FEDERAL RESERVE BANK PHILADELPHIA

# Household Rental Debt During COVID-19: UPDATE FOR 2021

DAVIN REED AND EILEEN DIVRINGI

March 2021



The views expressed in these papers are solely those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

# **1. Introduction**

The COVID-19 pandemic continues to affect labor market opportunities for millions of Americans, and even households who are working again may struggle to make up income lost while out of work or working fewer hours. Rental debt accrued during this period has been a particular concern for policymakers, as it could contribute to eviction, which poses direct health risks during a pandemic and has been shown to be associated with other negative outcomes (Desmond, 2012; Desmond and Bell, 2015; Desmond and Kimbro, 2015) and to cause health emergencies, financial distress, and employment and earnings losses (Collinson and Reed, 2018; Humphries et al., 2018). These labor market and eviction impacts have been shown to disproportionately affect lower-income households, women, and people of color, raising questions about whether and which kinds of policies can contribute to an equitable recovery.

This report provides an updated look at the current and future state of household rental debt during COVID-19. It builds on our October 2020 report (Reed and Divringi, 2020), which simulated income losses for renter households and estimated their resulting rental debt for different stimulus and unemployment insurance (UI) policy scenarios. We add to the October 2020 report in four key ways:

- We update employment changes through December 2020.
- We incorporate income lost from involuntary part-time employment.
- We forecast rental debt through September 2021.
- We incorporate the economic stimulus payments and enhanced UI benefits enacted in December 2020 and currently being proposed for March 2021.

Our results help policymakers better understand current and future levels of rental debt both overall and by household type, how effective different policies have been at reducing rental debt, and where gaps remain that might be filled by alternative policies such as local rental assistance. We have three main findings. First, there remains substantial rental debt even as the labor market has improved since April and May 2020. Of 33.5 million renter households with at least one worker in February 2020, 12 million (36 percent) have experienced some lost work (either not working at all or involuntarily working part time) between March 2020 and December 2020. We estimate that in March 2021, 1.8 million renter households (5.4 percent of all renter households and 15 percent of those experiencing some lost work) will owe \$11 billion in rent, which is around \$6,100 each.<sup>1</sup> These 1.8 million households contain 5 million individuals.<sup>2</sup>

Second, we show that policies enacted in December 2020 and those currently being proposed for March 2021 help reduce rental debt by a reasonable amount but that gaps will nevertheless remain. Gaps remain because in our model, and consistent with publicly available estimates, only about half of households receive UI of any kind.<sup>3</sup> And while 90 percent of households in our model receive stimulus payments, these appear to be insufficient to address all back rent accrued since March 2020. These results suggest that additional programs, such as local rental assistance programs that may be better targeted to households still in need, may be required to address the remaining gaps.

Last, as in our October 2020 report, we find greater shares of households of color and female-headed households have rental debt by March 2021 and September 2021. This is consistent with findings

This scenario incorporates all stimulus and UI policies enacted since March 2020: the Coronavirus Aid, Relief, and Economic Security (CARES) Act and Economic Impact Payments (EIP) policies enacted in March/April 2020, the one-month UI extension in August 2020, and the stimulus and UI policies enacted in December 2020 that extend until March 14, 2021. It also assumes that 90 percent of all households received stimulus payments and that nationally, around 50 percent of workers who have lost work since March 2020 received either state or enhanced UI benefits and 50 percent did not receive any UI.

We calculate state-specific UI recipiency rates from the Census Bureau's Household Pulse Survey, which yields a national rate of 50 percent. Although this rate suggests that a large share of unemployed workers have not received benefits, it is much higher than state recipiency rates before COVID-19 and is similar to the levels reached in the first few months of the Great Recession. An alternative approach calculates UI recipiency rates from continuing UI claims data and unemployment estimates, although this approach has its own drawbacks, such as the number of claims not necessarily corresponding to the number of unique individuals actually receiving benefits.

