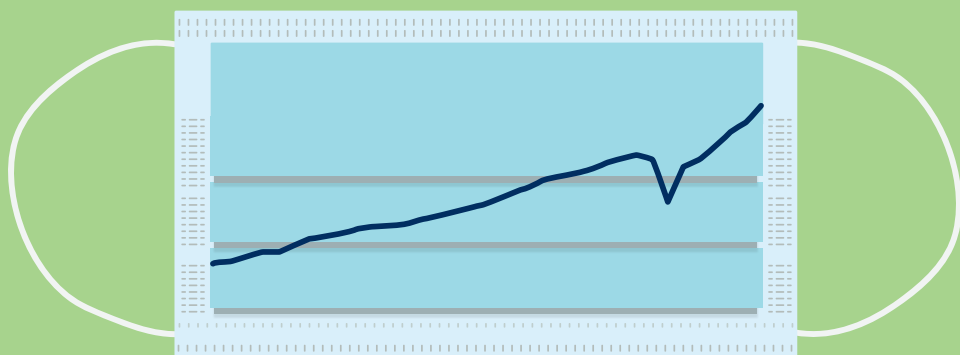


RECESSION REMEDIES

Lessons Learned from the
U.S. Economic Policy Response to
COVID-19



Edited by

**Wendy Edelberg, Louise Sheiner,
and David Wessel**

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Lessons Learned from Housing Policy during COVID-19

Many American renters and homeowners with mortgages experienced significant distress during the COVID-19 pandemic, and the government responded with a variety of policies. We describe and evaluate these policies in this chapter. In 2019, there were 123 million occupied housing units in the U.S., of which 44 million were rented and 79 million were owner-occupied. Roughly two-thirds of owner-occupied units had mortgages (Census Bureau 2019; see Table 5.1). Data from before the pandemic show that homeownership and renting households differ significantly: the median homeowner had higher annual income and substantially more wealth than the median renter, as Table 5.1 below shows. Households that spend more than 30 percent of their income on housing are considered housing cost burdened according to the Department of Housing and Urban Development’s definition. Nearly half of all renters were housing cost burdened compared to slightly more than 20 percent of homeowners.

During the pandemic, homeowners benefited from a run-up in house prices; renters did not. Declining interest rates allowed many homeowners to refinance their mortgages, thereby reducing their housing costs; renters did not have that option. Rents fell slightly below trend for a few months early in the pandemic and then accelerated. Renters were more likely than homeowners to work in industries most vulnerable to COVID-19: food and accommodation, construction, entertainment, retail, and other services.

This chapter is in two parts.¹ The first describes the circumstances of mortgage borrowers and the aid the government provided to them. The second does the same for renters.

When the pandemic struck in early 2020, homeowners had substantially more equity in their homes than they did at the start of the Great Recession, leaving them in better financial shape than they were then. Also, in contrast to

1. The authors are grateful to Mitchell Barnes, Eric Hardy, and Moriah Macklin for providing excellent research assistance. The authors thank Marcus Casey, William Fischer, Raven Molloy, Jenny Schuetz, participants in the October authors’ conference, and the editors of this volume for their insightful feedback. The views expressed in this chapter are those of the authors and do not reflect the views of The Federal Reserve Board or Urban Institute, its funders, or trustees.

TABLE 5.1

Comparison of Homeowners and Renters, 2019

	Owners	Renters
Percent in the five most vulnerable industries	30.3%	37.9%
Median income	\$81,000 overall; \$96,000 with a mortgage, \$58,100 without a mortgage	\$42,000
Median wealth	\$255,000	\$6,300
Total number	78,791,325	44,011,579
Percent cost-burdened	21%	46%
Percent severely cost-burdened	9%	24%

Source: Census Bureau 2019; Board of Governors of the Federal Reserve System 2019; authors' calculations.



Note: The five industries in which employment was most vulnerable to COVID-19 were food and accommodation, construction, entertainment, retail, and other services.



the Great Recession, homeowners benefitted from steadily rising house prices throughout the pandemic. As the mortgage borrowers' section of this chapter details, homeowners who lost income during the pandemic benefited from the substantial aid to households provided by the federal government through expanded unemployment insurance and Economic Impact Payments (EIPs) (see Chapters 2 and 3). On top of that, Congress in March 2020 declared that anyone with a federally-backed mortgage (nearly two thirds of all borrowers) who suffered financial hardship due to the pandemic could postpone mortgage payments for up to 12 months without penalty (forbearance); many servicers of mortgages not backed by the federal government voluntarily did the same. In addition, mortgage rates fell, in part because of actions by the Federal Reserve, allowing many homeowners to reduce their monthly payments by refinancing their loans. The authors find that Black and Hispanic borrowers were far less likely to refinance—even after controlling for such factors as credit scores, loan-to-value ratio, income at origination, loan amount, and the potential size of savings from refinancing. They also find that while minority and low-income borrowers were much more likely to miss payments relative to white and high-income borrowers, those who did miss payments were equally likely to take advantage of the forbearance offer. Overall, the authors conclude that pandemic-era forbearance worked well in reducing foreclosures and delinquencies, better than the mortgage modification programs of the Great Recession, both because there were fewer restrictions and because the economic environment was so different.

For renters, the story is more complicated. Federal, state, and local eviction moratoriums, while preventing dire outcomes during the pandemic, did not

relieve renters from paying past due rent. A federal \$46 billion Emergency Rental Assistance (ERA) program to help eligible households pay rent and utility bills came late in the pandemic, and the grants were slow to be distributed by state and local governments. The expansion of unemployment benefits and the EIPs, of course, helped renters who lost income during the pandemic. However, the percentage of renters who were at least one month behind on rent did rise and evictions did occur despite the substantial aid and the moratoriums. The authors conclude that the eviction moratoriums and ERA helped many who struggled to pay rent during the national health emergency. In addition, the policy response was sufficient for renters who were able to afford their rent before the pandemic and those who suffered temporary income losses during the pandemic. However, those policies did little to address the longstanding issue of lower-income families struggling to pay their rent, leaving many renters in precarious financial situations. The authors emphasize that the paucity of data about renters makes drawing firm conclusions about these pandemic-driven policies quite difficult.

Part I. Lessons Learned from Mortgage-Borrower Policies and Outcomes

Kristopher Gerardi, Lauren Lambie-Hanson, and Paul Willen

Introduction

The COVID-19 pandemic, which has proven to be the worst public health crisis in a century, has caused significant distress in the mortgage market. Widespread job loss in the early stages of the pandemic resulted in waves of missed mortgage payments. As Figure 5.1a shows, the share of loans past due approached levels last seen during the global financial crisis (GFC) and subsequent Great Recession more than a decade ago.

In this part of the chapter, we detail how the most important policy responses to the pandemic affected the mortgage market. In particular, we focus on the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020; the follow-on American Rescue Plan (ARP) Act of 2021, which extended many of the provisions in the CARES Act; and the Federal Reserve's large-scale asset purchase (LSAP) program that was announced in March 2020. Our analysis considers the overall effects and the distributional effects of these policies on U.S. homeowners. While there are numerous ways to study the data, we will focus primarily on documenting differences across racial and ethnic groups. This decision is motivated by the fact that the COVID-19 virus disproportionately affected minority communities both as a disease and as a disruptive economic force. During the pandemic Black and Hispanic individuals were at elevated risk of infection, hospitalization, and death.² Furthermore, minorities experienced significantly worse labor market outcomes during the pandemic. For example, the unemployment rate peaked in April 2020 at 16.7 percent for Black workers versus 14.1 percent for white workers; even more concerning, though, unemployment stayed elevated much longer for minority workers than for white workers as the economy healed.³ By September 2020 the white unemployment rate had fallen by more than half to 7.0 percent, whereas in March 2021, almost a year after the pandemic started, the Black unemployment rate was still close to 10 percent (Bureau of Labor Statistics [BLS] 2022). While most of our focus

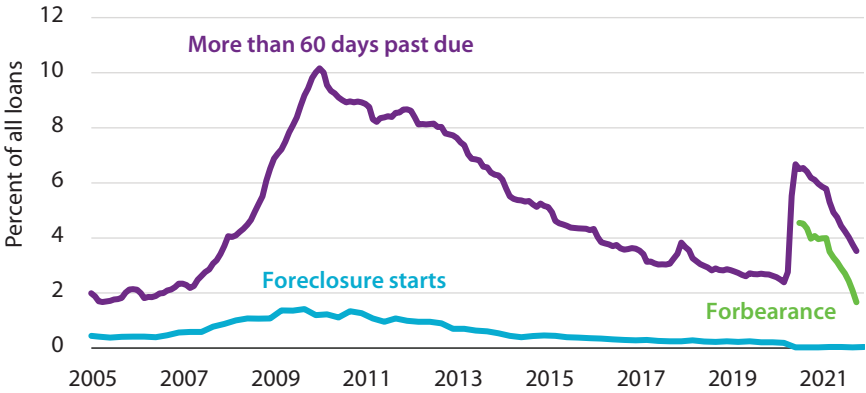
2. See Van Dorn, Cooney, and Sabin (2020) as well as Centers for Disease Control and Prevention (CDC) data on hospitalizations and death rates by race and ethnicity (CDC 2019).

3. For simplicity, we use “white” and “Hispanic” to refer to “non-Hispanic white” and “Hispanic white,” respectively.

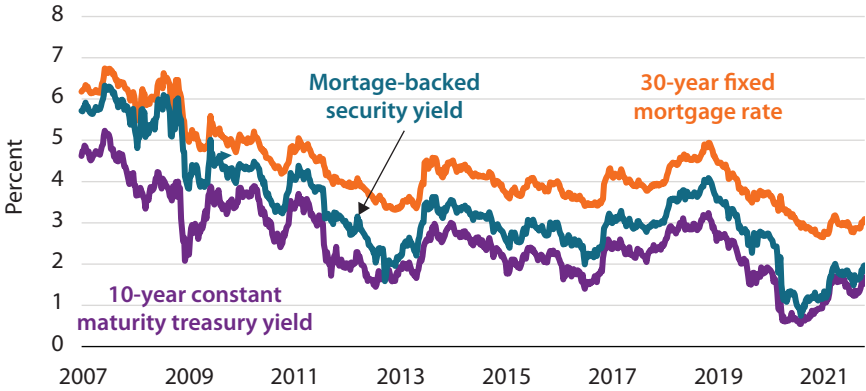
FIGURE 5.1

Mortgage Status and Interest Rates

A. Mortgage Nonpayment and Foreclosure, 2005–21



B. Interest Rates and Spreads, 2007–21



Source: Black Knight n.d.; Fuster et al. 2021; MBA n.d.a.

Note: *Panel A*: Forbearance shares include only loans 60+ days past due and in forbearance. More than 60 days past due includes all past-due loans, including loans in foreclosure. *Panel B*: FRM30 is the note rate on a 30-year fixed rate mortgage as measured by the Freddie Mac Primary Mortgage Market Survey. MBS Yield uses data from JPMorgan Markets to compute the yield on a security containing a 30-year FRM paying FRM30. 10-year CMT is the constant-maturity yield on a 10-year bond as reported in FRB H-15. For details, see Fuster et al. (2021).



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is on documenting racial disparities, we also look at differential policy effects across gender, household income levels, and county unemployment levels.

The CARES Act included a national forbearance mandate, a foreclosure moratorium, significantly expanded Unemployment Insurance (UI) benefits,

and Economic Impact Payments (EIPs) to most households. We argue that these policies were quite effective in alleviating financial distress at the outset of the pandemic and in preventing longer-run problems in mortgage and housing markets. Furthermore, we show that, although minority mortgage borrowers were much more likely to experience distress and miss mortgage payments; conditional on missing payments, forbearance uptake was similar across racial and ethnic lines.

The Federal Reserve's LSAP was focused on improving market functioning and lowering long-term interest rates. Mortgage-backed security (MBS) purchases were a significant component of the program, and Fuster et al. (2021) show that they indeed lowered mortgage rates and spurred a significant wave of refinancing. While borrowers who were enrolled in forbearance were unable to refinance, we show that a large fraction of borrowers who remained current on their loans during the height of the pandemic took advantage of the refinancing opportunity and significantly lowered their payments. Unlike the case of forbearance, however, there were large differences in refinancing behavior across racial and ethnic groups. We estimate that, through March 2021, only 10.6 percent of Black borrowers refinanced as compared with 15 percent of Hispanic borrowers, almost 19 percent of white borrowers, and 22 percent of Asian borrowers. After controlling for basic underwriting variables including credit score, loan-to-value ratio, income at origination, loan amount, as well as the potential amount of refinance savings, Black borrowers were 67 percent as likely as white borrowers to refinance.

An alternative way to measure inequality in refinances is to look at the payment savings. In Gerardi, Lambie-Hanson, and Willen (2021), we estimate that the typical refinance reduced the borrower's monthly payment by about \$280, leading to a payment reduction of \$5.3 billion per year for all households that refinanced in the first ten months of 2020. Of those savings, we estimate that only \$198 million, or 3.7 percent, went to Black households, who held 5.9 percent of mortgage debt in our sample. To put these numbers in perspective, Black households account for 13.3 percent of the population and 9.1 percent of all homeowners.

Finally, we conclude this section of the chapter with a discussion of some of the lessons that we believe policymakers should take away from the pandemic experience. We argue that forbearance was an especially effective policy in reducing borrower distress because of its timeliness, high accessibility, and incentive compatibility. However, we also acknowledge that the stars may have been all aligned as the state of the pre-pandemic housing and mortgage markets and the dynamic of the pandemic itself set up almost perfectly for forbearance to be an especially effective policy. Specifically, the rapid labor market recovery in the late spring and early summer of 2020 meant that most borrowers only needed a few months of assistance. In addition, the majority of outstanding mortgage debt (65-70 percent) was insured by the U.S. government going into the pandemic (Urban Institute 2021), including that debt held by the

most financially vulnerable segments of the market, and thus, most financially distressed borrowers had direct access to the CARES Act mandated forbearance policy. Finally, we note that the housing market was exceptionally healthy due to years of robust house price growth and low defaults and foreclosures, which meant that most borrowers exiting forbearance were not in danger of being evicted from their homes. Thus, while we argue that forbearance should remain an important tool in the policy kit going forward, it is unclear if it will be as effective in a future crisis.

