

# Understanding Economic Risk for Low-Income Families

Economic Security, Program Benefits, and Decisions About Work

ASPE and OPRE Report 2024-324 September 2024

Ariella Spitzer, Jesse Chandler, Bernadette Hicks, and Daniel Thal

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Submitted to: Nina Chien and Robin Ghertner

Contract Number: HHSP233201500035I/75P00122F37072

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Spitzer, Ariella, Jesse Chandler, Bernadette Hicks, and Daniel Thal (2024). *Understanding Economic Risk for Low-Income Families: Economic Security, Program Benefits, and Decisions About Work*. ASPE and OPRE Report #2024-324, Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, and Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

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# Overview

Each year more than one-quarter of all Americans rely on means-tested benefits for basic needs such as food, health insurance, housing, and child care (Macartney and Ghertner 2023). Recipients of these benefits have to consider trade-offs when deciding to accept a new, higher-paying job opportunity: Will the greater income outweigh the potential loss of benefits when their earnings increase? People who lose benefits most often have to start the application process from scratch. In addition to the burden of reapplying, there is a risk that their application will be rejected, or they may have to spend weeks or months without needed benefits while waiting for their application to be approved. Given this risk and uncertainty, people might be reluctant to take higher-paying jobs that push their income above the eligibility thresholds for their benefits—especially if the recipient views the job opportunity as unstable and likely to end unexpectedly, at which point they would need benefits again.

Economists generally define the marginal tax rate as the share of an income increase that a worker does not receive because it is taxed. Although marginal tax rate sometimes refers exclusively to federal and state income tax, it is often also used when considering changes in benefits from means-tested programs (Kosar and Moffitt 2017). The value of the lost benefits can be so large that it actually exceeds the value of the higher income, meaning that the marginal tax rate is over 100 percent. This is referred to as a *benefits cliff*. In this study, we evaluate the impact of benefit loss, the level of ease in reinstating benefits, marginal tax rates, and job stability on benefit recipients' willingness to accept opportunities to increase earnings.

### **Research questions**

- 1. How important is each of the following factors in the decision to accept a higher-paying job?
  - a. The potential to lose their benefits, and, if they do, how hard it would be to resume benefit receipt
  - b. The marginal tax rate (the percentage of new earnings that are eroded by lost benefits) and the net income increase (the difference between the dollar value of the earnings increase and the benefit loss)
  - c. The stability of the new job opportunity
- 2. How do the impacts of the factors in Research Question 1 interact, if at all?
- 3. Do the factors in Research Question 1 have different impacts for different subgroups including gender, the presence of children in the household, race and ethnicity, and the type of program receipt (Child Care and Development Fund [CCDF], Medicaid, Supplemental Nutrition Assistance Program [SNAP], and Temporary Assistance for Needy Families [TANF])?

### **Key findings**

Overall, respondents were very likely (75 percent) to accept a higher-paying job. Our findings demonstrate the important role that all three factors listed in Research Question one played in this decision.

Benefit loss made respondents less likely to accept a higher-paying job.<sup>1</sup> However, knowing that lost benefits could be easily resumed (if needed again later) made respondents more likely to accept a higher-paying job and more willing to lose benefits. We found that when respondents knew that lost benefits could be automatically resumed in the event of earnings loss, they were more likely to accept a higher-paying job opportunity than they were if they would have to reapply for lost benefits. Furthermore, automatic benefit reinstatement also increased the share of respondents who would accept a higher-paying job even if the new job were unstable. Finally, automatic reinstatement of benefits increased the share of respondents who would accept a higher-paying job even if the marginal tax rate was high or the net income increase was small (in statistical terms, we observed interactions between automatic restoring of benefits and each of the two other factors). Note that automatic resumption of benefits is a hypothetical scenario that we explored in this study, not a common policy practice.

**Respondents were also more likely to accept higher-paying job opportunities associated with more stable job situations compared to unstable job situations.** Furthermore, more stable job opportunities made respondents more likely to accept higher-paying job opportunities regardless of higher marginal tax rates or only a small increase in net income.

# Lower marginal tax rates and higher net income increases each, on their own, made respondents more likely to accept higher-paying jobs.

The key findings were consistent across genders, races and ethnicities, and parental statuses. However, there were important differences in the relative magnitude of the impacts. While the impact of having to reapply for benefits was similar across races and ethnicities, the positive effect of automatically resuming benefits was stronger for respondents identifying as non-Hispanic White than for respondents who identified as non-Hispanic Black or Hispanic. And compared with male respondents, female respondents were less likely to take the new job when faced with losing benefits and were more sensitive to the size of the marginal tax rate and the change in net income.

There were also differences in the magnitude of effects depending on which benefit program was described as at risk of loss. Benefit loss had a negative impact on the likelihood of accepting a higherearning job for all benefit program respondents, but the effect was larger for respondents receiving CCDF) than for those receiving Medicaid, SNAP, and TANF. Lower net income increases and higher marginal tax rates were a stronger disincentive for respondents receiving CCDF and Medicaid than they were for respondents receiving TANF.

The results of this study demonstrate the important role that eligibility and reapplication rules for meanstested benefits play in shaping the decisions that benefit recipients make regarding employment. Results from the vignettes provide clear evidence of the importance of all three experimental factors—benefit loss and ease of benefit reinstatement, net income increase and marginal tax rate, and risk of job loss—in shaping these types of decisions. Moving forward, the findings from this study will inform how policy levers could be used to limit the impact of benefit loss on accepting job opportunities.

<sup>&</sup>lt;sup>1</sup> For ease of exposition, we describe the respondents as accepting an opportunity when they recommend that the fictional character accept it.

### Methods

We used a survey experiment to understand how workers with low incomes consider higher-paying job opportunities when faced with potential loss of four means-tested benefit programs: CCDF, Medicaid, SNAP, and TANF. We conducted the survey with 1,804 current and former recipients of these benefits. Respondents were asked to consider a series of vignettes describing fictional beneficiaries faced with the decision of accepting a job opportunity. For each vignette, respondents were asked to decide whether the person should not take the higher-paying job. These opportunities varied based on the process for reapplying for benefits, the amount of the income increase and benefit loss, and the stability of the job opportunity.

# I. Introduction

Each year more than one-quarter of Americans rely on means-tested benefits to provide for basic needs such as food, health insurance, housing, and child care (Macartney and Ghertner 2023). For people to be eligible to receive benefits, their household income and/or wealth cannot surpass certain thresholds. The purpose of these policies is to allocate limited resources to households with the greatest need. However, in some cases this creates what is referred to as a benefits cliff, in which increases in wages cause household earnings to decrease by triggering a loss of benefits if household income surpasses the threshold. Benefits cliffs create large disincentives for benefit recipients to accept higher-paying job opportunities.

Recognizing this disincentive, many means-tested benefit programs include a phaseout range, in which benefits slowly reduce as household income rises. For example, after passing an income threshold, recipients of SNAP benefits generally have their benefits reduced by 24 to 36 cents for each additional dollar they earn until they reach zero benefits (Center on Budget and Policy Priorities 2023). In these cases, instead of a cliff, benefit recipients face what is often referred to as an effective marginal tax rate on their income. This means that for each additional dollar they earn, some share of their income is taxed in the form of lost benefits. For the remainder of this report, we refer to this as simply *marginal tax rate* for ease of exposition.

Losing benefits also imposes nonmonetary costs on recipients that can act as a disincentive to work. One especially important concern is that benefits are easier to lose than they are to reclaim. For some benefits, people who stop receiving benefits have to start the application process from scratch. For example, people who exceed the federal income eligibility threshold for child care subsidies (85 percent of the median state income) must reapply if they later become eligible again (45 CFR Part 98). In addition to the burden of reapplication, there is the risk of having an application rejected or spending weeks or months without needed benefits while waiting for an application to be approved. Thus, people might be reluctant to take job opportunities that push them above the eligibility thresholds for their benefits. This can be particularly important if the recipient views the job opportunity as less stable—that is, as having a high likelihood of ending abruptly.

In this study, we use a survey experiment to understand how workers with low incomes consider the potential loss of four means-tested benefit programs in their decisions to accept new job opportunities. We focus on how people consider the amount of the income increase and benefit loss, whether benefits are lost, the stability of the job opportunity, and the process for reapplying for benefits. This will provide critical evidence for policymakers in thinking about how to structure benefit programs, particularly with respect to benefit eligibility phaseout and reapplication requirements.

# A. Background

Economists generally define the marginal tax rate as the share of an income increase that a worker does not receive because it is taxed. Although marginal income tax generally refers exclusively to federal and state income tax, it is often also applied when considering changes in benefits from means-tested programs (Kosar and Moffitt 2017). "Marginal" refers to the fact that the marginal tax rate is calculated as *the amount of tax paid on the change in earnings*, rather than the average tax rate paid for all income.

There is widespread concern that high marginal tax rates facing people with low incomes will disincentivize workers from taking opportunities to increase their earnings (Gruber and Saez 2002, Sherpa 2024). Most of the research trying to estimate the behavioral impacts of changes in the marginal tax rate on earnings for such workers has focused primarily on tax credits. These studies have generally found that the earnings of households with low incomes were sensitive to marginal tax rates. For example, evidence shows households are more likely to report earnings around the refund-maximizing earnings level (Saez 2010; Mortenson and Whitten 2020). This finding is more pronounced for self-employed workers, but it also exists among wage-based workers. Despite at least some workers with low incomes changing earnings in response to marginal tax rates, it is likely that the complicated nature of the tax code and the fact that workers receive most tax credits in a single payment at the end of the year limits this impact.

There is reason to believe that workers with low incomes might respond differently to marginal tax rates in the form of program benefit loss relative to tax credits. First, while tax credits respond directly to an individual's reported income, households have to reapply for most means-tested benefits and risk rejection or delayed access. Second, the ability of workers with low incomes to understand the impact of earnings changes on benefits can differ. Finally, means-tested benefits are not dispersed in the same way as tax credits. Benefits are distributed throughout the year as cash, direct subsidies, or services, whereas tax credits are distributed only once a year. This could change how recipients perceive the benefits of each. As a result, research on the impacts of marginal tax rates driven by tax credits might not reflect the impacts of marginal tax rates driven by benefit loss.

Some research has attempted to understand how benefit recipients consider the potential loss of benefits in their decisions on whether to accept new job opportunities that may increase their earnings. In a survey of 117 families receiving or wait-listed for child care subsidies in Butte County, California, Roll (2018) found that more than one-third of respondents reported taking actions to reduce their earnings to avoid losing benefits, such as not taking a raise at work, not taking on additional hours at work, or not accepting a job offer. A number of studies have attempted to understand, through ethnographic research, how benefit recipients consider potential benefit losses in accepting job opportunities. For example, Holt and Romich (2007) related that benefit recipients may view higher earnings negatively because of the associated loss of resources.

