Essays on Unemployment

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Abstract

This dissertation explores the factors that shape individual labor force transitions after job loss. Using mixed methods, I explore how people navigate the aftermath of job loss in the U.S. and the variables that influence this process. In the first essay, I use in-depth interviews with a diverse group of women in Greater Boston to understand how individual trajectories after job loss take shape. These women had been separated from hourly service employment because of the COVID-19 pandemic, and I trace their responses after that separation in terms of intensity of search effort and jobs pursued. I offer a richer understanding of what women do and how they feel in the aftermath of job loss. I also propose a more multifaceted view of the factors influencing unemployed women's decision-making with respect to their labor market positions and relationships with work. This type of qualitative analysis emphasizes that many women strive for labor market outcomes that align with politicians' rhetoric about the importance of steady work but often encounter obstacles that set them back. I conclude the chapter with a discussion of policy changes aimed at helping women employed in low-paid work achieve greater stability. In the second essay, I explore institutional influences on individual labor force transitions after job loss in greater depth. Specifically, I explore the role of unemployment insurance (UI), a social insurance program that provides people who have lost their jobs with temporary income to meet basic needs while they job search. Combining linked Current Population Survey data with state administrative sources, I investigate the degree to which pre-existing features of state UI programs affected job finding of the non-employed and job quality of the reemployed during the COVID-19 pandemic. During a period of unprecedented federal expansion, I try to understand the degree to which pre-pandemic features of state UI programs remained important. The role of interstate variation, particularly the influence of stricter states, is increasingly relevant, as more states grow emboldened to challenge established UI system norms or break with the federal partner. This essay contributes to the small but growing literature that traces disparate labor force outcomes to state UI policy differences. Further, it contributes a new dimension of insight to the vast UI literature by exploring the role of states. Read together, this dissertation contributes insight to issues and debates that are central to work and employment, a field committed to surfacing the labor market's most pressing challenges and proposing solutions to make work more equitable and humane. Findings show that unemployment can be an upending force in people's lives, and our public policy has a long way to go before it can adequately address the wide-ranging fallout.

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Acknowledgments

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the seeds of my interests in work and industrial change. The contrast between their early lives and my life today is difficult to fathom. I dedicate this dissertation to them.

Introduction

Unemployment can have a profound social and economic impact on people, families, and communities. Involuntary job loss and unemployment can impose significant financial strain, and the effects are often felt far beyond the affected individuals. Reflecting work's central role in people's lives, job loss can also diminish an individual's sense of worth or purpose, and their status among the people they share their lives with (Newman 1988, Sharone 2014). Job loss can also be highly detrimental to people's careers. The earnings "scars" can persist for years (Couch and Placzek 2010, Davis and von Wachter 2011, Gangl 2006, von Wachter, Song, and Manchester 2009), and people who lose their jobs often experience job instability for many years afterwards (Stevens 1997). The consequences of job loss have also been found to extend to personal health (Sullivan and von Wachter 2009), family stability (Attewell 1999), and children's well-being (Brand and Simon Thomas 2014, Kalil and Ziol-Guest 2005, 2008). Finally, job loss and unemployment are phenomena that are shaped by enduring patterns of labor market inequality and have the potential to worsen these patterns. A large literature shows significant gender and racial/ethnic differences in the incidence and consequences of job loss (e.g., Boisjoly and Duncan 1994, Farber 2015, Moore 1992, 2010, Spalter-Roth and Deitch 1999, Wrigley-Field and Seltzer 2020). Thus, as economic shifts have produced more permanent layoffs and longer unemployment durations for people across the occupational distribution, work and employment scholars must probe deeply into the evolving nature of unemployment, the people it most impacts, and the policies and practices that can reduce its fallout. This is the task of this dissertation.

This dissertation explores the factors that affect what people do and how they recover after they lose their jobs. Using mixed methods, I explore how people navigate the aftermath of job loss and the variables that influence this process.

In the first essay, I use in-depth interviews with a diverse group of women in Greater Boston to understand how individual trajectories after job loss take shape. These women had been separated from hourly service employment because of the COVID-19 pandemic, and I trace their responses after that separation, job outcomes, and personal evaluations of their circumstances. I

offer a richer understanding of what women do and how they feel in the aftermath of job loss. I also propose a more multifaceted view of the factors influencing women's decision-making with respect to their labor market positions and relationships with work. Women are subject to multiple, competing influences, with some propelling them towards work, including specific types of work, while others deter their employment.

First, I provide a typology that encompasses four responses to job loss, reflecting differences in the timing and intensity of women's search efforts and their willingness to explore different fields after they lose their jobs. Findings show that involuntary job loss has the potential to significantly disrupt low-wage women's already fragile career paths.

The first response, to *Recover*, occurred among 14 women, and involved returns to one's pre-pandemic situation, either the job held previously or a similar position. By the time of their interviews, 9 of 14 women were earning steady work-based income. However, many faced unstable schedules or lower pay. Such conditions left several participants feeling unsettled or uncertain about their professional futures.

The second response, to *Switch/Stack*, occurred among 12 women, and involved quickly filling available work-hours. Participants prioritized securing any work, including platform or childcare employment, and often "stacked" multiple jobs. Of all responses, this seemed to yield the most successful job outcomes. Of these 12 women, 11 were employed and earning steady work-based income when interviewed. At least six held primary jobs with higher nominal wages than their pre-pandemic jobs; however, just four women were working similar weekly hours. These women's financial circumstances were more acute overall. Reflecting these mixed circumstances, some women projected uncertainty or resignation, while others were cautiously optimistic.

The third response, to *Reach*, occurred among 12 participants, and involved attempted transitions to more specialized, higher-paid work, including standard employment, informal self-employment, or self-directed arrangements. By the time of their interviews, only four women

reported steady work-based income. Reflecting prolonged job searches, or certain skill or resource deficits, most participants spoke of struggling or questioning their choices.

The fourth response, to *Step Back*, occurred among three participants, and involved weaker workforce attachment. Once separated, these women did not attempt to return to work, or if they did, it was in an informal arrangement. By the time of their interviews, just one woman was earning steady work-based income in the informal labor market. Though she embraced her "free agent" status, she faced a seasonal dip in her schedule. The two other women performed occasional gig work mostly online, and experienced mounting stress, either because of worsening financial precarity or a growing disconnection from work generally.

In this essay, I also examine factors that seemed to influence women's responses to employment loss, including variation in their responses. I theorize that women's responses are affected by *interweaving* factors that encompass three areas. The first area is relationship-based resources. Help from partners, kin, friends, or coworkers can provide a critical boost after an income shock; at the same time, a lack of support or additional responsibilities to family can impose significant strain. The second area is institutional realities. These refer to rules and practices that help govern the provision of major income supports in the U.S. and foster the conditions of low-wage work. The third area is cultural beliefs about work, family, and success. Culture provides an intellectual and emotional "architecture" (Newman 1988) that spurs people to think and act in certain ways, especially after a disruption like job loss.

I use the term interweaving to illustrate the interconnections or entanglements between factors. I propose that low-wage women's responses to unexpected job loss arise from the ways these respective factors come together in their lives; each response is influenced by a somewhat distinct pattern of interconnection or entanglement.

Although Recover participants were better supported by private financial resources, including partners' support, which unemployment insurance (UI) supplemented, they were also constrained in their movement by commitment to trusted supervisors or expectations of reward for loyalty to their employers. They were also hemmed in by institutional rigidities that hampered career

transitions. Reflecting mixed attitudes towards hourly service work, some women felt conflicted about their circumstances.

With few institutional supports, Switch/Stack participants were the most vulnerable to hardship after job loss. Obligations to family, including remittance payments, further strained scarce resources, compelling almost immediate reemployment attempts for most of these women. Yet, in contrast to the Recover category, these women seemed less constrained in terms of search breadth, reflecting a more transactional or strategic approach to work. Participants projected less loyalty towards employers and viewed work as a means to other ends. Two younger Black women's vigilance was also informed by past experiences of racial discrimination.

The more selective orientation of Reach participants reflected fuller institutional supports, including public employment services, with some participants reporting connection to such services for many years. These women's responses also seemed influenced by constraints imposed by single parenthood and attitudes about work that seemed informed by past experiences of instability, like homelessness or family dissolution. Some participants' desire to avoid hourly service employment was also shaped by cultural attitudes that such work was inferior or lacking in meaning.

Lastly, the three Step Back participants' more disconnected states seemed influenced by stronger private supports compared to the similarly less advantaged Reach category. One woman's decision to Step Back is notable for being among the few cases in which partner dynamics seemed to weaken workforce attachment; other married or cohabitating participants often projected commitments to financial independence, which tended to accelerate their reemployment. Two participants, including this woman, also spoke of work as being less central to their lives and finding meaning in other activities (like raising children or art).

To tease out which factors matter and for which groups of women would require different data; however, this study surfaces patterns and linkages that might be explored in future research. The somewhat patterned racial/ethnic distribution across the four categories of response—with White, U.S.-born women concentrated in the more stable Recover category (or else the more

tenuous Step Back category); Latina immigrant women, including undocumented women, concentrated in the precarious Switch/Stack category; and Black women concentrated in the less advantaged Reach category—points to the importance of race/ethnicity and its intersection with immigrant status in differentiating unemployed women's experiences, even within an occupationally less advantaged group.

This study makes important contributions. First, findings help fill a gap in the qualitative literature in sociology on job loss and unemployment, which tends to focus on more advantaged workers, including professionals, White, U.S.-born workers, or men displaced by factory closings.

I also offer a richer understanding of women's decision-making after a separation. Past research focuses narrowly on the obstacles to unemployed women's job searches and has not adequately examined women's decisions about which jobs to pursue. If this study had focused only on search effort, it would have missed a key decision in terms of overcoming the disruption of job loss—namely, some women's interest in and efforts to seek out different work from what they lost.

Further, I offer a richer view of the factors influencing women's sense-making and actions after a loss of work. Past research on women's unemployment focuses on what happens in women's homes and how dynamics with partners can subvert reemployment attempts. As a result, it draws attention from the different institutional factors that help structure women's economic opportunity. This study provides insight into how these private and public sources of influence may intermingle in low-wage women's lives.

In addition, I illustrate culture's multifaceted role. Notably, findings show that beliefs that restaurant serving or retail work are inferior or lacking in meaning were partially responsible for the attempted occupational shifts of some participants in the Reach category; or else, similar beliefs instilled a sense of dissatisfaction among some women in the Recover category. Attitudes were most pronounced among White participants. This study contributes to the "meaningful" work literature by providing insights from an occupationally less advantaged group, whom

research suggests are no different from more advantaged workers in desiring fulfilling work (Cech and Hiltner 2022); at the same time, given this literature's emphasis on education- and class-based variation, my findings point to race/ethnicity as an important avenue for future research.

My findings also contribute insight into how past traumatic experiences, such as homelessness, intimate partner violence, or family dissolution, may foster specific cultural beliefs that influence some women's relationships with work. Though one might expect past trauma to suppress work attachment through lingering stress or anxiety, my findings suggest that the link may be more complicated. Future research should explore how this important dimension of many women's lives influences their orientations towards work.

Findings also reflect race- and class-based variation in attitudes towards receipt of government benefits. Several White, higher-educated women, both in the Recover and Step Back categories, often qualified their accounts of receipt with deeper self-reflection, suggesting adherence to dominant U.S. ideologies of meritocracy and individualism (Newman 1988, Lamont 2000). However, such attitudes did not necessarily spur these women to avoid supports, UI in particular.

Finally, my findings challenge reductive political debates about how U.S. safety net programs influence work attachment. Such debates have persisted since the New Deal (Katznelson 2013) and were renewed with force during the COVID-19 pandemic. Through in-depth interviews, this study richly describes women's behaviors and subjective experiences after job loss. This type of qualitative analysis helps demonstrate that many women strive for labor force outcomes that align with politicians' rhetoric, but often encounter obstacles that set them back. I conclude this chapter with a brief discussion of policy changes that could help women employed in low-paid work achieve greater stability.

In the second essay, I explore institutional influences on individual labor force transitions after job loss in greater depth. Specifically, I explore the role of unemployment insurance, a nearly 90-year-old social insurance program that provides people who have lost their jobs with temporary income to meet basic needs while they job search. UI also stabilizes the economy during

recessions. Because households experiencing unemployment are often financially constrained, they spend their UI income quickly; this reduces further declines in general economic activity when the unemployment rate is high.

I set out to understand whether pre-existing features of state UI programs, particularly the influence of states with stricter UI policies, remained important in a time of unprecedented federal expansion. In March 2020, to help mitigate the economic effects of the COVID-19 public health crisis, Congress authorized three UI programs to compensate individuals who had lost their jobs because of the pandemic. The resulting benefits scheme was more generous in breadth and depth than any previous recessionary expansion.

Before the pandemic, common measures of UI program adequacy and performance signaled system erosion. For example, in 2019, the last full pre-pandemic year, the percentage of unemployed people receiving UI ranged from about half in New Jersey and Massachusetts to 10 percent or less in Florida, Mississippi, and North Carolina. Nationally, just under one-quarter of unemployed received UI. This compares to the late-1990s, a comparable non-recessionary period, when one-third of unemployed people received UI.

States are also increasingly willing to depart from established norms and break with the federal government in a system designed for "federal-state partnership." The motivating concern is whether the U.S. UI system can withstand these conditions and continue to do what it was designed for: provide unemployed people with resources to avoid hardship and find suitable reemployment, and stabilize economies during recessions.

Combining linked Current Population Survey data with state administrative sources, I investigate the degree to which pre-pandemic strictness of state UI programs affected job finding of non-employed adults, and then job quality among the reemployed, during the COVID-19 pandemic. During a period of unprecedented federal expansion, this essay seeks to understand the degree to which pre-pandemic features of state UI programs remained important. Yet, this question is important outside of national recessions, when the impact of state variation, particularly the influence of stricter policies, is likely to be stronger due to the absence of federal safeguards.

I examine four sources of UI strictness, chosen because they reflect distinct areas of state UI rules. I develop an additive index that captures states' pre-pandemic strictness in terms of initial eligibility (i.e., treatment of certain voluntary quits), continuing eligibility (i.e., denial rate for issues like violation of work-search rules), and benefit levels (i.e., replacement rate). The fourth measure, recipiency, is a common aggregate measure capturing overall coverage among a state's unemployed population. I split states into two groups in terms of it, stricter states and less strict states.

I assess two employed-related outcomes. The first outcome is job finding. From one month to the next, what percentage of non-employed workers transition to employment, and how does this vary by pre-pandemic strictness? The second outcome is reemployment quality, a relatively understudied area in UI research. Using detailed occupational median wage information from the Occupational Employment and Wage Statistics, I investigate how the quality of an individual's job compares to their prior job, and the extent to which state strictness influences the change in job quality between separation and reemployment.

I employ two broad empirical strategies to assess links between state UI strictness and job finding and job quality. The first strategy provides insight into the effects of state UI strictness on job finding and the change in job quality between separation and reemployment within each of four major pandemic phases, spanning from the six months before the pandemic to the six months after the federal UI programs turned off in September 2021. The second strategy assesses links between strictness and *changes* in the two primary outcomes, job finding and the change in job quality, both when the federal UI programs started and when they stopped.

Overall, findings are mixed. Links between strictness before the pandemic and job finding during the pandemic are mostly insignificant. However, there are hints that the strictest states in terms of the additive index had higher job finding. As to links between pre-pandemic strictness and *changes* in monthly job finding once the federal UI programs turned on, findings suggest that the effects of the pandemic's onset and the start of the federal UI programs did not differ meaningfully between states distinguished by pre-pandemic strictness. But such findings are less

surprising if one considers that early state actions likely reflected a shared understanding of the pandemic's profound and distinctive economic impact. The political conditions that contributed to state differences before the pandemic seemed not to affect states' initial responses.

Results suggest possible *negative* links between stricter status and reemployment quality; however, findings vary depending on the strictness measure. Findings also suggest that stricter states saw more adverse change in reemployment quality outcomes when the pandemic struck, and that less strict states benefited to a greater degree from the federal UI programs in terms of the change in job quality between job loss and reemployment. This is likely a result of greater overall UI receipt in these less strict states.

This essay contributes to the small but growing literature that traces disparate labor force outcomes to state UI policy differences (e.g., Skandalis, Marinescu, and Massenkoff 2022). Findings are not inconsistent with prior UI research, including pandemic research, that finds a negative relationship between UI generosity and job finding. However, this essay contributes a new dimension of insight by exploring the role of pre-existing state features.

Further, this essay contributes to the small literature linking UI generosity and reemployment quality (e.g., Nekoei and Weber 2017). The finding that less strict states may have benefitted from the federal UI programs to a greater degree than stricter states in terms of the change in job quality between job loss and reemployment represents a new insight into the benefits of the federal UI programs. Prior research shows that the federal UI programs boosted consumption (Farrell et al. 2020) and reduced poverty (Chen and Shrider 2021); this essay suggests that they may have helped some workers avoid deeper scars associated with job loss, too.

Future research should test more refined measures of state UI strictness. However, if such analysis affirms this essay's suggestive findings on reemployment quality, then they would point to measures that aim to bring relevant state rules, practices, and infrastructure into convergence, as an alternative to distributing federal dollars through pre-existing state UI regimes.

Read together, this dissertation contributes insight to issues and debates that are central to work and employment, a field traditionally committed to generating rich description of the labor market's most pressing challenges and proposing solutions to make work more equitable and humane. First, it shows the extent of variation in the experience of unemployment across geographies and groups of people. Such variation reflects the contours of major institutions, like UI; it also reflects disparities linked to labor market inequality. Second, it highlights the importance of labor market institutions in helping structure people's actions and sense-making after a disruption like job loss. Further, it contributes insight to debates about the appropriate balance of power between the federal government and states. Scholars must continue to probe into whether in an increasingly globalized economy, the highly decentralized administration of major safety net programs—as well as the low floor of core labor standards like the minimum wage—is the most effective way to support the health and vitality of this nation's workforce. Finally, this dissertation shows that unemployment can be an upending force in people's lives, and our public policy has a long way to go before it can adequately address the wide-ranging consequences.

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Assorted Entanglements: Low-Wage Women's Responses to Employment Loss

by

Claire C. McKenna

Abstract

This study seeks to advance our understanding of how low-wage women respond to unexpected job loss, barriers they may face to moving forward, and the ways race/ethnicity and its intersection with immigrant status may influence women's experiences and job outcomes. I draw on in-depth qualitative interviews with a racially/ethnically diverse sample of 41 women in Greater Boston; all women had been separated from hourly service employment for COVID-induced reasons, and I trace their responses after that separation. I provide a typology that encompasses four responses to unexpected job loss, reflecting differences in the timing of reemployment attempts and the types of job pursued. In addition, I trace women's job outcomes and subjective states, stressing the lingering toll of employment loss. Second, I offer a theoretical framework that highlights potential influences on participants' responses. Women's responses are affected by relationship-based resources; institutional realities; and cultural beliefs or attitudes about work, family, and success. The term *interweaving* is used to illustrate the interconnections or entanglements between these factors. This research helps fill a gap in the qualitative literature on job loss and unemployment, which tends to focus on occupationally advantaged jobseekers, particularly White, U.S.-born jobseekers, or blue-collar men. Further, this study challenges reductive political debates about how individuals relate to work, which were renewed with force during the COVID-19 pandemic, by highlighting the heterogeneity of low-wage women's responses to employment loss, and the trade-offs these women often make to keep themselves and those in their care afloat. Lastly, this study surfaces patterns and links that might be explored in future research using larger data sets.

Introduction

Political debates about how U.S. safety net programs influence work attachment have persisted since the New Deal, an era of sweeping federal investment in social welfare that serves as the foundation of modern income support (Katznelson 2013, Newman and Jacobs 2010). Historically, means-tested programs designed to serve low-income people and families have faced the greatest scrutiny, with the persistence of gendered and racialized tropes of cash aid recipients being a prime example. Critics argue that these programs discourage work by providing a level of income similar to what recipients could earn by working and penalizing earnings. As a consequence, recipients eschew work, which weakens individual mobility chances and exacerbates poverty.[1]

The federal-state unemployment insurance (UI) program, the nation's main response to job loss and widespread labor market disruption, has come under similar scrutiny. Enacted in 1935 as an employer-funded social insurance program, research on public opinion at the time indicates a swell of negative reaction, particularly from the continuously employed, with recipients called "shiftless," "loafers, ne'er-do-wells," and "bums and malcontents" (Katznelson 2013, Newman and Jacobs 2010).

Debates about work disincentives and income supports, particularly UI, were renewed with force during the COVID-19 pandemic. Federal policymakers responded to the surge in unemployment in spring 2020 with fiscal relief measures of remarkable scope, including three new UI programs: benefits for the self-employed, independent contractors, and very low-paid workers; a $600 weekly supplement; and durational extensions. While extensions have been characteristic of recessionary measures going back to 1958, the two other programs were unprecedented (Whittaker and Isaacs 2021).

[1] A relatively recent prominent elaboration of this position can be found in a 2014 House Budget Committee Report, authored by then-Chair Paul Ryan, titled "The War on Poverty: 50 Years Later." An archived version, from the House Budget Committee website, can be found at this link: https://web.archive.org/web/20140308035430/http://budget.house.gov/UploadedFiles/War_on_Poverty.pdf

Despite the pandemic's structural origins and large-scale impact, the arc of public support for the unemployed followed a familiar path, with initial supportive attitudes souring at the first signs of economic growth and increased hiring (Chen and Sharone 2020). With most beneficiaries receiving far more from UI than their prior earnings (Ganong et al. 2020), Congress let the $600 supplement lapse on July 31, 2020, despite health and safety conditions many found untenable. Following public outcry, it was eventually replaced with a $300 payment. Later, aided by news reports of labor shortages, states acted to roll back federal commitments to provide additional UI support through September 2021. Altogether, 24 states terminated federal UI over June and July 2021, including 20 states that ended all three measures, plus four states that ended just the supplement.[2] The Louisiana governor was the single Democrat who ended all programs, by late July. The remaining 27 states maintained all three measures until September.

The fundamental problem with these debates is they reduce a complex set of decisions about how one might respond to employment loss to a binary choice between working or not working. Yet, how someone moves ahead after a disruption of this kind involves decisions about not just whether, how soon, and how much to work, but also what kinds of work to pursue. As to *why* someone might respond as they do, debates are similarly reductive. Drawing on economic theories of moral hazard, explanations focus narrowly on the impact of benefit generosity on material conditions, and the potential effects on work incentives, overlooking other institutional, cultural, or structural factors that may shape how someone relates to work, perceives their reemployment options, and moves forward.

The experiences of women in low-wage work may reveal these complexities acutely. This population is racially and ethnically diverse, more vulnerable to financial hardship, and more likely to have dependents without having an employed spouse (e.g., Ross and Bateman 2019). Therefore, women who were previously employed in low-wage work may respond to job loss with a mix of behaviors and emotions that dominant policy debates and infrastructure fail to capture.

[2] Montana's Governor Greg Gianforte was the first to announce withdrawal of federal UI aid, on May 4th (https://news.mt.gov/Governors-Office/montana-to-launch-return-to-work-bonuses-return-to-pre-pandemic-unemployment-program-to-address-workforce-shortage). Four states, Alaska, Arizona, Florida, and Ohio, ended just the supplemental payment—Arizona, by mid-July 2021, and the three other states, by late-June 2021.

In recent years, economic shifts have resulted in a rise in permanent layoffs and increased unemployment duration across the occupational distribution, and a body of qualitative research has emerged that provides insight into job losers' perceptions of their circumstances, and strategies used to gain reemployment. Such research makes evident that how people cope with employment loss is more complex than public debates acknowledge. Nonetheless, important gaps in our understanding of how the intersection of gender, race, and class shape labor force experiences following job loss persist, due to this literature's focus on occupationally advantaged jobseekers (Lane 2011, Newman 1988, Rao 2020, Sharone 2014), White jobseekers (Damaske 2020), or more racially diverse men displaced by industrial restructuring (Chen 2015).

Past quantitative research on differences in rates of reemployment across worker groups indicates that gender and race/ethnicity are important sources of variation after job loss. Women face a lower risk of job loss than men; yet, once displaced, they are less likely to obtain work, more likely to exit the labor force, and more likely to be reemployed part-time (Farber 2015). Further, once displaced, Black women and Hispanic/Latina women are less likely to find reemployment than comparable White women (Moore 2010, Spalter-Roth and Deitch 1999).

