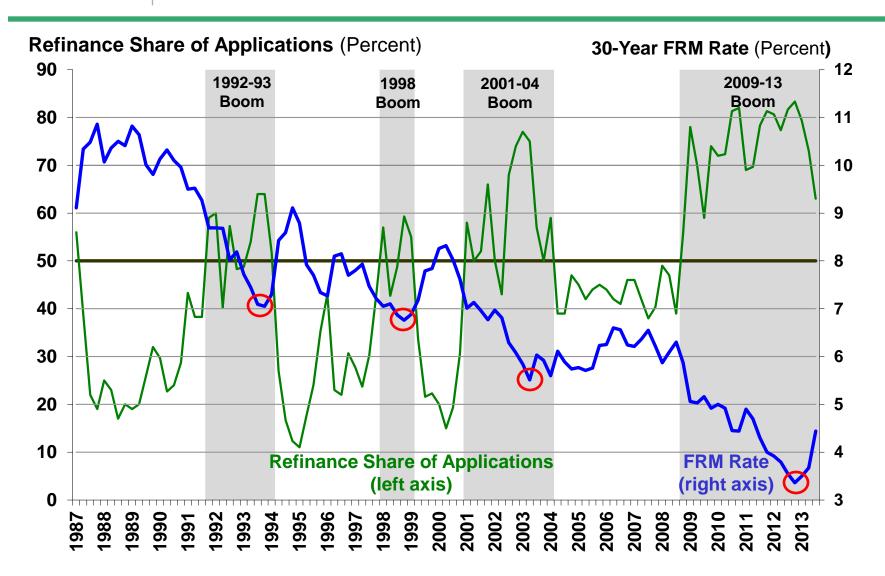


### **Quarterly Refinance Report**

- Built on "repeat transactions" loan data
  - Freddie Mac owns two successive first liens on house
  - Second transaction is a refinance
- Compare the paid-off loan with the new loan
  - Pre- and post-loan balance ("Cash-out", "Cash-in", "Rate & Term")
  - Pre- and post-contract rate
  - Pre- and post-loan products ('product transition')
  - Estimates of aggregate home equity extraction
- Located at: http://www.freddiemac.com/news/finance/

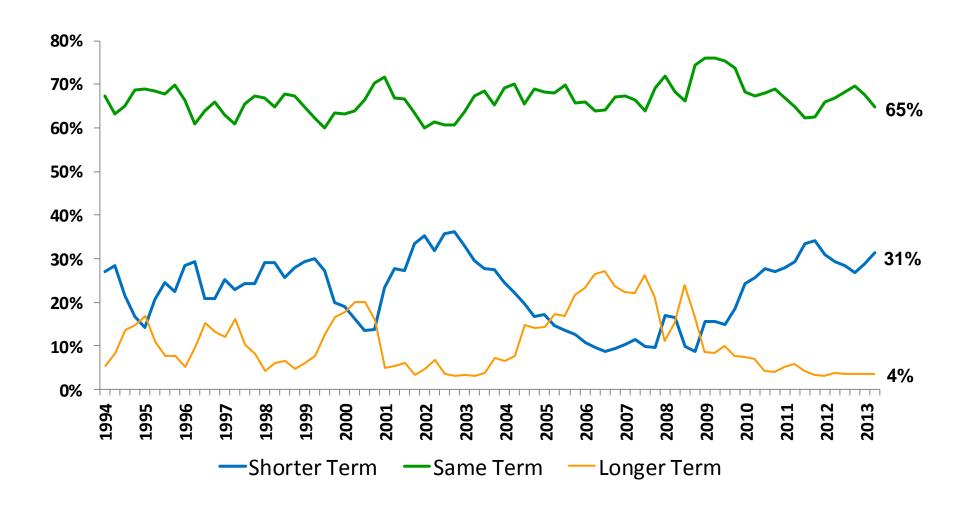


### New Mortgage Rate Lows Create Refinance Booms





#### 31% Shortened Loan Term When Refinancing

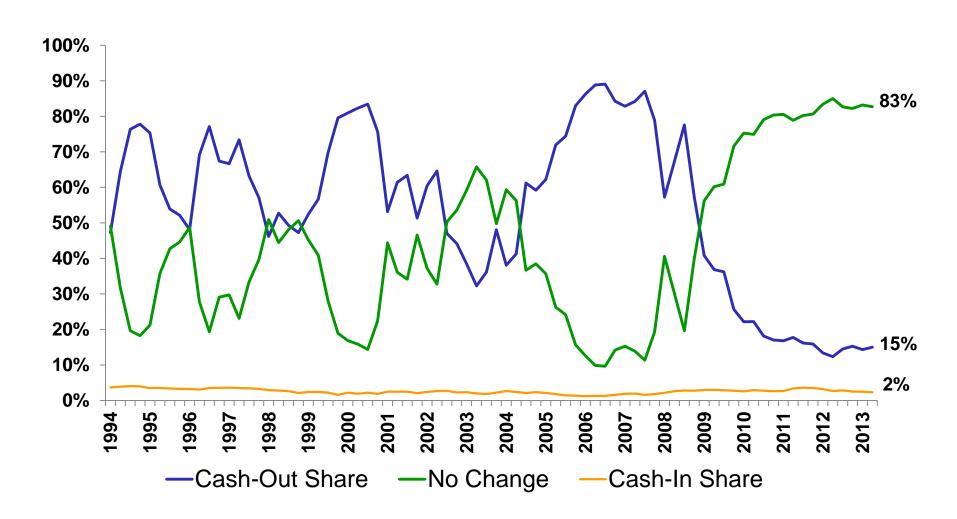


Source: Freddie Mac Product Transition data. Balloons are excluded from the analysis.

Percentages rounded to nearest whole number.



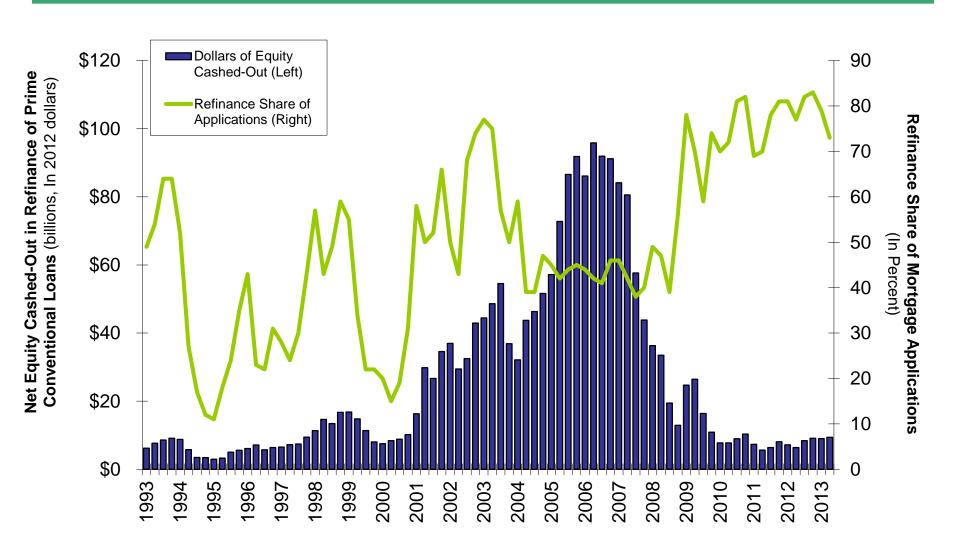
### 15% Took "Cash-Out" At Refinance vs. 89% in Q3 2006



Source: Freddie Mac Cash-Out Refinance Report data. Second quarter 2013.



