Comment Letter to the Consumer Financial Protection Bureau on the Qualified Mortgage Rule

Karan Kaul, Laurie Goodman, and Jun Zhu

September 2019

On July 25, the Consumer Financial Protection Bureau (CFPB) issued an advance notice of proposed rulemaking seeking public comments on the January 2021 expiration of a key provision in the CFPB's qualified mortgage (QM) rule.[1] This provision exempts conventional mortgages eligible for purchase by Fannie Mae and Freddie Mac (the government-sponsored enterprises, or GSEs) from a central requirement of the QM rule that requires qualified mortgages to have a debt-to-income (DTI) ratio of 43 percent or less. Commonly known as the "GSE patch," this exemption has played a critical role in enabling access to credit for creditworthy borrowers with DTI ratios over 43 percent.

The Urban Institute first commented on this issue in October 2018 and argued that the current DTI-centric QM regime does not adequately serve market needs (Kaul and Goodman 2018). As a single-dimensional variable, the DTI ratio by itself does not capture credit risk comprehensively. We showed that FICO scores and loan-to-value (LTV) ratios better predict default than DTI ratios. We also explained how the DTI ratio is often mismeasured, as certain types of income and debt are excluded from the DTI calculation, distorting the ratio and, by extension, mortgage lending.

We also explained that a high-DTI mortgage is not necessarily riskier than a low-DTI mortgage because mortgage underwriting takes a borrower's full financial profile into account. In addition to the DTI ratio, the full profile includes FICO scores, LTV ratios, income, assets, savings, and tax returns. In fact, as we demonstrate in this comment letter, many high-DTI mortgages default at lower rates than low-DTI mortgages (i.e., high-DTI mortgages are less risky). By deeming these mortgages as qualified mortgages, the GSE patch has given lenders an efficient secondary market outlet, which enables such financing. If the patch were eliminated without a replacement, these borrowers would need to get either a Federal Housing Administration (FHA) loan (which may be more expensive and would increase taxpayer risk) or a nonqualified mortgage (which would be more expensive). Potential borrowers priced out would have to forgo purchasing a home.

Given the potential for disruption, our previous brief proposed an alternative QM regime without a DTI requirement. We shared comprehensive data on defaults going back to the mid-1990s, demonstrating the predictiveness of rate spread (i.e., the difference between the annual percentage rate, or APR, and the average prime offer rate, or APOR)[2] across three business cycles: pre-bubble, Great Recession, and postcrisis. This analysis showed a strong positive relationship between rate spread and defaults across all lending channels.

Our earlier analysis supports the following recommendations:

- The DTI ratio should be dropped from the QM rule, given its inherent weakness in predicting default. This would make appendix Q unnecessary and allow the GSE patch to expire with minimal disruption to the market.

- Other requirements of the QM rule should remain in place. Restrictions on risky loan features, points and fees, terms longer than 30 years, guidelines concerning the underwriting of adjustable-rate mortgages, restrictions on prepayment penalties, and the QM treatment for loans originated and held by depositories with less than $10 billion in assets would all remain unchanged.

- Absent DTI ratios, the QM rule would be defined by existing product and feature restrictions. The rate spread would continue to be the "bright line" separating safe harbor loans from rebuttable presumption QM loans.

In this brief, we substantially expand our prior analysis to strengthen the case for the elimination of the DTI ratio from the QM rule. We present this new analysis in three parts:

- We provide additional empirical data demonstrating the severe limitations of the DTI ratio in predicting default.

- We provide data characterizing the high-DTI lending segment: Who are these borrowers? How much do they depend on high-DTI lending?

- We provide additional data supporting the rate-spread recommendation, showing it has been better than the DTI ratio in predicting default. We also present new evidence that suggests the QM safe harbor threshold be raised from 150 basis points to 200 basis points.

The Limitations of the DTI Ratio in Predicting Default

To examine default behavior, we used Fannie Mae loan-level performance data, covering 30-year fixed-rate, full-documentation loans originated from the first quarter of 1999 through the second quarter of 2018. We sorted the data into DTI ratio and FICO score buckets, tracking loan performance (the likelihood of ever going 90 or more days delinquent, or "seriously delinquent") in each bucket over the life of the loan. Table 1 shows a snapshot of loan performance at 120 months (10 years) for three DTI ratio buckets and the highest and lowest FICO score buckets. Figure 1 shows the full loan performance over the life of these loans.