Although forbearance was very effective in mitigating mortgage market distress, we argue that the Federal Reserve's LSAPs, implemented at the onset of the pandemic, had more modest effects. Although empirical evidence suggests that LSAPs lowered mortgage rates (Fuster et al. 2021) and spurred a refinancing boom in the spring and summer of 2020, most borrowers experiencing pandemic-related financial distress were likely unable to refinance. A first-order impediment was forbearance itself, as borrowers enrolled in a forbearance plan were required to exit the plan and make three consecutive mortgage payments in order to qualify to refinance. Combined with the high fees associated with refinancing, this meant that many borrowers facing financial distress and liquidity constraints related to the pandemic were unable to exploit rate declines to lower their debt burdens. This factor likely played a role in the large racial disparities in refinancing described above. We offer a few suggestions to ensure that the benefits of lower mortgage rates reach a broader set of borrowers in future downturns. These include the development and marketing of alternative mortgage products that automatically lower payments when rates decline as well as more widespread adoption of streamlined refinance programs that do not require employment or income verification.

Data

For much of the analysis in this chapter we track mortgage performance over time by borrower race and ethnicity by combining several sources of anonymized data. These sources are Black Knight McDash mortgage servicing data; Home Mortgage Disclosure Act (HMDA) data; and two credit bureau data sets from Equifax: one from Credit Risk Insight Servicing data linked to McDash data (known as CRISM) and the other from the Federal Reserve Bank of New York/Equifax Consumer Credit Panel.⁴ The McDash data provide information on loan performance, while the Equifax data allow us to observe other mortgages the borrowers have and to determine if any mortgages are in forbearance. The HMDA data enable us to identify the race, ethnicity, and gender of the borrower and to capture borrower income at the time of underwriting. We focus on 30-year, fixed-rate, first-lien loans originated during the

4. See Gerardi, Lambie-Hanson, and Willen (2021) for more information on the matching procedures and match rate.

2010 to 2019 period. Loans originated during that period made up about 75 percent of active accounts and 85 percent of active loan balances in 2019. We restrict our sample to mortgages secured by owner-occupied, single-family homes and condos. We further limit the sample to Federal Housing Administration (FHA) loans and conventional loans held by Fannie Mae or Freddie Mac (government-sponsored enterprises, or GSEs). Although we exclude portfolio and private-label securitized loans from our analysis, they make up less than 35 percent of loans active during the pandemic. As An et al. (2021) show, the forbearance rates of portfolio loans were similar to GSE loans, and the rates among private-label securitized loans were similar to FHA loans.

We supplement the matched data set with data from Optimal Blue (n.d.) to estimate the interest rate that borrowers in our sample would likely receive upon refinancing.⁵ To do this, we use the median interest rate locked each month by borrowers with similar credit scores and loan-to-value ratios, as captured in the Optimal Blue database.⁶ We use CoreLogic Solutions (n.d.) house price indices at the zip code, county, and state levels to analyze recent trends in home price appreciation for our mortgage sample and to calculate updated monthly loan-to-value ratios and home equity accumulation.⁷

Mortgage Market Policy Responses to the COVID-19 Pandemic

One important goal of policy during the pandemic was to alleviate household financial distress. A summary measure of the financial burden faced by a mortgage borrower is the debt service ratio (DSR)

$$DSR = \frac{m}{y}$$

where m and y are the mortgage payment and income, respectively. All else equal, an increase in the DSR makes a household worse off suggesting an increase can be a signal of distress. Borrower responses to a higher DSR can also have negative spillover effects, particularly when increases in DSRs are widespread across households. For example, borrowers can reduce spending on non-housing goods and services, reducing aggregate demand. Or they can

5. Optimal Blue (n.d.) data, as referenced throughout this chapter, is anonymized mortgage market/rates data that do not contain lender or customer identities or complete rate sheets.

6. We calculate the rate assuming the borrower pays zero points (and receives zero credits) from the lender at closing. We observe the borrower's credit score in month t in the CRISM data, and we estimate the loan-to-value ratio of their mortgage by dividing its unpaid principal balance by the estimated value of the home (Equifax n.d.).

7. We do this by adjusting the property value at origination by the growth in the CoreLogic zip code home price index. The CoreLogic county-level index is then used for loans located in zip codes for which CoreLogic does not provide an index, and the state-level index is used if neither zip code nor county data are available (CoreLogic Solutions n.d.).

default on their mortgages and weaken the financial system. Finally, borrowers can list their homes on the market and flood the market with unsold property.

Absent any policy intervention, the COVID-19 pandemic would have led to a massive fall in income and a consequent increase in the DSR. To reduce financial distress, policy makers took three actions early in the pandemic which affected the DSR. The first two, forbearance and asset purchases, lowered mortgage payments (m), the numerator, and the third, income support programs, raised income (y), the denominator.

We now discuss details of the three policy interventions.

Forbearance

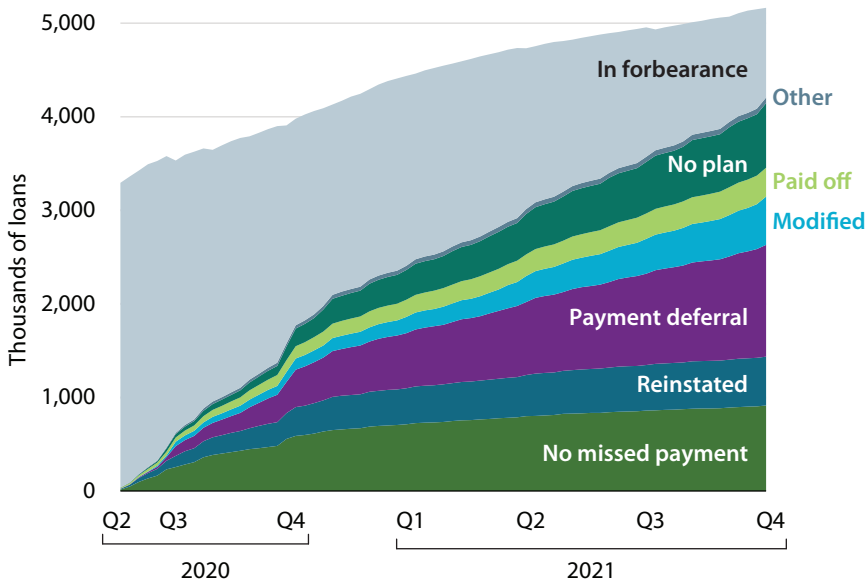
The CARES Act, passed into law on March 27, 2020, instructed lenders to allow borrowers to postpone payments for up to a year, later extended to 18 months, without incurring any penalty. Specifically, the CARES Act stipulated that any borrowers who had mortgages insured by the federal government could enroll in forbearance by simply attesting to financial hardship caused by COVID-19; households did not need to document this hardship.⁸ While the CARES Act forbearance mandate formally applied to only federally backed loans, which accounted for approximately 65–70 percent of the market at the time, servicers of portfolio and private-label securitized mortgages also routinely granted forbearance (An et al. 2021, Cherry et al. 2021).

Figure 5.2 shows the stock of loans in forbearance from the first quarter of 2020 through the third quarter of 2021. The gray area in the chart corresponds to loans that remain in forbearance, while the colored areas correspond to the stock of loans that exited forbearance in various ways. The stock of loans in forbearance peaked early in the pandemic, in the second quarter of 2020, and has been slowly declining since. The figure clearly shows that the flows into forbearance were heavily concentrated during the first few months of the pandemic. Over 80 percent of borrowers in our sample who missed mortgage payments in the first three months of the pandemic (April–June 2020) enrolled in forbearance, which suggests that the policy helped most borrowers who experienced financial distress due to the pandemic. Furthermore, previous research (Lambie-Hanson, Vickery, and Akana 2021) has shown that forbearance was concentrated among borrowers who were employed in hard-hit industries before the pandemic, such as leisure, hospitality, arts, and entertainment, as well as among households who had experienced a job disruption or income loss due to the pandemic. Interestingly, approximately one-third of borrowers who

8. Section 4022 of the CARES Act mandated that borrowers of federally backed mortgages could request forbearance for up to 12 months. It further states, “No fees, penalties, or additional interest will accrue on the loan beyond what is scheduled” (CARES Act sec. 4022 (b)(3)). In February 2021 the Biden administration extended the CARES Act forbearance mandate through June 2021.

FIGURE 5.2

Forbearance Outcomes by Exit Code



Source: MBA n.d.c.; authors’ calculations.

Note: “In forbearance” measures the stock of all loans in forbearance at a moment in time. All other data series are cumulative exits.

Note that the MBA cannot distinguish between new entrants and re-entrants to forbearance. Thus the same loan may appear twice in the sample. For example, most of the loans that exited with “No plan” most likely re-entered forbearance meaning that at the end of the sample, many loans appear in both “No plan” and “In forbearance.” The MBA also does not track loans after the end of forbearance so, for example, many of the “No missed payments” loans may have refinanced after exit but will not show up in the “Paid off” category. Size of surveyed universe varies but is typically around 38 million loans per week. A small number of borrowers exited using a repayment plan and those are included in the “Other” category. The first week of data is from May 31, 2020.



enrolled in forbearance during this period stayed current on their mortgage payments, which suggests that forbearance was also widely used by non-distressed borrowers as a form of insurance against employment uncertainty during the initial stages of the pandemic.⁹

The CARES Act further stipulated that forbearance resulting from the pandemic could not negatively affect a borrower’s credit score, which meant that lenders were not allowed to report borrowers in forbearance as being delinquent

9. The fraction of borrowers in forbearance but who were current on their mortgage payments quickly declined to trivial magnitudes in the second half of 2020.

on their payments. We show in section 3.3 that this stipulation largely prevented significant declines in the credit scores of borrowers who missed payments.

The CARES Act also included a moratorium on foreclosures. Initially, the moratorium only went through May 17, 2020, but it was extended twice and finally expired on July 31, 2021. For borrowers covered by the CARES Act forbearance provisions, the moratorium was largely irrelevant because forbearance prevents *any* action by the lender against a past due borrower. However, the moratorium did help borrowers who had payment problems that pre-dated the pandemic stay in their homes.

Asset Purchases

The first mortgage market policy response to COVID-19 came from the Federal Reserve. On March 3, 2020, the Federal Open Market Committee (FOMC) cut the Fed Funds target rate by 50 basis points. Less than two weeks later, on March 15, the FOMC cut the rate by an additional 100 basis points taking it essentially to zero. In addition, on the same date, the FOMC initiated large-scale purchases of both mortgage-backed securities (MBS) and Treasury securities. It initially committed to purchasing at least \$200 billion of MBS and \$500 billion of Treasury securities. Panel B of Figure 5.1 shows that following these activities, the 10-year, nominal Treasury rate fell below one percent for the first time on March 20 and MBS yields also fell to historically low levels.

Mortgage rates also fell but more slowly than Treasury rates or MBS yields. The Freddie Mac Primary Mortgage Market Survey (PMMS) 30-year fixed-rate mortgage rate fell at the beginning of March reaching a historic low of 3.29 percent (Freddie Mac n.d.). However, disruptions in the MBS market caused the PMMS rate to rise later in the month. Fed interventions in the MBS market meant that rates fell again in the beginning of April. However, as documented by Fuster et al. (2021), capacity constraints among originators meant that the spread between the primary market rates charged by originators and rates in the MBS market remained wide for an extended period, as illustrated in Panel B of Figure 5.1. Rates were historically low but most likely about 20 or 30 basis points higher than they would have been in the absence of binding capacity constraints in the mortgage origination industry, driven by a shortage of qualified workers and operational frictions such as how to complete appraisals and closings while maintaining social distancing.

Not surprisingly, historically low interest rates led to a wave of refinancing. In March 2020, the Mortgage Bankers Association (MBA) refinance index increased to its highest level in more than a decade and remained elevated throughout the entire year (MBA n.d.b.).

Income support

In addition to its direct effect on the mortgage market through forbearance, the CARES Act also indirectly affected the market through direct payments to households to make up for income lost due to the pandemic. From the standpoint of households, the main program was the expanded provision of UI. The key UI provisions of the CARES Act included expanded coverage to non-salaried workers who normally do not qualify for UI, and a supplemental payment of \$600 per week per household. Figure 5.3a shows that, starting in May 2020, expanded UI was enough to ensure that aggregate personal income remained at or above its pre-COVID trend for almost every month of the pandemic through February 2022. Additional income support programs, including the Paycheck Protection Program, meant that, in fact, personal income *exceeded* its pre-pandemic trend throughout most of that period. Figure 5.3b shows that, during the GFC and subsequent Great Recession, income support programs did not play a similar role. The 2008 stimulus program did lead to an increase in income in May and June of 2008, but government assistance from September of 2008 to March of 2009, the acute phase of the Great Recession, was minimal. Congress passed the American Recovery and Reinvestment Act of 2009, which expanded UI and provided other stimulus, but those measures did not compare to relief provided by the CARES Act and subsequent legislation. In the Great Recession, personal income never returned to its pre-crisis trend.