<sup>&</sup>lt;sup>3</sup> We showed in our October 2020 report that UI policies have been very protective for those households that receive them — as expected, given that UI enhancements replaced 100 percent of income for the typical worker.

from previous studies showing that COVID-19 has disproportionately affected these households, which primarily reflects their overrepresentation in occupations in which jobs and work hours were lost during the pandemic.<sup>4</sup> The findings suggest that beyond promoting a full recovery, alternative policies such as local rental assistance programs may be required to ensure an equitable recovery.

There are a couple of important caveats to our findings. First, as in our October 2020 report, we look specifically at rental debt accruing to households who have lost income because of unemployment or involuntary part-time employment since the COVID-19 pandemic began. This is a narrower question than how much rental debt exists from all other causes and that might have existed prior to COVID-19. The benefit of our approach is that it allows us to study the effectiveness of policies like stimulus payments and UI benefits, as well as where gaps remain.<sup>5</sup> Additionally, we assume that households remain in their original rental unit through September 2021, although some could adjust to income losses by moving to cheaper housing. However, one of the stated goals of housing policy during the COVID-19 pandemic has been to keep people in their homes.

# 2. Data, Simulation Methods, and Policy Scenarios

We provide a summary of our data and methods here. Additional details are available in Reed and Divringi (2020).

The main data inputs are a nationally representative sample of renters with individual characteristics, incomes, industries and occupations, and rents from IPUMS 2019; payroll employment changes by month, state, and industry from the Current Employment Statistics (CES); involuntary part-time employment changes by month and industry from the Current Population Survey (CPS); risk of job loss at the occupation level from Mongey et al. (2020); standard UI benefits replacement rates (for given income and quarters worked) from Ganong et al. (2020); UI recipiency rates at the state level calculated from the Census Pulse survey; and estimates of nonhousing costs and initial household savings, which we don't observe in the IPUMS data.

With these data inputs, we simulate individual job losses by month. In months, states, and industries where workers lose jobs, we assign workers in the highest-risk occupations job losses first.<sup>6</sup> We assign workers from full-time to involuntary part-time work in a similar way. Once lost work is simulated in this way, we ensure that the aggregate shares of all initially employed workers in each category (not working, involuntary part time, and full employment) in each month matches shares available from publicly available sources. Lost income can be partially replaced by standard UI, and the amount of income that can be replaced is calculated specifically for each worker based on their income, quarters worked, and their state's benefits formula.7 The share of workers who then actually receive UI is based on the state-specific recipiency rate, and the national average is around 50 percent.

We then recalculate each household's income in each month to account for income lost because of job loss or involuntary part-time work. In each month, we can compare this new income to the household's self-reported rent, other nonhousing costs, and an initial stock of savings. If income is less than rent and nonhousing costs, households can draw from savings to pay rent. If there are not enough savings, they begin to accrue rental debt and are counted as a household in debt. As the employment situation improves, individuals can regain work, which we assume pays their original income, and potentially move out of rental debt.

<sup>&</sup>lt;sup>4</sup> Lower-income, minority, and female workers are more likely to work in jobs requiring close physical proximity and in jobs that are not easily done from home, both of which have been most affected by social distancing requirements (Mongey et al. 2020).

<sup>&</sup>lt;sup>5</sup> For additional context, we find in a survey fielded in early January 2021 that 8 percent of all renter households were behind on rent, which is similar to the estimate for the subset of renter households who were working before COVID-19. Thus, rental debt is about as prevalent among nonworking households as it is for working households, although it is unclear the extent to which the former struggled with rental debt before COVID-19.

<sup>&</sup>lt;sup>6</sup> Higher-risk occupations are those that require work in close physical proximity to others and with low ability to work from home. Mongey et al. (2020) show that lower-income households are more likely to work in such occupations, and this helps us generate the now well-established pattern that lower-income households, households of color, and femaleheaded households have been more likely to lose jobs during the COVID-19 pandemic (Saenz and Sparks, 2020; Chetty et al., 2020).

<sup>&</sup>lt;sup>7</sup> The program and additional details are available in Ganong et al. (2020).

