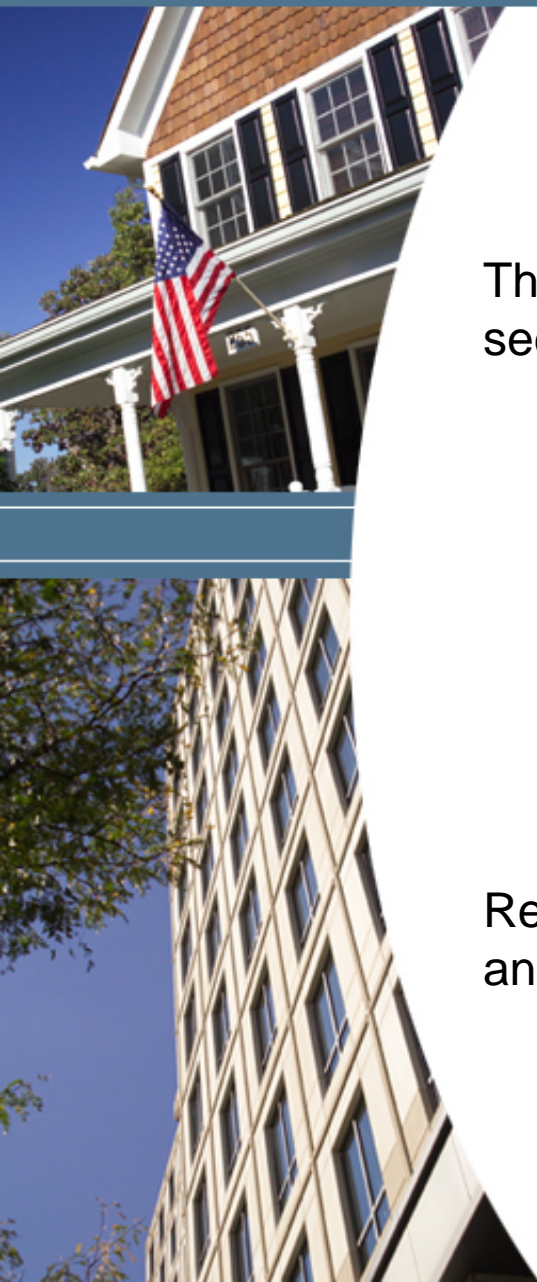




# Underwriting Conference – Back to Basics

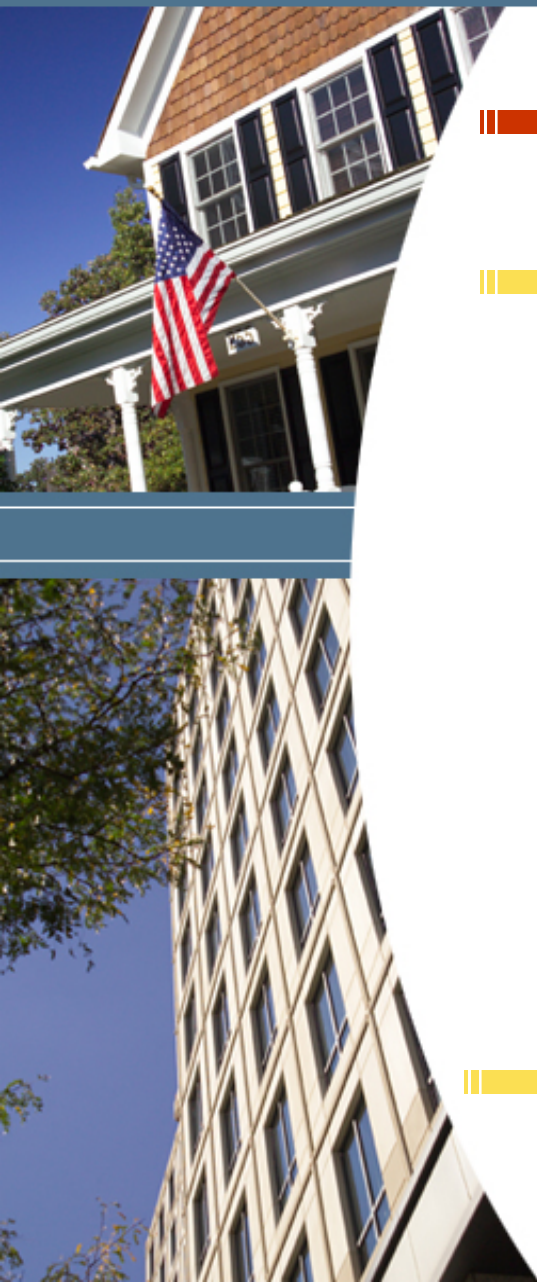
Part Three – Evaluating Layered Risk



The past few years has brought a layering of risk never before seen in widespread mortgage lending practices.

In the most extreme cases, not only did new products push the edge of affordability with payment shock and negative amortization features; these loans carried high debt-to-income ratios, based on an initial teaser rate, that were calculated using unverified income. These loans were made to borrowers with poor credit, at a high LTV (or CLTV), based on limited collateral review. Added to this, a prepayment penalty period that extended beyond the teaser rate period, all created the perfect storm for loss.

Renewed confidence starts with a well-underwritten loan and an appropriate evaluation of layered risk.

