



Preparing for the “QM Patch” Expiration

August 2019



REDWOOD TRUST

Disclaimers



This presentation may contain forward-looking statements within the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including statements relating to Redwood's business, growth, and prospects. Forward-looking statements involve numerous risks and uncertainties. Our actual results may differ from our expectations, estimates, and projections and, consequently, you should not rely on these forward-looking statements as predictions of future events. Forward-looking statements are not historical in nature and can be identified by words such as "anticipate," "estimate," "will," "should," "expect," "believe," "intend," "seek," "plan," and similar expressions or their negative forms, or by references to strategy, plans, or intentions. These forward-looking statements are subject to risks and uncertainties, including, among other things, those described in our Annual Report on Form 10-K for the year ended December 31, 2018 under the caption "Risk Factors." Other risks, uncertainties, and factors that could cause actual results to differ materially from those projected are described below and may be described from time to time in reports we file with the Securities and Exchange Commission, including reports on Forms 10-K, 10-Q, and 8-K. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

Important factors, among others, that may affect our actual results include: the pace at which we redeploy our available capital into new investments; interest rate volatility, changes in credit spreads, and changes in liquidity in the market for real estate securities and loans; changes in the demand from investors for residential mortgages and investments, and our ability to distribute residential mortgages through our whole-loan distribution channel; our ability to finance our investments in securities and our acquisition of residential mortgages with short-term debt; changes in the values of assets we own; general economic trends, the performance of the housing, real estate, mortgage, credit, and broader financial markets, and their effects on the prices of earning assets and the credit status of borrowers; federal and state legislative and regulatory developments, and the actions of governmental authorities, including the new U.S. presidential administration, and in particular those affecting the mortgage industry or our business; strategic business and capital deployment decisions we make; developments related to the fixed income and mortgage finance markets and the Federal Reserve's statements regarding its future open market activity and monetary policy; our exposure to credit risk and the timing of credit losses within our portfolio; the concentration of the credit risks we are exposed to, including due to the structure of assets we hold and the geographical concentration of real estate underlying assets we own; our exposure to adjustable-rate mortgage loans; the efficacy and expense of our efforts to manage or hedge credit risk, interest rate risk, and other financial and operational risks; changes in credit ratings on assets we own and changes in the rating agencies' credit rating methodologies; changes in interest rates; changes in mortgage prepayment rates; changes in liquidity in the market for real estate securities and loans; our ability to finance the acquisition of real estate-related assets with short-term debt; the ability of counterparties to satisfy their obligations to us; our involvement in securitization transactions, the profitability of those transactions, and the risks we are exposed to in engaging in securitization transactions; exposure to claims and litigation; whether we have sufficient liquid assets to meet short-term needs; our ability to successfully compete and retain or attract key personnel; our ability to adapt our business model and strategies to changing circumstances; changes in our investment, financing, and hedging strategies and new risks we may be exposed to if we expand our business activities; our exposure to a disruption or breach of the security of our technology infrastructure and systems; exposure to environmental liabilities; our failure to comply with applicable laws and regulations; our failure to maintain appropriate internal controls over financial reporting and disclosure controls and procedures; the impact on our reputation that could result from our actions or omissions or from those of others; changes in accounting principles and tax rules; our ability to maintain our status as a REIT for tax purposes; limitations imposed on our business due to our REIT status and our status as exempt from registration under the Investment Company Act of 1940; decisions about raising, managing, and distributing capital; and other factors not presently identified.

Additionally, this presentation contains or refers to estimates and information concerning the mortgage origination and finance industry, including market size and growth rates of the markets in which we participate, that are based on industry publications and reports. This information involves many assumptions and limitations, and you are cautioned not to give undue weight to these estimates. We have not independently verified the accuracy or completeness of the data contained in these industry publications and reports. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those referred to above, that could cause results to differ materially from those expressed in these publications and reports.

