

The Short-Term Benefits of Emergency Rental Assistance

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Abstract

The Emergency Rental Assistance program provides unprecedented support for renters facing hardships who are unable to pay their rent or utilities. While the implicit rationale of the program is to help renters get caught up on payments and prevent evictions, there are other potential short-term benefits beyond housing stability, including improved financial well-being and mental health. This paper uses the US Census Bureau's Household Pulse Survey to investigate the potential short-term benefits of ERA receipt. Comparing ERA recipients with ERA applicants, I find that ERA is associated with a lower likelihood of being behind on rent, having difficulty meeting expenses, or reporting poor mental health. The benefits of ERA on renter households' housing stability, financial well-being, and mental health point to the importance of ongoing support as funding begins to run out. Even as the immediate shock of the pandemic wanes, large shares of renters continue to report employment loss and difficulty paying rent, highlighting the need for continued rental assistance.

Introduction

Employment losses due to the COVID-19 pandemic hit renters disproportionately hard and challenged their ability to make rent. By December 2020, nearly 20 percent of renter households were behind on rent according to data from the US Census Bureau. In response to this overwhelming need, the Consolidated Appropriations Act created the Emergency Rental Assistance (ERA) program on December 27, 2020, allocating \$25 billion from the Coronavirus Relief Fund. The American Rescue Plan Act, enacted on March 11, 2021, dedicated an additional \$21.55 billion to help households with rent and utility payments. While the program suffered from slow rollouts in many places, this unprecedented level of emergency assistance for renters supported more than 4.7 million payments by February 2022, with funds targeted to extremely low-income households and renters of color who were more likely to work in service jobs that were shut down during the pandemic.¹ Many state and local governments and organizations created additional rental assistance programs to supplement the federal resources.

Federal Emergency Rental Assistance is available to renters with low incomes who experienced financial hardships or job losses and are at risk of homelessness or housing instability.² Thus, the implicit rationale behind the program is to help renters get caught up on rent payments and prevent eviction. While there is a growing body of work examining the broader design and spending performance of ERA programs,³ less is known about the effects of this assistance on households and whether the expected outcomes have been achieved. Additionally, there is ample reason from the existing literature to expect that receiving ERA could convey additional benefits for households beyond housing stability, including improved financial well-being and mental health.

This paper uses the US Census Bureau's Household Pulse Survey to investigate the potential short-term benefits of ERA receipt. The primary research questions are: To what extent is Emergency Rental Assistance associated with keeping households current on rent? And, is ERA associated with additional financial and mental health benefits? This study uses descriptive statistics, logistic regression modeling, and propensity score matching to compare the effects of receiving ERA against a comparison group of households who applied for ERA but had not yet received it. The findings point to statistically

¹ US Department of Treasury, "Treasury Announces \$30 Billion in Emergency Rental Assistance Spent or Obligated with Over 4.7 Million Payments Made to Households Through February 2022"; National Low Income Housing Coalition, "More than 3.2 Million Households Received ERA Assistance in 2021; Nearly Two-Thirds Had Extremely Low Incomes."

² Driessen, McCarty, and Perl, "Pandemic Relief: The Emergency Rental Assistance Program."

³ Aiken et al., "Treasury Emergency Rental Assistance Programs in 2021: Preliminary Analysis of Program Features and Spending Performance."

significant and practically meaningful short-term benefits in self-reported housing, financial, and mental health outcomes for ERA recipients.

Potential Benefits of Emergency Rental Assistance

Rent is the single largest expense for most households in the US.⁴ Missing a rent payment or even part of a rent payment can put households at risk of eviction and threaten their housing stability. Given the importance of housing stability for employment, health, and well-being,⁵ households sacrifice on other necessities to make rent. As Matthew Desmond notes, “the rent eats first.”⁶ The tradeoffs households make in order to keep up with rent are apparent in the spending differences between lower-income renters who spend more than 50 percent of their incomes on housing and those who are not housing cost burdened. Indeed, the Joint Center for Housing Studies found that severely burdened renters in the bottom expenditure quartile spent less on food and healthcare than their unburdened or even moderately burdened counterparts.⁷ By covering rent and utility payments, even for a limited amount of time, emergency rental assistance could alleviate some of the pressure on households, enabling them to remain stably housed while also freeing up financial resources to meet other expenses.

While high housing costs and eviction risks existed well before the pandemic, the loss of employment income due to COVID-19 shutdowns, infections, and childcare disruptions has only further challenged households’ ability to pay rent and meet their basic needs. More than half of renter households experienced income losses during the pandemic, and these households were much more likely to tap into resources that could harm their future financial stability.⁸ For example, households who lost income were much more likely to use their savings or borrow from friends or family to meet their housing and spending needs. Many renters used these strategies to keep up with rent, but half of renters who eventually fell behind on their rent payments also reported borrowing money from friends and family, substantially widening the financial fallout of employment loss to broader communities. Emergency Rental Assistance could potentially reduce the need for renters to tap into their meager savings or borrow from their social networks, improving their financial health.