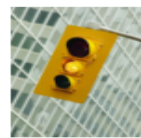
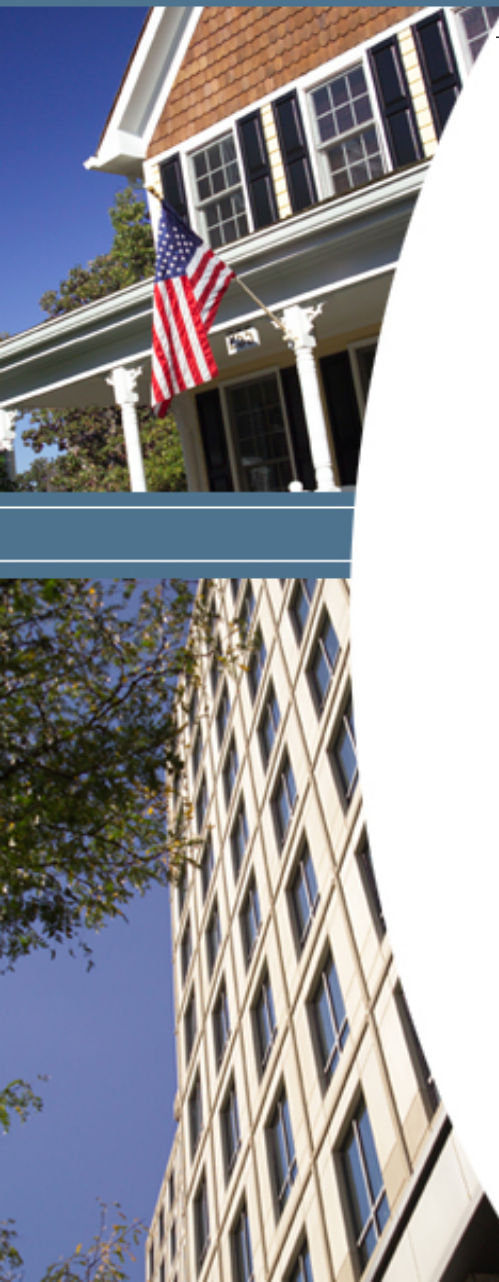


## Fannie Mae's Comprehensive Risk Assessment Worksheet



Primary Risk	Low		Moderate		High
	Significantly Decreases Risk	Decreases Risk	Risk Neutral	Increases Risk	Significantly Increases Risk
Primary Risk Factor					
LTV Or CLTV					
Representative Credit Score					
Contributory Risk Factor					
Financial Reserves					
Employment Classification					
Mortgage Term					
Product Type					
Property Type					
Transaction Type					
Presence of co-borrowers					
Total Debt-to-Income Ratio					
Mortgage Delinquency					
Bankruptcy of Foreclosure					
<b>Comprehensive Risk</b>	<b>Low</b>		<b>Moderate</b>		<b>High</b>

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## Moderate Primary Risk

The yellow traffic light represents Fannie Mae's model of moderate primary risk. Review your file to determine if it falls within the moderate risk parameters. If so, the risk is moderate. If not, continue your assessment by comparing the high and low risk models.

**When the loan-to-value/combined loan-to-value ratio is...**

**And the representative credit score ...**

Between 91% and 100%

Ranges from mid-600 to low-700

Between 81% and 90%

Ranges from low-600 to mid-600

At or below 80%

Is in the low-600 range



## High Primary Risk

The red traffic light represents high primary risk. As the LTV / CLTV approaches the high end of the range in the moderate primary risk table, the credit profile must also reflect the high end of the credit score range to maintain moderate risk. Otherwise, the loan will be considered to have **high risk**. For example, a mortgage with a 100% LTV paired with a mid-600 credit score should be considered high primary risk.

**When the loan-to-value/combined loan-to-value ratio is...**

**And the representative credit score ...**

Between 91% and 100%

Is below the mid-600 range

Between 81% and 90%

Is below the low-600 range

At or below 80%

Is below the low-600 range



## Low Primary Risk

The green traffic light represents low primary risk. For LTVs / CLTVs at or below 80%, the loan may have either "marginally" or "significantly" low primary risk, as reflected in the low primary risk table.