In previous work at the Office of the Assistant Secretary for Planning and Evaluation, Chien and coauthors (2021) explored how benefit loss can affect individual decisions around work through a series of focus groups. They found that benefit recipients took into account that they might lose benefits when considering a higher-paying job opportunity. They also found that focus group respondents were particularly concerned about the stability of a new job opportunity, citing the fact that if earnings later declined, workers with low incomes could find themselves without benefits or sufficient income. This current study builds on the existing literature by using a survey experiment to quantify how marginal tax rates, reapplication processes, and stability of job opportunities influence the decisions of low-income workers to accept job opportunities that will raise their earnings.

### B. Means-tested benefit programs

In this study, we focus on recipients of four means-tested benefit programs that provide resources to millions of American workers with low incomes each year:

- **Child Care Development Fund.** The CCDF program provides child care subsidies to parents with low incomes who have children ages 13 and younger, or 18 and younger if children have special needs. The goal of the program is to help low-income families afford child care.
- **Medicaid.** Medicaid provides health coverage to peoples of all ages with low incomes who are unable to obtain health insurance from another source. Following the Affordable Care Act of 2010, most but not all states (41 states as of August 2024) expanded eligibility to non-elderly adults with incomes below 138 percent of the federal poverty level (Kaiser Family Foundation 2024). Beyond that income level, people in states that expanded Medicaid become eligible to receive Premium Tax Credits from plans purchased on Healthcare.gov. In states that did not expand Medicaid, Premium Tax Credits are available for those with incomes above 100 percent of the federal poverty level.
- **Supplemental Nutrition Assistance Program.** SNAP (formerly known as food stamps) is a nutrition assistance program operated at the state level; the program provides funding for purchasing food to people with low incomes.
- **Temporary Assistance for Needy Families**. TANF provides cash assistance and a range of other benefits and services to families with low incomes who have children. This program is intended to offer a temporary source of income to families who are experiencing financial hardship that prevents them from meeting their basic needs. Note that this study focuses only on the cash assistance portion of TANF.

## C. This study

In this study, we analyze how benefit loss and the conditions surrounding benefit loss affect the decisions of benefit recipients who must decide whether to accept a job with higher earnings. Using a survey experiment, we measure how recipients of means-tested benefits consider the potential benefits and costs of new job opportunities. Specifically, we use the following research questions to examine how three factors, alone and in combination with each other, influence the decision to accept a job opportunity:

- **1.** Among low-income people receiving one or more federal benefits, how important is each of the following factors in the decision to accept (or not accept) a higher-paying job opportunity?
  - a. The potential to lose their benefits, and if they do, how hard it would be to resume them
  - b. The marginal tax rate (the percentage of new earnings that are eroded by lost benefits) and the net income increase (the difference between the dollar value of the earnings increase and the benefit loss)
  - c. The stability of the new job opportunity
- 2. How do the impacts of the factors in Research Question 1 interact, if at all?

- **3.** Do the factors in Research Question 1 have different impacts for different subgroups of the population of benefit recipients? For example, do custodial parents respond more strongly to the ease of reinstatement of their benefits, compared with persons without children in their care? In particular, do impacts vary by the following subgroups:
  - a. Gender
  - b. Respondents with custodial children (ages birth to 17) versus respondents without any resident custodial children
  - c. Race or ethnicity
  - d. Respondents who receive benefits from CCDF, Medicaid, SNAP, or TANF
    - Among respondents who receive both SNAP and Medicaid, does it matter whether an individual sees a vignettes that includes SNAP alone, Medicaid alone, or both SNAP and Medicaid?
- **4.** Are there any factor-by-factor by subgroup interactions? (For example, if the risk of losing a job is high, people are more willing to accept a higher paying job opportunity if they can easily get their benefits reinstated; is this effect stronger for custodial parents than for others?)

To answer the research questions, the study team tested how people respond to different hypothetical employment opportunities using a survey instrument with three sections. The first section contained baseline demographic questions. The second was a task in which respondents reviewed a series of five vignettes describing a fictional person trying to make a decision about a new job opportunity, then answered questions about them. In each vignette, the fictional character was considering a new position offering higher pay but the same hours. The third part asked respondents whether they had ever made decisions in order to keep benefits.

We analyze responses to the survey to assess how each of the experimental factors impacts the share of respondents who accept a new job opportunity with higher pay.<sup>2</sup> We also evaluate how these impacts vary for different types of participants and those receiving different benefits. By presenting respondents with a simplified description of a choice facing benefit recipients, we are able to isolate the impact of each individual factor. However, we also note that in order to isolate the impact of the experimental factors, we described a set of new job opportunities that include similar responsibilities but new positions. In the real world, increased earnings often come with more hours or through a raise for the same job, and therefore require different considerations.

This report presents the results of the survey and describes how these results can support future policymakers. Section II describes the study methods. Section III presents the results of the survey, and Section IV discusses our findings and their implications for policy design. The Technical Supplement to this report includes the full survey instrument, additional details on the methods that we used to analyze survey data, an analysis of the sensitivity of the estimates to different assumptions and analytical approaches, and supplemental tables.

<sup>&</sup>lt;sup>2</sup> We discuss opportunities as "higher-paying job opportunities" because in our survey we describe only scenarios in which a fictional character is already employed and is considering whether to take a job with higher earnings.

# II. Methods

## A. Survey instrument

To understand how benefit recipients weigh the potential risks and benefits of additional earnings, we used a survey experiment known as a *discrete choice experiment*, which elicits individual preferences by asking respondents to choose between a set of options within hypothetical scenarios (Aguirregabiria and Mira 2010). Discrete choice experiments are a well-established strategy for measuring individual preferences when revealed preferences are difficult to assess using real-world data. Although discrete choice experiments cannot fully capture the complex considerations of real-world settings, numerous studies have shown their ability to meaningfully represent real-world preferences (Lancsar and Swait 2014; Haghani et al. 2021).

In this study, we estimated respondents' preferences with respect to accepting opportunities to increase earnings in the face of benefit loss and uncertainty. Our main results were estimated using responses to questions following a series of vignettes. The vignettes presented respondents with five of six possible unique fictional characters, each facing a different higher-paying job opportunity; the characters were selected at random and presented in random order. Each vignette described a hypothetical person faced with a decision about whether to accept a new job opportunity that would increase their earnings. In each vignette, the person is currently employed, receives at least one government benefit, and has an opportunity to take a new position—either with the same employer or with a different employer—that would increase their earnings. The vignette also offered details on the individual's circumstances and the opportunity. The survey then asked respondents whether they believed the individual should accept the new opportunity. Figure II.1 shows an example of the vignette that a survey respondent might encounter. The full survey instrument is in the Technical Supplement.

### Figure II.1. Example of a survey vignette

Angel is in her thirties and is married.

Angel works at a landscaping company, where she earns about \$2,100 per month. Angel also receives SNAP from the government. She is the only person earning money in their household.

Recently, Angel was offered a new job as a groundskeeper at a golf course. The job has the same hours but pays more and would increase her income by \$300 per month.

The higher income would cause Angel to lose all their food stamps, which is worth \$100 per month.

Angel could always go back to her old job if things didn't work out. If this happened, Angel would have to go through the reapplication process for SNAP again, including filling out all the paperwork and waiting for approval.

Angel is trying to decide whether to take the job. People who work there never seem to last long.

Below is a summary of how Angel's situation might change if she takes the new job.

Feature	Difference between old job and new job
Monthly income increase	\$300
Lost value of monthly SNAP benefits	\$100
Likelihood of losing the new job, and having to go back on her original, lower income	Likely
Getting SNAP back	Requires re-application

To understand how key aspects of the new job opportunity affect respondents' decisions, we systematically varied key characteristics of the jobs presented in each vignette. The treatment arms varied with respect to three factors:

- **1.** Benefit loss and ease of resuming benefits. Each treatment arm included one of three levels of benefits loss: no benefit loss, automatic reinstatement of benefits, or having to reapply.
- 2. Risk of losing the job with higher pay. Each vignette described a new job opportunity assigned either a high or low risk of losing the earnings increase. These descriptions were specific to the described scenario, each describing a job as either highly stable or less stable.
- **3. Earnings increase and benefit loss.** Each treatment arm included one of three potential monthly earnings increases and an associated benefit loss. For each combination, we present the changes to net earnings and marginal tax rate (Table II.1). Note that benefit loss values were chosen to maximize our ability to examine the effects of marginal tax rates and net income increases. In the real world, the value of benefits include many factors such as household size, household income, and health/child care utilization.

#	Earnings increase (\$)	Benefit loss (\$)	Net income increase (\$)	Marginal tax rate (benefit loss/earnings Increase)
1	300	100	200	0.33
2	650	450	200	0.69
3	750	250	500	0.33

### Table II.1. Three combinations of monthly earnings increase and benefit loss

The benefits described in the vignette are consistent with the benefit(s) (CCDF, Medicaid, SNAP, and TANF) the respondents themselves receive. For respondents who receive only one benefit, all the vignettes were about people who received that benefit. To help us assess how individuals perceived the loss of multiple benefits relative to just one, some respondents who received both Medicaid and SNAP were shown vignettes in which the individual described receives both Medicaid and SNAP.

# B. Data collection

We recruited participants using a blended sample of a nationally representative sample and opt-in nonprobability samples. Our probability sample (66 percent of our sample) was drawn from NORC's Amerispeak panel, which comprises a set of randomly selected U.S. households. The non-probability sample (34 percent of our sample) was collected using opt-in samples maintained by survey research companies. The survey was fielded between January 2024 and February 2024. Participants completed the survey on the web.

Following our preregistered analysis plan, we excluded respondents who presented data-quality problems. Specifically, we excluded those who failed factual manipulation checks included in the study and respondents who indicated that their data should not be included in our analysis. Factual manipulation checks are questions that assess the respondent's understanding of the basic facts of the vignette (Kane and Barabas 2019). In our survey, we asked respondents three comprehension questions, and we excluded respondents (n = 54) who answered all questions incorrectly. We also excluded respondents (n = 208) who indicated that we should exclude their responses from the analysis. The final

analytic sample totaled 1,804 responses. See the Technical Supplement for a more detailed description of data collection.

## C. Sample

Our primary analysis sample consisted of 1,804 current or previous benefit recipients. Table II.2 describes the characteristics of the sample. Females comprised nearly three-quarters of the sample (74 percent). Slightly over half of the sample (53 percent) identified as non-Hispanic White, with most of the rest identifying as either non-Hispanic Black (21 percent) or Hispanic (19 percent). Our sample was well educated relative to the general population of adults receiving benefits (Ma et al. 2019). Only six percent of the sample did not complete high school, and only 32 percent had a high school degree or GED but no postsecondary education. Seventy-two percent of our sample lived with at least one child. Most of the sample was employed (71 percent), with another 19 percent looking for work.

