

RESEARCH REPORT

# Reducing the Black-White Homeownership Gap through Underwriting Innovations

## The Potential Impact of Alternative Data in Mortgage Underwriting

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# Executive Summary

In the housing finance industry, growing attention has turned to the potential of alternative data—instead of or to supplement traditional credit history and scores—in mortgage underwriting to expand access to credit and homeownership. “Alternative data” refers to data that are not typically considered in the underwriting process and are currently underreported or not included in the credit files of the three national credit bureaus—Experian, Equifax, and TransUnion—that generate credit scores. Although alternative data could include many factors, we restrict our analysis to financial data, primarily rent, utility, and telecommunications payments and patterns of transactions in and out of consumers’ deposit and card accounts (i.e., cash flow). We focus on rental payment history and cash-flow data, which have the greatest potential to predict future mortgage performance. Although these data were once regularly used to evaluate borrowers, most lenders today do not use these alternative data to decide whether to issue a mortgage, instead relying heavily on credit scoring models (Cochran, Stegman, and Foos 2021).

In this report, we seek to contribute to a growing conversation about alternative data in mortgage underwriting and the potential racial equity implications of their inclusion. To survey the current industry landscape, we reviewed the literature and interviewed stakeholders working on this issue. We also analyzed data to better understand how Black households could benefit from better adoption of alternative data, specifically rental payment history. Our analysis shows that reporting all rental payments, including missed ones, could disproportionately harm Black households, as they are more likely than other households to miss rental payments. Therefore, we recommend the incorporation of only positive rental payments, which could usher more households into homeownership without creating any undue burdens.

We begin by outlining the state of Black homeownership, how credit scores and credit history are used in mortgage underwriting, and how long-established underwriting practices disproportionately exclude Black households from homeownership. Credit is the most cited reason lenders decline mortgage applications, and credit scores are also used for loan pricing. But about 53 million people cannot be scored under the Classic FICO model, the model most commonly used in mortgage underwriting. Additionally, Black households are disproportionately likely to have no FICO scores and to have FICO scores below 620, which is the typical cutoff for mortgage approval. Therefore, including alternative data into mortgage underwriting could help many Black households obtain mortgages and get a lower price for the loan. We analyze how including rental payment data could help more Black

renters become homeowners. There are two emerging practices for using alternative data in underwriting:

- incorporating alternative data directly into credit scoring models
- separately considering alternative data in mortgage underwriting in addition to traditional credit scores

For each approach, we explore research that examines how incorporating alternative data in mortgage underwriting could expand the credit box and provide our own analysis on its impact on access to mortgages, especially for Black homebuyers. We then examine recent progress made by multiple stakeholders—including the government-sponsored enterprises (GSEs), lenders, mortgage insurance companies, financial technology (fintech) companies, and regulators—to enhance the use of alternative data in mortgage underwriting.

We highlight three areas—data collection, data standardization, and regulation and consumer protection—that need additional work to enhance the use of alternative data in mortgage underwriting and share potential solutions that can be implemented to ease this process.

Finally, although greater adoption of alternative data has great potential, it will not automatically close the racial homeownership gap. Acknowledging the need for more evidence to learn how incorporating alternative data can affect access to credit for Black homebuyers and racial homeownership disparities, we conclude with next steps for developing pilot programs to test alternative data implementation. We also discuss three other areas—pricing, servicing, and regulation—that need to be addressed to ensure the use of alternative data enhances racial equity.

Our report details the state of alternative data use; its potential impact on borrowers, pilots, and programs that can further its implementation; and the role many market actors have to play in harnessing alternative data to advance racial equity. Though incorporating alternative data in underwriting alone cannot fully address the many impacts of structural racism in housing finance, their use is one promising strategy in the ongoing project of achieving racial equity and increasing Black homeownership.

# 1. Introduction

We need interventions to reverse the outcomes of historically rooted systemic racism on the homeownership process and advance Black homeownership. A growing number of voices have called for the use of alternative data—in particular, cash-flow data; rent, utility, and telecommunications payments; or both—in mortgage underwriting to expand credit and lower the costs of credit to potential borrowers who were previously underserved. To contribute to the conversation, we explore how using these alternative data in credit scoring and underwriting could make the housing finance system more inclusive and usher more Black households into homeownership.

Cash-flow data are records of transactions into and out of consumers' deposit and card accounts, data that can capture details about how borrowers manage their finances (FinRegLab 2019). Among rental, utility, and telecommunications payments, our report focuses primarily on rental payment data, as they are most similar to the mortgage payment in purpose, frequency, and amount and are a strong predictor of making future housing payments. A monthly mortgage payment is a similar expense to a monthly rental payment, and in many parts of the country, the median mortgage payment is actually lower than the median rent payment.<sup>1</sup> Thus, it is reasonable to expect that a household that can pay its rent could pay its mortgage.

But there are no publicly available datasets that track the housing payments of households that transition from rental housing to owner-occupied housing. Therefore, it is difficult to examine how rental payment history is directly predictive of mortgage performance. Despite data limitations, Goodman and Zhu (2021) updated their 2018 study that used past mortgage payments as a proxy for rental payments and estimated how well rental payments (as opposed to credit scores) predict future mortgage performance.<sup>2</sup> The study found that past mortgage payment history is a stronger predictor of future performance than credit scores.<sup>3</sup> Even for households with low FICO scores, those who had no missed mortgage payments were significantly less likely to default on their mortgages in the subsequent two years. The finding suggests that including rental payment data in mortgage underwriting can enhance mortgage performance predictions.

There are two methods for incorporating alternative data into underwriting. The first is to include these data to improve variables that are already included in mortgage underwriting algorithms. For example, rental payments can be reported and stored in the credit bureau database and incorporated in credit score calculations, and cash-flow data can be used to adjust debt-to-income (DTI) ratios.

## About the Racial Equity Accelerator for Homeownership

Homeownership is the primary way many US households build wealth. But because of historical racism and its ongoing legacies, the path to homeownership for Black households is rife with structural barriers, and, even once obtained, homeownership's benefits are not equitably distributed. To address some of the persistent racial disparities in homeownership and wealth, the Federal Home Loan Bank of San Francisco has partnered with the Urban Institute to launch a research and product development initiative called the Racial Equity Accelerator for Homeownership. The accelerator hosts several research workstreams investigating methods for facilitating and sustaining Black homeownership:

- incorporating alternative data into mortgage underwriting (the focus of this report)
- mitigating the impact of student debt on Black homeownership
- using artificial intelligence and advancing technologies that can overcome mortgage lending biases
- innovating loss mitigation strategies to help households sustain homeownership during times of stress

Although the accelerator focuses on Black homeownership, many of the barriers Black households face apply to other households of color, and the solutions to reduce the Black-white homeownership gap can help other households who struggle to become homeowners and build wealth.

Addressing the Black-white homeownership gap is essential to achieving racial equity and ensuring all households have access to homeownership. Historically, the mortgage finance system purposefully excluded Black households from homeownership through racist practices such as redlining, and the legacies of these practices persist. To undo the effects of explicit historical racism in housing, an equally explicit commitment must be made to address racial homeownership disparities. Without such a commitment, homeownership and wealth gaps will widen.

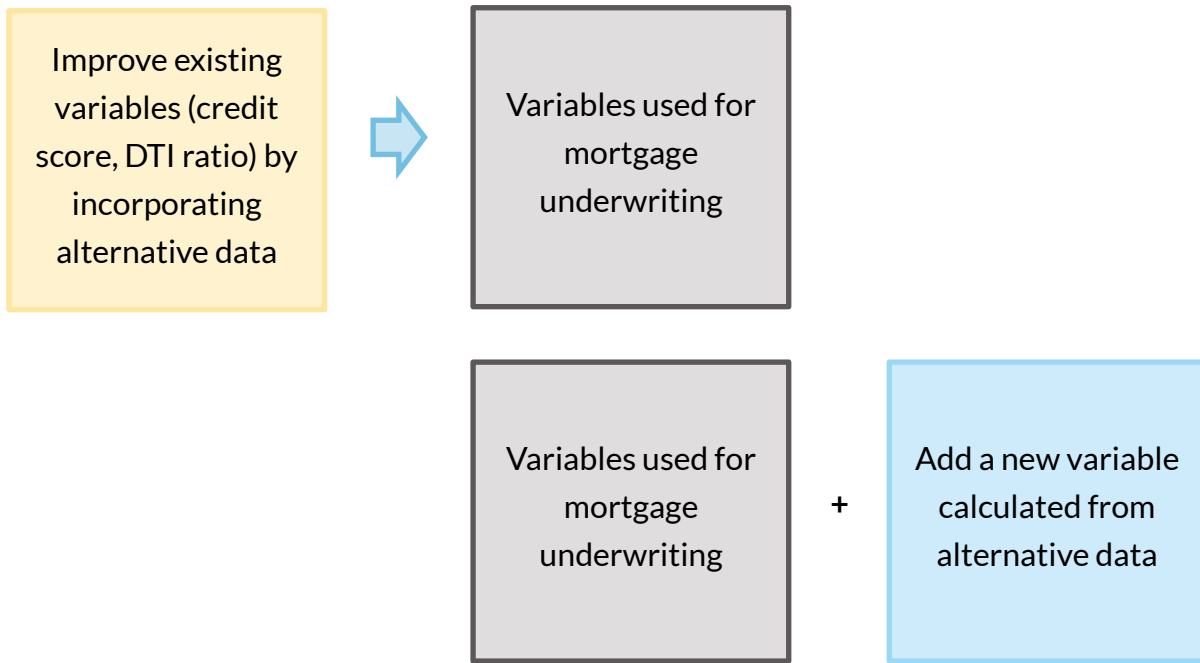
Rooting out systemic racism is a complicated process that will require sustained collaboration between many actors in the housing finance system, and the policy and practice changes proposed in this report may improve Black homeownership only at the margins. But our research in this area is promising, and if the housing finance system can rally the necessary political will, we may be able to make tangible improvements for thousands of Black households.

The second method for incorporating alternative data is to separately examine the cash-flow data as compensating factors alongside standard underwriting variables. Lenders could look at rental payment history or cash-flow data obtained from bank accounts when deciding whether to approve mortgage applications and at what price. A strong history of making on-time rental payments can offset concerns raised by a thin credit file, for example.



FIGURE 1

Two Approaches for Including Alternative Data in Mortgage Underwriting



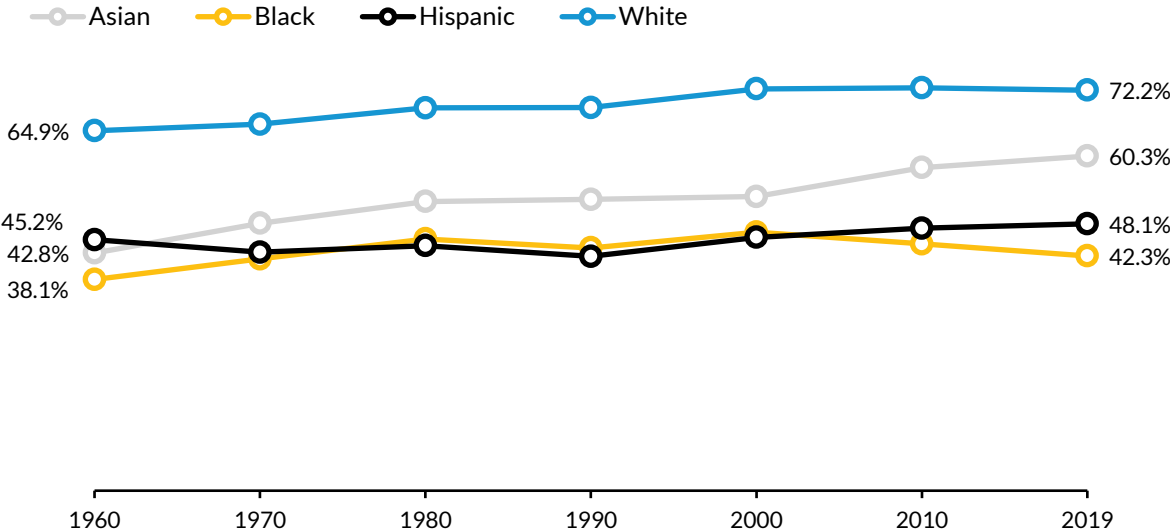
We explain how each method works, compare the benefits and limitations of the two approaches, and discuss the impact of including alternative data in mortgage underwriting for Black households, as well as what needs to be done in the future. Before comparing the two approaches, we first lay out the current landscape of the racial homeownership gap and credit’s role in mortgage underwriting, followed by a data analysis of whether including alternative data in mortgage underwriting could alleviate barriers to obtaining homeownership, especially for Black homebuyers.

