MEMORANDUM

TO: File No. S7-14-11

FROM: Jay Knight
Special Counsel
Office of Structured Finance
Division of Corporation Finance
U.S. Securities and Exchange Commission

RE: Meeting with Representatives of FICO

DATE: November 4, 2011

On October 6, 2011, Katherine Hsu and Jay Knight of the Division of Corporation Finance, and Eric Emre Carr and Stanislava Nikolova of the Division of Risk, Strategy, and Financial Innovation met with the following representatives of FICO:

- Joanne Gaskin (FICO)
- Daniel Nestel (FICO)
- Jeffrey Peck (Peck, Madigan, Jones & Stewart)

The meeting participants discussed topics relating to the Commission's March 30, 2011 proposals regarding credit risk retention. A handout is attached to this memorandum.

Attachment

Summary of FICO's Comment Letter

The Dodd-Frank Wall Street Reform and Consumer Protection Act amended the securities laws to require securitizers of asset-backed securities to retain five percent of the credit risk of the assets collateralizing the securities. The Proposed Rule would include an exemption from this credit risk retention requirement in the form of a "qualified residential mortgage" (QRM). FICO is generally supportive of the legislative intent behind the Proposed Rule's QRM standard, based on the notion that some securities are relatively risk-free, and thus risk retention is unnecessary.

However, FICO believes the Proposed Rule is fundamentally flawed in one significant respect: the credit history standards incorporated into the proposed definition of QRM are not sufficiently predictive of the risk of delinquency or default. The proposed credit history standards shift away from the use of the most predictive measurement of default risk (credit scores) and instead adopt a narrow set of "derogatory factors" found in credit reports. In addition, the Proposed Rule takes a similarly flawed approach to defining a Qualifying Auto Loan (QAL): the Proposed Rule would include credit history standards very similar to those incorporated into the QRM definition, and the QAL credit history standards would also fail to adequately predict credit risk.

Key Problems

- **Proposed credit history standards select the wrong population of risks**. FICO believes the proposed credit history standards exclude too many borrowers who are good credit risks, while at the same time failing to identify too many borrowers who are bad credit risks – that is, a significant number of low risk borrowers fail to meet the QRM standards while high risk borrowers satisfy the QRM standards. FICO conducted extensive research analyzing the effectiveness of the proposed QRM credit history standards compared to analytically derived credit scores. The research revealed the following:
  - The proposed credit history standards would include borrowers qualifying under the QRM with FICO scores as low as 472, which is very high risk.
  - Many low-risk borrowers would inadvertently be denied access to QRM loans, some with scores as high as 845 on a 300- 850 FICO Score range.
  - Sharp discrepancies in the proposed QRM rule's treatment of consumers within a range of FICO Scores that would impact more than 25 percent of the US population. For example, at any given score level within this range some consumers would qualify and others would not qualify under the proposed QRM credit history rules.
- **A return to manual underwriting**. The proposed credit history standards will mark an unwelcome return to manual underwriting while also proving to be difficult to implement. Requiring originators to conduct a manual review of the proposed credit history standards, i.e., the —derogatory factors, in the credit file will signal a shift away from automated underwriting, and will likely be accompanied by added costs, delays, errors and transparency concerns.
- **Some data is unavailable or may be stale**. Some of the credit history information relied upon in the proposed standards, such as the timing of short sales and repossessions, is not readily available to lenders at the time of underwriting and, because the proposed standards permit lenders to determine QRM status on data that is up to 90 days old, many of these important decisions will be based on stale information.
- **Imposes a check-the-box solution**. As FICO has seen in other recent rulemakings where already overburdened financial institutions with scarce compliance resources are driven

toward adopting check-the-box solutions in order to comply with an ineffective regulatory requirement, the proposed QRM standards could result in some institutions taking the disastrous step of substituting the proposed standards for sound underwriting practices.

- **May Imperil the securitization market**. The purpose of the risk retention provisions is to protect the securitization and credit markets, and the clear solution is to require the use of credit scoring models to accurately predict the credit risk that is being assumed by securitizers.

Benefits of Credit Scoring

The benefits derived from the use of credit scores have been well documented in a number of government studies. Most notably, the following reports confirmed that credit scoring:

- **Increases accuracy, access to credit, and market efficiency**. The Federal Reserve Board underscored these points in its 2007 Report to Congress on *Credit Scoring and Its Effects on the Availability and Affordability of Credit.*
- **Decreases the possibility of bias**. The 2010 Federal Reserve Staff Report titled **—***Does Credit Scoring Produce a Disparate Impact?* recognized the benefits derived from the use of an objective measurement of credit risk and concluded that there was no evidence that credit scoring yields a disparate impact by race or gender.

FICO's QRM Solution

The Agencies (OCC, FRB, FDIC, SEC, FHFA, HUD) should mandate the inclusion of credit scores as a QRM underwriting standard. This can be done under their existing regulatory authority and oversight power and in a vendor-neutral way.

- Credit scores are the product of credit scoring models, which are built with depersonalized data pursuant to the rigorous requirements of Regulation B, which implements the Equal Credit Opportunity Act.

- Credit scores are already validated, revalidated and subject to comprehensive regulatory oversight, as evidenced by the recently published Federal Reserve/OCC Supervisory Guidance on Credit Risk Management, to ensure that they are fully predictive, and do not result in impermissible discrimination or exposure to unwarranted credit risk.

- All credit scoring models that meet these regulatory requirements can easily be calibrated to a standard set by regulators based on a specified percentage of the national population of residential mortgage loans that qualify under QRM or, alternatively, a specified national default rate.

Follow-Up Analysis of Proposed QRM Standards

Joanne Gaskin, AMP
Director, Scores
FICO

Introduction

- » FICO undertook research to understand how the credit risk history standards proposed by QRM compared to credit scores and scorecards used by the mortgage industry today
- » FICO® Scores were used as the illustrative benchmark
- » Initial findings were that the credit history standards would result in 77% of the mortgage applicants qualifying for QRM and a 90+ delinquency rate of 3.4%.
  - » A 640 FICO® score would result in a similar percentage of population qualifying for QRM with a 90+ delinquency rate of 2.5%
- » Follow up research was requested to understand the impact of the “non credit” QRM standards and various LTV thresholds.
- » The following research was conducted by FICO leveraging both credit bureau data and LoanPerfomance data.