However, this research merely describes rates of reemployment while providing less specificity about whether the reemployment was in a similar or different field. In addition, while analysis of longitudinal data on UI claimants during the Great Recession finds that the time spent searching for work declines the longer one is unemployed (Krueger and Mueller 2016), past research otherwise provides limited insight into the evolving goals of the unemployed. The value of qualitative research is its ability to highlight important interrelationships between variables, shifts in individual trajectories, and, importantly, people's sense-making and emotions, which quantitative research is less apt to capture. For example, with respect to political debates about workforce attachment and income supports, qualitative research can illuminate cases of when someone prefers to work but faces obstacles due to poor workplace conditions, social isolation, or difficulty changing careers. Qualitative research can surface roadblocks or unexpected areas of agreement between policymakers and the people they govern—in this example, an

appreciation of work's value—potentially resulting in new solutions or perspectives on long-standing issues.

Research on low-wage women, including women of color, centers the effects of 1996 federal welfare reform, which greatly reduced cash aid to women and families experiencing poverty. This legislation was a turning point in safety net debates, and marked the rise of more punitive "work first" approaches (Peck and Theodore 2000). Pre-reform research emphasizes women's chronic non-employment and choices about welfare over work (Edin and Lein 1997, Wilson 1996); later research and journalistic accounts profile the stresses of low-wage employment, particularly for early career workers, amidst scarce institutional supports (Newman 1999, 2006, Ehrenreich 2001).

A dearth of qualitative research focuses on what happens after women who have been working in relatively steady but low-wage employment lose their jobs. This research gap persists even as the institutional environment has shifted further, with sweeping efforts to raise minimum wages, but also a weakening of the permanent UI safety net. Further, important compositional shifts have occurred in the low-wage workforce reflecting increased migration from Latin America and the Spanish-speaking Caribbean (Migration Policy Institute 2021). These changes point to a need to expand beyond the Black-White binary that has dominated prior study of U.S. poverty and low-wage work. Such research is essential, as it can provide insight into how the shock of job loss may further harm vulnerable women and families, disrupt fragile career paths, and set women on divergent labor market trajectories, deepening inequality.

Drawing on in-depth qualitative interviews of a racially/ethnically diverse sample of 41 women in Greater Boston who had separated from hourly service employment for COVID-induced reasons, this study seeks to advance our understanding of how low-wage women respond to unexpected job loss, barriers they may face to moving forward, and the ways race/ethnicity and its intersection with immigrant status may influence these processes. This study also seeks to challenge ongoing policy debates that often fail to recognize the complexity of women's lives, and the trade-offs they make to keep themselves and those in their care afloat.

The sample is limited to women employed for at least four months in food service, retail, or hotels. Recruitment occurred mainly online and targeted individuals working within 25 miles of downtown Boston. This study considers the multiple, interweaving factors that more racially diverse and economically vulnerable women contend with when they lose their main source of income, their jobs. After unexpected job loss, as was experienced during the COVID-19 pandemic, how do they decide to move forward, and what influences their responses?

Overall, findings show that involuntary job loss has the potential to significantly disrupt low-wage women's career paths. A significant share of participants, the large majority of whom had become separated in March 2020, were unemployed or non-employed when interviewed at least 16 months later, between summer 2021 and 2022—thirteen participants, or just under one third, lacked steady work-based income. Further, most reemployed participants earned the same or less, and about half of women across categories struggled with short and/or variable schedules.

I provide a typology that encompasses four responses to unexpected job loss that reflect search effort, or the timing of reemployment attempts, and search breadth, or the types of job pursued. In addition, I trace women's job outcomes, and describe women's subjective states, stressing the lingering toll of employment loss.

In addition, I offer a theoretical framework that aims to highlight potential influences on women's responses to job loss, including variation in their responses. I propose that women's responses are affected by *interweaving* factors, encompassing relationship-based resources; institutional realities; and cultural beliefs or attitudes about work, family, and success. The term interweaving is used to illustrate the potential interconnections or entanglements between factors.

Due to the limited number of cases, I am unable to show that these respective factors influence each response directly. Instead, I surface potential influences and common themes in the narratives and sense-making of the women with each response. In addition, the findings suggest that these factors and how they hang together may serve as important linkages between socio-demographic traits, such as race/ethnicity and immigrant status, and low-wage women's experiences of involuntary job loss and unemployment.

This research helps fill a gap in the qualitative literature on job loss and unemployment, which tends to focus on occupationally advantaged jobseekers, particularly White, U.S.-born jobseekers or blue-collar men. Further, this study challenges reductive political debates about how individuals relate to work, by highlighting the heterogeneity of low-wage women's responses to employment loss, and the different factors that may influence them. In addition, this study surfaces patterns and links that might be explored in future research using larger data sets.

The rest of this paper proceeds as follows. First, I review prior research and where I aim to contribute. Then following a description of the sample, recruitment methods, and analytic strategy, I review the findings. I conclude with a discussion of this paper's contribution and potential policy implications.

Response to employment loss: search effort and search breadth

Before examining potential influences on women's responses to job loss, it is important to understand what *response* means and where research gaps persist. Past research suggests that women's search activity after employment loss can be understood on three dimensions. The first dimension is effort, as in how much one searches once unemployed (Damaske 2020, Rao 2020). This is essentially labor force participation. The second dimension is breadth, as in where one searches relative to what was lost, in terms of tasks, setting, and arrangement (Pager and Pedulla 2015).

Past qualitative research on gender and unemployment emphasizes impediments to women's search effort, without delving deeply into the kinds of jobs pursued (Damaske 2020, Rao 2020). The ability to job search is important to securing reemployment, particularly for those who lack robust networks, and knowing that women's searches across the occupational distribution are often diverted provides insight into why displaced women have lower job finding than men (Farber 2015). However, research that limits its focus to search effort provides only partial insight into women's job loss and unemployment experiences. The jobs women pursue is an equally important dimension of response, because it provides insight into how women perceive

their reemployment options and contemplate their career trajectories. Further, understanding the factors that distinguish women making various post-job loss transitions (upward, downward, or lateral) highlights important labor market dynamics, including the features that aid (or hinder) mobility and areas where policy interventions could support more equal outcomes. Therefore, research on women's job loss and unemployment should examine both search effort and breadth.

A third dimension of search activity is search methods, as in how one searches for work (e.g., Green, Tigges, and Diaz 1999, Marsden and Gorman 2001). A relatively large literature examines differences in use of formal versus informal methods across socio-demographic groups, and the consequences of this variation in terms of pay and job status (Marsden and Gorman 2001, Mouw 2003, Trimble and Kmec 2011).

However, one could argue that search methods, particularly networks, *underpin* both effort- and breadth-related outcomes, rather than operating separately from them. For example, it is reasonable to expect that individuals with large, diverse networks may exhibit lower effort because they expect to learn of job opportunities through these networks. By contrast, a more isolated jobseeker might search persistently through formal methods because they lack informal information sources. Prior research on "non-searchers" is consistent with this theory (e.g., McDonald 2008). Pedulla and Mueller-Gastell (2019) call search methods and breadth "intertwined," reflecting findings that informal, network-based search yields application pools that are heavy on non-standard employment; in contrast, formal sources, such as the internet, typically yield full-time standard employment. Therefore, research suggests it is important to pay close attention to how search methods potentially influence effort and breadth.

Response to employment loss also encompasses an emotional or subjective component, reflecting one's internal emotional condition or state during the job loss event, its immediate aftermath, and the subsequent search and reemployment activities. Much prior research across disciplines documents the emotional toll of job loss, particularly in the U.S., given the centrality of work to individuals' lives (e.g., McKee-Ryan et al. 2005, Newman 1988, Krueger and Mueller 2011). In general, it is important to parse out these different dimensions of response, as they

provide deeper insight into the full scope of low-wage women's experiences following job loss, including critical sources of variation among them.

Potential influences on women's responses

Research suggests that three sets of factors can influence low-wage women's responses to employment loss as just described: private financial resources, and relationships that are potential sources of additional support; labor market institutions; and cultural attitudes about work. In general, past research on women's job loss and unemployment overlooks occupationally less advantaged women, including women of color. Therefore, little is known about how these different factors take shape in low-wage women's lives and affect responses to job loss.

Further, there is a need to better understand the different ways these factors come together in women's lives. Instead of operating separately, one might expect strong interconnections or entangling, with certain combinations associated with the intersections of race/ethnicity and immigrant status; characteristics like education and family status may also play a role. Particular responses to employment loss may emerge from these combinations or entanglements. Therefore, women's responses following involuntary job loss may be shaped less by a single factor, such as marital relationships, than by multiple *interweaving* factors. Further, such factors may exert competing influences on women, with some propelling women towards work, including certain kinds of work, while others deter their employment.

With these points in mind, the goal of this literature review is to orient the analysis around possible themes, not to isolate one factor or cause as more important than others. This study does not attempt to isolate the effect of certain situations on women's post-displacement outcomes, but to holistically describe how they respond—that is, how much women search and with what goals in terms of jobs pursued. Then it aims to surface potential influences in women's narratives and sense-making. This type of qualitative analysis allows me to richly describe women's behaviors and subjective experiences, and to trace how their situation makes sense to them.

Relationships

Many Americans lack the private financial resources to absorb the shock of job loss (Gruber 2001), particularly Black and Latino households, thus prompting larger consumption declines compared to White households (Chetty 2008, Ganong et al. 2020, Gould-Werth 2018). Further, evidence of a widening gender wealth gap, due to women's lower earnings (Lee 2022), suggests women are increasingly less able to buffer economic shocks relative to men. Job loss can trigger financial uncertainty that causes working-class women to seek immediate reemployment in any job (Damaske 2020, 2021; Gatta 2014).

After an unexpected job loss, women's relationships can become invaluable sources of support (Portes 1988); also, a lack of such relationships can put individuals at a significant disadvantage. Family structure may be an important source of variation in women's responses. Because single-headed households hold less wealth than married households (Schmidt and Sevak 2006), unmarried women may be less able to insure against income loss, particularly if separated from low-paid work, likely accelerating their reemployment. Yet, for unmarried women with children, a group with the least financial resources (Ruel and Hauser 2013) the stress of job loss, often from a lack of affordable childcare, can prevent them from even starting a search (Damaske 2020, 2021).

Unmarried women also lack the cushion of a spouse's income (Lundberg 1985), which research suggests can induce a slower, more methodical search among some working-class women for work similar to what was lost (Damaske 2020, 2021). Marriage can decelerate women's reemployment in other, more adverse ways, by fostering dynamics that steer them towards housework (Damaske 2020; Rao 2020).

Resources from other kinship ties, friends, neighbors, and coworkers, including cash gifts, childcare and transportation, and job information, (Portes 1998, Dominguez and Watkins 2003, Edin and Lein 1997, Harknett 2006; see also Stack 1974), are also likely to influence low-wage women's responses by providing important supplemental aid. However, obligations to less advantaged ties can strain resources (Chen 2015, Gould-Werth 2018, Lamont 2000, Portes

1998), potentially *accelerating* reemployment. At the same time, the trauma of past family instability or relationship dissolution can deplete one's psychic energy, hindering effort. To the extent such relationships are more common among Black or Latina women, they may compound existing racial/ethnic gaps in financial resources and contribute to further variation in women's responses.

Relationships are also important sources of job information and influence in hiring processes (Lane 2011, Sharone 2014). Prior research distinguishes network use by gender and race/ethnicity, finding that women and jobseekers of color, particularly Black workers, are disadvantaged by their networks' smaller size, homogenous composition, and dormancy (Campbell 1985, 1988, Pedulla and Pager 2019; Smith 2007, 2010). While Latino workers have larger networks, and often find work through them, the connection may not lead to a quality job (Trimble and Kmec 2011). However, a dearth of qualitative research examines search methods, particularly network use, among women of more marginalized identities; an open question concerns the degree to which variation in women's abilities to leverage relationships may further distinguish their responses, in terms of both effort and breadth.

Ties to community-based organizations may also provide vital aid (Small and Gose 2020). As the breadth of origin groups represented among U.S. Latinos and Black households expands (Waters et al. 2014), and as the immigrant share of the low-wage labor force increases (Rubin and Ettenheim 2023), an important open question concerns the degree to which immigrant status affects connection to private resources in the absence of more robust institutional supports and shapes reemployment attempts.

Labor market institutions

The scope and structure of labor market institutions may also influence women's responses, through the economic resources they distribute, the search practices they induce, and the structural conditions they generate. By confining the analytic focus to private domains, past research on women's unemployment draws attention from the institutions that may hinder

women's career advancement. Less understood are the ways key institutions interact with women's private supports to influence decision-making after job loss.

1. Income support programs

Both UI and Supplemental Assistance for Needy Families (SNAP, formerly Food Stamps) provided significant income stabilization in the last three recessions (Bitler and Hoynes 2016, Moffitt and Ziliak 2020). In particular, SNAP, a largely federal program, is filling gaps left in the wake of contractions elsewhere, increasingly serving childless adults (Center on Budget and Policy Priorities 2023, Food and Nutrition Service 2023). Temporary Assistance for Needy Families (TANF), which has contracted sharply since 1996, was unresponsive, with research showing greater cyclicality of extreme poverty during the Great Recession compared to earlier recessions (Bitler and Hoynes 2016, Moffitt and Ziliak 2020).[3]

The objectives of UI, another largely state system, are weakened by declining receipt rates and systematically lower receipt among Black, lower-educated, and younger unemployed workers (e.g., Forsythe and Yang 2021, Kuka and Stuart 2021). Damaske (2020, 2021) argues that the UI system perpetuates the labor market's gendered pay inequities because states base UI benefit amounts on prior earnings. This is a valid criticism, and advances her argument about gendered variation in reemployment attempts. However, it is minor in comparison to other challenges that undermine UI's effectiveness, mainly that outside recessions most unemployed receive no benefits. Research finds that most unemployed fail to apply, mainly due to perceptions of ineligibility (Gould-Werth and Shaefer 2012). Further, longstanding eligibility gaps exclude less advantaged labor force participants (West et al. 2016).

As in past recessions, UI and SNAP both expanded during the COVID-19 pandemic in terms of eligibility and benefit amounts. However, important gaps remained, most notably exclusions of undocumented immigrants, despite high pre-pandemic employment in hotels and food services

[3] The 1996 reform legislation, while most notable for replacing Aid to Families with Dependent Children with time-limited TANF, also severely restricted immigrants' access to federal income supports, including TANF and SNAP (Broder and Lessard 2023). Exceptions are made for battered noncitizens, but documentation requirements, particularly for SNAP, pose a major hurdle.

(Passel and Cohn 2015, Svajlenka 2020). Further, pre-pandemic UI receipt disparities persisted across states and socio-demographic groups (Carey et al. 2021, Forsythe and Yang 2021). Thus, it is reasonable to expect that such gaps could accelerate some women's reemployment efforts, especially those with limited private support networks.

UI, SNAP, and TANF also serve as entry points to the public workforce system.[4] One might expect these supports to broaden women's awareness of available careers, and aid transitions to more stable or higher-paid fields following job loss. But informed by a "work first" approach, services emphasize job search skills and personal responsibility. Research also suggests that displaced women are funneled into gendered low-paid employment, while training referrals to promote entrance to fields that offer economic security are rare (Gatta 2014; Grahame 1998; Negrey et al. 2003; Smith et al. 2005; Van Oort 2015).

Student loan debt from formal training or education may also affect women's flexibility following employment loss, and deter efforts to pursue further training or career shifts. Research finds that women, particularly Black women, are burdened disproportionately by student loan debt, and have greater difficulty repaying loans (Miller 2017).

2. Labor standards

The structural conditions of the labor market may also influence how women, particularly mothers, respond to job loss in terms of effort and breadth. Research on welfare recipients suggests that the sub-standard conditions of low-wage work may deter women's reemployment (Edin and Lein 1997). Research also suggests that women may pursue informal self-employment to balance work and family demands, given the greater flexibility in setting their schedule and location (Budig 2006). In the pandemic context, when faced with the choice of hazardous, unstable workplace conditions and unreliable childcare, or generously compensated unemployment, many women may have determined that they were better off deferring

[4] The Workforce Investment and Opportunity Act (WIOA) encouraged greater integration of means-tested programs, particularly TANF, with one change requiring state TANF programs to provide access to career services in WIOA-funded American Job Centers (also known as one-stop centers or career centers). WIOA also allows states to include TANF in "combined" WIOA plans that seek to coordinate and align resources across multiple programs.

reemployment. At the same time, women's responses may encompass alternative income-generating strategies like self-employment.

In sum, there is still much to learn about the influence of core labor market institutions on women's willingness to work, including the speed of their reemployment attempts, and the kinds of work or income-generating strategies they pursue following job loss. Additional consideration should be given to the possibility that such institutions could thwart low-wage women's efforts to transition to more stable career paths.

Cultural beliefs about work

Lastly, low-wage women's responses to job loss may be influenced by available cultural resources. Such resources potentially precede or underpin the factors just described, including women's partner relationships and their engagement with institutional supports, rather than operating independently from them. Culture can be understood as a "toolkit" or set of repertoires consisting of meanings or scripts that individuals selectively draw upon to act, manage their lives, and make sense of their worlds, especially when faced with uncertainty (Swidler 1986).

Recent theorizing by Gowayed, Mears, and Occhiuto (2022) advances our understanding of responses to job loss by highlighting the influence of *multiple* factors (what they call situational factors), including institutional factors like labor market demand. However, this framework features an important oversight in that it overlooks the role of culture in setting individuals on different paths; indeed, culture also provides a guide for how people should feel about their circumstances.

Cultural beliefs may inform women's perceptions of the causes of job loss, their interpretation of search challenges, and their willingness to take up public supports like UI. With research suggesting that workers more accustomed to economic adversity interpret job loss as less of a shock (Brand 2015), one might expect fewer interpretations of labor market difficulties as personal failures among low-wage women, particularly in a pandemic context (Chen 2015, Gould-Werth 2018, Newman 1988, Sharone 2014). At the same time, research on racial

differences in conceptions of morality (Lamont 2000) points to potentially stronger adherence to dominant individualistic narratives among White women compared to Black women (Lamont 2000). Thus, one might expect White women's lower engagement with supports once displaced relative to Black women, or potentially more conflicted feelings.

Cultural attitudes may also shape responses by influencing how women and their male partners balance household commitments. This includes chores and parenting, which may subvert some women's reemployment (Damaske 2020, Rao 2020). Such studies feature predominately White samples, and, in the case of Rao (2020), advantaged professionals; further, they emphasize marital relationships. Given important racial/ethnic differences in family structure and parenting ideals (Dow 2016), it is an open question how gendered family practices might unfold among a racially/ethnically diverse sample of lower-wage women and affect decision-making after a separation.

Cultural attitudes may also influence responses to job loss, particularly in terms of search breadth, by shaping perceptions of valuable or fulfilling work and work's role in one's life. A dearth of qualitative research, particularly research on unemployment, explores why women pursue the jobs they do. Gender and racial segregation are enduring features of the U.S. occupational structure, and confine women, particularly Black and Latina women, to certain industries and occupations (e.g., Tomoskovic-Devey 1993). Quantitative research suggests that Black jobseekers target a broad scope of jobs to adapt to racial discrimination in the labor market, while women target narrower pools (Pager and Pedulla 2015). Research also finds that women choose jobs that allow them to manage family responsibilities (e.g., Gerson 1986).

One might also expect women's responses to be influenced by career self-reflections and notions of what work matters. A growing literature explores pursuit of "meaningful" work, work as a source of personal identity, and the financial trade-offs individuals make, particularly the college-educated, in order to pursue such work (Cech 2021). Less is known about whether similar ideals affect women's responses following job loss, particularly economically vulnerable women separated from "bad jobs," or jobs generally considered less fulfilling. Further, research

has yet to explore racial/ethnic variation in these ideals (e.g., Cech and Hiltner 2022), despite important racial variation in other cultural attitudes noted earlier.

Research questions

This study aims to more richly describe what women do and how they feel in the aftermath of job loss. Past research focuses too narrowly on the obstacles to women's job searches and has not adequately examined women's decisions about which jobs to pursue. This study aims to understand both the timing and intensity of women's search efforts and their willingness to explore different fields after they lose their jobs. This study explores these topics among a population of workers that past qualitative research overlooks: women in low-wage work.

After describing women's responses, this study surfaces potential influences on women's decision-making. In particular, it explores the role of women's relationships, particular institutional realities, and cultural beliefs about work. This study seeks a more multifaceted view of the factors influencing women's thoughts and actions after a loss of work. Specifically, I try to understand how these sources of influence converge in economically vulnerable women's lives.

Past research emphasizes women's private lives and how dynamics with partners can subvert reemployment attempts. But given the diversity of family structures among less advantaged households, the nature or relevance of these dynamics among women separated from low-wage work is an open question. Further, by focusing on what happens in women's homes, past research draws attention from the different institutional factors that help structure women's economic opportunity. These factors include income support programs and rules that establish basic worker protections. This study aims to understand how these private and public sources of influence intermingle in low-wage women's lives.

This study also aims to understand how women's cultural beliefs affect their sense-making and actions after job loss. Culture can influence women's partner relationships and their engagement with institutional supports. But one area deserving greater attention pertains to how women's

perceptions of "meaningful" work and the role of work in their lives influence their job choices after a separation.

The findings from this research can offer valuable insights into several issues, including the extent of variation in women's economic circumstances and sense-making after job loss, and, in particular, linkages with race/ethnicity and immigrant status. While this study does not attempt to explain which women weather involuntary job loss, it can contribute insight into the question. Additionally, findings can provide insight into fundamental questions like women's views of the range of job opportunities and career paths available to them, and their relationships with work generally.

Data and methods

To provide insight into these questions, this study draws from 41 in-depth qualitative interviews with women living and working in Greater Boston. These interviews were conducted between July 2021 and July 2022.[5] Women were eligible if they were between the ages of 25 and 64, and employed steadily for at least four months in an hourly position in a food service or drinking place, retail establishment, or hotel, and had experienced involuntary COVID-induced job loss as of February 2020 or later. This includes participants whose workplace closed, whose position or shift was eliminated, or who were placed on temporary layoff. It also includes a minority of women who had left their jobs due to health and safety concerns and/or lack of childcare. Separations of this kind, while employee-initiated, were effectively involuntary, since the reason for quitting was due to circumstances beyond the employee's control.

Eligibility was further limited to women whose pre-pandemic job was their main source of income, including women who worked part-time. All the women in the sample worked at least 25 hours each week, on average. The sample also included women employed in non-standard

[5] This includes preliminary interviews with seven participants. I also conducted preliminary interviews with seven *additional* women, whose data I do not incorporate here, because their pre-pandemic employment was later deemed ineligible (i.e., five of them worked in salaried positions prior to the pandemic, one was outside the sample age range, and a final participant failed to meet the tenure requirements). Once formal data collection was underway, six additional women were deemed ineligible due to various circumstances, including failure to consent to participate (n=1), and ineligible pre-pandemic employment.

arrangements, namely prep cooks and servers employed by food service staffing firms, a robust industry in the region, as they frequently worked side-by-side with individuals in standard arrangements and had employment histories that were largely indistinguishable from the rest of the sample.

The sample captures occupations that require customer interaction of some kind—servers, bartenders, prep cooks, cashiers, sales associates, hotel room attendants, and desk clerks, among others. The women who fill these jobs cook and serve the food we eat when we dine out, ring up our purchases at the stores where we live and work, and ensure our stays away from home are comfortable. Many perform this work in front of customers, often expending emotional labor to enhance customer experience (and earn tips), while others labor out of view in back-of-house roles, like dishwashers or room attendants. Despite hard physical demands, and their centrality to U.S. community life, these jobs tend to be low-paid, lack benefits or paid time off, feature unstable scheduling, and often lack union protection.[6]

This study employed a stratified sampling strategy to generate a non-random sample with representation across race-ethnicity, and to a lesser extent, nativity (Trost 1986). Eligibility was further limited to women whose self-reported race/ethnicity was White, Black or African American, and/or Hispanic or Latina.[7,8] By incorporating Hispanic/Latina women, and both

[6] As to union protection, hotels, certain segments of food service, and grocery have higher-than-average union density in the Greater Boston region. However, just three participants reported union membership in their pre-pandemic jobs, including one participant separated from a cashier position at a grocery store, and two participants separated, respectively, from museum- and airport-based serving positions. A fourth participant worked at a unionized hotel, but in an hourly position outside the bargaining unit. A fifth participant, separated from a hotel housekeeping position, could not say whether she was covered by a union contract.

[7] This paper uses Latino, or Latina, as shorthand for individuals of Hispanic or Latino/x origin. It uses Black as shorthand for participants who would describe themselves as either African American, Black American, or Black.