Overall, respondents accepted 75 percent of the opportunities presented in the survey, with some noticeable differences across respondents by characteristic (Table II.2). Female respondents accepted fewer job opportunities than male respondents (by four percentage points). Respondents who identified as non-Hispanic White accepted more opportunities than those who identified as non-Hispanic Black and Hispanic. Respondents with at least some post-secondary education and higher income also accepted a larger share of job opportunities.

Characteristic	Respondents	Share of respondents	Share of job opportunities accepted
Total	1,804	100%	75%
Age			
< 20	20	1%	81%
20–29	231	13%	72%
30–39	666	37%	76%
40-49	519	29%	74%
50+	368	20%	78%
Gender			
Male	449	25%	78%
Female	1,341	74%	74%
Other or missing	14	1%	77%
Race and ethnicity			
Non-Hispanic White	953	53%	77%
Non-Hispanic Black	376	21%	73%
Hispanic	339	19%	72%
Mixed or other	136	8%	76%
Marital status			
Married	561	31%	76%

### Table II.2. Characteristics of the survey sample

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Characteristic	Respondents	Share of respondents	Share of job opportunities accepted
Cohabitating	338	19%	74%
Not married or cohabitating	905	50%	75%
Household composition	1		
No residential children	504	28%	76%
Residential children	1,300	72%	75%
Education	'		
Less than HS	113	6%	74%
HS diploma or GED	572	32%	73%
Some college or vocational courses	557	31%	78%
College or vocational degree	562	31%	76%
Health			
Excellent or very good	525	29%	74%
Good or fair	1,148	64%	76%
Poor or very poor	131	7%	79%
Employment			
Currently employed	1,276	71%	76%
Not employed but looking	350	19%	76%
Not employed or looking	178	10%	72%
Household income			
Less than \$10,000	415	23%	74%
\$10,000-\$19,999	402	22%	72%
\$20,000-\$29,999	514	28%	77%
\$30,000–\$49,999	368	20%	77%
\$50,000 or more	105	6%	81%
Benefits received (not mutually exclusive; one re	espondent may recei	ive more than one p	rogram)
CCDF (current and former recipients)	372	21%	73%
Current recipients only	185	10%	72%
Medicaid (current and former recipients)	1,690	94%	75%
Current recipients only	1,453	81%	74%
SNAP (current and former recipients)	1,619	90%	75%
Current recipients only	1,100	61%	75%
TANF (current and former recipients)	626	35%	79%
Current recipients only	269	15%	76%

Source: Understanding Economic Risk for Low-Income Families survey data.

CCDF = Child Care and Development Fund; SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families.

Overall, 39 percent of survey respondents reported that they had made a life decision in order to keep their benefits (Table II.3). The most common decisions were not increasing hours at work to preserve benefits (15 percent) or not taking a new job (15 percent).

Life decision	Respondents	Share of respondents
Total	1,749	100%
Ever made a life decision to keep benefits	675	39%
Did not increase hours at work	267	15%
Did not take a new job opportunity	256	15%
Did not take a raise at work	168	10%
Did not get married	148	8%
Did not accept child support payment	51	3%
Something else	170	10%

### Table II.3. Share of respondents who made a life decision in order to preserve benefits

Source: Understanding Economic Risk for Low-Income Families survey data.

Note: Respondents were asked to report all options that applied. Analysis excludes 55 respondents who skipped the relevant questions.

## **D.** Analysis methods

To analyze the data, we used a Bayesian hierarchical model to account for respondent characteristics and to model the effects of the factors and the interaction of the factors with each other and respondent subgroups. We chose a Bayesian model for three reasons. First, it enables us to detect smaller effects in a smaller sample relative to traditional frequentist approaches. This is accomplished via the concept of partial pooling, whereby each individual estimate adapts to what the model learns about other estimates (Gelman et al. 2012). Second, it allows us to make probabilistic statements about our estimates, which tend to be more easily understood than statements about statistical significance. Last, the Bayesian priors<sup>3</sup> obviate any concerns about multiple comparisons, enabling us to explore high-level interactions without worrying about spurious conclusions (Gelman et al. 2012).

We estimate impacts by fitting a linear probability model where the outcome is an indicator for whether the respondent accepted the higher-paying job opportunity. To fit the model, we use a hierarchical approach to model the main effects of each factor, as well as their interactions with each other and the vignette characteristics. We estimate interactions using the structured approach that Si and coauthors (2020) advocate, which intuitively sets a prior for each interaction based on the scale of the constituent main effects as well as on the relative scale of other interactions of the same order (for example, the model learns that interactions in general are smaller than main effects, and that higher-order interactions are smaller). This enables us to estimate interactions all the way up to the fourth order without chasing the noise inherent to such fine-grained effects, something that would not be possible in a frequentist framework. We also adjust for second-order characteristics of the vignette such as the scenario and the order in which it was seen, observed respondent characteristics (such as income), and model respondent unmeasured characteristics via a respondent random effect.

The four benefits covered in this survey vary substantially in the types of support provided, the reapplication process, and the restrictions on benefit receipt. Thus, it follows that respondents may feel

<sup>&</sup>lt;sup>3</sup> A Bayesian prior represents our initial beliefs or assumptions about a parameter before we observe any data, which will determine how new information will update those beliefs through Bayesian inference.

differently about the potential of losing different benefits. Similarly, respondents may feel differently about losing multiple benefits than they do about losing a single benefit. We therefore analyzed the impact of benefit loss by benefit type. To most closely reflect the recipients of each benefit, we estimated benefit-specific impacts for the current recipients of each benefit program.<sup>4</sup> For ease of discussion, we describe program-specific impacts as the impact of each program on beneficiaries. For example, we describe the impact of losing TANF as the impact of benefit loss on TANF beneficiaries, although many TANF beneficiaries also receive other benefits. Finally, we weighted the sample to reflect the population of beneficiaries of each program.

Finally, we describe how the impacts of the experimental factors differ across subgroups of respondents defined by their characteristics. Specifically, we analyze how our results vary by gender, race/ethnicity, and whether the respondent lives with dependent children.

See the Technical Supplement for a more detailed description of analysis methods.

<sup>&</sup>lt;sup>4</sup> We estimated benefit-specific results using a slightly modified version of our main model, which includes a term for whether or not the respondent currently receives the benefit discussed in the vignette. We interact this term with all experimental factors and report results using the estimated effects specific to current recipients. Because of our Bayesian partial pooling, we are still able to include all 1,804 respondents, and we allow the data to speak to how results differ for current versus past recipients.

# III. Results

In this section, we present the results of our survey, focusing on the impacts that each of our three experimental factors had on whether a respondent recommended that the fictional character described in the vignette accept the job opportunity. For ease of exposition, we describe the respondents as accepting an opportunity when they recommend that the fictional character accept it. Note that given that broad range in individual considerations that are not captured in this survey, we feel the strongest value in this research lies in the differences between factor levels, rather than in the actual percentage acceptance rates for each combination of factors.

All results presented here are based on the Bayesian regression analysis described in the previous section. This approach enabled us to estimate the impact of each factor, given the data. We present these results as regression-adjusted averages—the equivalent of the most likely impact levels—holding constant the values of other covariates. We also report the probability that an impact falls within a specified range. For example, we report the probability that the true impact is greater than zero, greater than five percentage points, or greater than 10 percentage points.

Throughout the report, we refer to results as being "highly likely" if there is at least a 90 percent chance of it being true. For example, we would say that an impact is highly likely to be greater than five percentage points if there is a greater than 90 percent chance that the impact is greater than five percentage points. Similarly, we refer to results as being "likely" if there is at least an 80 percent change of it being true. For simplicity, we refer to results that fall short of 80 percent as being not certain. For example, if a difference is estimated to have a 60 percent probability of exceeding five percentage points, we would write that it is not certain that the difference is at least five percentage points. In many instances, we may want to present our certainty of the direction of a difference. If we find that the probability that an impact in the reported direction is less than 80 percent, we describe the direction of the impact as not being certain. Unless we specify otherwise, all results discussed in the text are highly likely (> 90 percent) to be different than zero in the direction of the result presented. For example, if we state that the share of respondents who would accept a job is 19 percentage points higher when the benefit recipient would not lose their benefits, this also means there is at least a 90 percent chance that this impact is positive, unless we state otherwise.

# A. Analysis of experimental factors

We found that all three factors were highly likely to have strong and policy-relevant impacts on the fraction of respondents accepting a job opportunity. These factors also interacted with each other to influence acceptance rates. That is, the influence each factor had on acceptance rates depends on the other factor levels it was paired with. In aggregate, these patterns demonstrate that people become more discriminating about the job opportunities they will accept when doing so may result in a benefit loss. That is, they accept fewer offers overall and become sensitive to the wages and marginal tax rates of the opportunity. These patterns are magnified for jobs that are unstable (i.e., have a higher risk of not working out).

Table III.1 presents average acceptance rates for respondents across all three factors that illustrate the combined effects of these patterns. In this section, we explore in detail how each of the three

experimental factors impacted respondents' likelihood of accepting an opportunity. We further explore how these impacts vary by respondent characteristics and benefit program. To demonstrate that the impact estimates are present before using regression adjustment, we begin by showing acceptance rates as raw averages in Table III.1. This table shows the share of respondents that accepted job opportunities with each combination of factors. For example, we see that 95 percent of respondents accepted an offer of a \$750 earnings increase for a stable opportunity with no benefit loss. In contrast, only 45 percent of respondents accepted an offer for a \$650 earnings increase for an unstable opportunity with \$450 of lost benefits that could be resumed only by reapplying. We note that there are only minor (generally less than one percentage point) differences between the unadjusted and regression-adjusted estimates presented in Table III.1. For the rest of this section, we present results as regression-adjusted averages, which use the Bayesian regression model to control for vignette and respondent characteristics.

	Unsta	able job opportu	nity Stable job opportunity			
Earnings increase (benefit loss)	No benefit loss	Automatic reinstatement	Have to reapply	No benefit loss	Automatic reinstatement	Have to reapply
\$750 earnings increase (\$250 loss)	77%	78%	66%	95%	85%	84%
\$650 earnings increase (\$450 loss)	77%	58%	45%	94%	80%	71%
\$300 earnings increase (\$100 loss)	74%	66%	54%	94%	84%	76%

**Table III.1.** Likelihood of accepting a higher-paying job opportunity, by each of three experimental factors

Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: This table presents the average (unadjusted) acceptance rate.