⁴ US Bureau of Labor Statistics, “Consumer Expenditures - 2020.”

⁵ Desmond and Gershenson, “Housing and Employment Insecurity among the Working Poor”; Kushel et al., “Housing Instability and Food Insecurity as Barriers to Health Care among Low-Income Americans”; Desmond, *Evicted: Poverty and Profit in the American City*.

⁶ Desmond, *Evicted*.

⁷ Joint Center for Housing Studies, “America’s Rental Housing 2022.”

⁸ Airgood-Obrycki et al., “Making the Rent: Household Spending Strategies During the COVID-19 Pandemic.”

Finally, housing instability, in the form of eviction or forced moves, homelessness, and overcrowding, has known effects on mental health. A recent systematic review of the literature found that housing disadvantages, including overcrowding, housing instability, and eviction, were associated with depression and stress.⁹ Additionally, housing cost burdens, poor housing conditions, and forced moves can all negatively impact mental health.¹⁰ Existing rental assistance programs can improve mental health and reduce psychological distress.¹¹ If ERA does help households get caught up on rent and alleviates financial pressure, it is likely that recipients would also exhibit better mental health outcomes. In short, the housing stability that ERA potentially provides could have expanded benefits, improving the financial well-being of households, reducing the tradeoffs they must make, and in turn easing the stresses that contribute to poor mental health.

Data and Methods

The data in this study come from the US Census Bureau’s Household Pulse Survey, an experimental survey that has been fielded during the pandemic to gauge its impact on households. Data collection periods, survey sampling methods, and questions have varied since the survey began in April 2020. This study uses a pooled sample of respondents from weeks 36–44, a period that encompasses August 18, 2021 through April 11, 2022. These survey weeks were chosen to align with the period in which a question about ERA receipt and application was asked of all cash renters. I use the microdata in the Public Use File for this analysis and employ the household weight that the Census Bureau provides.

The sample is broken into two groups: renters who indicated that they had received ERA and renters who applied for ERA but were still waiting to hear if they’d been approved. Over the study period, about 5 percent of all renters received assistance at the time they were surveyed while an additional 5 percent applied but were waiting for a determination. Pooling responses over several weeks yields a total unweighted sample size of 10,300 renters; 56 percent of the unweighted sample is recipients and 44 percent is applicants. These groups have similar income distributions and roughly function as treatment and control groups for understanding the potential effect of receiving ERA.

⁹ Singh et al., “Housing Disadvantage and Poor Mental Health.”

¹⁰ Denary et al., “Does Rental Assistance Improve Mental Health?”

¹¹ Fischer, Rice, and Mazzara, “Research Shows Rental Assistance Reduces Hardship and Provides Platform to Expand Opportunity for Low-Income Families”; Felon et al., “Housing Assistance Programs and Adult Health in the United States.”

The methodology consists of basic descriptive statistics, logistic regression modeling, and propensity score matching to identify the treatment effects of receiving ERA. There are a total of eight binary outcomes of interest (**Table 1**). All outcomes are self-reported and, given the timing of the program and the survey, should be interpreted as short-term. The three housing outcomes are whether a household was behind on rent at the time they were surveyed; if they were behind, whether they thought eviction was at least somewhat likely in the next two months; and if they were deeply behind on rent (in arrears by at least three months behind). There are four outcomes related to financial well-being and spending tradeoffs, including difficulty meeting household expenses, whether the household had tapped savings/sold assets, borrowing from friends or family to meet their expenses, and current food insecurity. Mental health challenges are captured in one indicator that is a composite of people who reported that they felt anxious, worried, depressed, or have little interest in things at least half the days of the last two weeks.

First, descriptive statistics compare recipients and applicants along each of these outcomes to examine differences in the shares of households experiencing these difficulties. While applicants serve as a reasonable control group for comparison, there are some differences between ERA applicants and recipients. Applicants, for example, were much more likely to have lost employment income in the previous four weeks when they were surveyed (53 percent compared to 31 percent).

To better account for the differences between applicants and recipients, I next run a series of logistic regression models. There are eight models that correspond to the outcome variables described above. In each model, the independent variables include several demographic controls, such as income, race, age, education, marital status, disability status, gender, and the number of adults and children in the household (**Table 2**). There are additional variables to capture whether a household lost employment income in the previous four weeks, whether they worked in the last seven days, and whether they receive Supplemental Nutrition Assistance Program (SNAP) benefits. Each model has state and survey week fixed effects, and the variables pass checks for excessive multicollinearity.