Agenda

FICO

» **FICO® Score Distribution**

» Parameters of Proposed QRM Study

» Proposed QRM Criteria Outcomes

» Loan to Value Study

  » 85% LTV

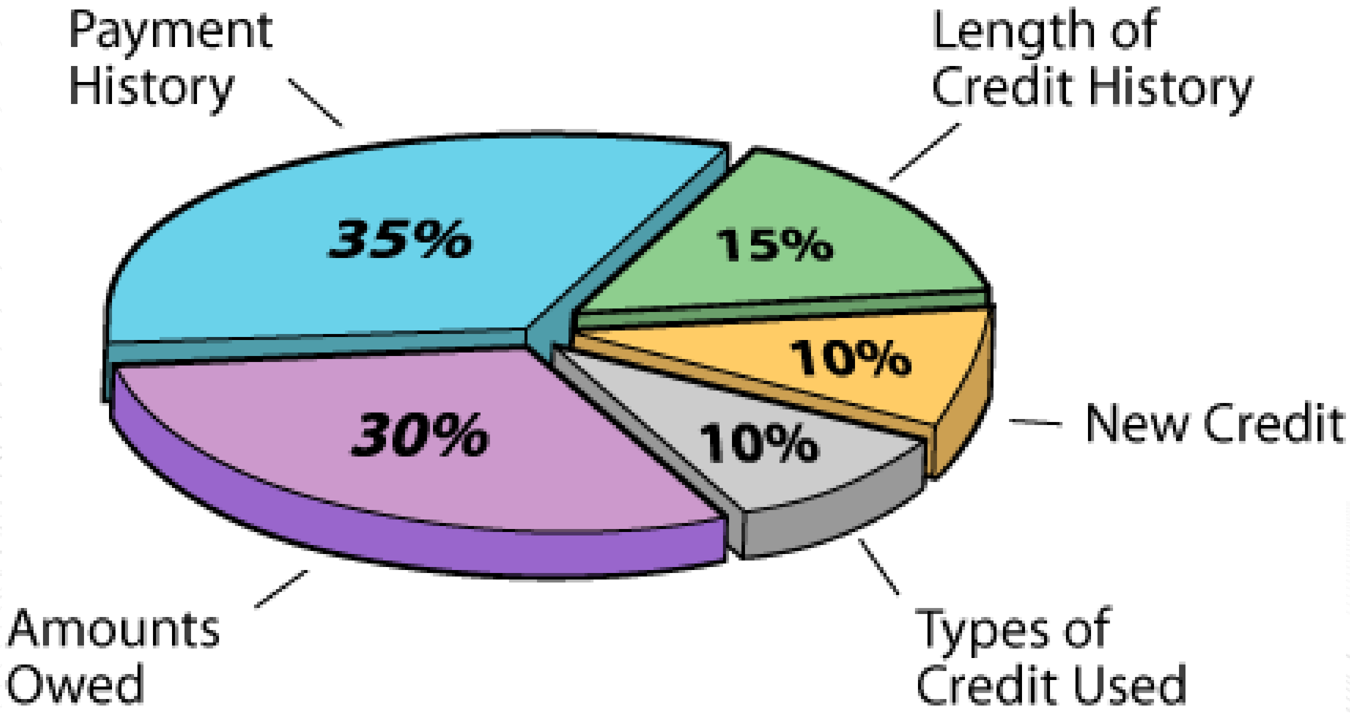
  » 90% LTV

  » 95% LTV

CoreLogic (NYSE: CLGX) provided loan characteristics and performance data for this study. The CoreLogic LoanPerformance databases contain information on more than 45 million loans, representing more than 85 percent of all outstanding mortgage loans. The study dataset was constructed by identifying the loans within data that CoreLogic had authorization to utilize for analysis purposes, could be linked to loans identified by FICO, and had sufficient information to calculate the proposed QRM logic.

What Drives A FICO ® Score

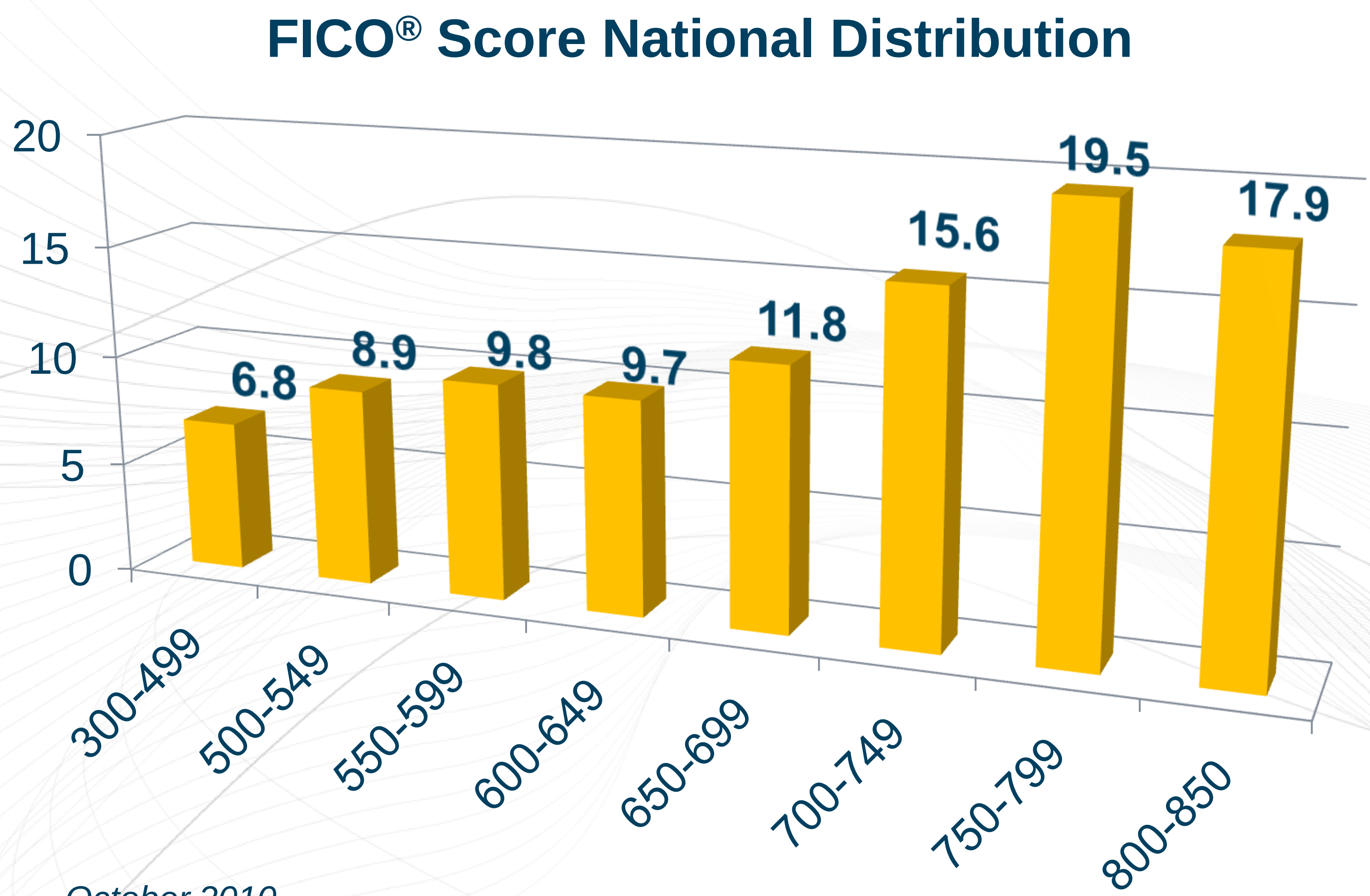
FICO



NOT Considered:

- Race
- Age
- Gender
- Income
- Employment
- Address

Most Consumers Have Good Scores



October 2010

65% of US Consumers have a FICO® score of 650 or higher

Agenda

» FICO® Score Distribution

» **Parameters of Proposed QRM Study**

» Proposed QRM Criteria Outcomes

» Loan to Value Study

Parameters of Proposed QRM Study

- Examined pool of new mortgages opened between 2005-2008
- Merged loan-level information with Credit Bureau files to more fully explore the outcomes of the proposed QRM definition
- QRM "non-credit" criteria applied to dataset
  - Back-end DTI <= 36%
  - Origination Loan-to-Value
    - Purchase <= 80%
    - Refinance <= 75%
    - Cash out Refinance <= 70%
  - Owner occupied
  - First lien
- <u>After applying QRM "non-credit" criteria, ~29% new mortgages originated between 2005-2008 remained</u>
- All subsequent analyses are based on the new mortgages which satisfied the QRM "non-credit" criteria

Agenda

» FICO® Score Distribution

» Parameters of Proposed QRM Study

» **Proposed QRM Criteria Outcomes**

» Loan to Value Study

  » 85% LTV

  » 90% LTV

  » 95% LTV

Proposed QRM Credit Criteria

"…creditor has verified and documented that within 90 days prior to the closing of the mortgage transaction…"

- Borrower is not currently 30 days past due
- Borrower has not been 60 dpd within previous 24 months
- Within previous 36 months
  - No bankruptcy filings or judicial judgments
  - No repossesions
  - No 1 to 4 family property owned by borrower has been subject of foreclosure, deed-in-lieu, or short sale

Proposed QRM Criteria Breakdown

- Files that Pass the QRM “non credit” criteria ~29%
- Of that population:
  - Files that fail QRM “credit” criteria ~14%
  - Files that satisfy QRM “credit” criteria ~86%
- <u>Files with new mortgage that satisfy all aspects of QRM criteria ~25%</u>

QRM Criteria and Comparable FICO Score Cut-off (volume held fixed)

FICO

Corresponding FICO Score Cut-off Analysis

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	86%	14%
FICO 8	650	86%	14%
FICO 8 Mortgage	635	86%	14%
Prior FICO	645	86%	14%

90+ Bad Rate on New Mortgage Accounts

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	2.4%	9.5%
FICO 8	650	2.0%	11.8%
FICO 8 Mortgage	635	1.7%	13.4%
Prior FICO	645	2.0%	12.0%

Overall 90+ Bad Rate on New Mortgage Accounts – 3.4%

Data Summary: The proposed QRM credit criteria allowed for 86% of the new mortgage population to qualify for the QRM exemption. The corresponding FICO® Score that would allow for the same percentage of population to qualify for QRM is a 650. The resulting 90+ dpd rate for the QRM credit criteria is 2.4% vs 2.0% for the FICO® 8 650 Score.

Applying a Score rather than the QRM criteria on the ~47.8 million new mortgages booked between 2005-2008 would have resulted in ~48,000 fewer 90+ dpd accounts qualified for the QRM exemption. Assuming ~$50k loss per bad mortgage, <u>use of a Score would correspond to a reduction in losses of ~$2.4 billion within the QRM qualified loans.</u>

QRM Criteria and Comparable FICO Score Cut-off
(bad rate held fixed)

FICO

90+ Bad Rate on New Mortgage Accounts

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	2.4%	9.5%
FICO 8	620	2.4%	15.2%
FICO 8 Mortgage	580	2.4%	20.1%
Prior FICO	620	2.4%	14.0%