### 1. Benefit loss and ease of resuming benefits

### **Key findings:**

- Respondents were more likely to accept a higher-paying job when they knew that lost benefits could be automatically resumed, compared to when they would have to reapply for benefits.
- CCDF recipients were less likely than recipients of TANF, Medicaid, and SNAP to accept a higher-paying job that would lead to a benefit loss.
- Women were less likely than men to accept a higher-paying job that would lead to benefit loss.
- The impact of benefit loss on the share of respondents who accepted a job was larger for respondents who identified as non-Hispanic Black and Hispanic when they were told that lost benefits could be automatically resumed, compared with respondents who identified as non-Hispanic White. In contrast, the impact of benefit loss was similar across races/ethnicities when benefits would require reapplication, suggesting that there is something about benefits being automatically resumed that is perceived differently across respondents.

Not surprisingly, we found that benefit recipients accepted fewer opportunities when they faced benefit loss. However, the ease of resuming benefits, once lost, mattered a great deal for a participant's likelihood of accepting a new higher-paying job opportunity. When participants were told they would be able to automatically resume lost benefits if their income fell, their likelihood of accepting the higher-paying job opportunity was nine percentage points higher than when participants were told they would have to

reapply for benefits (Table III.2.). Knowing that benefits could be easily resumed, if needed, greatly increased participants' likelihood of accepting a higher-paying job opportunity. Note that automatic reinstatement of benefits is not the current policy practice, but rather a hypothetical scenario that is being explored in this study.

Conditio	on 1	Conditio	on 2	Average difference in acceptance rates		
Benefit loss type	Acceptance rate	Benefit loss type	Acceptance rate	Mean	SD-P	
No benefit loss	85%	Have to reapply	67%	19 рр	1 рр	
No benefit loss 85%		Automatic reinstatement	76%	10 рр	1 рр	
Automatic reinstatement	76%	Have to reapply	67%	9 pp	1 pp	

Table III.2.	Impacts of	benefit loss	/ease of	resumina	benefits or	n hiaher-i	oaving	iob accer	tance rates
			00.000						

Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: This table presents the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values.

pp = percentage points.

SD-P = posterior standard deviation. This is the standard deviation of the Bayesian posterior distribution. It is a measure of statistical uncertainty, analogous to the standard error reported from traditional frequentist models.

# a. Impacts of benefit loss/ease of resuming benefits, by benefit program described in the survey vignette

CCDF recipients were the most sensitive to losing benefits whereas TANF recipients were the least sensitive to losing benefits. Relative to no benefit loss, respondents accepted fewer job opportunities if they were going to lose the benefit and would have to reapply for it (CCDF, 26 percentage points; Medicaid, 24 percentage points; SNAP, 18 percentage points; and TANF, 13 percentage points) (Figure III.1). This may reflect the fact that CCDF and Medicaid provide sustained support to beneficiaries, whereas TANF is a temporary measure. Also, although the benefit amounts were held constant across the different programs, it is possible that respondents somehow felt the dollar amounts were higher for CCDF and Medicaid than for TANF, reflecting the real-world benefit amounts associated with these programs.

The impact of losing both Medicaid and SNAP and having to reapply was 20 percentage points, which was between the impact of losing just Medicaid (24 percentage points) and the impact of losing just SNAP (18 percentage points). Note that the dollar value of loss is the same regardless of the number of benefits lost). This runs counter to the hypothesis that someone who would need to reapply to two separate benefit programs might be more discouraged from accepting a job than someone who would only have to reapply to one program. The additional burden of having to reapply to two programs seems to matter less to respondents than the amount and nature of the benefits. This may be driven, at least in part, by the

fact that some states (28 as of May 2024) have combined applications for SNAP and Medicaid (Kaiser Family Foundation 2024).<sup>5</sup>

We present the full set of probabilities of differences by benefit programs in Exhibits TS.9 and TS.10 in the Technical Supplement.





Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: This graph presents the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent who was a current recipient of the benefit program will recommend accepting the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values. The height of each bar represents the mean acceptance rate. The error bars show the 90 percent likelihood range.

CCDF = Child Care and Development Fund; SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families.

<sup>&</sup>lt;sup>5</sup> Similarly, 28 states have combined applications for Medicaid and TANF and 15 states have combined applications for Medicaid and child care subsidies. Future work could test the hypothesis that there may be differences between preferences from respondents in states with and without combined applications.

### b. Impacts of benefit loss/ease of resuming benefits, by respondent characteristics

Female respondents were more sensitive to losing benefits than male respondents, both when they would have to reapply for benefits and with automatic reinstatement. Despite similar rates of accepting jobs with no benefit loss, having to reapply for benefits led to a 20 percentage point drop in the share of female respondents accepting a job opportunity relative to only 15 percentage points for men (Figure III.2.a). In contrast, the estimated impact of benefit loss was similar (less than one percentage point difference) between respondents with and without residential children (Figure III.2.b). We note that because the results are presented as regression-adjusted averages, these differences are holding constant other factors that we control for in the regression. This means that, for example, differences between males and females are not driven by differences in parental status or benefit type.

Differences in the likelihood of accepting higher-paying job opportunities when no benefits would be lost were small across race/ethnicities, with acceptance rates ranging from 84 to 86 percent likelihood (Figure III.2.c). Similarly, when people have to reapply for benefits, there were small differences across race and ethnic groups in the likelihood of accepting a higher-paying job opportunity, with acceptance rates from 64 to 67 percent. However, when benefits could be automatically resumed, differences by race/ethnicity were more pronounced: 78 percent of non-Hispanic White respondents accepted each higher-paying job opportunity when benefits would be automatically reinstated, compared to 71 percent of Hispanic respondents and 73 percent of non-Hispanic Black respondents.

We present the full set of probabilities of differences by respondent characteristics in Exhibits TS.11 and TS.12 of the Technical Supplement.



**Figure III.2.** Higher-paying job acceptance rates by benefit loss/ease of resuming benefits and by respondent characteristics

100%



b. Presence of residential children

Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Black

Note: These graphs present the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values. The height of each bar represents the mean acceptance rate. The error bars show the 90 percent likelihood range.

White

Other

#### 2. Net income increase and marginal tax rates

### **Key findings:**

- With lower marginal tax rates, respondents were more likely to accept a higher-paying job—even compared to another situation with the identical net income increase.
  - Respondents were seven percentage points more likely to accept a job opportunity offering \$300 in additional monthly earnings with a \$100 decrease in benefits than a job opportunity offering \$650 in additional monthly earnings with a \$450 decrease in benefits, despite the two opportunities offering the same net income increase.
- With higher net income increases, respondents were more likely to accept a higher-paying job—even compared to another situation with the identical marginal tax rate.
  - Respondents were nine percentage points more likely to accept a job opportunity offering \$750 in additional monthly earnings with a \$250 decrease in benefits than a job opportunity offering \$300 in additional monthly earnings with a \$100 decrease in benefits, despite the two opportunities having the same marginal tax rate.
- The impact of both net income increase amount and marginal tax rates were smaller for TANF recipients than recipients of other benefits, in particular, compared to CCDF and Medicaid recipients.
- Women were less likely male respondents to accept a higher-paying job when faced with lower net income increases and higher marginal tax rates; under the most favorable condition (\$750 increase and \$250 benefit loss) there were no gender differences.

Next, we discuss how the earnings increase and benefit loss levels impacted respondent willingness to accept a higher-paying job opportunity. For this section, we limit this discussion to vignettes that described an individual who would lose benefits (that is, "no benefit loss" is excluded).

The goal of this aspect of the analysis is to inform policymakers' understanding of how sensitive benefit recipients are to the net income increase (i.e., the earnings increase minus the benefit loss) and the marginal tax rate that the benefit loss represents. To assess this, we included three pairings of earnings increase and benefit loss. These included two earnings increase–benefit loss combinations with a marginal tax rate of 33 percent (low) but different net income increases (\$750 gain and \$250 loss; \$300 gain and \$100 loss). The third combination (\$650 gain and \$450 loss) had a marginal tax rate of 69 percent (high), but the same net income increase as the \$300 gain and \$100 loss condition. This allowed us to better understand how respondents reacted to changes in their net income increase and the marginal tax rate.

Our respondents were similarly sensitive to the net income increase and the marginal tax rate of a potential job opportunity. When facing the same marginal tax rate, the share of respondents who accepted a job opportunity was nine percentage points higher when it was associated with a \$500 net income increase (\$750–\$250) rather than a \$200 net income increase (Table III.3). However, net income was not the only thing that respondents cared about. The share of respondents who accepted a job opportunity was also seven percentage points higher for an opportunity offering a \$200 increase in net income (\$300–\$100) if it was associated with a low marginal tax rate rather than a high marginal tax rate (\$650–\$450). It is worth noting that in the high marginal tax rate scenario, respondents also faced the highest level of benefit loss. Therefore, this may represent an overall aversion to losing larger amounts of benefits.

# **Table III.3.** Impacts of net income increase and marginal tax rate on higher-paying job opportunity acceptance rates

Ear	nings incre	is 1	Earr	nings increa	ise—Los	s 2	Difference		
Earnings increase and benefit loss	Net income increase	Net         Earnings         Net           income         Acceptance         increase and         income         Acceptance           ncrease         MTR         rate         benefit loss         increase         MTR         rate		Mean	SD-P				
\$750, \$250	\$500	33%	79%	\$300, \$100	\$200	33%	70%	9 pp	1 pp
\$750, \$250	\$500	33%	79%	\$650, \$450	\$200	69%	64%	15 pp	1 рр
\$300, \$100	\$200	33%	70%	\$650, \$450	\$200	69%	64%	7 рр	1 рр

Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: This table presents the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values.

MTR = marginal tax rate; pp = percentage points; SD-P = posterior standard deviation. This is the standard deviation of the Bayesian posterior distribution. It is a measure of statistical uncertainty, analogous to the standard error reported from traditional frequentist models.

# a. Impacts of net income increase and marginal tax rates by benefit program described in the survey vignette

We assessed how the impact of differences in the level of the increase in earnings and the benefit loss amount varied across the benefit programs in our study.

TANF recipients were the least sensitive to changes in earnings level and value of benefits lost, whereas CCDF recipients were the most sensitive. This pattern was consistent with the program-based differences in respondents' sensitivity to the loss of benefits. Across all benefit groups, the largest share of respondents accepted a job that offered \$750 in additional earnings with \$250 in lost benefits, whereas the smallest share accepted a job that offered \$650 in additional earnings with \$450 in lost benefits (Figure III.3). However, the degree of the difference in acceptance rates differed across programs. TANF recipients were eight percentage points less likely to accept a job in the \$750–\$250 condition than the \$650–\$450 condition relative to a 19 percentage-point difference for CCDF recipients. The impacts for SNAP, Medicaid, and Medicaid and SNAP were in between the other two programs.

We present the full set of results, by benefit programs, in Exhibits TS.12 and TS.13 of the Technical Supplement.





Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: This graph presents the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent who was a current recipient of the benefit program will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values. The height of each bar represents the mean acceptance rate. The error bars show the 90 percent likelihood range.