Propensity score matching further isolates the effect of ERA receipt on the outcomes of interest. Causal effects are difficult to determine in observational data due to confounding factors and non-randomized controls. Propensity score matching is one method for drawing causal inference when randomized control trials are not possible. The propensity score is the likelihood of a given observation being assigned to the treatment group (ERA receipt) using a set of covariates; in this case, recipients and applicants are assigned a propensity score based on the same independent variables used in the logistic regression models including state and survey week. Propensity scores range from zero to one, and the

Table 1. Outcomes of interest, survey variable variables, and coding

	Outcome	Variables	Question	Coding
Housing	Behind on rent	RENTCUR	Is this household currently caught up on rent payments?	0 = Caught up on rent 1 = Behind on rent
	Eviction somewhat likely, if behind on rent	EVICT	How likely is it that your household will have to leave this home or apartment within the next two months because of eviction? <i>(Asked if behind on rent)</i>	0 = Eviction not likely at all or not very likely 1 = Eviction somewhat likely or very likely
	3+ months behind, if behind on rent	TMNTHSBHND	How many months behind is this household in paying your rent or mortgage? <i>(Asked if behind on rent)</i>	0 = 0–2 months behind 1 = 3 or more months behind
Financial Well-Being	Difficulty meeting expenses	EXPNS_DIF	In the last 7 days, how difficult has it been for your household to pay for usual household expenses, including but not limited to food, rent or mortgage, car payments, medical expenses, student loans, and so on?	0 = Not at all difficult or a little difficult 1 = Somewhat or very difficult
	Tap savings/assets	SPND_SRC3	Thinking about your experience in the last 7 days, which of the following did you or your household members use to meet your spending needs?	0 = No source/other source 1 = Money from savings or selling assets or possessions
	Borrow from friends/family	SPND_SRC4	Thinking about your experience in the last 7 days, which of the following did you or your household members use to meet your spending needs?	0 = No source/other source 1 = Borrowing from friends/family
	Food insecurity	CURFOODSUF	Getting enough food can also be a problem for some people. In the last 7 days, which of these statements best describes the food eaten in your household?	0 = Enough of food we want to eat or enough but not always the food we want to eat 1 = Sometimes or often not enough to eat
Mental Health	Poor mental health	ANXIOUS	Over the last 2 weeks, how often have you been bothered by feeling nervous, anxious, or on edge?	0 = Anxious, worry, little interest, and down not at all or several days 1 = Anxious, worry, little interest, or down more than half the days or nearly every day
		WORRY	Over the last 2 weeks, how often have you been bothered by the not being able to stop or control worrying?	
		INTEREST	Over the last 2 weeks, how often have you been bothered by having little interest or pleasure in doing things?	
		DOWN	Over the last 2 weeks, how often have you been bothered by feeling down, depressed, or hopeless?	

Table 2. Descriptive statistics for independent variables (percent or mean)