	Ever Lost Work	Never Lost Work	All
Renter Households	12,012,977	21,540,530	33,553,508
Median Annual Household Income Before Job Loss (\$)	46,000	50,000	49,500
Median Annual Head of House- hold Income Before Job Loss (\$)	28,000	38,000	34,000
Median Monthly Rent (\$)	1,025	1,073	1,055
Average Monthly Other Costs (\$)	1,901	1,567	1,687
Average Adults per Household	2	1.7	1.8
Average Children per Household	0.8	0.7	0.7

Notes: Sample is all renter households with at least one member working before March 2020. Other costs, adults per household, and children per household shown as averages instead of medians because there is less variation in these at the household level. The precision of these estimates should not be overinterpreted, and they are likely only accurate to one or two significant digits. Sources: IPUMS 2019, CES, and CPS.

To understand where policies have and have not been effective at addressing rental debt, we incorporate three different policy scenarios. In the April 2020 scenario, 90 percent of households receive an EIP based on the number of adults and children in the household (\$1,200 per adult and \$500 per child), which we add to their stock of savings in April 2020.8 Households receiving standard state UI receive an additional \$2,400 per month through July and an additional \$1,200 in August. In the December 2020 scenario, 90 percent of households receive an additional payment in January 2021 (\$600 per adult and child), and those receiving UI receive an additional \$1,200 per month in January and February and an additional \$600 in March 2021 (to reflect that the program expires March 14, 2021). Last, the March 2021 scenario reflects the most recent version of benefits currently proposed for March 2021: 90 percent of households receive stimulus payments of \$1,400 per adult and child in March 2021, and those receiving UI receive an additional \$600 in

March 2021 (half of the month) and an additional \$1,200 per month through August 2021. We recalculate household incomes in each month with these different policy scenarios in effect: just April 2020, April 2020 and December 2020, and all three.

## **3. Aggregate Results**

**Table 1** presents summary statistics of our national sample of renter households with at least one adult worker in February 2020.<sup>9</sup> Of these 33.5 million households, 12 million (36 percent) have at least one worker who lost work during the study period, either to no work or to involuntary part-time work. As in our initial report, we find that households who lost work have lower pre–job loss household incomes than households whose members remain employed throughout the study period, and this disparity is even greater when considering the individual incomes of the heads of households.

<sup>8</sup> The stimulus payments in all three scenarios are phased out as household income increases according to the specific formulas.

<sup>&</sup>lt;sup>9</sup> These summary statistics may differ slightly from Table 1 in our prior report as a result of updating the underlying data set to the 2019 ACS PUMS.

#### **FIGURE 1: NATIONAL DEBT OUTCOMES FOR DIFFERENT POLICY SCENARIOS**



Figure notes: Sample is all renter households with at least one member working before March 2020. Sources: IPUMS 2019, CES, and CPS.

**Figure 1** shows our four rental debt outcomes by month for the three policy scenarios.<sup>10</sup> Each panel summarizes a different debt outcome. Within each panel, each line represents that outcome for a specific policy scenario. For example, Figure 1, Panel A, shows the share of all 33.5 million renter households with any rental debt in each month, and each line represents a different policy scenario. Panel B shows total households with debt, Panel C shows millions of dollars of debt, and Panel D shows average debt per household in debt.

Figure 1 reveals a few things. First, there is substantial rental debt in most months, and the

patterns reflect the timing of employment losses and increased involuntary part-time work observed in aggregate data. Second, the additional aid included in the December 2020 relief legislation and the aid currently being proposed for March 2021 provide additional protections from rental debt. The March 2021 policies, in particular, are likely to help stabilize the share of rental debt households at near their March 2021 levels. However, at the same time, total and average debt will continue to increase as the households who do not receive UI benefits continue to accrue debt. Thus, these federal policies alone are unlikely to help everyone with debt, simply because not everyone receives these policies. This suggests an important role for local rental assistance or other

<sup>&</sup>lt;sup>10</sup> Here and throughout the report, Month 3 corresponds to March 2020 and Month 21 corresponds to September 2021.