Redwood Trust - A Voice for the Private Sector

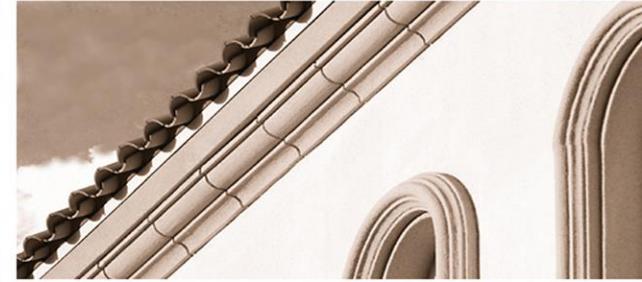


- In May 2019, we released a report highlighting ***significant competitive advantages in the mortgage market enjoyed by the public sector*** over the private sector, and how the Qualified Mortgage (“QM”) Patch undermined regulators’ efforts to create a safer lending environment
- The report highlighted ***private capital’s ability to serve non-QM borrowers*** if regulators level the playing field and require that GSEs adhere to the same rules and regulations as the private sector
 - FHFA Chairman Calabria has echoed this sentiment, acknowledging that the QM Patch “exacerbates an unlevel playing field” between the GSEs and the rest of the mortgage market
- On July 25, 2019, the ***CFPB announced its intention to allow the QM Patch to expire***. This “Update” to our May 2019 QM Patch Presentation offers further thoughts on how regulators can coordinate and streamline certain rules to further enhance the private sector’s ability to absorb loans currently covered by the QM Patch



Preparing for the QM Patch's Expiration

- As we previously noted, the expiration of the QM Patch could result in more than \$185 billion¹ per annum in mortgage loans returning to the private sector
- Because housing finance involves many participants and impacts every American who owns or wants to own a home, there are numerous regulators and thousands of regulations that must work in harmony to best serve both consumers and taxpayers
- The QM Patch expiration presents an opportunity for regulators to streamline certain rules to put the housing finance sector on the best possible footing going forward, while enhancing consumer and taxpayer protections
 - Specifically, we propose the following changes for consideration:
 - 1. Redefine QM (Reform Appendix Q)**
 - 2. Refine the Risk Retention Rules**
 - 3. Reform Reg AB II**
 - 4. Improve Pricing Transparency within the Public Sector**



1. Redefine QM



REDWOOD TRUST



Redefine QM: Reform Appendix Q

- **Appendix Q should be reformed, with numerous aspects of the QM Rule clarified and made less prescriptive.** The remainder of the QM rule is sufficient and already digested by the market
 - Underwriting is both an art and a science, and the current ability-to-repay (ATR) rule's prescriptive nature constrains the ability of an underwriter to thoughtfully balance borrower risks and mitigants when making a credit determination
 - Greater flexibility is needed in how to document and verify income, including methodologies to accurately count income from multiple sources rather than leaving no alternative when the limited, prescribed sources are not an option
 - ***Taking steps to lessen the severe impact of QM versus non-QM, rather than a wholesale change to the ATR rules,*** will preserve lender accountability and consumer protections while avoiding market inefficiencies that harm a consumer's ability to get a loan at a reasonable rate

While the current rule is not perfect, building on and improving what we have is more prudent than creating a new regime with its own set of challenges



Redefine QM: Should DTI be Replaced?

- Many in the industry have advocated eliminating DTI as a QM/ATR determinant or replacing DTI with “Spread at Origination” (SATO), a market-based metric
 - While DTI by itself is not a perfect measure of loan risk, we believe that DTI or a similar borrower credit metric should remain a core aspect of the QM/ATR determination
 - SATO is a convenient tool used by economists to measure relative risk over time, but it must be highlighted that ***SATO is merely a relative measure that must be taken in the context of other market conditions***
 - The QM/ATR standards are meant to encourage prudent lending in all market environments; relying solely on a relative measure such as SATO could further overheat risky markets and further depress down markets

While we believe the DTI limit can be raised prudently, SATO should not be a wholesale replacement for core borrower credit metrics contained in the rule