# 2. Current Landscape: Black Homeownership and Credit's Role in Mortgage Underwriting

## The State of Black Homeownership

The structural barriers to homeownership for Black households, rooted in historical racial discrimination, have created an enormous disparity in homeownership between Black and white households. Racial homeownership disparities have persisted for decades, with the Black homeownership rate falling below homeownership rates for all racial and ethnic groups since 2010. The homeownership gap between Black and white households currently stands at 30 percentage points—wider than it was in 1960, when the Fair Housing Act had not yet been passed and race-based housing discrimination was still legal (figure 2). Even on a local level, not a single metropolitan statistical area in the United States has closed the Black-white homeownership gap (Choi et al. 2019).

**FIGURE 2**  
**Homeownership, by Race and Ethnicity**



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Sources: Decennial censuses and the American Community Survey.

Goodman and Zhu (2021) project that despite growth in the number and population share of people of color in the next 20 years, racial homeownership gaps will remain at their current levels unless stakeholders design and implement comprehensive and effective actions. We project that the Black homeownership rate will stay at a similar rate and the 30 percentage-point gap between the Black and white homeownership rates will persist or even widen unless substantial efforts are made to increase Black homeownership. Reevaluating the disparate racial impacts of current practices and updating them to better serve households of color is one mechanism for doing so.

## Current Mortgage Underwriting Practices and the Role of Credit

Among other factors such as debt, income, and down payment size, mortgage underwriting systems rely heavily on credit history and credit scores to determine an applicant's likelihood of repaying their loan. In Home Mortgage Disclosure Act data, lenders most frequently cite credit history as the reason for denying home purchase mortgages. Other than assessing creditworthiness, credit scores are also used in loan pricing—borrowers with higher credit scores pay lower interest rates, as lenders expect them to have lower default risk.

In mortgage underwriting, the Fair Isaac Corporation (FICO) score, which debuted in 1989<sup>4</sup> and which the GSEs firmly incorporated into mortgage underwriting in 1995,<sup>5</sup> is the dominant score used. Many mortgage lenders typically use a minimum FICO score (e.g., 620) as a cutoff for creditworthiness. Another model is the VantageScore, which has its own credit scoring models based on data from the three nationwide credit reporting agencies. The VantageScore is not currently permitted for generating credit scores for loans to be sold to Fannie Mae or Freddie Mac, though it is widely used to assess the creditworthiness of other credit products. Compared with lending for other products, mortgage lending has been slower to adapt to updated credit scores and new modeling techniques. Mortgage lenders still use Classic FICO models (Experian uses FICO Score 2, TransUnion uses FICO Score 4, and Equifax uses FICO Score 5) that do not incorporate rental payment data into their calculations.

The FICO score became a key variable in mortgage underwriting in the 1990s when automated underwriting systems were first adopted. Before automated underwriting systems, mortgage lenders frequently relied on applicants' rental payment records to assess their creditworthiness when manually underwriting loans. But at the time automated underwriting systems were adopted, these variables were left out of mortgage underwriting models because the credit bureaus did not capture rental,

utility, and telecommunications data (Cochran, Stegman, and Foos 2021), and these alternative variables were more cumbersome to collect and incorporate than credit scores.

The inclusion of FICO scores in underwriting has helped lenders access a common proxy for creditworthiness that reduces time and financial costs and enhances market efficiency. Kaul, Goodman, and Zhu (2019) find that FICO scores are stronger predictors of mortgage delinquencies than DTI ratios and loan-to-value (LTV) ratios. But using the FICO score alone as a marker of creditworthiness leaves substantial room for improvement, given the nontrivial portion of consumers who could make on-time mortgage payments but lack a FICO score because they have no or few records on their credit history. And even among borrowers with FICO scores, including alternative data could improve their credit scores and lower the costs of borrowing. FICO (2021) estimates there are about 53 million US adults who cannot be scored under its classic models.

This suggests that the heavy reliance on credit scores and automated credit history data discriminates against people of color through *process*, not just through risk assessment. The automated process strongly favors applicants with easily documentable strong credit records, while those whose credit history might be confirmed with further effort and documentation are usually shut out.

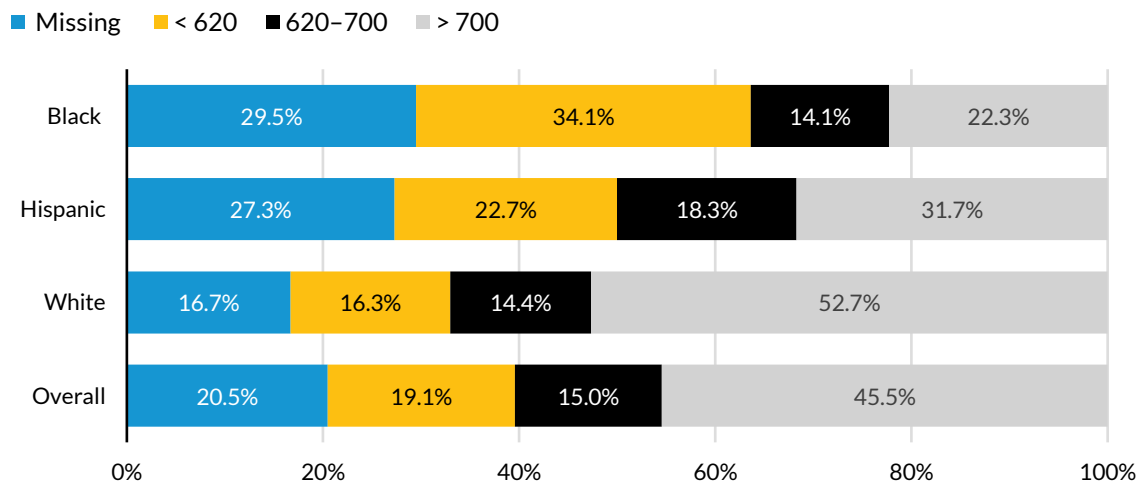
# 3. Racial Disparities in Credit Scores and the Potential of Rental Payment Data

## Racial Disparities in Credit Scores

Lenders rely on credit history and credit scores to determine mortgage eligibility and loan pricing, but Black households have regularly experienced greater difficulties accessing the same services that have allowed white households to build strong credit profiles. Historically, Black people have had less access to 30-year mortgages, revolving credit, and Federal Deposit Insurance Corporation-insured bank accounts and were often forced to turn to costlier and riskier alternatives that trapped them in cycles of debt (Baradaran 2019).

As a result, Black consumers are both significantly less likely than white consumers to have a FICO score and significantly more likely to have a lower score. In 2018, almost 30 percent of Black adults did not have a FICO score, compared with 17 percent of white adults. Black consumers also compose a higher share of borrowers with FICO scores below 620: this share was 34 percent for Black borrowers compared with 16 percent for white borrowers (figure 3).<sup>6</sup> These numbers suggest that Black consumers are disproportionately harmed by current underwriting models that heavily weight FICO scores, and Black consumers could receive disproportionate benefits from including cash-flow data in mortgage underwriting.

**FIGURE 3**  
**FICO Score Distribution, by Race or Ethnicity**



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Source: 2018 credit bureau data obtained from Freddie Mac.

Racial disparities in credit scores suggest that focusing on rental payments and cash-flow data makes sense from a racial equity perspective. Black households are more likely to be renters: nationally, a majority of Black households are renters compared with a minority of white households. Consequently, many Black renting households stand to gain from the inclusion of rental and cash-flow data in underwriting.

But we recognize that reporting all rental payments, including missed ones, could disproportionately harm Black households, who have lower average incomes and less job security and are therefore more likely than white households to miss rental payments. They also are likely to face discrimination from their landlords. As such, our analysis leads us to recommend the incorporation of only positive rental payments, which could usher more households into homeownership without creating any undue burdens. But how would incorporating rental payment information in underwriting have a different effect by race and ethnicity?

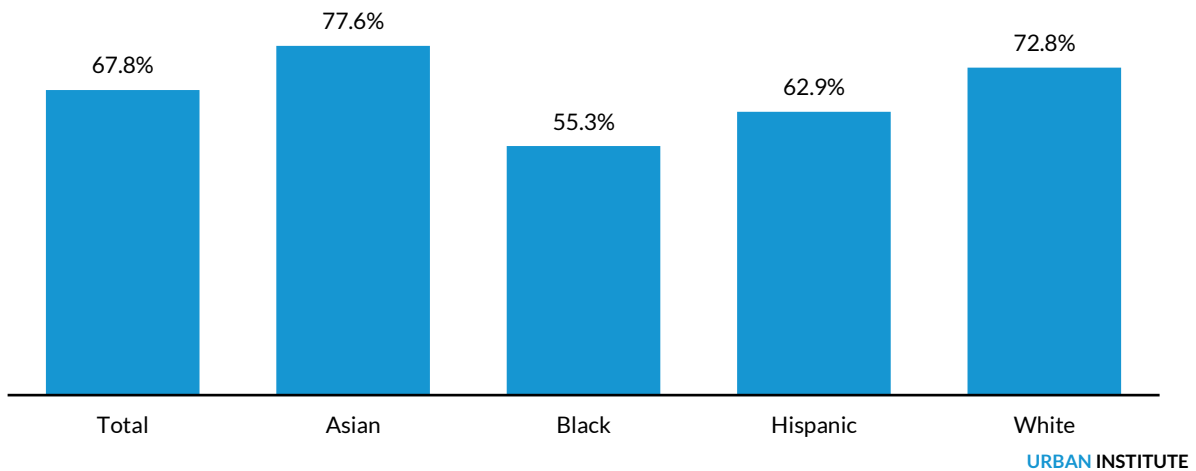
## The Potential for Including Rental Payments for Black Borrowers

Even though Black households are more likely to be renters and credit invisible, including positive rental payments may not have greater benefits for these households if they are less likely to be able to make

and document on-time rental payments. We also note that negative information for renters who have missed payments is often already included in credit reports, so crediting borrowers who made on-time payments could partially offset the disproportionate damage the current system has caused Black families.

Using the Understanding America Study, we have examined the share of renters that made 12 months of on-time rental payments between July 2020 and July 2021.<sup>7</sup> The study is a panel dataset provided by the Center for Economic and Social Research at the University of Southern California. The dataset was launched to explore how the COVID-19 pandemic has affected US households, so prepandemic data are not available. The dataset follows about 6,200 US residents older than 18 and provides weights to make the data nationally representative. Because the dataset tracks the same households over time, it allows us to calculate how many times households have missed monthly rental payments.

**FIGURE 4**  
**Share of Renters Who Made 12 Months of On-Time Rental Payments, by Race or Ethnicity**



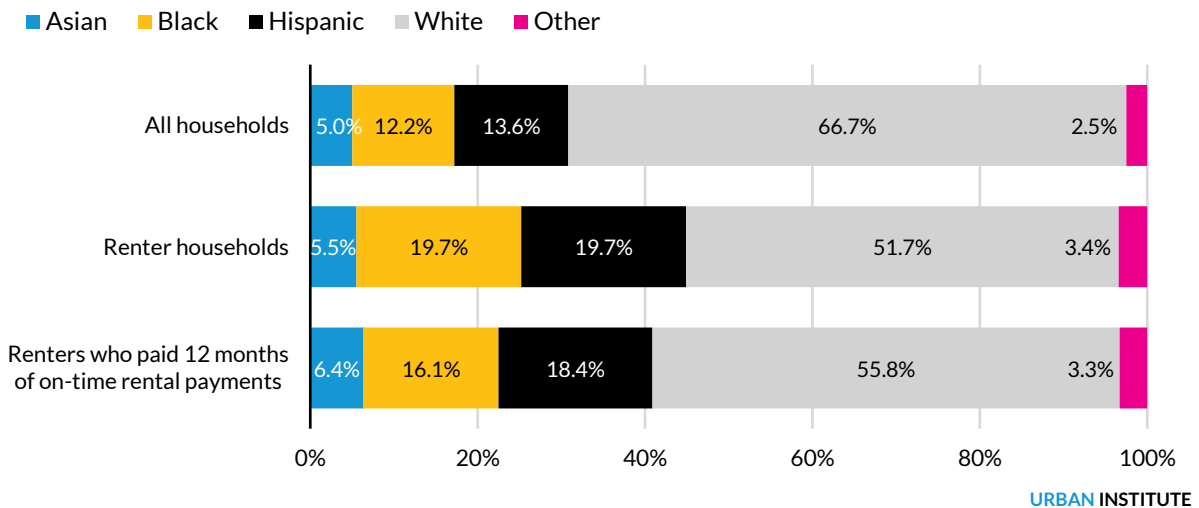
Source: July 2020–July 2021 Understanding America Study.