TABLE 1
**Share of Fannie Mae Loans Ever 90 or More Days
Delinquent at 120 Months, by FICO Score and DTI Ratio**

	FICO score > 750	FICO score < 700
DTI ratio ≤ 30%	0.6%	5.6%
DTI ratio 30–45%	1.1%	7.1%
DTI ratio > 45%	2.8%	11.4%

Source: Urban Institute analysis of Fannie Mae loan-level performance data.
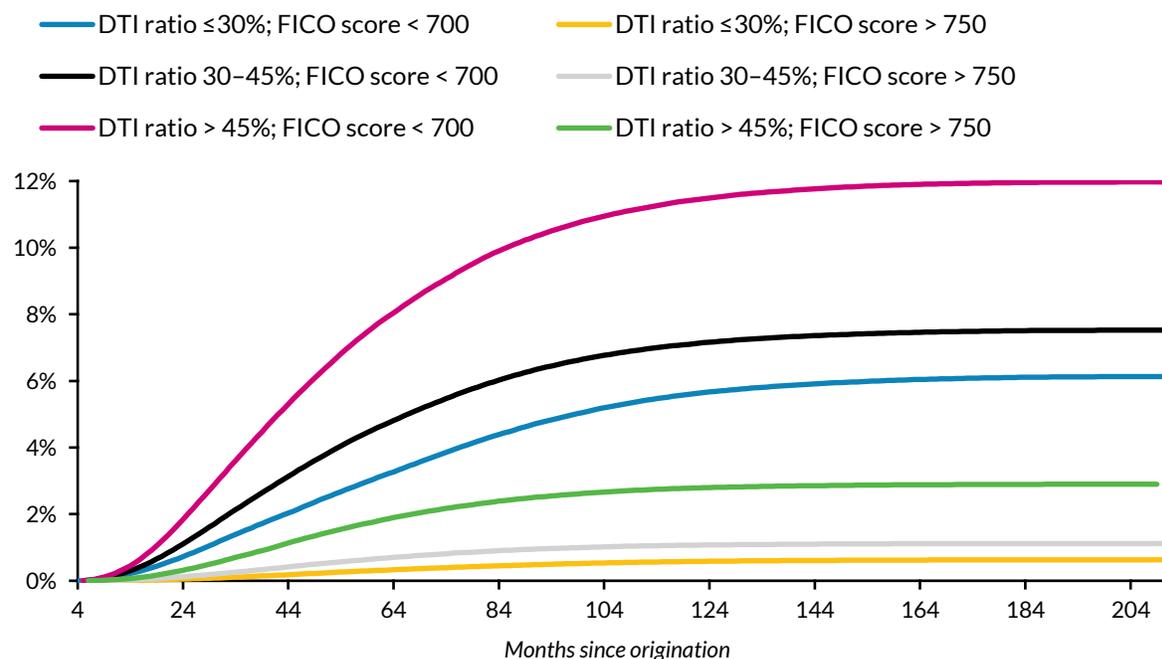
Notes: DTI = debt-to-income. The Fannie Mae dataset includes 30-year fixed-rate, full-documentation, fully amortizing mortgage loans. These data include loans originated from the first quarter of 1999 through the second quarter of 2018. Loan performance is through the second quarter of 2019.

Table 1 shows how FICO scores and DTI ratios affect defaults. Within each of the three DTI buckets, the serious delinquency rate for loans with FICO scores below 700 is orders of magnitude greater than it is for loans with FICO scores above 750. For loans with DTI ratios up to 30 percent, the default rate increases more than nine times (from 0.6 percent to 5.6 percent) from loans with FICO scores above 750 to loans with FICO scores below 700. For loans with DTI ratios between 30 and 45 percent and over 45 percent, the default rate increases more than sixfold and fourfold, respectively, between the two FICO score buckets. These represent substantial increases in default rates. Now, let us look at default rates moving from low to high DTI ratios within each FICO bucket. For loans with FICO scores below 700, the default rate doubles (from 5.6 percent to 11.4 percent) from the lowest to the highest DTI bucket. For loans with FICO scores above 750, the default rate increases fourfold (from 0.6 percent to 2.8 percent.)

These patterns tell us several things. First, the effect of rising DTI ratios on default when the FICO score is held constant is lower than the effect of declining FICO scores when the DTI ratio is held constant. This reaffirms the weakness of DTI ratios in predicting default. Second, table 1 shows that the default rate for loans with DTI ratios over 45 percent and FICO scores above 750 (2.8 percent) is half the 5.6 percent default rate for loans with DTI ratios up to 30 percent and FICO scores below 700. In other words, the high-DTI loan with the higher FICO score is much safer than the low-DTI loan with the lower FICO score. If the CFPB eliminated the patch and left the 43 percent DTI cap in place (or raised it to 45 percent), a higher-risk loan with a lower DTI ratio would be awarded safe harbor protection, while a safer loan with a higher DTI ratio would be penalized as a nonqualified mortgage. Although table 1 summarizes this analysis at the 10-year loan age mark, the results are every bit as valid over time. Figure 1 shows serious delinquency rates, by loan age, for the same FICO score and DTI ratio buckets over time, demonstrating the robustness of this analysis. At every loan age, loans with the highest DTI ratios and FICO scores (green line) have a significantly lower serious delinquency rate than loans with the lowest DTI ratios and FICO scores (blue line).