### Borrowers Cashed-Out About \$9 Billion When Refinancing in 2013Q2



Source: Freddie Mac, Bureau of Labor Statistics (Consumer Price Index) Second Quarter 2013, Equity cashed-out adjusted for inflation.

### **Discussion of MBA Mortgage Market Data**

October 16, 2013

Mike Fratantoni

Vice President, Single-family Research & Policy Development mfratantoni@mba.org





For more than twenty years, MBA's *Weekly Applications Survey* (or the Survey, or Weekly Apps) has provided a timely indicator of housing and mortgage market activity. Since the survey's inception in 1990, its indices have been a leading indicator of housing and mortgage finance activity.

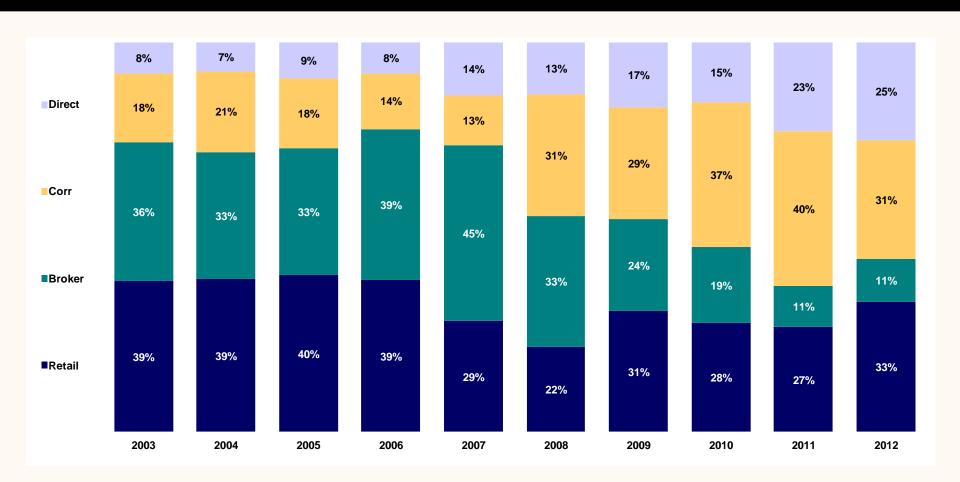
All unadjusted indexes are set equal to 100.00 for the week of March 16, 1990.

Beginning with data from the week of September 16, 2011, released on September 21, 2011, MBA's Weekly Applications Survey was enhanced along a number of dimensions:

- Due to recruitment of new participants, MBA estimates the survey now captures more than 75% of all retail and direct channel mortgage applications, compared to 50% previously.
- There is now significantly more detail regarding the composition of applications, including the geographic and product mix of applications.
- MBA has collected additional information regarding mortgage rates. In addition to the rates previously reported, MBA now also reports on 5/1 ARM rates and 30-year fixed rates for jumbo loans.