Redefine QM: Challenges of SATO

- A significant challenge with implementing a SATO metric is as simple as who sets the base rate:
 - Using the GSEs will effectively codify their dominance of the mortgage market and further complicate GSE reform; using a regulator leaves room for political agendas and abuse; using an unregulated industry group leaves open the possibility for the private sector to act in a pro-cyclical manner
 - ***If SATO is used, one recommendation would be to apply a self-regulatory organization (SRO) designation to a reputable industry group (i.e., The Structured Finance Association), with appropriate oversight***
- The QM designation also determines the statutory Risk Retention for all mortgage loans once the QM Patch expires. If SATO is the main driver of the QM designation, loans with rates just outside any governing SATO spread will finance very differently in addition to the extra legal liability they carry
 - This would create a market where lenders are incented to undercharge for riskier loans to avoid legal liability and skin-in-the-game



2. Refine the Risk Retention Rules



REDWOOD TRUST



Risk Retention Reform

- **Risk retention rules should be refined** to ensure that private capital is held accountable, but able to more efficiently price risk and serve more consumers
 - Current risk retention rules are written so that one non-QM loan triggers risk retention for an entire securitization, creating significant inefficiencies for financing non-QM and QM loans alike
 - The vast majority of variables associated with the QM determination are not seen as default risk drivers. Many non-QM loans would be best pooled and financed with QM loans that have similar risk profiles
 - ***Allowing risk retention on an asset-based level***, rather than a pool-based level, would ensure that a securitization sponsor keeps skin-in-the-game for non-QM loans (and alignment of interest) while making QM and non-QM finance most efficiently

Asset-level risk retention will preserve skin-in-the-game, while reducing the harmful effects that a hard QM/non-QM line has on mortgage loan pricing



3. Reform Reg AB II



REDWOOD TRUST



Regulation AB II Reform

- Reg AB II in its current form is unworkable for RMBS as evidenced by ***not one public RMBS transaction post implementation***
 - Post crisis, and until the adoption of Reg AB II in 2014, Redwood completed 16 registered RMBS transactions, and 5 privately offered RMBS transactions
 - Following the adoption of Reg AB II, Redwood has completed zero registered RMBS transactions and 37 privately offered RMBS transactions
- In contrast, GSE securities issuances greatly accelerated during this period
 - Under their respective enabling statutes, Fannie and Freddie issue RMBS considered ‘exempt securities’ and therefore Reg AB II does not apply to them
- The net effect is that ***the GSEs have access to “public” capital while the private sector does not***
- ***We recommend reforming Reg AB II to promote greater liquidity*** and capital support as an increasing number of loans move from the public, to the private sector



Asset-Level Disclosure Comparison

- Reg AB II requires issuers to file extensive asset-level disclosures at the time of each issuance and in each monthly Form 10-D report filed during the lifetime of the deal
 - Current market standard disclosure for RMBS issuers:
 - GSE (Exempt): ~100 asset-level data fields
 - Rule 144A (Private): ~200 asset-level data fields
 - Reg AB II (Public): ~270 asset-level data fields



Asset-Level Disclosure Challenges

- Reg AB II asset-level disclosure requirements pose several unique challenges for RMBS issuers:
 - In many instances the information is not available, or what is available is not reliable;
 - Data points that RMBS investors require have been removed or modified in a way that makes them meaningless or far less useful;
 - In various instances a “Yes/No” or “Code” is required when information may not be reasonably reduced from narrative format;
 - There is still a lack of clarity on information sought under the rule; and
 - Certain fields require unreasonable and unprecedented data sharing between competitive market participants
- ***Without a clear, attainable framework for compliance, issuers bear the burden of securities law liability for errors or inaccuracies*** in reports that, under the current regime, call for categories of information that are impossible or near impossible to determine



Don't Just Take Our Word For It ...