Outcomes

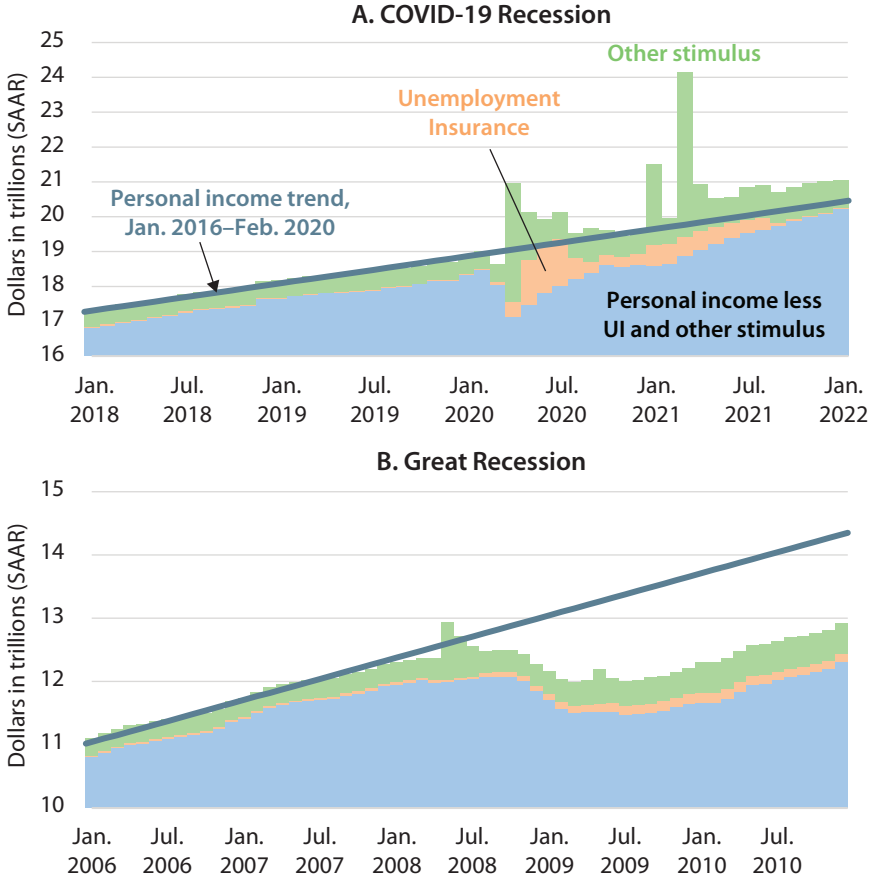
Policy was clearly successful at reducing household financial distress caused by income losses due to the pandemic. The orange line in Figure 5.4a shows the mortgage DSR, as defined by the Federal Reserve Board as the ratio of scheduled mortgage payments relative to personal disposable income from the National Income and Product Accounts.¹⁰ The figure shows that the DSR fell by about 55 basis points or roughly 13 percent over the four quarters from the first quarter of 2020 to the first quarter of 2021.

Why did the mortgage DSR fall during the crisis? In Figure 5.4a, we conduct a series of counterfactual experiments to illustrate how policy improved household budgets. Starting from the top, the area labeled “income loss” shows what would have happened without any direct assistance from the government. The DSR would have gone up by about 20 basis points and then drifted down as the economy recovered. Our next counterfactual isolates the effect of policy by asking what would have happened if income had remained at its pre-pandemic level and borrowers had benefited from the policy changes. The area labeled “forbearance” shows that forbearance would have lowered the DSR

10. For details see Federal Reserve Board (n.d.).

FIGURE 5.3

Personal Income after Great Recession and COVID-19 Recession



Source: BEA 2022.

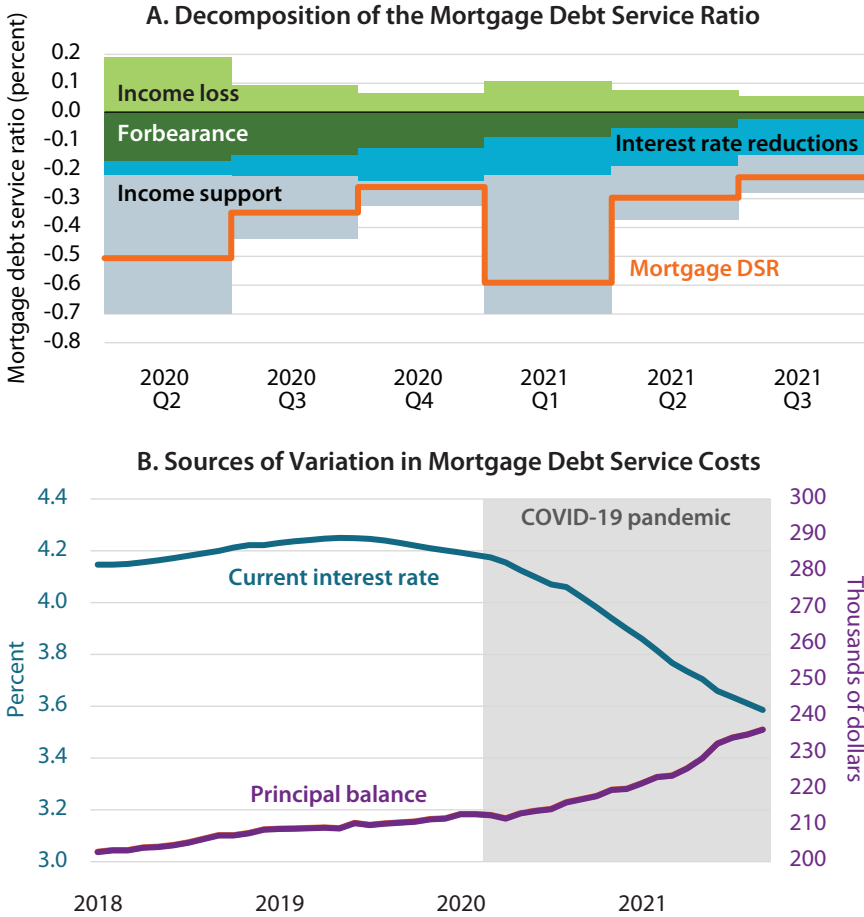
Note: Time trends are based on linear regressions of personal income, estimated over the period from January 2016 to February 2020, and the period January 2004 to December 2007, for the COVID-19 and Great Recession periods, respectively. SAAR is Seasonally Adjusted Annual Rate.



initially by about 20 basis points. Visually, Figure 5.4a shows that early in the pandemic, forbearance and income loss were roughly the same size which leads to a crucial point: forbearance alone was roughly able to offset the effects of the pandemic if we measure financial distress using the debt-service ratio. Our

FIGURE 5.4

Evolution of the Mortgage Debt Service Ratio during the Pandemic



Source: Federal Reserve Board n.d.; Black Knight n.d.; authors' calculations.

Note: In Panel A, the four shaded areas represent deviations from a linear pre-pandemic trend.



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next counterfactual is to add interest rate reductions while holding income constant. The area labeled “interest rate reductions” shows that they had a similar effect to forbearance in overall magnitude. However, the timing of the benefits of forbearance and interest rate reductions was quite different. The benefits

of forbearance were front loaded and played little role by the spring of 2021, whereas interest rate reductions had little effect initially but grew over time.

Our final counterfactual experiment consists of adding income support programs to interest rate reductions and forbearance, still holding income constant at pre-pandemic levels. The area labeled “income support programs” shows that income support programs had a bigger effect on the DSR than forbearance and interest rate cuts combined in all but one quarter of the pandemic.

Overall, Figure 5.4b illustrates that the multipronged assault of different parts of the CARES Act and monetary policy meant that, using the DSR as a measure, households were actually better off after the start of the pandemic than before. Either forbearance alone or income support programs alone would have been enough to blunt the effects of the job and income losses associated with the pandemic. Of course, it is important to stress that our analysis ignores any general equilibrium effects of the policies. For example, without forbearance, many households would have cut spending which would have, in equilibrium, affected the time path of household income.

It is perhaps somewhat surprising that the effects of the interest rate reductions were so small. The bottom panel of the figure shows that the average mortgage rate paid by borrowers did in fact fall significantly, dropping by 60 basis points or about 15 percent over the pandemic period. But, several factors meant that lower rates did not translate into correspondingly large reductions in monthly payments. The bottom panel shows that lower rates were offset by an acceleration in mortgage balance growth. In addition, some refinancers took advantage of exceptionally low rates on 15-year mortgages and, as a result, had higher payments despite paying less interest.

What Happened to Borrowers in Forbearance?

Forbearance is fundamentally different from interest rate reductions and income support. Interest rate reductions and UI do not need to be paid back; forbearance does. An important concern of policymakers was that, when forbearance ended, borrowers would have to quickly repay the arrears they had accumulated. The institutional evidence and the data suggest that this was not a major problem. On the institutional side, the main government lending programs did not demand immediate repayment of arrears but rather offered a waterfall of different options: First, lenders offered to convert arrears into a non-interest-bearing second lien due on termination of the loan. This payment deferral option meant that the borrower could resume making monthly payments *as if* they had not missed any payments, meaning a restoration of the pre-COVID-19 status quo, at least as far as cash flow was concerned. If the borrower had suffered a permanent reduction in income due to COVID-19, lenders could then offer a modification of the existing loan in addition to payment deferral.

The data show that, for the most part, the waterfall worked as intended. Figure 5.2 uses data from the MBA Weekly Forbearance Survey (MBA n.d.c.), to track the evolution of all loans that entered forbearance, including loans that exited and then reentered forbearance. According to Black Knight, about 8 million loans have been in forbearance since the start of the pandemic. MBA's survey gives insight into 5 million of these forbearance experiences. As of October 2021, about a million loans were still in forbearance. What happened to the rest? About 700,000 loans had no plan, meaning that forbearance expired without the borrower making contact with the servicer to explore options. Although we cannot be sure, we think most of those loans subsequently reentered forbearance because data from Black Knight show that, starting in the fall of 2020, most entries into forbearance were, in fact, reentries. Another large exit category, especially in 2020, was borrowers who requested forbearance but then never actually used it and exited with no missed payments. In addition, a significant number of borrowers had missed only a small number of payments and were reinstated after repaying those missed payments. But, overall, most exits involved either a payment deferral or a modification, or a combination of the two.

Forbearance and Credit Scores

The CARES Act of 2020 includes language that protects borrowers who choose to use forbearance from experiencing a negative impact on their credit scores. Specifically, the legislation says that, if a borrower is in forbearance, the lender must report the loan as current to the credit bureaus (CARES Act 2020, sec. 4021). This stipulation dramatically affected the credit scores of borrowers who missed mortgage payments during the pandemic.

In February 2010 about 90 percent of past-due borrowers of FHA and GSE loans had credit scores (from Vantage 3.0) below 622, whereas the 90th percentile for past-due borrowers in February 2021 was 788, a super-prime score. The majority of the latter borrowers began missing payments in April and May 2020 and used forbearance under the CARES Act, which enabled them to avoid the serious damage to their scores that would normally accompany missing months of mortgage payments.

This difference in the distribution of credit scores is also partly a product of stricter underwriting in the aftermath of the GFC. Specifically, the 90th percentile score among borrowers current or up to 30 days past due was 812 in February 2010, as compared to 824 in February 2021. It is also possible that because the pandemic caused a very large swath of borrowers to become unemployed, nonpayment in the pandemic was less concentrated among low-score borrowers than it was in the GFC. Even if not entirely driven by the role of forbearance in protecting distressed borrowers' credit scores, the fact that VantageScores of distressed mortgage borrowers were significantly higher at the end of the pandemic than they were in the last crisis has important implications.

It suggests that borrowers exiting forbearance should have more robust access to consumer credit markets and a greater ability to tap their housing wealth. In addition, borrowers who are not able to cure their distress and who are forced to sell will likely face an easier return to future home ownership compared with similarly distressed borrowers a decade ago.

Distributional Impacts of Mortgage Policies

We now turn to a discussion of the distributional effects of the policies. In particular, we focus on differences in outcomes by race and ethnicity as well as by household income, household composition, and the growth in county-level unemployment rates. For our analysis of race/ethnicity we use information from HMDA and construct indicators for Black, white, Asian, and Hispanic borrowers. For our income analysis we use HMDA income, which is reported by borrowers when they file their loan applications, along with Census data on metro area income. We then compute an indicator variable for whether a borrower meets the Department of Housing and Urban Development's definition of either low or moderate income.¹¹

Mortgage Nonpayment and Forbearance

Figure 5.5a displays monthly, unconditional nonpayment rates for federally insured mortgages from January 2019 through the end of our sample in October 2021, broken down by borrower race/ethnicity, whether household income falls in the low or moderate category, and the amount by which unemployment increased in the borrower's county early in the pandemic. We use a 60-plus days past due (DPD) definition of nonpayment (i.e., at least two missed payments), which is common in the mortgage default literature. The figures correspond to the stock of mortgage nonpayments (i.e., the share of active mortgages that are at least 60 DPD in each month).

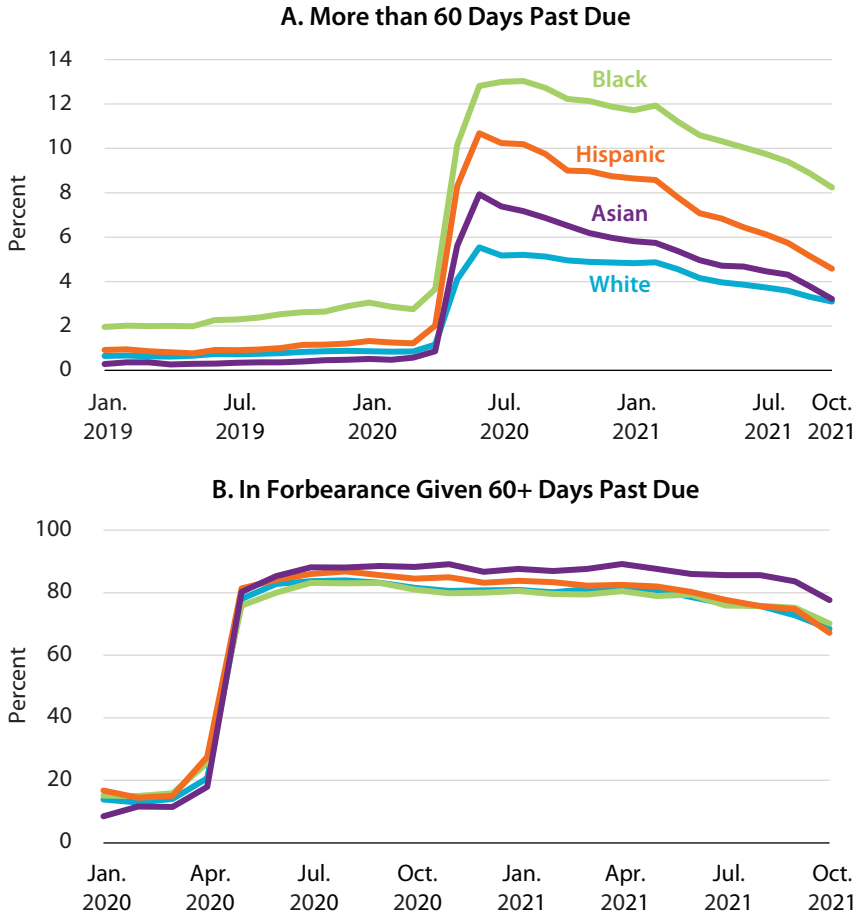
The differences across race/ethnicity in the pattern of nonpayment hazards is striking. Nonpayment rates spike for all borrowers beginning in May 2020 with the onset of the pandemic, but the increase is significantly larger for borrowers of color.¹² Black borrowers experienced the most distress; their nonpayment rates rose from around 3 percent just before the pandemic to 13 percent in mid-2020. Hispanic and Asian borrowers experienced a similarly sharp rise in nonpayments, from 1 percent to 11 percent and from 1 percent

11. HUD's definition of low income corresponds to household income being less than or equal to 50 percent of area median income, and its definition of moderate income corresponds to income that is greater than 50 percent but less than 80 percent of area median income.