Share of Fannie Mae Loans Ever 90 or More Days Delinquent, by FICO Score and DTI Ratio

Source: Urban Institute analysis of Fannie Mae loan-level performance data.

Notes: DTI = debt-to-income. The Fannie Mae dataset includes 30-year fixed-rate, full-documentation, fully amortizing mortgage loans. These data include loans originated from the first quarter of 1999 through the second quarter of 2018. Loan performance is through the second quarter of 2019.

The above analysis demonstrates the importance of evaluating a borrower's broader financial profile using the full range of underwriting variables. Table 2 provides additional context that explains how a broader assessment of credit risk meaningfully reduces defaults. For each origination year group and DTI bucket, we show the FICO score distribution for Fannie Mae loans. High-DTI lending has become safer over time, even as the share of high-DTI lending has increased. Among Fannie Mae full-documentation, fully amortizing loans with DTI ratios over 45 percent, the share of loans with FICO scores above 750 increased from 28 percent in 1999–2004 to 33 percent in 2007 and 42 percent in 2008. For originations after 2009, this share jumped to 59 percent. More importantly, the increase in the lending share for loans with FICO scores above 750 in each of the three DTI buckets has come from a large reduction in the share of lending to borrowers with FICO scores below 700 (the gray-shaded cells). Thus, even though the share of high-DTI lending has increased, these borrowers are being held to a much higher FICO standard.

TABLE 2

Distribution of Fannie Mae Lending, by FICO Score and DTI Ratio

Origination year	DTI ratio ≤30%			DTI ratio 30–45%			DTI ratio > 45%		
	FICO score ≤700	FICO score 700–750	FICO score > 750	FICO score ≤700	FICO score 700–750	FICO score > 750	FICO score ≤700	FICO score 700–750	FICO score > 750
1999–2004	28%	27%	45%	38%	30%	31%	40%	32%	28%
2005	28%	22%	50%	37%	27%	36%	39%	29%	32%
2006	29%	22%	50%	38%	26%	37%	40%	28%	32%
2007	29%	21%	50%	38%	25%	37%	41%	27%	33%
2008	16%	21%	63%	22%	27%	50%	28%	30%	42%
2009–2010	6%	17%	78%	10%	25%	66%	13%	28%	59%
2011–2018	9%	18%	73%	16%	27%	57%	15%	26%	59%
1999–2018	18%	22%	60%	24%	28%	48%	33%	30%	38%

Source: Urban Institute analysis of Fannie Mae loan-level performance data.
Notes: DTI = debt-to-income. The Fannie Mae dataset includes 30-year fixed-rate, full-documentation, fully amortizing mortgage loans. These data include loans originated from the first quarter of 1999 through the second quarter of 2018. Loan performance is through the second quarter of 2019.

Lastly, further support for the DTI ratio's limitations in predicting default is confirmed by a regression analysis (table 3). We use a simple ordinary least squares regression, capturing the default effects from different risk characteristics (DTI ratio, FICO score, and LTV ratio), controlling for issue-year effects, loan size, loan purpose, property type, occupancy type, and first-time homebuyer status. This analysis shows that although the DTI ratio is a predictor of default, it is weaker than the LTV ratio and much weaker than the FICO score. These results show that a one standard deviation, or 11.3 percentage-point, change in the DTI ratio from its mean value of 34.3 percent to 45.6 percent would increase the likelihood of default by only 0.6 percentage points, all else equal. But the same one standard deviation, or 54-point, change in FICO score from its mean value of 740 to 686 would increase the likelihood of default by about 2.5 percentage points, more than four times the DTI effect. A separate analysis of loans insured by the FHA showed similar results.[3]

TABLE 3

Comparing the Predictive Power of DTI Ratios, FICO Scores, and LTV Ratios

Parameter	Estimate	*t*-value	Mean	Standard deviation	Effect of one standard deviation
DTI ratio	0.056%	187.3	34.3%	11.3	0.6%
FICO score	-0.046%	-681.3	739.9	53.6	-2.5%
LTV ratio	0.063%	277.5	73.4%	16.0	1.0%

Source: Urban Institute analysis of Fannie Mae loan-level performance data.
Notes: DTI = debt-to-income; LTV = loan-to-value. The Fannie Mae dataset includes 30-year fixed-rate, full-documentation, fully amortizing mortgage loans. These data include loans originated from the first quarter of 1999 through the second quarter of 2018. Loan performance is through the second quarter of 2019.