- The FDIC, at its July 2019 Board meeting, released a proposed amendment to their securitization safe harbor rule removing Reg AB II compliant asset level disclosure
- The FDIC's proposed amendment reiterates the concerns expressed by ABS market participants about the difficulty of complying with Reg AB II and highlights the suppressive effect the rule has had on the ability of banks (and other non-GSEs) to issue registered RMBS
 - <https://www.fdic.gov/news/board/2019/2019-07-16-notice-dis-c-fr.pdf>



A Proposed Solution

- In spite of the 144A market requiring approximately 70 fewer data fields than the Reg AB II standard, and the GSE market requiring approximately 170 fewer data fields, each of these markets maintains significant depth and liquidity
 - *In sum, institutional investors have demonstrated comfort that current asset-level disclosures are sufficient to garner their participation*
- Rather than create a new reporting standard, we suggest Reg AB II asset-level reporting be conformed to what the 144A market currently expects and accepts
- To the extent additional or new categories of reporting are desirable, we urge dialogue with market participants on how to structure the reporting framework to produce precise, attainable reporting that is consistent across the industry
- We suggest the SEC provide comfort to issuers via shelf approval, no-action letters and other interpretive guidance to enable greater access to the public debt markets for private sector participants



4. Improve Pricing Transparency within the Public Sector



REDWOOD TRUST



Improve Pricing Transparency

- Our May 2019 analysis segmented QM Patch loans into various cohorts based on certain credit risk metrics (see Appendix)
 - The results showed that the vast majority of production currently covered under the QM Patch (est. 65-70%) could be reliably funded through the private sector with very little impact to borrowers
 - However, the data also showed that GSE loans with significant layered risks would receive much higher interest rates when risk-based pricing by the private sector is applied
 - Market participants have traditionally seen these loan types financed through the FHA, where insurance terms and fees charged for layered risk loans are well disclosed and understood
 - Consequently, pricing divergences between the GSEs and the private sector for layered risk loans exist but are not readily transparent



Improve Pricing Transparency

- **To promote affordable lending across the housing finance markets that achieves safety and soundness for consumers and taxpayers, we recommend improved GSE pricing transparency, particularly for loans that are not currently being financed competitively by the private sector**
 - One way to accomplish this would be for the FHFA, on a quarterly or semi-annual basis, to request, monitor, and publish average pricing metrics from Fannie Mae and Freddie Mac, the FHA, and PLS issuers
 - These metrics could encompass a broad array of loan types and borrower profiles and help determine not only if borrowers are being adequately served, but also whether pricing divergences across the public and private sectors are creating unhealthy distortions in the market