	Behind on rent		Eviction somewhat likely (if behind)		3+ months behind (if behind)		Difficulty meeting expenses		Tap savings/assets		Borrow from friends/family		Food insecurity		Poor mental health	
	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
n	6,147	4,090	1,695	2,384	2,240	1,751	2,549	7,701	7,715	2,547	6,325	3,937	6,911	3,323	4,165	6,097
<i>Emergency Rental Assistance status</i>																
Applicant	34.6	65.4	35.4	64.6	45.9	54.1	15.2	84.8	75.4	24.6	51.8	48.2	60.0	40.0	35.5	64.5
Recipient	75.5	24.6	56.2	43.8	69.9	30.1	32.7	67.4	81.6	18.4	65.6	34.4	70.0	30.0	48.9	51.1
<i>Household income</i>																
Less than \$25,000	55.4	44.6	39.6	60.4	49.1	50.9	22.1	77.9	83.6	16.4	57.8	42.2	62.6	37.4	40.9	59.1
\$25,000–49,999	53.8	46.3	42.3	57.7	56.4	43.6	22.9	77.1	74.7	25.3	59.0	41.0	65.6	34.4	42.0	58.0
\$50,000–74,999	57.3	42.7	44.8	55.2	56.9	43.1	33.8	66.2	61.8	38.2	61.5	38.5	74.6	25.4	45.9	54.1
\$75,000–99,999	61.2	38.8	46.0	54.0	52.7	47.3	34.2	65.8	67.4	32.6	69.9	30.1	77.5	22.5	49.5	50.5
\$100,000 or more	65.2	34.8	42.2	57.8	50.4	49.7	42.1	58.0	55.2	44.9	68.7	31.3	74.8	25.2	42.7	57.4
<i>Race/ethnicity</i>																
White	60.7	39.4	39.7	60.3	52.2	47.8	24.5	75.5	76.0	24.0	62.2	37.8	66.0	34.0	36.0	64.0
Black	51.3	48.7	42.1	57.9	55.8	44.2	23.0	77.0	82.7	17.3	54.5	45.5	64.0	36.0	47.1	53.0
Hispanic	52.8	47.2	40.1	59.9	46.4	53.6	24.7	75.3	78.3	21.8	61.3	38.7	64.6	35.4	45.9	54.1
Asian	70.0	30.0	56.9	43.1	73.3	26.7	40.2	59.9	71.5	28.5	69.7	30.3	79.3	20.7	57.0	43.0
Another/multiracial	54.3	45.7	43.5	56.5	54.1	45.9	21.1	78.9	74.2	25.8	52.8	47.2	62.8	37.2	34.5	65.6
<i>Age</i>																
Age (mean)	44.1	42.0	41.8	42.2	40.4	43.4	45.1	42.6	44.1	40.2	44.7	41.1	43.7	42.1	44.0	42.7
<i>Gender</i>																
Male	55.9	44.1	40.9	59.1	49.0	51.0	25.6	74.4	72.2	27.8	59.7	40.3	62.7	37.3	45.0	55.0
Female	55.4	44.6	42.0	58.0	54.0	46.0	23.3	76.7	81.4	18.6	58.4	41.6	66.7	33.3	41.5	58.5
Transgender/nonbinary	52.9	47.1	33.3	66.7	63.5	36.5	23.0	77.0	80.1	19.9	53.8	46.2	52.1	47.9	27.0	73.0
<i>Marital Status</i>																
Married	56.1	43.9	41.5	58.5	49.5	50.5	26.0	74.0	77.9	22.1	62.6	37.5	65.0	35.0	46.0	54.0
Widowed	66.7	33.3	44.3	55.7	48.9	51.1	25.3	74.7	79.6	20.5	66.1	34.0	68.6	31.4	42.5	57.5
Divorced/separated	53.5	46.5	36.9	63.1	48.7	51.3	21.7	78.3	81.0	19.0	59.8	40.2	64.6	35.4	39.8	60.2
Never married	55.4	44.6	43.8	56.2	57.3	42.7	24.5	75.6	77.3	22.7	55.8	44.2	65.3	34.7	42.1	57.9

Table 2 continued. Descriptive statistics for independent variables (percent or mean)

	Behind on rent		Eviction somewhat likely (if behind)		3+ months behind (if behind)		Difficulty meeting expenses		Tap savings/assets		Borrow from friends/family		Food insecurity		Poor mental health	
	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
n	6,147	4,090	1,695	2,384	2,240	1,751	2,549	7,701	7,715	2,547	6,325	3,937	6,911	3,323	4,165	6,097
<i>Household composition</i>																
Adults (mean number)	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.9	1.8	1.9	1.8	1.9	1.9	1.8
Children (mean number)	1.0	1.2	1.2	1.2	1.3	1.1	1.0	1.1	1.1	1.0	1.0	1.2	1.1	1.0	1.1	1.1
<i>Education</i>																
Less than high school	53.2	46.8	41.5	58.6	53.1	46.9	24.4	75.6	87.1	12.9	62.4	37.6	59.3	40.7	44.9	55.1
High school/GED	55.3	44.7	40.3	59.7	52.3	47.7	23.7	76.3	79.0	21.1	57.0	43.1	64.9	35.1	41.7	58.3
Bachelor's or higher	60.1	39.9	47.5	52.5	54.4	45.6	26.8	73.2	63.8	36.2	66.5	33.5	74.6	25.5	43.2	56.8
<i>Disability status</i>																
No disabilities	56.1	44.0	50.9	49.1	57.7	42.3	31.7	68.4	80.6	19.4	64.7	35.3	72.3	27.7	62.4	37.6
At least one disability	55.3	44.7	37.8	62.2	50.8	49.2	21.4	78.6	77.9	22.1	56.7	43.3	62.5	37.5	35.0	65.0
<i>SNAP receipt</i>																
Does not receive SNAP	54.8	45.2	42.4	57.6	56.0	44.0	26.4	73.6	72.4	27.6	59.2	40.8	60.3	39.7	43.5	56.5
Receives SNAP	55.6	44.4	40.5	59.5	50.3	49.7	22.4	77.6	83.1	16.9	58.5	41.5	68.5	31.6	41.4	58.6
<i>Lost employment income in last 4 weeks</i>																
Did not lose income	65.7	34.4	48.8	51.2	55.5	44.5	32.6	67.4	80.5	19.5	65.8	34.2	70.3	29.7	47.6	52.4
Lost income	41.4	58.6	35.2	64.8	50.4	49.6	12.3	87.7	75.9	24.1	49.3	50.7	57.8	42.2	35.0	65.0
<i>Work in last 7 days</i>																
Did not work	54.9	45.1	36.8	63.2	49.3	50.8	22.7	77.3	81.4	18.6	59.7	40.3	63.0	37.0	41.0	59.0
Worked	56.1	43.9	47.3	52.7	57.2	42.8	25.7	74.3	74.8	25.2	57.6	42.4	67.7	32.3	43.9	56.1
<i>Structure type</i>																
Manufactured	47.1	52.9	34.3	65.7	53.7	46.3	17.8	82.2	81.0	19.0	56.4	43.6	58.4	41.6	38.6	61.4
Single-family	54.8	45.2	39.9	60.1	50.8	49.2	23.7	76.4	78.9	21.1	58.4	41.6	68.4	31.7	43.2	56.8
2–4 units	57.8	42.2	41.5	58.5	55.2	44.8	25.1	75.0	80.3	19.8	56.0	44.0	64.4	35.7	42.8	57.2
5 or more units	56.0	44.0	43.0	57.0	52.8	47.3	25.0	75.1	77.0	23.0	61.1	38.9	64.5	35.5	42.2	57.8