**When the loan-to-value/combined loan-to-value ratio is...**

**And the representative credit score ...**

Between 91% and 100%

750 or higher

Between 81% and 90%

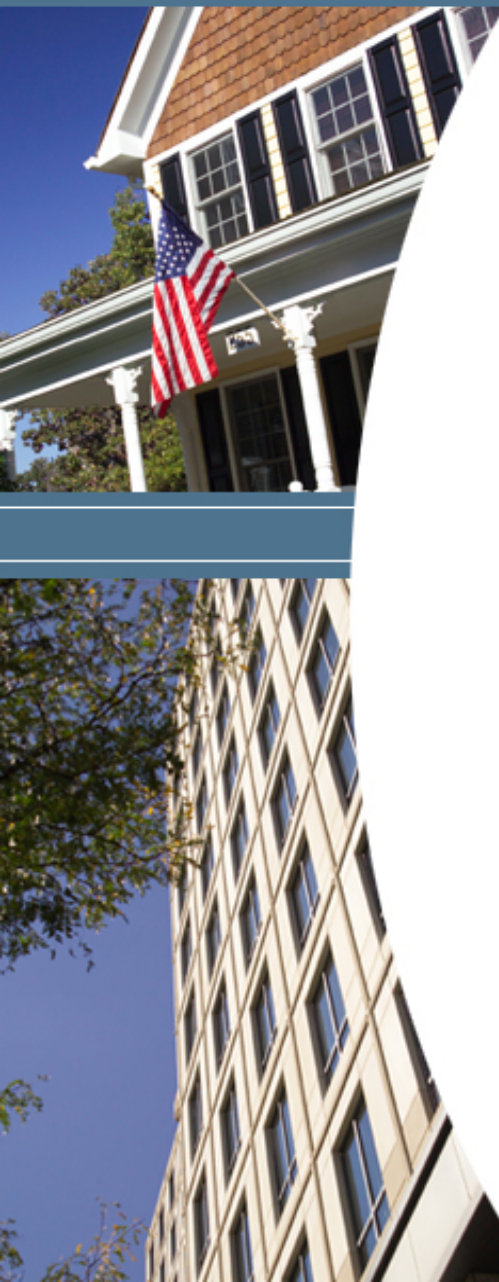
680 or higher

At or below 80%

Ranges from 680 to 749 - "Marginally" low Primary Risk

Is 750 or higher - "Significantly" low Primary Risk

# Primary Risk Factors – Equity - Home Price Appreciation (HPA) – What a Ride!



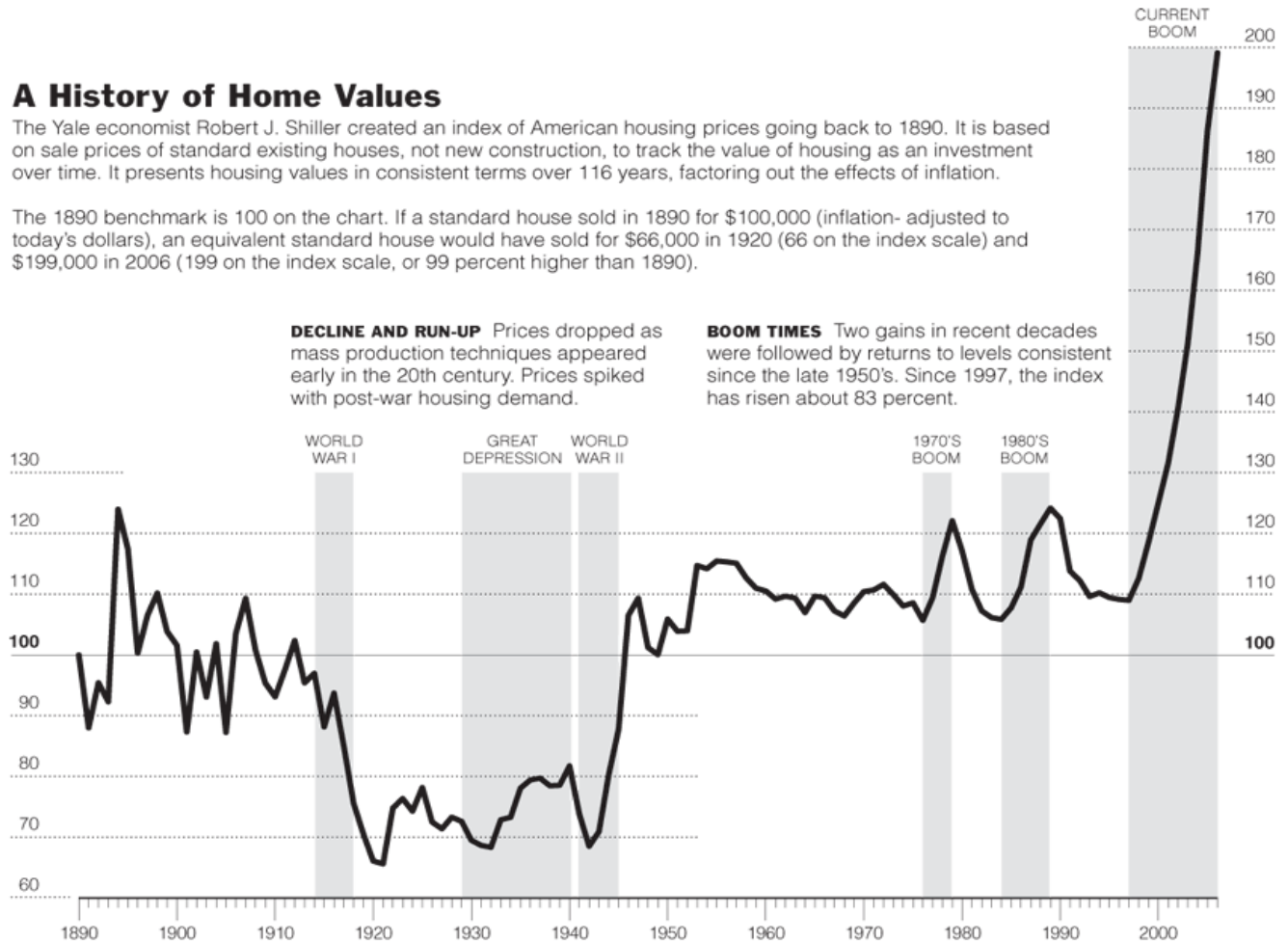
## A History of Home Values

The Yale economist Robert J. Shiller created an index of American housing prices going back to 1890. It is based on sale prices of standard existing houses, not new construction, to track the value of housing as an investment over time. It presents housing values in consistent terms over 116 years, factoring out the effects of inflation.

The 1890 benchmark is 100 on the chart. If a standard house sold in 1890 for \$100,000 (inflation-adjusted to today's dollars), an equivalent standard house would have sold for \$66,000 in 1920 (66 on the index scale) and \$199,000 in 2006 (199 on the index scale, or 99 percent higher than 1890).