### **Channel Mix: Large Lenders (% of Total Production \$)**

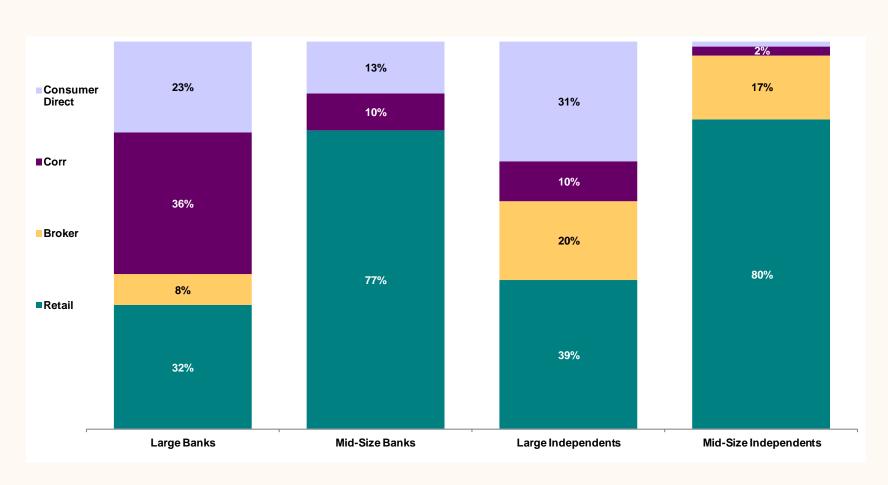




Source: MBA/STRATMOR Peer Group Survey

### 2012 Channel Mix by Peer Group

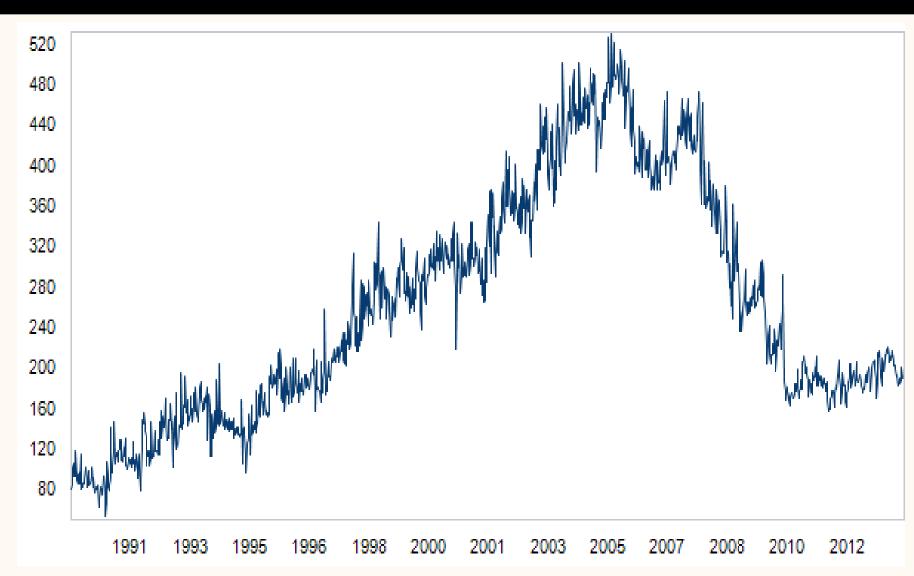




Source: MBA/STRATMOR Peer Group Survey

#### **Purchase Index - Historical**

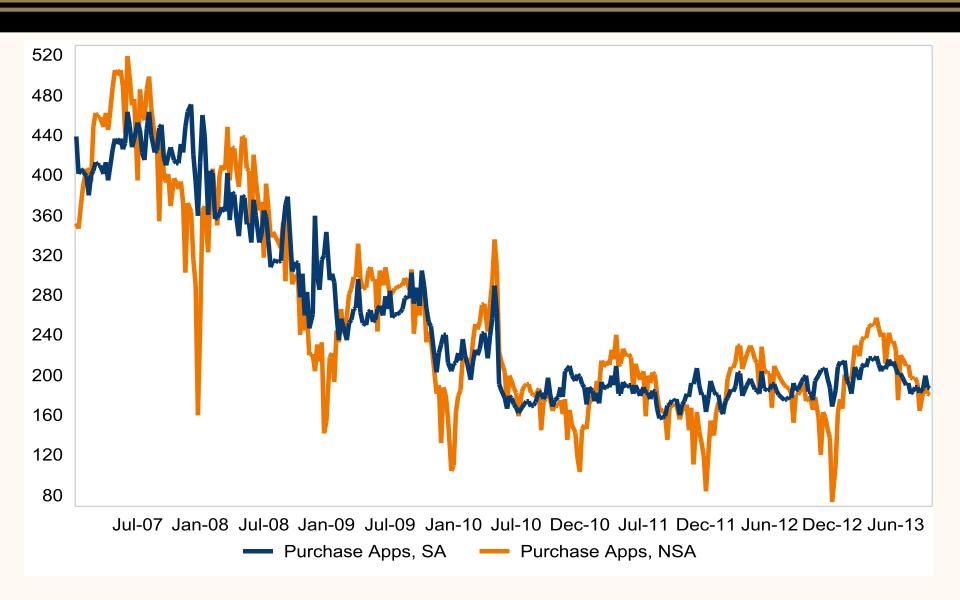




Source: Mortgage Bankers Association

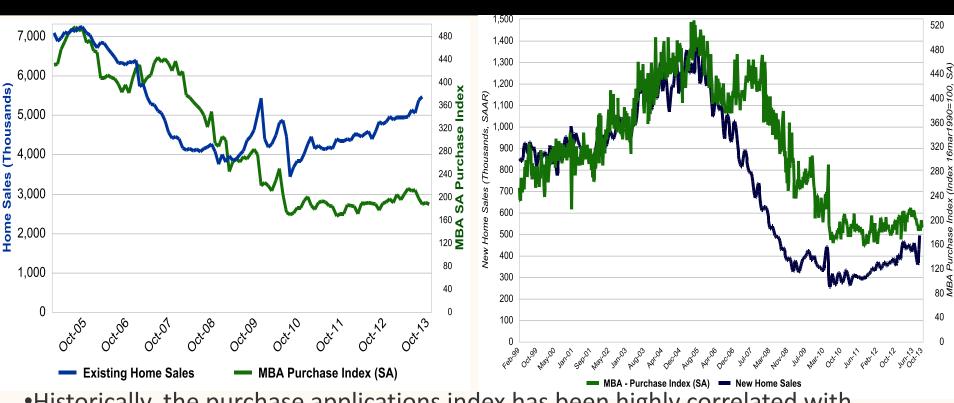
### Purchase Index – Recent Activity





### **Purchase Apps and Home Sales**

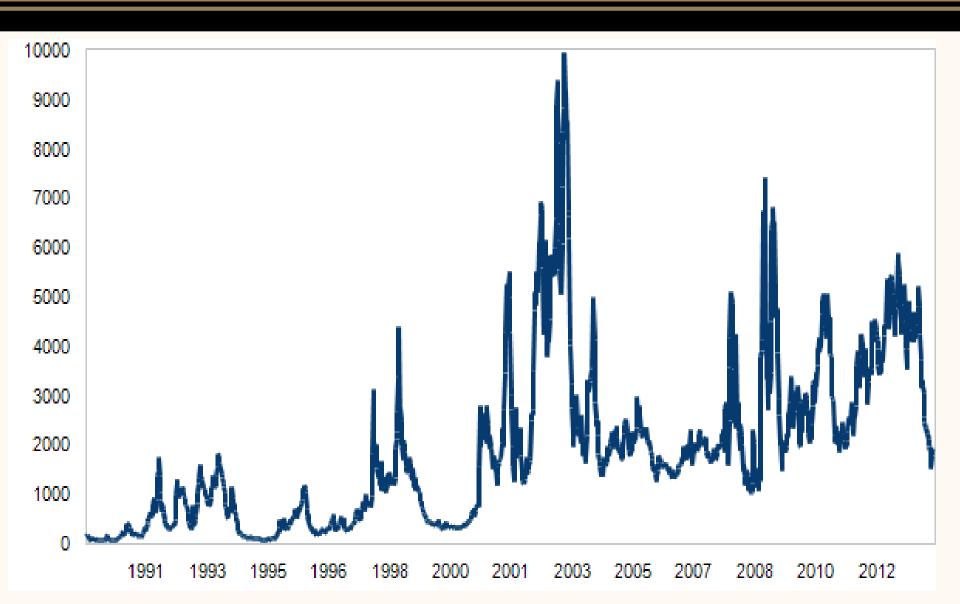




- •Historically, the purchase applications index has been highly correlated with and has led home sales data by 4-6 weeks.
- •In the past few years, a rising cash share of purchases, changes in the share of applications going through the retail and consumer direct channels, and changes in the home sales data have led to some separation.