▲ = Earnings increase; ▼ Benefit loss; CCDF= Child Care and Development Fund; SNAP= Supplemental Nutrition Assistance Program; TANF= Temporary Assistance for Needy Families.

### b. Impacts of net income increase and marginal tax rates, by respondent characteristics

As with benefit loss, female respondents were more sensitive to changes in both net income increase and marginal tax rates. For opportunities offering a \$750 earnings increase with a \$250 loss of benefits, male and female respondents had similar rates of acceptance (80 percent and 79 percent, respectively). However, among female respondents, 10 percentage points fewer accepted job opportunities with a lower net earnings increase (\$300 earnings increase and a \$100 loss of benefits), compared to six percentage points fewer among male respondents (Figure III.4.a). Similarly, female respondents were more sensitive to changes in marginal tax rates, although this difference only met our threshold for being likely (but not highly likely). The fraction of females responding that they would accept an opportunity was seven percentage points higher for the lower marginal tax rate. For males, this difference was five percentage points. Respondents with residential children were also more sensitive to changes in net

income and marginal tax rate than those without residential children, although the differences were smaller than differences between genders (Figure III.4.b).

We present the share of respondents accepting a higher-paying job by race/ethnicity and by increase/loss conditions in Figure III.4.c. Differences by race/ethnicity do not reveal a consistent pattern in how respondents reacted to differences in marginal tax rates or net income increases.

We present the full set of probabilities of differences by respondent characteristics in Exhibits TS.15 and TS.16 of the technical supplement.







b. Presence of residential children

Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: This graph presents the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent who was a current recipient of the benefit program will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values. The height of each bar represents the mean acceptance rate. The error bars show the 90 percent likelihood range.

<sup>▲ =</sup> Earnings increase; ▼ Benefit loss;

### 3. Job stability

### **Key findings:**

- Respondents were 18 percentage points more likely to accept a higher-paying job that was characterized as stable than a job opportunity that was characterized as unstable.
- Respondents who identified as non-Hispanic Black were less deterred by jobs presented as unstable, compared to respondents who identified as Hispanic or non-Hispanic White.

Last, we discuss the impact of the stability of a job opportunity (i.e., the risk of it not working out) on respondents' willingness to accept it. For each job, we present the opportunity as either having a high or low likelihood of working out. Our results showed that respondents were very sensitive to the stability of an opportunity, with an 18 percentage point higher share of respondents accepting stable opportunities (low risk of job loss) than unstable opportunities (high risk of job loss) (Table III.4).

### Table III.4. Impacts of job stability on higher-paying job acceptance rate

Job st	ability	Difference		
Stable	Stable Unstable		SD-P	
85%	67%	18 рр	1 рр	

Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: This table presents the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values.

pp = percentage points; SD-P = posterior standard deviation. This is the standard deviation of the Bayesian posterior distribution. It is a measure of statistical uncertainty, analogous to the standard error reported from traditional frequentist models.

### a. Impacts of job stability by benefit program described in the survey vignette

We found that the impact of the stability of an opportunity was similar across all benefit programs. Across all programs, benefit recipients were 17 to 19 percentage points more likely to accept a job opportunity that was presented as stable than they were to accept job opportunities presented as unstable (Figure III.5).

We present the full set of probability of differences by benefit programs in Exhibits TS.17 and TS.18 of the Technical Supplement.





Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: This graph presents the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values. The height of each bar represents the mean acceptance rate. The error bars show the 90 percent likelihood range.

CCDF = Child Care and Development Fund; SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families.

#### b. Impacts of job stability, by respondent characteristics

The impact of job stability on whether respondents accepted a job opportunity was similar for respondents of different genders and respondents with and without residential children (Figure III.6, panels a and b). Respondents who identified as non-Hispanic Black were less sensitive to the differential risks of job loss than those who identified as non-Hispanic White and Hispanic. Respondents who identified as non-Hispanic Black respondents were only 13 percentage points less likely to accept an unstable job opportunity relative to 20 percentage points for those identifying as non-Hispanic White respondents and 20 percentage points for those identifying as Hispanic (Figure III.6.c).

We present the full set of results by respondent characteristics in Exhibits TS.19 and TS.20 of the Technical Supplement.



85%

Stable

Residential children

I

67%

Unstable

85%

Stable

No residential children



60% 50%

40%

30% 20% 10% 0% 67%

Unstable



Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: These charts present the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values. The height of each bar represents the mean acceptance rate. The error bars show the 90 percent likelihood range.

## **B.** Analysis of factor interactions

In this section, we analyze how the three study factors interact with each other to affect whether respondents accept a higher-paying job. We note that we did not find any patterns in the differences in impacts of factor interactions across groups of respondents by benefit type, gender, race and ethnicity and parental status. Put differently, there were no factor by factor by subgroup interactions which told a consistent story.

### 1. Benefit loss/ease of resuming benefits and net income increase/marginal tax rates

### **Key finding:**

 Automatic reinstatement of benefits made people more likely to accept a higher-paying job opportunity, even in the face of high marginal tax rates and small net income increases (compared to the condition where people have to reapply for benefits).

Not surprisingly, when benefits would not be lost, acceptance rates were uniformly high across earnings levels (Figure III.7). In contrast, when respondents would lose benefits and have to reapply to resume them, respondents became extremely sensitive to the different earnings increase/benefit loss conditions: respondents were less likely (by 17 percentage points) to accept a higher-paying job for the least favorable condition (\$650 earnings increase, \$450 benefit loss) than for the most favorable condition (\$750 increase, \$250 benefit loss).

However, when respondents were able to automatically resume benefits if needed, they became not only overall more likely to choose a higher-paying job, but also less sensitive to the various earnings increase

conditions. Respondents who were able to automatically resume benefits were only 13 percentage points less likely to accept a higher-paying job for the least favorable condition (\$650 earnings increase, \$450 benefit loss) than for the most favorable condition (\$750 increase, \$250 benefit loss). We saw earlier that automatic reinstatement of benefits made people overall more likely to accept a higher-paying job opportunity, compared to having to reapply for benefits. Here we see that automatic reinstatement of benefits also made people more inclined to accept higher-paying job opportunities that involve high marginal tax rates and small net income increases (compared to the condition where people have to reapply for benefits).





Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: These charts present the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values. The height of each bar represents the mean acceptance rate. The error bars show the 90 percent likelihood range.

#### 2. Benefit loss/ease of resuming benefits and job stability

### **Key finding:**

 Automatic reinstatement of benefits (compared to having to reapply for benefits) made respondents more willing to accept a higher-paying job, even if the job was less stable. Knowing that benefits could be automatically resumed at a later time also made people more willing to accept higher-paying job opportunities that were less stable. When benefits would have to be reapplied for once they had been lost, respondents were 21 percentage points less likely to accept an unstable job than a stable job (Exhibit III.8). In comparison, when benefits would be automatically resumed, respondents were only 15 percentage points less likely to accept an unstable job. This suggests that automatic reinstatement of benefits could make job instability more tolerable because individuals know that if a job didn't work out, they would still have benefits to fall back on.





Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: These charts present the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values. The height of each bar represents the mean acceptance rate. The error bars show the 90 percent likelihood range.

### 3. Net income increase/marginal tax rates and job stability

### **Key finding:**

• More stable job opportunities (compared to less stable job opportunities) made people more likely to accept a higher-paying job in spite of high marginal tax rates and low net income increases.

When the earnings increase is from an unstable job, people were very sensitive to different marginal tax rates: respondents were less likely (by 20 percentage points) to accept a higher-paying job opportunity for the least favorable condition (\$650 earnings increase, \$450 benefit loss) than for the most favorable condition (\$750 increase, \$250 benefit loss). When the earnings increase is from a more stable job, the difference in likelihood of accepting the most versus the least favorable earnings increase/benefit loss condition was much smaller, 11 percentage points (Figure III.9).





Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: These charts present the results of a Bayesian hierarchical linear probability model of the likelihood that a respondent will accept the new job. The model controls linearly for respondent covariates such as age, education, and vignette order and uses random effects to model the effects of factors, subgroups of interest, and each level of their interaction. Reported acceptance rates are presented as a posterior mean of regression-adjusted values. The height of each bar represents the mean acceptance rate. The error bars show the 90 percent likelihood range.

## C. Sensitivity analyses

Although we preregistered our plan for analyzing the survey data, we wanted to understand how robust our findings were to the design choices we had made. Therefore, we ran a series of sensitivity analyses to understand how the results changed if we made a different set of decisions. First, we considered how results would change if we applied a stricter rule for removing participants who had failed our factual manipulations checks. We also considered how results would change if we included all participants who completed the survey, with no exclusion criteria for the quality of responses. Finally, to understand the impact of our blended sample, we also ran the analyses limiting our analysis only to the Amerispeak probability sample. The results of all these analyses were consistent with the key takeaways from our main analyses. We present the full results of these sensitivity analyses in section III.A of the Technical Supplement.

To illustrate how the Bayesian analysis shaped the impact results, we also ran results using a traditional frequentist regression approach. The results of the frequentist analyses confirmed the results of the Bayesian analyses for all factor-level impacts and key findings by subgroup and factor interactions, although these analyses had significantly less power and thus estimates were less precise. We present the results of the frequentist analyses in section III.B of the Technical Supplement.

## D. Open-ended responses

To better understand how respondents made recommendations about whether to accept a higher-paying job opportunity, we included an open-ended question asking why a respondent decided to accept or not accept a job opportunity, which helped us contextualize our findings. To analyze these data, we first scanned open-ended responses for common themes. We then reviewed all responses and categorized them according to these themes. We present the results of this in Table III.5.

Reason for decision	Respondents	Share	
Recommended accepting			
Increased income	987	80%	
No benefit loss	213	17%	
Career benefits	212	17%	
Low risk—can always go back to old job	121	10%	
Can always get benefits back	100	8%	
Negative feelings about benefit use	84	7%	
Other reason	63	5%	
Total	1,229	100%	
Recommended not accepting			
Risk of losing the job	192	50%	
Benefit would be lost	145	38%	
Not enough money to be worth it	92	24%	
Value of benefits is too high to lose	55	14%	
Reapplication process	55	14%	
Other reason	49	13%	
Total	384	100%	

Table III.5.	Reasons for	accepting	or not a	ccepting a	a higher-	paying job	(open-ended	responses
categorized	l by key them	ne[s])						

Source: Understanding Economic Risk for Low-Income Families survey data (N = 1,804).

Note: Analysis is limited to respondents who answered the open ended question on the reason for their decision. Respondents may have listed multiple reasons and therefore be included in multiple rows.