The Significance of High-DTI Lending for the Mortgage Market

High-DTI lending, when considered in the context of the full set of underwriting variables balanced against one another, is less risky than low-DTI lending where underwriting variables are not adequately weighed against each other. A second reason for preserving high-DTI lending is its importance to minorities and first-time homebuyers. Table 4 shows high-DTI lending patterns by channel and race or ethnicity in 2018.

TABLE 4

High-DTI Lending by Channel and Race or Ethnicity, 2018

Lending channel	Race or ethnicity	Share of loans with DTI ratios > 45%	Number of loans with DTI ratios > 45%	Distribution of all loans	Distribution of all loans with DTI ratios > 45%
Government	Black	43.3%	88,307	13.7%	16.1%
	Hispanic	46.8%	112,854	16.2%	20.6%
	White	32.9%	324,370	66.5%	59.2%
	Asian	47.9%	19,291	2.7%	3.5%
	Other	28.0%	3,526	0.8%	0.6%
	Total	36.9%	548,349	100.0%	100.0%
GSE conventional	Black	21.3%	16,624	4.8%	5.5%
	Hispanic	24.2%	39,702	10.0%	13.1%
	White	17.2%	218,049	77.7%	71.9%
	Asian	24.0%	27,615	7.0%	9.1%
	Other	18.3%	1,394	0.5%	0.5%
	Total	18.6%	303,385	100.0%	100.0%
Non-GSE conventional	Black	18.4%	19,786	5.1%	5.2%
	Hispanic	21.5%	43,825	9.7%	11.4%
	White	17.9%	292,220	77.4%	76.2%
	Asian	16.5%	25,646	7.4%	6.7%
	Other	21.3%	1,911	0.4%	0.5%
	Total	18.2%	383,387	100.0%	100.0%

Source: 2018 Home Mortgage Disclosure Act data.

Notes: DTI = debt-to-income; GSE = government-sponsored enterprise. Includes owner-occupied, single-family (one to four units), site-built, purchase, and refinance loans. Loans with missing race or ethnicity were reallocated based on the share of lending to each race or ethnicity.

Let us start with the government channel, which includes FHA, US Department of Veterans Affairs, and US Department of Agriculture loans and serves a larger share of minorities than the GSE or the non-GSE conventional (i.e., fully private) channels: 43.3 percent of all government loans made to black borrowers in 2018 had DTI ratios over 45 percent. This share was higher for Hispanic borrowers (46.8 percent) and Asian borrowers (47.9 percent). Even white borrowers were highly dependent on high-DTI lending. About one-third of government lending to white borrowers was high-DTI lending. The last two columns in table 4 show the distribution of all loans and loans with DTI ratios over 45 percent by race or ethnicity. Black and Hispanic borrowers received 13.7 percent and 16.2 percent of all government loans in 2018 but 16.1 percent and 20.6 percent of loans with DTI ratios over 45 percent. That is, a loan to a

black borrower was 18 percent more likely to be a high-DTI loan than the overall loan universe. A loan to a Hispanic borrower was 27 percent more likely to be a high-DTI loan than the overall universe.

The share of high-DTI loans in the GSE channel and the private channel is less dramatic than in the government channel but still demonstrates minority borrowers' increased dependence on high-DTI lending relative to white borrowers: 21.3 percent, 24.2 percent, and 24.0 percent of GSE loans made to black, Hispanic, and Asian borrowers, respectively, had DTI ratios over 45 percent, compared with 17.2 percent of loans to white borrowers. Comparing the racial and ethnic distribution of all loans with the distribution of loans with DTI ratios over 45 percent shows that minorities were more dependent on high-DTI lending than white borrowers. A loan to a black borrower was 15 percent more likely to be a high-DTI loan than the overall universe, and a loan to a Hispanic borrower was 31 percent more likely to be a high-DTI loan than the overall universe. The proportional overrepresentation of black and Hispanic borrowers in the GSE high-DTI lending segment is close to that in the government channel.

We chose a 45 percent DTI cutoff for this analysis (and more generally across this brief) as opposed to 43 percent for a reason. Eliminating the patch and relaxing the DTI cap from 43 percent to 45 percent would be a marginal change at best. If such a regime had been in place in 2018, more than 303,000 GSE borrowers with DTI ratios over 45 percent would not have been able to obtain that financing. The alternative to GSE lending for these borrowers is either FHA or private lending, both of which are more expensive for borrowers who otherwise qualify for GSE financing. Those unable to afford the higher financing costs would have to forgo buying a home.