About 68 percent of US renters made 12 months of on-time rental payments. This share is higher among white and Asian renters (73 percent and 78 percent, respectively). Black households were least likely to pay 12 months of rent on time. Only 55 percent of them did so, compared with 63 percent of Hispanic renters. The lower share of Black renters making 12 months of on-time rental payments suggests that incorporating rental payment data would not automatically close the racial homeownership gap.<sup>8</sup> During the pandemic, essential industries, including grocery stores, hospitals,

postal services, warehousing, and storage, were hit particularly hard, resulting in higher unemployment for Black and Hispanic households, who are overrepresented in these industries.<sup>9</sup>

Another way to look at this number is to compare the racial and ethnic composition of all households, renter households, and renter households that made 12 months of positive rental payments. Figure 5 shows that Black households account for 12 percent of all households but account for 20 percent of renter households. Among renters who have made 12 months of positive rental payment history between July 2020 and July 2021, the Black household share was 16 percent. Although this share is lower than the Black share of renters among all renters, it is about 4 percentage points higher than the Black share of households among all households. Similar patterns are shown among Hispanic and Asian households, suggesting that incorporating rental payments in mortgage underwriting could have a disproportionately positive impact on households of color. Additionally, as white and Asian households are more likely to obtain access to credit without incorporating rental payment history, Black and Hispanic households would be among those who face challenges accessing mortgages in the current system.

**FIGURE 5**  
**Racial and Ethnic Composition of Households, by Tenure**



Sources: 2019 American Community Survey and July 2020–July 2021 Understanding America Study.

A limitation of the analysis is that we only have data during the pandemic, the years of which are likely to be outliers. But even though rental market data are scarce, existing data suggest that renters have weathered the pandemic better than expected, largely because of the financial support the federal government provided, including stimulus checks, unemployment insurance benefits, and emergency

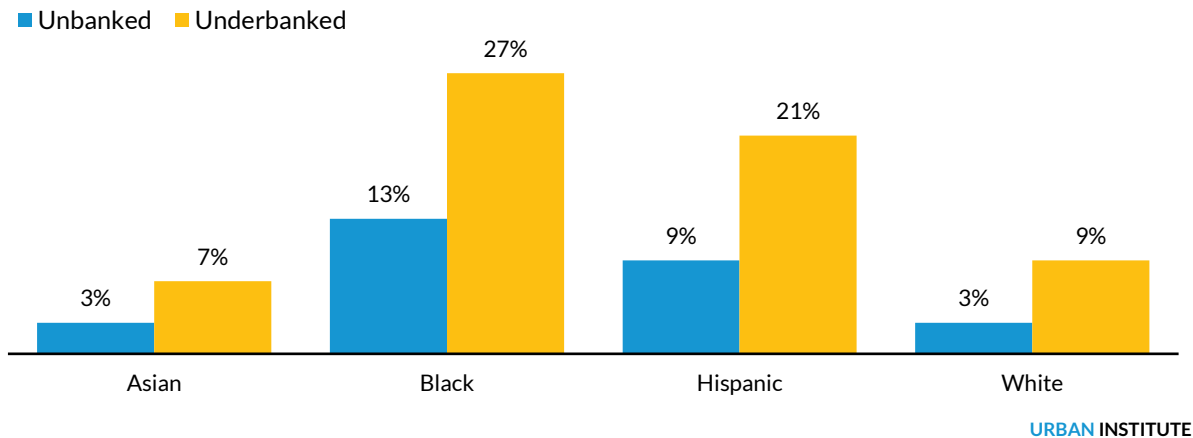


rental assistance (Choi, Goodman, and Pang 2022). As we recover from the pandemic, the numbers shown in figure 4 could improve further, though rising rents pose another concern.

Even if including positive rental payment history could have a disproportionately positive impact on borrowers of color, this would happen only if lenders could access these data. A lower share of Black renters live in large multifamily rental units managed by professional real estate companies, and a higher share live in two-to-four-unit properties largely owned by small mom-and-pop landlords.<sup>10</sup> Given those complicating factors, it could take longer for Black renters' payment information to be included in credit bureau data.

Using bank account data to identify rental payments or cash flows for Black renters is promising but could be more challenging because Black renters are more likely to be unbanked. According to a 2021 Federal Reserve study, 13 percent of Black adults were unbanked in 2020, compared with 3 percent of white adults (figure 6).<sup>11</sup> These data suggest the need for a concerted effort to help households of color, particularly Black households, access the banking system to increase the number of households who would benefit from including cash-flow data in underwriting.

**FIGURE 6**  
**Unbanked and Underbanked Adults in 2020, by Race or Ethnicity**



**Source:** "Economic Well-Being of U.S. Households in 2020–May 2021," Board of Governors of the Federal Reserve System, last updated June 13, 2022, <https://www.federalreserve.gov/publications/2021-economic-well-being-of-us-households-in-2020-banking-and-credit.htm>.

We find that Black renters are less likely to have 12 months of on-time rental payments, are more likely to live in smaller units, and are more likely to be unbanked, but our analysis still suggests that including rental payment data in underwriting could expand credit and mortgage access for many Black

households. This shows that more work is needed to collect and standardize rental payment data and to increase borrower's awareness of the possible benefits of sharing their data with lenders.

# 4. Two Methods for Incorporating Alternative Data into Mortgage Underwriting

To investigate the advantages, challenges, and racial equity implications of incorporating alternative data into mortgage underwriting, we conducted quantitative analyses and qualitative interviews with mortgage finance stakeholders. We begin by assessing the two methods of incorporating alternative data into underwriting.

First, we examine the evidence on including rental payments and cash-flow data in credit scoring and provide our own analysis of the impact of rent reporting on credit scores. Second, we explore the feasibility and impact of incorporating cash-flow data separately into underwriting alongside existing credit scoring models. We explore the literature on the topic and offer our own analysis of the potential racial equity impacts of incorporating cash-flow data in underwriting. We then compare the two approaches.

## Incorporating Alternative Data Directly into Credit Scores

Credit scores used for mortgage underwriting do not incorporate rental payment data into their calculation. But even if rental payment data are included in the credit scoring model, they would not make a noticeable difference because less than 2 million of the 44 million US renter households have their rental payment history on file with the three major credit reporting agencies. Although positive rental payment history is largely omitted from credit files, it is most commonly reported when a missed payment goes to a collection agency, meaning most rent reporting on file is derogatory only. As such, incorporating rental payment data directly into credit scores would require a significant improvement in rent reporting.

Beyond the evidence on rent reporting, we can examine the impact of including other monthly payments in credit scores to understand the potential effects of incorporating rental payments. Utility and telecom payments are comparable, though consumers prioritize these payments differently (NCLC 2022). Unlike rental payments, which are rarely present in credit bureau data, the National Consumer

Telecom and Utilities Exchange, a consumer credit reporting agency for utility and telecom payment data, has files on 245 million consumers.<sup>12</sup> The exact effects of including these payments vary across studies because of differences between full-file and positive reporting and the sample population, but the overall trends suggest that including these data reduces the number of unscorable and thin-file consumers and modestly increases credit scores.

## Existing Research

Because reporting rental payments to the credit bureaus has historically been uncommon, few studies have examined the impact of incorporating rental payments into credit scores. Studies that do exist use samples that are not representative of all renters, so the results should be interpreted with caution.

A few studies examine the relationship between rental payments and credit scores. The results are hard to generalize because of small sample sizes, geographic limits, or the inclusion of only subsidized units. Nonetheless, the studies generally found that including rental payment data substantially increased the scorable share of consumers. In addition, they found that after six months to two years of on-time rental payments, many of these newly scorable consumers had prime or near-prime credit ratings and that score increases were more common than decreases (Chenven and Schulte 2015; Experian 2017; Stringer 2017; Turner and Walker 2019).

TransUnion has released three press releases overviewing research findings on this subject, though the actual studies have not been made public. Overall, the studies found that including rental payments has a positive impact on credit scores for most consumers, especially for those at the low end of the credit distribution. A 2014 study of an unspecified number of files found that 67 percent of consumers experienced positive or neutral changes to their scores, and 19 percent experienced an increase of at least 10 points when positive rental payments are reported. Among consumers who initially had subprime scores, 79 percent experienced an increase, with 40 percent gaining at least 10 points.<sup>13</sup> A 2017 analysis of 12,000 renters found that including six months of rental payment history caused an average 16-point increase in scores, and consumers with initial scores below 620 experienced the largest increases (Aitken 2017). Finally, a 2021 report found that 9 percent of consumers became scorable, with an average score of 631 and an average increase of 60 points, after including rental payment history. Overall, 60 percent of consumers experienced score increases, and 12 percent moved into a higher credit tier.<sup>14</sup>

Looking beyond rental data, two studies using data from the national credit bureaus show the impact of including utility data in credit scoring. The first is a report from Experian that analyzes a

random sample of 5 percent of consumers with positive energy utility payment history from its general credit files. It used 25 months of positive payment history to create parallel tradelines for a nationally representative sample with no currently reported utility tradelines to simulate how national positive history reporting affects credit scores. The report estimates that between 2 percent and 5 percent of currently unscorable consumers would become scorable with positive energy utility payment history. The study also found that including these data decreased the share of thin-file consumers from 45 percent to 36 percent and that 77 percent of consumers experienced score increases, with an average increase of 28 points, compared with 3 percent who experienced declines. Score increases were largest among borrowers with subprime scores, 82 percent of whom experienced increases of at least 11 points. Finally, the share of subprime consumers dropped from 30 percent to 16 percent, while the share of nonprime and prime consumers increased by 7 and 8 percentage points, respectively (Experian 2015).

Additionally, a report from the Policy and Economic Research Council using credit file data from TransUnion and Experian found that including utility payment history reduced the share of unscorable and thin-file consumers by 5 and 4 percentage points, respectively. The researchers observed that changes in credit scores were positive for 25 percent of consumers with thin files and were negative for 6 percent (Turner et al. 2012).

Unfortunately, few public studies measure the impact of alternative data on default predictiveness. Cochran, Stegman, and Foos (2021) show these data may improve the predictiveness of default, especially for consumers who are unscorable or have thin files with traditional credit information. But none of the studies specifically examine the predictiveness of alternative data on mortgage default. In addition, none of the above studies examined how including alternative data may have different impacts across race and ethnicity. But Cochran, Stegman, and Foos (2021) note that some evidence suggests credit application acceptance rates would increase disproportionately for applicants of color.

## Data Analysis

To better understand how rent reporting affects credit scores, we partnered with the fintech company Esusu Financial to analyze its rent reporting data. Our analysis, which examines the impact of 12 and 24 months of rental payment data on renters' credit scores, found results similar to those from the TransUnion studies (table 1). From an analysis of a representative sample of 12,492 Esusu consumers who made on-time rental payments, we find that previously unscorable consumers received average VantageScores of 676 and 686, respectively, after including 12 and 24 months of positive rental

payments. These scores enable them to apply for conventional loans and lower their potential mortgage costs.

Additionally, we find that consumers with the lowest initial scores experienced the largest increases in terms of both gross and percentage increases. For consumers with scores below 600, our analysis demonstrates that the credit scores increased, on average, by 8.9 percent if 12 months of positive rental payment were included and by 9.4 percent if 24 months were included. For consumers in the highest credit score bucket, the average increase was about 1 percent in both cases. Twenty-four months of positive rental payments have a slightly larger impact than 12 months, but the difference is marginal. This finding suggests that adding even 12 months of positive rental payments would be enough for many renters with missing or low credit scores to improve their likelihood of getting a mortgage or lowering the cost of their mortgage.