# **TABLE 2: NATIONAL DEBT OUTCOMES FOR DIFFERENT POLICY SCENARIOS**

Month	Share of Renter Households in Debt	Total Renter Households in Debt	Millions of Dollars of Debt	Average Debt If Any
March 2021	5.4	1,812,708	10,974	6,054
April 2021	5.5	1,838,316	12,082	6,572
May 2021	5.5	1,858,262	13,224	7,117
June 2021	5.6	1,887,709	14,401	7,629
July 2021	5.7	1,906,820	15,608	8,185
Aug. 2021	5.8	1,929,504	16,844	8,730
Sept. 2021	5.9	1,963,859	18,138	9,236

#### March 2021 Policy Scenario

	De	cember 2020	Policy Scena	ario	April 2020 Policy Scenario					
Month	Share of Renter House- holds in Debt	Total Renter House- holds in Debt	Millions of Dollars of Debt	Average Debt If Any	Share of Renter House- holds in Debt	Total Renter House- holds in Debt	Millions of Dollars of Debt	Average Debt If Any		
March 2021	5.5	1,860,557	11,139	5,987	5.9	1,973,047	11,430	5,793		
April 2021	5.7	1,913,951	12,344	6,449	6.1	2,048,772	12,784	6,240		
May 2021	5.9	1,967,807	13,624	6,923	6.3	2,122,739	14,231	6,704		
June 2021	6	2,026,874	14,976	7,389	6.6	2,197,992	15,761	7,171		
July 2021	6.2	2,087,079	16,403	7,859	6.8	2,272,895	17,375	7,645		
Aug. 2021	6.4	2,146,227	17,898	8,339	7	2,346,129	19,073	8,129		
Sept. 2021	6.6	2,210,147	19,463	8,806	7.2	2,411,618	20,837	8,640		

Notes: Sample is all renter households with at least one member working before March 2020. The precision of these estimates should not be overinterpreted, and they are likely only accurate to one or two significant digits.

Sources: IPUMS 2019, CES, and CPS.

programs to fill the remaining gaps, a point we return to in the conclusion.

**Table 2** shows the values of the monthly debt
 outcomes depicted in Figure 1 for all three policy scenarios. As depicted in Figure 1, the share of households with rental debt in by March 2021 would be 5.4 percent if the currently proposed March 2021 policies are implemented, would be 5.5 percent with just the April 2020 and December policies (everything enacted thus far), and would have been 5.9 percent if only the April 2020 policies had been enacted. By September 2021, the share of households with rental debt in these scenarios would rise to 5.9 percent, 6.6 percent, and 7.2 percent, respectively, and the total numbers of households in debt would be 1.96 million, 2.2 million, and 2.4 million, respectively. Total rental debt ranges from \$11 to \$11.4 billion in March 2021 and increases to \$18 to \$21 billion by September 2021. In all three scenarios, the average rental debt per household is around \$9,000. We emphasize again that because of data limitations, our forecasts

assume that employment and part-time work remain at their December 2020 levels through September 2021. Nevertheless, comparing these three scenarios illustrates the continued importance of supplemental UI payments for keeping many households out of rental debt and simultaneously highlights the financial hardship experienced by the substantial fraction of households who have been unable to access these supports.

# **4. Results by Race and Ethnicity and Household Type**

As in our original report, we break out differences in rental debt outcomes by race and ethnicity and by household type. Research continues to document the disproportionate negative labor market impacts of COVID-19 for workers of color and parents, particularly mothers. As the economic recovery has slowed in recent months, these racial and gender employment disparities are likely to persist, with implications for disadvantaged



#### **FIGURE 2: DEBT OUTCOMES BY RACE AND ETHNICITY**



Figure notes: Sample is all renter households with at least one member working before March 2020. Race/ethnicity categories are exclusive, such that Hispanic households may be of any race and all other racial groups refer to non-Hispanic households. Debt outcomes are calculated using the state-specific recipiency rates estimated from the Census Bureau's Household Pulse Survey, which yields a national average of 50 percent.