In sum, eliminating the patch and slightly relaxing the DTI cap to 45 percent (or leaving it unchanged at 43 percent) will serve neither borrowers nor the market nearly as adequately as the current patch does because of these four reasons:

1. Loans with DTI ratios over 45 percent as part of comprehensive underwriting have lower default rates than loans with DTI ratios up to 30 percent with less robust underwriting.

2. A 45 percent DTI cap will disproportionately affect minorities and first-time homebuyers in their ability to obtain mortgage credit.

3. The changes will unnecessarily increase financing costs or curtail homeownership for borrowers pushed out of the GSE channel.

4. By sending more high-DTI borrowers to the FHA, which tends to have less flexible loss mitigation procedures and hence higher loss severities than the GSEs, the changes will actually end up increasing taxpayer risk (Kaul et al. 2018).

What Does This Mean for the Patch and the QM Rule?

Given the DTI ratio's limitation in predicting default, the positive effect of comprehensive underwriting, and the importance of high-DTI lending to all borrower segments, we reiterate our recommendation that the CFPB drop the DTI ratio from the QM rule. Were the CFPB to do this, the QM rule would be

defined by its product and feature restrictions, and safe harbor determination would continue to depend on the rate spread, the difference between the APR on the loan and the APOR. This raises two new questions:

- Is the APR a better predictor of default than the DTI ratio? If so, how much better?
- Is a 150 basis-point rate spread the correct threshold?

To answer the first question, we compare historical default rates for Fannie Mae loans by rate spread[4] and by DTI ratio. In figure 2, the left panel shows default rates by loan age for six rate-spread buckets. The right panel shows default rates for five DTI ratio buckets. Three points are worth highlighting.

First, the DTI ratio and the rate spread have a direct relationship with default. That is, default rates rise as rate spreads and DTI ratios rise. Second, the rate spread does a better job sorting out loans that are more likely to default than the DTI metric. At any given age, loans with rate spreads over 200 basis points experience much higher serious delinquency rates than loans with DTI ratios over 50 percent (green lines). Similarly, loans with rate spreads between 151 and 200 basis points default at higher rates than loans with DTI ratios between 45 and 50 percent (pink lines). And so on. If the goal is to keep riskier loans outside the QM box, rate spread achieves that more efficiently than the DTI ratio.

Third, this analysis allows us to study the effects of alternative safe harbor thresholds. At a loan age of 10 years (120 months), the serious delinquency rate for loans with a 0 to 50 basis-point rate spread is 2.3 percent and is 3.1 percent for loans with a 50 to 100 basis-point rate spread. The default rate for loans with a 100 to 150 basis-point rate spread (150 basis points being the maximum rate spread for current safe harbor eligibility) is 4.7 percent, or 1.6 percentage points higher than the previous bucket. The default rate for the next bucket, a 150 to 200 basis-point rate spread, is 6.1 percent, or a 1.4 percentage-point jump. For loans with spreads over 200 basis points, the default rate is substantially higher, well over 10 percent. To the extent the CFPB is considering increasing the safe harbor threshold, these data suggest increasing it from 150 basis points to 200 basis points will not result in an outsized increase in defaults.

FIGURE 2

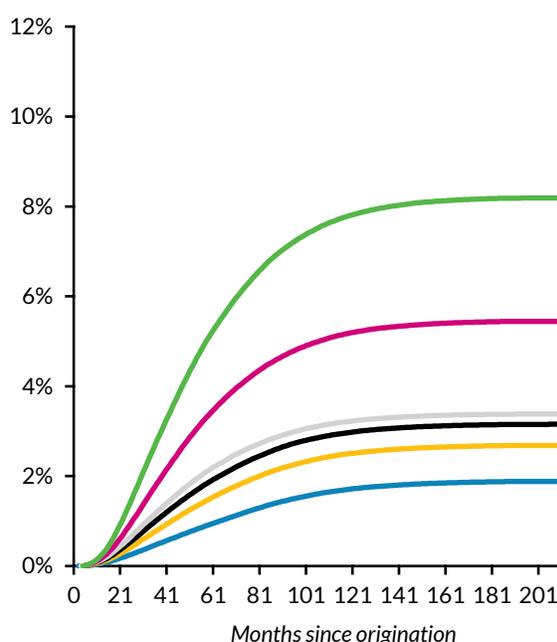**Share of Fannie Mae Loans Ever 90 or More Days Delinquent**