Among respondents who accepted the associated job opportunities, respondents most often mentioned money as a reason for accepting a job; 80 percent of respondents who accepted mentioned this as a reason. Conversely, 24 percent of respondents who did not accept the job stated that the pay increase would not be enough for them to allow them to accept. As might be expected, low pay was mentioned less often when wage increases were higher: Only eight percent of people receiving a \$750 wage increase (with \$250 loss of benefits, when relevant) stated the pay increase was not enough, as compared to 26 percent of people receiving a \$300 earnings increase (with \$100 loss of benefits, when relevant) and 31 percent of people receiving a \$650 earnings increase (with \$400 loss of benefits, when relevant).

Respondents were more likely to mention lost benefits as a reason to not accept a job than they were to mention the ability to keep or resume benefits as a reason to accept a job. Of the respondents who did not accept the job, 38 percent mentioned losing benefits and 14 percent mentioned the reapplication

process as reasons for this decision. When we restricted this to only respondents who did not keep their benefits, 44 percent mentioned losing benefits and 18 percent mentioned the reapplication process. Of the respondents who did accept the job, 25 percent mentioned the ability to keep their benefits or easily reapply for benefits as a reason for their decision. Specifically, 44 percent of respondents who did not lose benefits and 19 percent of respondents who could automatically resume benefits mentioned this in their explanation for accepting the job opportunity.

Job stability also played a big role in respondents' decisions. Respondents who did not accept the job were more likely to mention job security (50 percent) than respondents who did accept the job (17 percent). Of respondents who mentioned job security as a reason to not accept a job, 91 percent were faced with unstable situations where they were not likely to keep the job. On the other hand, 10 percent of respondents who accepted the job mentioned the ability to go back to their old job as important; respondents facing unstable situations were twice as likely to mention this.

# IV. Discussion

The results of this study demonstrate the important role that means-tested benefits play in shaping the decisions that benefit recipients make regarding employment. Almost 40 percent of our respondents reported having made life choices, such as not taking a new job opportunity or not increasing hours, to avoid losing benefits. This finding in a larger sample adds to a literature of smaller interview-based studies that offer conflicting evidence about how the potential loss of benefits affects decision making. Romich (2006) interviewed 40 families who had applied for a work support program and reported that none of the families she interviewed had declined a raise in order to avoid benefits loss. In contrast, Roll and East (2014) interviewed low-income families needing child care support and found that one-third of those families had turned down a raise to keep child care subsidies (see also Ruder et al. 2020). Ballentine and coauthors (2022) offered a somewhat more nuanced account of their interviewees' experiences, observing that low-income workers included potential loss of benefits as one part of a much more complex effort to maximize the available resources for their families (see also Andersen et al. 2022). Our estimates may be higher than estimates from prior research for various reasons. We collected responses online and anonymously, minimizing any motivation respondents might have to portray themselves in a socially desirable way. Also, we also asked this question as part of a long survey on decisions about benefits, which may have given respondents more opportunities to recall their own past experiences.

Overall, most respondents recommended taking higher-paying job opportunities. Averaging across all vignettes, respondents recommended accepting approximately three-quarters of higher-paying job opportunities. Even when presented with opportunities describing the least favorable combination of the three factors (lost benefits that would require reapplication, a \$650 increase paired with a \$450 loss, and an unstable job), 45 percent of respondents still recommended accepting the higher-paying job opportunity. This likely reflects two factors. First, in all cases the job opportunity described would be a raise relative to their current earnings, and in some cases respondents may have inferred that there could be more opportunities for upward mobility. Consistent with this observation, the most common reason respondents pointed to the career considerations of accepting the job. Second, respondents may prefer to earn money on their own rather than rely on government benefits. Seven percent of respondents who recommended accepting the job referenced negative feelings about taking government benefits as their motivation. This is consistent with prior literature, which has found that people generally prefer earning money through work over government benefits (Stuber and Kronebusch 2004).

# A. Effects of experimental factors

### 1. Benefit loss and ease of resuming benefits

The results from the vignettes provide clear evidence that respondents consider loss of benefits when evaluating whether to accept a new job opportunity offering higher earnings. Across all respondents and other vignette factors, respondents were 19 percentage points less likely to accept a job opportunity where they would lose benefits and have to reapply than an opportunity where they would not lose benefits. This is despite the fact that in all scenarios, the new job offered a greater monetary value in additional earnings than the value of benefits lost. Further, the risk of taking the new job was

limited by the fact that the character in the vignette could always return to their old position—meaning that the character was not at risk of losing earnings entirely if the new job did not work out. This suggests that respondents perceived an additional risk of the job not working out—most likely that they would have to reapply for benefits. This may reflect the burden of having to reapply, the delay while they wait for benefits to be restored, or the risk of not being able to reclaim them (Office of Information and Regulatory Affairs 2023). One important note is that in real-world scenarios, benefit recipients have many more considerations than in the simplified vignettes presented in the survey. This may have increased the salience of the experimental factors and therefore increased respondents' sensitivity to them.

Easy reinstatement of benefits, as opposed to requiring that beneficiaries reapply for benefits, increased acceptance rates of higher-paying jobs. Specifically, job acceptance was only 10 percentage points lower when benefits could be automatically resumed relative to when benefits were not lost. When lost benefits would require reapplication, job acceptance rates were 19 points lower, as described above. Presumably, this is because automatic reinstatement of benefits reduces the risk that an unforeseen job loss might leave the worker worse off than they were before. Depending on how respondents assume this process might work, automatic reinstatement of benefits may remove some uncertainty about whether a future application for benefits would be approved or denied and shorten the gap in coverage that would occur following job loss. Respondents might also consider potential reductions in the burden of the reapplication process, such as spending less time completing forms, locating documents, and speaking with eligibility interviewers reviewing their case.

However, for respondents considering job opportunities in the context of easy reinstatement of benefits, acceptance rates remained well below the no loss of benefits condition. This may reflect a perceived risk of benefit loss, even with the fictional policy. Even if benefits were automatically reinstated, there would likely be some administrative burden for reporting an earnings drop in order to reclaim them. Respondents may also be skeptical of the survey's fictional policy and remain concerned that they would not be able to reclaim benefits. This explanation has important implications for equity, if some groups are more likely than others to take a new policy at face value. We discuss this more in Section IV.B. It is also possible that our results reflect respondents' reluctance to take on additional work responsibilities when they would not reap the full additional earnings. Although none of the opportunities included extra hours, some of them did include additional responsibilities, such as a shift lead role. This may also reflect respondents' reduced willingness to accept a higher-paying job opportunity based on their perception of the fairness of marginal tax rates. In this case, high marginal tax rates might be seen as unfair, counter to basic values of equity and the rewarding of individual effort (Giannarelli and Steuerle 1995). Supporting this conclusion is the finding that people in the benefit-loss conditions were sensitive to having a higher marginal tax rate, even when the net income increase was the same.

### 2. Net income increase and marginal tax rate.

Our results show that economic benefits were a key factor in deciding whether to accept new job opportunities, but this decision involved more than just maximizing net income increases. When respondents could retain their benefits in full, acceptance rates were consistently high across levels of income increases, suggesting that in this case, any opportunity to improve their economic situation was viewed favorably. However, when faced with loss of benefits, respondents were far more likely to accept a higher-paying job opportunity with larger net income increases (\$500) than one with smaller net income increases (\$200). Furthermore, people were also less likely to accept a higher-paying job opportunity that would result in higher marginal tax rates (69 percent) than jobs that would result in lower marginal tax rates (33 percent), even when these opportunities resulted in the same net income increases. These marginal tax rates are well within what low-wage beneficiaries—especially parents—are likely to experience (Altig et al. 2020; CBO 2015; Kosar and Mofitt 2017; Maag et al. 2012; Parrott and Greenstein 2014). This finding is consistent with other research demonstrating that marginal tax rates tend to disincentivize people from increasing their earnings (Velasquez and Vtyurina 2019).

There are several plausible explanations for why respondents reacted so negatively to high marginal tax rates even when increases in net income were similar. First, it is possible that respondents were reacting primarily to the amount of the lost benefits. If respondents are focused on the risk of the job not working out and not being able to resume benefits, they may be less likely to take opportunities with high levels of benefits loss. In this case, we would expect that the impact of marginal tax rates would be greater for unstable opportunities. This expectation was only partially supported by the data. We did find that respondents were more sensitive to the marginal tax rate for unstable opportunities than they were for stable opportunities. However, these differences remained when benefits would be automatically resumed, despite the lower risk. We also know that respondents were focusing on more than the amount of the lost benefits, given that they preferred jobs offering \$750 in additional earnings and \$250 in lost benefits over jobs with \$300 in additional earnings and \$100 in lost benefits. Research on decision making can help explain these patterns. Substantial research has shown that not only are people loss averse when making decisions, they also undervalue uncertain gains and overvalue assured losses (Kahneman and Tversky 2013). If a wage increase is treated as an uncertain gain—as jobs may not work out for many reasons—and a benefit reduction is treated as a guaranteed loss, then jobs with high marginal tax increases may simply present too low an expected value to be appealing. Higher marginal tax rates might also be off-putting for less quantifiable reasons. People might track changes to earnings and benefits in separate "mental accounts" (Thaler 1999). Some research has suggested that beneficiaries evaluate wage increases in comparison with their total earnings or expenses (Romich 2006), making the increases feel insignificant compared to the magnitude by which their benefits are reduced. Focus group interviews have also suggested that people sometimes view the shift from benefits to wages as akin to paying for something that they would otherwise get for free (Ruder et al. 2020).

### 3. Risk of job loss

### In our study, respondents were very sensitive to the stability of potential job opportunities.

Respondents were substantially less likely to accept a higher-paying job opportunity if the job was described as risky, regardless of the loss of benefits, the amount of the earnings increase, or the value of the benefits loss. This was also despite the fact that we specified that the fictional characters could always return to their old job if the new one did not work out, something that is often not true for people considering new job opportunities. Job risk was operationalized differently across our vignettes, covering concerns such as the demands of the job, low employee retention rates, and the employer's financial stability. These issues are likely to be among the many non-financial considerations that are important to people evaluating a job opportunity. Risk also amplified the effects of earnings and benefits loss. Specifically, although an opportunity being unstable decreased acceptance rates across all conditions,

acceptance rates were especially low for jobs when applicants had to reapply for benefits and when the initial changes in earnings were less desirable. This aversion to risky jobs suggests that policies, programs, or services that reduce uncertainty about new jobs could support benefit recipients' pursuit of opportunities to increase their earnings.

### B. Differences in impacts, by benefit program

The benefit programs we examined in this study vary substantially in terms of the types of support provided, the reapplication process, and the restrictions on benefit receipt. Reflecting this variation, although the experimental factors had the same general pattern of effects on job acceptance, the magnitude of these effects differed across benefit programs. As a reminder, survey respondents only reviewed vignettes about programs that they themselves received—for example, only TANF recipients viewed vignettes about TANF recipients.