### **Refinance Index - Historical**

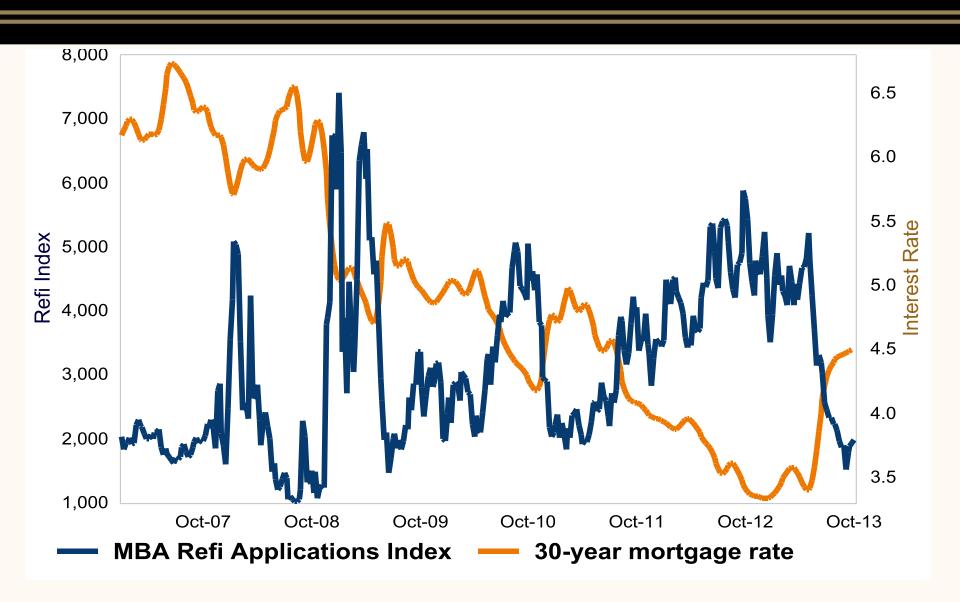




Source: Mortgage Bankers Association

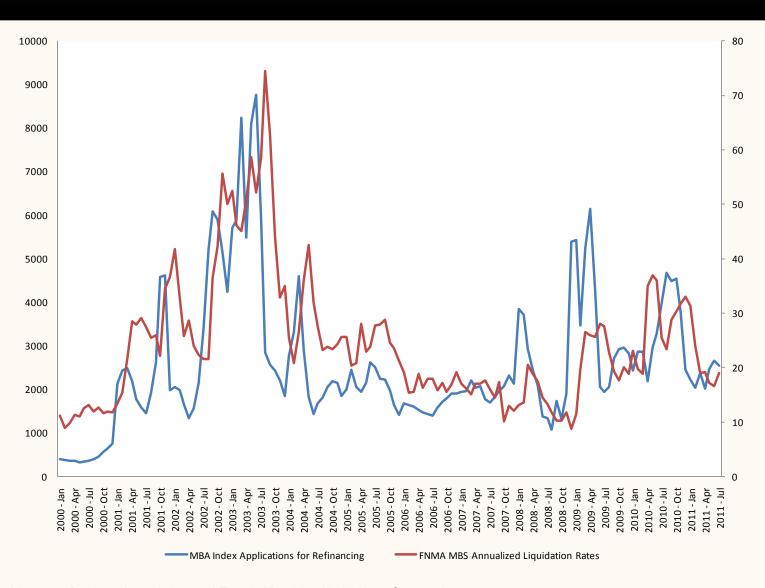
### Refinance Index – Recent Activity





### **Prepay Speeds and Refinance Apps**





#### **Additional Data Available on a Monthly Basis**

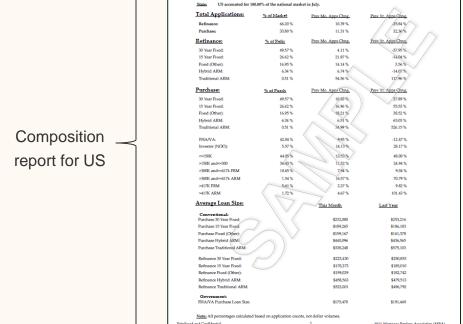
Mortgage Bankers Association

Monthly Devail Report

July - 2011

United States Application Activity Report (in # of Apps)

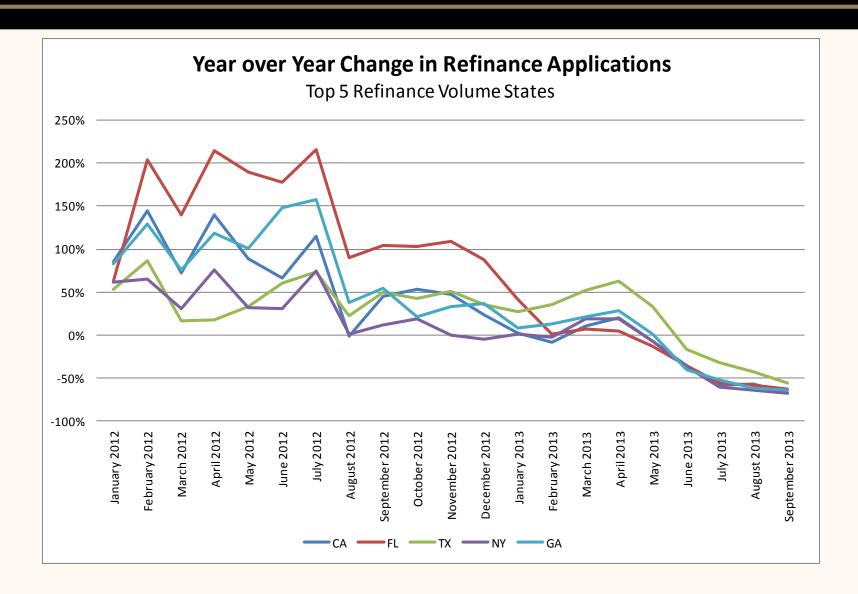




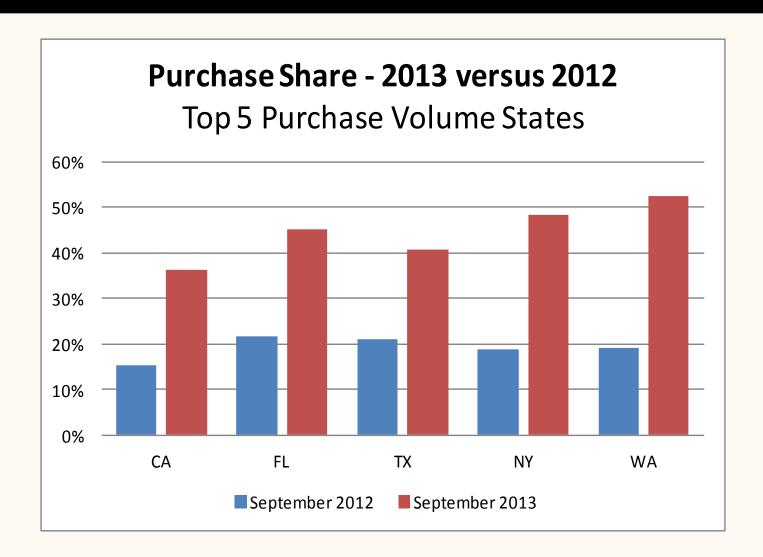
All Rights Reserved

Monthly state profile of mortgage activity









#### Discussion of New Mortgage Rate Series



Each week mortgage lenders report their weekly interest rates and associated points in the *Survey* along with their mortgage application volumes. For conventional loans, the contract interest rates are for an 80% loan-to-value (LTV) loan. FHA loans have higher average LTVs. The points measure includes both origination fees and discount points.