Overall 90+ Bad Rate on New Mortgage Accounts – 3.4%

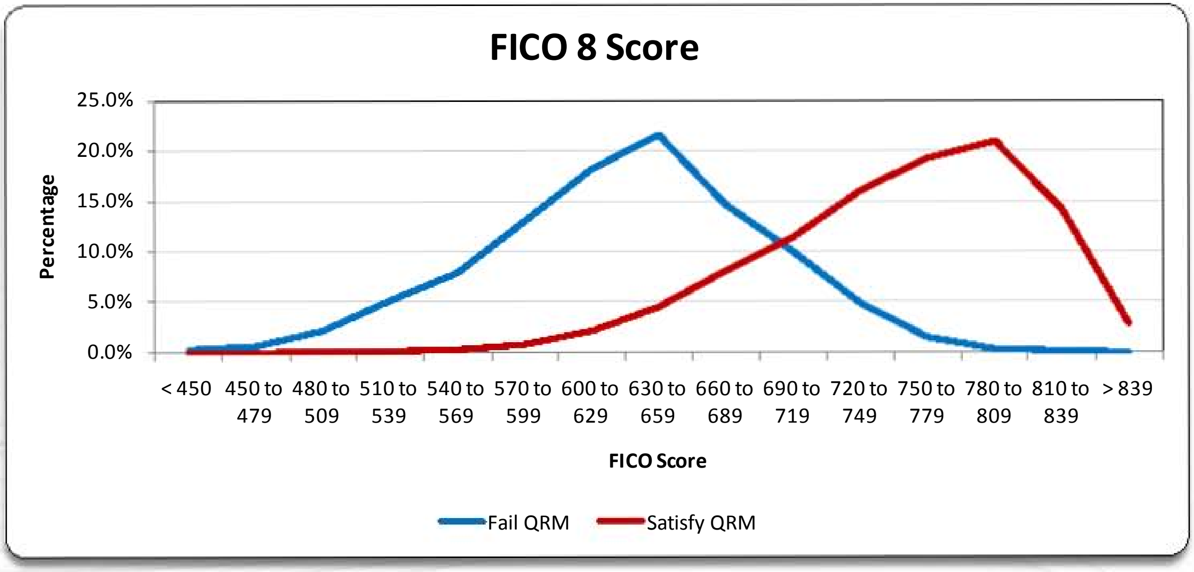
Resulting Volumes by FICO Scores

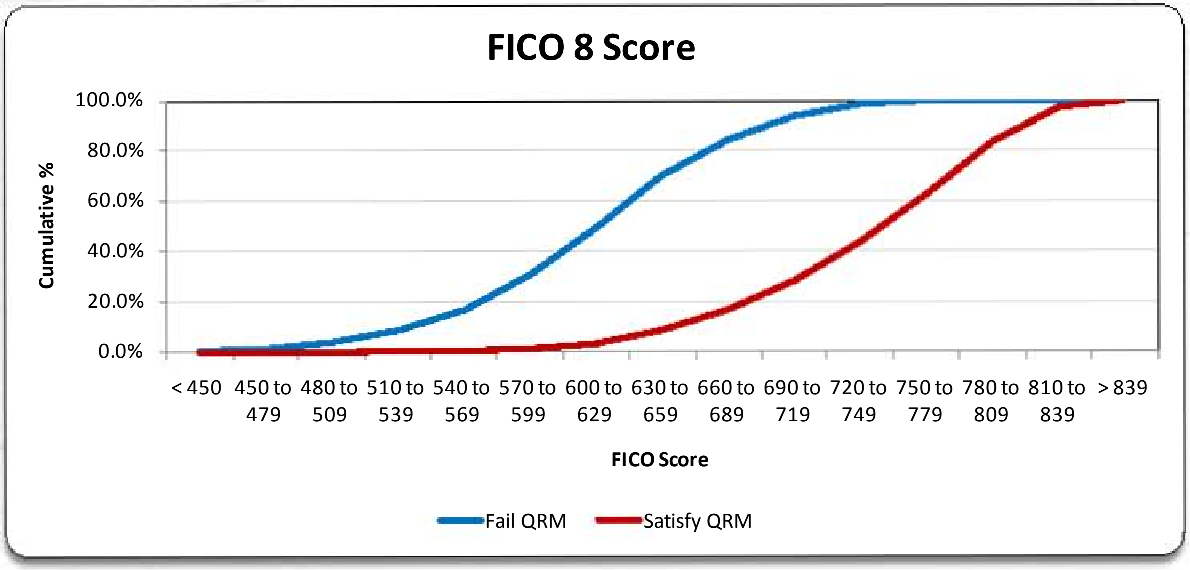
QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	86%	14%
FICO 8	620	92%	8%
FICO 8 Mortgage	580	95%	5%
Prior FICO	620	91%	9%

Data Summary: The proposed QRM standards would result in an overall 2.4% 90+ dpd rate for the QRM qualified population. The corresponding FICO 8 score that would result in the same 90+ dpd rate is a 620.

Applying FICO® 8 score of 620 instead of the QRM criteria on the ~47.8 million new mortgages booked between 2005-2008 would have resulted in <u>~832,000 more QRM qualified consumers</u> while still holding the bad rate of the QRM qualified population fixed at 2.4%.

Proposed QRM Score Distribution





FICO Score Stats – a wide range of credit both qualifies and fails under the proposed rules

FICO

	Files that Fail QRM "Credit" Criteria							
					Percentiles			
Score Version	*Min*	*Max*	*Mean*	*Median*	*1 st*	*5 th*	*95 th*	*99 th*
FICO 8	438	827	630	634	481	523	727	760
FICO 8 Mortgage	332	850	624	630	409	475	749	791
Prior FICO	396	782	619	625	470	509	710	738

	Files that Satisfy QRM "Credit" Criteria							
					Percentiles			
Score Version	*Min*	*Max*	*Mean*	*Median*	*1 st*	*5 th*	*95 th*	*99 th*
FICO 8	493	850	752	761	598	644	833	848
FICO 8 Mortgage	407	850	752	761	561	616	850	850
Prior FICO	492	818	746	760	599	642	809	816

The proposed QRM rules will result in consumers with good credit not qualifying for the QRM exemption while those with poorer credit qualifying, potentially resulting in disparate pricing and terms.

Swap Sets Between QRM and FICO Score Cut-off

	New Mortgage Population							
	Fail QRM & score greater than				*Satisfy QRM & score less than*			
	660	*690*	*710*	*720*	*660*	*690*	*710*	*720*
FICO 8	31%	$\boxed{16\%}$	9%	6%	8%	$\boxed{16\%}$	23%	27%
FICO 8 Mortgage	33%	19%	13%	10%	13%	22%	28%	32%
Prior FICO	27%	11%	5%	3%	8%	17%	25%	29%

Data Summary: 16% of the new mortgage loans originated between 2005 and 2008 with a FICO® score greater than 690 would have failed the QRM criteria.

Agenda

» FICO® Score Distribution

» Parameters of Proposed QRM Study

» Proposed QRM Criteria Outcomes

» **Loan to Value Study**

  » 85% LTV

  » 90% LTV

  » 95% LTV

Parameters of 85% LTV Study

- Examined pool of new mortgages opened between 2005-2008
- Merged loan-level information with Credit Bureau files to more fully explore the outcomes of the proposed QRM definition
- QRM “non-credit” criteria applied to dataset
  - Back-end DTI <= 36%
  - Origination Loan-to-Value
    - Purchase <= 85%
    - Refinance <= 75%
    - Cash out Refinance <= 70%
  - Owner occupied
  - First lien
- After applying QRM “non-credit” criteria, ~30% new mortgages remained

Proposed QRM Criteria Breakdown - 85% LTV

- Files that Pass the QRM “non credit criteria ~30%
- Of that population:
  - Files that fail QRM “credit” criteria ~15%
  - Files that satisfy QRM “credit” criteria ~85%
- Files with new mortgage that satisfy all aspects of QRM criteria ~26%

QRM Credit Criteria and Comparable FICO Score
Cut-off 85% LTV (volume held fixed)

FICO™

Corresponding FICO Score Cut-off

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	85%	15%
FICO 8	650	85%	15%
FICO 8 Mortgage	635	85%	15%
Prior FICO	645	85%	15%

90+ Bad Rate on New Mortgage Accounts

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	2.5%	10.2%
FICO 8	650	2.1%	12.6%
FICO 8 Mortgage	635	1.8%	14.0%
Prior FICO	645	2.1%	12.9%

Overall 90+ Bad Rate on New Mortgage Accounts – 3.6%

Data Summary: The proposed QRM credit criteria (85% LTV) allowed for 85% of the new mortgage population to qualify for the QRM exemption. The corresponding FICO® Score that would allow for the same percentage of population to qualify for QRM is a 650. The resulting 90+ dpd rate for the QRM credit criteria is 2.5% vs 2.1% for the FICO® 8 650 Score.