Appendix



REDWOOD TRUST

The Private-Label Market is Price Competitive with the GSEs for most Cohorts

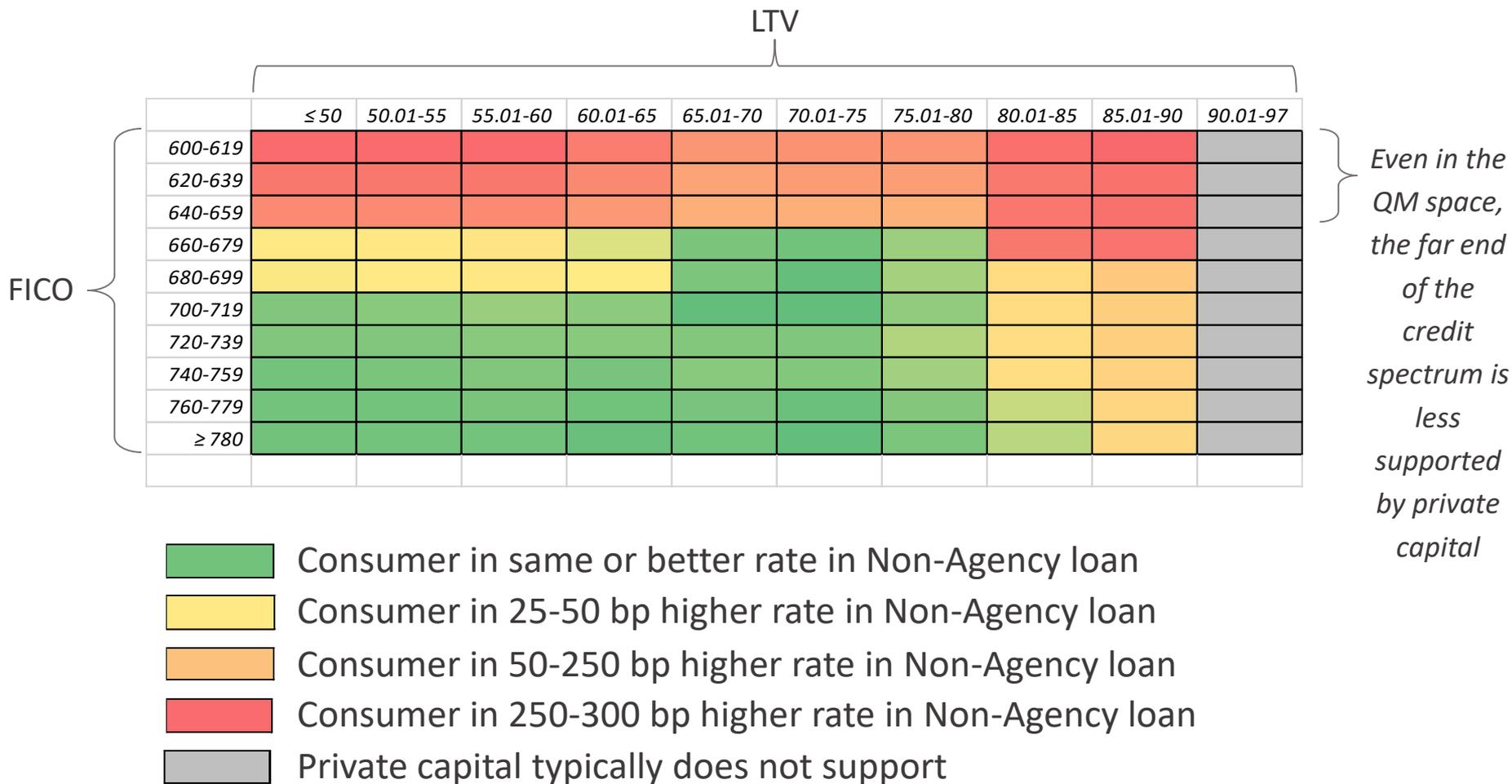


The following heat maps illustrate:

- Qualified consumers offered loans supported by private capital receive similar rates to what the GSEs provide today
- The loans private capital can fully support represent a majority of what the GSEs are currently buying
- Private capital stays away from extreme layered risk (i.e., high DTI with very high LTV)
- Private capital has no “QM Patch” and must adhere to ATR standards on all loans
 - These standards were designed to protect the consumer