matching seeks to pair observations from each group that have similar likelihoods of receiving ERA based on their characteristics. In this analysis, renters from the two groups are matched to at least one nearest neighbor with replacement based on the propensity score. Matched pairs have propensity scores that fall within 0.04 of each other with the vast majority (99.7 percent) falling within 0.005. While the two groups were similar before matching, the pairs are more balanced after matching when considering the average standardized differences across all covariates (see Appendix Table).

The matches are then used to calculate average treatment effects (ATE) and average treatment effects on the treated (ATT). The ATE identifies the average effect of receiving ERA and is the difference we would expect if *all renters* in the sample had received ERA compared to if all had applied but were still waiting to hear back. The ATT measures the average effect just among those who did receive ERA. It is the difference we would expect to see if *all ERA recipients* instead had applied but were still waiting to hear back.

There are criticisms that propensity scores do not produce adequately balanced matches, leaving confounding factors that can bias results. Coarsened exact matching (CEM) in particular has gained momentum as an alternative, and it matches observations on each covariate level.¹² However, CEM reduces statistical power by culling the total sample size when there are many covariates to match on. In a robustness check using just CEM and then using CEM on key variables as the first pre-processing stage prior to performing propensity score matching, CEM cuts the sample to a fraction of its full size while the two-part matching does not produce better balance on key covariates than using propensity score matching alone. The two-part method also produces results of similar magnitude and statistical significance, and for these reasons, I use and present the propensity score analysis in this paper.

There are limitations to this study. The Household Pulse Survey contains a reasonable amount of demographic data, but these variables are grouped into pre-defined categories. The demographic variables are thus limited, as are the geographic variables available, which could lead to confounding factors that reduce the power of causal inference.

The timing of the questions is another limitation, because time frames of the questions vary. For example, respondents are asked about employment income loss in the last four weeks, mental health over the previous two weeks, and expense difficulties in the last seven days. ERA application and receipt has no time frame on it, and households may have received ERA months before they were surveyed. It is possible that applicants are at a high point in their distress, and it is difficult to know if their outcomes

¹² Iacus, King, and Porro, "Causal Inference without Balance Checking."

would naturally improve or continue to decline over time without ERA. It is also difficult to know if ERA recipients got assistance several months ago and have fallen back into distress. The unknown of where applicants and recipients are in the cycle of distress makes it difficult to assess whether the estimated effects are biased upward or downward.

Respondents may also interpret the questions differently or gauge their likelihood of eviction or difficulty meeting expenses differently. Rental assistance could refer to the federal ERA program or to any number of state or local programs funded through other mechanisms. Despite these limitations, the Household Pulse Survey provides a reasonably large sample and the most up-to-date picture of housing, financial, and mental health outcomes for emergency rental assistance recipients.

Results

Across each of the outcomes of interest, the descriptive statistics show that ERA recipients are less likely to report housing, financial, or mental health stresses (**Table 3**). Notably, just 25 percent of recipients were behind on rent at the time they were surveyed, compared to 65 percent of applicants.¹³ Even with ERA, 67 percent of recipients have difficulty meeting their expenses, but this is considerably lower than the 85 percent of applicants. Recipients also report lower rates of tapping their savings or borrowing from friends and family and experience a greater degree of food security. Mental health is again a significant concern for both groups, but about two-thirds of applicants report at least one mental health

Table 3. Share of ERA recipients and applicants with each outcome (percent)

	Behind on rent	Eviction somewhat likely (if behind)	3+ months behind (if behind)	Difficulty meeting expenses	Tap savings/assets	Borrow from friends/family	Food insecurity	Poor mental health
Recipients	24.6	43.8	30.1	67.4	18.4	34.4	30.0	51.1
Applicants	65.4	64.6	54.1	84.8	24.6	48.2	40.0	64.5