Applying FICO® 8 score cutoff instead of QRM criteria on the ~47.8 million new mortgages booked between 2005-2008 results in ~49,000 fewer bads above cut off. Assuming ~$50k loss per bad, this corresponds to a reduction in loss of ~$2.4 billion.

QRM Credit Criteria and Comparable FICO Score
Cut-off 85% LTV (bad rate held fixed)

FICO

90+ Bad Rate on New Mortgage Accounts

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	2.5%	10.2%
FICO 8	615	2.5%	16.7%
FICO 8 Mortgage	580	2.5%	21.2%
Prior FICO	615	2.5%	15.2%

Overall 90+ Bad Rate on New Mortgage Accounts – 3.6%

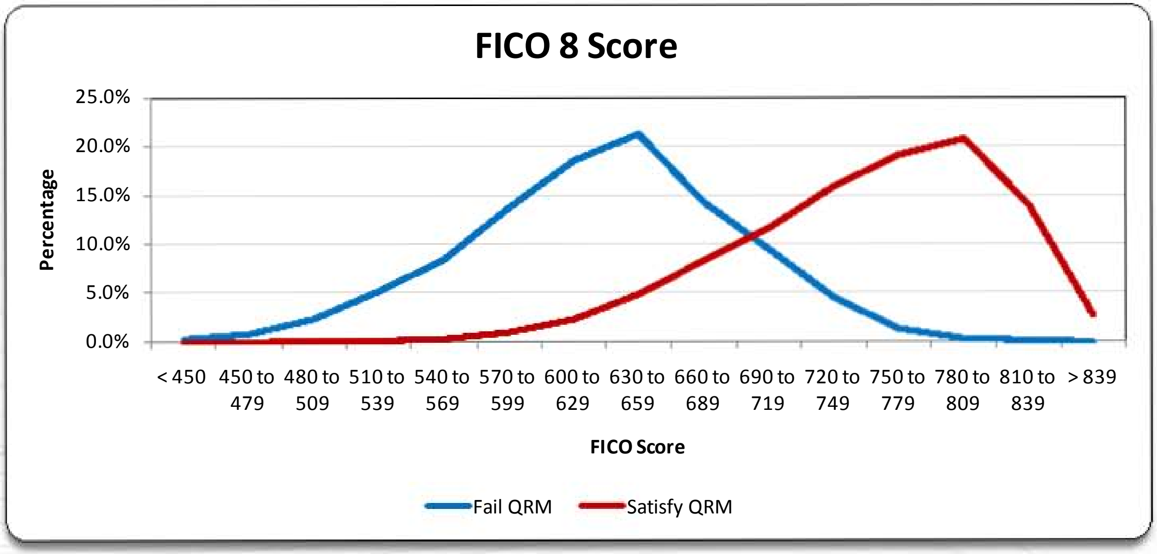
Resulting Volumes by FICO® Score

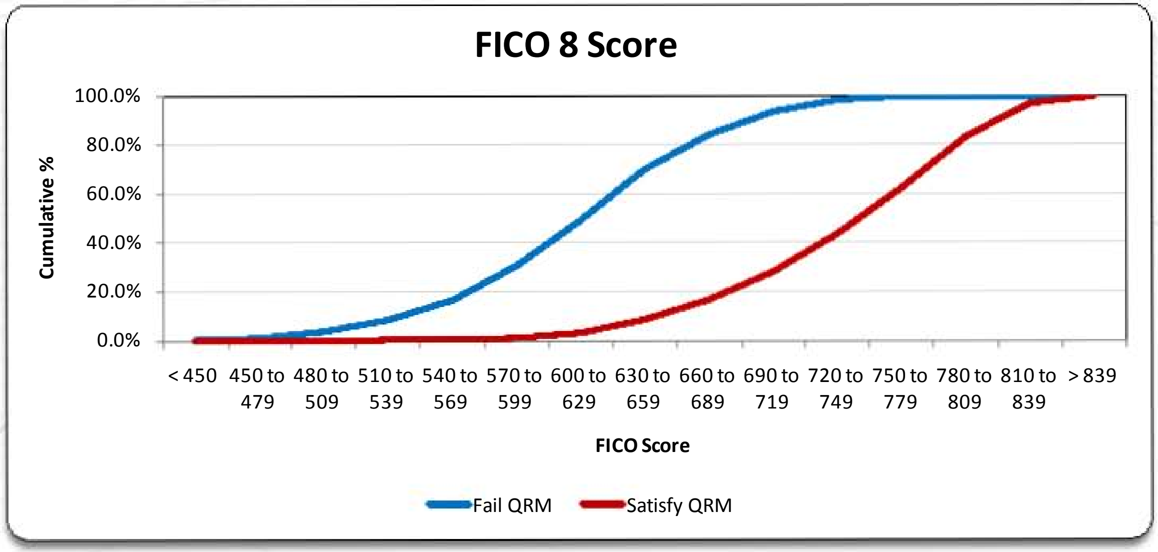
QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	85%	15%
FICO 8	615	92%	8%
FICO 8 Mortgage	580	94%	6%
Prior FICO	615	91%	9%

Data Summary: The proposed QRM standards (85% LTV) would result in an overall 2.5% 90+ dpd rate for the QRM qualified population. The corresponding FICO® 8 score that would result in the same 90+ dpd rate is a 615.

Applying FICO® 8 score cutoff instead of QRM credit criteria on the ~47.8 million new mortgages booked between 2005-2008 results in ~1,000,000 more QRM qualified consumers while still holding the bad rate of the "Above Cut-off" population fixed at 2.5%.

Proposed QRM Score Distribution - 85% LTV





FICO Score Stats 85% LTV - a wide range of credit both qualifies and fails under the proposed rules

FICO

	Files that Fail QRM "Credit" Criteria							
					Percentiles			
Score Version	*Min*	*Max*	*Mean*	*Median*	*1 st*	*5 th*	*95 th*	*99 th*
FICO 8	438	$\boxed{827}$	628	631	479	521	725	757
FICO 8 Mortgage	332	850	621	627	405	471	747	790
Prior FICO	396	782	616	623	468	505	708	735

	Files that Satisfy QRM "Credit" Criteria							
					Percentiles			
Score Version	*Min*	*Max*	*Mean*	*Median*	*1 st*	*5 th*	*95 th*	*99 th*
FICO 8	$\boxed{493}$	850	751	760	597	642	832	848
FICO 8 Mortgage	407	850	751	760	559	615	850	850
Prior FICO	492	818	745	760	598	640	809	816

The proposed QRM rules will result in consumers with good credit not qualifying for the QRM exemption while those with poorer credit qualifying, potentially resulting in disparate pricing and terms.