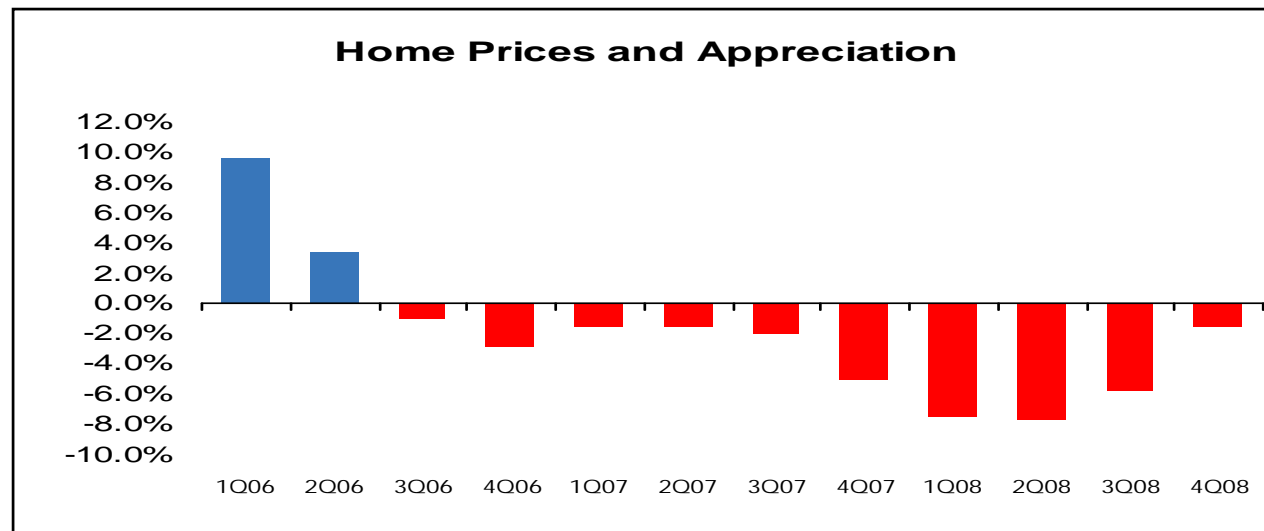
**DECLINE AND RUN-UP** Prices dropped as mass production techniques appeared early in the 20th century. Prices spiked with post-war housing demand.

**BOOM TIMES** Two gains in recent decades were followed by returns to levels consistent since the late 1950's. Since 1997, the index has risen about 83 percent.



Source: "Irrational Exuberance," 2nd Edition, 2006, by Robert J. Shiller

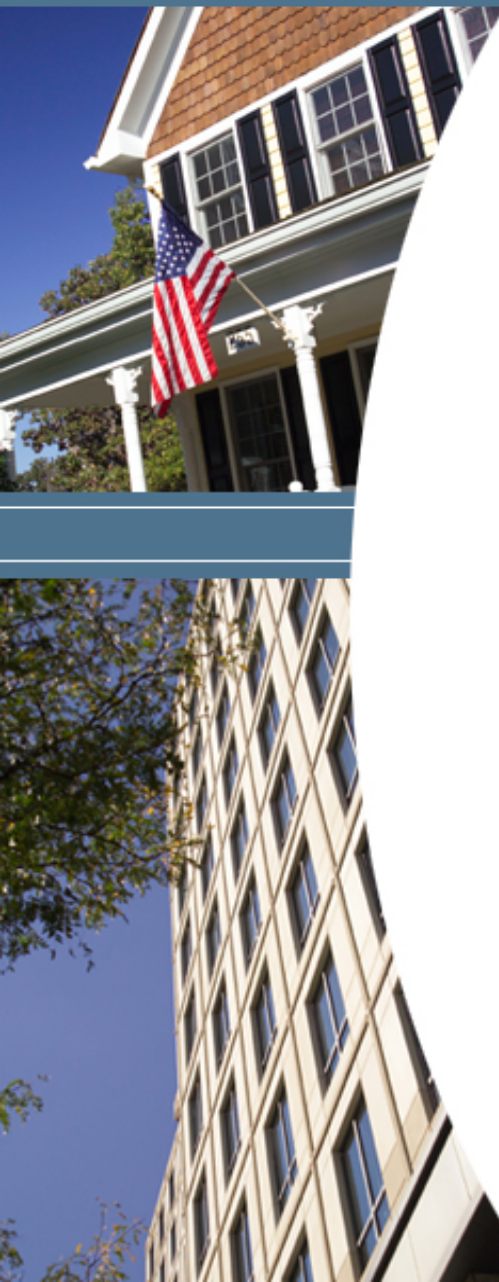
Bill Marsh/The New York Times



Source: Moody's Economy.com, July 2007

## Return to Quality –

- GSE Identifies Falling Home Price ZIP Codes for Appraisals
- AUS returns messaging for declining markets
- Underwriting pull-back in declining markets
- Consider Valuation Models lagging behind value changes
- Appraisal practices questioned



The popularity (and inherent risk) of high LTV/CLTV loans increased over the past few years...

	Orig. Yr	CLTV	CLTV > 80	Seconds	Full Doc	IO %
<b>Prime ARMs</b>	2002	66.5	3.9	1.8	54.8	46
	2003	68.2	10.1	10.8	48.5	53
	2004	73.3	18.8	20.7	47.5	60
	2005	74.4	22.1	27.0	44.5	73
	2006	75.0	27.3	34.0	31.7	91
<b>Alt-A ARMs</b>	2002	74.3	20.7	2.7	29.6	27
	2003	78.0	33.5	23.4	28.0	56
	2004	82.6	46.9	39.0	32.5	75
	2005	83.3	49.4	46.7	28.1	83
	2006	85.5	56.5	56.0	19.3	88
<b>Subprime ARMs</b>	2002	81.2	46.8	3.7	66.9	1
	2003	83.2	54.9	10.1	62.9	5
	2004	85.1	60.6	19.4	59.7	19
	2005	86.4	63.4	27.9	55.8	32
	2006	86.8	63.7	31.1	54.6	20
<b>Option ARMs</b>	2002	69.0	1.7	0.5	33.1	-
	2003	71.3	12.2	7.7	31.1	-
	2004	72.9	11.8	11.2	24.9	-
	2005	76.6	25.1	24.1	18.1	-
	2006	78.0	32.2	30.7	9.1	-