The following interest rates are covered:

FRM 30-Year (Conforming)

FRM 15-Year

FRM 30-year Jumbo

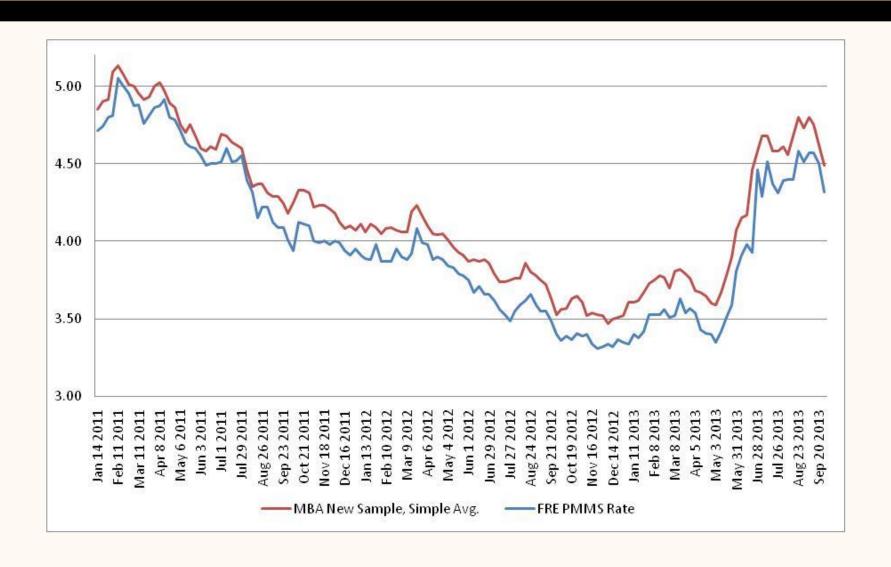
5/1 ARM

FHA 203(b)

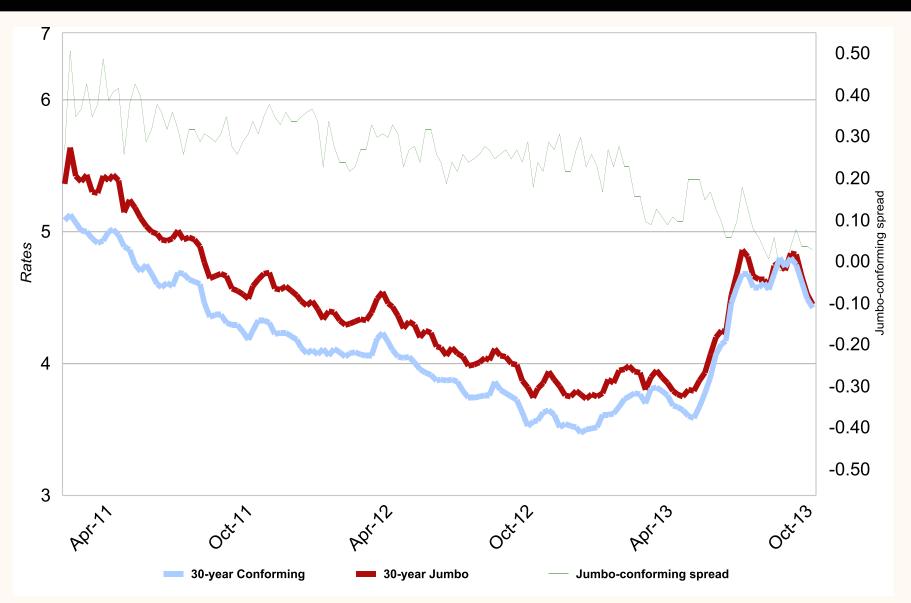
Survey participants must contribute a minimum number of each loan type to enter the calculation.