Swap Sets Between QRM and FICO Score Cut-off 85% LTV

FICO

	New Mortgage Population							
	Fail QRM & score greater than				*Satisfy QRM & score less than*			
	660	*690*	*710*	*720*	*660*	*690*	*710*	*720*
FICO 8	29%	$\boxed{15\%}$	8%	6%	8%	$\boxed{16\%}$	24%	28%
FICO 8 Mortgage	31%	18%	12%	10%	13%	22%	29%	33%
Prior FICO	26%	10%	4%	2%	9%	17%	25%	29%

Data Summary: 15% of the new mortgage loans originated between 2005 and 2008 with a FICO score greater than 690 would have failed the QRM criteria

Parameters of Study - 90% LTV

» Examined pool of new mortgages opened between 2005-2008

» Merged loan-level information with Credit Bureau files to more fully explore the outcomes of the proposed QRM definition

» QRM "non-credit" criteria applied to dataset

- » Back-end DTI <= 36%
- » Origination Loan-to-Value
  - » Purchase <= 90%
  - » Refinance <= 75%
  - » Cash out Refinance <= 70%
- » Owner occupied
- » First lien

» After applying QRM "non-credit" criteria, ~32% new mortgages remained

Proposed QRM Criteria Breakdown - 90% LTV

- Files that Pass the QRM “non credit criteria ~32%
- Of that population:
  - Files that fail QRM “credit” criteria ~16%
  - Files that satisfy QRM “credit” criteria ~84%
- Files with new mortgage that satisfy all aspects of QRM criteria ~27%

QRM Credit Criteria and Comparable FICO Score Cut-off 90% LTV (volume held fixed)

FICO

Corresponding FICO Score Cut-off

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	84%	16%
FICO 8	650	84%	16%
FICO 8 Mortgage	635	83%	17%
Prior FICO	645	84%	16%

90+ Bad Rate on New Mortgage Accounts

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	2.7%	10.8%
FICO 8	650	2.2%	13.2%
FICO 8 Mortgage	635	1.9%	14.6%
Prior FICO	645	2.2%	13.5%

Overall 90+ Bad Rate on New Mortgage Accounts – 4.0%

Data Summary: The proposed QRM credit criteria (90% LTV) allowed for 84% of the new mortgage population to qualify for the QRM exemption. The corresponding FICO® Score that would allow for the same percentage of population to qualify for QRM is a 650. The resulting 90+ dpd rate for the QRM credit criteria is 2.7% vs 2.2% for the FICO® Score.

Applying FICO® 8 score cutoff instead of QRM criteria on the ~47.8 million new mortgages booked between 2005-2008 results in ~64,000 fewer bads above cut off. Assuming ~$50k loss per bad, this corresponds to a reduction in loss of ~$3.2 billion.

QRM Credit Criteria and Comparable FICO Score Cut-off 90% LTV(above cut-off bad rate held fixed)

FICO

90+ Bad Rate on New Mortgage Accounts

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	2.7%	10.8%
FICO 8	620	2.7%	16.5%
FICO 8 Mortgage	585	2.7%	21.0%
Prior FICO	620	2.6%	15.4%

Overall 90+ Bad Rate on New Mortgage Accounts – 4.0%

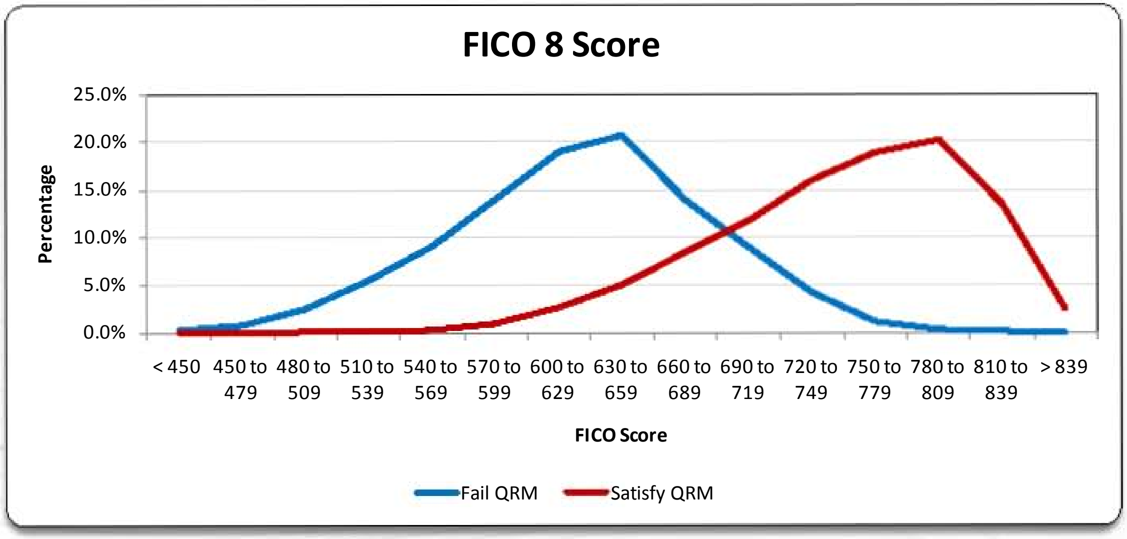
Resulting Volumes by Cut-off

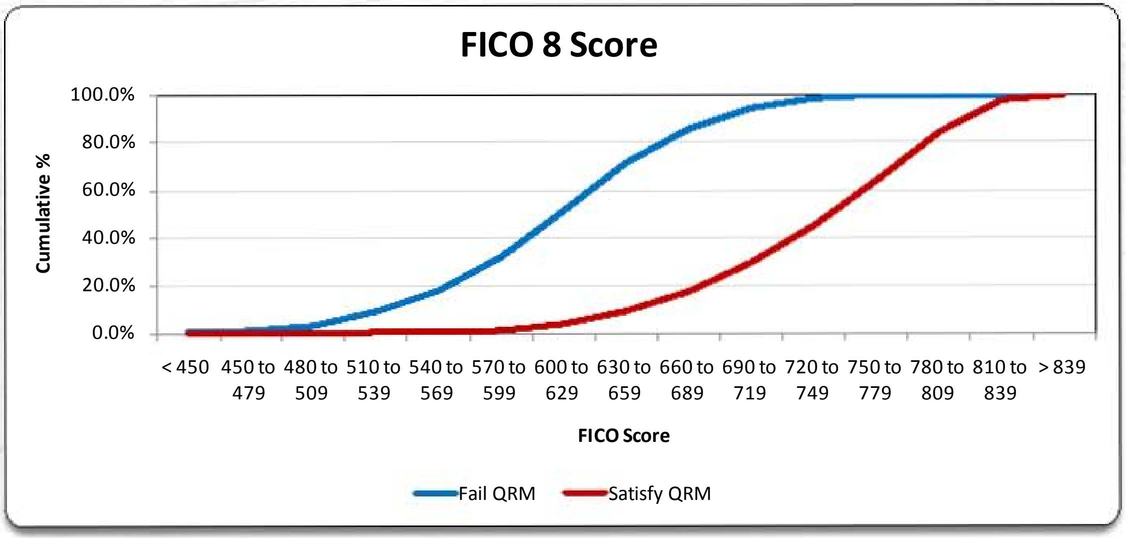
QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	84%	16%
FICO 8	620	90%	10%
FICO 8 Mortgage	585	93%	7%
Prior FICO	620	89%	11%

Data Summary: The proposed QRM standards (90% LTV) would result in an overall 2.7% 90+ dpd rate for the QRM qualified population. The corresponding FICO® 8 score that would result in the same 90+ dpd rate is a 620.