**TABLE 1**  
**Average Change and Percentage Change in Credit Scores after Including 12 and 24 Months of On-Time Rental Payments by Credit Score Bucket**

	No or thin file	< 600	600-660	661-780	> 780
<b>Including 12 months of positive rental payment</b>					
Initial score	676				
Average point change (#)		42	41	27	7
Average point change (%)		8.9%	7.6%	4.4%	1.0%
<b>Including 24 months of positive rental payment</b>					
Initial score	686				
Average point change (#)		45	40	27	7
Average point change (%)		9.4%	7.4%	4.4%	1.1%

**Source:** Data analysis provided by Esusu.

**Note:** Years include 2021 for renters who made 12 months of positive rental payments and 2020 and 2021 for renters who made 24 months of positive rent payments.

## Separately Including Alternative Data in Mortgage Underwriting

The GSEs have launched initiatives that incorporate rental payment history into mortgage underwriting by identifying rental payment history from borrowers’ cash-flow data. With more than 96 percent of American households having bank or prepaid accounts, cash-flow information offers a promising option for improving automated underwriting systems, given the information’s ability to provide a timely and comprehensive picture of consumer finances outside of traditional credit reports (FinRegLab 2019).

Cash-flow data have been shown to accurately predict consumer credit risk and ability to pay through access to more precise measures of income, rental payments, utility payments, and other relevant variables found in consumer deposit and card accounts. Additionally, these cash-flow data and attributes tend to identify risk in ways different from traditional credit scoring models. This can allow cash-flow data to supplement and improve risk assessment in traditional scoring systems through a combination of new and existing models lenders are already familiar with.

## **Existing Research**

The research examining combined scoring models is even more limited than the research on incorporating alternative data into credit scores. That said, a recent report by FinRegLab (2019) highlights the strong potential for cash-flow information in consumer deposit accounts to improve automated underwriting processes. Compared with the 45 to 60 million consumers in the US who lack sufficient credit history to generate reliable credit scores, more than 96 percent of households have bank or prepaid accounts where records are becoming increasingly more accessible electronically. Information found in cash-flow data can provide a detailed picture of how applicants manage their finances not found in traditional credit reports.

The study found compelling evidence that these separate cash-flow-information-based measures and scores were highly predictive of credit risk across a diverse set of companies, populations, and products for which loan-level performance data were available when tested. These cash-flow measures and scores also appeared to separate risk in ways different from traditional scores and attributes, which improves the ability to predict credit risk among borrowers who are already scored by traditional scores by using a combination of models. But none of the analyses in the study have involved mortgage credit, and therefore, the relationship between cash flow and mortgage performance needs further research.

## **Data Analysis**

Given the lack of literature on alternative data in underwriting, we perform an analysis to determine the potential racial equity impact of their inclusion. Using 2020 Home Mortgage Disclosure Act data, we examine how incorporating alternative data, specifically positive rental payment history, would affect borrowers who were originally denied home purchase mortgages. These are rough estimates to examine the racial impact of including rental payments in mortgage underwriting, and the real results will depend on other factors, including whether lenders can access 12 months of rental payment history.

We first calculate the racial distribution of all 4.2 million borrowers who applied for first-lien closed-end conventional mortgages. Among all applicants, Black borrowers accounted for 6.1 percent, though they account for 12.2 percent of total households (Neal et al. 2021). Hispanic applicants accounted for 12.9 percent, slightly lower than the Hispanic share of US households (13.6 percent), and white applicants accounted for 72.4 percent of all applicants, higher than the white share of households (66.7 percent).

The Black share of denied applicants (14.2 percent) was much higher among the 392,513 total borrowers who were denied, while the share of white applicants denied was only 58.5 percent. Hispanic applicants accounted for 20.4 percent of denials. These numbers confirm the struggles Black and Hispanic households face in becoming homeowners.

Among denied borrowers, we select those who were denied because of credit history or incomplete credit application. We also select those younger than 45 to better capture first-time homebuyers. As credit is one of the main reasons Black and Hispanic households are denied, their share increases among this selected population. Among 102,799 applicants younger than 45 who were denied for credit reasons, the share of Black and Hispanic borrowers are 18.3 percent and 22.4 percent, respectively.

We then estimate the share of those who could be approved had they made 12 months of on-time rental payments. We use the share of renters who did not miss any of the 12 monthly rent payments, by race and ethnicity, calculated from the Understanding America Study between July 2020 and July 2021. (Our methodology for generating these numbers is in chapter 3.) Using these numbers, we find that about 10,000 Black applicants and 14,000 Hispanic applicants younger than 45 could be reapproved among those denied home purchase mortgages in 2020 because of credit history or incomplete credit application. Black and Hispanic applicants account for 15.0 percent and 20.9 percent of applicants among those who could be reapproved in our analysis.

Overall, our findings show that 17.7 percent of borrowers who were originally denied could be approved. A disproportionately high share of Black and Hispanic households could be reapproved if 12-month positive rental payments were included in mortgage underwriting. To put this in context, for every potential additional Black homebuyer, we estimate there are four potential additional white homebuyers. This compares favorably with the current ratio of more than nine white homeowning households for each Black homeowning household.

Note that the share of reapproved borrowers is likely to be lower because lenders would not be able to obtain rental payment history data for all borrowers who are denied because of credit. Even for those who provide 12 months of positive rental payments, some may still be denied. On the other hand,



it may also be that many potential borrowers who are unscorable today are dissuaded from applying for mortgages altogether and would be more likely to apply if lenders widely accepted alternative data. Despite these limitations, these preliminary findings suggest that incorporating rental payments into underwriting could expand access to homeownership, particularly for Black and Hispanic households.

If alternative data use is expanded, lenders could approve loans to more households who have lower traditional credit scores without increasing the amount of risk they take on. But the data can expand mortgage access even further. The Housing Credit Availability Index,<sup>15</sup> which measures the share of owner-occupied home purchase loans that are likely to default, indicates that since the Great Recession, lenders have been increasingly unwilling to tolerate defaults. The tightening of the credit box took away from many households of color with reasonable credit the chance to become homeowners and build wealth in the past decade as home prices increased and interest rates remained low. To help Black households and other households access homeownership, the credit box could be safely expanded, and the risk could be slightly increased to a level in the early 2000s before the banks started to relax the credit box and accept riskier loans. Alternative data would be especially effective in improving Black homeownership.

TABLE 2

Number and Share of Mortgage Borrowers Who Were Previously Denied and Would Potentially Be Approved If 12 Months of Rental Payment History Were Reported, by Race or Ethnicity

Race or ethnicity	All Home Purchase Applications		Home Purchase Application Denied		Denied Because of Credit History or Incomplete Credit Application <sup>a</sup>		12 Months of Positive Rental Payment History	Potentially Approved after 12 Months of Positive Rental Payment History Are Reported <sup>a</sup>	
	Number	Share	Number	Share	Number	Share	Share	Number	Share
Asian	338,095	8.1%	23,767	6.1%	3,247	3.2%	77.6%	2,520	3.6%
Black	256,159	6.1%	55,803	14.2%	18,772	18.3%	55.3%	10,384	15.0%
Hispanic	537,615	12.9%	80,080	20.4%	23,057	22.4%	62.9%	14,510	20.9%
White	3,019,244	72.4%	229,513	58.5%	56,560	55.0%	72.8%	41,176	59.4%
Other	18,719	0.4%	3,350	0.9%	1,163	1.1%	65.8%	765	1.1%
<b>Total</b>	<b>4,169,832</b>		<b>392,513</b>		<b>102,799</b>			<b>69,355</b>	
								<b>Share approved from those who were first denied =</b>	<b>17.7%</b>

Source: 2020 Home Mortgage Disclosure Act data and the Understanding America Study.

Note: Data are for purchase mortgages only.

<sup>a</sup> Borrowers younger than 45 (to better capture first-time homebuyers).

## Comparing the Two Approaches

Moving forward, we expect we will see both approaches—using alternative data in credit scoring and using alternative data directly in mortgage underwriting—continue to improve and play a greater role in mortgage underwriting. And both approaches would require lenders to make changes in their current underwriting systems.

Replacing the classic credit score with an updated version would require smaller changes in the current automated underwriting system and would therefore require lower up-front costs than examining alternative data separately in mortgage underwriting. Most research finds that including positive rental payment information in credit scores makes a meaningful difference, especially for consumers without credit scores or with low scores. Additionally, FICO and VantageScore have consistently improved their scoring models. FICO 10 and VantageScore 4.0 account for rental payment history, and UltraFICO allows customers to link their bank accounts to the credit scoring system, which updates their scores based on the additional information.

But less than 5 percent of rental payment information is in the credit system, and because of the nature of the rental market, that share is not expected to rise soon. It would be easy to include rental payment information for consumers living in large multifamily rental properties managed by professional real estate companies, but providing incentives for the more than 10 million individual mom-and-pop landlords who own more than 40 percent of rental properties will be more challenging.<sup>16</sup> In general, credit bureaus require prospective furnishers to report a minimum of 100 to 200 active accounts a month, but many mom-and-pop landlords typically own less than 10 properties (NCLC 2022).

Tenants can also sign up for credit bureau reporting (e.g., Experian Boost, Avail CreditBoost, and MoCaFi) that pulls from payment processing, bank accounts, and other data sources, but this, in most cases, requires fees, and the information is not reported to all three credit bureaus. The problem with not reporting rent to all three bureaus is that a lender might not generate the credit score from the bureau to which rent was reported. Each credit bureau has different rent reporting systems, which complicates reporting to all three.

In addition, it will take time to determine how much weight should be given to rental payment history in newer generations of credit scoring models. Currently, rental payments are treated by FICO and VantageScore as another tradeline, like an additional personal loan, which understates its importance as a mechanism for predicting the ability and willingness to make mortgage payments. As

more rental payment data enter credit files, the weight given to rental payment history in credit scoring models is expected to increase in those files where the data are available.

In the meantime, allowing lenders to examine cash-flow or rental payment information separately could expand access to mortgage loans for borrowers with missing or thin credit files and potentially lower mortgage costs for borrowers with low credit scores. Because mortgage and rental payments are largely similar in terms of size, purpose, and frequency, using the rental payment history in underwriting would increase the accuracy of default prediction. If lenders could easily access and use consumers' bank account data, we would not need to immediately give landlords and tenants incentives to report their rental payments to the credit bureaus. But gaining consumer permission could be challenging, especially for marginalized and historically excluded consumers who have had experiences that make them distrust financial institutions.<sup>17</sup> Even when consumers are willing to share their data, not all lenders have systems in place to access consumers' bank account data.<sup>18</sup> Additionally, as long as credit scores are used to price loans, it would still be important to report on-time rental payments to the credit bureaus, especially for consumers with no or thin credit files.

Also, without the standardization of cash-flow data and clear guidance about how these data should be used in underwriting, evaluating the additional information would be time consuming for lenders. Standardization of cash-flow data would require substantial time and effort. The Consumer Data Industry Association, a trade organization for standardizing credit reporting, is working on standardizing rent reporting and establishing a common definition of when a rental payment is delinquent. But for cash-flow data standardization, it is not clear who would play this role.

When interest rates were low, lenders had less incentive to change their systems to include more customers because refinance activities were already booming. Although it requires time and effort to change the systems, lenders will likely focus more on the purchase market as interest rates rise, invest greater efforts in incorporating alternative data in mortgage underwriting, and reach out to more customers who have the ability to make mortgage payments.

# 5. Progress toward Including Cash-Flow Data in Mortgage Underwriting

Historically, the mortgage market has been slow to adopt new scoring models and alternative data. In mortgage lending, multiple players have a stake in the process, including consumers, the GSEs, the Federal Housing Administration (FHA), the US Department of Veterans Affairs (VA), the US Department of Agriculture's Rural Housing Service, Ginnie Mae, regulators, credit rating agencies, insurance companies, banks, nonbanks, data aggregators, servicers, and investors. These stakeholders are not always aligned, especially given that the costs and benefits of updated systems are not necessarily evenly distributed. The multiple stakeholders and the fragmented housing finance ecosystem contribute to a lengthy transition period of industry adaptation of new technologies and scoring models.