12. The spike in 60 DPD in May 2020 corresponds to borrowers missing their first payment at the beginning of April and their second payment in May.

FIGURE 5.5

Households Past Due on Mortgage Payments and in Forbearance, by Race/Ethnicity



Source: Home Mortgage Disclosure Act (HMDA) data; Equifax Credit Risk Insight Servicing-McDash data; Federal Reserve Bank of New York/Equifax Consumer Credit Panel (CCP) data; authors' calculations.



to 8 percent, respectively. White borrowers experienced less distress; their nonpayment rates rose from 1 percent to 6 percent.

The time-series pattern of the stock of nonpayment rates in Figure 5.5a suggests that mortgage distress was concentrated almost entirely within a two- to three-month period at the very beginning of the pandemic. Indeed, new mortgage nonpayments for all borrowers spiked in May 2020, remained

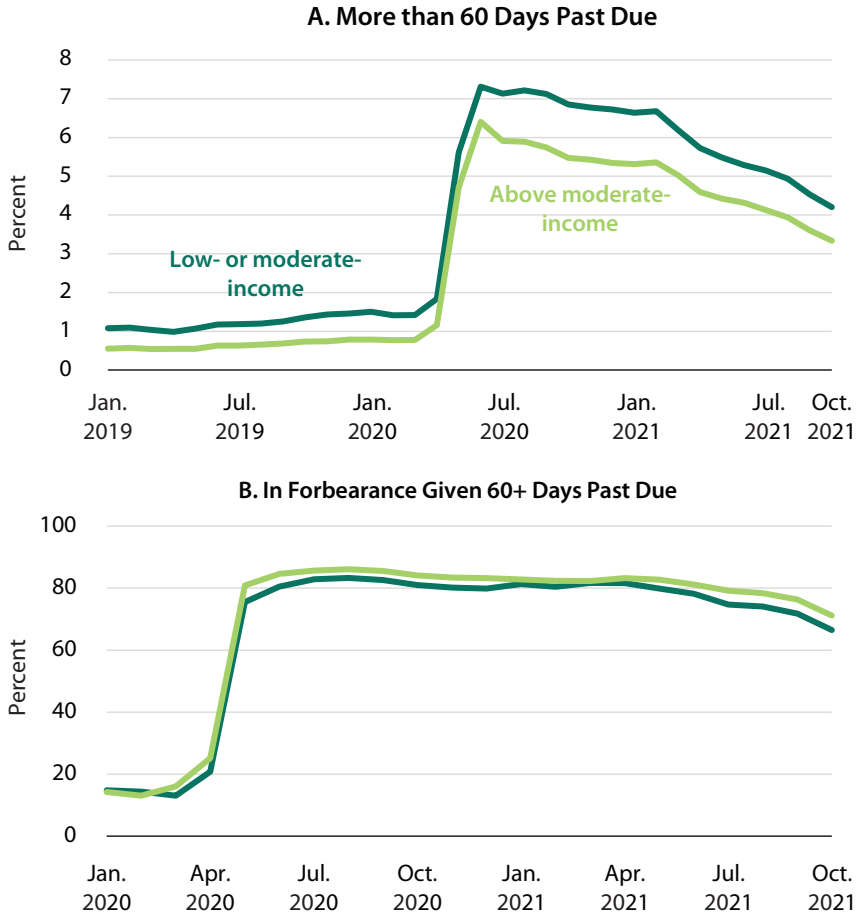
elevated in June, but then quickly declined in July. New nonpayments flattened afterward at levels that were slightly more elevated relative to their pre-pandemic levels. The fact that we see the stock of 60 DPDs stay extremely elevated through the end of the sample, despite the flows into nonpayment receding in the summer of 2020, suggests that many borrowers who experienced distress at the beginning of the pandemic were unable to quickly resolve their financial difficulties. We show below that most of those borrowers obtained relief with the CARES Act forbearance policy, and that many remained in forbearance through the end of our sample.

Figure 5.5a and Figure 5.6a clearly show that minority borrowers and lower-income borrowers experienced significantly higher levels of mortgage distress compared with white borrowers and higher-income borrowers, respectively, during the pandemic. This is not surprising, given the fact that job loss was significantly higher for minority households and that sectors characterized by lower-paying jobs like leisure and hospitality were affected more by the lockdown and social distancing measures implemented in response to the pandemic. Figure 5.7a shows that counties with top quartile increases in the unemployment rate between February and April 2020 experienced significantly higher nonpayment rates than counties in the bottom quartile over the same period, which is consistent with the idea that employment losses from the pandemic created a lot of financial distress for some mortgage holders—despite expanded unemployment insurance benefits. We now turn to an analysis of forbearance, the primary policy response to the distress in the market, to see if it had a differential impact across racial/ethnic lines or across borrowers with low versus high incomes.

Figures 5.5b, 5.6b, and 5.7b also plot forbearance rates by race/ethnicity, by income group, and by unemployment growth groups. Importantly, the figures show forbearance rates *conditional* on being behind on payments so that the large differences in nonpayment rates do not influence the forbearance differences. Conditional on being past due on payments, similarly high fractions of minority and white borrowers were enrolled in forbearance plans. For example, as of August 2020 84 percent of all white borrowers who were 30-plus DPD were enrolled in forbearance, compared with 88 percent of Asian borrowers, 83 percent of Black borrowers, and 87 percent of Hispanic borrowers. We also see similar forbearance enrollment rates across the income distribution: borrowers with low or moderate incomes were only slightly less likely to enroll in forbearance compared to higher-income borrowers. Finally, Figure 5.7b shows that conditional forbearance rates are nearly identical across counties with top quartile versus bottom quartile increases in unemployment rates. Thus, while minority and low-income borrowers were much more likely to miss payments during the pandemic relative to white and high-income borrowers, those who missed payments were approximately equally as likely to take advantage of payment relief offered through forbearance.

FIGURE 5.6

Households Past Due on Mortgage Payments and in Forbearance, by Income



Source: CFPB n.d.; Equifax n.d.; New York Federal Reserve Bank n.d.; authors' calculations.

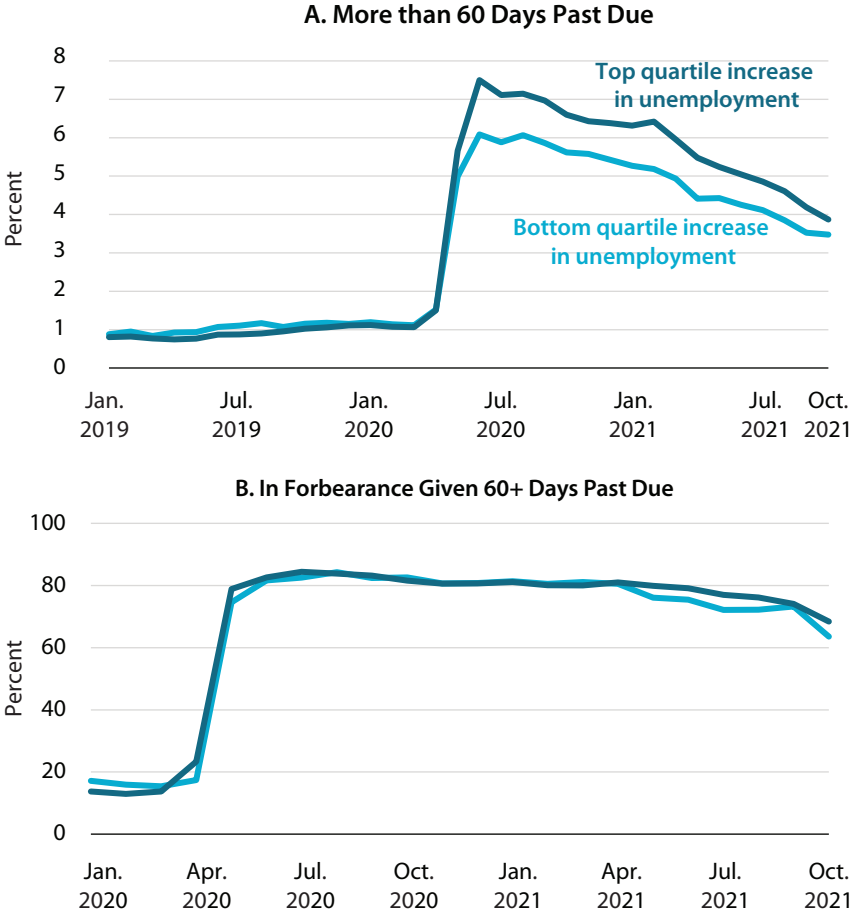
Note: Borrowers are classified as low- or moderate-income (LMI) if their real income at origination (measured in 2021 dollars) is less than 80 percent of the 2021 median family income in their metro area (or state, for borrowers outside metro areas).



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FIGURE 5.7

Households Past Due on Mortgage Payments and in Forbearance, by Unemployment



Source: CFPB n.d.; Equifax n.d.; New York Federal Reserve Bank n.d.; authors' calculations.

Note: Borrowers are classified as top-quartile if their county's unemployment rate increased by more than the 75th percentile of counties nationwide (10.6 percentage points) between February and April 2020. Bottom-quartile borrowers resided in counties with unemployment rates that increased by less than 4.9 percentage points during this period. Nonpayment indicators are derived using McDash data; forbearance is derived from Equifax data.



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Refinancing

Using pre-pandemic data, Gerardi, Willen, and Zhang (2020) showed that racial disparities in refinance behavior are significantly exacerbated during periods of low interest rates and high refinance volume. Since the pandemic was characterized by both historically low mortgage rates and significant refinance activity, we might expect to find similarly large disparities during this period.

Figure 5.8a shows the evolution of refinance propensities during the pandemic by plotting monthly, unconditional refinance rates for our different racial and ethnic groups. Refinance rates were similar across all groups in the first few months of 2020, before the onset of the pandemic. Beginning in March 2020, however, a significant gap between white or Asian borrowers and Black or Hispanic borrowers emerged. Asian borrowers had the highest refinance propensities during the pandemic, while Black borrowers were the least likely to refinance. Notably, the racial gaps in refinance activity persisted through the entire pandemic. Figure 5.8b displays refinance rates for loans taken out by single male borrowers, single female borrowers, and multiple borrowers. Figure 5.8c shows refinance propensities for low- and moderate-income borrowers and above moderate income borrowers. Finally, Figure 5.8d shows refinance hazards for loans originated in counties with top and bottom quartile increases in the unemployment rate during the pandemic.

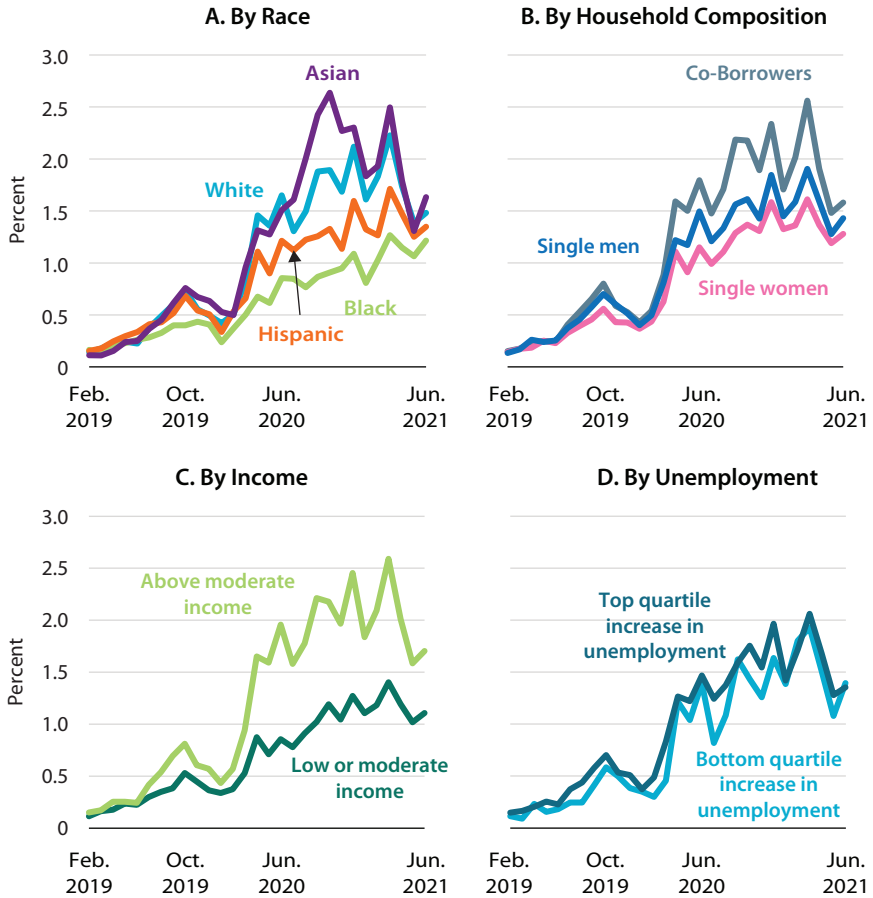
Refinance rates were significantly higher for loans with multiple borrowers during the pandemic period compared to loans with only a single borrower. Among single-borrowers, males were slightly more likely to refinance than females. While the difference in refinance rates between higher-income and low-to-moderate income borrowers was small in the pre-pandemic period, higher-income borrowers were approximately twice as likely to refinance during the pandemic. Agarwal et al. 2021 also find significantly lower refinancing activity among low-income borrowers. Differences in refinance propensities between loans in high-unemployment and low-unemployment growth counties were small.