[8] In the event participants self-reported their race-ethnicity as a nationality or country of origin (e.g., 'Dominican' or 'Haitian'), the following criteria, based on U.S. Census criteria (and revised standards from the Office of Management Budget), were used to categorize individuals into one of the three racial/ethnic categories. The category White includes women who self-identified with one or more of the following nationalities or ethnic groups with origins in Europe, including but not limited to English, French, German, Irish, Italian, Polish, or Russian. The category Black or African American includes women who self-identified with at least one of the following nationalities or ethnic groups with origins in Africa or the English- or French-speaking Caribbean, including but not limited to Barbadian, Cape Verdean, Ethiopian, Haitian, Jamaican, Kenyan, Nigerian, or Trinidadian and Tobagonian. The category Latina or Hispanic includes women who self-identified with one or more of the following nationalities or ethnic groups with origins in Mexico, Central and South America, and the Spanish-speaking Caribbean including but not limited to Colombian, Cuban, Dominican, Ecuadoran, Guatemalan, Mexican, Puerto Rican, and Salvadoran.

immigrants and non-immigrants, this paper seeks to advance beyond a binary Black-White paradigm that anchors a number of studies of race and unemployment, or nonemployment, in the U.S. This is not intended to diminish the importance of the Black-White divide to the country's class structure, politics, and culture, but rather to better account for the dynamics and demographic realities of contemporary urban labor markets in the U.S., and the significance of other racialized groups (Omi 2001).

All respondents lived in Greater Boston, a region whose racial and ethnic diversity has evolved significantly in the last 30 years. Although White workers remain a majority of the region's labor force, their share has declined over time, while the respective shares of Latino workers and Black workers have both risen. Regional population growth over this period has been led almost entirely by immigrants of color, especially Latinos (Edozie et al. 2019). This has contributed to a labor force with a relatively high share of foreign-born workers (23 percent versus 17 percent nationally).[9] As the number of Latinos in the region has increased significantly, so has the breadth of their diversity, with significant shares today from El Salvador, Guatemala, Honduras, and Colombia, along with Spanish-speaking Caribbean countries (i.e., Cuba, Puerto Rico, and the Dominican Republic), which have long predominated (Edozie et al. 2019). Similarly, the foreign-born share of the region's Black labor force has risen significantly to more than four-in-ten, with Haiti, Cape Verde, and Jamaica as the most prevalent countries of origin (Edozie et al. 2019).[10]

Recruitment was limited to individuals residing within 25 miles of downtown Boston. As housing costs have spiked throughout Massachusetts, especially within the city of Boston (Joint Center for Housing Studies 2022), many surrounding towns have become significantly more racially/ethnically diverse. This is reflected in the sample, with participants coming from towns like Chelsea, Malden, Revere, Lynn, and Watertown, to name a few, where immigrant populations and populations of color have increased sharply since 1990 (Edozie et al. 2019).

[9] Author's calculations of pooled U.S. American Community Survey data, 2015-2019
[10] Author's calculations of pooled U.S. American Community Survey data, 2015-2019

Recruitment occurred through various online forums. Efforts shifted to online resources after multiple attempts to recruit participants through community-based organizations—including childcare centers, worker centers, and women's day shelters—and use of flyering in libraries, shopping centers, and commercial districts yielded limited results. Targeted Facebook advertisements were an effective method, particularly for Latina woman (Schneider and Harknett 2019), as was Craigslist. An additional source of recruitment, particularly for the city of the Boston, was the weekly e-newsletter of an area career center, one of many throughout the region that provides free employment services to jobseekers, including unemployment insurance recipients.[11]

I created a Facebook page featuring brief descriptions of the study purpose, eligibility criteria, and participation terms, including that participants would receive $50. Content was in English and Spanish. The page also featured photographs of women of different races/ethnicities performing the types of jobs targeted by the study.[12]

Both the Facebook page and advertisements featured similar language inviting potential participants to complete an anonymous 12-question Qualtrics survey, or to contact the project team directly. The survey, available in English and Spanish, acted as a screening tool. It asked basic questions about one's demographic background (i.e., their gender, age, and highest schooling), the primary job held prior to the pandemic, the circumstances of one's job loss, whether they currently worked for money, and the best way to contact them. Screening calls probed more deeply into women's circumstances, and typically lasted between 15 and 30 minutes. Formal interviews were arranged with participants who provided responses that matched the study requirements. A total of four individuals, including two paid undergraduate research assistants, plus two paid translators, both White-presenting women in their 30s, conducted screening calls with Spanish-speaking participants and provided live interpretation during interviews.[13] Though participants were invited to share study information across their

[11] Specifically, of 41 participants, 12 participants were recruited through Facebook, 18 through Craigslist, one through NextDoor, four through the career center newsletter, five through snowball sampling, and just one through a flyer posted on the public message board of an area public library branch.
[12] The study recruitment page is available at this link: https://www.facebook.com/covid.job.loss.study.
[13] Translation and interpretation responsibilities were divided as follows. The one male undergraduate research assistant, a U.S.-born, first-generation college student, assisted with screening calls, and written translation tasks

personal networks, and, in certain instances provided the contact information of women directly, I recruited just five participants through use of snowball sampling.

The final sample featured 41 women, including 19 White women, 10 Hispanic/Latina women, 9 Black women, and 3 women who identified as both Black and Latina (see Table 1 for sample information). Two White participants were foreign-born, from Albania and Armenia, respectively. All Latina participants were foreign-born except for one, with Guatemala and Colombia as the most common countries of origin. Of Black participants, three were foreign-born, from Cape Verde and a small Caribbean island nation, while a fourth participant's country of origin was unknown. Occupationally, the largest number of participants worked as front-of-house servers, bartenders, or hosts in their pre-pandemic employment (n=18), followed by back-of-house prep cooks (n=7), then retail cashiers/associates (n=5). More broadly, 27 participants worked in front-of-house or customer-facing roles, including servers, retail associates, or hotel receptionists, while 14 worked in back-of-house or non-customer-facing roles, such as prep cooks, dishwashers, or room attendants. Pre-pandemic, the majority of participants worked in the food services sector (n=26), while the remainder worked in retail trade (n=6), hotels (n=6), or a combination that included food services and either retail trade or hotels (n=3). Tenure in pre-pandemic employment ranged from between approximately 4 months up to 33 years. The vast majority of participants, or 36, separated through layoff, while five quit. At the time of interviews, participants ranged in age from 25 to 64, with a median age of 37. Slightly more than half of participants were single (n=21); 11 were married, while 9 were cohabitating. While 25 participants were parents, 17 reported children under 18 in their care.

[Insert Table 1 about here]

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only; the second undergraduate research assistant, an early-30s woman from the Dominican Republic, assisted with screening calls, written translation tasks, and live interpretation during interviews. Once it was clear that I would need to be very flexible to accommodate the limited schedules of potential Spanish-speaking interviewees, I hired two additional assistants, both adult women in their 30s, to provide live interpretation during interviews. The first was a White-presenting woman from Colombia; the second was a White-presenting U.S.-born woman with Mexican and Peruvian heritage. The length of interviews with Spanish-speaking participants varied. In two cases (Esperanza and Teresa), interviews were shorter than expected (about 1.5 hours) due to participants having to depart unexpectedly for work; in such situations, I made sure to cover the most important questions. Though participants were notified in advance that they should set aside two hours, it was not always possible. Otherwise, interviews with Spanish speakers were *longer* than average, due to the time needed to translate spoken content between English and Spanish, and to clarify certain details, like job tenure or pay, multiple times.

Interviews with 28 participants were conducted in person, while interviews with 13 participants were held virtually using Zoom. Interviews held in-person occurred in participants' homes, coffee houses, fast food restaurants, my car, a local library, and my campus office. They lasted between one and a half hours and three hours and fifteen minutes, with a median duration of approximately two hours. Live interpreters assisted with interviews of seven Spanish-speaking participants.[14] Two such interviews were held in person; two were in a hybrid format, where I was present with the participant, while the interpreter joined via Zoom; and four were held via Zoom. Interviews were audio-recorded and transcribed by a professional transcription service; transcription was limited to English dialogue. Participants received $50 at the end of the interview, with an additional $25 paid for interviews up to or more than three hours.

I used an interview guide featuring open-ended questions about participants' work situations, job-loss circumstances and how they moved forward, family life, and types of supports used. Interviews also probed into early-life education and employment experiences. During interviews, I took care to emphasize the confidential and voluntary terms of participation, to repeatedly signal openness to any response, and, where possible, to order questions in such a way that established rapport and trust before discussion of sensitive subjects. Detailed fieldnotes capturing initial impressions of and reactions to the participant and interview, along with observations of body language, significant or effusive emotional displays, surrounding context, and other notable moments, supplemented interview transcripts. Consistent with abductive analysis, slight adjustments to the interview guide were made based on identification of "surprising research evidence" or unexpected findings (Tavory and Timmermans 2014, 11).

Interviews transcripts and field notes were transcribed in Atlas.ti. Initial coding was based on categories derived from the interview guide, along with those generated inductively. Coding proceeded on approximately two dimensions, with the first being focused on the evolution and circumstances of women's lives as they were reported to me, particularly during the episodes of

[14] Interpretation was used with: Blanca (hybrid), Esperanza (hybrid), Helena (Zoom), Hilaria (Zoom), Josefina (in-person), Sofia (Zoom), and Teresa (Zoom). An interpreter was present, and interjected occasionally, in the in-person interview with Noemi. However, the vast majority of our conversation was in English.

disruption under study, while the second paid attention to explanations or introspective talk about their decisions and circumstances. As Tavory (2020) argues, while researchers cannot necessarily presume interviewees' accounts translate directly into action, they can use them to gain insight into how people make sense of their lives outside the interview context. Memo-writing was done in parallel to coding, capturing stray thoughts and deeper reflections on broader themes.

To facilitate comparison of participants, data on each were inputted into Microsoft Excel, where I constructed search and employment trajectories, reflecting characteristics of pre- and post-pandemic employment (e.g., pay, schedule, tenure, how found); dimensions of labor force participation and search once separated, i.e., effort (whether and how much searched); methods (how searched); and breadth (where searched); family arrangements; and material resources. Additional items included parental as well as early-life education and employment experiences. Broader thematic codes regarding cultural attitudes about work and family emerged after repeated readings of each interview and were appended to participants' Excel data. After further analysis, I categorized participants on the key dependent variable, response to employment loss, particularly in terms of search behaviors, and denoted common characteristics of each group.

Findings

This study's findings are split into two major sections. The first section describes women's responses to job loss. I distinguish responses in two main ways. The first way is with effort, as in how soon and persistently reemployment attempts occur after separation. Effort is essentially labor force participation—are participants job searching if unemployed, or outside the labor force, such as for training or caregiving. The second main way I distinguish responses is with breadth, as in the type of employment pursued relative to what was lost, in terms of tasks, setting, and arrangement (i.e., whether in a new industry or occupation, formal or informal, and/or employed in one job or multiple jobs).

Following descriptions of each response, the second section attempts to explain the factors that influence women's responses. Though I provide limited contextual information in the

descriptions of each response in the first section, the second section aims to probe more deeply into the ways women's relationship-based resources, institutional factors, and cultural beliefs converge and affect how they decide to move ahead after a separation from work. In this section, I probe more deeply into women's sense-making. How do women perceive these factors, and how do women's perceptions then relate to their responses, and, ultimately, their employment situations and subjective states?

Low-wage women's responses to employment loss

Four responses to employment loss emerged among participants (see Figure 1 for a summary description of each; Table 2 shows each participant's response). In the following section, I describe each response. Within each sub-section, I also examine what each response yielded in terms of more traditional outcomes as of their interviews, including employment status, hours, and earnings. Further, I describe participants' subjective or emotional states, both in the aftermath of job loss and at the time of their interviews. While the findings cannot directly explain who does and does not weather involuntary job loss, they can contribute some insight into the question.

[Insert Figure 1 about here]

[Insert Table 2 about here]

Recover

Fourteen participants had responses best described as *Recover*. Their primary focus was on *returning* to their prior employment situation—either the job they held prior to separation, or a very similar job. They made no explicit attempt to move to a new formal position with higher (or lower) pay or different core responsibilities relative to their prior employment. The large majority of participants (n=10 of 14) departed their pre-pandemic positions with recall expectations. With expectations to return, many participants did not actively job search while on layoff; instead, participants spoke of waiting for notification from their former employer. If participants searched, it was relatively late into their separation.

Many in this category reported grappling with existential questions about the future of the hospitality industry, particularly early on. But once the initial shock of the shutdowns wore off, many settled into pandemic routines focused on "self-care," new hobbies, or childcare. Many reported feelings of boredom or restlessness, having been accustomed to such active work schedules. The largest share of women in this category reported feeling relatively stable, but expectant (Figure 1, Table 2).

For example, Kendall, a 30-year-old White woman and bartender, responding to the question of whether she thought to search while on layoff, said: "No, 'cause I knew that my job would still be there." Brooke, a 31-year-old White woman and bartender/server, reported occasionally browsing Internet forums dedicated to helping laid-off hospitality workers with their career transitions; but otherwise, she did not actively search for alternative employment. For a time, she sold homemade jewelry and graphic t-shirts on Etsy and social media; but, calling it an "at-home hobby," she had no plans for it to be her primary income source.

Similarly, Tammy, a 64-year-old White woman, and highly experienced hotel food and beverage server, recalled being "bored out of my mind. The first six or eight weeks was really hard for me. I was just crawling out of my skin because I'm very active and I would work a minimum of five days a week." She began her job search approximately one year after her separation, remarking that she had become "very curious of what was out there."

Helena, a 39-year-old Costa Rican woman and former prep cook, is an exception. She quickly transitioned to job searching, even though she had expected to be recalled to her fast-casual restaurant. But as she searched for other prep cook positions, she regularly called her former employer for status updates despite their persistent non-response.

Three additional participants had *not* departed their pre-pandemic employment with recall expectations. However, similar to peers in this category, they demonstrated lower search effort, having deferred their job searches to summer 2021, relatively late; also, they had targeted work that was very similar to their pre-pandemic employment, in terms of occupation. Their reasons

for waiting to job search varied. With sole responsibility for her daughter, single mother Valencia, a 38-year-old Black and Puerto Rican woman, and former grocery clerk, spoke of having few options: "I didn't search for work. *I couldn't search for work*. I had Amy." She had worked an earlier stint as a prep cook for a fast-casual chain, but had separated after two months due to a harassing coworker.[15]

Like other later-career participants, when asked whether she thought to search, Kate, a 53-year-old White woman and longtime server hardened by years of physical tip-based work, cited health concerns and the need for much-deserved rest. Tonya, a 36-year-old Black woman, was laid off unexpectedly from her prep cook job seven months into the pandemic.[16] She spoke of waiting until restaurant hiring had become more robust; she was also wary of receiving the COVID-19 vaccine, which restaurant employers were increasingly requiring.

Status at interview

Nine of fourteen participants in the Recover category were earning steady work-based income by the time of their interviews. However, working conditions varied.[17] A number of participants faced under-scheduling or variability. This was the case for Josefina and Tammy, two committed, long-time hotel workers who were recalled in February and September 2021, respectively. While Josefina, a 41-year-old Guatemalan woman, and room attendant, had recovered to full-time hours just weeks before our fall meeting, 64-year-old White woman Tammy was balancing light restaurant shift-work with weekend banquet gigs, as needed. With thinned out staffs, participants also spoke of having to perform additional duties—hotel room attendants were tasked with laundry or kitchen work (Josefina, Nadine); bartenders managed their employer's social media during off-hours (Barbara).

[15] It is unclear if she was discharged, or had voluntarily quit; she remarked at some point during the interview, "they let me go!" but spoke of the episode as though she had been forced to quit, due to untenable circumstances.
[16] Tonya was deemed essential because she worked in the restaurant kitchen of a hotel that serviced affiliates of a nearby hospital. She was laid off relatively late, in October 2020, once demand had dipped.
[17] Two participants, Cassie (a 30-year-old White woman and server/bartender) and Nina (a 27-year-old Latina woman and dishwasher), were job-attached but not working when we interviewed. Cassie was on medical leave; Nina was on summer furlough.

Just one participant, Kendall, a 30-year-old White woman, was earning higher nominal wages in her bartending job; but she, too, had become frustrated with the unstable hours, and kept checking her phone during our Zoom interview to see if she would be called in for a shift later that day (she eventually was). She remarked, irritated: "So my schedule changes every week. And I'm on call; it's almost 3 o'clock. I would have liked to know three hours ago if I was going to have to work." Notably, she also spoke with resignation about the pandemic derailing plans to open a brewery in her sleepy suburban town, despite she and her fiancé moving there from Boston's inner ring for that very purpose.

Otherwise, about half of participants (7 of 14) were paid the same as their prior earnings, while the three women who were laid off permanently despite recall expectations, held *lower-paying* jobs.[18] Two of these participants, Nora and Nadine, talked of passively searching for new jobs, while third participant Helena was searching for a *second* job. Nora was a 48-year-old White woman from Albania and a single mother of a teenager; she had been unexpectedly laid off from her pre-pandemic hotel position of more than 10 years. Now a hotel front desk clerk, she reflected on her circumstances and the feeling that she should be earning more for her work:

> *So right now, I'm making $24.75 an hour. I was making $28 at my previous job, and it took me that long to get to where I was. And now, moving backwards, it doesn't have a good feeling. I think about it; that worries me. I say to myself, 'I have all this vast experience, I'm outgoing, I'm personable, I have a vast knowledge of Boston's surroundings. You name it, bars, restaurants in the vicinity of where I work, things to do, places where a guest can go.' And I excel at it, I really do. I'm very good at it, and I enjoy doing it. But to work that kind of hour, and that kind of hectic schedule, and also take a pay cut… I don't know how to describe the feeling. It doesn't make me feel good. It makes me feel like I'm not accomplished. And I should be a lot more accomplished. I should be aiming for $35 an hour, in that genre, and I haven't found anything.*

A sense of being unsettled was not uncommon among this category's reemployed; conditions were relatively stable, but not altogether satisfactory. For example, even though Wendy, a 42-

[18] Helena, Nadine, and Nora

year-old White woman, was mostly content in her high-paying restaurant serving job (also her pre-pandemic job), about a year after her return, she contemplated adjusting her daytime schedule, in part to manage shifting parenting responsibilities. She experimented with a service selling homemade food through a large delivery platform. But, given the substantial work involved, including shopping, prepping, then driving the food to a distant hub from her home just north of Boston, she abandoned it.

Circumstances had become increasingly urgent for the three unemployed participants, Valencia, Kate, and Tonya. While each talked of searching for jobs similar to what they had lost, circumstances had become urgent enough that Tonya had recently worked a single-day landscaping gig from Craigslist; similarly, Kate, whose only income was SNAP, and who spoke of "living on fumes" by the time of our interview, was prepping for a domestic cleaning gig, which she had secured through a neighbor.

Switch/Stack

The second response I observed was to *Switch/Stack*. The majority of these 12 participants focused on filling available work-hours as soon as they were able to work. While the predominant initial response to job loss among the Recover category was to defer search because of recall expectations or wellness concerns, 8 of 12 participants in the Switch/Stack category reported immediate reemployment attempts. They prioritized securing any work, including work dissimilar to their former employment (Switch). Arrangements often involved multiple job-holding (Stack), but not exclusively. Although participants were more likely to have held multiple jobs before the pandemic, this arrangement was not exclusive to them.[19] These

[19] Several participants from other categories spoke of multiple job holding either directly prior to the pandemic, or in their recent past. From the Reach category, Kate (53-year-old White woman) had performed domestic work for a family just prior to the pandemic, but stopped when they departed their permanent home for a less dense location outside the city; Josefina (41-year-old Guatemalan woman) had occasionally helped her ex-partner at his office-cleaning job in the evenings; Tammy (64-year-old White woman) had for 14 years worked a second job as a "nanny" for a family; and Brooke (31-year-old White woman) had worked occasional weekend gigs at comic book conventions. From the Reach category, Noemi (45-year-old Colombian woman) had balanced two serving jobs before landing at her pre-pandemic airport serving job; Fatima (48-year-old Cape Verdean woman) had balanced freelance interpretation work with her food prep job; Erica (49-year-old White woman), former hotel room attendant, had also worked as a part-time platform driver for roughly six months directly prior to the pandemic; and Bethany (27-year-old Black woman) had balanced two serving jobs. In the Step Back category, Kimberly (36-year-old White woman) spoke of performing occasional domestic cleaning gigs, in addition to her food prep position.

participants also expressed greater willingness to leave a job if unsatisfactory on some dimension. However, some participants' exits were also induced involuntarily.

For example, this category included three undocumented participants who had attained relatively high tenure in food service; or, as in 40-year-old Colombian woman Teresa's case, she had transitioned several months before the pandemic from dishwashing to higher-paid prep cooking. These participants spoke of wanting to work and searching diligently; and though they had understood that certain jobs in the initial pandemic phases were unavailable and tailored their searches accordingly, they projected openness to any work that would hire them, and recounted the period with great stress and agitation. For example, Blanca, an undocumented Guatemalan woman in her 50s, who had been let go unexpectedly from her 15-plus-year dishwashing job with a local catering company, said through an interpreter: "Anything I can do, I applied for it." Similarly, Esperanza, a 40-year-old Guatemalan woman, and former prep cook, reported searching for "whatever I could find." Reflecting these concerns, the largest share of women in this category reported feeling, essentially, stressed, including two women who also cited fearfulness; at the same time, two women reported feeling unfazed (see Figure 1, Table 2).

The four women who elected to defer job search did so because of childcare obligations (Melody), health and safety concerns (Eva), a need for rest (Tiana), and an assessment that good-paying jobs were scarce (Nita). Nonetheless, like their peers, these participants demonstrated openness to various types of employment once available for work, pooled earnings from multiple jobs, and worked briefer stints once employed.

For example, Nita, a 34-year-old Colombian woman with legal status had worked two pre-pandemic jobs in hotels and museum dining services both as a busser/server. Like other participants in this category, she had a relatively well-defined strategy for maximizing her employment potential and income.[20] Eligible for UI, she deferred her search until August 2020, which she determined was late enough that she had better options in terms job quality; yet, it was still months in advance of federal UI's expiration, which she expected would flood the labor

[20] Participants who projected a sense of "strategy" when talking of their reemployment attempts included: Bernadette, Courtney, Esperanza, Eva, Frances, Nita, Tiana, Teresa, Tracy.

market, and heighten her competition. Anticipating higher demand and compensation, she focused her job search on hospitals and universities.

Status at interview

Participants' abilities to secure paid employment prior to summer and fall 2020 varied. Additionally, three Hispanic/Latina participants were briefly sidelined by COVID-19 in 2020 and early-2021, including relatively severe cases for two participants.[21]

Two younger participants, Courtney, a 25-year-old Black and Puerto Rican woman and former retail associate, and Frances, a 31-year-old White woman and former restaurant/bar server, secured childcare employment as early as March 2020. Three other participants, Bernadette, a Black and Latina woman in her 50s and former hotel front desk clerk, Tracy, a 25-year-old White woman and former retail associate, and Sofia, a 47-year-old Latina woman and former server, transitioned to platform work around the same time, performing food delivery and grocery shopping.

Otherwise, at least five participants, particularly those with poor English proficiency, reported difficulty finding stable, non-platform work in 2020.[22] However, once participants found jobs, they did not stay for long. Reasons for leaving included *permanent* workplace closure (Teresa), the ending of a temporary position (Frances, Teresa), an employer's discovery of a participant's undocumented status (Blanca, Esperanza), or, as in two instances, quitting for something better (Esperanza, Nita).

For example, a few months after former prep cook Teresa's pre-pandemic restaurant closed permanently in July 2020, she started a temporary, part-time custodial position in the public transit system; starting January 2021, she was also balancing a half-time nanny position, the job she held when interviewed. Shortly after completing a month-long custodial position at an elder

[21] Blanca, Esperanza, and Nita reported contracting COVID-19; both Blanca and Esperanza reported severe cases. A fourth woman from the first category, Nina, a 32-year-old Latina woman, single mother of one (age 7), and dishwasher, also reported contracting COVID in late-2020. This coincided with her being placed on layoff.
[22] These participants are Blanca, Esperanza, Sofia, Teresa, and Tracy.

care facility around January 2021, which 40-year-old Esperanza departed because of her undocumented status, she was recalled to two of three of her pre-pandemic restaurants. She later quit one of them to move to a higher-paid position with a current manager, the job she held when interviewed.