Additionally, reporting to credit bureaus is voluntary and usually does not include data that provide a window into consumers' regular rental housing and utility payments (Cochran, Stegman, and Foos 2021). But the tide appears to be shifting regarding greater use of alternative data in underwriting. With the increasing availability of timely data through bank accounts as well as better technology to read this information, the use of cash-flow data in mortgage underwriting is growing. In this section, we explore the steps various stakeholders in the mortgage market have taken to improve cash-flow data use.

## The GSEs

The two GSEs, Fannie Mae and Freddie Mac, recently spearheaded efforts to expand access to credit and homeownership through cash-flow data reporting. Both GSEs are evaluating new FICO and VantageScore models, and the Federal Housing Finance Agency (FHFA) is comparing options for incorporating a new credit scoring model when underwriting GSE mortgages (Cochran, Stegman, and Foos 2021).<sup>19</sup>

In August 2021, Fannie Mae introduced a new feature in its automated underwriting system, Desktop Underwriter, that incorporates consumers' rental payments in the mortgage credit evaluation process. If Desktop Underwriter does not return a favorable recommendation for sale to Fannie Mae, the system will now check, for all first-time homebuyers, whether a 12-month history of on-time rental payments would change the outcome. If so, Fannie Mae will inform the lender, who can then ask the

borrower to permit Fannie Mae to access their bank statements through an approved vendor qualified to safeguard the highly confidential information.<sup>20</sup>

With permission from mortgage applicants, a Fannie Mae lender can automatically access applicants' bank statement data to identify recurring rental payments and deliver a more inclusive credit assessment. Only consistent rental payments will be considered to improve eligibility, but these rental payment data can only be used positively in the application process. Lack of evidence of a 12-month on-time rental payment history will not change the negative outcome of the initial automated underwriting system assessment of loan ineligibility, but it will also not affect the consumer's credit score.

Before launching the initiative, Fannie Mae estimated that about 17 percent of first-time homebuyers who were initially ineligible would have been approved with a consistent 12-month rental payment history.<sup>21</sup> But not all borrowers will initially be able to take advantage of the program, largely because banks can work with only a limited number of vendors with third-party systems that meet their stringent security criteria. Fannie Mae expects a few new mortgage approvals as the new system goes live, but the feature is expected to primarily expand opportunities for Black and Latino borrowers, who tend to have lower credit scores than white borrowers. Between September 2021 and May 2022, Fannie Mae assisted underwriting about 2,000 borrowers through this approach, and about a half of those were borrowers of color.<sup>22</sup>

On June 29, 2022, Freddie Mac announced<sup>23</sup> it will also consider on-time rental payments in its loan purchase decisions, starting July 10. With borrower permission, lenders and brokers can submit bank account data obtained from designated third-party service providers to Freddie Mac's automated underwriting system to identify 12 months of on-time rental payments when accessing the borrower's purchase eligibility. Eligible rent payment data includes payment made by check, electronic transactions, or digital payments using Zelle, Venmo, or PayPal.

In November 2021, Freddie Mac announced a program, in partnership with Esusu Financial, to provide multifamily operators incentives to report rental payments to the three major credit bureaus. To offset rent reporting fees, the program provides closing cost credits to Freddie Mac's borrowers owning multifamily rental properties who agree to report on-time rental payments using Esusu's platform. The Freddie Mac program seeks to use rental payments to improve consumers' credit scores. Consumers may opt out of the program, which initially reports up to 24 months of on-time rental payments. Renters who miss a payment are automatically unenrolled from the program and can reenroll in six months if their financial situation has improved. In June 2022, Freddie Mac announced<sup>24</sup> that

70,000 households across more than 800 multifamily properties have enrolled in the program. The program has helped 15,000 credit-invisible consumers establish credit scores, and 67 percent of renters who already had credit scores saw their scores increase.

Together, Fannie Mae and Freddie Mac funded more than 1.1 million low-income multifamily units in 2020. On September 27, Fannie Mae announced a pilot program to promote multifamily property owners reporting their tenants' rental payments at no cost.<sup>25</sup> The two GSE programs could even more significantly improve credit access and scoring as more landlords participate.

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#### BOX 1

##### **Incorporating Rental Payment Data for Large Multifamily Housing into Credit Bureau Reporting**

Landlords are offered an incentive when they close a multifamily loan with Freddie Mac. This incentive can be applied across multiple properties in addition to the property with the new loan. Freddie Mac has also negotiated with Esusu a discounted per unit rate that is available to all properties with a loan purchased by Freddie Mac. Expanding the program to existing multifamily properties could help millions of renters improve their credit scores. Compared with many individual mom-and-pop landlords, professional management companies would have an easier time including rental payment data.

The National Multifamily Housing Council's pandemic rental payment tracker provides an example of data collection at this scale. Since the pandemic began, the council has tracked rental payments from between 11 and 12 million rental units, or about a quarter of all rental units, in large, professionally managed multifamily properties nationwide.<sup>a</sup> Providing incentives for large institutional landlords to report rental payment data would be a meaningful move forward, but tenants in multifamily buildings managed by large companies are skewed toward high-income households, and Black and Hispanic renters are underrepresented among high-income households.<sup>b</sup> This means that to reduce racial disparities, there needs to be a greater effort to include rental payment information in the credit bureau data for those living in smaller rental properties.

<sup>a</sup> Jung Hyun Choi, Laurie Goodman, and Daniel Pang, "Navigating Rental Payment and Eviction Data during the Pandemic: What Have We Learned, and What Do We Need to Know?" (Washington, DC: Urban Institute, 2022).

<sup>b</sup> Jung Hyun Choi and Caitlin Young, "Owners and Renters of 6.2 Million Units in Small Buildings Are Particularly Vulnerable during the Pandemic," *Urban Wire* (blog), Urban Institute, August 10, 2020, <https://www.urban.org/urban-wire/owners-and-renters-62-million-units-small-buildings-are-particularly-vulnerable-during-pandemic>.

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Additionally, in June 2022, both GSEs announced plans to include cash-flow data in mortgage underwriting in their Equitable Housing Finance Plans to improve racial equity in mortgage underwriting. Fannie Mae's plan states that it will continue expanding its adoption and use of positive rental payment history in its Desktop Underwriter and will increase access for credit-invisible

borrowers by conducting cash-flow underwriting into Desktop Underwriter (Fannie Mae 2022). Freddie Mac's plan highlights that many communities of color manage finances through cash transactions outside the credit system and announced that it will conduct technological and credit policy analysis to determine the most effective methods of incorporating cash transaction data in the lending process to expand access to credit to underserved borrowers (Freddie Mac 2022).

Though the GSEs have begun to increase the use of cash-flow data in underwriting, more work is needed in this space. The GSEs and the FHA have been allowing lenders to account for rental payment history when performing manual underwriting, but these procedures have had little impact on the current market. Engaging in manual underwriting could qualify more applicants with nontraditional credit records for federal guarantee programs, but a substantial amount of time and labor is needed to analyze each applicant's financial profile. As such, investors and secondary market actors prefer to use automated underwriting systems that rely on data and models that are easy to compare across portfolios. Thus, where underwriting information is not easy to access, lenders may reject applicants not because the applicants pose too much default risk but because operational obstacles complicate the risk assessment (Cochran, Stegman, and Foos 2021).

In their Equitable Housing Finance Plans, the GSEs have mentioned they will enhance technology to implement automated validation of nontraditional tradelines in Desktop Underwriter. But the FHA, which serves a disproportionately high share of first-time homebuyers and homebuyers of color, needs to update technology to adopt newer credit scoring models or automate cash-flow data into its current underwriting system.<sup>26</sup>

## Private Companies: Lenders, Fintech, and Insurance Companies

As part of our landscape scan, we spoke with several private companies in the rent reporting space that either help report rental payment data to credit bureaus (e.g., MoCaFi, Bilt Rewards, and Avail) or examine cash-flow data in underwriting (e.g., Guild Mortgage, FormFree, and Petal).

MoCaFi is a self-referred "neobank" that partners with banks and offers fee-free financial services accounts to help underbanked populations deposit money and pay bills. The company allows customers to directly submit rental payment history without having to connect with their landlords. Through MoCaFi's prepaid card, mobile app, and online reporting system, consumers are given multiple options to create their rent reporting profiles and submit or link information from the cards and bank accounts



they use to pay rent each month. The payment history data are then directly reported to Equifax and TransUnion and added to the customer's tradelines within 45 days. Consumers need to opt in to report their rental payments and are automatically unenrolled if they have three months of missed payments. And because MoCaFi partners with banks and because customers often pay rent with their MoCaFi-branded credit cards, Fannie Mae can use MoCaFi's records directly for verification of rental payments in a new feature of its automated underwriting process.

Bilt Rewards, a fintech company, provides free rent reporting services to the three credit bureaus for all residents in the Bilt Rewards Alliance, a collection of 2 million units and 3 million renters in multifamily properties across the country. Bilt Rewards Alliance renters also earn free rewards points for each on-time rental payment through Bilt Rewards. In addition, Bilt has partnered with Wells Fargo to offer the Bilt Mastercard, a general-purpose credit card renters can use to pay rent and earn extra points with no transaction fees to either renters or landlords. For Bilt Mastercard members, renters' credit scores can benefit both from the rent being reported as part of their rental tradeline as well as potentially the benefit from paying rent with their credit card. Bilt allows consumers to report their rental payments to the credit bureaus at no cost, and the rewards points Bilt members earn can be used for a future down payment.

Avail, an online platform that serves mom-and-pop landlords, allows its renters to report up to 24 months of rental payment history to TransUnion, with a one-time fee of \$3.95 per reported month. Though the sample is small compared with the 44 million renters in the US, about 12,000 renters (10 to 13 percent of renters paying rent through the Avail platform) have signed up for this program—suggesting that even at some cost, many renters want their rental payment history to be incorporated into their credit scores. At the same time, this demonstrates that not all renters are willing to sign up for rent reporting services, which could be related to a consumer's lack of knowledge, reluctance to share financial information, or unwillingness or inability to pay an additional fee.

Several companies are advancing the use of cash flow in mortgage underwriting. FormFree, a fintech company, uses bank statement data to measure and index a person's ability and willingness to pay based on both discretionary and nondiscretionary spending needs, amounts, habits, and residual income. These ability-to-pay and willingness-to-pay measurements are not a single number but sets of scores included in a broader suite of data intended to supplement traditional credit scores.

To test the predictiveness of its data, FormFree is partnering with Guild Mortgage to use its historical loan-level data to compare default risk against FormFree's risk scoring analysis, which it claims was just as accurate at measuring risk as a FICO score. In July 2022, Guild Mortgage launched a

pilot<sup>27</sup> program that uses a Residual Income Knowledge Index™ (RIKI™) provided by FormFree. The RIKI is generated from the flow of income and expenses from a consumer's bank account data. Guild will also analyze rental payment history data furnished by FormFree to provide additional insight into a borrower's ability to repay their mortgage. The initial pilot will use the rental history data and the RIKI to price FHA mortgages for applicants lacking FICO credit scores, using the FHA's manual underwriting guidelines. FormFree will also provide a 12-month summary of the borrower's financial situation analyzed from bank statement data, which are easier to quickly analyze than multiple pages of PDFs.

Additionally, Guild is planning a second pilot that would incorporate thin-file borrowers with FICO scores around 640 or below, acknowledging that the credit risk fees for thin-file customers can be significantly improved with these alternative measures of credit risk. Guild will use these data to reach credit-invisible consumers who face difficulties accessing homeownership and lower their mortgage costs. Once the program launches, it will service these loans and continue to track loan performance.

FormFree's goal is not to create its own free-standing credit scoring model to compete with the widely used FICO model; rather, it seeks to supplement FICO scores by creating a more comprehensive financial profile that can more fully reflect the financial behaviors of consumers with thin or missing credit files. One of FormFree's data requirements is that consumers must grant permission. With consumer-permissioned data, reaching consumers who are less connected to traditional credit information may be particularly challenging, and expanding the program becomes difficult. Lenders are also concerned that individual applicants might provide selective access to data that do not include accounts they have struggled to pay. Lender interest in adopting alternative scoring models appears to be growing, but more work is needed to ensure the data are accurate, inclusive, and representative.