While Figure 5.8 shows unconditional refinance rates, the size of the disparities is not materially affected if refinance rates are conditioned on observable borrower and loan characteristics like credit scores, whether the borrower has been current on mortgage payments, loan-to-value ratios, the incentive to refinance (how much the borrower's rate differs from what is available in the market), and geographic location.¹³ That is, the difference in refinance rates by group is not explained by differences in loan or borrower characteristics included in our data. An important factor that we cannot observe is how a

13. For more details about how controlling for observables impacts refinance disparities, see Gerardi, Lambie-Hanson, and Willen (2021). This is contrary to the findings of Gerardi, Willen, and Zhang (2020), who show that approximately 80 percent of the unconditional refinance gap between Black and white borrowers can be accounted for by differences in observable characteristics.

FIGURE 5.8

Share of Borrowers Who Refinanced Their Mortgage, February 2019–June 2021



Source: CFPB n.d.; Equifax n.d.; BLS 2022; authors' calculations.

Note: Panels A and B: Borrower race and ethnicity (Panel A) and borrower gender (Panel B) are captured in CFPB (n.d.). Panel C: Borrowers are classified as low- or moderate-income (LMI) if their real income at origination (measured in 2021 dollars) is less than the 2021 median family income in their metro area (or state, for borrowers outside metro areas). Panel D: Borrowers are classified as top-quartile if their county's unemployment rate increased by more than the 75th percentile of counties nationwide (10.6 percentage points) between February and April 2020. Bottom-quartile borrowers resided in counties with unemployment rates that increased by less than 4.9 percentage points during this period.



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borrower's income and employment status change over time. Black and Hispanic households lost their jobs at higher rates during the pandemic, which likely contributed to the disparities in their ability to refinance.

The racial disparities in refinance activity documented in Figure 5.8 are significant and lead to large differences in how the total benefits from the lower interest rate environment are shared. Those total gains are a function of the probability that a borrower refinances and how much borrowers who do refinance save. Gerardi, Lambie-Hanson, and Willen (2021) find that the mean monthly payment reductions for borrowers who refinanced were generally similar across groups. White borrowers generally had lower existing interest rates, which lowered their gain from refinancing, but they also had bigger mortgages, which worked in the opposite direction. Annualizing the savings and multiplying them by estimates of the number of mortgages held by each racial and ethnic group, we estimate that American homeowners who refinanced through October 2020 will save about \$5 billion a year until they refinance again or sell their homes. We estimate that Black homeowners account for only \$198 million, or 3.7 percent, of the savings despite holding roughly 5.9 percent of balances in our mortgage sample. In contrast, white borrowers account for approximately 71.1 percent of the savings (\$3.8 billion), which is a slightly larger percentage of their sample share (69 percent).

Lessons Learned

Mortgage borrowers, like all Americans, experienced significant turmoil during the COVID-19 pandemic. According to the MBA, in the second quarter of 2020, the percentage of mortgage borrowers who were past due peaked at 6.7 percent. That rate fell to 3.5 percent of mortgage borrowers in the fourth quarter of 2021, almost a 50 percent reduction in six quarters. To put that in perspective, after the GFC, the rate peaked at 10.2 percent in the first quarter of 2010 and took until the third quarter of 2014 for the past due rate to fall by 50 percent, roughly three times as long. What role did policy play in those outcomes? What went right and what went wrong? How important was it that the nature of the downturns was so different? Does success in this episode provide us with a road map or even useful insights for the future? Can we say that the policies targeting homeowners had been a success? We now review the three policy levers, forbearance, interest rate reductions and income support, in turn.

Forbearance was especially effective due to its timeliness and the ease with which borrowers were able to take advantage of it. Unlike the Home Affordable Modification Program (HAMP), the primary mortgage market policy enacted in the aftermath of the GFC, enrolling in forbearance required zero documentation on the part of borrowers and only minimal contact with mortgage servicers. Borrowers simply had to contact their servicer and attest to experiencing financial hardship due to the pandemic. Thus, whereas the

HAMP program took about a year to really get up and running at full capacity, forbearance was heavily utilized almost instantaneously.

Furthermore, forbearance, unlike modifications and principal reduction, is incentive compatible, meaning it is most attractive to those who really need it: financially distressed borrowers. The reason is that forbearance requires borrowers to pay back their missed payments and thus, does not significantly lower the net present value (NPV) of payment obligations. The emerging empirical evidence on forbearance usage suggests that it was, in fact, used by the borrowers who needed it the most, with little evidence that it was used strategically by non-distressed borrowers. Using a survey of over 1,000 homeowners, Lambie-Hanson, Vickery, and Akana (2021) find that borrowers who used forbearance overwhelmingly had personally suffered a job loss or income disruption during the pandemic. They also show that forbearance was concentrated among borrowers who were employed pre-pandemic in industries hard hit by COVID-19, including leisure, hospitality, arts, and entertainment. An additional piece of evidence that forbearance targeted borrowers in need is that as financial distress waned over the course of the pandemic, so did forbearance usage. Forbearance was used most intensively in the second quarter of 2020 when labor income losses were most significant.

Incentive compatibility meant that forbearance contrasts favorably with the concessionary loan modifications used to assist borrowers during the GFC. The most common loan modifications reduced interest rates, thereby significantly lowering the NPV of payment obligations, making them appealing to both distressed borrowers as well as non-distressed borrowers. Studies such as Mayer, Morrison, Piskorski, and Gupta (2014) have documented evidence that this moral hazard was a nontrivial issue for some of the modification programs rolled out in the aftermath of the GFC. To avoid modifying loans for borrowers not in need, lenders demanded extensive documentation of hardship and, even then, foreclosed on many borrowers even when it was more costly to foreclose than to modify.¹⁴ In addition, the complexity of dealing with these information problems meant that the flagship Federal Home Affordable Mortgage Program (HAMP) did not really start to make a difference until several years after policymakers identified a foreclosure problem in the United States. As our data shows, forbearance was helping borrowers at the beginning of April, days after Congress passed the CARES Act and before even expanded unemployment insurance which did not start to flow in earnest until May.

Supporting these distressed borrowers also had spillover effects on their communities. Normally, increases in area unemployment and corresponding negative income shocks would lead to more houses being put up for sale, which pushes down prices. But Anenberg and Scharlemann (2021) show that

14. See Adelino, Gerardi, and Willen (2013) for a discussion of why information asymmetries lead rational lenders to foreclose rather than modify loans even when the loss from foreclosure exceeds the reduced NPV from modification.

forbearance offset pandemic-related increases in unemployment, decreasing the number of new for-sale listings and propping up county-level home prices.

As a result, one might conclude that policymakers should have turned to forbearance in 2008 and should do so in any future economic downturn. However, there are three important points that should be considered before settling on such a conclusion. First, forbearance is not costless. Put simply, lenders are effectively extending interest free loans to borrowers which is costly even in a low interest rate environment.

Second, although the government insures investors against any missed payments of interest and principal on MBS, there is a lag between missed payments by borrowers and insurance payments by the government. Loan servicers are contractually obligated to cover this gap and can find themselves in a liquidity squeeze.¹⁵ Indeed, a sufficiently high rate of forbearance could bankrupt mortgage servicers.¹⁶ To address this risk, federal agencies changed their reimbursement policies in March and April of 2020. Fannie Mae lowered the number of months that servicers were responsible for covering missed payments from twelve to four. Ginnie Mae set up the Pass-Through Assistance Program (PTAP), an emergency credit facility that servicers could access to fund payments. In the end, lower-than-expected forbearance take-up and an increase in highly profitable refinance activity meant that servicers had ample liquidity throughout the pandemic. However, if a broad-based forbearance policy is considered in response to a future crisis, servicer liquidity risk could resurface as a first-order concern.

The third point to keep in mind before concluding that forbearance is a panacea is that there were features of the pandemic that likely made a policy of broad-based forbearance particularly advantageous. First, the extremely rapid jobs recovery in the late spring and summer of 2020 meant that many distressed borrowers who had lost their jobs only needed a few months of assistance. Most recessions, especially the Great Recession, are characterized by much longer labor market recoveries. Second, most mortgages were federally insured so risks to private investors were minimal. At the start of the pandemic, 62 percent of mortgages by value were held in Fannie Mae, Freddie Mac, or Ginnie Mae mortgage-backed securities, meaning that the U.S. Treasury effectively guaranteed repayment of principal and interest. By contrast, before the GFC, the comparable figure was 43 percent.

15. Before the pandemic period, Fannie Mae required servicers to forward principal and interest payments for 12 months for loans in forbearance, while Freddie Mac required 4 months of advances before reimbursement could occur. For Ginnie Mae loans, servicers were expected to forward mortgage-related payments for the entire life of the loan.

16. This was especially true for the non-bank mortgage companies (NBMC), which are primarily funded by short-term wholesale debt, exposing them to greater liquidity and running higher risk than banks. NBMCs accounted for the majority of loan originations (approximately 70 percent) in the pre-pandemic period.

Finally, perhaps the most important reason forbearance was so successful was the strong pre-pandemic housing market, and specifically the robust house price growth that most areas of the country experienced in the years before and, more importantly, during the pandemic. Among borrowers in our sample whose loans were still active in February 2020, the median house price appreciation in their area over the next year was 9.8 percent, and the average was 10.2 percent. And house price growth was widespread, as even the 10th percentile of the growth distribution in our sample experienced more than 5 percent appreciation during the pandemic. Strong house price growth before and during the pandemic translated into significant amounts of accumulated housing wealth for borrowers. We estimate that the median borrower in our sample had an equity position of more than 45 percent as of February 2021. More importantly, unlike during the GFC and Great Recession, negative equity was not an issue. Even borrowers at the fifth percentile of the equity distribution in our sample had accumulated significant wealth in their homes. This meant that most borrowers were not at risk of foreclosure when exiting forbearance, as they had the option to sell their properties if they were still unable to resume making mortgage payments. In contrast, during the GFC, negative equity was a huge problem, and temporary payment forgiveness was not as effective in preventing large numbers of defaults and foreclosures. As documented in Adelino, Gerardi, and Willen (2013), most loan modifications granted by servicers in the lead-up to the GFC mirrored forbearance in that they did not change any of the loan terms but simply involved the capitalization of arrears into the balance of the loan. Before the GFC, these modifications were often successful in giving borrowers time to cure their delinquencies, but in the aftermath of the GFC, non-concessionary modifications proved to be ineffective as household distress due to employment and income loss became more prevalent and persistent.

Despite these caveats, we believe that forbearance could be a useful tool in mitigating mortgage market distress in a future crisis. Many of the factors that made forbearance such an effective policy in the pandemic period are likely to be present in the next crisis. For example, the share of mortgages insured by the government has gone up since 2020, reaching 67 percent in the second quarter of 2021. The severe national house price decline that resulted in widespread negative equity was really a phenomenon unique to the GFC. In most post-war recessions house prices did not significantly decline at the national level, and thus, a future recession accompanied by deep, broad-based negative equity is unlikely.

Turning to the Federal Reserve's monetary policy and large-scale MBS purchases, the resulting reduction in mortgage rates and boom in refinances did serve to reduce household financial distress. However, as a method for offsetting the shock of the pandemic, its effectiveness was limited. Low mortgage rates were slow to diffuse through the economy, and intermediaries captured a significant portion of the benefits, at least initially (Fuster et al. 2021). Figure 5.4

shows that the benefits of lower rates went into effect gradually over six quarters. There are several reasons for this lag. The first reason, as discussed above, is that lenders have limited capacity for processing refinances, a problem aggravated by the pandemic. Lenders rationed by raising prices, as Figure 5.4b shows. Another is that refinances take 45 days or more even in normal times, and higher volumes, combined with pandemic-related constraints on production, stretched timelines out even more. Finally, another reason for the slow take-up of low rates is borrower inattention, as documented by Andersen et al. (2020).

As mentioned above, enrollment in a forbearance plan disqualified a borrower from refinancing into a new loan, and most lenders required a borrower who had exited forbearance to make three consecutive payments before approving a refinance. The refinancing process is also quite costly, with high fees and taxes, which limits take-up. In addition, as we showed in section 4, Black and Hispanic borrowers were significantly less likely to benefit from low interest rates.

There are a few possible ways to ensure that lower mortgage rates reach more borrowers and do so more quickly. One possibility is to increase the prevalence of streamlined refinance programs. Gerardi, Loewenstein, and Willen (2021) argued that a streamlined refinance program that did not require documentation of employment or income during the early stages of the pandemic would have provided necessary payment relief to many borrowers who had experienced financial hardship. Another possibility would be to expand the use of adjustable-rate mortgages or other types of mortgage products that automatically pass interest rate declines through to borrowers. Borrowers with adjustable-rate mortgages, more prevalent outside the United States, would have seen more-or-less immediate payment relief in April 2020 rather than having to initiate a costly and time-consuming refinance. One promising product in our view is the ratchet mortgage, which combines the benefits of both fixed-rate loans and adjustable-rate mortgages. The ratchet mortgage allows downward adjustments in the mortgage rate but does not allow increases. This type of product provides lower costs to borrowers over the life of the loan and eliminates the subsidization of those who refinance more frequently by those who refinance less frequently, in exchange for a potentially higher initial rate.

Finally, the income support programs during the pandemic clearly played a large role in alleviating financial distress, especially the expansion in the UI benefits program. As detailed in Chapter 2 of this volume, the UI expansion fully restored income for many unemployed individuals and in some cases more than restored it. Dettling and Lambie-Hanson (2021) construct a measure of income support (e.g., UI, stimulus checks, and Paycheck Protection Program loans) relative to pre-pandemic incomes in each state and county. They document significant variation in the extent to which these federal programs provided under the CARES Act replaced lost income, and that geographic areas with more generous income support experienced better mortgage outcomes. Controlling for unemployment, the share of mortgages

that are government-backed, COVID-19 cases, and social distancing policies, they find that a one-standard-deviation increase in the index of CARES Act income support generosity is associated with rates of mortgage nonpayment (delinquency and/or forbearance rates) that were about two percentage points lower, or roughly a 25 percent reduction.