Sources: IPUMS 2019, CES, and CPS.

households' continued accumulation of rental debt and risk of eviction.

### a. Results by Race and Ethnicity

**Figure 2** shows patterns of rental debt outcome by month for the March 2021 scenario — which includes the original CARES Act supports, the relief package passed in December 2020, and the proposed provisions of the March 2021 stimulus — broken out by the race and ethnicity of the householder. Panel A shows that Hispanic and Latino households continue to be the most likely to experience any debt (7.8 percent have rental debt by March 2021), followed by Black households (5.8 percent) and other non-White and non-Hispanic households (5.6 percent). White and Asian households remain less likely to accrue rental debt, at 4.4 percent and 4.1 percent, respectively. **Table 3** provides these and other rental debt estimates for households by race and ethnicity for March 2021 and September 2021, along with prepandemic summary statistics for households who subsequently lost work.

#### TABLE 3: SUMMARY STATISTICS AND DECEMBER DEBT OUTCOMES BY RACE AND ETHNICITY

		Panel A: Summary Statistics for Households Who Ever Lost Work						
	Renter House- holds	Renter House- holds Who Ever Lost Work	Median Annual House- hold Income Before Job Loss	Median Annual Head of House- hold Income Before Job Loss	Median Monthly Rent	Average Monthly Other Costs	Average Adults per House- hold	Average Children per House- hold
Asian	1,970,587	567,160	54,300	30,000	1,320	2,132	2.5	0.7
Black	6,415,119	2,352,719	39,000	25,800	974	1,823	1.9	0.9
Hispanic	7,085,797	3,014,359	45,000	25,000	1,125	2,295	2.3	1.1
Other non-Hispanic and non-White	1,124,397	402,884	45,000	26,600	1,040	1,905	2	0.8
White	16,950,967	5,675,855	50,000	30,000	980	1,701	1.9	0.6

#### Panel B: Rental Debt Outcomes in March 2021 Policy Scenario

	By March 2021				By September 2021			
	Share of Renter House- holds in Debt	Total Renter House- holds in Debt	Millions of Dollars of Debt	Average Debt If Any	Share of Renter House- holds in Debt	Total Renter House- holds in Debt	Millions of Dollars of Debt	Average Debt If Any
Asian	4.1	80,755	582	7,207	4.5	89,503	937	10,466
Black	5.8	368,836	1,828	4,955	6.0	387,684	2,925	7,545
Hispanic	7.8	556,014	3,593	6,461	8.5	600,649	5,873	9,777
Other non-Hispanic and non-White	5.6	62,773	381	6,063	5.9	65,932	624	9,472
White	4.4	744,331	4,592	6,169	4.8	820,092	7,779	9,486

Notes: Sample is all renter households with at least one member working before March 2020. Debt outcomes are calculated using the state-specific recipiency rates estimated from the Census Bureau's Household Pulse Survey, which yields a national average of 50 percent. The precision of these estimates should not be overinterpreted, and they are likely only accurate to one or two significant digits.

Sources: IPUMS 2019, CES, and CPS.

#### **FIGURE 3: DEBT OUTCOMES BY HOUSEHOLD TYPE**



Figure notes: Sample is all renter households with at least one member working before March 2020. Nonfamily households include households living alone. Other households are households that could not be assigned a household type in the IPUMS data. Debt outcomes are calculated using the state-specific recipiency rates estimated from the Census Bureau's Household Pulse Survey, which yields a national average of 50 percent.

Sources: IPUMS 2019, CES, and CPS.