Enact Mortgage Insurance Corporation recently piloted a nontraditional credit product as part of its diversity, equity, and inclusion initiative. Nontraditional credit guidelines apply when no borrower on the loan has a valid credit score or when the credit score is not supported by the minimum number of credit references or does not meet the credit history requirements. The Enact pilot expands existing GSE nontraditional credit guidelines by increasing the LTV and DTI ratio limits to 97 percent and 45 percent, respectively, and including manufactured housing (box 3). To qualify for the pilot, each borrower must have at least three payment references in the United States composed of tradelines that do not appear on the credit report. At least one reference must be rental payment history with no payments that were 30 days late in the past 12 months. Each payment reference must have existed for the most recent 12 months. Example references include payments for utilities, insurance, cell phones, child care, medical bills, and school tuition. For payments other than rent, one 30-day delinquency is allowed. The program also requires at least two months' mortgage reserves.

In terms of nontraditional credit pricing, the GSEs' loan-level pricing adjustment matrices categorize these loans in the below-620 credit score buckets and charge the highest up-front, risk-based fees. But Enact finds that nontraditional credit performs better than scores below 620 and will be priced accordingly. Enact hopes to increase mortgage access and affordability in a responsible manner. Although Enact will monitor pilot performance, it will be difficult to evaluate the product's direct impact on racial equity in the short run, as race and ethnicity information is available only at the individual lender level.

Outside the mortgage space, fintech companies such as Petal have used cash-flow transaction data to serve consumers without prime credit scores or who lack sufficient credit history to qualify for credit cards from established issuers. Petal analyzes banking history to create a Cash Score, an instant and more comprehensive measure of a person's creditworthiness based on income, savings, and spending history. (Any applicants' existing history is factored in as well.) Based on this Cash Score, customers can qualify for a Petal credit card, which they can use to build payment history that is then reported to all three major credit bureaus. Fifty-three percent of Petal's consumers had thin or no credit files when they applied for a Petal card, and 43 percent of them were denied a credit card from a major bank issuer before receiving a Petal card. After several months, the average credit score reached 676 for Petal consumers who started with no score. Compared with typical bank credit cards, Petal cards' credit limits are lower, ranging from \$300 to \$10,000. About 63 percent of Petal consumers are younger than 35, and 67 percent have incomes below \$50,000. This indicates the company mainly serves young low-income households that are new to credit and provides them a chance to access credit and build credit scores without having to rely on more onerous options, such as secured cards.

Further, Petal reports that consumers with no credit history underwritten using Cash Score demonstrate credit performance equivalent to consumers with prime credit scores. Full-file consumers underwritten using Cash Score perform 30 percent better than those underwritten without Cash Score. Though more research is needed to examine the relationship between cash-flow data and mortgage performance, Petal's findings imply that using cash-flow data could increase the predictive power of mortgage underwriting models and improve the opportunity for consumers with no or thin credit to access homeownership.

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## BOX 2

### The Use of Artificial Intelligence and Machine Learning in Underwriting: VantageScore and Zest

Even without including alternative data in calculating credit scores or underwriting, some companies have applied machine learning techniques that could expand the credit box or better predict default probabilities within a given credit box. Although this subject is not the key focus of this report, we provide two examples. Many other companies, including Petal and FormFree, also use machine learning and artificial intelligence (AI) to estimate risk using alternative data. But the examples below highlight how using AI and machine learning estimates the borrower's risk by using data that already exist in the credit files.

Unlike traditional credit scoring models, VantageScore 4.0 scores consumers with less than six months of credit history, consumers with tradelines with as little as two months of activity, those with no tradelines but who have external collections and public records on their files, and consumers who do not show transaction activities in the past six months in their credit files but have prior activities. These are more likely to be young consumers, consumers of color, or immigrants. VantageScore 4.0 uses machine learning to look at millions of consumer attributes and find the attributes that are most predictive. Through this method, VantageScore 4.0 can provide credit scores to 37 million consumers who do not have FICO scores. Among these newly scored consumers, 13 million have scores above 620. VantageScore 4.0 claims to have tested the default probabilities of the newly scored consumers and found that they are similar to consumers with existing credit scores in the same credit score buckets.

The table below presents the number and the share of newly scored consumers and newly scorable consumers with scores above 620, which is typically the minimum score to access conventional loans, by race and ethnicity. We compare these numbers with the racial and ethnic shares of adults older than 18. As the Black population has a higher share of credit-invisible consumers, a relatively higher share of Black consumers receives a credit score using the VantageScore 4.0 model than the Black share of consumers older than 18. Among those who are newly scorable, 15 percent are Black consumers, about 3 percentage points higher than the share of Black consumers among the adult population.

But among those who receive credit scores above 620, the share of Black consumers (10 percent) becomes substantially smaller. This is because among newly scorable Black consumers, less than 24 percent receive credit scores above 620. For Hispanic, white, and Asian consumers, these shares were 40 percent, 33 percent, and 38 percent, respectively. Among newly scoreable consumers with scores above 620, only the share of white consumers is higher than their share among the adult population. This suggests that even though applying new machine learning techniques can expand credit, this approach has limitations in closing racial disparities because there are already considerable disparities in the underlying data used in generating credit scores.

## VantageScore Newly Scorable Customers, by Race or Ethnicity

	Share of population older than 18	VantageScore newly scorable consumers	Newly scorable consumers, by race or ethnicity	VantageScore newly scorable consumers with scores $\geq$ 620	Newly scorable consumers, by race or ethnicity, with scores $\geq$ 620
Asian	6.0%	1.8 million	4.7%	0.7 million	5.4%
Black	12.1%	5.5 million	14.9%	1.3 million	10.0%
Hispanic	16.3%	5.2 million	14.1%	1.7 million	13.1%
White	63.0%	24.2 million	65.4%	9.2 million	70.8%
Other	2.7%	0.4 million	0.9%	0.1 million	0.8%
<b>Total</b>		<b>37.0 million</b>		<b>13.0 million</b>	

Source: Authors' calculations from data received from VantageScore and the 2019 American Community Survey.

Note: The Asian category includes Native Americans and Pacific Islanders.

Recently, Zest AI, a fintech company founded in 2009, announced that its AI-powered automated underwriting methodology increases the loan approval rate by 21 percent without increasing risk compared with the traditional scoring method.<sup>a</sup> Zest uses Federal Credit Reporting Act (FCRA)-compliant credit data.<sup>b</sup> It explains that additional approval rates using Zest models often come from the fact that they dig more deeply into credit report data by using a machine learning approach. This approach allows them to get more comprehensive information on the borrower's characteristics and their financial status, which leads to more accurate identification of their risk level. In March 2022, Zest announced its partnership with Cornerstone League,<sup>c</sup> which represents almost 500 credit unions in Arkansas, Oklahoma, and Texas. Freddie Mac is exploring whether the Zest model can expand homeownership opportunities to communities of color, but we do not have information about how the mortgage approval rate differs between Zest and traditional underwriting models.<sup>d</sup> More data and evidence are needed as more lenders adopt this new approach in mortgage underwriting.

<sup>a</sup>Devin Parker, "How AI and Automation Fit into Your Lending Process," Zest AI, August 19, 2020,

<https://www.zest.ai/insights/how-ai-and-automation-fit-into-your-lending-process>.

<sup>b</sup>The FCRA protects the accuracy, fairness, and privacy of the information collected by consumer reporting agencies, such as credit bureaus, medical information companies, and tenant screening services. The law regulates the way consumer reporting agencies can collect, access, use, and share the data they collect in consumer reports.

<sup>c</sup>Natasha Chilingirian, "Partnership Delivers Zest AI's Software to Cornerstone League CUs," Credit Union Times, March 22, 2022, <https://www.cutimes.com/2022/03/22/partnership-delivers-zest-ais-software-to-cornerstone-league-cus/>.

<sup>d</sup>Jeff Kauflin, "New Freddie Mac Partnership Will Mean 'Tens of Thousands of New Mortgages Per Year For People of Color,' Says Zest AI CEO," *Forbes*, November 18, 2020, <https://www.forbes.com/sites/jeffkauflin/2020/11/18/zest-ai-inks-deal-with-freddie-mac-to-boost-mortgage-approvals/?sh=6130aa6b12a0>.

## Legislation

Finally, on a policymaking level, efforts have been made to encourage landlords to report rental payments to credit bureaus. Recently, California, Colorado, and Washington, DC, have all adopted

initiatives to increase the prevalence of rent reporting. California passed a law that requires all landlords with more than 15 subsidized rental units to offer tenants the option to report their payments (SB 1157); the bill requires tenants' written consent and mandates full-file reporting. Similarly, Colorado and DC have initiated pilot programs in hopes of furthering rent reporting (HB21-1142).<sup>28</sup>

# 6. Solutions to Expand the Use of Alternative Data in Mortgage Underwriting

Incorporating rental payment and cash-flow data into mortgage underwriting is gaining momentum, but significant challenges remain. Although we are starting to see some tangible changes in the market, it will take time to fully adopt new data into the system, especially with multiple parties involved in the implementation. Below, we lay out three core areas—data collection, data standardization, and regulation for consumer protection and access to credit—that need more work to facilitate the adoption of alternative data in the mortgage space, as well as potential solutions for tackling these challenges.

## Data Collection

Cash-flow data need to be collected and made accessible to lenders before they can be used. The two major methods of increasing data collection are giving landlords incentives to report rental payments and allowing consumers to permit the use of their data, particularly bank data.

Because landlords experience a cost to rent reporting with little or no verifiable benefit to their business, it has historically been difficult to get landlords to report tenants' rental payments. Given that, the use of consumer-permissioned bank account data is the most scalable path forward. But gaining consumer permission presents certain challenges.

The payment records of Avail, which enables independent landlords to use its online platform to collect rent for more than 40,000 properties, show that about 77 percent of its tenants pay rent using Automated Clearing House, 7 percent use credit or debit cards, and the remaining 16 percent are manually recorded by landlords who receive payment via cash or check. Avail told us this share has been consistent over time.<sup>29</sup> This indicates that bank account data could be used to track the rental payment history of more than 80 percent of tenants.

But getting access to bank data would require consumer permission, which would take time and effort. Additionally, credit scores are likely to continue to be used for pricing several credit products, including mortgages. So even if more cash-flow data are included in underwriting, the cost of the mortgage will continue to be affected by the customer's credit score. Therefore, it is important to

continue efforts to report more positive payment data to credit bureaus and upgrade scores to reflect these payments.

## Solutions

### 1. CONTINUE EFFORTS TO INCREASE RENT REPORTING TO CREDIT BUREAUS

Policymakers, the GSEs, credit bureaus, and rent reporting companies have supported multiple efforts to increase rental payment information to credit files.

Legislative efforts include SB 1157, which requires landlords of assisted housing developments in California to offer tenants the option to have their rental payments reported to at least one of the credit reporting agencies.<sup>30</sup> Additionally, in July 2021, Senator Tim Scott (R-SC) introduced the Credit Access and Inclusion Act of 2021 (S. 2417), which would amend the FCRA to allow positive rental, utility, and telecommunications payment information to be reported to consumer reporting agencies.<sup>31</sup> Consumer advocates have opposed the bill, raising concerns that it would reduce consumers' control over their own data.<sup>32</sup> For rental payments, a person or the US Department of Housing and Urban Development (HUD) may report rental payments under a lease agreement for a dwelling.<sup>33</sup>

In recent years, the proliferation of commercial rent reporting platforms has made rent reporting less onerous. Rent reporting companies such as Esusu, Bilt, Rent Dynamics, and RentTrack (recently acquired by Self Financial) have begun providing services to report rents to all three credit bureaus.<sup>34</sup> These companies are expected to facilitate the growth of rental payment data into credit files. Although many tenants may willingly pay extra fees to report their rent to the credit bureaus, tenants with low incomes may find these fees burdensome. Recognizing this financial burden, Freddie Mac requires landlords to bear the costs of rent reporting through its initiative with Esusu, while providing an incentive to help defray the costs. California's rent reporting legislation caps tenant costs at \$10 a month. There are ongoing debates about what the consumer's role should be in this process. For example, Esusu gives consumers an opt-out option; consumers are automatically enrolled for having their positive rental payments reported to the credit bureaus but can opt out of this service. The advantage of the opt-out option (over the opt-in option) is efficiency that leads to greater tenant participation, at least short term. In the Esusu platform, consumers are also automatically unenrolled if they miss rent payments to prevent harming those who are struggling financially. But some consumer advocacy groups we interviewed strongly expressed their support for the opt-in option to ensure consumers have full awareness and control over their data. MoCaFi provides an opt-in option to empower its consumers but told us this option limits consumers' participation, and it is examining ways



to address this problem. Importantly, the federal Privacy Act requires that all rent reporting efforts in federally assisted housing be opt-in efforts. Further research into the effectiveness of the opt-in and opt-out models of rent reporting could clarify the impact on consumers. Collaborations between private companies and landlords are one way to provide incentives for rent reporting.