¹³ This is somewhat surprising, as there would be an expectation that households would be applying for assistance because they are currently beyond on rent. There are several reasons why a household might report that they aren't behind on rent but applied for assistance, including: 1) They may have applied during a period when they were behind but subsequently paid off their arrears by the time they were surveyed; 2) They may not be behind on rent but are behind on utilities and applied for assistance for that reason; 3) They may have anticipated that they would be behind on rent in the coming month and applied prematurely; 4) They may have applied but not been eligible for assistance; or 5) They may have conflated an ERA application with an application for regular rental assistance.

Table 4. Logistic regression model results (odds ratios)

	Behind on rent	Eviction somewhat likely	3+ months behind	Difficulty meeting expenses	Tap savings/assets	Borrow from friends/family	Food insecurity	Poor mental health
<i>Emergency Rental Assistance status</i>								
Applicant (reference)								
Recipient	0.18 ***	0.41 ***	0.41 ***	0.42 ***	0.72 **	0.63 ***	0.68 ***	0.58 ***
<i>Household income</i>								
Less than \$25,000 (reference)								
\$25,000–49,999	1.06	0.91	0.72 *	0.98	1.45 ***	0.88	0.78 **	1.04
\$50,000–74,999	0.90	0.96	0.63 *	0.60 **	2.40 ***	0.85	0.50 ***	0.92
\$75,000–99,999	0.85	1.01	0.77	0.65	1.63 *	0.65	0.46 **	0.82
\$100,000 or more	0.69	0.83	0.87	0.39 **	2.51 **	0.58	0.35 **	1.06
<i>Race/ethnicity</i>								
White (reference)								
Black	1.29 *	1.06	0.84	1.00	0.74 *	1.26 *	1.21	0.66 ***
Hispanic	0.98	1.12	1.21	0.82	0.85	0.96	0.92	0.63 ***
Asian	0.50 *	0.93	0.36 **	0.47 *	0.80	0.85	0.58	0.48 **
Another/multiracial	1.50 **	0.97	0.87	1.18	1.10	1.53 **	1.33	1.13
<i>Age</i>	1.00	1.00	1.01 *	0.98 ***	0.97 ***	0.98 ***	0.98 ***	0.98 ***
<i>Gender</i>								
Male (reference)								
Female	1.03	0.90	0.79	1.04	0.67 ***	1.01	0.89	1.10
Transgender/nonbinary	1.04	1.26	0.48 *	0.84	0.63	1.05	1.27	1.86 *
<i>Marital Status</i>								
Married (reference)								
Widowed	0.84	0.82	0.75	1.47	1.67 *	1.19 0.46	1.06	1.26
Divorced/separated	1.32 *	1.29	0.91	1.25	1.13	1.22 0.09	1.05	1.24
Never married	1.01	1.03	0.74	0.89	1.03	1.10 0.44	0.86	1.07
<i>Number adults</i>	1.02	0.97	0.93	1.02	1.02	1.04 0.27	1.08	0.93
<i>Number children</i>	1.05	1.02	0.91	0.95	0.93	1.03 0.34	0.95	0.98

*** $p < .001$, ** $p < .01$, * $p < .05$

Table 4 continued. Logistic regression model results (odds ratios)

	Behind on rent	Eviction somewhat likely	3+ months behind	Difficulty meeting expenses	Tap savings/assets	Borrow from friends/family	Food insecurity	Poor mental health
<i>Education</i>								
Less than high school (reference)								
High school/GED	0.83	1.06	0.94	0.94	1.45	1.10	0.63 **	0.98
Bachelor's/higher	0.68 *	0.88	0.81	0.94	2.53 ***	0.80	0.41 ***	0.96
<i>Disability status</i>								
No disabilities (reference)								
At least one disability	1.13	1.86 ***	1.33	1.80 ***	1.36 **	1.66 ***	1.73 ***	3.27 ***
<i>SNAP receipt</i>								
Does not receive SNAP (reference)								
Receives SNAP	0.86	1.01	1.24	1.16	0.77 *	0.96	0.55 ***	1.03
<i>Lost employment income in last 4 weeks</i>								
Did not lose income (reference)								
Lost income	2.17 ***	1.66 ***	1.10	3.14 ***	1.16	1.85 ***	1.58 ***	1.58 ***
<i>Work in last 7 days</i>								
Did not work (reference)								
Worked	1.04	0.75 *	0.92	1.00	1.10	1.17	0.83 *	0.93
<i>Structure type</i>								
Manufactured (reference)								
Single-family	0.66 *	0.79	1.25	0.64	1.23	0.95	0.66 *	0.95
2-4 units	0.54 **	0.74	0.91	0.59 *	1.14	1.06	0.75	0.95
5 or more units	0.61 **	0.77	0.89	0.64	1.25	0.99	0.77	0.94
Intercept	3.39 *	1.82	1.87	9.22 ***	0.56	0.78	1.90	1.24
State fixed effects	X	X	X	X	X	X	X	X
Week fixed effects	X	X	X	X	X	X	X	X
<i>F</i>	8.32 ***	2.22 ***	3.55 ***	4.88 ***	4.57 ***	3.67 ***	3.50 ***	4.41 ***
Unweighted n	9,561	3,826	3,752	9,574	9,583	9,583	9,559	9,583
Weighted n	23,429,659	10,451,012	10,228,690	23,466,995	23,491,847	23,491,847	23,388,906	23,491,847