### **Comparison of MBA and Freddie Mac Survey 30-Year Fixed Rates**

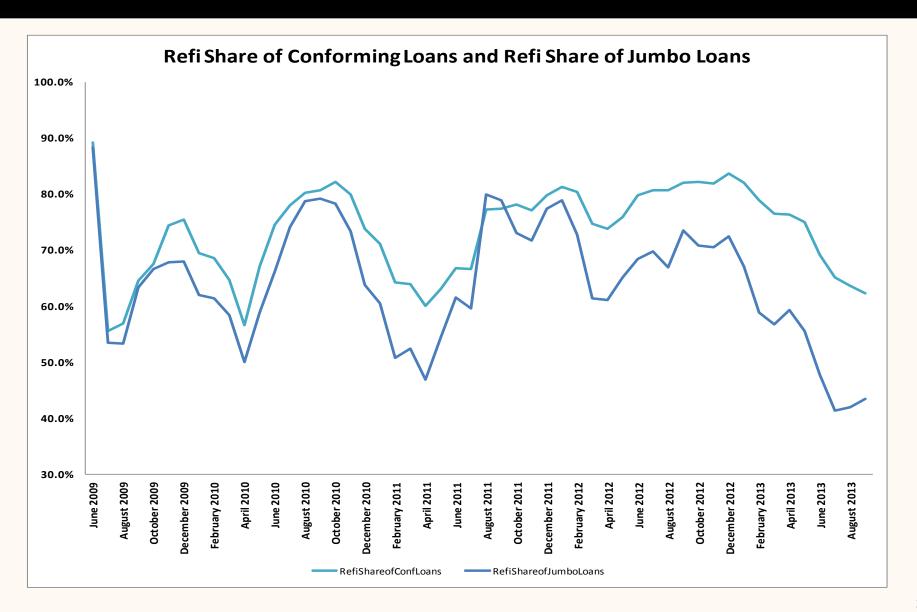




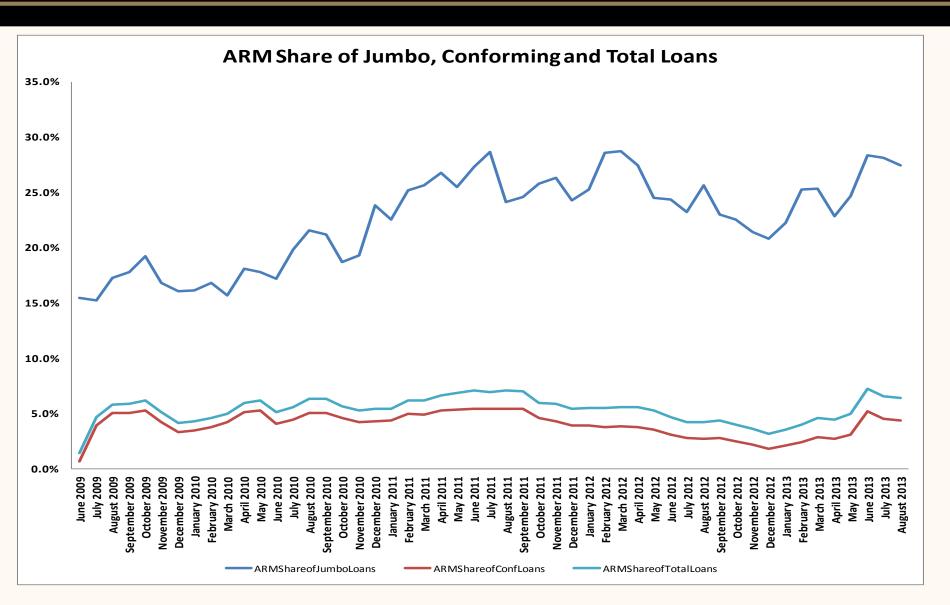












# **Credit Availability Index**



- •The Mortgage Credit Availability Index (MCAI) is calculated using several quantitative metrics related to borrower eligibility
  - •Credit score, loan type, loan-to-value ratio, etc.



- •Metrics are combined to calculate the MCAI, a summary measure which indicates the availability of mortgage credit at a point in time.
- •MCAI is a measure of mortgage credit supplied to the market.
- •Unlike survey measures which only capture whether lending provisions are tightening or loosening, the MCAI provides a standardized quantitative metric that is solely focused on mortgage credit.

# AllRegs Data, Processing by MBA



- Transformation of AllRegs Market Clarity Data by MBA analyst.
  - TERM:

```
Original = 5,10,15,30
```

Transformation: Min Term=5; Max Term=30

• PURPOSE:

Original = "Cash Out Refinance, Purchase, Rate and Term Refinance"

Transformation: "Allows Cash Out"

- Granular data is categorized for standardization and analysis.
  - MAX LTV

Original = 95.6 OR 95 OR 92 OR 98.5, etc.....

Transformation =

- ° LTV <=90
- ° LTV >90 and <=95</p>
- ° LTV >95

# 7 Dimensions of Risk Weighting



Amortization

IO/Amortization

Loan Purpose

Product_Type	Weight
FIXED	
ARM	
BALLOON	

Int_Only_Flag	Product_Type	Weight
NON-IO	FIXED	
NON-IO	ARM	
NON-IO	BALLOON	
INTEREST ONLY	FIXED	
INTEREST ONLY	ARM	
INTEREST ONLY	BALLOON	

Doc.Type

purpose_ROLLUP	Weight
Allows Rate/Term Refi, Not Cash Out	
Allows Cash Out Refi	
Purchase Transactions Only	

Loan Term

term_ROLLUP	Weight
Max Term <= 30	
Max Term >30	

Doc_Type_ROLLUP	Weight
FULL/ALT DOC	
STATED DOCUMENTATION (Anywhere the word *Stated* appears)	
NO DOC (Anywhere the word *NO* is mentioned, excludes any entries with the word *STATED*)	

LTV / Occupancy Joint

FICO / LTV Combo

Max_LTV_Bracket	occupancy_ROLLUP	Weight
LTV <=90	Allows Investor Homes	
LTV >90 and <=95	Allows Investor Homes	
LTV >95	Allows Investor Homes	
LTV <=90	Allows Second Homes, Not Investor	
LTV >90 and <=95	Allows Second Homes, Not Investor	
LTV >95	Allows Second Homes, Not Investor	
LTV <=90	Owner Occupied Only	
LTV >90 and <=95	Owner Occupied Only	
LTV >95	Owner Occupied Only	

Max_LTV_Bracket	Min_FICO_Bracket	Weight
LTV >95	FICO <=620	
LTV <=90	FICO <=620	
LTV >90 and <=95	FICO <=620	
LTV >95	FICO >620 and <=680	
LTV >90 and <=95	FICO >620 and <=680	
LTV <=90	FICO >620 and <=680	
LTV <=90	FICO >680	
LTV >95	FICO >680	
LTV >90 and <=95	FICO >680	

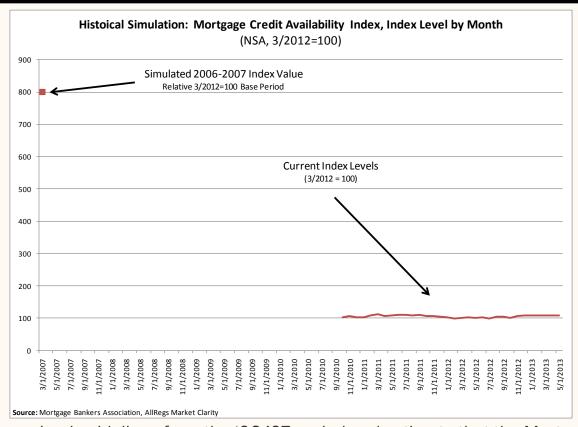
### **Historical Simulation**



#### Reading the Mortgage Credit Availability Index

Lower Index = Less Credit Available

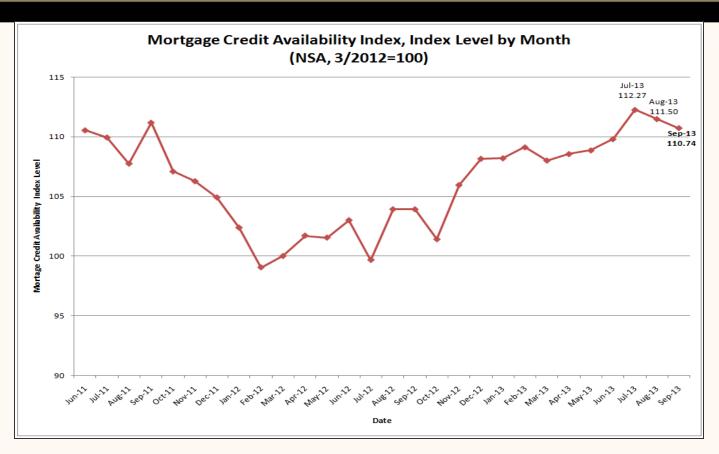
Higher Index = More Credit
Available



- •AllRegs and MBA examined guidelines from the '06-'07 period and estimate that the Mortgage Credit Availability Index was probably somewhere between 750 and 850 during this period.
- •This was due to the high availability of low-doc; no-doc; stated income; interest-only loans.
- •Also, the lending environment during that time made drawing cash against the equity in a home a common and accessible industry trend, making credit more available during that time while also carrying a high amount of risk.

## **Current Trends in the MCAI**





•The MCAI is benchmarked to an index value of 100 in March 2012. Relative to the base period (March 2012), index values above 100 represent greater availability of mortgage credit while index values below 100 are an indication that mortgage lending standards have tightened.