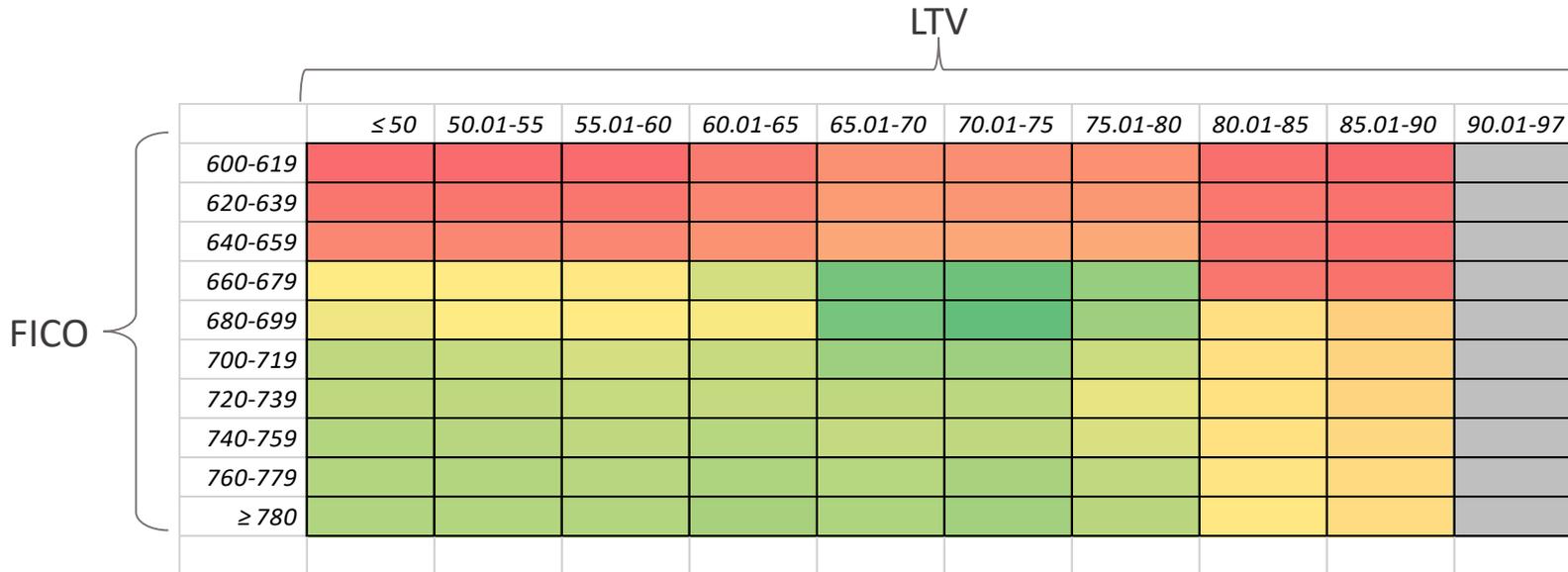
Note: All of the following tables are displayed in the same increments so they can be overlaid with one another

GSE vs Redwood Rate Comparison: Non-Agency "QM" vs Agency "QM"



Disclaimer: GSE versus Redwood rate comparisons and agency production distributions are based on aggregated observations, estimates, and assumptions, including observations of residential mortgage loan market pricing, estimates of loan pricing derived from Fannie Mae and Freddie Mac "TBA" securities, and other industry data. Pricing inputs and loan characteristics were obtained, estimated, or derived from sources which we believe are reliable, but we do not warrant or guarantee the completeness or accuracy of this information. This information involves many assumptions and limitations, and you are cautioned not to give undue weight to these estimates. The information displayed regarding Redwood is not a solicitation or an offer to buy or sell securities and is not investment advice or a recommendation to purchase or sell any security.