Of the 12 participants in this category, 11 were employed and earning steady work-based income when interviewed; the twelfth participant, Tracy, a 25-year-old White woman and former retail associate, was on leave but job-attached (informally) (see Figure 1). Only one participant was with a pre-pandemic employer (Eva).[23] Notably, at least six participants held primary jobs with higher nominal wages than their pre-pandemic jobs. However, just four participants were working approximately similar weekly hours (meaning, they worked fewer hours than pre-pandemic schedules but at higher wage rates). Like many in the Recover category, scheduling was a lingering challenge, and at least six participants were searching for additional work when interviewed.[24]

Reflecting the mixed circumstances, participants' subjective states varied (see Figure 1, Table 2). Several participants felt positively about their circumstances. For example, after two consecutive bussing roles, first in a hospital then a university, Nita returned to a single, high-paying hotel food and beverage position at a former manager's request. Accustomed to balancing two jobs, she cited "more time for me," and her partner; still, she expressed mild concern about the hotel's lower occupancy levels. Similarly, while 40-year-old Colombian woman Teresa had wanted more hours in her current nanny job, she was relatively content as she had earned a childcare certificate in her native Colombia.

[23] Even though at least half of Switch/Stack participants (n=6) were recalled by their pre-pandemic employers, just one participant was still attached to a former employer when we interviewed (Eva, who reported recall offers from two of three pre-pandemic employers). Of the three participants who accepted recalls to former jobs, two had already departed them when interviewed (specifically, Esperanza, Eva, and Teresa accepted recall offers from former employers; of them, just Eva was working for a pre-pandemic employer when interviewed, in spring 2022.) Four participants had declined recalls, including three who had already started new jobs by the time their former employers had contacted them (specifically, Frances, Nita, and Tiana reported declining recall offers from pre-pandemic employers; Eva, a fourth participant, also declined one of two recall offers from former employers (she accepted the other offer)).

[24] These participants were searching for additional work: Bernadette, Blanca, Esperanza, Frances, Sofia, and Teresa. Participant Courtney, a 25-year-old Black and Puerto Rican woman, had very recently secured a third job with a coffee and fast-food chain.

A small number of participants were more constrained or projected a lack of direction. When I interviewed 47-year-old Guatemalan woman Sofia in March 2022, she had been working for more than 1.5 years in a part-time custodial position, a job she wished she could quit due to under-scheduling and worksite conditions she perceived as unsafe. She took up this position after working for some months as a platform food-delivery driver. She was job searching when we met. Through an interpreter, she said: "Now, there are sometimes that I do wish I could leave this job. But I have an obligation to my family, so I can't." Similarly, Melody, a 31-year-old Black woman and a single mother of a school-age child, and former restaurant/retail worker, was "drifting through Amazon," when we interviewed, having found the physical requirements of three prior departments too demanding.

Reach

The third response I observed was to *Reach*. After separating, the 12 participants in this category were focused on making occupational transitions up and out of lower-paid service work. Often participants' transitions involved pursuit of a prior career objective or highpoint, or an interest that took shape during the pandemic. While at least two cases involved potential transitions to standard employment arrangements, others involved informal self-employment or self-directed arrangements like real estate. With exceptions, such attempts often occurred after some length of time out of the labor force, during which participants were typically focused on childcare and/or skill development. In a small number of cases, these attempted shifts also occurred after brief initial attempts to return to work similar to what was lost.[25] Reflecting this variation, half of participants in this category reported feeling relatively stressed, while the other half reported relative stability (see Figure 1, Table 2).

Participants cited a variety of occupations and professions including: crafts/fine art (Bethany), non-profit and human services work (Britta, Ebony, Olivia, Tara), digital content creation (Noemi), medical billing and coding (Camille), nursing (Samantha), real estate (Felicia),

[25] Britta, Camille

translation services (Fatima), and meal prep/delivery (Hilaria).[26] These jobs require more specialized skills, perhaps even formal credentials, and typically draw higher compensation than hourly service work.

For example, Olivia was a 37-year-old White woman and single mother of a preschooler. A former restaurant server, she elected to finish her Bachelor's remotely while out of work, taking on approximately $25,000 of debt to do so. While her initial focus was on "how am I gonna keep my people safe," her "people" being her mother and child, her attention eventually shifted to her education and career. Recounting her decision to return, she explained:

> *I have this time, I'm not doing anything. So that's what occurred to me. Let me just finish school now. [School where she had earlier college credit]'s in New York; they've always been in person, but they were doing it virtually 'cause the pandemic, so it was kind of a one-shot opportunity for me to finish from here, 'cause they're already back in person now. So I'm like, I got to jump on this.*

Participant Britta, a 39-year-old Black woman and single mother of four (aged 10 to 22), was midway through an online human services certificate program when we interviewed. She had declined recall to her pre-pandemic job as a grocery merchandise clerk because of untenable changes to the working conditions, including a shift to night work, for which she lacked childcare, and an unexpected schedule and pay reduction. She explained: "The pay rate was $12.50. And I'm like, how do they want us to go from $13 to $12.50, and it's not even gonna be full time? It's only part-time? So I just, I couldn't do that."

[26] The stated aims of a 12th participant, Erica, a 49-year-old White woman, married mother of two (ages 10 and 12), and former hotel housekeeper and platform driver, were slightly less specific or well-defined. Having spent years earlier in her career as a front desk receptionist at a medical office, she spoke of wanting to avoid it, and housekeeping. Jobs mentioned included customer service, but also event greeter, or "something in a museum." She spoke of wanting to find "a job that I find enjoyment with […] just something that's different." She continued: "Just something that's a little bit more— I guess, who *I am* as a person. I don't wanna be a housekeeper or work in a [medical] office. I'm done with that crap. So maybe just to be around people that are maybe a little bit more educated than I am, if they accept me? [chuckle]" It was clear she had not begun her job search in earnest by the time we spoke by Zoom, and was unaccustomed to using online resources, like Indeed, or Craigslist; though she was set to start.

Since separating, she had been out of the labor force, spending part of that time grieving the death of her mother from COVID-related complications after a long illness. Recounting her anxiety about working and her mother's worsening health, she said: "I was an emotional wreck; I was depressed and sad. And I wanted to work, but I couldn't 'cause I was too worried about leaving my mother and it was just a lot for me at that moment."

Hilaria was a 34-year-old Guatemalan woman with undocumented status, and single mother of two (aged 9 and 15). She worked as a prep cook for a catering company before her March 2020 layoff. When we spoke via Zoom in March 2022, she had been working for six months as a part-time prep/pastry cook at the production hub of regional bakery chain. Unemployed a year, but reluctant to pursue formal work because of an asthmatic son, she turned to Facebook to sell a popular Guatemalan snack food *garnachas* from her home.

Status at interview

Few participants were earning steady work-based income when interviewed compared to the two prior categories (n=4).[27] Most participants spoke of struggling in some way or questioning their chosen path, either because their job search had taken longer than expected, or they lacked the motivation or safety net to achieve entrepreneurial success (see Figure 1, Table 2). Often this meant continued unemployment or underemployment (Camille, Ebony, Fatima); pivoting towards more accessible opportunities (Olivia, Tara); potentially returning to work similar to what was lost (Noemi, Britta); or applying for additional public aid (Felicia).

For example, Olivia, disheartened that her professional job search had been taking so long and was so heavily mediated by automated technology, called it, "singly, the hardest thing in my life right now." Finding the pay in her initial search for human services positions "almost unlivable," she pivoted to human resources, reasoning that she could apply the "people skills" she had honed in her serving career. Ultimately, she was frustrated that her significant educational investment was not paying off more quickly: "So I have this degree and it has been a personal milestone for

[27] Ebony, Hilaria, Samantha, and Tara

me to achieve it, but it really has not proved to give me any kind of leg up with this job stuff, so it's been a little bit frustrating."

Britta considered the human services training course a bright spot after a painful couple of years, following her separation from a job she had hoped to grow in and her mother's death. She spoke of interest in continuing her education, with the goal of perhaps opening her "own non-profit health organization," and was researching options at a nearby community college. Nonetheless, she was growing increasingly stressed about her precarious finances; and accustomed to "being able to provide," she talked of actively job searching. Since entering the training, her search breadth had shifted from hourly service work to a "real, stable job" in her chosen field.

Unlike several other participants in the Reach category, Hilaria expressed relatively strong optimism about her future, despite facing a tough road ahead due to her vulnerable legal status. Though she preferred to limit sales for her food prep business to two weekends per month, and viewed her low English proficiency and legal status as major hindrances, she aspired to formalize the operation. Speaking through an interpreter, she said: "So now my dream is to maybe find a spot where I can sell them, and [make the venture] bigger, and employ other people like me." The work was lucrative enough that in her ongoing search for a second cooking job outside the house, she avoided anything that required weekend work.

Step Back

The final, small group of three participants responded to pandemic-induced job loss by *Stepping back* from the formal paid labor force. They were distinguished from participants in other categories with weaker labor force attachment by the sense of uncertainty they projected about their return to formal paid work or steady work. Further, they expressed few coherent goals for their reemployment or work generally; and their descriptions indicated a lack of deliberate or consistent search activity compared to other participants. In the initial pandemic months, two of out of three participants reported feeling essentially stable, while one woman reported feeling relatively stressed (see Figure 1, Table 2).

First participant, Irene, a 41-year-old White woman and engaged mother of two (ages 7 and 13), was one of the few participants with a four-year degree, and had early-career experience in finance and professional services. But tired of office life, she switched to serving, a job she had greatly enjoyed as a teenager; but, once the pandemic hit, she left her neighborhood restaurant to manage her daughter's special health needs.

Kimberly, a 36-year-old White woman and prep cook with early-career CNA experience had secured a couple shifts months before from her pre-pandemic employer, a food service staffing firm. She was receptive to additional offers to work, but had otherwise not engaged in much formal work or job search. She talked of selling crafts before and during the pandemic, but her earnings from such work were unclear.

Lastly, Katie, a 30-year-old White woman, and former associate at a large cosmetics retailer, had transitioned to a part-time cash-only landscaping job in July 2020 while still drawing UI benefits, an arrangement that enabled her to "really stack my savings, which is amazing." She learned of the job from friends in a local music scene. She controlled the days she worked, calling it "non-committal"; but unlike Irene's and Kimberly's arrangements, she had an ongoing relationship with the owner, who assigned her to residences in Boston's affluent inner suburbs and paid her.

Status at interview

These three participants' employment situations were relatively precarious by the time of our interviews. Just one participant, Katie, had been earning steady work-based income. But she faced a seasonal dip in hours when we met in late-fall 2021. She talked of securing temporary serving work to weather the downturn—"some stupid job that I don't care about for a couple of months"—but seemed uncertain about the long-term feasibility of her arrangement. One longer-term option was to secure a "more legitimate" year-round landscaping position with an area park system or green space.

The circumstances of the two other participants, Irene and Kimberly, were more financially acute, with Irene saying that her family had been "struggling *very hard* with money at the moment." Both their households were receiving some form of public aid.

Irene earned income through rudimentary data-entry work on Craigslist. For her last gig, she earned $18 per hour to input business card information into a spreadsheet. She also "flipped" clothes, which involved buying clothes and reselling for a profit, usually online. She called her work situation "iffy," reflecting an ambivalence about exiting the formal workforce for full-time caregiving and coping with the associated challenges:

> *Sometimes I have days— I think maybe it's just days when being at home is frustrating and I feel like I'm stuck, and I can't stand hearing 'Mama. Mama. Mama.' one more time. [Then] I'm like, 'Oh God I wish I was in an office right now, just doing... Away from the chaos.' […] But then again, I love being able to be here for my kids, and be there for milestones, and to help them grow to be the best human beings they can be. So I'm kind of on the fence on that.*

Kimberly had been considering applying for disability due to a nagging foot injury and a heightening sense of anxiety that made working difficult. She earned occasional income by completing paid surveys and micro-gigs through various phone apps, and went on occasional "dump runs" with her live-in boyfriend of two years, a self-employed laborer. When asked how the pandemic affected her relationship to work, she responded: "Right now, it's not really there, but also it's... Part of it is for my mental health, interacting with other people and stuff like that, and I just... I need to be part of something, you know what I mean?" She cited several future work possibilities; but it was unclear if she would move forward with any of them.

Interweaving factors: relationships, institutions, and culture

In this section, I examine factors that seemed to influence participants' responses to employment loss, including variation in their responses. Due to the limited number of cases, I am unable to show that these respective factors influence each response directly. Instead, in this section I

surface potential influences and common themes in the narratives and sense-making of the women with each response.

I theorize that responses are influenced by *interweaving* factors, including resources derived from relationships, with kin and coworkers in particular; a set of institutional realities; and cultural beliefs about work, family, self-sufficiency, and success. Participants' responses in terms of search effort or timing seemed particularly influenced by disparate access to public aid, coupled with differences in privately-held resources, including personal savings and family help. Participants' responses in terms of search breadth seemed influenced by workplace relationships, certain institutional rigidities, and cultural attitudes that spring from a broad range of sources.

The term interweaving is based on the idea that such factors, rather than operating separately are potentially interconnected or entangled with one another; they seem to hang together. In this section, I explore how low-wage women's responses to job loss in terms of search effort, search breadth, and their subjective states in the aftermath of job loss—and subsequently, their employment status and emotional condition at the time of their interviews—are influenced by how each of these factors materialize and converge in their lives; each response seems underpinned by distinct patterns of interconnection or entanglement.

In the following sections, I assign labels that try to capture the essential nature of women's circumstances, particularly their labor market positions: more constrained (Recover); less constrained (Switch/Stack); selective (Reach); disconnected (Step back).

While this study is unable to conclude either way, the findings suggest that these factors and how they hang together may serve as important links between socio-demographic traits, such as race/ethnicity and immigrant status, and low-wage women's experiences of involuntary job loss and unemployment.

To parse out which of these factors matters and for which groups of women would require different data; however, this study surfaces patterns and links that might be explored in future

research. Additionally, since I argue that the different factors co-occur and interconnect, any future quantitative analysis would require a focus on interactions.

[insert Figure 2 about here]

More constrained: Fuller private supports, workplace loyalty, work as identity

Participants in the first Recover category were the most socio-demographically advantaged. Most participants were White (n=8) and/or U.S. born (n=10). Participants were also older (with a median age of 39), more likely to be married (n=6), and higher-educated (n=3 had a U.S. Bachelor's degrees), though the latter number was small.

Reflecting these traits, participants in the Recover category were the most advantaged in terms of financial resources. The large majority of participants received UI (12 of 14), the most of all categories. Further, fewer participants received SNAP (n=~4) or rental assistance (n=~2), reflecting more ample private financial resources, including home ownership among seven women.[28] Further, a slightly larger share of participants in this category were first-time UI recipients, reflecting more stable employment histories on average.[29] Such high receipt rates were despite participants' generally more mixed attitudes towards UI receipt, with three higher-educated White participants expressing discomfort (Kendall), shame (Barbara), or frustration at punitive-seeming application questions (Wendy), respectively.

With notable exceptions, Recover participants, who were more likely to be married or cohabitating, also had greater access to a partner's steady income, and/or a parent's caregiving help.

[28] As to SNAP receipt, it never came up in the interview of a potential fifth participant, Valencia; but given her financial circumstances, and that she received rental assistance, it is likely she received SNAP benefits, too.
[29] The number of participants in each category reporting first-time UI receipt are as follows: 7 of 12 in the Recover category; 4 of 6 in the Switch/Stack category (the status of fifth participant, Bernadette, is unknown); 4 of 9 in the Reach category; and 1 of 2 in the Step Back category.

These supports provided participants with a secure safety net once their employment disappeared. This likely accounts for their slower reemployment attempts, particularly compared to the more vulnerable Switch/Stack category.

At the same time, participants in the Recover category seemed more constrained in their ability to shift away from their pre-pandemic jobs. They professed stronger attachment to their pre-pandemic employment, reflecting commitment to trusted supervisors or employer-owners; many also cited expectations of promotion or that high tenure or length of service would be rewarded somehow.

Their movement also seemed constrained by labor market rigidities, namely the high cost of formal training, and the financial penalties that arise from shifting fields. Reflecting deep ambivalence about pursuing long-term careers in hourly service work, certain participants felt conflicted or bereft about their circumstances.

For example, Brooke was a 31-year-old White woman, and server. Like some other earlier-career participants, Brooke expressed apprehension about working in a front-of-house role into her mid- or later-career, as if doing so signified career failure.[30] Recounting the unpredictability of the initial reopening phases at her pre-pandemic brewpub, and the lack of appreciation she felt from supervisors, she remarked: “There are some days that I doubt myself for sure and get into a funk about being a server forever. I don't want to be 40 years old waiting tables and things like that.” Yet the idea of an office job, or what she called “sit down work,” was unappealing, a view others shared; having worked in that type of role post-college, she felt most productive “being in motion,” and she liked this feature of the restaurant industry best. Further, she cited close, trusting relationships with her employers, and had expected them to better engage her skills and experience in future expansion plans. Brooke was also “swimming” in a reported $35,000 of debt from her four-year degree, adding that the “idea of getting any more of it is so anxiety-inducing that it's crazy.” This debt foreclosed any meaningful medium-term consideration of formal skill development or career shifts.

[30] Brooke, Kendall, Samantha

Other participants cited similar challenges. Longtime hotel worker, Nora, who held an Associate's (plus a B.A. from her country of origin, Albania), had completed a free online IT course when she sensed her layoff from her pre-pandemic hotel was imminent, but remarked: "it's not that I had the money to go and spend and take an online course, at University or whatever." Thirty-year-old White woman, and bartender, Kendall, whose entrepreneurship plans were derailed by the pandemic, had felt "professionally stunted"; she had dropped out of her self-financed four-year degree in her final year, "regret[ting] it everyday."

Similar contraints were observed among this category's mid- to later-career participants, many of whom had accumulated high tenure and earnings on par with certain professional jobs, contributing major family support. Additionally, these participants recounted work processes and customer interactions in ways that projected significant tacit knowledge, and a commitment to front-of-house or customer-facing work as a *profession*. Hotel worker, Nora, who spoke confidenly of her accumulated knowledge and guest services skills, said: "Hospitality runs in my veins."

Despite these successes, many cited pressure or judgment of their career choices from peers, patrons, or society at large. For example, 42-year-old White woman Wendy, who spoke of being drawn to the instant cash earnings of her serving job of 10-plus years, was conflicted about her work schedule and testing new arrangements. Her parents and grandparents Italian immigrant business owners, she cited budding entrepreneurial aspirations, and "[making] something for yourself, [making] something for your family." However, she had yet to act on them beyond her earlier meal prep attempt, cited earlier.

Such participants likely faced steep penalties if they shifted fields, or even employers (and both Nora and Nadine were earning less in their post-layoff jobs). This was especially true for older, lower-educated participants like Kate or Tammy. This may help to account for why long-time hotel server Tammy, a 64-year-old White woman, had eschewed alternative re-employment for so long, despite a high commitment to work and financial independence. Her relatively narrow skill-set would garner lower pay and less respect elsewhere, especially outside higher-paid hotel food and beverage. Referring to coworkers at her pre-pandemic (non-union) hotel, including a

cherished supervisor, she said: “Those are the people who value my opinion, that they see value in me; they know. I don't have to go to there and prove myself to anybody. They already know.” Before it was clear that she would be returning to her pre-pandemic hotel, she accepted a temporary food-runner position at a sports venue; but she struggled to navigate the size and felt out of her depth, remarking: “I don’t like feeling inept.”

Like Tammy, Josefina, a 41-year-old Salvadoran woman and hotel room attendant with legal status, was fortunate to have achieved a stable, well-paid work situation, despite lower education, and in her case, low English proficiency. She spoke of opportunities to move to higher-paid unionized hotels through former co-workers. But she preferred her current arrangement because of the convenient commute from her western suburb; she also cited a supportive relationship with her supervisor, a Spanish-speaking Cape Verdean woman with whom she texted over the pandemic, as well as her 16-year tenure.

More isolated than other participants in this category, and still unemployed after a brief stint at a fast-casual chain, Valencia, a 38-year-old Black and Puerto Rican woman, spoke of traditionally targeting food service and cashier roles, because: “It's the most easy things that I can do. *It's not that difficult*, you know?" She had earned an Associate’s in culinary arts several years prior from a now-shuttered for-profit institution, and still held $3,500 of debt. However, her most recent work experience had so upset her that she was eschewing food handling jobs. She spoke of wanting to “grow up in a job, have a little career,” but was increasingly stressed by her unemployment, and finding it difficult to avoid food service, saying: “I mean, I promised myself that I didn't want to do anything to do with food, but mostly that's what they're looking for—food stuff. I'd rather do cashier, but I am so stressed out— it's just, damn."

Less constrained: Fewer supports, family obligations, strategic/vigilant

Participants who pursued a Switch/Stack response were the most socio-demographically vulnerable. They were slightly younger, much more racially/ethnically diverse (n=9 Black or Latina), and included more immigrants (n=6, including 3 of 5 undocumented participants) than

the three other categories.[31] Further, participants in this category were lower-educated than the three other categories, on average.

With few institutional supports, these participants were the most vulnerable to hardship after job loss. Rules that bar undocumented immigrants from receiving major forms of cash aid in the U.S. were a hindrance to Hispanic/Latina participants in particular.

Just half of participants received UI (n=6 of 12), with administrative difficulties derailing the applications of two others. Even fewer participants received means-tested aid, despite many lacking significant financial resources. While SNAP was an important monthly boost for most participants in the Reach and Step Back categories, especially once federal UI stopped, just under half of participants in the Switch/Stack category received it (n=5 of 12); another participant, Courtney, reported receiving SNAP through her boyfriend, whom she had recently moved in with.[32] Though Esperanza, a 40-year-old undocumented Guatemalan woman, and prep cook, received SNAP on behalf of her two younger U.S.-born children, payments had recently stopped after she failed to recertify. When asked why, she explained that the website was in English, suggesting she was unable to locate a translated option.

In place of formal government assistance, Latina women and participants with undocumented or uncertain status, received help from private community-based or charitable organizations. The most significant source of aid was rental assistance, in some cases for several months, along with food aid.[33]

Obligations to family further strained scarce resources. Remittance payments ranging from $200 up to 10 percent of monthly earnings were a critical added expense for at least seven study participants from Central America and Colombia, including five participants in the more volatile Switch/Stack category.[34] Just two participants were forced to reduce or pause payments.[35]

[31] A sixth participant, Sofia, age 47, had come to the U.S. from Guatemala several years ago seeking asylum with her two children (her parents followed later). She reported being authorized to work.
[32] Bernadette, Melody, Tiana, and Tracy
[33] Participants Nadine (Recover) and Noemi (also reported receiving community-based aid
[34] Blanca, Esperanza, Teresa, Nita, Noemi (Reach), Josefina (Recover)
[35] Blanca and Teresa

With work-based earnings as the main income source, and with persistent obligations to family abroad, or else relatively weak support from family within closer proximity—just one participant was married (while four others were cohabitating)—the loss of employment income seemed to compel almost immediate reemployment attempts for many participants in this more vulnerable category.

Yet, in contrast to the Recover category, Switch/Stack participants also seemed less constrained in terms of search breadth. Specifically, participants moved with a greater sense of purpose or strategy. Jobs pursued were based on labor market conditions at the time of search and participants' assessments of which jobs had relatively low entry barriers, decent pay, and tolerable conditions. For example, higher-paid, more stable (and often unionized) hourly positions with larger employer systems, like universities, airports, or hospitals—which were sources of early, well-paid reemployment for English-speaking server, Nita—were out of reach to this category's undocumented participants because of the more stringent documentation requirements; the same was reportedly true of the ubiquitous Amazon.

Further, participants' family arrangements likely permitted consideration of a broader range of employment options, as proportionately fewer participants had children under 18 in their care (n=3), compared to other categories.

Relationships with coworkers or members of a larger ethnically-based occupational community were important, but only to the extent that these connections helped participants transition jobs. Otherwise, they professed less loyalty to employers. They expected less from work in turn, and extracted only what they needed. Participants in this category also projected less deference to the idea of work as a source of meaning or fulfillment. Work provided income, structure, or family support.

Notably, the more vigilant orientations of two participants were informed by reported difficulty achieving job retention or advancement because of their race. Twenty-five-year-old Courtney spoke of her qualifications, and White-passing name, often getting her in the door, but then

encountering difficulties once employers learned she was not White, calling her dual Black and Puerto Rican identities "double the trouble."