TANF recipients were more likely to accept a higher-paying job opportunity in spite of benefit loss (relative to no benefit loss) and high marginal tax rates (relative to low marginal tax rates) than recipients of other benefit programs. These findings suggest that TANF recipients prioritize increasing earnings despite a potential benefit loss. This may reflect the strict time limits on TANF lifetime eligibility, which ranges, by state, from 24 to 60 months, unlike most benefit programs without time limits (Knowles et al. 2022). Because TANF benefits have a limit, TANF recipients likely view these benefits as temporary, and therefore are less concerned with the prospect of losing those benefits than are beneficiaries of other programs. Also, because many states impose work requirements for TANF recipients, TANF recipients may prefer to receive work income rather than spend hours fulfilling work requirements to receive a small TANF cash benefit.

Another explanation is that TANF recipients value earnings increases more than TANF benefits because they have lower base earnings. State eligibility requirements for TANF vary widely in terms of both thresholds and definitions of income, but they are almost always far below the federal poverty line (Knowles et al. 2022). In contrast, CCDF, SNAP, and Medicaid usually phase out above the federal poverty line. Alternatively, if respondents know that TANF begins phasing out at much lower income levels than other benefits, they may assume that the people described in the TANF scenarios earn less, so the described raises make more of a difference to these individuals. Respondents might assume that the wage increases are more desirable if they know that TANF begins phasing out at much lower income levels than other benefits (Knowles et al. 2022).

We also observed that for CCDF recipients, benefit loss, net earnings increase, and marginal tax rates had stronger negative impacts on the likelihood of accepting a job opportunity. This is consistent with interviews with beneficiaries who note that child care benefits are especially important. Should parents lose access to child care, this could have downstream effects on their ability to work (Adams and Heller 2015). Child care subsidies are also typically much more supply-constrained than the other benefits we examined, and the wait lists for them are often long (Falk et al. 2015). Finally, when thinking about the loss of subsidies, parents consider that this may also mean losing access to safe, high-quality child care (Anderson et al. 2022).

## C. Differences in impacts, by respondent characteristics

Across subgroups, the experimental factors had the same general pattern of effects on job acceptance across groups by gender, whether they had residential children, and race and ethnicity. However, the magnitude of these differences varied by gender and race/ethnicity. Perhaps surprisingly, the differences in impacts between respondents with and without residential children were small.

Our results showed that women were less likely to accept a higher-paying job opportunity that resulted in benefit loss and were less likely to accept a higher-paying job opportunity with lower net income increases and higher marginal tax rates. This finding is consistent with other research demonstrating that women tend to be more responsive than men to marginal tax rates (Eissa and Hoynes 2006; Kolm and Lazear 2010) This could be because women may place more value on benefits, such as medical care or child care. Because we present results as regression-adjusted averages, these results hold constant other observed factors, including benefit type and parental status. Interestingly, this is also not likely to be a pure reflection of differences in risk tolerance, given that the estimated impact of job stability was nearly identical for male and female respondents.

There were also differences in how respondents of different races and ethnicities reacted to policyrelated information presented in the vignette, which provide potential equity considerations when designing policy levers. Respondents had similar acceptance rates of higher-paying jobs both when there was no benefit loss and when lost benefits would require reapplication. However, Hispanic and non-Hispanic Black respondents viewed automatic reinstatement of benefits less positively than non-Hispanic White respondents, on average; for just that condition, acceptance rates were lower for Hispanic and non-Hispanic Black respondents than for non-Hispanic White respondents. One potential explanation for this difference is that Hispanic and non-Hispanic Black respondents may have more experience with administrative burden, and could therefore be less likely than White respondents to believe that benefits could truly be automatically resumed. This is consistent with research documenting that Black people have more experiences with administrative burden than White people (Michener 2018). Another explanation could be a greater level of concern among Hispanic and non-Hispanic Black respondents about whether the benefits could be reinstated at all, whether automatically or not. This is consistent with previous research finding that some Black and Hispanic individuals regard government systems with circumspection, reflecting a long history of mistreatment and under-representation (Howell and Fagan 1988; Alsan et al. 2020).

The difference in willingness to accept stable and unstable job opportunities was smaller for non-Hispanic Black respondents (13 percentage points) than for non-Hispanic White respondents (20 percentage points) and Hispanic respondents (20 percentage points). Unfortunately, the current findings do not elucidate whether these differences arise from different perceptions of the job opportunities presented in the vignettes or different levels of risk tolerance, or something else. It is possible that non-Hispanic Black respondents perceived the relative risk of opportunities differently—for example, they may have viewed the opportunities described as "stable" less favorably than others did. It is also possible that non-Hispanic Black respondents had a higher tolerance for risk of job loss than non-Hispanic White respondents and Hispanic respondents.

### D. Strengths and limitations

Our study used a discrete choice experiment that captured the perspectives of benefit recipients through vignettes. These vignettes enabled us to examine the impact of specific events and circumstances in a highly controlled setting. The within-respondents design and Bayesian analysis enabled us to make precise estimates of the relative magnitude of differences caused by different policy scenarios. These findings complement observational methods where decision features such as earnings and tax rates are often confounded with each other and with the biographical details of benefit recipients.

The use of vignettes is also a limitation of our design. First, recommendations are not behaviors. Actual employment acceptance decisions could be higher or lower than the rates resulting from respondents' recommendations. Similarly, the experimental factors that we analyzed may impact respondents differently in the real world. For example, individuals may feel differently about the risk of a job opportunity in the presence of real-world factors like pressure from management, personal stress, and outside obligations.

A second, related limitation is that people's individual experiences are much more complex than in the stylized vignettes we used. This is both a strength and limitation of our study. By simplifying the decisions facing the fictional characters, we are able to isolate the impact of each factor. However, in the real world, individuals must consider a range of other factors. Other benefits, tax credits such as the Earned Income Tax Credit, and other contextual factors all affect decision making, either by changing the value of different outcomes or by making the decision more complex. Recipients and caseworkers often know little about the impact of wages on benefits beyond the general principle that higher earnings mean fewer benefits (Romich 2006). In many cases, beneficiaries learn about the impact of increased earnings on benefits only after their benefits have been affected. Future research could explore how this uncertainty about benefit loss influences behavior.

Another limitation of the study is that we only collected a limited set of characteristics about respondents. As a result, we may have missed respondent characteristics that impact their decisions on the experimental factors. For example, because we asked people only about children living in the household that is, residential children—people with nonresidential children were placed in the same group as people without any children. It is possible that this grouping was not appropriate and affected or diminished our ability to detect differences between parents and non-parents.

Finally, in this study we describe fictional individuals who are employed and present them with fictional descriptions of new job opportunities. To improve our ability to isolate the impact of our experimental factors, we describe all scenarios as opportunities to raise earnings through a new position—without increasing work hours. In the real world, opportunities to increase earnings often come with longer hours, which can introduce additional barriers (e.g., the need for more child care hours). In other cases, employees may be offered a raise in a current position without a change in responsibility or hours. The findings from this study therefore may not translate to other types of earnings increases, which involve different considerations. Similarly, many benefit recipients are not currently employed but are considering whether to take a new job opportunity. These decisions require a different set of considerations. Because we limited our sample to individuals who are employed or have recently been employed, it is also possible that our sample does not represent the preferences of unemployed benefit recipients.

# E. Policy implications

The results of this study yield evidence that can inform the design of policies to encourage benefit recipients to increase their earnings even in the face of risk and benefit loss. Specifically, we highlight the following policy implications from this study. Future research could consider strategies for refining these policy recommendations and testing them in both survey and real-world settings.

Policies that include easy reinstatement of benefits in the event of earnings loss may encourage means-tested benefit recipients to take opportunities to raise their earnings. Our results show that the prospect of automatic reinstatement of benefits, compared to the prospect of needing to reapply for benefits, increased acceptance rates. Presumably, this is because automatic reinstatement of benefits reduces the risk that an unforeseen job loss might leave the job seeker worse off than they were before. Depending on how respondents assume this process might work, automatic benefit reinstatement might remove some uncertainty and risk about whether a future application for benefits will be approved or denied and shorten the gap in coverage that could occur following job loss. Respondents might also consider potential reductions in the burden of the reapplication process, such as spending less time completing forms, locating documents, and speaking with eligibility interviewers reviewing their case.

Policies intended to help benefit recipients (e.g., automatic reinstatement of benefits) may not be perceived equally by, and thus may not equally help, all benefit recipients. The development of new policies should be accompanied by communication and outreach strategies that involve the community and are tailored to be culturally responsive to ensure that new policies achieve the intended equitable impacts. The finding that, overall, Hispanic and non-Hispanic Black respondents viewed automatic reinstatement of benefits less positively than did non-Hispanic White respondents highlights the importance of how policies are implemented and communicated. If policies are not communicated in a culturally appropriate way, historically marginalized populations who may have lower average trust levels in government (Howell and Fagan 1988; Alsan et al. 2020) and may have more negative experiences with administrative burden (Herd and Moynihan 2019) may be left out by well-intended policy changes.

**Policies that try to maximize net income increases could also encourage people to take higherpaying job opportunities.** The benefits cliff literature has in the past examined marginal tax rates to the exclusion of net income increases. Our findings show that even when marginal tax rates are constant between two scenarios, people prefer the scenario with the larger net income increase. For example, the design of minimum wage policies could consider both the marginal tax rates of the additional wages and the net income increase due to additional wages. Thus, policies should be designed with net income as well as marginal tax rates in mind.

Policies that support benefit recipients by lowering the risk of new job opportunities (i.e., by making new job opportunities more stable and reliable) would make it easier for people to take opportunities to raise their earnings. In our study, respondents were substantially less likely to accept a higher-paying job opportunity when jobs were described as unstable, regardless of benefit loss, the ease with which they could resume benefits, the amount of the earnings increase, or the value of the benefit loss. This was also despite the fact that we specified that the fictional characters could always return to their old job if the new one did not work out, something that is often not true for people considering new job opportunities. Risk also amplified the effects of benefits loss and high marginal tax rates: although an

opportunity being unstable decreases acceptance rates across all conditions, acceptance rates were especially low for jobs when applicants had to reapply for benefits and when marginal tax rates were high or net income increases were low. This aversion to unstable jobs suggests that policies, programs, or services that reduce uncertainty about new jobs could support recipients of benefits in pursuing opportunities to increase their earnings. Examples of such policies include unemployment insurance policies, mandatory severance policies, or designating the number of weeks' notice that an employee must be given if they are laid off. Future research should therefore consider additional tools for limiting the likelihood and consequences of earnings loss.

Policies that make the trade-off between earnings and benefits transparent could support effective decision-making by benefits recipients. People are generally rational in their decisions about their economic well-being when they have full information. When they know what will happen to their benefits, they make decisions that maximize their perceived well-being. What's more, we observed that people will largely choose work over benefits—in almost every combination of factors, acceptance rates were above 50 percent. In the real world, benefit situations are rarely as transparent as they were in our vignettes. Improving the transparency of earnings and benefit trade-offs would make it easier for recipients of program benefits to make decisions that improve their well-being.