#### b. Results by Household Type

**Figure 3** shows monthly rental debt outcomes for the March 2021 policy scenario broken out by household type. Patterns again reflect the disparities identified in our original analysis: Families with children, particularly single parents, continue to be disproportionately likely to accrue rental debt. By March 2021, the share of households with rental debt resulting from the pandemic is projected to be highest among single female-headed family households (7.2 percent) and single male-headed family households (6.3 percent). **Table 4** provides additional rental debt estimates for March 2021 and September 2021, as well as pre-pandemic summary statistics by household type. It reveals that prior to job loss, female-headed households (both family and nonfamily) had significantly lower incomes than other household types, suggesting they may have had less of a buffer against economic shocks.<sup>11</sup>

<sup>&</sup>quot;Other" households have characteristics similar to family households. Although a household type is not assigned for these households, they may consist of unrelated adults and/or children who are not related to the individuals designated as the householder (although they may be related to another adult in the household).

#### **TABLE 4: SUMMARY STATISTICS AND DECEMBER DEBT OUTCOMES BY HOUSEHOLD TYPE**

		Panel A: Summary Statistics for Households Who Ever Lost Work							
	Renter House- holds	Renter House- holds Who Ever Lost Work	Median Annual Household Income Before Job Loss	Median Annual Head Of Household Income Before Job Loss	Median Monthly Rent	Average Monthly Other Costs	Average Adults per House- hold	Average Children per House- hold	
Family, female	5,820,805	2,260,915	34,000	23,000	994	2,058	2	1.1	
Family, male	1,680,720	710,426	50,800	30,000	1,040	1,967	2.2	0.7	
Family, married	10,865,958	4,258,915	60,400	30,000	1,150	2,461	2.5	1.2	
Nonfamily, female	5,015,552	1,268,362	29,000	25,000	900	819	1.2	0	
Nonfamily, male	5,907,308	1,595,873	35,000	30,000	863	833	1.2	0	
Other	4,263,164	1,918,486	54,000	27,000	1,030	2,051	2.2	0.8	

#### Panel B: Rental Debt Outcomes in March 2021 Policy Scenario

	By March 2021				By September 2021				
	Share of Renter House- holds in Debt	Total Renter House- holds in Debt	Millions of Dollars of Debt	Average Debt If Any	Share of Renter House- holds in Debt	Total Renter House- holds in Debt	Millions of Dollars of Debt	Average Debt If Any	
Family, female	7.2	420,019	2,140	5,094	7.7	448,098	3,420	7,633	
Family, male	6.3	105,899	685	6,473	7.1	119,598	1,174	9,815	
Family, married	5.3	570,987	3,874	6,785	5.8	627,181	6,481	10,333	
Nonfamily, female	4.4	220,103	1,196	5,435	4.6	230,622	1,940	8,413	
Nonfamily, male	4.2	246,484	1,479	6,002	4.5	266,863	2,435	9,123	
Other	5.8	249,217	1,599	6,417	6.4	271,496	2,689	9,903	

Notes: Sample is all renter households with at least one member working before March 2020. Debt outcomes are calculated using the state-specific recipiency rates estimated from the Census Bureau's Household Pulse Survey, which yields a national average of 50 percent. The precision of these estimates should not be overinterpreted, and they are likely only accurate to one or two significant digits.

Sources: IPUMS 2019, CES, and CPS.



# **5.** Conclusion

Overall, our findings lead to three main takeaways. First, despite the many policies put into place in the form of direct stimulus payments and enhanced UI benefits, substantial rental debt remains; while these policies are protective for those who receive them, not everyone receives UI benefits.<sup>12</sup> Thus, ensuring that these remaining gaps are filled by other policies, such as local rental assistance programs, is crucial to ensuring a full recovery from rental debt and protection from the risk of eviction. In a related brief, we find in a January 2021 survey that many households with rental debt have been unable to access local programs for various reasons, suggesting more support for such programs may be helpful (Reed et al., 2021).

Second, the successive rounds of assistance provided in April 2020 and December 2020, and those currently proposed for March 2021, have nevertheless helped stabilize rental debt levels below what would likely have occurred otherwise. Although not shown here, Reed and Divringi (2020) additionally show that a scenario without any stimulus or enhanced UI benefits would have yielded far more rental debt than has likely occurred.