While income support programs are broad based and can help to alleviate distress in both the rental and mortgage markets, they do have a few drawbacks. One issue is cost. They are much more expensive to taxpayers than forbearance or interest rate reductions. In addition, because income support is typically provided as a gift and not a loan, it suffers from moral hazard problems that are much more severe. A person who has lost his job may have less incentive to seek a new job if he is receiving generous unemployment benefits, which are never repaid. However, there is less incentive for a borrower to voluntarily skip mortgage payments through forbearance, since that debt must ultimately be repaid. As a result, it seems that few borrowers misrepresented themselves as negatively affected by COVID-19 in order to get forbearance; in contrast, fraud was a major concern for both the Paycheck Protection Program and expanded UI benefits programs. Finally, although income support programs provide help to households much faster than rate cuts, they are not as timely as forbearance. In some states (e.g., Florida) it took several weeks for UI benefits to reach newly unemployed individuals at the start of the pandemic.¹⁷

17. See Mazzei and Tavernise (2020) for a discussion of this issue.

Part II. Lessons Learned from Rental Policies and Outcomes

Laurie S. Goodman and Susan Wachter

Rent Burden and Related Federal Programs before the Pandemic

Before the pandemic, many households were rent burdened, meaning that they spent more than 30 percent of income on rent. For example, in 2019, 46.3 percent of all renters were rent burdened. Of those renters, approximately half spent over 50 percent of their income on rent (see Table 5.2). After rising almost 6 percentage points in the early 2000s, those shares have remained relatively steady over the past decade.

Low-income households were more likely to be rent burdened before the pandemic. At one end of the range, 81.9 percent of renters with household incomes of less than \$25,000 were housing cost burdened in 2019 (here referred to as rent burdened). At the other end, only 6.8 percent for those with incomes of \$75,000 and over were (Joint Center for Housing Studies 2021, figure 31).

A patchwork of federal programs offers rental assistance to an estimated 4.9 million households (Center on Budget and Policy Priorities 2022a).¹⁸ They include:

- public housing with over 3,000 housing authorities managing approximately 900,000 units;
- the Housing Choice Voucher Program (formerly Section 8 formerly Section 8 vouchers (which subsidizes private market rents for 2.3 million low-income households);
- the Department of Housing and Urban Development’s Section 8 Project-based rental assistance programs in which government authorities contract directly with private or nonprofit organizations to operate specific properties that provide affordable homes to low-income tenants and serve an estimated 1.2 million households;
- the Department of Housing and Urban Development’s Section 202 Housing for the Elderly and Section 811 Housing for People with Disabilities, which provides rental assistance and support services to 154,000 households; and,
- the U.S. Department of Agriculture’s rural rental assistance, which includes both Section 515 Rural Rental Housing and Section 514 Farm Labor Housing properties, which serve 269,000 households.

18. See Center on Budget and Policy Priorities (2022b) for detailed information on the data sources.

TABLE 5.2

Distribution of Cost Burdened Households

All	
Cost burdened	46.3 percent
Moderately cost burdened	22.4 percent
Severely cost burdened	23.9 percent
Cost Burdened, by Household Income	
Less than \$25,000	81.9 percent
\$25,000–49,999	57.8 percent
\$50,000–74,999	25.7 percent
\$75,000+	6.8 percent

Source: Joint Center for Housing Studies 2021.

Note: Cost burdened is defined as spending 30 percent or more of income on housing. Severely cost burdened is defined as spending 50 percent or more of income on housing.



However, many renters who qualify for federal rental assistance do not receive it because funding for federal rental assistance programs is insufficient to meet need. According to the Center on Budget and Policy Priorities (2022a, 2022b), 23.4 million low-income households were severely rent burdened; that is, they paid more than half their income for housing. However, just one in four households (4.9 million) received federal aid.

Renter Distress before and during the Pandemic

There are limited data on the prevalence of renter distress prior to the pandemic. We do not have a full time series of the number of renters who missed payments or were evicted from their homes per year. Our best data are from a single year: the 2017 American Housing Survey. That survey indicates that 6.8 percent of renters were unable to pay all or part of their rent in the three months before the survey date.

Survey Evidence on Renter Distress during the Pandemic

Measuring how much renter delinquency rose during the pandemic is difficult both because of the absence of a pre-pandemic baseline and because a different question was asked in the two pandemic-era surveys of renters: the Understanding America Survey (UAS)—conducted by the University of Southern California (USC Center for Economic and Social Research n.d.) from April

2020 to June 2021 and the Census Household Pulse Survey (HPS), which began in April 2020 and has continued since. The UAS asks whether households are behind on rent in the current month, and the HPS asks whether a respondent is fully caught up on rent (e.g., respondents saying they are behind on rent in September 2020 could have missed a payment six months earlier). These differences in the questions make detecting small increases in rental distress due to the pandemic difficult to measure. Moreover, it is unclear whether the HPS is representative given its experimental nature, mode of collection, and very low response rates.

With those significant caveats in mind, the HPS indicates that the share of renter households who reported being behind on their rent peaked at 21 percent in January 2021. From March 2021 through February 2022, the numbers fluctuated between 14 to 17 percent; the latest available number for the two weeks ending February 7, 2022, as the Omicron variant of COVID-19 was raging, is at the upper end of that range.¹⁹ Those numbers are higher than those in the UAS, which shows a peak of 14 percent in August 2020 and that as of June 30, 2021, 10 percent of respondents had missed the last month's rent or paid less than the full amount. It is not surprising that the UAS share is somewhat lower since a tenant could be behind on rent but still be able to make the more recent payment.²⁰

Given that an estimated 42 million households were renters making cash payments (as opposed to, say, paying for rent by providing services), an estimated 6.9 million households were behind on their rent in August 2021.²¹ Parrott and Zandi (2021) estimate that households behind on rent collectively owed about \$21 billion as of August 2021, with the average delinquent renter being just over two months behind and owing \$1,477 (\$1,129 in back rent, \$296 in utilities, and \$50 in late fees). That amount is approximately double the back rent owed before the pandemic.

The HPS data show that those behind on rent are disproportionately minorities, with 11.3 percent of white renters behind on rent in February 2022, 19.7 percent of Hispanic renters, and 27.9 percent of Black renters (Figure 5.9). Those behind are disproportionately lower income, with 22.3 percent of those earning

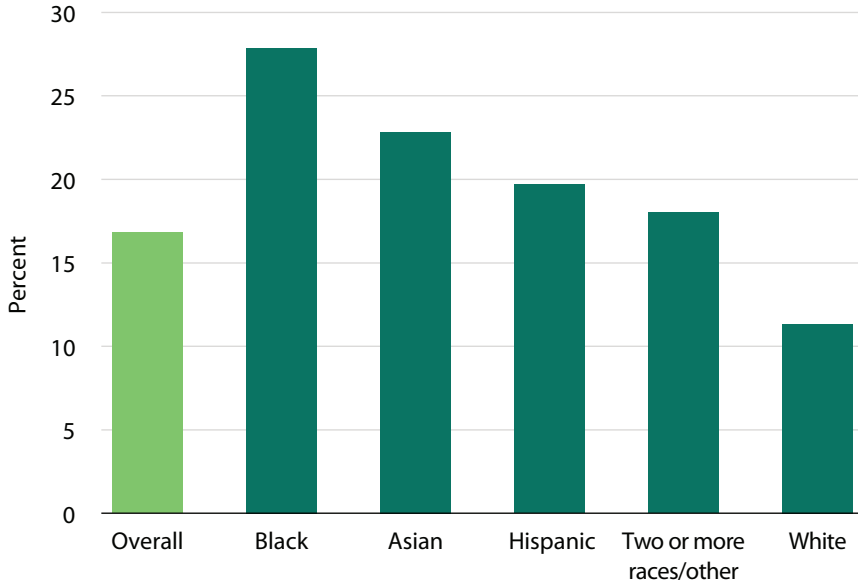
19. The 16.4 percent nonpayment were derived from renters who answered the question, "Are you caught up on rent?" The numerator was the number of renters behind on rent, and the denominator was the total number of renters who paid rent. Those who paid noncash rent (if, for example, the unit is owned by a friend or relative, the renter performs chores in exchange for rent) were excluded from both the numerator and denominator since these renters are neither current nor delinquent.

20. For more discussion, see Choi, Goodman, and Pang (2022).

21. The 2019 American Community Survey reports indicates there were 44 million renter households, of whom 42 million paid cash rent. In contrast, the HPS surveys individuals, not family units. The Census HPS for the weeks covering August 2021 (week 37, September 1 to September 13, 2021) indicates that just over 16 percent of renters were behind on their rent (U.S. Census Bureau 2021).

FIGURE 5.9

Share of Households Not Caught Up on Rent Payments in 2022, by Race/Ethnicity



Source: U.S. Census Bureau 2021; authors' calculations.

Note: This figure shows the results for responses collected between January 26th and February 7th, 2022. Results include estimates for renters who responded “No” to the following question: “Is this household currently caught up on rent payments?” All racial groups are non-Hispanic.

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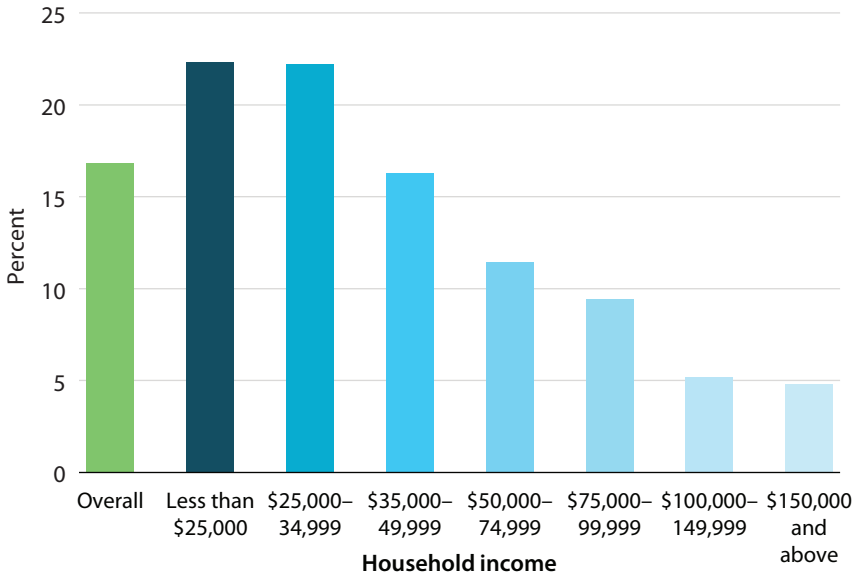
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less than \$25,000 behind on rent versus 11.1 percent earning \$50,000–\$75,000 and 5.1 percent of those earning \$100,000–\$150,000 (Figure 5.10). Renters with children under 18 are more apt to be behind on rent, 23.1 percent versus 12.9 percent for those without children.

We can compare the pandemic survey data to the 2017 American Housing Survey to get a sense of how much rental distress has increased during the pandemic. However, the differences in questions asked by the surveys suggest that comparing it to the HPS likely leads to too large of an increase, while comparing it to the UAS likely leads to too small of an increase. With that in mind, the comparison to the HPS shows that the rate of renter distress rose by 13.9 percentage points from 2017 to its peak in January 2021. By February 2022, the rate was 10 percentage points higher than 2017 levels. The comparison to the UAS shows a peak increase of 7.1 percentage points in August 2020 and a three-percentage-point increase in June 2021.

FIGURE 5.10

Share of Households Not Caught Up on Rent Payments in 2022, by Income



Source: U.S. Census Bureau 2021; authors' calculations.

Note: This figure shows the results for responses collected between January 26th and February 7th, 2022. Results include estimates for renters who responded “No” to the following question: “Is this household currently caught up on rent payments?”

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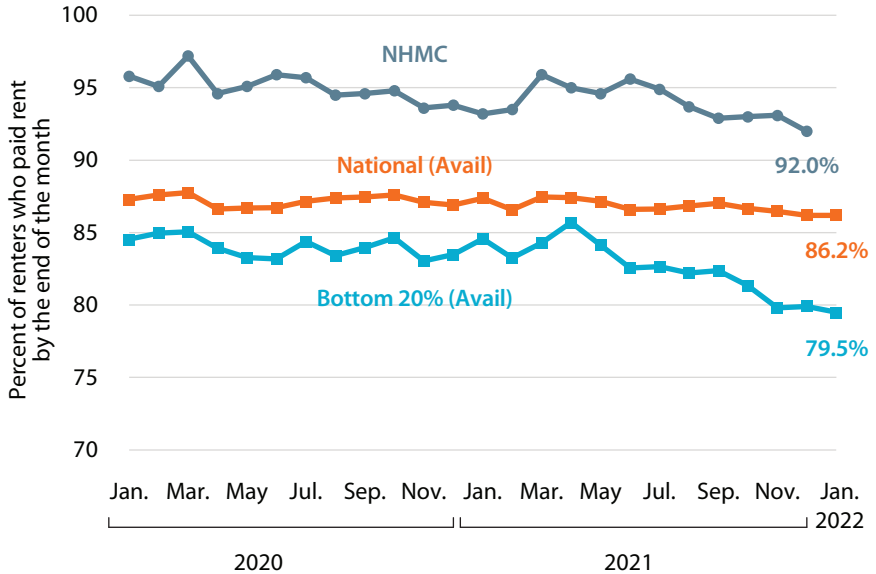
Administrative Data for Subsets of Renters

Two sources of administrative data allow us to look at pre-COVID versus post-COVID rent collections for subsets of the renter population. The first is from the National Multifamily Housing Council (NMHC), which predominantly reflects renters in buildings with 50 or more units. The second is from Avail, a vendor for mom-and-pop investors, who predominantly own single-family structures. Both datasets report the share of renter households who have paid for their rent by the last day of the month. The NMHC sample is skewed toward more affluent renters and newer, more upscale buildings. It is unclear if the Avail data are skewed by income.²²

22. The Avail data, developed in collaboration with the Urban Institute, include renters of single-family houses, who tend to be more affluent than renters in buildings with more units, but they also include renters of properties in buildings with two to four units, who have the lowest income of all structure types according to the 2018 American Community Survey.

FIGURE 5.11

Share of Renters Who Paid Rent by the End of the Month, January 2020–January 2022



Source: Avail 2022; National Multifamily Housing Council (NMHC) 2021.

Note: Rent payment data includes both full and partial payments. The share of those who made partial payments account for only 1 to 2 percent of those who made payments throughout the sample period. NMHC data collected ended December 31, 2021. Avail data has been updated through January 2022.



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Across both datasets, the share of renter households who missed a rental payment between the January 2020 and January 2022 increased by 1 to 3 percentage points (Figure 5.11). The Avail data suggest that the increase in the share was larger for lower-income households. Among those with the lowest 20 percent of rent costs, which likely reflects more lower-income households, the increase in the share missing their last rental payment was roughly 5 percentage points.