Tiana was one of the few participants of color, and one of two Black participants, with serving experience.[36] She preferred her pre-pandemic catering serving position to restaurant serving as the staff are typically more racially/ethnically diverse; she recounted an experience in which she had suddenly been offered fewer shifts than the younger, newer White staff despite requesting more hours, *and* receiving praise for her performance.[37] Balancing multiple jobs at reduced schedules provided greater flexibility, which she prized; further, it reduced her obligation to—or investment in—any given job. This was how she guarded against the challenges of being a "Black woman in employment," as follows:

> *I don't have to commit to everything they want. […] Cause I tried those jobs, like 40 hours, and 30 hours, and it put a lot of pressure on me, mentally, at these jobs. And if something came up in my life, and I had to change it, my managers would give me a hard time, most of the time. [...] Food service and retail. And they'll give me a hard time, they'll fire me, different things that I went through. […] Or hiring other people, [having me] help someone else get the job and then push me to the side. And I experienced different things, and that mentally... What's the word I'm looking for? Mentally messed me up a little bit about employment for me, being a Black woman in employment. So it works better for me that way.*

Though serving had recently been her primary employment, she also worked continuously as a Personal Care Attendant (PCA) for her grandmother, assisting her mother for eight hours per week. She spoke of perhaps deepening her PCA work, and held an expired medical certificate

[36] Of the four Black participants with restaurant or food service experience, two held back-of-house (BOH) prep cook roles.

[37] This is also true of food service staffing firms, which are often referred to by workers as "catering" firms, but differ from traditional catering firms in that they do not typically have in-house menu planning services; instead, they provide front- and back-of-house staff, including servers, runners, prep cooks, etc. Event organizers, attached to area universities like MIT for instance, will hire them to provide support; one participant also talked of being dispatched to an area sports stadium, and working side by side with the permanent staff. Tiana had worked for a traditional catering firm; other study participants, Bethany, Kimberly, and Fatima, had worked for food service staffing firms, Bethany as a server, and Kimberly and Fatima as prep cooks. Undocumented participant Blanca had also reported picking up occasional serving work with food service staffing firms, whenever she wanted extra work.

from a shuttered for-profit provider (plus $8,000 in loans). However, she was nursing a back injury that was prompting deeper questions about her ability to continue in physically-demanding service employment in general.

At least two participants spoke of work as *a means to an end*. Working helped 34-year-old Colombian woman and serving assistant, Nita, build wealth and secure her future. Though she had downshifted to one job post-pandemic, years of balancing two FOH positions had allowed her to purchase a home in a heavily Latino suburb north of Boston and begin the process of acquiring two properties in Colombia. She explained as follows:

> *Why two jobs? Because basically, I think I came to this country, because best opportunity, and to make money. And also, because I want to buy some things, like buy a house or something in Colombia that I can just kind of secure my future, something like that. And also, I help my [father] in Colombia […] So that's basically the main reasons. And especially here in Boston, it's expensive to live; and if you don't have like two jobs, or like a good income, it's hard.*

College-educated, but less-stably employed and isolated, middle-aged Black woman and former hotel desk clerk, Bernadette, called jobs "a dime a dozen." She returned to work early in the pandemic as a platform grocery shopper, but was struggling to secure more than three weekly shifts in summer 2021, and was working intermittent Craigslist gigs to make up for the lost income. With aspirations to own a business, and plans to relocate to the Southern U.S., she called work a "means to an end of working for myself, on and offline," citing interests in writing, digital videos, and crafts. She had reportedly purchased a website domain; but it was unclear how viable or lucrative such a venture would be.

Selective: Fuller institutional supports, parenting obligations, trauma-informed work expectations

Participants in the third Reach category were more selective. Such selectivity was typically enabled by receipt of fuller institutional supports. This scope of support was likely linked to participants' family arrangements. Unlike the first Recover category, where a similar share of

participants had children (n=6, three of them married), all parents in the Reach category were single, except for one participant, Noemi.

And while not as racially/ethnically diverse as the Switch/Stack category, over half of participants were women of color (n=7), including five Black participants (three of whom were born outside the U.S.), the highest of all categories.

Like the more advantaged Recover category, a majority of participants received UI after separating from their pre-pandemic positions (n=10 of 12). However, reflecting greater deficits in private safety nets, including weaker kin networks, means-tested supports were also important, with just over half of participants receiving SNAP (n=7), and half receiving rental assistance of some kind (n=6); two had also received TANF. With important exceptions, this category featured more notable instances of isolation or estrangement from family.[38] Rental assistance, in the form of public housing or Section 8 vouchers, was particularly valuable, providing participants the buffer of significantly reduced housing costs once earnings stopped.

Importantly, several women in this category also spoke of close or ongoing connection to public employment services.[39] While such services seemed to expose participants to higher-skilled occupations, their ability to facilitate participants' entrance or retention in such occupations was less obvious. Some participants spoke of past attempts at short-term training or possible future skill development in ways that seemed incoherent, inconsistent with reported interests, or out of reach given their reported financial resources.

Some participants' decisions to exit hourly service employment for higher-paid, more specialized fields, or to test self-employment, also reflected a strategy of coping with an inhospitable institutional environment for working parents, particularly single mothers. Like the Recover category, some participants in the Reach category, particularly White participants, were also influenced by dominant cultural attitudes about meaningful or valuable work, causing them to

[38] Bethany, Britta, Camille, Felicia
[39] Britta, Camille, Ebony, Fatima, Felicia (but also Bethany, to aid more generally)

eschew hourly service work.[40] Participants also projected a stronger sense of conviction about what work *should* provide, in terms of pay and conditions. Such beliefs seemed informed by past experiences of instability and hardship. These experiences seemed to harden participants, and provide them with greater clarity about what they should and should not tolerate. It is likely that such beliefs also facilitated participants' greater take-up of institutional supports compared to other categories.

For example, Felicia, a 37-year-old Black woman from Cape Verde, and single mother of a preschooler, had experienced ongoing stress from prior foster-care involvement and a strained family relationship.[41] Her mother had helped with childcare before the pandemic, but was no longer an option when I interviewed Felicia; neighbors were also unreliable. Kept afloat by means-tested aid, most recently TANF, she remarked pointedly on the value of the UI expansions: "I felt like I could afford food. I felt like I can pay my bills. I felt like I can be home and be safe. That's more or less how I felt about it." A former sales associate at a national discount department store, a transition back to flexible real estate, Felicia resolved, was the only way she could maintain steady connection to wage-earning work. Other circumstances propelling participants' transitions included an acrimonious split from a child's father (Olivia), a child's special health needs (Hilaria), and family estrangement and self-reliance since high school (Bethany). Felicia explained, as follows:

> *I like the freedom and the flexibility of having a job that I can set up my own time, to do my own thing. Especially me not having enough support for my child and daycare, I would have to have a job where I can do that. So that's why I need to really put my focus on [real estate], and really get to work because this is my only way to—I feel anyways—to accomplish any type of work, or make any type of money and not feel like: 'Oh, tomorrow I'm gonna get fired.' 'I have to call out for work today because my son has a runny nose, and we can't bring him in, because COVID.' […] And jobs are always like,*

[40] Camille, Noemi, Olivia; Ebony, to a lesser degree

[41] Felicia had a second, older child (a teenager); but he was in full custody of the child's father. This was an amicable arrangement between Felicia and the father, and best for the child, according to Felicia. Unlike her younger son's father, from whom she was estranged, she had a relatively close relationship with her older son's father.

> *'Oh, do you have extra support? Do you have backup?' Like, listen dude, we all don't have backups. It's hard when you're with children nowadays; things are so hard.*

The case of Camille, a 48-year-old White woman, single parent of three (aged 9 to 25+), and former grocery platform shopper, who had initially connected to career services through TANF many years before, is an example of the limited potential of such services. She had an earlier work history in medical billing and coding that was derailed by the dissolution of her relationship with her second child's father. Camille's early life was also quite unstable. Raised by elderly relatives, she spent part of her teenage years living on the street, narrowly avoiding foster care involvement. She achieved stability with the help of public supports, at one point expressing gratitude for living "in a place where there are many, many resources," adding that "not to take advantage of them is just kind of foolish."

Besides a GED, she held a medical billing and coding certificate, and a human services certificate, acquired online at no cost, and maintained three resumes, respectively oriented towards medical billing/coding, human services, and service work. Though returning to medical coding seemed her ultimate goal, she would have been content to return to her pre-pandemic position, but failed to secure shifts. She talked of declining warehouse and retail positions, citing sub-standard conditions in each, but was regretting the latter when we met. Like her White counterparts Olivia (aged 37) and Samantha (aged 29), Camille talked of hourly service employment as lacking meaning, and indicative of career stagnation or failure. Overall, she projected uncertainty about her employment situation and career direction, citing plans to attend a pharmacy tech training information session, plus wide-ranging interests, explaining:

> *I really just want to get back into something, but something that's meaningful to me. I just wish I knew what it was like. [...] I definitely want a career, and a career that makes me happy and meaningful; something that I feel like I'm doing good with. I don't want that to be hanging clothes or serving coffee.*

Like others, Camille was also critical of career services. Most training prepared participants for hourly service employment, or imparted basic computer literacy; other services helped customers

craft an effective job search. “Not necessarily anything that I didn't already have, as far as I'm concerned,” she remarked. She would have preferred more intensive training services designed to prepare people like her for higher-paid careers.

Fatima, a 48-year-old Cape Verdean woman, and former prep cook, was also a longtime public employment services user, initially connecting to access their computer resources; but she was also quite critical, commenting “not once did they give me a job.” Unable to turn freelance interpretation work of many years into a full-time arrangement, she relied on lower-paid service work as her main employment income. She had completed a temporary government position in summer 2020, but was otherwise unemployed and job searching. Like Olivia and Ebony, Fatima was fortunate to live in a parent’s owned home; recently married, she also received spousal help, which left her increasingly agitated after living independently for most of her adult life.[42] While fine to receive UI, she also spoke emphatically about avoiding means-tested aid to help finance her extended job search.[43] Having received TANF briefly in the past, she called it a “trap,” and felt it would “step me back.”

Notably, Fatima expressed perhaps the greatest frustration at the low wages of open jobs and lawmakers’ lack of response, and had planned to decline a $17 prep cook job, with benefits, in a western suburb because of the pay and tortuous commute. She exclaimed: “How do you live off of $14 an hour? [...] We're in Boston. The cost of living, it doesn't cut it. [...] I know they raised it a little. [...] Whoever comes up with these laws and makes them, something's not right.”

Disconnected: Mixed support, gendered partner dynamics, work attitudes

The three White, U.S.-born participants in the small Step back category reported somewhat mixed support, both public and private. Katie, a 30-year-old White woman, and former retail associate, and Kimberly, a 36-year-old White woman, and prep cook, both received UI. Katie credited it with helping her to avoid “working a job that I hated and [having] a really shitty quality of life;” yet, she opted not to renew later on, fearing the state’s agency would discover

[42] Olivia, a 41-year-old White woman, and former server, lived in her mother’s owned home; Ebony, a 29-year-old Black woman, former restaurant host, and current retail worker, lived in her grandparent’s owned home.
[43] Though it is likely that her private resources exceeded eligibility thresholds.

her landscaping earnings and request repayment. By contrast, Irene, a 41-year-old White woman, and former server, eschewed it, summoning images of deceptive or undeserving claimants in her explanation; this represented a somewhat rare aversion among study participants. All three participants received SNAP, however, including Irene; Kimberly, the least economically stable of them, was also supported by rental assistance and TANF. In contrast to the less advantaged Reach category, participants also cited parents as sources of financial help, if needed.

Though such assistance enabled participants' weaker attachment, other factors were also important. This included partner dynamics in one case, and a reportedly less central role of work in one's life in two of them.

For example, Katie, a former retail associate turned part-time landscaper, spoke of the pandemic inciting a new, less conventional work orientation. She spoke of increasing her commitment to her art and music, and supplementing with paid work as needed. With experience in retail and food service environments since her teenage years, including while earning her Associate's, she described understaffed workplaces and colleagues working while sick or pulling double shifts. She stressed the need for greater "work-life balance." Yet, absent the support of the pandemic-induced safety net expansions, the long-term viability of her arrangement was unclear. She explained:

> *I feel like not having a job was probably scary before, but now there is opportunities in that, and it's not so scary. And I'm just like, 'I'll figure out how to make it work. I'll figure out how to make ends meet.' I can hustle, and find ways to do it unconventionally. Or I know in the back of my mind that, if I have to, I can just walk in anywhere and get a job probably. Yeah. But having a full-time 40-hour week job with paid time off and benefits is not something that's necessary to my life right now, which maybe before [I] felt like it was.*

Irene, too, cited weaker commitment to formal work, remarking that she had "never been a career-oriented person." However, like others, her account of her decision to step back encompassed multiple factors, including gendered partner dynamics, an assessment of workplace

conditions, and beliefs about what types of work are acceptable or appropriate. Her account of the negotiation that led she and her fiancé to designate her as their daughter's primary caregiver, while he reentered formal welding work following an extended period earning disability and cash from side jobs, suggests they failed to meaningfully explore alternative arrangements. After deciding to home-school their daughter, Irene recalls her fiancé defaulting to her, citing her four-year degree, a credential she considered insignificant: "And of course, her father is like, 'It's all on you, you're the one with the college degree!' And I said, 'All that means is that I have a ton of student loans, and some piece of paper on the wall.'"

Irene is notable for being among the only cases in which partner dynamics seemed to weaken workforce attachment; married or cohabitating participants across the first three categories often projected commitments to financial independence, which tended to accelerate their reemployment (or else spark agitation if supported by UI or a spouse's income, such as in Fatima's case (Reach)).

At the same time, like several others, particularly other White participants, she projected reluctance to continue serving at her age, remarking: "Waiting tables at 40 years-old is kind of… Not there's anything wrong with it. But it just seems like waitresses and waiters are usually younger, and they're faster." She also cited her likely modest earnings, reflecting the lower price-point of area restaurants, and, ultimately, framed it as a choice between parenting, a role she described as having greater pay-off, or lower paid work, saying: "So it was kind of, what's more important: going out and making *okay money*, or spending time with my kids and raising them."

Discussion and conclusion

This study offers a richer understanding of what women do and how they feel in the aftermath of job loss. This study also proposes a more multifaceted view of the factors influencing unemployed women's decision-making.

Drawing on 41 interviews with Greater Boston women separated from hourly positions in retail, hotels, and food service, this study deepens understanding of economically vulnerable women's experiences following job loss, and how race/ethnicity and immigrant status may further shape both responses and job outcomes.

Overall, findings show that involuntary job loss has the potential to significantly disrupt low-wage women's already fragile career paths. While findings cannot directly explain who does and does not weather involuntary job loss, they can contribute insight into the question. A significant share of women were unemployed or non-employed when interviewed—thirteen participants, or about just under one third, lacked steady work-based income; three additional participants were on some kind of leave. Further, with exception of reemployed women in the Switch/Stack category, many of whom were earning higher nominal wages compared to their primary pre-pandemic employment, most reemployed participants earned the same or less; as to work-hours, half of participants across categories struggled with short and/or variable schedules.

This research helps fill a gap in the qualitative literature on job loss and unemployment, which tends to focus on occupationally advantaged jobseekers, particularly White, U.S.-born jobseekers, or blue-collar men. Research on welfare reform contributes relevant insights to this day, as findings show; however, this study incorporates shifting racial/ethnic frameworks that encompass Latinos and immigrant status.

Further, findings challenge reductive political debates about how individuals relate to work, by highlighting the heterogeneity of low-wage women's responses to employment loss and the range of potential influences on their choices.

I provide a typology that encompasses four responses to unexpected job loss that reflect search effort, or the timing of reemployment attempts, and search breadth, or the types of job pursued. In addition, I trace women's job outcomes, and describe women's subjective or emotional states, stressing the lingering toll of employment loss.

To summarize the first set of findings, the first response, to Recover, occurred among 14 participants, and involved returns to one's pre-pandemic situation, either the job previously held or a similar position. By the time of their interviews, 9 of 14 women were earning steady work-based income. Despite having the least volatile reemployment, however, many faced under-scheduling or variability and/or lower pay. Such conditions left several participants agitated and unsettled.

The second response, to Switch/Stack, occurred among 12 participants, and involved quickly filling available work-hours. Participants prioritized securing any work, and often "stacked" multiple jobs. Of all responses, this seemed to yield the most successful job outcomes. Of the 12 participants, 11 were employed and earning steady work-based income when interviewed; the twelfth participant was on leave but job-attached (informally). Notably, at least six of these women held primary jobs with higher nominal wages than their pre-pandemic jobs. However, just four participants were working approximately similar weekly hours. These women's financial circumstances were more acute on the whole. Reflecting these mixed circumstances, participants' assessments of their situations featured a mix of stress, uncertainty, and some moderate optimism.

The third response, to Reach, occurred among 12 participants, and involved attempted transitions to more specialized, higher-paid work, including a mix of standard employment and freelance/entrepreneurship. By the time of their interviews, only four women reported steady work-based income. Reflecting longer-than-expected job searches, or certain skill or resource deficits, most participants spoke of struggling or questioning their choices.

The fourth response, to Step Back, occurred among three participants, and involved exits from the formal labor force, and little or no search activity. By the time of their interviews, just one woman was earning steady work-based income in the informal labor market. Further, these women projected uncertainty about their return to formal paid work or steady work and expressed few clear goals for their reemployment. Although the one steadily-earning participant embraced her "free agent" status, she faced a seasonal dip in her schedule. The two other women

performed occasional gig work, mostly online, and experienced mounting stress, either because of worsening financial precarity or a growing disconnection from work generally.

Past research on women's job loss and unemployment by Damaske (2020) and Rao (2020) emphasizes search effort impediments and overlooks search breadth, an evidently important source of heterogeneity following separation. Had this study focused on effort alone, it would have missed a key decision in terms of overcoming the disruption of job loss – namely, women's interest in and efforts to seek out different work rather than primarily to return to similar work. Further, this study's focus on women separated from a narrow set of hourly service jobs, rather than a diversity of occupations as in past research, enables clearer insight into breadth; it also underscores the institutional or structural obstacles facing women seeking to move up the economic ladder.

Findings also contribute insight to how search methods relate to search effort and breadth; methods seemed to underpin them both. Further, often women's use of particular methods was dictated by the strength of their relationships. With exceptions, a number of career services users or users of more traditional search modes like job websites were more isolated. At the same time, many Latina participants who often switched jobs through networks also spoke of using Indeed or Facebook. Future research should better distinguish between these dimensions of job search, and explore their interrelationships as done here and in past work Pedulla and coauthors (2015, 2019), cited earlier.

In the second part of the findings, I examine factors that seemed to influence participants' responses to employment loss, including variation in their responses. Due to the small number of cases, I am unable to show that these factors influence each response directly. Instead, I surface potential influences and common themes in women's narratives and sense-making.

I posit that women's responses are influenced by *interweaving* factors, that encompass relationship-based resources; institutional realities; and cultural beliefs or attitudes about work, family, and success. Variation in the timing of participants' responses seemed strongly influenced by disparate access to institutional supports, coupled with differences in private

resources, such as personal savings and kin support. Jobs pursued seemed influenced by work-based relationships, institutional rigidities, and cultural attitudes.

I use the term interweaving to illustrate the interconnections or entanglements between factors, or how they hang together. Low-wage women's responses in terms of search effort, search breadth, and their subjective states in the immediate aftermath of job loss—and subsequently, their employment status and subjective states at the time of their interviews—seemed influenced by how each of these factors converge in their lives.

I assign labels that try to capture the essential nature of women's circumstances. Specifically, although Recover participants were better supported by private financial resources, including partners' support, which unemployment insurance (UI) supplemented, they were also constrained in their movement by commitment to trusted supervisors or expectations of reward for workplace loyalty, as well as institutional rigidities that hampered career transitions. Reflecting mixed attitudes towards hourly service work, a number of women felt conflicted about their circumstances.

With few institutional supports, Switch/Stack participants were especially vulnerable to hardship after job loss. Family obligations, like remittance payments, further strained resources, compelling almost immediate reemployment attempts for the majority of these women. Yet, in contrast to the Recover category, these women seemed less constrained in terms of search breadth, reflecting a more transactional or strategic approach to work. Participants projected less loyalty towards employers and viewed work as a means to other ends. Two younger Black women's vigilance was also informed by past experiences of racial discrimination.

The more selective orientation of Reach participants reflected fuller institutional supports, including public employment services, constraints imposed by single parenthood, and trauma-informed work attitudes. Some participants' desire to avoid hourly service employment was also driven by cultural attitudes that such work was inferior or lacking in meaning.

Lastly, three Step Back participants' more disconnected states seemed influenced by stronger private supports, compared to the similarly less advantaged Reach category. Also important were gendered partner dynamics in one instance and a less central work orientation among two participants.

While this study is unable to offer a definitive conclusion, the findings suggest that these factors and how they hang together may serve as important links between race/ethnicity and immigrant status and low-wage women's experiences of involuntary job loss and unemployment. The somewhat patterned racial/ethnic distribution across the four categories of response—with White, U.S.-born women concentrated in the relatively advantaged Recover category (or else the fourth Step Back category); Latina immigrant women, including undocumented women, concentrated in the precarious Switch/Stack category; and Black women concentrated in the less advantaged Reach category—demonstrates the importance of race/ethnicity and its intersection with immigrant status in distinguishing, or even stratifying women's experiences, even among a group of occupationally less advantaged workers.

To tease out which of these factors matters and for which groups of women would require different data; however, this study surfaces patterns and links that might be explored in future research. First, this study considers relationships more broadly than in past research. Often research on job loss and unemployment distinguishes between spousal or partner relationships, non-spousal kinship ties, and "network" contacts, including coworkers. But a more agile view encompasses the full scope of women's relationships, both inside and outside the home. This view is particularly relevant for women in lower-wage work, a group with more heterogeneous family structures.

Race-based differences in resources derived from relationships were apparent and mostly consistent with prior literature. Younger White women had greater support or potential support from relatives, including cash gifts or housing, while younger Black women had help from the state to offset greater estrangement from or soured relations with family overall (Gould-Werth 2018). The knowledge that one could potentially rely on parental support if needed was a

powerful source of relief and stability, and, particularly in the cases Katie and Olivia, likely compelled greater professional risk-taking (Harknett 2006).

Consistent with prior work showing Latinos' use of networks to transition to jobs, many of the Latina participants, along with other immigrant women, spoke of relying on contacts to transition jobs. All were employed when interviewed, and many in jobs that paid higher wages relative to their pre-pandemic employment; however, a number of them were in need of greater hours. At the same time, many White women, concentrated in the Recover category, also benefited from close connections to current or prior employers as described earlier.

Second, this study shows how the institutional environment interacts with women's private supports including relationship-based resources to potentially influence decision-making following job loss. Past research on women's unemployment confines much of its focus to the private domain, particularly the marital relationship; in so doing, it draws attention from the institutional context that helps structure low-wage women's economic opportunity by distributing economic and career development resources and fostering labor market conditions.

Consistent with prior research on unemployed women's efforts to regain employment, which rely on investigation of largely White samples (Damaske 2020, Rao 2020), two partnered White women's weakened work attachment (Erica, Reach; Irene, Step Back) seemed partially influenced by spousal arrangements which placed them in charge of child-rearing; Irene also projected commitment to intensive parenting of her young daughter. However, as I show, Irene's choice to step back from formal work seemed to represent a culmination of multiple factors. These included a less central work orientation; she also assessed her earnings potential, reflecting a reality that serving is often much less lucrative outside fine-dining.

Findings point to the potentially important role of labor market institutions in influencing low-wage women's reemployment decisions. There was a relatively high incidence of student loan debt, including cases where the payoff seemed dubious. Consistent with expectations, such debt may have had a chilling effect on some women's career decisions; at minimum, they imposed a lingering burden. In addition, consistent with past research, the accounts of some Reach

participants suggest that public career services are more heavily oriented towards job search than meaningful skill development; intensive training services are often provided on a competitive basis, as in Britta's case.

Single parents struggled uniquely following job loss. This seemed to reflect an inhospitable institutional environment, including a lack of paid leave, or affordable childcare. However, unlike past research, which depicted the stress of job loss as preventing any search (Damaske 2020), single women with children, if they lacked support as in the Switch/Stack category, commenced immediate searches; however, with the aid of robust institutional supports, single parents in the Reach category eventually committed their time to pursuing career transitions that may be riskier but have the potential to yield greater payoff. Further, as a number of participants expressed, particularly in the Reach category, the sub-standard conditions of much low-wage work seemed to factor into their reemployment decisions, consistent with prior research on welfare recipients (Edin and Lein 1997).