All these efforts are a valuable step moving forward, but progress has been slow. To facilitate greater rent reporting, Fannie Mae (following Freddie Mac) is initiating its own rent reporting initiative for owner-operators of multifamily properties it finances going forward, while Freddie Mac is exploring ways to further extend its rent reporting initiative to its existing multifamily portfolio.

## 2. FACILITATE THE USE OF CONSUMER-PERMISSIONED CASH-FLOW DATA IN MORTGAGE UNDERWRITING

To avoid relying on landlords for rent reporting, increasing the use of rental payment or cash-flow data obtained from consumer-permissioned bank accounts could be beneficial for consumers who lack credit scores or consumers with low scores but who pay their rent on time. Technical systems would need to be enhanced. The GSEs announced that as part of their respective Equitable Housing Finance Plans, they are working with their lenders, vendors, and other constituents to incorporate cash-flow data into their automated underwriting systems.

The FHA is lagging behind the GSEs in these efforts. To make a greater impact on Black households and other borrowers of color, who are more likely to purchase homes through the FHA channel, the FHA would need to substantially upgrade its underwriting technology. In 2019, 37 percent of Black homebuyers bought homes with FHA mortgages, compared with 14 percent of white homebuyers. Because of funding constraints, the FHA cannot make necessary technology improvements to adopt newer credit scoring models or incorporate rental payment history in automated underwriting. For a larger share of Black households to benefit from incorporating cash-flow data in mortgage underwriting, funding should be made available to HUD to enable it to accelerate the FHA's transition to a digital platform that will expand cash-flow data use for Black households. On September 27, the FHA announced<sup>35</sup> that it will start permitting positive rental payment history for first-time homebuyers in the credit assessment that determines eligibility for an FHA-insured mortgage. The outcome of this new approach needs to be monitored and evaluated.

## Data Standardization

Even if the amount of available data increases, lenders will experience difficulty using those additional data in underwriting absent standardization. Multiple data aggregators are aggregating and cleaning these data to make them more user-friendly. But even with improved technology, this is not an easy task.

Several factors complicate the use of cash-flow data. For example, the amount of rent households pay every month could vary if utility payments are added to the payment. The data on which rental payments are made could also change month to month, and multiple household members could contribute to the payment, making it difficult to track. FormFree and other leading companies use AI and machine learning to identify rental payments in bank account data, but if multiple people contribute, and some pay with cash, it would still be difficult to track the exact payment. Some lenders we spoke with were also concerned about how to analyze and incorporate large amounts of cash-flow data in mortgage underwriting. Although fintech is helping to overcome these challenges, with multiple aggregators, it is still uncertain how comparable the processed data would be.

To increase efficiency, clearer federal guidelines need to be established for consumer protections around personal financial data ownership and sharing derived from individual bank accounts, a responsibility of the Consumer Financial Protection Bureau under Section 1033 of the Dodd-Frank Act. And with more than half of mortgage originations securitized by Fannie Mae and Freddie Mac, lenders we interviewed hoped to receive clear guidelines from the GSEs on how to use alternative data without making major changes to their current systems or needing to manually underwrite loans (Goodman et al. 2022). Several lenders pointed to the current lack of guidance as a barrier to their adoption of alternative data use. Another point that could use clarifying is how much cash flow should be weighted in credit scoring or underwriting models. Though the GSEs do provide guidelines for underwriting borrowers without credit scores, they apply strict eligibility criteria that limit the number of borrowers who can benefit (box 3) and levy maximum risk-based pricing fees on these loans.

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### BOX 3

#### GSE Underwriting Guidelines for Borrowers without Credit Scores

Both Fannie Mae and Freddie Mac provide guidelines for underwriting borrowers without credit scores. Fannie Mae provides Desktop Underwriter, which simplifies underwriting for borrowers with nontraditional credit without lenders having to manually underwrite each loan.<sup>a</sup>

Fannie Mae imposes additional requirements on borrowers' eligibility: only purchase or no-cash-out refinance mortgages are allowed; the property must be a one-unit primary residence, and all borrowers must occupy the property; manufactured homes are not eligible; loan amounts need to be below the general loan limit; the combined LTV ratio must be less than 90 percent; and the DTI ratio must be below 40 percent. Black first-time homebuyers are less likely to qualify under these LTV and DTI restrictions. When an approved recommendation is received, the lender must assess at least two nontraditional credit sources that show 12-month payment history for each borrower, one of which must be for rent.

Freddie Mac also has strict requirements for lenders when assessing borrowers without credit scores using its automated system.<sup>b</sup> The requirements are largely similar to Fannie Mae's, but the total LTV ratio must not exceed 95 percent, while there are no guidelines on DTI ratio limits. Freddie Mac also requires the borrower to provide 12 months of payment history, including rental payment history, and the borrowers must have no delinquencies of 30 or more days in the most recent 12 months of payment. These restrictions limit the number of borrowers without credit scores who can access GSE mortgages, and even if they do receive a mortgage, they pay a 3-to-4-point fee or pay higher interest rates. Between 2016 and 2020, less than 0.1 percent of the loans Fannie Mae and Freddie Mac purchased were made to borrowers without credit scores.<sup>c</sup>

<sup>a</sup>Fannie Mae, "Underwriting Borrowers without Traditional Credit" (Washington, DC: Fannie Mae, 2021).

<sup>b</sup>Freddie Mac, "Mortgages for Borrowers without Credit Scores" (McLean, VA: Freddie Mac, 2021).

<sup>c</sup>GAO (Government Accountability Office), *Mortgage Lending: Use of Alternative Data Is Limited but Has Potential Benefits* (Washington, DC: GAO, 2021).

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## Solutions

### 1. CLARIFY AND STANDARDIZE THE USE OF ALTERNATIVE DATA

The current regulatory environment generally does not provide banks or other financial institutions incentives to standardize their data, and many data aggregators spend a significant amount of time interacting with consumers to verify their financial information. Policymakers could consider subsidizing technical infrastructure or offering financial incentives to financial institutions for data standardization to ease the use and transfer of alternative data use. The GSEs are working with the

Consumer Data Industry Association and related organizations to create clearer standards for rent reporting. The Mortgage Industry Standards Maintenance Organization should also improve clarity and standardization around consumer data use and access when those are within its purview.<sup>36</sup>

## 2. PROVIDE CLEAR GUIDELINES ON INCORPORATING ALTERNATIVE DATA IN UNDERWRITING

Unless lenders hold the loans they originated on their balance sheets, they have limited capacity to incorporate alternative data in mortgage underwriting. They must rely on guidance from the GSEs in this regard. Although establishing guidance would take time, some progress is being made on using updated credit score data that incorporates rental payment history in mortgage underwriting. The FHFA and the GSEs are examining the possibility of replacing the Classic FICO score with FICO Score 10 and VantageScore 4.0, both of which incorporate rental payment history into their models. With simultaneous efforts to increase rental payment data into credit bureaus, upgraded credit scoring models could better capture borrowers' ability to repay a mortgage. The FHFA is expected to announce its decision to approve the use of any of the two models in the coming months, but the transition will be lengthy, perhaps as long as 36 months.<sup>37</sup> At the same time, both GSEs have indicated they are minimizing the use of third-party credit scores in their automated underwriting engines as they deepen their use of credit file and bank account data to underwrite mortgages.<sup>38</sup> Updating regulatory guidance to clarify expectations around alternative data use would allow lenders to comfortably extend mortgage financing to more households.

## Regulation for Consumer Protection and Access to Credit

The proliferation of cash-flow data without clear guidance could harm consumers, especially if they are unaware of what data are used and how. Ensuring consumers have control and visibility, and are clear on costs and benefits of sharing their data is a necessary step before cash-flow data use becomes widespread. Clear regulatory guidelines are needed to ensure the information is not misused and consumers are treated fairly and equitably in mortgage underwriting.<sup>39</sup> Lenders need to be able to accurately disclose their underwriting methodologies and relative weights applied to the different metrics. With respect to access to credit, regulatory barriers may limit the adoption of alternative data to expand homeownership. These types of barriers relate both to safety and soundness regulation and the rules governing what lenders need to do to verify an applicant's ability to repay. Some tangible regulatory considerations are discussed below.

## Solutions

### 1. CLARIFY HOW THE FCRA APPLIES TO CASH-FLOW DATA USE

A major source of uncertainty around cash-flow data use relates to the FCRA. The FCRA requires lenders to inform applicants which credit bureau provided the information that motivated their decision to deny a mortgage application or charge a higher price for a loan. Consumers have the right to access this information and dispute it with either the consumer reporting agency or the original furnisher, who are obligated to investigate mistakes. Although consumer protection is a critical element when sharing bank account data, federal regulators have yet to clarify how the FCRA applies to customer-permissioned data transfers by data aggregators for underwriting purposes.

Regulatory uncertainty makes it unclear whether alternative data are considered a consumer report, leaving aggregators unsure which FCRA consumer reporting agency and furnisher requirements apply to them and their data sources. Research has found that data aggregators have different views on whether the FCRA applies to their operations (Cochran, Stegman, and Foos 2021). Forthcoming Consumer Financial Protection Bureau rulemaking may alleviate these differences.

### 2. FINALIZE SECTION 1033 RULEMAKING

Policymakers also can clarify the use of consumer-permissioned data in mortgage underwriting. Notably, the Consumer Financial Protection Bureau is engaged in rulemaking to implement Section 1033 of the 2010 Dodd-Frank Act, which requires financial services providers to make account data accessible to their consumers. The 1033 rulemaking may clarify what data elements consumers have a right to access, what the standards are for private companies accessing and transferring data, and how several federal consumer finance laws should be applied to consumer data transfers (Cochran, Stegman, and Foos 2021). But this rulemaking likely will not be finalized until 2025. The bureau could consider advancing the timing of their plans to publish a proposed rule.

### 3. EXPAND THE CREDIT BOX TO A REASONABLE STANDARD

As noted, alternative data can enable lenders to approve more loans at the margin, which would result in disproportionately more mortgages to households of color who would otherwise be shut out from homeownership. Because it will take some time to calibrate alternative data with loan performance, lenders seeking to do so face regulatory issues related to safety and soundness and to ability to repay, even if they have full confidence in the quality of loans made.

On the safety and soundness side, regulators require more capital to be held against loans originated without credit scores, making them cost prohibitive and potentially even triggering ability-to-repay concerns based on the loan's pricing. These obstacles are layered throughout the mortgage system. For example, GSE capital standards require mortgage insurers to hold capital against loans approved on the basis of alternative data at the highest level (that is, the same level as if there were no credit score).

Across the system, regulators should recognize the risk-mitigating value of careful underwriting that establishes ability to repay based on factors other than a traditional credit score (Freddie Mac 2018).

# 7. Recommendations to Advance Adoption and Racial Equity

The main finding of this report is that using reliable indicators of creditworthiness and ability to repay other than credit score *could* increase mortgage approvals for Black borrowers if used and accessed appropriately. Emerging technologies and underwriting developments are already paving the way for increasing the use of alternative data in mortgage decisionmaking.

But greater adoption of alternative data alone is not enough to produce equity-enhancing outcomes. There is even a reasonable risk that without additional guardrails, these innovations could pose potential risks to borrowers who have traditionally been excluded from credit and homeownership access.

Here, it is essential to recognize the degree to which systemic racism is embedded in the housing finance system, contributing to the outcomes discussed in this report—namely, that white people have been generally better served by the mortgage industry. These outcomes may not necessarily result from individual prejudice but rather from the perpetuation of policies and practices that were first established with racist intentions and have gone relatively unchanged or unchallenged.<sup>40</sup> Unless conscious efforts are made to recognize the roots of disparate outcomes and uproot their causes, people of color will continue to be underserved or even harmed. For valid reasons, people of color are more likely to be skeptical of the banking system because of repeated instances of racial discrimination.