Of course, these findings about changes in renter distress during the pandemic measure changes for broad groups of renters. Rates of distress likely rose much more steeply among households who saw declines in income but did not receive substantial fiscal aid.

Policy Interventions

In this section, we focus on the three major economic policy responses enacted during the COVID-19 pandemic that benefited renters (for a discussion of housing as an automatic stabilizer, see Collinson, Ellen, and Keys 2021). We look at cash payments, including enhanced Unemployment Insurance (UI) and the three Economic Impact Payments (EIP); the eviction moratorium; and the Emergency Rental Assistance (ERA) program.

Cash Payments: Enhanced UI and EIPs

As discussed in Chapters 2 and 3 of this volume, Congress provided substantial income support to households during the pandemic. New provisions greatly expanded the scope of those eligible for UI, lengthened the period during which one could receive benefits, and provided extra weekly payments of \$600 a week and later \$300 a week. The additional payments substantially reduced the loss of income for many unemployed workers. Indeed, many earned more from UI than they had lost in wages, particularly low-wage workers since the extra benefit was a flat amount unrelated to previous earnings (Kovalsky and Sheiner 2020).

In the spring of 2020 most taxpayers received EIP checks that totaled \$3,400 for a family of four (\$1,200 per adult and \$500 per child).²³ Two additional rounds of relief—in January and March/April 2021—together provided \$2,000 per person or \$8,000 for a family of four. Thus, most families of four received a total of \$11,400 in EIPs between April 2020 and April 2021.

Administrative problems initially delayed UI benefits for many, and some of the unemployed could not easily navigate the intake process. However, it is likely that the EIPs were able to tide many renters over until unemployment benefits could be accessed. Nevertheless, the programs did leave some people behind: most of those who experienced a cut in hours or wages probably did not receive UI benefits. Moreover, undocumented workers or those not explicitly authorized to work in the U.S. do not qualify for unemployment benefits, and these workers were usually ineligible for EIPs.²⁴

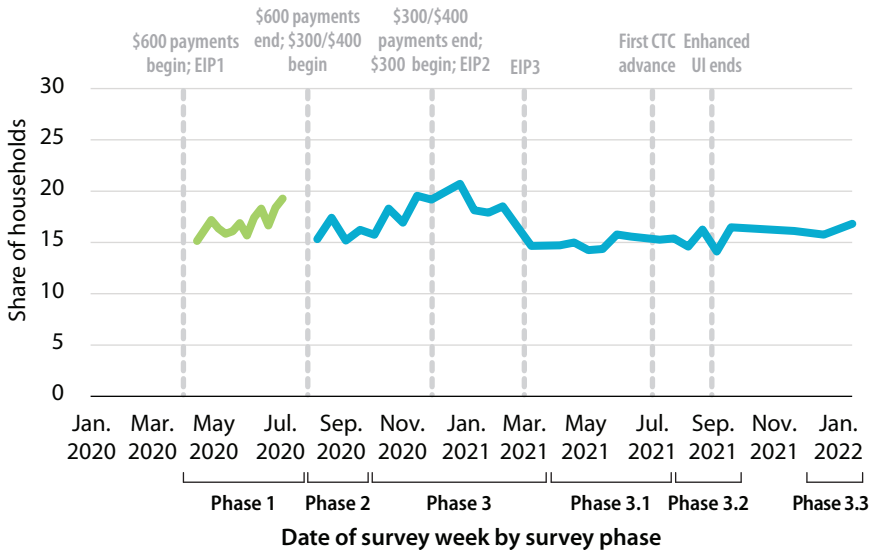
Despite these constraints, the cash benefits—enhanced UI and EIPs—substantially cushioned the impact of a loss of employment for renters (Figure 5.12). As a result, we see little evidence that the increase in renter distress was pronounced among those who lost their jobs during the pandemic. For example, there is no correlation between the timing patterns of the increase

23. See Chapter 3 in this volume for a description of the eligibility requirements for these payments.

24. Only people with valid Social Security numbers are eligible for stimulus payments. Undocumented workers and people who file taxes with an individual taxpayer identification number (ITIN) are not eligible. In the first two rounds of economic stimulus payments, if one adult in the family filed with an ITIN, the entire family was ineligible. In the third round, this “family penalty” was removed; adults with Social Security numbers in mixed immigration families are eligible for economic stimulus payments as are their dependents.

FIGURE 5.12

Share of Households Behind on Rent Payments, March 2020–February 2022



Source: Census Household Pulse Survey (HPS) n.d.; authors' calculations.



Note: The form of the question changed slightly over time. From August 2020 on, the HPS asked respondents if their households are currently caught up on rent payments. From April–July 2020, HPS asked respondents if they paid their rent the previous month. We examine the overall share of renter occupied households who report being behind on rent payment during the survey week. The green line includes households who reported “payment was deferred.” The most recent collection of HPS data spans January 26th to February 7th, 2022.



in unemployment and the increase in renter delinquency. The unemployment rate spiked from 3.5 percent in February 2020 to 14.8 percent in April 2020 and then declined to 11.1 percent in June 2020, 6.7 percent in December 2020, and 4.1 percent in November 2021. But the number of renters who could not pay their rent exhibited only a small variation in both the Avail and NHMC data (Figure 5.3). In addition, the share of renters owing back rent in the HPS data has varied from a low of 14 percent to a high of 20.7 percent and exhibited no correlation with unemployment rates. The lack of a relationship between unemployment and delinquencies suggests that the cash benefits prevented the newly unemployed from missing rent payments. Nonetheless, it is difficult to see a relationship between the pattern of weekly benefits to the unemployed and rental delinquencies, shown in Figure 5.12.

TABLE 5.3

Households Who Experienced Income Shock During COVID-19

Household Income	Households with at Least One Job Loss	Share of Households at Income Level with at Least One Job Loss
Below 30% of AMI	1,098,419	10.6%
30–50% of AMI	1,286,004	18.3%
50–80% of AMI	1,963,293	22.4%
80–100% of AMI	1,064,089	24.3%
100–150% of AMI	1,831,024	26.3%
150%+ of AMI	1,671,813	26.8%
Total	8,914,642	20.4%

Source: Strochak et al. 2020.



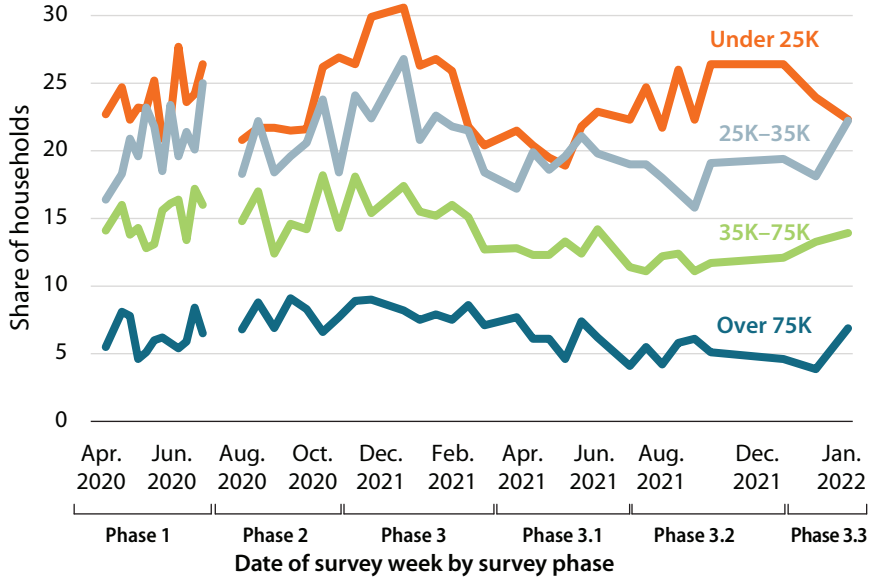
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Another piece of evidence that job loss did not drive renter distress is that increases in distress were highest among low-income renters, while job loss was more common for those with higher incomes. Using BLS data on the change in job loss from mid-February to mid-April 2020 by state and industry, Strochak et al. (2020) estimate that approximately 8.9 million renter households—20 percent of all renter households—lost a job over this period. Among these, only 11 percent of households with incomes below 30 percent of Area Median Income (AMI) had at least one job loss versus roughly 25 percent of renters with incomes between 80 and 150 percent of AMI (see Table 5.3 and Strochak et al. 2020). At the same time, the HPS data in Figure 5.13 show that lower-income renters were more apt to be behind on rent. For example, survey data from May 7 to May 12, 2020, show that 22.7 percent of renters with incomes under \$25,000 were behind on their rent versus 16 percent of renters with incomes \$35,000–\$75,000 and 8.1 percent of renters with incomes over \$75,000.

The evidence suggests that expanded UI benefits worked to alleviate renter distress among those who lost their jobs and therefore points to other factors behind the increase in renter distress besides the weakness in the labor market. One reason that the weakness in the labor market probably had muted effects is that before the pandemic, low-income renters were less likely to work for pay. Using the 2018 American Community Survey, Strochak et al. (2020) argue that only 43 percent of renters earning below 30 percent AMI worked in the previous year, compared to over 80 percent of renters earning over 80 percent of AMI. Relatedly, for those with very low incomes, the share of renters behind on their rent remained relatively elevated over the course of the pandemic even as the labor market improved. In contrast, the share among higher-income renters improved over time.

FIGURE 5.13

Share of Households Behind on Rent Payments, by Income Group



Source: U.S. Census Bureau 2021; authors' calculations.

Note: The form of the question changed slightly over time. From August 2020 on, HPS asked respondents if their households are currently caught up on rent payments. From April–July 2020, HPS asked respondents if they paid their rent the previous month. We examine the overall share of renter occupied households who report being behind on rent payment by income during the survey week. Households who did not report income are dropped from the sample. For the period April–June 2020, deferred is included in the current category. The most recent collection of HPS data spans January 26th to February 7th, 2022.



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Given this, and the fact that low-income renters were more likely to be rent burdened and behind on rent before the pandemic, it is reasonable to conclude the increase in renter distress was highest among groups struggling prior to the pandemic. Pinpointing the increased source of financial strain for those households is difficult. It is possible that those households were ineligible or could not access cash assistance to make up for a loss of income, a loss of financial assistance from friends and family, or increase in expenses. For example, it is possible that this group was more likely to lose hours at work and did not receive UI (although some were likely eligible).

Eviction Moratorium

The federal eviction moratorium boosted housing security for renters behind on their rent and unable to access sufficient fiscal support. The moratorium was put into place by the March 2020 CARES Act, providing a 120-day moratorium through July 24, 2020, for renters in Federal Housing Assistance programs or who lived in a property with a federally backed mortgage. This initial moratorium covered less than half of all renters. In addition, many state governments enacted eviction moratoriums during the pandemic that applied to all renters. In April 2020, for example, 15 states had paused eviction for all renters.²⁵ Many localities, some in states with no eviction moratorium, also imposed moratoriums covering all renters.

On September 4, 2020, the Centers for Disease Control and Prevention (CDC) established an eviction moratorium through December 31, 2020. This was extended several times and eventually expired on July 31, 2021 (although it was briefly renewed and again canceled).²⁶ Some state and local moratoriums remained in effect past that date; as of the end of February 2022, there were no statewide moratoriums and only California had some local moratoriums.²⁷ When the federal eviction moratorium expired, the HPS showed an increase in the number of tenants who expected to be evicted in the next two months, but this increase was limited, likely reflecting the fact that labor market conditions were greatly improved by summer 2021.

The federal eviction moratorium was not without conditions. To be eligible for it, the tenant had to fill out a declaration stating that (1) their income was less than \$99,000 (\$198,000 on a joint return) or they had received an EIP; (2) they had used “best efforts” to get all available government assistance for rent or housing; (3) they were unable to pay full rent or make a full housing payment because of lost income due to loss of hours or employment or because of out-of-pocket medical expenses; (4) they had made partial payments when possible;

25. These states were Connecticut, Delaware, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, New York, New Jersey, North Carolina, Pennsylvania, South Carolina, Texas, Virginia, and Washington.

26. When the CDC eviction moratorium expired on July 31, 2021, it could not be extended due to a judicial decision. President Biden put into place a revised moratorium, extending through October 3, 2021, covering COVID-19 “hot spots,” counties experiencing substantial or high levels of transmission. This covered an estimated 99.2 percent of rental households; the moratorium was rejected by the Supreme Court on August 26, 2021.

27. As of December 2021, New York, New Jersey, and New Mexico had statewide eviction moratoriums; Washington, D.C., Massachusetts, Minnesota, Nevada, and Oregon did not allow for eviction if the tenant had applied for Emergency Rental assistance; and California, Georgia, Massachusetts, New York, Oregon, Texas, and Washington had local moratoriums. As of the end of February 2022, no states have statewide eviction moratoriums; Washington, D.C., Massachusetts, Minnesota, New York, Nevada, and Oregon did not allow for eviction if the tenant had applied for ERA; and only California had local moratoriums (Mortgage Bankers Association n.d.).

and (5) they would likely be homeless, need to move into a homeless shelter, or share a new residence in close quarters with multiple people if evicted. Landlords were permitted to challenge the truthfulness of a tenant's declaration, were under no obligation to make tenants aware of the moratorium, and could legally evict a tenant under certain conditions.²⁸

An eviction moratorium imposes costs on landlords who have little recourse to collect overdue rent. The costs can be particularly difficult on mom-and-pop landlords with fewer financial resources. When tenants are not paying, small landlords tend to defer maintenance and may feel pressure to sell the properties.²⁹ In addition, it appears that landlords have tightened screening criteria for potential renters. For example, an Avail survey showed that more landlords are now looking at renters' eviction histories, particularly Black and Hispanic landlords (Choi and Goodman 2020).

There are no data to compare evictions filings nationwide in the recent period versus the pre-pandemic period, so it is difficult to pinpoint the effects of the moratorium on evictions nationally.³⁰ In jurisdictions for which the Eviction Lab collects data, the number of evictions was down substantially during the period the moratorium was in place between September 4, 2020, and July 31, 2021; the number of eviction filings was 47.2 percent of a typical year's level.³¹ However, there was a wide variation, from declines of 10.7 percent in Austin, Texas, to 91.4 percent in Las Vegas, Nevada (Rangel et al. 2021).