*** $p < .001$, ** $p < .01$, * $p < .05$

issue at least half the days of the two weeks before they were surveyed. Meanwhile, half of recipients have anxiety, worry, depression, or little interest in things.

The logistic regression models confirm these descriptive findings (**Table 4**). ERA receipt is statistically significant at the $p < .01$ level across all eight outcomes when controlling for household demographic characteristics, current employment status, and fixed geographic effects. In the first model, rental assistance is associated with an 82 percent reduction in the odds of being behind on rent. Models two and three are a subset of households who are behind on rent. Among these households, the odds that recipients think eviction is at least somewhat likely in the next two months are 59 percent lower than for applicants. Recipients' odds of being at least three months behind on rent are also less than half that of applicants.

The financial well-being and mental health metrics additionally show significant differences between ERA recipients and applicants. The odds of recipients having difficulty meeting their expenses are less than half that of applicants, and receiving ERA is associated with reduced odds of tapping into savings (28 percent lower), borrowing from friends and family (37 percent), or experiencing food insecurity (32 percent). In terms of mental health, recipients' odds of feeling anxious, worried, depressed, or having little interest in things are just over half the applicants' odds of experiencing these things.

Propensity score matching provides another layer of balancing the characteristics of recipients and applicants to better isolate the average effects of rental assistance at the population level and for those who receive ERA. This method lends itself to a greater level of causal inference than the logit models can provide. The treatment effects again confirm the results of the descriptive statistics and logistic regression models, showing the statistically significant importance of ERA across all eight outcomes (**Table 5**). For each outcome, the ATE and ATT are very similar, and I focus on the ATE results, which again is the average effect of receiving ERA that we would expect to see if all renters in the sample received ERA compared to if all had applied but were still waiting to hear back.

The average treatment effect of receiving ERA is a large 36-percentage point decrease in the likelihood of being behind on rent. Among households who are behind on rent, the chance of thinking eviction is somewhat likely and the chance of being three or more months behind is 14–20 percentage points lower for ERA receipt. The coefficients are largest for these housing outcomes, but the average treatment effects across the financial well-being indicators are also substantial, ranging from a 4-percentage point difference in the likelihood of tapping savings or assets up to a 13-percentage point

Table 5. Average treatment effects of Emergency Rental Assistance

	Average Treatment Effect (ATE)		Average Treatment Effect on the Treated (ATT)	
Behind on rent	-0.36	***	-0.36	***
Eviction somewhat likely (if behind)	-0.14	***	-0.19	***
3+ months behind (if behind)	-0.20	***	-0.20	***
Difficulty meeting expenses	-0.13	***	-0.14	***
Tap savings/assets	-0.04	***	-0.04	**
Borrow from friends/family	-0.11	***	-0.13	***
Food insecurity	-0.09	***	-0.09	***
Poor mental health	-0.07	***	-0.07	***

*** $p < .001$, ** $p < .01$, * $p < .05$

difference in having difficulty meeting expenses. The average effect on borrowing from friends or family (11 percentage points) or facing food insecurity (9 percentage points) is also lower for ERA receipt. A similar result is produced using the poor mental health indicator, with ERA receipt reducing the chance of feeling anxious, worried, depressed, or having little interest by 7 percentage points on average.

Conclusion

Emergency rental assistance is associated with substantial short-term benefits for housing stability, financial well-being, and mental health. The results consistently show that ERA receipt is associated with a lower likelihood of being behind on rent, and the effect is substantial. ERA recipients who are behind on rent still have a lower probability of thinking that eviction is likely in the coming months and were less likely to be behind on rent by more than three months. By covering at least a portion of owed rent and utilities, emergency rental assistance seems to relieve other financial pressures that households face.