To her credit, Damaske (2020) examines UI benefits formulas, arguing that they substantiate gendered pay inequities; but this issue is minor when one considers that most unemployed do not receive UI (U.S. Bureau of Labor Statistics 2023), reflecting outdated or disparate eligibility rules and access challenges (Wentworth 2017). This study is confined to a single institutional context; however, the sample is diverse enough such that several participants were either ineligible for most public benefits (due to unauthorized status), failed to apply, or were diverted somehow. Though women's responses seemed shaped and *distinguished* by multiple influences, such variation may underscore the particular importance of safety net access.

Third, this study explores culture's multifaceted role. Prior theorizing by Gowayed et al. (2022), while important for identifying how responses to job loss are influenced by *multiple* factors, including institutional factors, overlooks culture's role in establishing what Newman (1988) calls the intellectual and emotional "architecture" that sets individuals on different paths. This study identifies multiple ways women's cultural beliefs may influence responses.

Notably, findings suggest that beliefs that hourly service employment, like serving or retail, is inferior or lacking in meaning may have influenced the attempted occupational transitions of some participants in the Reach category; or else, similar beliefs instilled a sense of grief or longing among several more constrained participants in the Recover category. With notable exceptions, attitudes were most pronounced among White participants. This study contributes to the "meaningful" work literature by providing insights from an occupationally less advantaged group, whom research suggests are no different from more advantaged peers in desiring fulfilling work (Cech and Hiltner 2022); at the same time, given this literature's emphasis on education- and class-based differences, findings point to race/ethnicity as an important avenue for future research.

This study also contributes insight into how past trauma, such as homelessness, intimate partner violence, or family dissolution, may foster specific cultural schemas that influence women's relationships with work. Several participants in the Reach category held strong work expectations for decent pay and conditions; such expectations appeared to be influenced in part by a resilience forged through past experiences of hardship and family instability. Though one might expect past trauma to perhaps suppress work attachment through lingering stress or anxiety—and it appeared to do so for Kimberly (Step Back) in particular—findings suggest the link may be more complicated. A number of participants across categories reported instances of severe instability, though such experiences were more common among single women, particularly women with children. Future research should explore how this important dimension of many less advantaged women's lives influences work orientations.

Findings also reflect race- and class-based variation in attitudes towards public aid receipt, with certain White, higher-educated participants, both in the Recover and Step Back categories, often qualifying accounts of receipt with deeper self-reflection, suggesting adherence to dominant U.S. ideologies of meritocracy and individualism (Newman 1988, Lamont 2000). Such attitudes did not necessarily spur these women to avoid such supports, however, UI in particular; just Irene, a former server (Step Back), failed to take up UI, despite having a spouse able-bodied enough to work side jobs while he received disability benefits. Black participant, Fatima (Reach), a former

prep cook, received UI, but vowed to avoid means-tested aid, which had been a source of support in her earlier adult life.

Through in-depth interviews, this study richly describes women's behaviors and subjective experiences after job loss. This type of qualitative analysis helps demonstrate that many women strive for labor market outcomes that align with politicians' rhetoric but often encounter obstacles that set them back.

This study's findings point to certain policy changes that could aid low-wage women's stability and mobility, both in the aftermath of job loss and over their careers. This study highlights the power of robust institutional supports in helping low-wage women absorb the income shock of job loss and overcome the long-term career disruption. The federal government authorized an array of fiscal relief measures to mitigate hardship and prevent a catastrophic drop in macroeconomic demand. One such expansion included benefits for non-standard workers and very low earners. The UI system has been slow to enact eligibility reforms that reflect new modes of work and shifting employment relationships. Given these workers' continued importance to U.S. business operations, the Pandemic Unemployment Assistance (PUA) program should be transitioned to a permanent program of the UI system. To mitigate fraud and improper payments, which severely challenged the PUA program during the pandemic and undermines the UI system's reputation and integrity, any permanent program must incorporate secure means of identity and income verification.

Participants also struggled with variable or under-scheduling. State UI programs compensate "partial unemployment," but often set earnings thresholds and earnings disregards too low. Applicable state rules should be expanded and standardized to more effectively support employees subject to this ubiquitous feature of hourly service work.

Yet, even with these expansions, potentially eligible workers often fail to apply; or else applications are derailed by administrative difficulties. This was the case for a handful of participants. Hence, efforts to expand eligibility should be coupled with promotional efforts to inform the public of UI's availability and reduce stigma. Assessments of employer take-up of

short-time compensation, a UI program designed to aid employee retention during downturns, show the efficacy of simple marketing (Houseman et al. 2017). Further, measures are needed to enhance the UI system's overall accessibility. Given UI's sharp interstate variation, such an effort should be led by the Department of Labor.

To say that expanding UI to encompass undocumented workers is a political longshot is an understatement of epic proportions. Nonetheless, it would behoove governments to consider ways to support these essential but vulnerable workers. Undocumented participants were significantly more vulnerable after job loss, and were forced to turn local emergency-based resources. New York State's Excluded Workers' Fund is an innovative model worth exploring further (Wing et al. 2022). Incorporating steps from the process for submitting wage theft claims, the fund provided a one-time payment to applicants with sufficient work history, as long as they proved their identity, state residency, and past earnings.

Findings also highlight the need for greater investment in affordable avenues for skill development for working adults like community college, including added student supports to aid retention, which was an issue for many participants. The toll of student loan debt was evident. With the pandemic-induced pause behind us, it is imperative that lawmakers take action to alleviate the crushing burden of student debt and make higher education more accessible.

Lastly, a number of participants spoke of aspirations to own a business. Several were also engaged in self-directed gig or freelance work; Hilaria's garnachas business seemed to be the most lucrative of self-employment efforts cited. Such findings suggest that many women in low-wage work may find the formal labor market inhospitable or unyielding. While one possible avenue to promoting these women's economic stability is to provide some form of self-employment assistance, which is part of the UI system currently, other more sustainable steps are passage of measures that foster pay and conditions that allow people from across the economic distribution to live and thrive, including more affordable childcare, higher minimum wages, elimination of the sub-minimum wage, and enactment of paid leave.

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Tables and figures

Table 1. Sample characteristics (sorted by age)

Pseudonym	Age	Race/ethnicity	Country of origin	Industry, Pre-pandemic	Occupation, Pre-pandemic	Tenure, Pre-pandemic
Courtney	25	Black, Hispanic / Latina	U.S.	Retail trade - Apparel/Fashion	Cashier/Sales Associate	<6 m
Tara	25	White	U.S.	Food services and drinking places	Server (FOH)	<6 m
Tracy	25	White	U.S.	Retail trade - Bookselling	Cashier (and shipping)	1 to <3 y
Bethany	27	Black	Caribbean island nation	Food services and drinking places	1) Server (FOH); 2) Bartender (FOH)	1) 6 m to <1 y; 2) <6 m
Nina	28	Hispanic / Latina	U.S.	Educational services	Dishwasher (BOH)	1 to <3 y
Samantha	28	White	U.S.	Food services and drinking places	Bartender (FOH)	1 to <3 y
Ebony	29	Black	U.S.	Food services and drinking places	Host (FOH)	<6 m
Cassie	30	White	U.S.	Food services and drinking places	Server (FOH)	3 to <10 y
Katie	30	White	U.S.	Retail trade - Beauty/cosmetics	Cashier/Sales Associate	<6 m
Kendall	30	White	U.S.	Food services and drinking places	Bartender (FOH)/Shift Supervisor	<6 m [2]
Brooke	31	White	U.S.	Food services and drinking places	Server/Bartender (FOH)	<6 m [2]
Eva	31	White	Armenia	1) Accommodation; 2) Food services and drinking places; 3) Personal households	1) Hotel desk clerk; 2) Server (FOH); 3) Childcare worker	1) 1 to <3 y; 2) <6 m; 3) Unknown [3]
Frances	31	White	U.S.	Food services and drinking places	Server (FOH)	<6 m
Melody	31	Black	U.S.	1) Food services and drinking places; 2) Retail trade - Apparel/Fashion	1) Hostess/server (FOH); 2) Cashier/Sales Associate	6 m to <1 y
Nadine	31	Black	Unknown	Accommodation	Room attendant	3 to <10 y
Hilaria	34	Hispanic / Latina	Guatemala [1]	Food services and drinking places	Prep Cook (BOH)	1 to <3 y
Nita	34	Hispanic / Latina	Colombia	Food services and drinking places	1) Server (FOH); 2) Server assistant / busser (FOH)	3 to <10 y
Tiana	34	Black	U.S.	1) Food services and drinking places (staffing); 2) Healthcare and social assistance	1) Server (FOH); 2) Personal care assistant	1 to <3 y
Kimberly	36	White	U.S.	Employment services	Prep Cook (BOH)	1 to <3 y
Tonya	36	Black	U.S.	Accommodation	Prep Cook (BOH)	6 m to <1 y
Olivia	37	White	U.S.	Food services and drinking places	Server (FOH)	1 to <3 y
Felicia	38	Black	Cape Verde	Retail trade - Apparel/Fashion	Cashier/Sales Associate/Supervisor-in-training	1 to <3 y
Valencia	38	Black, Hispanic / Latina	U.S.	Retail trade - Grocery	Cashier	1 to <3 y

Britta	39	Black	U.S.	Employment services	Stocker and order filler (Grocery)	6 m to <1 y
Helena	39	Hispanic / Latina	Costa Rica [1]	Food services and drinking places	Prep Cook (BOH)	Unknown [3]
Esperanza	40	Hispanic / Latina	Guatemala [1]	Food services and drinking places	Prep Cook (BOH)	1, 2) 3 to <10 y; 3) <6 m
Teresa	40	Hispanic / Latina	Colombia [1]	1) Food services and drinking places; 2) Personal households	1) Prep Cook (BOH); 2) Housecleaner ("Maid")	1) 6 m to <1 y; 2) 1 to <3 y
Irene	41	White	U.S.	Food services and drinking places	Server (FOH)	1 to <3 y
Josefina	41	Hispanic / Latina	El Salvador	Accommodation	Room attendant	10+ y
Wendy	42	White	U.S.	Food services and drinking places	Server (FOH)	10+ y
Noemi	45	Hispanic / Latina	Colombia	Food services and drinking places	Server (FOH)	<6 m [2]
Sofia	47	Hispanic / Latina	Guatemala [1]	Food services and drinking places	Server (FOH)	1 to <3 y
Camille	48	White	U.S.	Retail trade - Grocery	Shopper	6 m to <1 y
Fatima	48	Black	Cape Verde	Employment services	1) Prep Cook (BOH)	1 to <3 y
Nora	48	White	Albania	Accommodation	Group housing coordinator	10+ y
Erica	49	White	U.S.	1) Accommodation; 2) Platform work (transportation)	1) Room attendant; 2) Driver	1) 3 to <10 y; 2) 6 m to <1 y
Kate	53	White	U.S.	Food services and drinking places	Server (FOH)	1 to <3 y
Blanca	55	Hispanic / Latina	Guatemala [1]	Food services and drinking places	Dishwasher (BOH)	10+ y
Barbara	57	White	U.S.	Food services and drinking places	Bartender (FOH)	3 to <10 y
Bernadette	50+	Black, Hispanic / Latina	U.S.	Accommodation	Hotel desk clerk	6 m to <1 y
Tammy	64	White	U.S.	Accommodation	Server (FOH)	10+ y

[1] Legal status undocumented (or asylee status, as in Sofia's case)

[2] Participant had started pre-pandemic job four to six months prior, following a voluntary transition directly from another position.

[3] Though these participants are understood to have worked for an eligible length of time in their pre-pandemic positions, their precise tenure in such positions is unknown.

Figure 1. Responses to employment loss and status at interview

			Response			Status at interview			
	White	**U.S. Born**	**Effort**	**Breadth**	**Subjective state**	**Steady work-based income (n)**	**Wage, same or greater (n)**	**Hours, same or greater (n)**	**Subjective state**
Recover (n=14)	8	10	Deferred, extended (n=6)	Same / similar (n=6)	Stable, Expectant (n=6)	9 *	6 *	6 **	Stable; Uncertain / unsettled
Switch / Stack (n=12)	3	6	Persistent (n=8)	Broader scope (n=11) (e.g., platform; janitorial; domestic; healthcare support; food processing)	Stressed (n=8) (incl. Fearful, Mournful)	11 **	7 **	4	Stressed; Mixed
Reach (n=12)	5	7	Deferred, extended (n=7)	Mixed (n=6) (e.g., healthcare, human services; real estate; self-emp, informal: meal prep, video production)	Stressed (n=6); Stable (n=6)	4	4	3	Stable; Questioning / Uncertain / unsettled
Step Back (n=3)	3	3	None (n=3)	Informal, incl. self-employment	Stable (n=2)	1	1	0	Stressed; Disconnected / Untethered
41	**19**	**26**				**25**	**18**	**13**	

Notes: The information in the qualitative categories represents the modal response. "Mixed" refers to job search breadth that consists of both targeted/specialized employment and employment that's the same or similar to one's pre-pandemic employment. * equals plus two participants on leave/furlough; ** equals plus one participant on leave/furlough

Table 2. Responses to employment loss and status at interview (sorted by response)

				Response				Status at interview			
Pseudonym	**Category**	**Race / ethnicity**	**Country of origin**	**Effort**	**Breadth**	**Detail (or reemp. occupation)**	**Subjective state**	**Steady work-based income (0/1)**	**Wage, same or greater (0/1)**	**Hours, same or greater (0/1)**	**Subjective state**
Nina	Recover	Hispanic / Latina	U.S.	None	--	Dishwasher	Stable, Expectant	Furlough (job-attached)	1	1	Stable
Cassie	Recover	White	U.S.	None	--	Server / bartender	Stable, Expectant	Leave (job-attached)	1	0	Stable, Contented
Kendall	Recover	White	U.S.	None	--	Bartender	Stable, Expectant	1	1	1	Stable, Uncertain / unsettled
Brooke	Recover	White	U.S.	None	--	Server / bartender	Stable, Expectant	1	1	1	Stable; Uncertain / unsettled
Nadine	Recover	Black	Unknown	Deferred, extended	Same / similar	Housekeeper	Stressed, Expectant	1	0	1	Stressed, Uncertain / unsettled
Tonya	Recover	Black	U.S.	Deferred, extended	Same / similar	Cook / Food prep	Mournful	0	--	--	Stressed
Valencia	Recover	Black, Hispanic / Latina	U.S.	Deferred, extended	Slightly broader scope	Fast food / counter; cashier	Stressed	0	--	--	Stressed
Helena	Recover	Hispanic / Latina	Costa Rica	Persistent	Same / similar	Cook/Food prep	Stressed, Expectant	1	0	1	Stressed; Uncertain / unsettled
Josefina	Recover	Hispanic / Latina	Guatemala	None	--	Housekeeper	Stressed, Expectant	1	1	0	Stressed; Grateful
Wendy	Recover	White	U.S.	Deferred, abbreviated	Targeted / specialized	Server	Stable, Expectant	1	1	1	Stable, Uncertain / unsettled
Nora	Recover	White	Albania	Deferred, abbreviated	Same / similar	Hotel desk clerk	Stable, Expectant	1	0	0	Stable, Uncertain / unsettled
Kate	Recover	White	U.S.	Deferred, extended	Same / similar	Server	Stressed / Angry, Cautious	0	--	--	Stressed
Barbara	Recover	White	U.S.	Deferred, extended	Same / similar	Bartender	Stressed / Embarrassed, Cautious	1	1	1	Stable, Uncertain / unsettled
Tammy	Recover	White	U.S.	Deferred, extended	Slightly broader scope	Server	Stable, Expectant	1	1	0	Stable, Resigned

Courtney	Switch / Stack	Black, Hispanic / Latina	U.S.	Persistent	Broader scope	Childcare worker; Fast food / counter; Courier/messenger (Platform)	Stressed	1	1	0	Stressed; Determined
Tracy	Switch / Stack	White	U.S.	Persistent	Broader scope	Retail sales; courier / messenger (Platform)	Stressed	Leave	1	0	Resigned; optimistic
Eva	Switch / Stack	White	Armenia	Deferred, extended	Same / similar	Server / attendant; Hotel desk clerk	Stressed, Expectant	1	?	1	Optimistic
Frances	Switch / Stack	White	U.S.	Persistent	Broader scope	Server	Unfazed / Determined	1	?	0	Grateful
Melody	Switch / Stack	Black	U.S.	Deferred, extended	Broader scope	Counter clerk	Stressed	1	1	1	Stressed; Uncertain / unsettled
Nita	Switch / Stack	Hispanic / Latina	Colombia	Deferred, abbreviated	Broader scope	Server/attendant	Stable	1	1	1	Optimistic
Tiana	Switch / Stack	Black	U.S.	Deferred, abbreviated	Broader scope	Server; Shopper; Nursing assistant	Stressed-stable	1	0	1	Uncertain / unsettled
Esperanza	Switch / Stack	Hispanic / Latina	Guatemala	Persistent	Broader scope	Cook/Food prep	Stressed, Fearful	1	1	0	Stressed
Teresa	Switch / Stack	Hispanic / Latina	Colombia	Persistent	Broader scope	Childcare worker	Stressed, Fearful	1	1	0	Stressed; Contented
Sofia	Switch / Stack	Hispanic / Latina	Guatemala	Persistent	Broader scope	Janitor / cleaner; Passenger vehicle driver (Platform)	Stressed	1	0	0	Stressed, Uncertain / unsettled
Blanca	Switch / Stack	Hispanic / Latina	Guatemala	Persistent	Broader scope	Janitor / cleaner	Stressed, Mournful	1	0	0	Stressed
Bernadette	Switch / Stack	Black, Hispanic / Latina	U.S.	Persistent	Broader scope	Shopper (Platform)	Unfazed / Determined	1	1	0	Resigned
Tara	Reach	White	U.S.	Deferred, abbreviated	Targeted / specialized	Counselor / social worker; Animal caretaker (dogwalker)	Stable	1	1	0	Stable; Questioning
Bethany	Reach	Black	Caribbean island nation	Deferred, extended	Mixed	Artist/designer	Stressed, Expectant	0	--	--	Stressed
Samantha	Reach	White	U.S.	Deferred, abbreviated	Mixed	Nursing assistant,	Stressed	1	1	1	Stable; Optimistic

						towards Registered nurse					
Ebony	Reach	Black	U.S.	Deferred, abbreviated	Mixed	Cashier	Stable	1	1	1	Stable; Uncertain / unsettled
Hilaria	Reach	Hispanic / Latina	Guatemala	Deferred, extended	Same / similar	Cook / Food prep	Stressed / Angry	1	1	1	Stressed; Moderately optimistic
Olivia	Reach	White	U.S.	Deferred, extended	Targeted / specialized	Social / human service assistant; Human resources worker	Stable, Cautious	0	--	--	Stable; Questioning
Felicia	Reach	Black	Cape Verde	Deferred, extended	Same / similar	Real estate sales agent	Stressed	0	--	--	Stressed; Uncertain / unsettled
Britta	Reach	Black	U.S.	Deferred, extended	Mixed	Social / human service assistant	Stressed	0	--	--	Stressed; Moderately optimistic
Noemi	Reach	Hispanic / Latina	Colombia	Deferred, extended	Targeted / specialized	Photographer / film and video editor	Stressed	0	--	--	Stable; Questioning
Camille	Reach	White	U.S.	Deferred, extended	Mixed	Social / human service assistant	Stable, Cautious	0	--	--	Stable; Uncertain / unsettled
Fatima	Reach	Black	Cape Verde	Persistent	Mixed	Interpreter / translator; Cook/Food prep	Stable	0	--	--	Stable; Angry / frustrated
Erica	Reach	White	U.S.	None	--	--	Stable	0	--	--	Stable; Uncertain / unsettled
Katie	Step Back	White	U.S.	None	--	Landscaper / groundskeeper (Informal)	Stable	1	1	0	Untethered; Uncertain / unsettled
Kimberly	Step Back	White	U.S.	None	--	Artist / designer; other (Platform)	Stressed	0	--	--	Stressed; Uncertain / unsettled
Irene	Step Back	White	U.S.	None	--	Miscellaneous personal care/service; other (Platform)	Stable	0	--	--	Stressed; Uncertain / unsettled

Notes: Deferred, abbreviated search refers to job search that started sometime in 2020; deferred, extended refers to job search that started as of January 2021 or later.

Figure 2. Responses and Potential Influences

Potential influences (interweaving factors: relationships, institutions, culture)	**More constrained** 1. Relationships: (a) Fuller private supports, incl. spouses/partners; (b) Workplace loyalty: trusted supervisors; reward expectations; 2. Institutions: Moderate supports (UI); 3. Culture: Work as identity (i.e., ambivalence about hourly service work as "career")	**Less constrained** 1. Relationships: Family obligations (i.e., remittance payments); few private supports; 2. Institutions: 3. Culture: Strategic/transactional work orientation; work as means to other ends	**Selective** 1. Relationships: (a) Family estrangement (w/ exceptions); (b) Single parenting obligations; 2. Institutions: Full supports (UI, means-tested aid, career services); 3. Culture: Trauma-informed work expectations	**Disconnected** 1. Relationships: Parental support; Gendered partnered dynamics (Irene) 2. Institutions: (a) Moderate supports (UI, means-tested aid); (b) Assessment of hourly service work as low paid/quality 3. Culture: (a) Ambivalence about serving as career (Irene); (b) Work as less central; (c) intensive parenting commitment (Irene)
Response (effort / speed of search, breadth of search)	**Recover** 1. Deferred, extended (n=6) 2. Same / similar (n=6)	**Switch / Stack** 1. Persistent (n=8) 2. Broader scope (n=11) (e.g., platform; janitorial; domestic; healthcare support; food processing)	**Reach** 1. Deferred, extended (n=7) 2. Mixed (n=6) (e.g., healthcare, human services; real estate; self-emp, informal: meal prep, video production)	**Step Back** 1. None (n=3) 2. --
Subjective state	Stable, Expectant (n=6)	Stressed (n=8) (incl. Fearful, Mournful)	Stressed (n=6); Stable (n=6)	Stable (n=2)
Employment status at interview (Steady work-based income (n))	n=9	n=11	n=4	n=1
Subjective state	Stable; Uncertain / unsettled (n=5)	Stressed; Mixed	Stable; Questioning (n=3); Stable; Uncertain / unsettled; Stable (n=3)	Stressed; Uncertain / unsettled (n=2)

How State Unemployment Insurance Program Differences Impacted Job Finding and Reemployment Quality During COVID-19

by

Claire C. McKenna

Abstract

Despite states' central role in the unemployment insurance (UI) program, limited research has tried to understand how state differences may contribute to disparate labor force outcomes for otherwise similar workers, including in a period of federal expansion. The role of interstate variation, particularly the influence of stricter states, is increasingly relevant, as more states grow emboldened to challenge established norms or break with the federal partner. Such actions limit the ability of UI to help pull the economy out of recessions, or aid the unemployed in a vulnerable time in their lives. Combining linked Current Population Survey data with state administrative sources, this paper investigates the degree to which pre-pandemic strictness of state UI programs affected job finding of the non-employed and job quality of the reemployed during the COVID-19 pandemic. During a period of unprecedented federal expansion, to what degree did pre-pandemic features of state UI programs remain important? Yet, this question is relevant outside periods of crisis and federal expansion, when the impact of state variation is likely to be stronger due to the absence of federal safeguards.

I explore four sources of strictness, selected because they reflect distinct areas of state UI rules, including initial eligibility, continuing eligibility, and benefit generosity; a fourth measure captures overall UI receipt in states. I assess job finding on two dimensions: rate of job finding, and reemployment quality, a relatively understudied area in UI research.

Findings are mixed. Links between pre-pandemic strictness and job finding are mostly insignificant. Findings suggest possible *negative* links between stricter status and reemployment quality; however, results vary depending on the strictness measure. Findings also suggest that stricter states saw more adverse change in reemployment quality outcomes when the pandemic struck, and that less strict states benefited to a greater degree from the federal UI programs in terms of change in job quality between separation and reemployment. This is likely a result of greater overall UI receipt in these less strict states. This paper contributes to the small but growing literature that traces disparate labor force outcomes to state UI policy differences as well as the dearth of research linking UI generosity and reemployment quality. Further, this paper contributes a new dimension of insight to the extensive literature on UI and job finding by exploring the role of states.

Introduction

Enacted nearly 90 years ago, unemployment insurance (UI) is a social insurance program that provides the unemployed with temporary income to meet basic needs while they seek reemployment (Chetty 2008, Gruber 1997). In the aggregate, payments stabilize the economy during downturns (Chodorow-Reich and Coglianese 2019, Vroman 2010). In March 2020, to help moderate the economic effects of the COVID-19 public health crisis, Congress authorized three UI programs to compensate individuals experiencing pandemic-induced job loss.