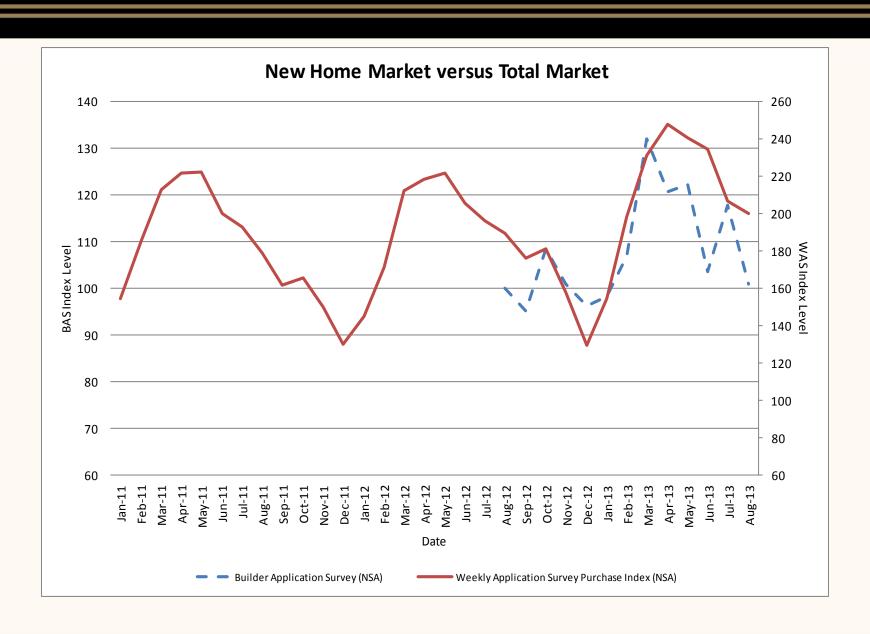
Source: MBA MCAI

# **Builder Application Survey**

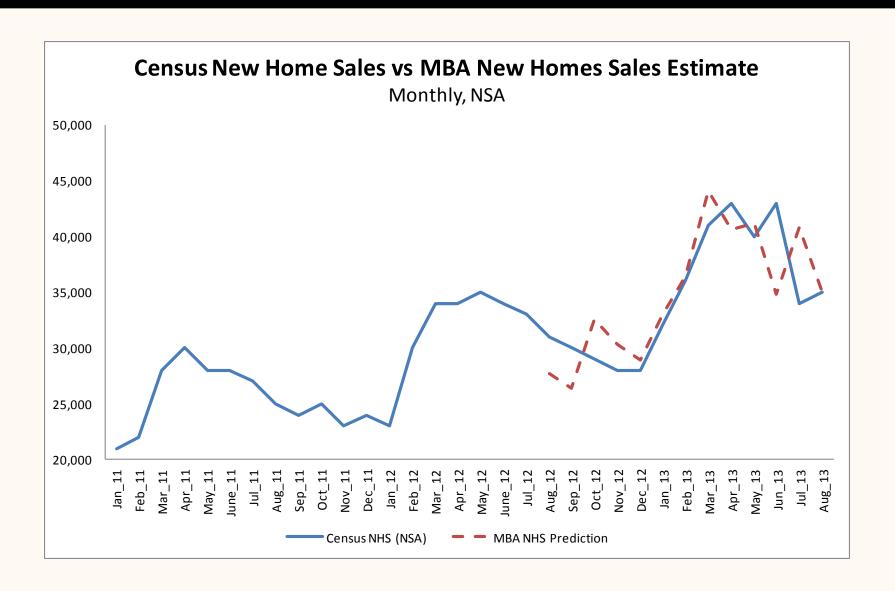


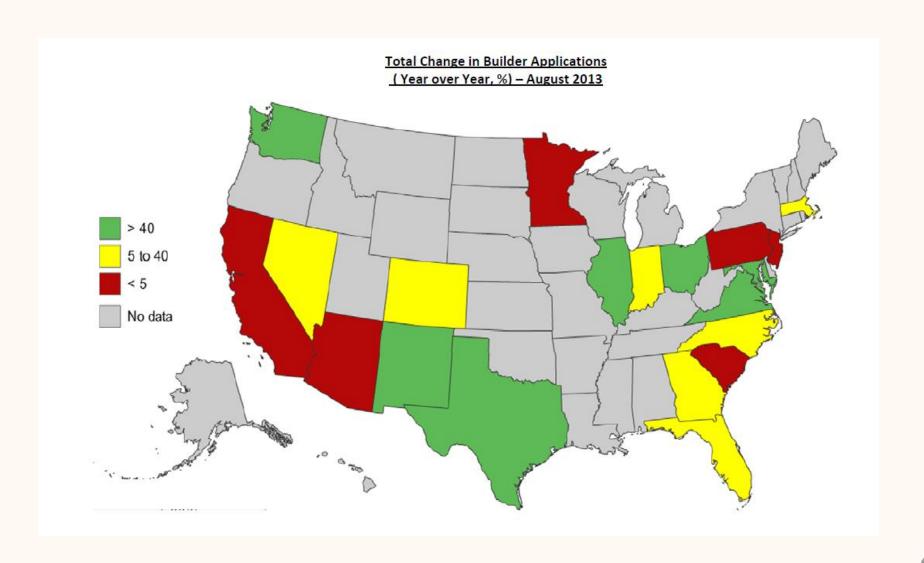
- •The MBA's Builder Application Survey (BAS) measures loan application activity received by lenders affiliated with or who work in cooperation with home builders for loans on new single-family properties. This survey focuses solely on the new home sales market.
- •The monthly BAS Press Release will track changes in national application volume, average loan size and loan products used for new home sales purchases. The MBA will also release a New Home Sales estimate.
- •Release Date Second Week of the Month
- •As the survey continues to expand, the MBA expects to phase in more detailed information including state- and metropolitan-level statistics.