# References

- Adams, G., and C. Heller. "The Child Care Development Fund and Workforce Development for Low-Income Parents: Opportunities and Challenges with Reauthorization." Washington, DC: Urban Institute. 2015.
- Aguirregabiria, Victor, and Pedro Mira. "Dynamic Discrete Choice Structural Models: A Survey." *Journal of Econometrics*, vol 156, no.1, 2010, pp. 38–67.
- Alsan, Marcella, Marianne Wanamaker, and Rachel R. Hardeman. "The Tuskegee Study of Untreated Syphilis: A Case Study in Peripheral Trauma with Implications for Health Professionals." *Journal of General Internal Medicine*, vol. 35, 2020, pp. 322–325.
- Altig, David, Alan Auerbach, Laurence Kotlikoff, Elias Ilin, and Victor Ye. "The Marginal Net Taxation of Americans' Labor Supply." Working Paper #27164. National Bureau of Economic Research, 2020. <u>https://doi.org/10.3386/w27164</u>.
- Anderson, Theresa, Amelia Coffey, Hannah Daly, Heather Hahn, Elaine Maag, and Kevin Werner. "Balancing at the Edge of the Cliff: Experiences and Calculations of Benefit Cliffs, Plateaus, and Trade-Offs." Washington, DC: Urban Institute, January 2022.

https://www.taxpolicycenter.org/sites/default/files/publication/163405/balancing-at-the-edge-of-the-cliff 0.pdf.

- Ballentine, Kess, Sara Goodkind, and Jeffrey Shook. "How Low-Paid Parents Navigate the Complex Financial Landscape of Benefits Cliffs and Disincentive Deserts." *Health Affairs*, vol. 41, no. 12, 2022, pp. 1707–1714.
- Center on Budget and Policy Priorities. "A Quick Guide to SNAP Eligibility and Benefits." October 2023. <u>https://www.cbpp.org/research/food-assistance/a-quick-guide-to-snap-eligibility-and-benefits</u>. Accessed December 14, 2023.
- Chien, N., and S. Macartney. "What Happens When People Increase Their Earnings? Effective Marginal Tax Rates for Low-Income Households." Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, 2019.
  https://area.bha.gov/cites/default/files/misrated\_logagy\_files//187771/brief2\_evention\_misrate\_object.

https://aspe.hhs.gov/sites/default/files/migrated\_legacy\_files//187771/brief2-overviewmtranalyses.pdf.

- Chien, N., P. Winston, R. Gaddes, and R. Holzwart. "Risks that Come with Increasing Earnings for Low-Income Workers Receiving Safety Net Programs: Perspectives of Working Parents." Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, 2021. <u>https://aspe.hhs.gov/reports/risks-come-increasing-earnings-low-income-workers</u>.
- Congressional Budget Office (CBO). "Effective Marginal Tax Rates for Low- and Moderate-Income Workers in 2016." November 2015. <u>https://www.cbo.gov/publication/50923</u>.
- Eissa, N., and H.W. Hoynes. "Behavioral Responses to Taxes: Lessons from the EITC and Labor Supply." *Tax Policy and the Economy*, vol. 20, 2006, pp. 73–110.
- Falk, G., M. McCarty, A. Mitchell, W.R. Morton, K.E. Lunch, and M.L. Crandall-Hollick. "Need-Tested Benefits: Estimated Eligibility and Benefit Receipt by Families and Individuals." Washington, DC: Congressional Research Service, 2015.
- Gelman, A., J. Hill, and M. Yajima. "Why We (Usually) Don't Have to Worry About Multiple Comparisons." *Journal of Research on Educational Effectiveness*, vol. 5, no. 2, 2012, pp. 965–1056.
- Giannarelli, L., and C. Eugene Steuerle. "The Twice Poverty Trap: Tax Rates Faced by AFDC Recipients." Urban Institute, 1995.
- Gruber, J., and E. Saez. "The Elasticity of Taxable Income: Evidence and Implications." *Journal of Public Economics*, vol. 84, no. 1, 2002, pp. 1–32.
- Haghani, M., M.C. Bliemer, J.M. Rose, H. Oppewal, and E Lancsar. "Hypothetical Bias in Stated Choice Experiments: Part I. Integrative Synthesis of Empirical Evidence and Conceptualization of External Validity." arXiv:2102.02940, 2021. <u>https://arxiv.org/pdf/2102.02940</u>.
- Herd, P., and D. P. Moynihan. "Administrative Burden: Policymaking by Other Means." Russell Sage Foundation, 2019.
- Holt, Stephen D., and Jennifer L. Romich. "Marginal Tax Rates Facing Low– and Moderate–Income Workers Who Participate in Means–Tested Transfer Programs." *National Tax Journal*, vol. 60, no. 2, 2007, pp. 253–276.

- Howell, S.E., and D. Fagan. "Race and Trust in Government: Testing the Political Reality Model." *Public Opinion Quarterly*, vol. 52, no. 3, 1988, pp. 343–350.
- Kahneman, D., and A. Tversky. "Prospect Theory: An Analysis of Decision Under Risk." In *Handbook of the Fundamentals of Financial Decision Making: Part I*, edited by Leonard C. MacLean and William T. Ziemba. Singapore: World Scientific, 2013.
- Kaiser Family Foundation. "Integration of Medicaid and Non-Health Program Eligibility Systems." 2024. <u>https://www.kff.org/affordable-care-act/state-indicator/integration-of-medicaid-and-non-health-program-eligibility-systems/</u>.
- Kane, John V., and Jason Barabas. "No Harm in Checking: Using Factual Manipulation Checks to Assess Attentiveness in Experiments." *American Journal of Political Science*, vol 63, no. 1, 2019, pp. 234–249.
- Knowles, S., I. Dehry, K. Shantz, and S. Minton. "Graphical Overview of State TANF Policies as of July 2020."
   Washington, D.C.: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2022.
- Kolm, A.S., and E.P. Lazear. "Policies Affecting Work Patterns and Labor Income for Women." In *Reforming the Welfare State: Recovery and Beyond in Sweden*, edited by Richard B. Freeman, Birgitta Swedenborg, and Robert H. Topel. University of Chicago Press, 2010.
- Kosar, Gizem, and Robert A. Moffitt. "Trends in Cumulative Marginal Tax Rates Facing Low-Income Families, 1997–2007." *Tax Policy and the Economy*, vol. 31, no. 1, 2017, pp. 43–70.
- Lancsar, E., and J. Swait. "Reconceptualising the External Validity of Discrete Choice Experiments." *Pharmacoeconomics*, vol. 32, no. 10, 2014, pp. 951–965.
- Ma, Jennifer, Matea Pender, and Meredith Welch. "Education Pays 2019: The Benefits of Higher Education for Individuals and Society." College Board, 2019. https://research.collegeboard.org/media/pdf/education-pays-2019-full-report.pdf.
- Maag, Elaine, C. Eugene Steuerle, Ritadhi Chakravarti, and Caleb Quakenbush. "How Marginal Tax Rates Affect Families at Various Levels of Poverty." *National Tax Journal*, vol. 65, no. 4, 2012, pp. 759–782. https://doi.org/10.17310/ntj.2012.4.02.
- Macartney, Suzanne, and Robin Ghertner. "How Many People Participate in the Social Safety Net?" ASPE Research Brief. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services, 2023.
- Michener, Jamila. Fragmented Democracy: Medicaid, Federalism, and Unequal Politics. Cambridge University Press, 2018.
- Mortenson, Jacob A., and Andrew Whitten. "Bunching to Maximize Tax Credits: Evidence from Kinks in the US Tax Schedule." *American Economic Journal: Economic Policy*, vol. 12, no. 3, August 2020, pp. 402–432.
- Office of Information and Regulatory Affairs. "Tackling the Time Tax: How the Federal Government is Reducing Burdens to Accessing Critical Benefits and Services." Office of Management and Budget Report. July 2023.
- Parrott, S., and R. Greenstein. "Policymakers Often Overstate Marginal Tax Rates for Lower-Income Workers and Gloss Over Tough Trade-Offs in Reducing Them." Washington, DC: Center on Budget and Policy Priorities, 2014. <u>https://www.cbpp.org/research/policymakers-often-overstate-marginal-tax-rates-for-lower-income-workers-and-gloss-over-0</u>.
- Roll, Susan. "Examining the Child Care Cliff Effect in a Rural Setting." Social Work & Society, vol. 16, no. 1, 2018.
- Roll, Susan, and Jean East. "Financially Vulnerable Families and the Child Care Cliff Effect." *Journal of Poverty*, vol. 18, no. 2, 2014, pp. 169–187. <u>https://doi.org/10.1080/10875549.2014.896307</u>.
- Romich, Jennifer L. "Difficult Calculations: Low-Income Workers and Marginal Tax Rates." *Social Service Review*, vol. 80, no. 1, 2006, pp. 27–66. <u>https://doi.org/10.1086/499086</u>.

- Ruder, A., J. Siwicki, E. Terry, and T. Toyin-Adelaja. "Benefits Cliffs as a Barrier to Career Advancement for Low-Income Adults: Insights from Employment Services Providers." FRB Atlanta Community and Economic Development Discussion Paper. Federal Reserve Bank of Atlanta, 2020. <u>https://www.atlantafed.org/-/media/documents/community-development/publications/discussionpapers/2020/02-benefits-cliffs-as-a-barrier-to-career-advancement-for-low-income-adults-2020-03-31.pdf.</u>
- Saez, Emmanuel. "Do Taxpayers Bunch at Kink Points?." *American Economic Journal: Economic Policy*, vol 2, no 3, 2010, pp. 180–212.
- Si, Y., R. Trangucci, Johah Sol Gabry, and Andrew Gelman. "Bayesian Hierarchical Weighting Adjustment and Survey Inference." *Survey Methodology*, vol 46, no. 2, December 2020, pp. 181–214.
- Sherpa, L. "Tax reforms and elasticity of taxable income: estimation using the current population survey." Applied Economics Letters vol 31. no 6. 2024, pp 1554-1559.
- Stuber, J., and K. Kronebusch. "Stigma and Other Determinants of Participation in TANF and Medicaid. *Journal of Policy Analysis and Management*, vol. 23, no. 3, 2004, pp. 509–530.
- Thaler, Richard H. "Mental Accounting Matters." *Journal of Behavioral Decision Making*, vol. 12, no. 3, 1999, pp. 183–206.
- Velasquez, A., and S. Vtyurina. "How Does Taxation Affect Hours Worked in EU New Member States?" Working Paper No. 2019/130. International Monetary Fund, 2019.

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