Indeed, ERA receipt is associated with a reduced chance of having difficulty meeting expenses, tapping savings to meet spending needs, or borrowing from friends or family. Households who receive ERA are likely making fewer tradeoffs in other expenses, as is evident in the reduced probability of experiencing food insecurity. ERA may also be conferring mental health benefits by increasing housing stability and reducing financial stress. ERA recipients do in fact have lower rates of mental health concerns, and this result holds through the logit models and treatment effect analysis.

Documenting the range of short-term benefits that ERA provides is especially crucial as funds go unspent in some places and run out in others. The US Department of the Treasury began a reallocation process in the fall of 2021 to get assistance into the hands of people who need it. But the program is temporary and finite by nature, and even with reallocation, the demand for assistance is greater than the available funds in many cities and states across the country. At the same time, federal and state-level eviction protections have ended. Some states and localities have limited stays on eviction for people who have pending rental assistance applications or who have recently received emergency assistance. Whether these measures are also contributing to improved short-term outcomes by offering temporary housing stability is an area for future research.

The lack of sustained assistance will likely be a problem going forward. As of April 2022, a full 13 percent of renters were still behind on rent and 16 percent had recently lost employment income. Lower-income renters of color have taken the brunt of the pandemic's impacts, and addressing rent shortfalls for these households is particularly important for advancing racial equity. Additionally, with the broader economy approaching full employment, continued high rates of arrears and loss of income highlight the fact that lower-income renters face ongoing financial stresses beyond the immediate impact of the pandemic. This points to the need for continued supports to keep people stably housed, either through additional emergency assistance programs or through expanded assistance programs.

The findings from this study point to the multi-faceted ways that assistance can improve the lives of renters. While this particular study examines emergency rental assistance, similar effects have been shown for regular assistance and housing stability. Expanding support for renters, in times of crisis and in the normally functioning housing market, is a valuable mechanism for reducing financial pressure on households, preventing detrimental spending tradeoffs and strategies, and improving mental health.

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Appendix

Table A1 provides data to evaluate the balance of the recipient and applicant groups before and after matching. While the propensity score matching yielded less balance on some variables, it improved the balance on race/ethnicity, age, household composition, and structure type. The balance was also substantially improved on lost employment income in the last four weeks and worked in the last seven days, two variables that likely have a significant impact on the outcomes of interest. Overall, the matching resulted in a lower average and median bias and the Rubin's B statistic (the standardized difference in the propensity score means between recipients and applicants) now falls within the suggested threshold of 25.

Table A1: Matched sample balancing

	Unmatched			Matched		
	Recipients	Applicants	Standardized Mean Difference	Recipients	Applicants	Standardized Mean Difference
\$25,000–49,999	0.4	0.4	-0.4	0.4	0.3	2.8
\$50,000–74,999	0.1	0.1	1.3	0.1	0.1	-1.8
\$75,000–99,999	0.0	0.0	1.1	0.0	0.0	1.4
\$100,000 or more	0.0	0.0	0.1	0.0	0.0	2.4
Black	0.2	0.3	-14.4	0.2	0.2	3.6
Hispanic	0.1	0.2	-5.9	0.1	0.2	-4.7
Asian	0.0	0.0	-1.3	0.0	0.0	1.8
Another/multiracial	0.1	0.1	6.5	0.1	0.1	-3.7
Age	46.9	45.1	13.7	46.9	47.1	-1.1
Female	0.7	0.7	0.3	0.7	0.7	2.1
Transgender/nonbinary	0.0	0.0	1.6	0.0	0.0	0.3
Widowed	0.0	0.0	0.4	0.0	0.0	-0.6
Divorced/separated	0.3	0.3	1.0	0.3	0.3	4.3
Never married	0.4	0.4	-5.8	0.4	0.4	-0.5
Number of adults	1.8	1.9	-5.7	1.8	1.8	0.0
Number of children	0.9	1.0	-7.0	0.9	0.9	-0.2
High school/GED	0.7	0.7	-2.3	0.7	0.7	4.0
Bachelor's or higher	0.2	0.2	1.4	0.2	0.2	-3.1
At least one disability	0.8	0.8	-0.3	0.8	0.8	-1.0
Receives SNAP	0.5	0.5	0.7	0.5	0.5	-1.5
Lost employment income in last 4 weeks	0.3	0.5	-32.4	0.3	0.3	-0.9
Worked in last 7 days	0.5	0.4	9.6	0.5	0.5	3.5
Single-family	0.3	0.3	-6.4	0.3	0.3	1.3
2–4 multifamily	0.2	0.2	2.3	0.2	0.2	-0.7
5 or more multifamily	0.4	0.4	5.4	0.4	0.4	0.5
Likelihood-Ratio Chi2		949.33			94.33	
<i>p</i>		0.00			0.19	
Mean Bias		4.9			1.8	
Median Bias		3.1			1.4	
Rubin's B		65.1			18.9	
Rubin's R		1.07			0.93	