## **Single-family Originations: Science and Art**

#### Benchmark to latest HMDA

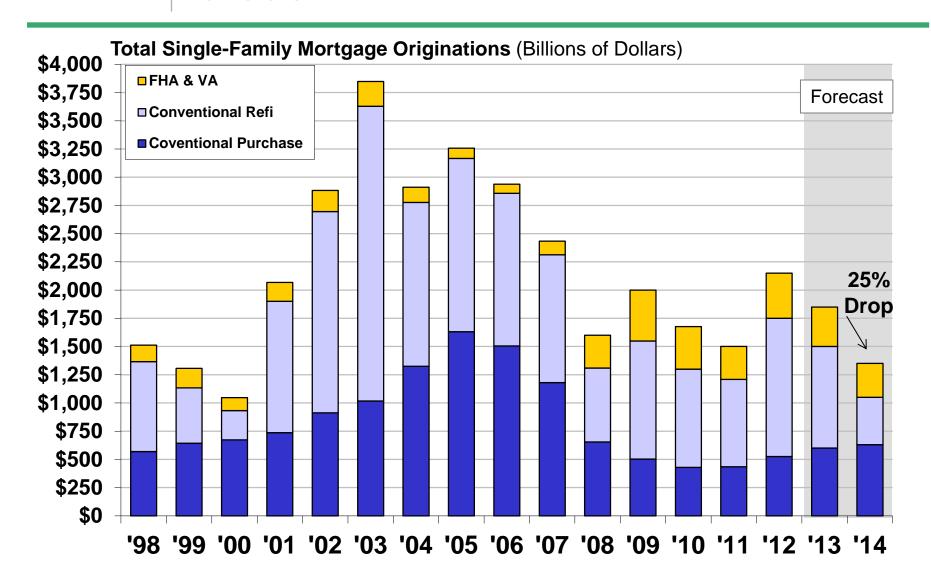
- Compare volume reported sold to Freddie Mac with our purchase volume
  - 2012 originations sold to Freddie Mac in 2012
  - 2011 originations sold to Freddie Mac in 2012 by a wholesaler
  - HMDA volumes totaled about 95% of Freddie Mac's purchase volume
- Conventional originations reported in 2012 HMDA = \$1.66 trillion, thus \$1.66/0.95 = \$1.75 trillion conventional originations (1st and junior liens)
- Add FHA+VA+USDA = \$0.38 trillion, puts 2012 single-family at \$2.13 trillion

## MBA data helps gauge recent activity

- Dollar application volumes not released by MBA
- Compare conventional applications in 2012 HMDA with average MBA index for conventional applications
- Use ratio to convert current-year index into application volume



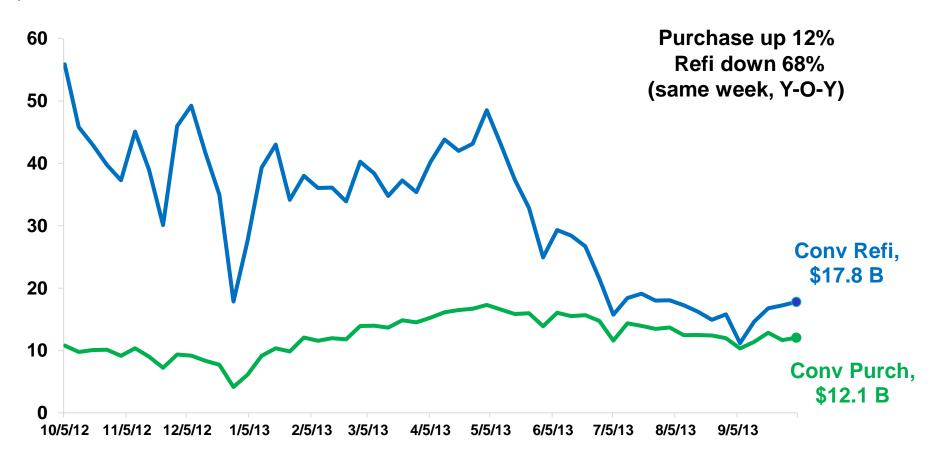
# Mortgage Origination Volume Is Large and Variable





## Weekly Conventional Application Volume<sup>1</sup>

#### \$ Billions



Source: MBA Weekly Applications Survey, Conventional Market (NSA), HMDA, Freddie Mac 

<sup>1</sup>The MBA Survey does not release dollar application volume, but using 2012 HMDA as a base year, we estimate market level application dollar volume.











Office of the Chief Economist

# Where to Get More Information

Look for regular updates to our economic forecast, commentary and data at www.FreddieMac.com/news/finance

Contact us at chief\_economist@freddiemac.com

Opinions, estimates, forecasts and other views contained in this document are those of Freddie Mac's Office of the Chief Economist, do not necessarily represent the views of Freddie Mac or its management, should not be construed as indicating Freddie Mac's business prospects or expected results, and are subject to change without notice. Although the Office of the Chief Economist attempts to provide reliable, useful information, it does not guarantee that the information is accurate, current or suitable for any particular purpose.

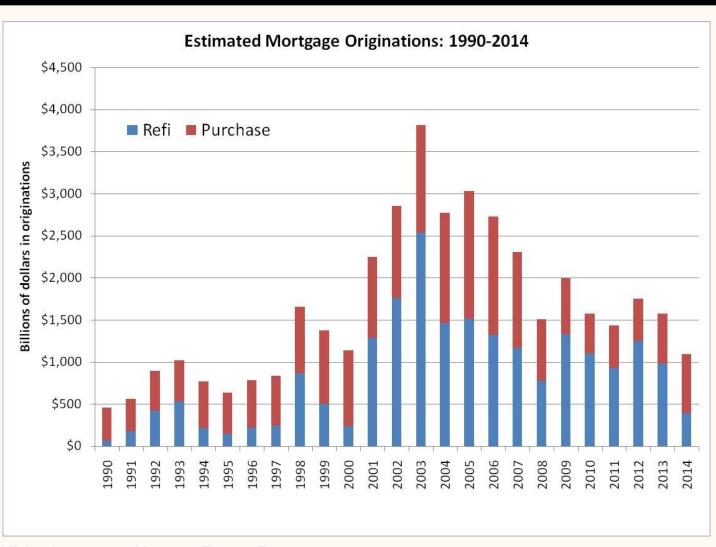
Information from this document may be used with proper attribution. Alteration of this document is prohibited. © 2013 by Freddie Mac.

# Outlook for 2013 and 2014



	<u>2012</u>	2013	<u>2014</u>
GDP Growth	1.8%	1.7%	2.5%
Inflation	1.9%	2.1%	1.9%
Unemployment	8.1%	7.5%	7.0%
Fed Funds	0.1%	0.2%	0.2%
10-year Treasury	1.8%	2.3%	3.0%
30-year Mortgage	3.7%	4.1%	4.9%
Refi originations (\$ B)	1,247	973	388
Purchase originations (\$B)	503	619	703
New Home sales (thousand)	364	465	493
<b>Existing home Sales (thousand)</b>	4,634	5,070	5,362

Source: MBA August 2013 Forecast



Source: MBA – August 2013 Mortgage Finance Forecast

## **Contact Information & MBA Resources**



#### **Michael Fratantoni**

Vice President, Single-family Research and Policy Development mfratantoni@mba.org (202) 557-2935

#### **MBA** Homepage:

www.mba.org

#### **MBA Research:**

www.mba.org/research

#### MBA Weekly Apps (Main page, FAQ, Methodology Document):

www.mortgagebankers.org/WeeklyApps

#### **Builder Application Survey:**

http://www.mortgagebankers.org/researchandforecasts/builderapps.htm

#### MCAI Product Page:

www.mortgagebankers.org/MortgageCredit