Applying FICO® 8 score cutoff instead of QRM credit criteria on the ~47.8 million new mortgages booked between 2005-2008 results in ~920,000 more QRM qualified consumers while still holding the bad rate of the "Above Cut-off" population fixed at 2.7%.

Proposed QRM Score Distribution - 90% LTV





FICO Score Stats 90% LTV - a wide range of credit both qualifies and fails under the proposed rules

FICO

	Files that Fail QRM "Credit" Criteria							
					Percentiles			
Score Version	*Min*	*Max*	*Mean*	*Median*	*1 st*	*5 th*	*95 th*	*99 th*
FICO 8	438	827	625	628	480	520	723	756
FICO 8 Mortgage	321	850	617	623	409	470	743	787
Prior FICO	396	782	614	620	468	504	706	734

	Files that Satisfy QRM "Credit" Criteria							
					Percentiles			
Score Version	*Min*	*Max*	*Mean*	*Median*	*1 st*	*5 th*	*95 th*	*99 th*
FICO 8	493	850	749	758	592	638	831	848
FICO 8 Mortgage	407	850	749	757	556	611	850	850
Prior FICO	492	818	743	758	592	636	809	816

The proposed QRM rules will result in consumers with good credit not qualifying for the QRM exemption while those with poorer credit qualifying, potentially resulting in disparate pricing and terms

Swap Sets Between QRM and FICO Score Cut-off 90% LTV

	New Mortgage Population							
	Fail QRM & score greater than				*Satisfy QRM & score less than*			
	660	*690*	*710*	*720*	*660*	*690*	*710*	*720*
FICO 8	28%	14%	7%	5%	9%	17%	25%	29%
FICO 8 Mortgage	30%	17%	11%	9%	14%	23%	30%	34%
Prior FICO	24%	10%	4%	2%	9%	18%	26%	30%

Data Summary: 14% of the new mortgage loans originated between 2005 and 2008 with a FICO score greater than 690 would have failed the QRM criteria.

Parameters of Study 95% LTV

- Examined pool of new mortgages opened between 2005-2008
- Merged loan-level information with Credit Bureau files to more fully explore the outcomes of the proposed QRM definition
- QRM “non-credit” criteria applied to dataset
    - Back-end DTI <= 36%
    - Origination Loan-to-Value
        - Purchase <= 95%
        - Refinance <= 75%
        - Cash out Refinance <= 70%
    - Owner occupied
    - First lien
- After applying QRM “non-credit” criteria, ~34% new mortgages remained

Proposed QRM Criteria Breakdown - 95% LTV

- Files that Pass the QRM “non credit criteria ~34%
- Of that population:
  - Files that fail QRM “credit” criteria ~16%
  - Files that satisfy QRM “credit” criteria ~84%
- Files with new mortgage that satisfy all aspects of QRM criteria ~28%

QRM Credit Criteria and Comparable FICO Score Cut-off 95% LTV (volume held fixed)

FICO

Corresponding FICO Score Cut-off

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	84%	16%
FICO 8	645	84%	16%
FICO 8 Mortgage	630	84%	16%
Prior FICO	645	83%	17%

90+ Bad Rate on New Mortgage Accounts

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	2.9%	11.3%
FICO 8	645	2.4%	14.5%
FICO 8 Mortgage	630	2.1%	15.6%
Prior FICO	645	2.3%	14.3%

Overall 90+ Bad Rate on New Mortgage Accounts – 4.3%

Data Summary: The proposed QRM credit criteria (95% LTV) allowed for 84% of the new mortgage population to qualify for the QRM exemption. The corresponding FICO® Score that would allow for the same percentage of population to qualify for QRM is a 645. The resulting 90+ dpd rate for the QRM credit criteria is 2.9% vs 2.4% for the FICO® Score.

Applying FICO® 8 score cutoff instead of QRM criteria on the ~47.8 million new mortgages booked between 2005-2008 results in ~68,000 fewer bads above cut off. Assuming ~$50k loss per bad, this corresponds to a reduction in loss of ~$3.4 billion.

QRM Credit Criteria and Comparable FICO Score Cut-off 95% LTV (bad rate held fixed)

FICO™

90+ Bad Rate on New Mortgage Accounts

QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	2.9%	11.3%
FICO 8	615	2.9%	17.7%
FICO 8 Mortgage	585	2.9%	21.3%
Prior FICO	615	2.9%	16.4%