Due to the broad scope of the federal programs, including substantially higher replacement rates than usual (Ganong et al. 2020), initial political debate and research focused on their potential to discourage reemployment. This continues a long tradition in economics of measuring UI's potential work disincentive effects,[1] not to mention decades of forceful debate about how income supports affect workforce attachment. In general, research found modest negative effects on transitions to employment (e.g., Altonji et al. 2020, Dube 2020, Petrosky-Nadeau and Valletta 2021). However, later research that compared the change in job finding in states where the three federal programs ended early to those where benefits continued suggests the expansions may have curtailed reemployment more than was previously understood (Holzer, Hubbard, and Strain 2021).

A central question for policymakers concerns the amount of aid to provide the unemployed during economic crises, which can vary greatly depending on the root causes. On the one hand, benefits should provide enough for recipients to weather the most severe waves of a downturn, when employment is scarce. Inducing premature returns to work through scant benefits in a sluggish labor market—or when health and safety threats persist—is sub-optimal, and could lead to loss of human or social capital, earnings, or, as in the case of the pandemic, much worse (Fallick 1993). On the other hand, benefit levels should not be so high that they discourage comparable reemployment to what was lost when the economy starts to grow and suppress labor market dynamism.

[1] Summaries of this research can be found in Krueger and Meyer (2002), and Schmieder and von Wachter (2016).

However, an important variable that prior debates and research overlook is the sharp underlying variation in state UI programs, a fundamental feature of the U.S. system's federal-state structure. Despite states' central role in the UI program, limited research of the COVID-19 pandemic or prior has tried to understand how state differences may contribute to disparate labor force outcomes for otherwise similar workers, including in a period of substantial federal expansion.

The role of interstate variation is increasingly relevant, as more states grow emboldened to challenge established program norms or break with the federal partner. Such actions limit the ability of UI to help pull the national economy out of recessions, or aid the unemployed in a socially and economically vulnerable time in their lives. While states often tighten benefit rules after recessions, the years following the Great Recession featured especially sharp cutbacks, coupled with heightened application protocols in certain states (Wentworth 2017). Further, similar to North Carolina's decision to terminate emergency extensions six months early in 2013, after a significant reduction in their maximum benefit violated federal UI law, 24 states prematurely opted out of at least one of the federal pandemic UI programs in mid-2021.

The consequences of the 2010s cutbacks are evident in measures of program coverage. UI receipt as a percentage of total unemployment declined to historically low levels, with just under one-quarter receiving UI in 2019, the last full pre-pandemic year, with wide state-level variation. In three Southeast states, fewer than one in ten unemployed individuals received benefits. Map 1 illustrates this wide variation in 2019 recipiency rates. In the late-1990s, a comparable non-recessionary period, a slightly greater one-third of unemployed received UI nationwide.

[insert Map 1 about here]

The limited research of state UI variation during the pandemic finds that states with lower pre-pandemic recipiency had lower receipt during the pandemic, despite the federal expansions (Carey et al. 2021, Forsythe and Yang 2021).[2] However, to what degree these lower receipt rates

[2] Throughout this paper, "receipt" and "recipiency" are used interchangeably. They refer to the proportion of unemployed in a state receiving UI benefits (including regular state UI, or federal UI, including Pandemic Emergency Unemployment Compensation or Pandemic Unemployment Assistance).

translated into different reemployment rates or lower reemployment quality for the unemployed in these states remains an open question. This paper seeks to understand this link.

Combining linked Current Population Survey data with state administrative sources, this paper investigates the degree to which pre-pandemic strictness of state UI programs affected job finding of non-employed adults and job quality of the reemployed during the COVID-19 pandemic. During a period of unprecedented federal expansion, this paper seeks to understand the degree to which pre-pandemic features of state UI programs remained important. Yet, this question is relevant outside of national recessions and periods of federal expansion, when the impact of state variation, particularly the influence of stricter state policies, is likely to be stronger due to the absence of federal safeguards.

I explore four sources of strictness, selected because they reflect distinct sets of state UI rules. I develop an additive index that captures states' pre-pandemic strictness in terms of initial eligibility (i.e., treatment of certain voluntary quits), continuing eligibility (i.e., denial rate), and benefit levels (i.e., replacement rate). The fourth measure, recipiency, is a common aggregate measure that captures overall coverage. I split states into two groups, stricter states and less strict states.

I assess post-pandemic job finding on two dimensions. The first dimension is the rate of job finding, or reemployment. From one month to the next, what percentage of non-employed workers transition to employment, and how does this vary by pre-pandemic strictness? The second dimension is reemployment quality, a relatively understudied area in UI research. Once reemployed, how does job quality compare with conditions prior to job loss, and to what degree does state strictness influence change in job quality between separation and reemployment?

I employ two broad empirical strategies to assess links of interest. The first strategy provides insight into the effects of strictness on job finding, and changes in job quality between separation and reemployment, within each of four major pandemic phases, spanning from the six months before the pandemic to the six months after the federal UI programs turned off. The second strategy assesses links between strictness and *changes* in the two primary outcomes, job finding

and changes in job quality between separation and reemployment, both when the federal UI programs started and when they stopped.

Overall, findings are mixed. Links between strictness before the pandemic and job finding during the pandemic are mostly insignificant, particularly in models accounting for state and month fixed effects. However, there are hints that the strictest states in terms of the additive index had higher job finding. As to links between pre-pandemic strictness and *changes* in monthly job finding once the federal UI programs turned on, findings suggest the effects of the pandemic's onset, and the activation of federal benefits, did not differ meaningfully between states distinguished by pre-pandemic strictness. But such findings are less surprising if one considers that early state actions likely reflected a shared understanding of the pandemic's profound and distinctive economic impact. The political conditions that contributed to state differences before the pandemic seemed not to affect the speed or nature of states' initial responses.

Links between pre-pandemic strictness and reemployment quality suggest possible *negative* links between stricter status and reemployment quality; however, findings vary depending on the strictness measure. Findings also suggest that stricter states saw more adverse change in reemployment quality outcomes when the pandemic struck, and that less strict states benefited to a greater degree from the federal UI programs than stricter states in terms of change in job quality between job loss and reemployment. This is likely a result of greater overall UI receipt in these less strict states.

However, findings should be interpreted with some caution, as supplementary analyses using the January 2022 Displaced Worker Supplement, which relies on actual reported earnings in the lost job and the reemployment job, instead of proxy information on occupational median wages, show an insignificant relationship between strictness and change in weekly wages. However, the Displaced Worker Supplement is not without issues, primarily a high rate of missing data.

Lastly, assessing links between pre-pandemic strictness and changes in job finding and reemployment quality once the federal programs *turned off* is challenging, because of the staggered termination across states. Results that show differences between the 19 generally

stricter states that terminated all three federal UI programs early and the 26 less strict states that paid them until September 2021 are somewhat illuminating. Notably, scholars inferring significant work disincentive effects of generous UI from a difference-in-differences approach that compares job-finding changes in them over July and August 2021 (Holzer et al. 2021) should consider that the two groups of states are not fully comparable to each other.

This paper contributes to the small but growing literature that attempts to trace disparate labor force outcomes to state UI policy differences. Findings are not inconsistent with prior UI research, including research on the pandemic, that finds negative links between UI generosity and job finding. However, this study contributes a new dimension of insight by exploring the role of pre-existing state features.

Further, this research contributes to the dearth of research linking UI generosity and reemployment quality, during the pandemic, but also more generally. The finding that less strict states may have benefitted from the federal UI programs to a greater degree than stricter states in terms of change in job quality between job loss and reemployment represents a new insight into the benefits of the federal UI programs. Prior research shows that the federal UI programs boosted household consumption (Farrell et al. 2020), and reduced poverty (Chen and Shrider 2021); this paper suggests they may have helped some workers avoid deeper scars associated with job loss, too.

If the suggestive findings on reemployment quality are indicative of broader patterns, then they would point to measures that seek to bring state rules and infrastructure into convergence, particularly by raising the floor of certain key policies.

The rest of this paper proceeds as follows. First, I provide institutional background on the U.S. UI system, focusing on the roots and consequences of the system's interstate variation. Then I review the state of the COVID-19 labor market and the federal policy response. Then I discuss prior research, and where I aim to contribute. Then following a description of the data and empirical strategies I use to estimate the effects of pre-pandemic state features on post-pandemic

job finding and job quality, I review the results. I conclude with a discussion of this paper's contributions.

Background

Interstate variation in the U.S. unemployment insurance system

Two unique features of the U.S. UI system have helped to produce significant heterogeneity across state programs. The first feature is the federal-state structure. While states must follow certain administration requirements, federal law gives them broad discretion in establishing rules for eligibility, benefit amounts, and tax structure (Wandner 2019, West and Hildebrand 1997). The result is essentially 51 different programs, such that two people in different states with similar past employment might differ in their UI eligibility, or the benefit amounts they receive if they qualify (Skandalis, Marinescu, and Massenkoff 2022). These divergent outcomes are more likely for workers on the labor market's margins.

The second feature is financing. Like most OECD countries, the U.S. finances their UI program through state and federal employer payroll taxes.[3] However, the U.S. is distinct in that the rate employers pay varies with how much former employees claim benefits (Vroman 1998, Vroman and Woodbury 2014). The purpose of this practice, called experience rating is to deter unemployment by requiring that employers pay for their layoff decisions (Nelson 1969). However, research suggests it may incentivize employers to contest claims and constrict tax mechanisms through legislative action (Gould-Werth 2016, Hertel-Fernandez 2013). A common source of comparison is the Social Security taxable wage base, which changes annually with national average wages. In 2022, this base was $147,000 (U.S. Social Security Administration 2023). In contrast, the federal UI base, just $7,000, has increased just three times since 1935, most recently in 1983 (Hertel-Fernandez 2013). With the federal base as the minimum, most state taxable wages bases do not exceed $15,000 (U.S. DOL-ETA 2022a), thus limiting the amount of payroll tax revenue states generate to support benefit payments.

[3] In three states, Alaska, New Jersey, and Pennsylvania, employees also make small payroll tax contributions.

As a consequence, states have repeatedly failed to pay benefits during recessions without borrowing from the federal government, including a record 35 states during the Great Recession (Evangelist 2012, Vroman 2016). The need to repay federal loans and avoid tax penalties over this period triggered benefit reductions and legislative proposals that are notable for their severity, but also because they sought to disqualify individuals for factors unrelated to their past earnings or the causes of their unemployment (Wentworth 2017).[4] For example, one notable change to occur after the Great Recession, starting in 2011, was the decision in several states to reduce the maximum number of weeks that workers could claim benefits down from 26 weeks, at a time of record long-term unemployment (U.S. Government Accountability Office 2015). While not a federal requirement, the 26-week norm had been in place in all states since the 1960's.[5] In the years following the Great Recession, other states took similar action, such that by January 2020, 10 states had maximum UI durations of less than 26 weeks, while three additional states reduced benefits over 2021 and 2022 (Gwyn 2022).

A common aggregate measure of program performance called recipiency compares the number of people receiving unemployment benefits to the total number of unemployed. In 2019, the last full pre-pandemic year, state recipiency rates ranged from about half in New Jersey and Massachusetts, to 10 percent or less in Florida, Mississippi, and North Carolina (see Map 1). Nationally, just under one-quarter of unemployed received UI. Previous literature has also found lower recipiency among workers of color, lower-educated workers, and younger workers (Forsythe and Yang 2021, Gould-Werth and Shaefer 2012, Grant-Thomas 2011, Kuka and Stuart 2021, Nichols and Simms 2012), and for those UI serves, disparate and declining rates of wage replacement (O'Leary and Wandner 2020, Skandalis, Marinescu, and Massenkoff 2022). Writing on these developments, just five months before the pandemic imposed unprecedented strain, one program analyst called the U.S. system "a state system as well as a system in decline" (Wandner 2019, 27).

[4] The severe back-to-back recessions of the early-1980s also precipitated a period of relatively steep borrowing followed by efforts to tighten benefit rules.
[5] Further, the 26-week maximum duration of state UI benefits was the recommendation of two federal advisory bodies in 1980 and 1995.

The COVID-19 labor market, and federal and state policy responses

The COVID-19 pandemic caused a pronounced but relatively brief labor market disruption. Between February and April 2020, the number of jobs in the U.S. economy contracted by 14.4 percent, a figure more than two-and-a-half times the Great Recession (U.S. Bureau of Labor Statistics 2023a). Congress responded with a commensurate level of relief and spending totaling an estimated $5.1 trillion over 2020 and 2021 (Center on Budget and Policy Priorities 2023). This spurred an economic recovery that helped cap the official recession at two months and reduce unemployment relatively swiftly over the next two years. As of early 2023, national unemployment was at 50-year lows (U.S. Bureau of Labor Statistics 2023b). This compares with the Great Recession, when unemployment, particularly long-term unemployment, remained elevated for years after the economy started to improve.

Among the major forms of early fiscal relief were three new UI programs for individuals experiencing pandemic-induced employment loss: Pandemic Unemployment Assistance (PUA), which provided benefits for the self-employed, independent contractors, and those with very low or unstable earnings histories, groups traditionally ineligible for UI; Federal Pandemic Unemployment Compensation (FPUC), which provided all claimants with a fixed $600 weekly supplement, later reduced to $300;[6] and, Pandemic Emergency Unemployment Compensation (PEUC), which provided extensions for those who had exhausted regular state benefits. The programs were structured to provide all regular UI claimants, and PUA recipients, with 75 weeks of benefits. This included 49 weeks of federal benefits for UI claimants, on top of what their state provided, typically up to 26 weeks, while PUA recipients could receive 75 weeks of federal benefits.[7] The result of these combined efforts was a substantial temporary expansion of aid to the unemployed in depth and breadth.

[6] The initial authorization of FPUC provided a $600 weekly supplement between April and July 2020. After a brief lapse, the Lost Wages Assistance (LWA) program, established August 8, 2020, provided a $300 FEMA-funded supplement for weeks of unemployment between August and December 2020 (in all states, including District of Columbia; just South Dakota elected not to distribute LWA). After a second lapse, the American Rescue Plan Act (ARPA), signed by President Biden on March 11, 2021, reauthorized a $300 FPUC supplement for weeks of unemployment from mid-March to early September 2021.

[7] Technically, ARPA provided PEUC and PUA claimants with 29 additional weeks, or 79 weeks total; but the expiration date of early September 2021 effectively limited weeks to 25, or 75 total. Further, UI claimants (but not PUA recipients) could receive up to 13 or 20 additional weeks of federal benefits through the permanent federal-state Extended Benefits (EB) program, depending on their state's unemployment rate. EB receipt was highest in the

Over this time, state responses to the crisis varied, with differences emerging on a few dimensions. Recent reviews of state experiences highlight variation in administration (Congdon and Vroman 2022, U.S. Government Accountability Office 2022). For example, states varied in the speed with which they began issuing federal payments, particularly PUA, with differences mainly reflecting technical readiness to simultaneously meet the high demand for benefits and incorporate three new programs into filing systems. While all states started issuing FPUC payments throughout April 2020, PUA first payment dates ranged from as early as the week ending April 4 in Kentucky, to as late as June 13 in New Hampshire (U.S. Government Accountability Office 2022). An estimated 32 states, including 7 of the 10 most populous states, were making payments by late April.

States also made various temporary changes to their underlying programs, some of which were spurred by federal funding. As a condition of receiving administrative aid to assist with the high benefit demand, states had to implement a series of temporary provisions, mostly designed to expand UI access (Congdon and Vroman 2022). They included a waiver of work-search requirements, an expansion of accepted job separations, such as for illness or caregiving, and a requirement that employers notify separating employees of their potential UI eligibility. The new requirements' timing was typically tied to activation of the federal programs, though not always. Notably, the reinstatement of state work-search requirements varied substantially, with 13 states from the Southeast, Midwest, and Mountain regions opting to eliminate the waivers between June and November 2020.[8] Further, a few states that reduced the maximum number of regular benefits after the Great Recession temporarily raised their maximum durations to 26 weeks starting early in the pandemic.[9]

second-half of 2020, when federal law provided just 13 weeks of PEUC to state UI exhaustees. It was several months before Congress authorized 11 additional PEUC weeks, in late December 2020. In general, whenever EB was activated in a state, PEUC recipients were required to transition to it, and exhaust EB, before returning to PEUC.

[8] Starting with the earliest states, they are: Arkansas, Missouri, Nebraska, North Dakota, South Dakota, Louisiana, Mississippi, Wyoming, Utah, Iowa, Tennessee, Oklahoma, and Texas.

[9] Of these states, Georgia continued the 26-week provision relatively late into the COVID-19 pandemic. Eventually, in 2021, legislation was passed that expanded the range of the sliding scale used to set the maximum duration, from 14 to 20 weeks, to 14 to 26 weeks, effective with claims as of July 2020.

Among the more consequential sources of state variation was the termination of the federal programs. Reflecting the acute circumstances of the time, most state actions early in the pandemic reflected a broad desire to rapidly distribute unemployment aid to all in need. However, pre-pandemic political divisions reemerged once the economy started to grow in the second half of 2020 and 2021. Aided by the proliferation of news reports of employer hiring difficulties, states acted to roll back federal commitments to provide benefits through early September 2021.[10] Starting in May 2021, 24 Republican governors announced they would terminate at least the supplemental FPUC payment prematurely, with 20 states ending all three programs by early July 2021.[11] The Louisiana governor was the single Democrat who ended all programs, by late July 2021. The remaining 27 states maintained all three measures until September 2021.[12]

Prior research on UI, job finding and reemployment quality, and interstate variation

The question of whether and to what degree UI benefits affect job finding has been the subject of ample research, particularly in economics (e.g., Moffitt 1985, Katz and Meyer 1990, Card and Levine 2000). Much emphasis has been on how UI expansions discourage work and increase unemployment duration.

The means through which UI can slow reemployment vary. UI provides the unemployed with more time and resources to search for a better-quality match, raising the reservation wage. Yet, by subsidizing leisure, UI can induce jobseekers to reduce search effort, thus lengthening the time to reemployment. However, in the aftermath of the Great Recession, a period of sluggish growth, Rothstein (2011), and follow-up work with coauthors (Farber and Valletta 2015; Farber,

[10] Unlike in similar past measures, the CARES Act gave states the option not to participate in the federal UI measures, or to later withdraw, as long as they gave 30 days' notice. This means that all states elected to participate in the programs when the pandemic began (https://news.bloomberglaw.com/daily-labor-report/unemployment-cut-off-suits-swipe-at-states-power-to-abandon-aid)

[11] Montana's Governor Greg Gianforte was the first to announce withdrawal of federal UI aid, on May 4th (https://news.mt.gov/Governors-Office/montana-to-launch-return-to-work-bonuses-return-to-pre-pandemic-unemployment-program-to-address-workforce-shortage). Four states, Alaska, Arizona, Florida, and Ohio, ended just the supplemental FPUC payment—Arizona, by mid-July, and the three other states, by late-June.

[12] Judges in state courts blocked attempts by the Indiana and Maryland governors to prematurely end the federal UI measures, after lawsuits brought by the unemployed or legal advocates. In Indiana, payments stopped in June 2021, but were reinstated in July (and paid retroactively) following the judge's orders. Benefits persisted in Maryland.

Rothstein, and Valletta 2015), found that extensions raised total unemployment by fractional amounts, but mostly because workers job searched for longer than they would have without the extensions before exiting the labor force.

Unsurprisingly, because the supplemental payment produced replacement rates above 100 percent for most claimants, and 300 percent for the lowest earners (Cortes and Forsythe 2020; Ganong, Noel, and Vavra 2020), research on the effects of the pandemic UI programs has focused on moral hazard effects. Like research from the Great Recession, this work found modest negative effects on job finding and aggregate employment (e.g., Altonji et al. 2020, Dube 2020, Grieg et al. 2021, Petrosky-Nadeau and Valletta 2021). For example, using linked CPS data, Petrosky-Nadeau and Valletta (2021) estimate that the increase in the typical replacement rate reduced job finding in May 2020 by 7.1 percentage points, which they view as low relative to overall job finding at the time. Analyzing bank account data, Ganong, Greig, Liebeskind, and coauthors (2021, 2022) find that the increase in job finding around the time of the expiration of the $600 payment, and the decline once it was reinstated at half the amount, were both minor in comparison to the broader fluctuations in job finding over the pandemic, and compared to the supplement's positive effects on consumption. In general, the consumption-smoothing benefits of the pandemic UI programs were found to be substantial (e.g., Farrell et al. 2020).

Leveraging the staggered expiration of federal UI in summer 2021, Holzer, Hubbard, and Strain (2021) show larger negative effects on job finding than earlier work. Using linked CPS data, they find that early-termination of FPUC and PUA triggered a 14 percentage-point increase in job finding in July and August 2021. However, the effects were smaller among sub-groups, including lower-educated workers, leisure and hospitality workers, and retail workers, for whom the effect was statistically insignificant.

This research suggests the UI expansions reduced transitions to employment nationally, with estimates shifting depending on the data source, empirical strategy, and time period studied. In general, researchers interpret effects as minor when compared with fluctuations in job finding generally, and when weighed against UI's welfare-enhancing benefits in a trying time for the nation. However, an open question concerns the role of underlying state program features. The

decision of nearly half of states to terminate the federal programs early, along with variation in the reactivation of work-search requirements, suggests persistence of pre-pandemic heterogeneity. Thus, research is needed that seeks to understand whether and how, despite unprecedented federal aid, and various state efforts to relax rules for some length of time, pre-existing program features—specifically, state strictness—affected the labor force transitions of separated workers.

An additional area that warrants further research, particularly when compared to the large literature on UI and job finding, is the relationship between UI and reemployment quality. Research documents the "scars" of involuntary job loss on long-term earnings, estimated to be twenty percent over twenty years (von Wachter, Song, and Manchester 2009).[13] One contributor may be the failure to secure full-time reemployment (Farber 2015). Further, severe recessions, or industry or occupational restructuring, may induce transitions to labor market segments with stronger hiring, which may lead to loss of human or social capital (e.g., Fallick 1993). Displaced workers also face high risk of job instability in the decade after the initial separation (Stevens 1997). These losses may accumulate over careers, setting workers on lower trajectories than would be achieved without employment loss. Therefore, an important question concerns the extent to which UI, which offers income replacement and optional job-search assistance (Gatta 2014, Jacobson 2009, Wandner 2012), mitigates the economic fallout from involuntary job loss.

UI is not necessarily designed to promote occupational mobility; instead, it seeks to mitigate the kind of downward earnings mobility that might occur if someone, lacking the financial resources to meet their basic needs while unemployed, was compelled to accept any job that would hire them, even if the job was sub-standard. Federal UI law provides that claimants are not required to accept "unsuitable" work. Generally, states' suitability criteria account for health and safety conditions, including physical requirements; location; an individual's prior training, experience, and earnings; and the length of unemployment (U.S. DOL ETA-OUI 2023).

[13] For earlier seminal evidence of the long-term economic effects of job displacement, see Jacobson, Lalonde, and Sullivan (1993), which uses administrative data from Pennsylvania, which prior research had not done, and Ruhm (1991), which uses the Panel Study of Income Dynamics.

However, as with other UI policy areas, definitions of suitability vary. Further, they are underpinned by sharply different benefit adequacy regimes. For example, while state benefit formulas are generally designed to replace 50 percent of a claimant's previous earnings, some states struggle to meet this standard due to low maximum benefit amounts. As of January 2020, state maximums ranged from $235 in Mississippi, up to $823 in Massachusetts; nine states had maximum amounts at or below $350 (U.S. DOL ETA-OUI 2022b); state maximum durations also varied. Thus, one might expect claimants in states that provide weaker income replacement to feel greater urgency to return to any available job compared to claimants in states with more generous replacement; this is expected to result in greater erosion in earnings between separation and reemployment.

Compared to the vast literature on UI generosity and job finding, little research explores links with reemployment quality. Of past studies that do, most find insignificant effects on reemployment wages (Card, Chetty, and Weber 2007, Lalive 2007, and Van Ours and Vodopivec 2008), or significant negative effects (Schmieder, von Wachter, and Bender 2016). The negative effects on wages come mainly from the negative consequences of extended unemployment duration, including erosion in skills or capabilities, stigma from employers, and shifts to other industries or occupations.

Nekoei and Weber (2017) exploit an age-based cutoff in the Austrian UI system that provides workers aged 40 and older with nine additional benefit weeks, compared to younger claimants. Contrary to past work, they estimate that the expansion, while lengthening jobless spells, enabled connection to employment that paid 0.5 percent higher wages; they find no effect on other quality measures, like tenure or probability of full-time reemployment.