	Orig. Yr	CLTV	CLTV > 80	Seconds	Full Doc	IO %
<b>Prime Fixed Rate</b>	2002	65.4	3.0	0.6	76.0	-
	2003	63.8	4.4	6.3	56.9	1
	2004	67.4	7.0	9.1	54.2	2
	2005	70.9	13.6	17.1	53.6	20
	2006	74.6	23.0	27.0	53.1	29
<b>Alt-A Fixed Rate</b>	2002	74.7	22.0	2.3	33.8	1
	2003	71.5	21.4	7.5	32.4	3
	2004	75.2	29.4	15.3	33.4	10
	2005	76.2	31.4	26.0	36.6	31
	2006	79.4	40.3	35.6	22.7	38
<b>Subprime Fixed Rate</b>	2002	77.9	39.7	1.4	68.9	0
	2003	78.4	42.7	2.9	68.2	0
	2004	78.6	43.5	5.3	70.0	2
	2005	80.0	48.1	8.9	71.4	5
	2006	81.2	51.2	11.0	71.4	6

Source: Loan Performance

## Return to Quality –


- Lenders are tightening LTV/CLTV limits

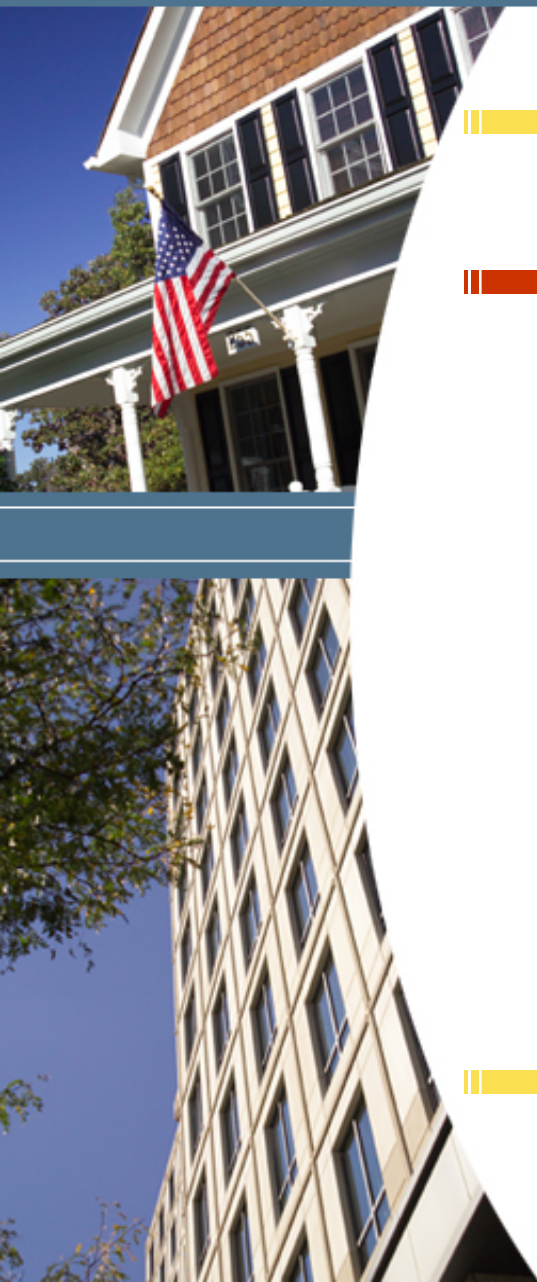




Lenders rely on credit scores to evaluate the borrower's credit profile. In the recent past, lower credit scores have been layered with high loan-to-value loans with low- or no-documentation.

## Return to Quality –

- Lenders are reconsidering pairing low credit scores with other risk factors.
  - Several factors to consider when analyzing the credit score:
    - Number of accounts and age of accounts
    - Payment history
    - Significant derogatory credit events and time since event
    - Credit utilization (overuse of revolving accounts)
    - Recent inquiries
- 



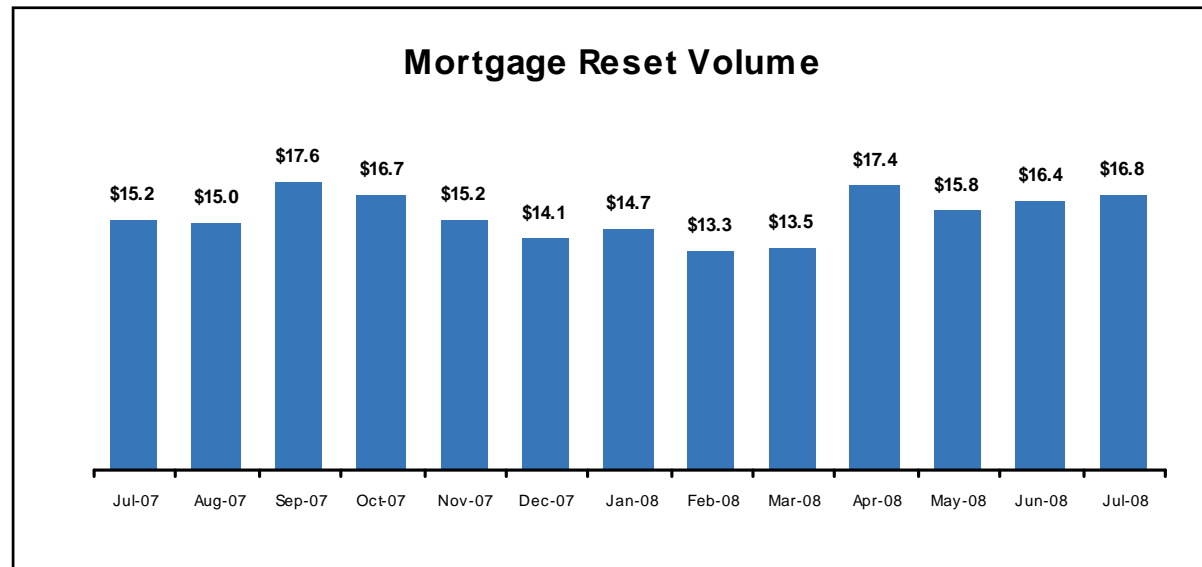
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Property Type					
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Total Debt-to-Income Ratio					
Mortgage Delinquency					
Bankruptcy of Foreclosure					
Comprehensive Risk	Low		Moderate		High