Overall 90+ Bad Rate on New Mortgage Accounts – 4.3%

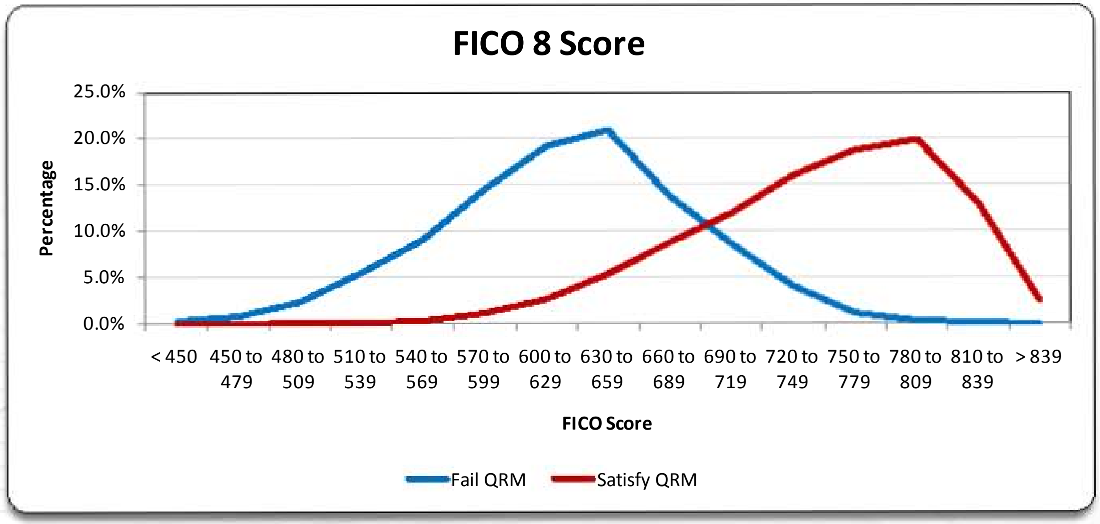
Resulting Volumes by Cut-off

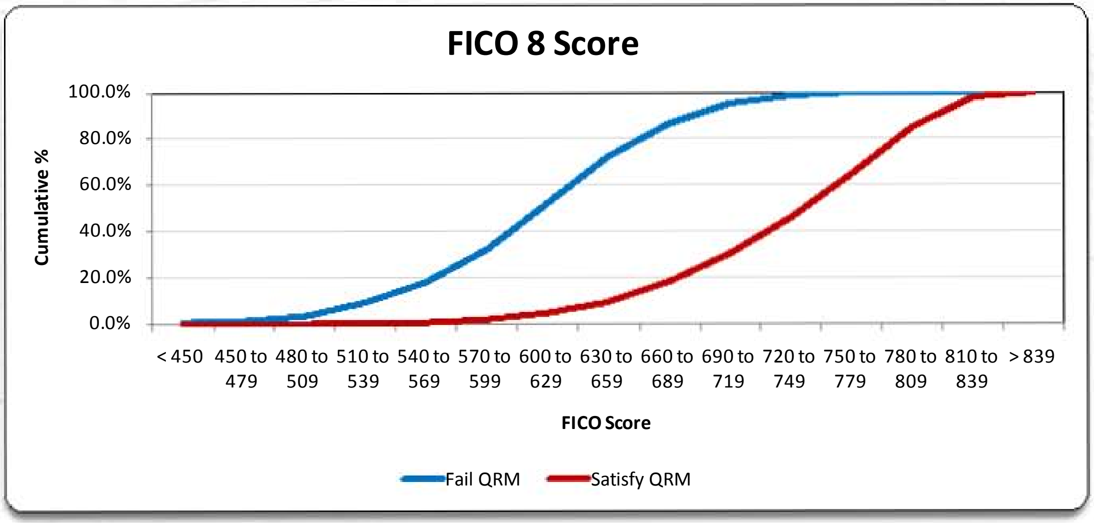
QRM/Score	Score Cut-off	Above Cut-off	Below Cut-off
QRM Criteria	-	84%	16%
FICO 8	615	91%	9%
FICO 8 Mortgage	585	93%	7%
Prior FICO	615	90%	10%

Data Summary: The proposed QRM standards would result in an overall 2.9% 90+ dpd rate for the QRM qualified population. The corresponding FICO 8 score that would result in the same 90+ dpd rate is a 615.

Applying FICO 8 score cutoff instead of QRM credit criteria on the ~47.8 million new mortgages booked between 2005-2008 <u>results in ~1,140,000 more QRM qualified consumers</u> while still holding the bad rate of the “Above Cut-off” population fixed at 2.9%.

Proposed QRM Score Distribution - 95% LTV





FICO Score Stats 95% LTV- a wide range of credit both qualifies and fails under the proposed rules

FICO

	Files that Fail QRM "Credit" Criteria							
					Percentiles			
Score Version	*Min*	*Max*	*Mean*	*Median*	*1 st*	*5 th*	*95 th*	*99 th*
FICO 8	428	$\boxed{827}$	624	627	480	520	721	756
FICO 8 Mortgage	321	850	616	622	409	472	741	786
Prior FICO	396	782	613	619	468	504	705	732

	Files that Satisfy QRM "Credit" Criteria							
					Percentiles			
Score Version	*Min*	*Max*	*Mean*	*Median*	*1 st*	*5 th*	*95 th*	*99 th*
FICO 8	$\boxed{493}$	850	748	756	591	636	831	848
FICO 8 Mortgage	407	850	747	754	555	609	850	850
Prior FICO	492	818	742	757	589	634	809	816

The proposed QRM rules will result in consumers with good credit not qualifying for the QRM exemption while those with poorer credit qualifying, potentially resulting in disparate pricing and terms

Swap Sets Between QRM and FICO Score Cut-off 95% LTV

	New Mortgage Population							
	Fail QRM & score greater than				*Satisfy QRM & score less than*			
	660	*690*	*710*	*720*	*660*	*690*	*710*	*720*
FICO 8	27%	$\boxed{14\%}$	7%	5%	9%	$\boxed{18\%}$	26%	30%
FICO 8 Mortgage	29%	16%	11%	8%	15%	24%	31%	35%
Prior FICO	24%	9%	4%	2%	10%	19%	27%	31%

Data Summary: 14% of the new mortgage loans originated between 2005 and 2008 with a FICO® score greater than 690 would have failed the QRM criteria.

Summary

» Since 1995 Credit Scoring has been the industry standard measure of credit risk and it brings many benefits; accuracy, fairness, reliability and consistency to the credit decisioning process

» FICO’s research has revealed that leveraging empirically derived credit scores; e.g. FICO 690 rather than the proposed credit history rules would have allowed 7 Million more consumers that obtained a mortgage between 2005 and 2008 to qualify for the QRM exemption

» FICO’s research also indicates that the use of a empirically derived score could also reduce default rates and resulting losses by $2.4 Billion holding the number of consumers eligible for the QRM exemption constant.

The widespread use of credit scoring in the underwriting
consumer credit has raised concerns that the use of thes

Federal Reserve Board 2007 Report to Congress

Credit Scoring and Its Effects on the Availability and Affordability of Credit:

Increased accuracy, access to credit, and market efficiency

Finally, credit scoring is accurate; that is, individuals with lower (worse) credit scores are more likely to default on their loans than individuals with higher (better) scores. Credit scoring increases the efficiency of consumer credit markets by helping creditors establish prices that are more consistent with the risks and costs inherent in extending credit. Risk-based pricing reduces cross-subsidization among borrowers posing different credit risks and sends a more accurate price signal to each consumer.

FICO™

FICO® Score Definition

The FICO® score is a summary of the information on a consumer's credit bureau report.

Each score is a single 3-digit number ranging from 300-850® which rank-orders consumers according to their default risk.

Higher scores equate to lower risk of default, and often qualify the consumer for more attractive rates.

FICO® Scores Are Relative

- FICO® scores rank consumers in the order of how likely they are to pay as agreed.
- At higher scores, more people with that score are likely to pay as agreed.
- At any score (even 850), some won't pay as agreed.