By rate spread

- ≤ 0 bps
- 1–50 bps
- 51–100 bps
- 101–150 bps
- 151–200 bps
- > 200 bps
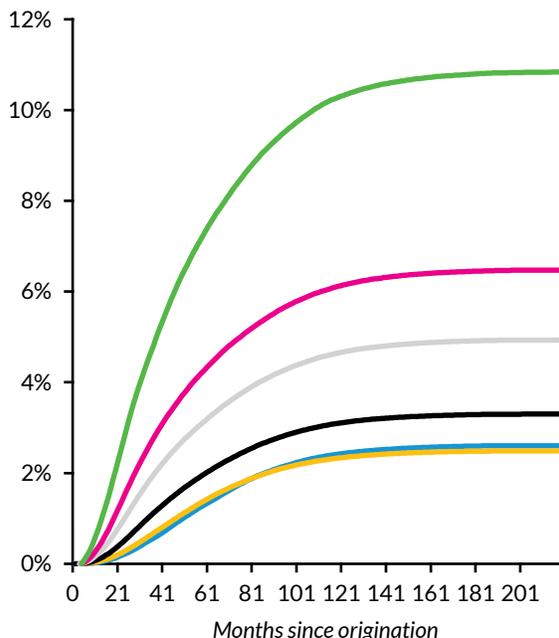
By DTI ratio

- ≤ 30%
- 30–35%
- 35–40%
- 40–45%
- 45–50%
- > 50%

Months since origination

Months since origination

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Source: Urban Institute analysis of Fannie Mae loan-level performance data.

Notes: bps = basis points; DTI = debt-to-income. The Fannie Mae dataset includes 30-year fixed-rate, full-documentation, fully amortizing mortgage loans. These data include loans originated from the first quarter of 1999 through the second quarter of 2018. Loan performance is through the second quarter of 2019.

Further substantiation of the importance of rate spread comes from a simple ordinary least squares regression equation—using the same Fannie Mae loan-level performance data—run from 1999 to 2018 (table 5). Our regression includes the rate spread and other control variables that should matter in predicting default. We have not included any DTI ratio, LTV ratio, or FICO score information because we are testing how well rate spread captures the probability of default. We control for origination year, original unpaid principal balance, loan purpose, property type, occupancy type, and first-time homebuyer status. All the variables have the expected sign, and the rate spread is highly predictive of default.

TABLE 5
Comparing the Predictive Power of Rate-Spread Buckets

Parameter	Estimate	*t*-value	Increase in D90 share over the previous bucket
Rate spread ≤ 50 bps	0.9%	95.36	0.9%
Rate spread 51–100 bps	2.1%	204.74	1.2%
Rate spread 101–150 bps	4.1%	294.40	2.0%
Rate spread 151–200 bps	6.1%	298.72	2.0%
Rate spread > 200 bps	9.8%	304.99	3.8%

Source: Urban Institute analysis of Fannie Mae loan-level performance data.
Notes: bps = basis points; D90 = 90 or more days delinquent. The Fannie Mae dataset includes 30-year fixed-rate, full-documentation, fully amortizing mortgage loans. These data include loans originated from the first quarter of 1999 through the second quarter of 2018. Loan performance is through the second quarter of 2019.

Loans that have a rate spread from 51 to 100 basis points have a probability of ever going seriously delinquent that is—on average and controlling for other factors—1.2 percentage points higher than the 0.9 percent default rate for loans with rate spreads from 0 to 50 basis points. Loans in the 101 to 150 basis-point rate spread category have a probability of ever going seriously delinquent that is 2.0 percentage points higher than the previous category. Loans with rate spreads from 151 to 200 basis points add an additional 2.0 percentage points to the probability of ever being seriously delinquent to the previous bucket. And loans with rate spreads over 200 basis points exhibit a big jump, adding an additional 3.8 percentage points to the probability of default. Our two takeaways from this exercise support the results from figure 2: (1) rate spread is a strong predictor of serious delinquency, and (2) the increase in the default rate is gradual up until a 200 basis-point rate spread, as opposed to a disproportionate increase over 200 basis points.

This raises another question. Given the manageable increase in serious delinquency from loans with rates spreads from 101 to 150 basis points to loans with rate spreads from 151 to 200 basis points, should the safe harbor threshold be raised to 200 basis points? There are three strong reasons it should be increased.

First, increasing the threshold would provide for an additional million or so mortgages (with rates spreads from 150 to 200 basis points) to be in safe harbor over a 10-year period. Table 6 provides context, showing the cumulative share of lending by rate spread and channel in 2018.

TABLE 6

Cumulative Share of 2018 Lending, by Rate Spread and Channel

Loan purpose	Rate spread	Government	GSE conventional	Non-GSE conventional
All	< 0 bps	11.92%	7.36%	18.88%
All	≤ 50 bps	30.18%	56.14%	59.99%
All	≤ 100 bps	53.23%	87.12%	83.07%
All	≤ 150 bps	79.64%	97.67%	92.54%
All	≤ 200 bps	94.09%	99.43%	95.90%
All	All	100.00%	100.00%	100.00%

Source: 2018 Home Mortgage Disclosure Act data.