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## Mortgage Resets on ARM Loans -

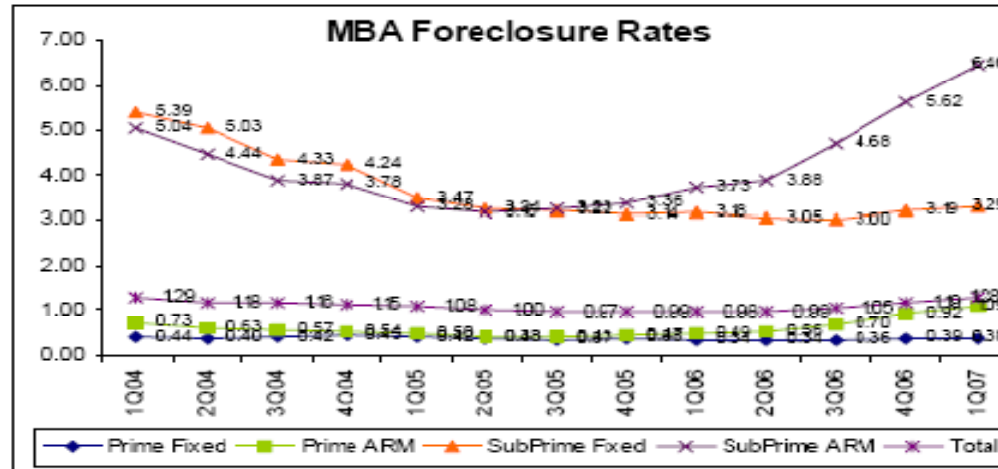
- \$15 billion in resets in August...\$17.6 billion in September
- *At a time when N.A.R. reports the lowest volume in U.S. home sales in five years*



Source: UBS Mortgage Strategist 7/24/07



Non Seasonally Adjusted Numbers as High as >15% Delinquency Rate on Sub-Prime ARMs



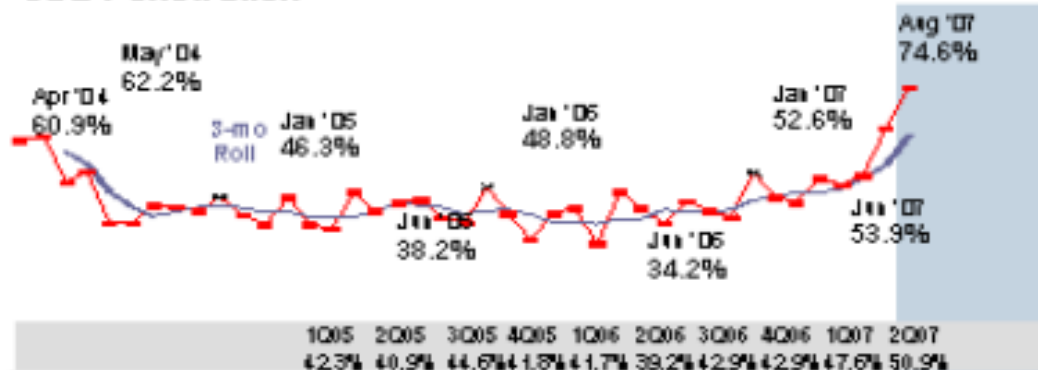
Subprime ARM Foreclosure Rate Projected to Peak in Double Digits by Center for Responsible Lending