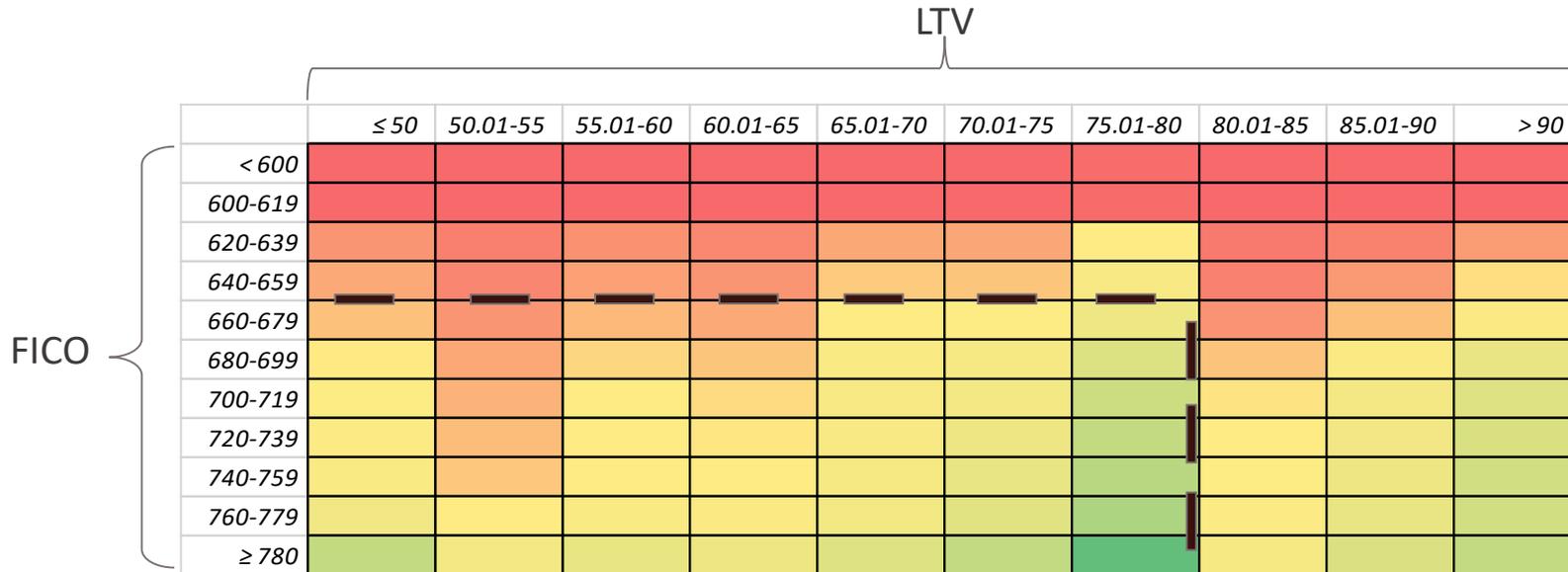
GSE vs Redwood Rate Comparison: Non-Agency “Non-QM” vs Agency “Non-QM”



- Consumer in same or better rate in Non-Agency loan
- Consumer in 25-50 bp higher rate in Non-Agency loan
- Consumer in 50-250 bp higher rate in Non-Agency loan
- Consumer in 250-300 bp higher rate in Non-Agency loan
- Private capital typically does not support

Disclaimer: GSE versus Redwood rate comparisons and agency production distributions are based on aggregated observations, estimates, and assumptions, including observations of residential mortgage loan market pricing, estimates of loan pricing derived from Fannie Mae and Freddie Mac "TBA" securities, and other industry data. Pricing inputs and loan characteristics were obtained, estimated, or derived from sources which we believe are reliable, but we do not warrant or guarantee the completeness or accuracy of this information. This information involves many assumptions and limitations, and you are cautioned not to give undue weight to these estimates. The information displayed regarding Redwood is not a solicitation or an offer to buy or sell securities and is not investment advice or a recommendation to purchase or sell any security.

Agency Production Distribution – Aggregate (“QM” + “Non-QM”)



- Overlaying the prior slides shows that the areas of green where the private market is able to effectively serve the consumer at the same rate aligns with the majority of GSEs purchase volume
 - The etched area represents more than 65% of GSE purchase volume

- Cells represent 4.5%-7.0% of Agency production
- Cells represent 3.0%-4.5% of Agency production
- Cells represent 1.5%-3.0% of Agency production
- Cells represent 0.0%-1.5% of Agency production

Disclaimer: GSE versus Redwood rate comparisons and agency production distributions are based on aggregated observations, estimates, and assumptions, including observations of residential mortgage loan market pricing, estimates of loan pricing derived from Fannie Mae and Freddie Mac "TBA" securities, and other industry data. Pricing inputs and loan characteristics were obtained, estimated, or derived from sources which we believe are reliable, but we do not warrant or guarantee the completeness or accuracy of this information. This information involves many assumptions and limitations, and you are cautioned not to give undue weight to these estimates. The information displayed regarding Redwood is not a solicitation or an offer to buy or sell securities and is not investment advice or a recommendation to purchase or sell any security.



REDWOOD TRUST

CELEBRATING

25 YEARS