Notes: bps = basis points; GSE = government-sponsored enterprise. Includes owner-occupied, single-family (one to four units), site-built, purchase, and refinance loans.

The vast majority of GSE lending (97.67 percent) and non-GSE conventional lending (92.54 percent) in 2018 was within the 150 basis-point threshold. In comparison, only 79.64 percent of government lending was within that threshold. Although the share of loans with rate spreads from 150 to 200 basis points is small, the number of loans is significant. In 2018, the GSEs originated 1.6 million loans, and the non-GSE conventional channel originated 2.1 million loans. The 1.76 percent of GSE loans with rate spreads from 150 to 200 basis points equals 28,000 loans (1.76 percent x 1.6 million loans); 3.35 percent of non-GSE conventional lending in the same rate-spread bucket equals 70,000 loans (3.35 percent x 2.1 million loans.) Thus, 98,000 GSE and private loans in 2018 had rate spreads between 150 and 200 basis points. That adds up to a million additional mortgages over a 10-year period.

Second, the price of credit risk has increased substantially postcrisis in the form of greater risk-based pricing via higher guarantee fees, loan-level pricing adjustments, and private mortgage insurance premiums, as well as the cost of servicing, which has skyrocketed. All these variables are factored into the APR and affect the rate spread. To the extent pricing and costs increase in the future, a 200 basis-point threshold would be less restrictive and enable better credit flow, even if these variables change.

Third, a 200 basis-point safe harbor threshold would be consistent with the FHA market. To meet the definition of an FHA safe harbor loan, the APR on the mortgage can be no more than the APOR plus the annual mortgage insurance premium plus 115 basis points. If the APR is over that level, the loan would be considered rebuttable presumption. With the current FHA mortgage insurance premium at 85 basis points a year, to qualify for the safe harbor, the APR on an FHA mortgage can be no more than 200 basis points over the APOR rate. Increasing the QM safe harbor threshold from 150 to 200 basis points would level the playing field between conventional and FHA lending.

We recognize that the rate-spread metric has its drawbacks. First, this metric can be procyclical. Rate spreads would be lowest when real estate prices have increased rapidly and are expected to continue to do so, such as during economic booms. Credit is also likely to be more loosely available during such periods, increasing the risk of borrowers getting overextended. In addition, a rate-spread regime could give lenders an incentive to price mortgages just below the threshold to qualify for safe harbor. But the bulk of the credit losses during the Great Recession were rooted in reckless

underwriting practices and products, most of which are already banned under the QM rule and other safeguards put in place postcrisis.

Conclusion

The upcoming GSE patch expiration is an opportunity to update the QM rule to make it work better for future borrowers. Evidence presented in this brief shows that the DTI ratio is a weaker predictor of default than other risk measures, and its centrality to the current QM rule distorts the market by misrepresenting true loan risk. This distortion allows riskier loans with lower DTI ratios to benefit from QM safe harbor while penalizing low-risk loans with higher DTI ratios as nonqualified mortgages. Given that the safe harbor designation is intended to provide additional legal protections to lenders, this benefit should be available only for low-risk QM loans. The rate spread, being a better predictor of default than the DTI ratio, achieves that objective with greater precision.

We recommend that the CFPB eliminate the DTI cap from the current QM framework. Restrictions on risky features and products should remain in place. As today, rate spread would continue to determine which loans qualify for safe harbor. We also recommend that the safe harbor threshold be increased from 150 to 200 basis points. Because lenders are rarely willing to make rebuttable presumption loans, the rate spread, which captures risk more holistically than the DTI ratio, would essentially determine the lending box for the conventional market. This approach would put the GSE and the private market channels on equal footing with each other and with the FHA, allowing better credit flow while keeping default rates manageable. It will also give the private-label securities market an opportunity to grow, continue to provide lenders a bright line, and allow the GSE patch to expire with no market disruption.

Notes

[1] Consumer Financial Protection Bureau, "Consumer Financial Protection Bureau Releases Qualified Mortgage ANPR," news release, July 25, 2019, https://www.consumerfinance.gov/about-us/newsroom/bureau-releases-qualified-mortgage-anpr/.

[2] The average prime offer rate is an annual percentage rate based on average interest rates, fees, and other terms on mortgages offered to highly qualified borrowers. The underlying data source for most fixed- and adjustable-rate products is Freddie Mac's Primary Mortgage Market Survey (PMMS).