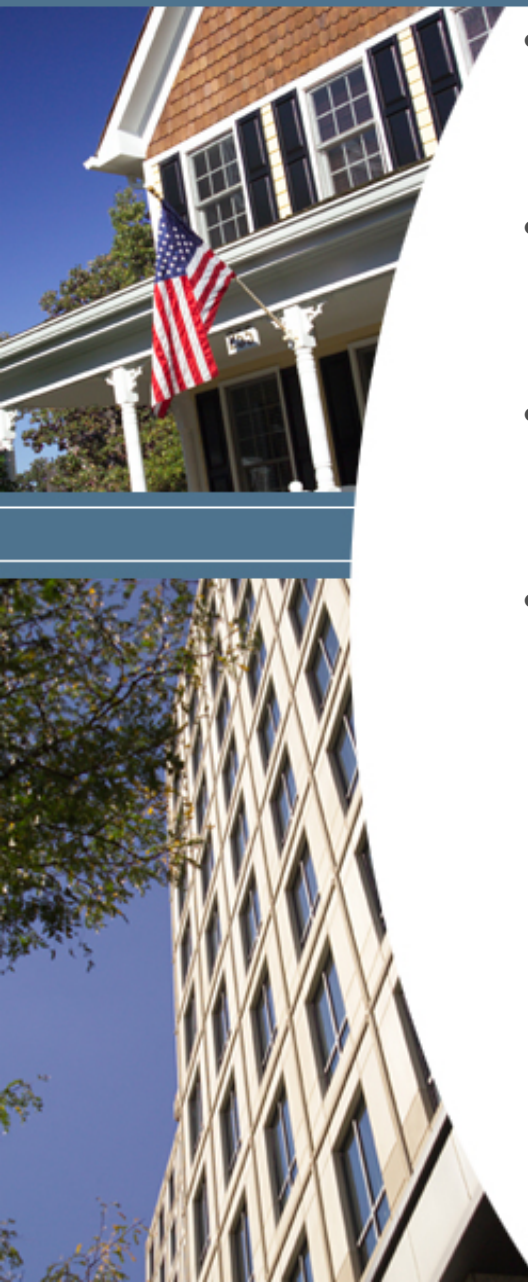
## Return to Quality –

- Return to stable product mix

• GSE Penetration up to 75% from a low of 34% in '06

## GSE Penetration

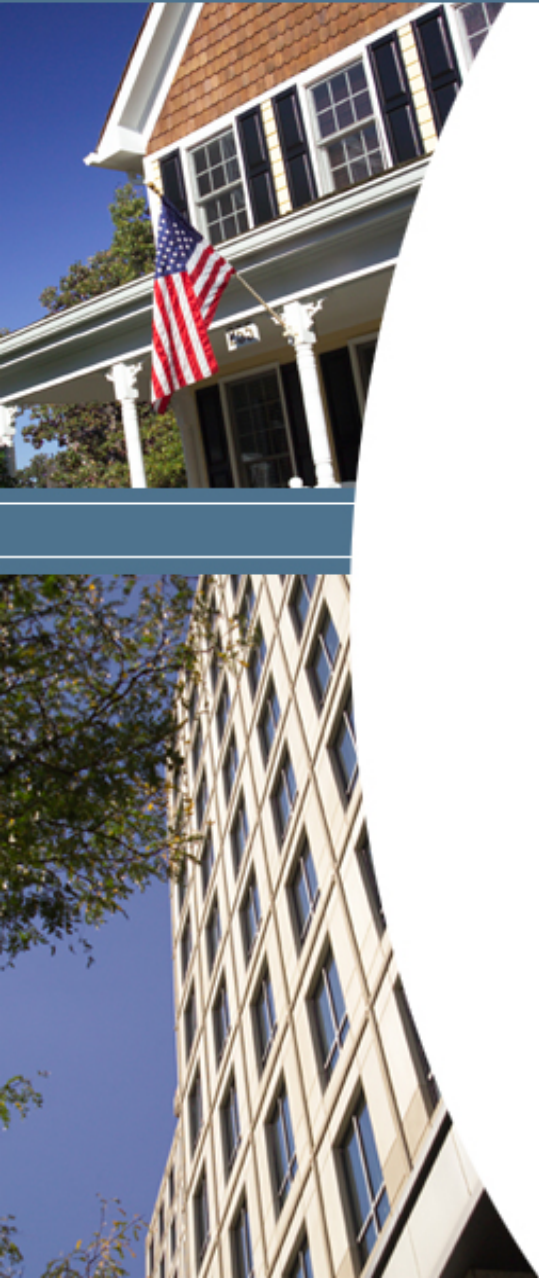




- National monthly household spending is at an all time high. On average, 126% of disposable monthly income was spent on household spending in 2006.
- By 2006, home sales were averaging 3.71% of average household income. In 1996, existing home sales averaged 2.45% of average household income. (Source: State of Nation's Housing 2007)
- In 2006, nearly 55% of subprime ARMS, 70% of prime ARMS, 80% of Alt A ARMS, and 90% of Option ARMS were low- or no-doc loans. (Source: Loan Performance))
- Allowable debt ratios increased to 55% or more on many layered-risk loans.

## Return to Quality –

- Taxes and insurance included in the qualifying ratios
- Stated income loans fall from favor and reasonableness tests implemented
- Non-traditional mortgage guidance



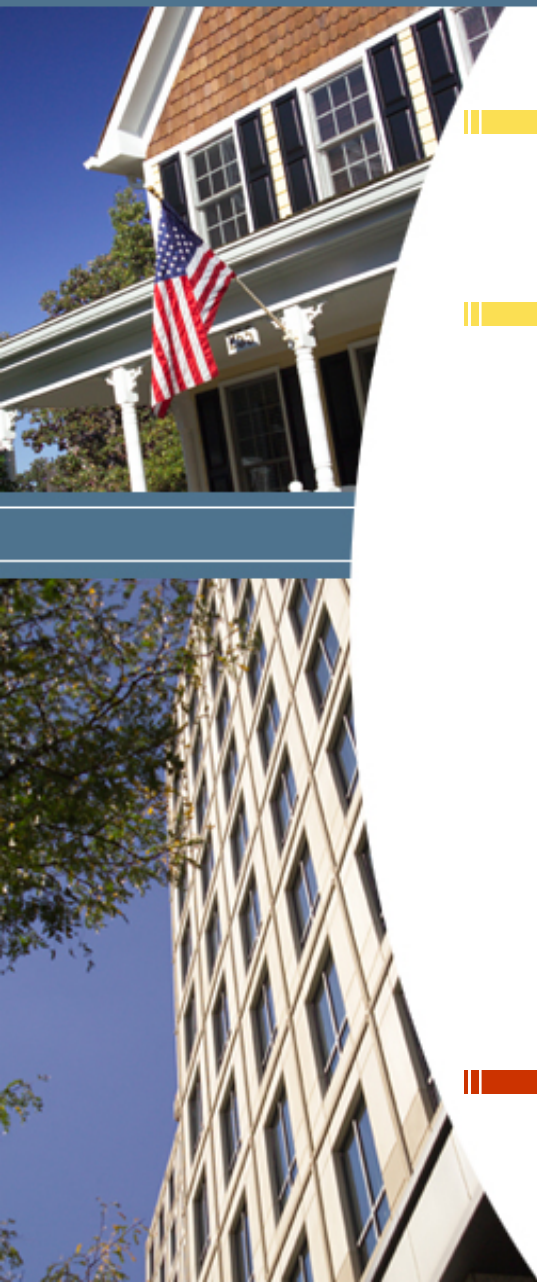
Consider other contributory risk factors