Mortgage innovation is challenging. Every stage in the mortgage process has multiple actors, each with entrenched, standardized ways of doing things, sometimes with conflicting incentives and cost structures. These forces are ways the system resists changes that could uproot systemic racism and improve racial equity. Aligning the actors from a racial equity perspective will be key to reducing racial homeownership gaps through alternative data.

We recommend undertaking pilots to address steps in the process that are essential to ensuring the innovations in technology and data actually result in racially equitable outcomes. In particular, we discuss and lay out a framework to answer key questions around the preorigination and readiness part of the process and the loan application and origination steps. We also discuss further equity challenges or opportunities that exist with respect to pricing, servicing, and regulatory accountability.

# The Importance of Addressing the “Last Mile”

Getting this right will require understanding how consumers of color, particularly those long underserved or excluded by the banking and credit systems, can best benefit from alternative data and gain access to the opportunity it presents. It is also important to identify frictions lenders face when accessing and using alternative data in mortgage underwriting and origination. Without solving for these “last mile” issues, it is unlikely the data and technology innovations will make much difference in racial equity. Effective approaches should be developed through carefully designed pilots where lessons are shared broadly, as we discuss below:

## Preorigination and Readiness

Pilots should be designed to increase would-be homeowner awareness about how alternative data may be used and managed in beneficial ways, particularly among households of color who may face discrimination from landlords and distrust sharing access to bank account information. Pilots can address such questions as these: What is the level of borrower understanding and comfort with this use of their data? What unintended harms or risks exist, and how can these be guarded against?

Further, pilots can test how real estate agents can be motivated and equipped to guide buyers to programs that accept alternative data and how housing counselors can guide clients through the process.

## Loan Application and Origination

Pilots can uncover and address frictions that might deter lenders from offering loans with alternative data. For lenders, what factors could hinder or facilitate adoption, and for which borrowers?

The more the secondary market actors standardize and streamline underwriting variances and changes to the application, documentation, and data collection, the more likely lenders will be to adopt. Incentives to adoption, such as the Community Reinvestment Act, can further encourage take-up. One tool lenders can use to advance racial equity is special purpose credit programs.<sup>41</sup> These programs allow lenders to specifically extend credit to historically disadvantaged groups and are a powerful example of the type of policy that acknowledges and works to undo historic racism. Pilots using alternative data in the context of special purpose credit programs can help test how to increase the likelihood that more Black borrowers qualify for mortgages.



Box 4 explains the potential role the Federal Home Loan Banks could play in promoting pilot programs to test how incorporating alternative data in mortgage underwriting could promote racial equity in homeownership. In the appendix, we provide a detailed framework for establishing pilots.

## **Consumer Education and Counseling**

Even assuming changes are made to the regulatory framework and rent reporting is expanded, additional work will still be needed to reach households who face greater barriers to homeownership. Several surveys indicate that many households with low incomes have a limited understanding of credit reporting and scoring, while research suggests that rent reporting works best when paired with education and awareness of what strong credit means.<sup>42</sup> Results have been mixed on consumer awareness as to whether alternative data are included in credit reports, but one survey of unbanked, low-income, and young consumers found that many respondents assumed they were included, while another survey noted that respondents of color were less likely to know whether energy utility payments were included (Javelin Strategy and Research 2013; Turner et al. 2009).

Incorporating information on alternative data and their uses into homebuyer education materials may be one mechanism of improving consumer knowledge. First-time homebuyer counseling in particular can help reach more people of color and inform participants of the possibilities for alternative data use, extending mortgage credit to a greater number of households. And consumer education will also empower consumers to better understand the use of their data and to ensure their protection against their misuse.

Any pilots undertaken should incorporate consumer education and counseling specifically designed to help borrowers safely share alternative data to qualify for mortgages.

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#### BOX 4

### **The Potential Role for the Federal Home Loan Banks**

The Federal Home Loan Bank of San Francisco has 328 member organizations, including banks, thrifts, credit unions, insurance companies, and community development financial institutions. Many members have expressed their interest in working on solutions to reduce racial disparities in homeownership. After multiple conversations with the bank and some of its members, we propose members be invited to participate in pilots to incorporate alternative data into mortgage underwriting that can help renters of color obtain homeownership. This invitation could be extended to other Federal Home Loan Banks and their members.

The bank has several tools at its disposal for enabling members to expand homeownership to underserved borrowers. Under its Affordable Housing Competitive Funding Program, it partners with local organizations to subsidize the acquisition, new construction, or rehabilitation of affordable housing. Its Homeownership Set-Aside Program provides direct assistance to households with low and moderate incomes in the form of down payment and closing cost assistance, housing counseling, and rehabilitation costs. And it offers discounted advances to its members for qualified community investment activities, including mortgage originations. The bank also undertakes special initiatives, such as the Empowering Black Homeownership initiative, where it matches funds from members to make grants to housing counseling agencies serving areas with large populations of color. Some of these tools can facilitate member pilots.

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## Other Equity Considerations

### **Pricing**

As mentioned earlier, mortgages extended as a result of using alternative data may be made prohibitively costly because of their treatment for risk-based pricing purposes and capital purposes or if they are otherwise discouraged via safety and soundness oversight. It is important to glean and share lessons from the approaches under way about how alternative data affect mortgage performance and about how it improves access to credit for previously marginalized applicants of color. This is particularly the responsibility of Fannie Mae and Freddie Mac, who can conduct pilots at large enough scale and who have a public mission “to promote access to mortgage credit throughout the nation.”

## **Servicing**

There may be a role for hands-on servicing for borrowers without established traditional credit histories. Such practices could also improve loan performance and, as a result, pricing.

## **Regulation**

Additionally, there remain potential regulatory barriers and uncertainties related to data access, data transfer, and consumer protection. We recommend that any regulatory flexibilities be predicated on the evidence that alternative data are being used to enhance racial equity in mortgage lending and in safe and sustainable ways. An important first step is for Fannie Mae and Freddie Mac to report on the demographics of who is and is not obtaining financing through their alternative data lending. This would be in keeping with their 2022–24 Equitable Housing Finance Plans.

## 8. Conclusion

We are observing increasing efforts to use alternative data in mortgage underwriting, and though they are promising, we recognize that including alternative data cannot solve all the persistent racial disparities in homeownership. Alternative data are an effective supplement to the information currently used in most credit scoring and underwriting models but could reflect underlying income and asset disparities. Structural racism has prevented people of color, and Black people in particular, from having equal access to educational opportunities, high-paying jobs, and intergenerational wealth. Black households typically have lower incomes than white households and, on average, substantially less wealth; they are also more likely to face discrimination in the workplace and in housing. These factors likely make it more difficult for the average Black household to make on-time rental and utility payments compared with the average white household, and a high share of Black households remain unbanked. Alternative data alone cannot fully close the persistent disparities in racial homeownership, and more work is needed within and outside the housing finance system to reverse the structural damage Black households have experienced for decades.

Despite these concerns, our research shows that including positive alternative data in underwriting is a step toward closing the Black-white homeownership and wealth gaps. Many Black households are renters who stand to gain from their on-time rental payments being counted, whether by credit agencies or mortgage lenders themselves. There is a long road ahead to expand and polish strategies for including cash-flow data in underwriting. Is it ultimately more effective to include rental payments when calculating credit scores themselves or separately in the mortgage process, or should we pursue both? Can the housing finance industry mount a concerted effort to update its underwriting processes? As a new and emerging issue, more research will be needed before we can settle these questions.

To improve Black homeownership outcomes, many housing finance actors will need to rally the will to make necessary changes and ensure their services equitably reach all potential borrowers. Specifically, we recommend that any innovation in alternative data in underwriting be deliberately deployed in a manner that will target Black and other households historically disadvantaged by the prevailing system. One such approach is the use of special purpose credit programs that incorporate alternative data. We also recommend pilots be undertaken and studied to enhance access to underserved borrowers.

# Appendix. Frameworks for Establishing Pilots

Pilots to test consumer and lender adoption of alternative data could be deployed to meet borrowers at various stages of mortgage readiness. The target stage can help determine the nature and purpose of the pilot and the lessons to be gleaned.

- Early stage
  - » Clients who are interested in homeownership in the long term but need up to three years to save and build credit. In these pilots, clients would be provided tools to build a record of positive rental payments or alternative data as part of their preparation.
- Mortgage-ready stage
  - » Clients who do not have an adequate traditional credit history but do have an adequate nontraditional credit history to establish the ability to pay.
- Second-look borrower stage
  - » Clients who have already applied but do not have the traditional credit history to establish the ability to repay and have been turned down by the lender.

TABLE A.1

Options for Establishing Pilots

	Borrower Readiness Stage		
	Early	Mortgage ready	Second look
Borrower outreach process	Third party (e.g., employer-based pilots)	Lender, housing counselor, or real estate agent	Referral by lender who declined the application
Borrower readiness process	Participant enrolls in regular reporting of rent or alternative data  Education and coaching from housing counselor or personal finance app; after establishing a satisfactory track record, apply for a mortgage	Offered under an SPCP  Lender and applicant work together or with third party (e.g., housing counselor or data reporting service) to document alternative credit history, as part of the application process	Client receives assistance and education from housing counselor to document alternative credit history  Client reapplies for mortgage using alternative data  Possible role for data reporting service to provide the data to lender in usable format
Lender responsibilities	Establish alternative data guidelines and SPCP (if applicable)  Train loan originators and partners  Provide information to clients during the process  Refer clients to housing counseling where applicable  Collect data and share lessons with clearinghouse or researchers  Possibly provide funding to counseling agencies		
Research or learning focus	Consumer understanding, control of data, and challenges that could derail success  Test basic assumptions on how well this works for the target market	Success in producing loans, especially for borrowers of color  Lender process and challenges  Early-term performance	Consumer acceptance or uptake  Lender process and challenges  Success in producing loans, especially for borrowers of color
Issues	Clients may be hard to source, long gestation, long engagement for lenders	Lender risk tolerance	Compliance around referrals, long gestation, lender risk tolerance
Funding needed	Developing housing counseling capacity  Costs of alternative data collection, validation, and reporting  Outcomes monitoring and research		

Note: SPCP = special purpose credit program.

A key for any pilot will be to automate the collection and use of alternative data, whether rent reporting or consumer-permissioned bank account data, and to do so in a way that protects consumers

and gives them confidence and visibility into the process. The pilot would need to identify providers who can play this role. Personal finance apps can help participants monitor and control their own financial information. Companies like FormFree or MoCaFi can help borrowers build an alternative data history. These companies, as well as rent reporting companies such as Esusu, could also work with mortgage-ready borrowers to establish a record of alternative payments in a form the lender can use. Additionally, some companies could guide borrowers through the process via a personal finance app (e.g., MoCaFi's Blueprint) and coordinate with housing counselors throughout the process. Across these strategies, housing counseling agencies can play a vital role in borrower readiness and agency.

Implementing one or more of these pilots would generate lessons that can help ensure more Black borrowers are safely and responsibly ushered into homeownership.

# Notes

- <sup>1</sup> “Home Ownership More Affordable Than Renting in Majority of US Housing Markets,” ATTOM Data Solutions, January 6, 2022, <https://www.attomdata.com/news/market-trends/home-sales-prices/attom-2022-rental-affordability-report>.
- <sup>2</sup> Laurie Goodman and Jun Zhu, “Fannie Mae’s Decision to Incorporate Rental Payments into the Mortgage Origination Process Will Expand Access to Homeownership over Time,” *Urban Wire* (blog), Urban Institute, August 12, 2021, <https://www.urban.org/urban-wire/fannie-maes-decision-incorporate-rental-payments-mortgage-origination-process-will-expand-access-homeownership-over-time>; and Laurie Goodman and Jun Zhu, “Rental Pay History Should Be Used to Assess the Creditworthiness of Mortgage Borrowers,” *Urban Wire* (blog), Urban Institute, April 17, 2018, <https://www.urban.org/urban-wire/rental-pay-history-should-be-used-assess-creditworthiness-mortgage-borrowers>.
- <sup>3</sup> By implication, this means that past mortgage payment history is also more predictive of loan performance than DTI and LTV ratios, as FICO scores are more predictive than DTI and LTV ratios.
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