[3] Laurie Goodman, Edward Golding, and Jun Zhu, "How Debt Burden Affects FHA Mortgage Repayment, in Six Charts," *Urban Wire* (blog), Urban Institute, September 12, 2019, https://www.urban.org/urban-wire/how-debt-burden-affects-fha-mortgage-repayment-six-charts.

[4] Methodology for calculating the rate spread: We do not know the rate spread or the APR on Fannie Mae loans in the Fannie Mae loan-level performance data. We use a crude estimation procedure. We begin with (1) using the note rate on the underlying mortgage, (2) adding the origination costs that are part of the APR, (3) adding the costs of private mortgage insurance for loans with LTV ratios over 80 percent, and (4) subtracting the PMMS rate. Inputs 1 and 4 are readily observable. For input 2, Mortgage Bankers Association application data and Freddie Mac PMMS data show up-front costs of about 50 basis points. We divide this by 5 to convert the fixed costs to an annual cost. For input 3, mortgage insurance, we use a rate sheet, with quotes expressed in annual terms, provided by one of the mortgage insurers. But because mortgage insurance is not paid after the LTV ratio

reaches 78 percent, we count only 70 percent of the premium in the APR. We recognize this is a crude rule of thumb. We lag the PMMS rate eight weeks, as the rate on the underlying mortgage is usually set at the time of application. We do not explicitly consider loan-level pricing adjustments, as these are generally rolled into the note rate on the underlying mortgage. Few borrowers pay the points up front, and even fewer of those with high loan-level pricing adjustments do so. We apply today's fixed cost and mortgage insurance rate sheet going back over time to reconstruct the APR at the loan level and eventually the rate spread, which is APR minus PMMS.

References

Kaul, Karan, and Laurie Goodman. 2018. "Updated: What, If Anything, Should Replace the QM GSE Patch." Washington, DC: Urban Institute.

Kaul, Karan, Laurie Goodman, Alanna McCargo, and Todd Hill. 2018. "Reforming the FHA's Foreclosure and Conveyance Processes." Washington, DC: Urban Institute.

About the Authors

Karan Kaul is a research associate in the Housing Finance Policy Center at the Urban Institute. He publishes innovative, data-driven research on complex, high-impact policy issues to improve the US mortgage finance system. A strategic thinker and thought leader with nearly 10 years of experience in mortgage capital markets, Kaul has published nearly 100 research articles on such topics as mortgage servicing reforms, efficient access to credit, benefits of alternative credit data and scoring models, and single-family rentals. He has advocated for efficient industry practices, regulation, and legislation to make the mortgage market work better for all Americans. Kaul is the lead researcher on the Mortgage Servicing Collaborative and regularly speaks at housing conferences. Before joining Urban, he spent five years at Freddie Mac as a senior strategist analyzing the business impact of postcrisis regulatory reforms. He holds a bachelor's degree in electrical engineering and a master's degree in business administration from the University of Maryland, College Park.

Laurie Goodman is a vice president at the Urban Institute and codirector of its Housing Finance Policy Center, which provides policymakers with data-driven analyses of housing finance policy issues that they can depend on for relevance, accuracy, and independence. Goodman spent 30 years as an analyst and research department manager on Wall Street. From 2008 to 2013, she was a senior managing director at Amherst Securities Group LP, a boutique broker-dealer specializing in securitized products, where her strategy effort became known for its analysis of housing policy issues. From 1993 to 2008, Goodman was head of global fixed income research and manager of US securitized products research at UBS and predecessor firms, which were ranked first by *Institutional Investor* for 11 straight years. Before that, she held research and portfolio management positions at several Wall Street firms. She began her career as a senior economist at the Federal Reserve Bank of New York. Goodman was inducted into the Fixed Income Analysts Hall of Fame in 2009. Goodman serves on the board of directors of MFA Financial and Arch Capital Group and is an adviser to Amherst Capital Management and a member of Morningstar Credit Ratings Regulatory Governance Board. She has published more than 200 journal articles and has coauthored and coedited five books. Goodman has a BA in mathematics from the University of Pennsylvania and an AM and PhD in economics from Stanford University.

Jun Zhu is a nonresident fellow in the Housing Finance Policy Center. She designs and conducts quantitative studies of housing finance trends, challenges, and policy issues. Before joining Urban, Zhu worked as a senior economist in the Office of the Chief Economist at Freddie Mac, where she conducted research on the mortgage and housing markets, including default and prepayment modeling. She was also a consultant to the Treasury Department on housing and mortgage modification issues. Zhu received her PhD in real estate from the University of Wisconsin–Madison in 2011.

Acknowledgments

URBAN INSTITUTE

500 L'Enfant Plaza SW
Washington, DC 20024

www.urban.org

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