- Financial Reserves
- Mortgage Term
- Property Type
- Transaction Type
- Presence of Co-borrowers
- Mortgage Delinquency
- Bankruptcy or Foreclosure

## Fannie Mae's Evaluation of Contributory Risk Factors

Contributory Risk Factor	Significantly decreases risk	Decreases risk	Satisfies basic risk tolerances	Increases risk	Significantly increases risk
Liquid financial reserves	25+ months reserves	12 months reserves	2 months reserves	1 month reserves	No reserves
Employment classification (self-employed)	N/A	N/A	Business has no debt and income significant	Any of the borrowers are self-employed	N/A
Mortgage term	N/A	Term is 20 years or less	Term is 25 or 30 years	N/A	N/A
Product type	N/A	N/A	FRMs, fixed-period ARMs	Balloons and buydowns	1-year ARMs or less
Type of property	N/A	N/A	1 unit	2 units, condos, coops or manufactured homes	3-4 units
Transaction type	A substantial decrease in UPB of more than 10%	UPB decreases by 10% (a decrease of 1 or 2% is minimal decrease in risk)	PHMs, LCOR, minimal increase in UPB	Increase of 10% UPB	Increase of 20% of UPB
Presence of co-borrowers	Co-borrower credit score of 700 or greater	Co-borrower credit score of upper 600s	N/A	N/A	N/A
Total debt-to-income ratio	10% or less range	Mid-20% range	Mid 30% range	Mid-40% range	45% or greater
Previous mortgage delinquency	N/A	None	1X30 in last 24 months; non in last 12 months	1X30 in last 12 months	2X30 or more; or 60 or 90 in last 24 months
Prior bankruptcy or foreclosure	N/A	N/A	None	Bankruptcy or foreclosure discharged in last 3 or 4 years	Bankruptcy or foreclosure in past 3 years

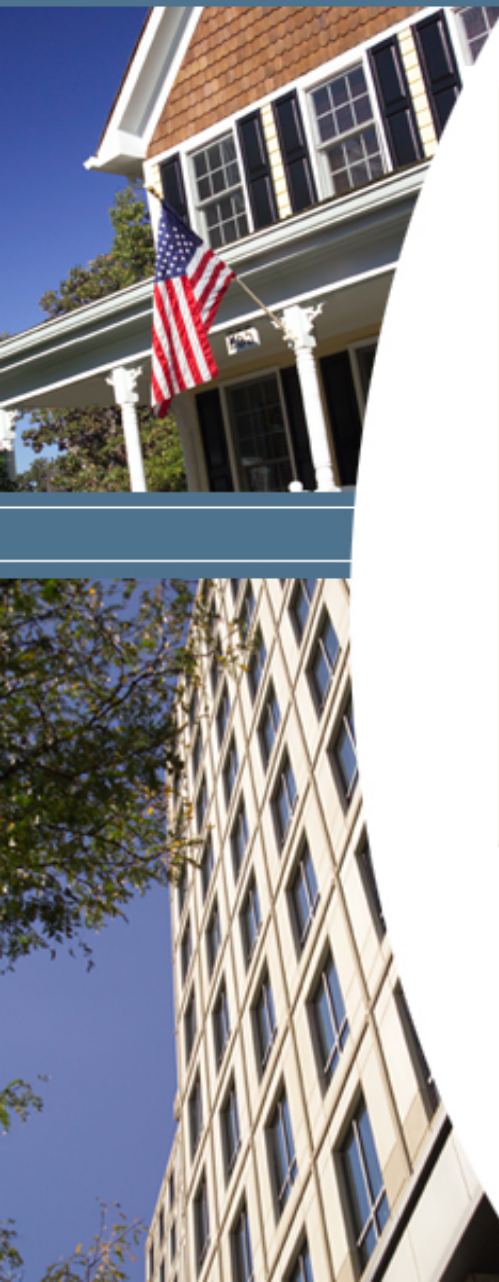
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## Fannie Mae's Comprehensive Risk Assessment Worksheet

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Representative Credit Score						
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Bankruptcy of Foreclosure						
Comprehensive Risk	Low		Moderate		High	

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## Tips for determining comprehensive risk

**Avoid** combining primary and contributory high-risk factors.

**Avoid** offsetting *very high* risk profiles with marginal decreased contributory risk factors. Always focus on strong offsetting factors to lessen higher risk.

**Avoid** layering several high risk contributory factors onto a loan with low or moderate primary risk. If too many high risk contributory factors are present in the file, the file may represent high comprehensive, regardless of the primary risk.

**Always** document the comprehensive risk decision.

**Always** document and provide a written statement for the underwriting rationale used to approve high comprehensive risk loans. Otherwise, high comprehensive risk loans are eligible for delivery to Fannie Mae *only if* the lender has a negotiated commitment to deliver the loan under a specific program or initiative.

If the comprehensive risk is...	The mortgage...
<b>High</b>	Will typically default! Be certain to verify all data within the mortgage loan file utilized to reach a final assessment.
<b>Moderate</b>	Will have a moderate chance of default.
<b>Low</b>	Is less likely to default.