Not surprisingly, the two cities with the largest decline in evictions were those with their own eviction moratoriums. Many areas with local eviction moratoriums had fewer conditions under which a tenant could be evicted, and courts were often more stringent in their interpretation of nuisance violations. It is important to realize that these data cover evictions; landlords have other ways to induce tenants to leave, including not renewing leases and cash for keys agreements. It is not clear if these methods were used more during the period the eviction moratorium was in place.

28. These include engaging in criminal activity on the property; threatening the health or safety of other residents; damaging or posing an immediate and significant risk of damage to the property; violating applicable building codes, health ordinances, or other regulations related to health and safety; and violating any contractual obligation other than the timely payment of rent, late fees, penalties, or interest. The last can include nuisance violations such as noise and are highly judgmental.

29. Choi and Goodman (2020) discusses pressure to sell properties; Goodman, Choi, and Pang (2021) discusses deferring maintenance.

30. The 2017 American Housing Survey includes data on evictions and shows that 29 percent of delinquent renters or about 806,000 households had received an eviction notice in the last three months. However, we do not have comparable recent nationwide data.

31. These data are based on the Eviction Lab's Eviction Tracking System (Eviction Lab 2022). This series begins in March of 2020 and covers six states (Connecticut, Delaware, Indiana, Minnesota, Missouri, and New Mexico) as well as 31 municipalities.

These Eviction Lab results were corroborated by a more formal study by An, Gabriel, and Tzur-Han (2021). Using data from the 27 cities covered by the Eviction Lab with complete data, they take advantage of the fact that some states and municipalities imposed eviction moratoriums before the CDC moratorium on September 1, 2020, while others did not. They find that statewide eviction moratoriums reduced the number of evictions by just over 50 percent.

Reducing evictions has important benefits, particularly during a pandemic. Jowers et al. (2021) find that policies that limited evictions reduced COVID-19 infections by 3.8 percent and reduced deaths by 11 percent. Moreover, they estimate that had eviction moratoriums been more comprehensive, COVID-19 infections and deaths would have been significantly lower. Beyond the health benefits, evidence from An, Gabriel and Tzur-Han (2021) suggests that the eviction moratorium provided a valuable safety net to renters and was particularly valuable to those who were troubled before the pandemic. They find that in addition to reducing evictions, moratoriums also resulted in a redirection of scarce household resources to immediate consumption, notably food and grocery spending. This, in turn, reduced food insecurity, with larger effects evidenced among Black households. In addition, they find that the moratoriums reduced reliance on food banks, a finding corroborated with Google Search data. The eviction moratorium also reduced incidences of mental stress.

The moratorium also likely prevented homelessness and other negative outcomes. Collison et al. (2021), based on pre-pandemic data, report that eviction is preceded by markings of economic distress—falling earnings, unemployment, and unpaid bills. However, receiving an eviction order further reduces earnings, credit access, and durable goods consumption and directly increases housing instability, for example, through greater homeless shelter use and more interactions with homeless services. The effects are more pronounced for female and Black tenants.

While the eviction moratorium did put a substantial dent in the number of filings where these data can be tracked, and did contribute to renter well-being, an eviction moratorium alone is not a long-run solution. The tenant still owes the money and may not have the resources to pay. In most areas where the eviction moratorium has been lifted and data can be tracked, evictions are much lower than pre-pandemic, although they are higher than during the moratorium (Haas 2021). It is important to realize that the decline in evictions during the pandemic are not solely the result of the eviction moratorium. The decline may also reflect the impact of ERA, discussed in the next section, as well as greater access to legal aid and the impact of eviction diversion programs.

Emergency Rental Assistance

In March 2021 Congress authorized \$46.55 billion in ERA: \$25 billion in December 2020 (ERA1) and \$21.55 billion (ERA2). The ERA funds took the

form of grants to states, U.S. territories, local governments, and (in the case of the December ERA) Indian tribes or a Tribally Designated Housing Entity. Grantees set up their own procedures to assist households through existing or newly created rental assistance programs. The funds could cover utilities and rent up to 18 months, including up to three months of future rent.

To be eligible for ERA, all three of the following conditions had to be met. First, one or more individuals within the household qualified for unemployment benefits or experienced a reduction in household income, incurred significant costs, or experienced other financial hardship due directly or indirectly to the COVID-19 outbreak. Second, one or more individuals within the household demonstrated a risk of experiencing homelessness or housing instability. Third, the household's income was at or below 80 percent of area median income. The ERA program did not impose restrictions based on immigration status, although many state and local grantees did (U.S. Department of the Treasury 2021a).

Because ERA funds were not allocated until nine months into the crisis, no adequate rental assistance was available when the pandemic first struck. As a result, many people experienced problems like overcrowding and homelessness that may have increased their exposure to the virus and could have contributed to the higher age-adjusted rates of infection and death among people of color. Also, we know that many people dealing with income losses but managing to pay their rent had to make difficult financial choices that can have long-term negative consequences. We know that withholding rent is typically a last resort; before that happens, people pursue other strategies such as taking on credit card debt, borrowing from friends and families, drawing down savings, and cutting back on other expenses (Airgood-Obrycki 2022), many of which could have harmful effects at the time or in the future.

The ERA money was slow to be distributed. As of June 30, 2021, only \$3 billion or 14 percent of the original \$25 billion in ERA had been distributed to 633,000 households (U.S. Department of the Treasury 2021b). By the end of December 2021, \$16.4 billion of the \$25 billion in ERA1 and \$3.96 billion of the \$21.55 billion in ERA2 had been distributed; this constituted 66.4 percent of ERA1 funding and 44 percent of total funding. Approximately 3.8 million families have been aided by this assistance—3 million families from the ERA1 funds and 790,000 families from the ERA2 funds.³²

The above numbers make it clear that even as delayed as the ERA approval was, the rollout took a good deal longer. Most states and localities that received ERA funds from the Department of the Treasury needed to stand up new programs to house this program, and as a result, many of the programs took months to launch. The grantees needed to develop documentation, put into

32. Authors' calculations from the Treasury's monthly ERA data spreadsheet, containing data through December 2021 and released in February 2022 (U.S. Department of the Treasury 2021c).

place portals to accept applications (some grantees developed this in house, while others purchased and customized the software), and develop procedures to process applications.

Some of the programs initially required onerous documentation as there was some confusion among the grantees on how to interpret some of the early Treasury guidance. The May 7, 2021, Treasury FAQ clarified some of the guidance and strongly encouraged state and local grantees to avoid documentation requirements that were likely to be a barrier to participation for eligible households (U.S. Department of the Treasury 2021a). For example, a grantee could rely on an applicant's self-attestation of income in certain circumstances. ERA2 was intended to eliminate still more obstacles. For example, ERA1 permitted, but did not require, programs to help renters when landlords would not cooperate, and ERA2 required payments to renters when landlords would not cooperate.

Meanwhile, evidence of fraud has been minimal (Beam and Casey 2021). Nonetheless, even today there is a wide variation between these programs in terms of documentation requirements as well as in the amount disbursed. The National Low Income Housing Coalition tracks 512 Treasury ERA programs and reports that 62.3 percent of the programs now allow at least one form of self-attestation, with 51.4 percent of the programs allowing self-attestation for COVID-related hardship, 20.9 percent allowing self-attestation for income, 28.9 percent allowing self-attestation for nontraditional income, 17 percent allowing attestation for housing instability, and 11.9 percent allowing self-attestation for lease/proof of tenancy (National Low Income Housing Coalition 2022). The amount paid out from ERA programs ranges from a low in the single digits to a high of 100 percent.

Because, as discussed above, most of the renters who experienced job loss likely had income above 80 percent of AMI, the ERA was more targeted to renters in distress for reasons other than job loss, and these renters were more likely to have been in distress and rent burdened before the pandemic. In fact, actual distribution numbers indicate that these programs have benefited the lowest income renters. The quarterly data on the demographics of ERA recipients indicate that as of year-end 2021, for ERA1, 63.6 percent had incomes less than 30 AMI, 22.7 percent had incomes in the 30 < 50 AMI range, and 13.7 percent had incomes in the 50 < 80 AMI range (authors' calculations from U.S. Department of the Treasury 2021d).

Assessing the effectiveness of the ERA program is difficult given both the slow rollout and the uncertainty about how many renters are actually in arrears. For example, an October 2021 Congressional Research Service report notes that "because there is no definitive estimate of renters in arrears and the amounts they owe, it is unknown whether all renters who are behind will be able to receive assistance with available funding. Estimates of the need for rental assistance vary and may depend on the data source and methodology...Whether existing ERA funding will be sufficient to address outstanding arrearages and

avoid widespread housing disruption when eviction moratoriums end is yet to be seen (Driessen, Perl, and McCarty 2021, page 14).”

Note that the \$46.55 billion in Congressionally allocated ERA money is more than twice as much as Zandi and Parrott’s (2021) estimate of the full amount of back rent owed. And, of course, those owing back rents with income over 80 AMI are not eligible. However, the program does cover up to three months of future rents and allows money for administrative expenses, neither of which was accounted for in their estimate. As a result, it is difficult to tell if the money will be sufficient to cover the COVID-19 arrears.

Going Forward

We are concerned that we have not seen the worst of the stress in the housing market for rent-burdened households. Rents are rising quickly in some markets. CoreLogic data covering the single-family rental market show national annual rent increases on the order of 12 percent for properties turning over in December 2021, and the increases are even more rapid in certain markets, with Miami up 35.7 percent and Phoenix up 18.9 percent (CoreLogic 2022). Apartment List shows even higher increases for multifamily properties (Salviati et al. 2022). However, all renters have not yet experienced a double-digit increase because not all tenants have renewed their lease and because landlords tend to give lower increases to renewing tenants, preferring to spread larger increases over several years. Nationally, rents for all apartments, not just those turning over, increased 3.3 percent in 2021 according to the Consumer Price Index. Going forward, this is likely to accelerate.

To the extent that rent increases faster than wages, the ranks of rent-burdened households will rise, particularly among lower-income renters. Indeed, the COVID-19 pandemic has a long tail, and it may leave many renters in more dire circumstances than they were in before the pandemic, with no more fiscal relief in sight. Meanwhile, the housing landscape has changed. Even though the eviction moratorium has been lifted, landlords are now aware that renter protections that make eviction more difficult, including moratoriums, are possible. The Avail survey results discussed earlier show landlords are protecting themselves by doing more rigorous screening of incoming tenants, including looking at their eviction history or demanding higher credit scores. This more rigorous screening means that once a renter runs into difficulties, subsequent rentals may be even more difficult to obtain, suggesting that evicted tenants will have even less choice in their next rental.

Neither the eviction moratorium nor the ERA policy response is a long-term solution for the rental market. Eviction moratoriums prevented immediate harm, but owed rental payments continued to accrue. The ERA program was put into place to assist lower-income households, but its erratic rollout prevented timely or easy access to these funds. While these programs surely helped prevent homelessness during the pandemic, there is still uncertainty over the

extent to which they will prevent evictions in the aftermath of the pandemic. Moreover, house price rises increased at an unprecedented rate, which has contributed to an increased wealth differential between renters and owners (Acolin, Goodman, and Wachter 2019). Indeed, even as homeowners enjoy an increase in house prices, renters will likely face large rent increases and more difficulties in becoming homeowners going forward. The crisis should prompt much needed conversations on growing inequities between these two groups.

Lessons Learned

Although EIPs and enhanced unemployment benefits were largely sufficient to ensure that moderate and higher-income renters who lost their jobs did not fall behind on rent, lower-income renters did show signs of increased distress. Those renters were already rent burdened before the pandemic. It appears that the pandemic worsened what was already a precarious situation and cash assistance was not sufficient to keep them from falling behind on rent.

In addition, the eviction moratorium was necessary to contain the health crisis. It was valuable to many families, particularly those who were already strained coming into the pandemic and were adversely affected by the pandemic. However, the cost of this moratorium was largely borne by the landlords, which has negative consequences for tenants going forward. In particular, landlords are deferring maintenance on their properties, and many are tightening criteria for new tenants. ERA was valuable to low-income families who were strained coming into the pandemic; nonetheless, a quicker, more streamlined rollout would have been beneficial for tenants and would have reduced the cost of the eviction moratorium for landlords.

The COVID-19 experience offers several lessons for policymakers in future recessions:

- Generous income replacement may be sufficient if policymakers are concerned only with the incremental effect of the recession on those who were employed in the formal market before the recession.
- Given generous income replacement, an eviction moratorium and ERA largely benefit renters who come into the recession already housing insecure. Eviction moratoriums have negative externalities for landlords and are second best relative to ERA. However, in the middle of a health crisis, eviction moratoriums are necessary.
- Along with generous income replacement, a successful ERA program could keep renter delinquency rates from rising during recessions and in their aftermath. Such a program must be streamlined, with a simple application, minimal documentation, and clear eligibility rules, like the successful forbearance program for homeowners discussed in the section of this chapter on mortgage borrowers.

- This crisis highlighted the need for a more permanent rental assistance safety net. The reality is that only one out of every four families that qualifies for federal rental assistance receives it. This leaves many vulnerable to any small shock, and when a crisis strikes, it could increase overcrowding and homelessness. A more permanent rental assistance safety net that captures more of the population would mean that in the next crisis, policymakers would be able to focus on a smaller share of people who fall through the cracks.
- We must invest in better data on renters and rental market conditions, both delinquencies and evictions. As we have shown, the data underlying this chapter are far from robust, making it impossible to do a rigorous and conclusive analysis of the pandemic policy response. The lack of good pre-pandemic data is particularly problematic because so many renters were in a precarious position before 2020, making it hard to disentangle the effects of the pandemic from prior housing instability.

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The COVID-19 pandemic posed an extraordinary threat to lives and livelihoods. In the United States, the pandemic triggered a sharp downturn. Yet, the ensuing economic recovery was faster and stronger than nearly any forecaster anticipated due in part to the swift, aggressive, sustained, and creative response of U.S. fiscal and monetary policy. But when the next recession arrives, it most likely won't be triggered by a pandemic.

Recession Remedies examines and evaluates the breadth of the economic-policy response to COVID-19. Chapters address Unemployment Insurance, Economic Impact Payments, loans and grants to businesses, assistance to renters and mortgage holders, aid to state and local governments, policies that targeted children, Federal Reserve policy, and the use of non-traditional data to monitor the economy and guide policy. These chapters provide evidence and lessons to apply to the next recession.

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