Last, looking at patterns of pre-pandemic incomes and rental debt accrued during the pandemic by race and ethnicity and household type shows that COVID-19 is likely to widen many preexisting disparities in economic distress. In particular, Hispanic households, Black households, and nonmarried family households (most of which are female-headed) are disproportionately likely to have accrued rental debt during COVID-19. Importantly, this is true even after taking into account the stimulus payments and enhanced UI benefits enacted thus far and currently being proposed for March 2021. Thus, ensuring that these remaining gaps are filled by other policies, such as local rental assistance programs, is crucial to ensuring a full and equitable recovery.

<sup>&</sup>lt;sup>12</sup> We show and discuss this in detail in our October 2020 report.

## References

Brennan, Maya, Nicole DuBois, Martha Fedorowicz, Kathryn Reynolds, and Corianne Scally. "The Future Is Shared": Why Supporting Renters During COVID-19 Is Critical for Housing Market Stability. Washington, D.C.: Urban Institute (2020). Available at housingmatters.urban.org/feature/future-sharedwhy-supporting-renters-during-covid-19-criticalhousing-market-stability.

Chetty, Raj, John N. Friedman, Nathaniel Hendren, and Michael Stepner. "The Economic Impacts of COVID-19: Evidence from a New Public Database Built from Private Sector Data." Working paper (2020). Available at opportunityinsights.org/wpcontent/uploads/2020/05/tracker\_paper.pdf.

Choi, Jung Hyun and Caitlin Young (2020). "Owners and Renters of 6.2 Million Units in Small Buildings Are Particularly Vulnerable during the Pandemic." Urban Wire (blog), August 10, www.urban.org/ urban-wire/owners-and-renters-62-million-unitssmall-buildings-are-particularly-vulnerable-duringpandemic.

Collinson, Robert and Davin Reed. "The Effects of Eviction on Low-Income Households." Working paper (2019).

Desmond, Matthew. "Eviction and the Reproduction of Urban Poverty." *American Journal of Sociology* 118:1 (2012), pp. 88–133.

Desmond, Matthew and Monica Bell. "Housing, Poverty, and the Law." *Annual Review of Law and Social Science* 11:1 (2015), pp. 15–35.

Desmond, Matthew and Rachel Tolbert Kimbro. "Eviction's Fallout: Housing, Hardship, and Health." Social Forces 94:1 (2015), pp. 295–324. Ganong, Peter, Pascal J. Noel, and Joseph S. Vavra. "U.S. Unemployment Insurance Replacement Rates During the Pandemic." NBER Working Paper No. 27216 (2020).

Humphries, John Eric, Nicholas Mader, Daniel Tannenbaum, and Winnie van Dijk. "Does Eviction Cause Poverty? Quasi-Experimental Evidence from Cook County, Illinois." Cowles Foundation Discussion Paper No. 2186 (2019).

Mongey, Simon, Laura Pilossoph, and Alex Weinberg. "Which Workers Bear the Brunt of Social Distancing Policies?" NBER Working Paper No. 27085 (2020).

Davin Reed and Eileen Divringi. Household Rental Debt During COVID-19. Philadelphia: Federal Reserve Bank of Philadelphia (2020). Available at www.philadelphiafed.org/communitydevelopment/publications/special-reports/ household-rental-debt-during-covid-19.

Davin Reed, Eileen Divringi, and Tom Akana. *Renters' Experiences During COVID-19*. Philadelphia: Federal Reserve Bank of Philadelphia (2021). Available at www.philadelphiafed.org/communitydevelopment/housing-and-neighborhoods/rentersexperiences-during-covid-19.

Ruggles, Steven, Sarah Flood, Ronald Goeken, et. al. IPUMS USA. IPUMS, Version 10.0 [data set] (2020). Available at doi.org/10.18128/D010.V10.0.

Saenz, Rogelio and Corey Sparks. *The Inequities* of Job Loss and Recovery Amid the COVID-19 Pandemic. Durham, NH: Carsey School of Public Policy (2020). Available at carsey.unh.edu/ publication/inequities-job-loss-recovery-amid-COVID-pandemic.



www.PhiladelphiaFed.org • @PhiladelphiaFed