Thus, in addition to exploring how variation in pre-pandemic state strictness affected transitions to employment, this paper investigates links with job quality among the reemployed. If stricter states had greater job finding, a valuable follow-up question is whether the unemployed in these states transitioned to lower-quality reemployment than comparable individuals in less strict states, where UI recipients may have had more time to search for a better job.

The small amount of pandemic-related research that accounts for state variation suggests that pre-existing features remained important. Using U.S. Census Household Pulse Survey data, Carey et al. (2021) find that application and receipt rates, and success rates among applicants, were higher in 2020 in states with higher 2019 recipiency. Using multiple data sources, Forsythe and Yang (2021) show an overall increase in recipiency in 2020 to an estimated 36 percent (from 27 percent in 2018); but like Carey et al., they find significantly higher recipiency in states with greater pre-pandemic receipt. They attribute this variation, pre- and post-pandemic, to misinformation and/or mistaken beliefs about eligibility, and decisions not to apply.[14] Further, they document persistence of pre-pandemic receipt disparities by age, race/ethnicity, and education.

Other recent research, of earlier time periods, similarly points to state differences as an important source of variation in labor force outcomes of the unemployed. As part of efforts to understand access disparities in the UI system, including potential causes, recent research has tried to draw connections to state UI heterogeneity (e.g., Kuka and Stuart 2021, O'Leary, Spriggs, and Wandner 2022, Skandalis, Marinescu, and Massenkoff 2022). These findings suggest that deepening understanding of the role of states is a fruitful path for UI research.

For example, using random audits of state UI claims spanning 2002 to 2017, Skandalis, Marinescu, and Massenkoff (2022) document how states with larger Black populations are systematically stricter, and show that Black claimants' replacement rates are 18.3 percent lower than rates for White claimants. While employment history differences account for just over half of the gap, the remainder is explained by state rule differences that produce dissimilar benefit levels for Black and White claimants with similar prior employment (for example, differences in maximum weekly benefit amounts). Kuka and Stuart (2021) link persistent Black-White recipiency gaps to Black workers' lower likelihood to apply. As to why Black workers apply less, the authors point to lower pre-separation earnings. State rule differences do not explain the differences, according to the authors; yet, they point to lower take-up and recipiency rates in stricter Southern states, where Black workers are concentrated, as another important driver.

[14] The authors use data from 2018 CPS non-filers supplement, and the Understanding COVID-19 in America Survey, which asks questions about UI filing experiences.

Thus, with past research identifying state differences as an important dimension of the UI system's ability to achieve its major objectives, this paper seeks to deepen understanding of the role of state UI programs during a significant and fundamentally destabilizing episode in its nearly 90-year history. It does so by investigating the association between pre-pandemic state strictness and two post-pandemic outcomes: job finding of the unemployed and non-employed, and job quality of the reemployed.

Understanding the relationship between interstate variation in the UI program and labor force outcomes is important for a few reasons. In a globalized economy, a fair question for policymakers is whether a fragmented system, controlled by states, is the most effective way to support our nation's unemployed through widespread shocks. The persistence of state variation undermines the ability of the federal government to accelerate recoveries from recession. Research of how state UI heterogeneity differentially affected reemployment in the pandemic can contribute insight to efforts to develop best practices in future crises, or other systemwide reforms.

Large state differences also prompt questions of equity, to the extent less generous states can shift more of the costs of high joblessness to the federal government during national emergencies or other income support programs. For example, during the Great Recession, states that reduced their maximum durations while federal extensions were active could shift the costs of unemployment to the federal partner sooner in claimant unemployment spells than states where benefit levels remained unchanged (U.S. Government Accountability Office 2015). As previously noted, a few states enacted temporary increases to 26 weeks during the pandemic. Nonetheless, three additional states reduced their maximum durations in 2021 and 2022, suggesting persistence of pre-pandemic contraction efforts (Gwyn 2022).

Finally, as suggested by recent work, state policy differences, while driving systemwide decline, may also be an important source of labor market disparity, particularly racial/ethnic disparity. The increased attention to the potentially adverse role of state UI variation is a valuable addition to the sizable UI literature in economics, which has historically overlooked the welfare

consequences of state heterogeneity. Thus, this paper aims to contribute new insight to UI research by emphasizing a critical but understudied feature of the U.S. system; this paper also aims to contribute to the small body of literature on UI and reemployment quality. This paper's findings also have the potential to aid recent administrative efforts to strengthen UI system integrity and access.[15]

Data

To explore the link between pre-pandemic state UI strictness and post-pandemic job finding and job quality, this paper uses linked Integrated Public Use Microdata Series (IPUMS) extracts of the Basic Monthly Survey (BMS) of the Current Population Survey (CPS) (Flood et al. 2022), the main source of national labor force statistics. The CPS is a monthly survey of about 60,000 U.S. households. Individuals living in sampled households are interviewed for four months, out for eight months, and then interviewed again for the next four months. In each month, it is possible to link about three-quarters of respondents to observations in the following month. IPUMS links individuals across months using a unique identifier. I confirm linkages using gender, age and race. Following Rothstein (2011), I assign each person's second batch of observations, starting with month-in-sample five, a new participant ID.[16]

As the BMS lacks UI receipt and eligibility information, I am unable to distinguish UI recipients from unemployed non-recipients. However, the CPS makes up for this limitation with large, recent samples. Other longitudinal sources with rich labor force information, like the Survey of Income are Program Participation, release new data less frequently. Further, this paper is interested in understanding the effects of state UI rules on job finding among the unemployed broadly. This is consistent with prior research that identifies spillover effects between insured

[15] The American Rescue Plan Act (ARPA), signed by President Biden in March 2021, appropriated $2 billion to the Department of Labor to modernize the UI system, with emphasis on three broad goals: detecting and preventing fraudulent activity; strengthening access, particularly among individuals state programs have traditionally underserved; and improving timely payment of benefits. Subsequently, in June 2023, the Fiscal Responsibility Act rescinded $1 billion of those funds.

[16] Jesse Rothstein makes available replication files for his analysis of monthly flows from unemployment to employment in the Current Population Survey, as featured in his 2011 paper (Rothstein 2012). This study has adapted segments of coding from these replication files. Readers can access the full set of replication files at this link: https://berkeley.app.box.com/v/rothstein-replication-uiflows.

and uninsured unemployed. For instance, increases to UI benefit levels have been found to reduce unemployment duration among non-recipients through longer spells for UI recipients (e.g., Levine 1993, Valletta 2014). Other research has tried to measure the effects on firm decisions, including vacancy creation (Landais et al. 2018).[17]

As states were required to waive work-search rules for some length of time as a condition of receiving emergency administrative aid, I include in my main sample of 18- to 64-year-old adults both traditionally unemployed workers, including involuntary job-losers, quitters, labor force re-entrants, and new entrants, and those marginally attached. Marginally attached workers are not in the labor force, but want and are available for work; and though they report job searching sometime in the prior year, they have not searched in the prior four weeks, and, thus, are not counted among the unemployed. Such distinctions between job-seeking unemployment and non-employment were likely to be less meaningful during the study period.

The first outcome, job finding, is based on respondent self-reports of their employment status each month. A binary variable indicates whether respondents transition to employment in the following month, or else remain unemployed or non-employed. Though prior research recodes single-month transitions from unemployment to employment (or out of the labor force), and back again to unemployment as "non-exits" (see, e.g., Farber et al. 2015, Holzer et al. 2021, Petrosky-Nadeau and Valletta 2021, Rothstein 2011), I leave them as is, given the potential for this method to obscure transitions to odd jobs or short-term employment, or brief recall episodes during the pandemic. Further, because this method requires that observations have at least two follow-up interviews to verify spuriousness, leaving these transitions untouched has the added benefit of increasing the sample size.

This paper also assesses the link between pre-pandemic state UI strictness and job quality of the reemployed. Specifically, the second set of outcomes capture change in job quality in terms of earnings between the lost job and the reemployment job. The challenge in assessing reemployment quality for those previously unemployed or non-employed in the CPS is the lack of data on the pre-separation or lost job. For unemployed respondents, and respondents not in the

[17] Schmieder and von Wachter (2016) includes a review of recent research of UI's spillover effects.

labor force with any work experience in the past five years, the CPS only reports industry and occupation.[18] We can compare reemployed respondents on a variety of job quality indicators; but this comparison provides little insight into the differential *impact* of involuntary job loss and unemployment across the diverse population of separated workers.

I resolve this challenge in two ways. First, I adopt a method used in Forsythe's (2019) analysis of occupational mobility within firms, that leverages the availability of detailed occupation information in the CPS on the lost job and the reemployment job. For approximately 450 detailed occupations, I attach median hourly wage estimates from the May 2019 Occupational Employment and Wage Statistics (OEWS), the last pre-pandemic survey. The OEWS produces employment and wage estimates for wage and salary workers in more than 800 occupations, based on semi-annual surveys collected over three years. The OEWS has two key advantages over the CPS. First, the wage estimates are based on much larger sample sizes—about 1.1 million establishments, compared with about 60,000 households in the CPS; second, since the OEWS is an establishment survey, the wage estimates are less error-prone than the individual self-reports in the CPS. I use U.S. Census Bureau crosswalks to reconcile use of the 2018 Standard Occupational Classification (SOC) system in the OEWS and the Census's 2010 occupational classification scheme by IPUMS. The OEWS median wage estimates range from $10.45 to $101.37.

With these data, I can then assess occupational mobility between separation and reemployment, by comparing the median hourly wage of the occupation recorded in the reemployment month with the wage for the occupation recorded in the unemployment month. I assess mobility with two outcomes: the first equals the change in the log of occupational hourly wages between the two months. For the second, I start by splitting the occupational wage distribution into deciles; then I measure whether respondents move up at least one occupational wage decile upon reemployment.

[18] However, even these data are reported somewhat unevenly, particularly for individuals NILF. Therefore, where possible, I impute industry and occupation information from other, adjacent year-month observations. For example, if in a two-month span, a NILF respondent reports no change in labor force status, but has manufacturing as their prior industry in the first month, and a missing value in the next month, I replace the missing value with manufacturing.

The second way I resolve the lack of "pre and post" job quality information in the Basic Monthly Survey of the CPS is with the Displaced Worker Supplement (DWS). The DWS is fielded every other January, and captures displacement experiences from the three prior calendar years among those aged 20 and older. Respondents are surveyed about the characteristics of their lost job, including hours, pay, and union status, along with the year last worked; Basic Monthly Survey questions supplement information collected about their current job, if reemployed. The most recent supplement was fielded in 2022. Thus, we have means to compare pre and post job quality among those displaced during the COVID-19 pandemic.

Following Farber (2015), I assess reemployment quality in terms of the probability of reemployment in part-time work, first for all job-losers, and then for full-time job-losers. Further, I assess change in log weekly earnings. I deflate nominal values to constant 1999 dollars, using an adjustment variable provided by IPUMS.

Pre-pandemic state UI strictness

I examine four sources of pre-pandemic state UI strictness. Table 1 provides the values for each of the 51 state UI programs, plus each state's rank, along with national average values, where applicable. The first measure reflects initial eligibility rules. In general, UI applicants must have separated from work involuntarily; however, an estimated 25 states also compensate voluntary quits from work for compelling family or personal reasons, such as the unexpected loss of childcare or a family member's illness. Historically, involuntary separation requirements have disadvantaged women, due to the higher likelihood of their experiencing caregiving-induced employment disruption. The American Recovery and Reinvestment Act of 2009 provided grants to states to expand permissible reasons for leaving work. This spurred expansions in several states; nonetheless 26 states continue to restrict eligible separations to narrower circumstances, connected to the claimant's work. The *quits* measure reflects rules in place as of January 2020.

The second measure reflects strictness of continuing eligibility rules. Individuals must demonstrate an active job search each week they claim benefits. Typically, states require

claimants to register with the public employment service, report the weekly number of employer contacts, and/or upload a resume, among other claims-filing procedures. In the years following the Great Recession, the denial rate for violation of these types of "non-separation rules," or rules unrelated to the claimant's job loss, increased sharply, reflecting passage of stricter work-search rules and application protocols, along with implementation of new claims-filing technologies (Wentworth 2017, Vroman 2017). Typically, a denial results in disqualification for some length of time.

The *denial rate* reflects the rate at which states deny benefits for noncompliance with continuing eligibility rules. Once states detect an issue with a claim, a fact-finding process ensues. States decide whether to award or deny benefits based on assessment of the facts against state rules. The net denial rate is reported per 1,000 claimant contacts. Starting in 2010, the net rate increased every year to 27 per 1,000 claimant contacts, or 2.7 percent, as of 2019, after hovering since the 1970s between 1.1 and 1.9 percent. State rates vary widely, from eight (or 0.8 percent) in Connecticut up to 98 (or 9.8 percent) in Mississippi. Once states detect an issue, they deny claims at relatively similar rates (typically, the large majority). States with the highest net denial rates are distinguished by the high rate at which they detect issues in the first place.

The third measure reflects benefit generosity. Once deemed eligible, states use the claimant's past earnings to compute their weekly benefit amount, and the potential number of weeks of benefits they may receive. Benefit formulas are typically designed to replace half of lost earnings, up to a statutory maximum. As of January 2020, state maximum benefit amounts ranged from $235 in Mississippi up to $823 in Massachusetts.[19] While some states index the maximum to state average wages, increases in other states require legislative action. The third strictness measure, reflecting *replacement*, equals the ratio of a state's maximum weekly benefit, as of rules in place January 2020, to the state's 2019 median weekly wage as reported by the Occupational Employment and Wage Statistics, and ranges from 31 percent in the District of Columbia up to 85 percent in Massachusetts.

[19] Additionally, several states, including Massachusetts, append dependents allowances to the benefits they provide. Formulas vary.

The fourth measure, commonly called *recipiency*, captures overall coverage, and reflects the culmination of a series of state rules, including the three just described. For example, Vroman (2017) attributes about 20 percent of the national recipiency decline after the Great Recession to the increased denial rate for non-separation issues described above. The measure equals the ratio of a state's insured unemployed to all unemployed, including those potentially eligible and ineligible for UI, and uses monthly UI claims data from administrative sources and monthly unemployment counts from the U.S. Bureau of Labor Statistics. As the measure used in this paper excludes claimants serving waiting or penalty weeks, it more closely reflects the portion of a state's unemployed actually receiving payments. In 2019, it ranged from 9 percent in North Carolina to 59 percent in New Jersey.

Empirically, I represent strictness using binary variables that indicate whether a state's policy is stricter (1) or less strict (0). To do so, I split states into two groups using as the cut point each measure's median value, weighted by state covered employment as of January 2020 (see the last column of Table 1). I do this for: non-separation denials, replacement, and recipiency. As is, state quits rules are represented in binary form, stricter or less strict. As a next step, I combine the binary quits, non-separation denials, and replacement measures into an additive index, in which 0 represents no strict non-recipiency measures, and 3 represents three strict non-recipiency measures. A similar strategy is used in prior research in sociology that explores the effects of work-schedule instability on workers' well-being (Schneider and Harknett 2019). The authors combine several binary indicators of schedule instability, such as having a variable schedule, into a single additive measure. Recipiency strictness is represented with a 0 (less strict) and a 1 (stricter).

Table 2 shows how the pre-pandemic strictness measures occurred together across the 51 state programs (including the 50 states, plus the District of Columbia). Table 3 shows each state's index value, strictness in terms of recipiency, and whether they ended at least one federal UI program before September 2021. In Table 2, states shown in bold had lower pre-pandemic recipiency. States shown in italics also terminated at least one federal UI program early. As the table shows, the strictest states, as in states that were strict on all three non-recipiency policy measures, included Florida, Indiana, Louisiana, Michigan, Mississippi, Missouri, North Carolina,

and Tennessee (n=8). All but one state, Michigan, had lower recipiency. These states are concentrated in the Southeast and Midwest. Further, states that ended at least one federal UI program before September 2021 are overrepresented among states that were strict on at least two non-recipiency policies. Of these 26 stricter states, 19 states ended at least one federal UI program early. By contrast, of the 25 states that were strict on just one non-recipiency policy (n=16), or none (n=9), just six ended at least one program early. This suggests that the factors that gave rise to the stricter pre-pandemic policies may have also contributed to the early termination of the federal UI programs.

Lastly, nine states were not strict on any of the three non-recipiency policy measures: Arkansas, Colorado, Connecticut, Illinois, Maine, Massachusetts, Oregon, Pennsylvania, and Rhode Island. Like the strictest states, these states are also somewhat concentrated geographically in the Northeast. Despite being less strict, however, two states, Arkansas and Colorado, also had lower recipiency in 2019.

[insert Tables 1, 2, and 3 about here]

As Figure 1 illustrates, states' additive index values reasonably predict continuous recipiency rates, with recipiency generally declining as the index increases.

[insert Figure 1 about here]

Empirical strategies

I employ two broad strategies to assess links between pre-pandemic features of state UI programs and post-pandemic job finding of the non-employed, and job quality of the reemployed (or reemployment quality). The first strategy provides insight into the effects of strictness on transitions to employment, and changes in job quality between separation and reemployment, across the major pandemic phases. In each phase, I assess how job finding, and changes in job quality, differed in stricter states relative to less strict states. The second overall strategy aims to assess links between strictness and *changes* in the two primary outcomes, job finding and

changes in job quality between separation and reemployment, both when federal UI started, and when it ended. This gives another dimension of insight into the interaction of state and federal UI programs, and, in particular, the sensitivity of states to federal aid.

The main challenge with assessing links between pre-existing state UI features and job finding and reemployment quality outcomes during recessions is distinguishing the effects of state programs from active federal benefits. The question is how to construct counterfactual conditions that permit observation of the relationship of interest, in post-pandemic months, but absent the federal expansions. Where possible, I leverage time periods that directly precede, and follow, the months of active federal benefits; further, I leverage the brief two-month period in summer 2021 when federal UI terminated in some states, and continued in others.

Strategy 1: Assessing links between strictness and (1) job finding, and (2) change in job quality among the reemployed, across pandemic phases

The first strategy aims to understand the effects of pre-pandemic state strictness, first, on monthly transitions from non-employment to employment, and then, among the reemployed, on job quality relative to the lost job, across the major pandemic phases. Major phases include (1) the six months before the pandemic; the months when federal UI benefits were active, in (2) 2020 and (3) 2021; and (4) the first six months without federal UI benefits. Within each phase, I measure how each outcome, job finding among the non-employed, and job quality among the reemployed, differed in strict states relative to less strict states.

Equations 1 and 2, below, model this first strategy.

(1) $$log\left(\frac{P_{ist}}{1-P_{ist}}\right) = \alpha + \beta_1 * (index19_s * precov_t) + \beta_2 * (index19_s * postfedON20_t) + \beta_3 * (index19_s * postfedON21_t) + \beta_4 * (index19_s * postfedOFF_t) + pua_{st} + waive_{st} + \gamma_{ist} + \delta_{st} + \alpha_{st} + \varphi_t + \epsilon_{ist}$$

(2) $$log\left(\frac{P_{ist}}{1-P_{ist}}\right) = \alpha + \beta_1 * (recip19_s * precov_t) + \beta_2 * (recip19_s * postfedON20_t) + \beta_3 * (recip19_s * postfedON21_t) + \beta_4 * (recip19_s * postfedOFF_t) + pua_{st} + waive_{st} + \gamma_{ist} + \delta_{st} + \alpha_{st} + \varphi_t + \epsilon_{ist}$$

I perform these analyses on all 51 state programs. In assessments of job finding, the outcome is the probability of reemployment by month $t + 1$, represented as the log odds (as shown in Equations 1 and 2). To assess links between pre-pandemic strictness and job quality among the reemployed, I replace the probability of reemployment outcome with the two reemployment quality outcomes, change in the occupational wages, Δ_{ist}, a continuous measure, and probability of movement up one or more wage deciles, represented as the log odds, $log\left(\frac{P_{ist}}{1-P_{ist}}\right)$. I confine these respective analyses to the sample of reemployed respondents.

In Equation 1, $index19_s$ represents pre-pandemic state UI strictness. Observations take on a 0 if their state is strict on none of the three measures, quits, non-separation denials, or replacement, a 1 if strict on one of them, and so on, up to 3. In models estimating the effects of pre-pandemic strictness in terms of recipiency, $index19_s$ is replaced with $recip19_s$, a binary variable (Equation 2). Observations take on a 1 if in a strict state, and a 0 if in a less strict state. I estimate the effects of the three measures, as captured in the index (Equation 1), separately from the binary recipiency strictness measure (Equation 2), as recipiency is akin to an outcome of the three other measures.

As an added dimension of strictness, I also assess differences by "federal UI status," or whether states terminated all three federal programs prematurely. I confine this analysis to 45 states, including the 19 "early cut-off" states that ended all three federal UI programs by early July 2021, and the 26 "continuous" states where benefits persisted for an additional two months, until early September (the circumstances and timing of federal UI's deactivation in the remaining six states varied, making them non-comparable to the others). The 19 "early cut-off" states are stricter on the whole than the 26 "continuous" states. For example, 14 of the 19 early cut-off states were strict in terms of non-separation denials and recipiency, compared with just nine, and seven, of the 26 continuous states, respectively. To estimate the effects of early cut-off status, I replace $recip19_s$ with another binary variable; observations take on a 1 if in an early cut-off state, and a 0 if in a continuous state.

Equations 1 and 2 split the pandemic into four phases: $precov_t$ spans September 2019 to February 2020 (six months); $postfedON20_t$ spans March to December 2020 (10 months); $postfedON21_t$ spans the first six months of 2021, i.e., the final six months of active federal UI in all states; and $postfedOFF_t$ spans September 2021 to February 2022, i.e., the first six months *without* federal UI both in all states. Due to the staggered termination of the federal UI programs starting in early summer 2021, and to enable comparison between strict states and less strict states regardless of state decisions to terminate federal UI early, this analysis excludes July and August 2021.

β_1 to β_4, the coefficients of interest, represent the interaction of strictness and the months of each phase; they allow me to assess the effects of strictness within each phase. I follow regression results with estimates of average marginal effects, which indicate the average percentage-point change associated with change in pre-pandemic strictness, from 0 (no strict measures) to 1 (1 strict measure), 0 to 2, and 0 to 3, in each phase (Equation 1). In the model estimating the effects of pre-pandemic strictness in terms of recipiency (Equation 2), average marginal effects estimates reflect the average percentage-point change associated with a change from less strict (0) to strict (1), in each phase (or from continuous to early-cut-off status).

Here and elsewhere, I include rich controls that influence labor force transitions of the non-employed, and job quality among the reemployed. In equation 1, γ_{ist} is a vector of individual covariates, including: gender; age (five categories); race/ethnicity (four categories); education (four categories); marital status (1/0); parental status (where 1 includes individuals with any children of their own in their care, and 0, all other arrangements); and, an interaction of woman, married, and parent. Pre-separation characteristics include: unemployment reason (where 1 represents involuntary job loss, and 0, unemployment for other reasons, or else non-employment); and major pre-separation industry (14 categories) and occupation (11 categories).

In addition, in δ_{st}, I incorporate monthly published data on state labor market conditions, including the unemployment rate, insured unemployment rate (capturing regular state UI programs only, and not federal UI programs), and monthly employment growth, and cubics in each rate. Further, I control for state-level COVID-19 caseloads and public health measures.

Following Petrosky-Nadeau and Valletta (2021), caseloads are represented monthly as new cases per 100,000 people (Dong, Du, and Gardner 2020). Pandemic restrictions are represented with a monthly stringency index, developed by Mathieu et al. (2020) of the Oxford Coronavirus Government Response Tracker project. These measures are captured in α_{st}.

Further, I include two binary variables that capture post-pandemic state UI policy variation. The first is a binary variable, pua_{st}, which reflects the months of active PUA payments; this is intended to capture the relatively staggered start of PUA payments in states in the pandemic's initial months. The second binary variable, $waive_{st}$, reflects the months each state waived work-search rules. While every state relaxed rules for at least a few months as a condition of receiving federal administrative funding, an estimated 13 states reinstated rules as early as the second-half of 2020. In follow-up analysis of job quality among the reemployed, I remove pua_{st} and $waive_{st}$.

Lastly, equations 1 and 2 include state and year-month fixed effects, φ_t. These allow me to eliminate bias from unobserved time-constant features of states, as well as unobservables that shift across months.

I conduct all analyses in Stata. All results, here and elsewhere, are weighted using CPS sampling weights. Since the treatments of interest are state policies, I cluster standard errors at the state level.

Strategy 2: Assessing links between strictness and *change* in (1) job finding, and (2) change in job quality among the reemployed, upon activation, and deactivation, of federal UI

As a second overall strategy, I examine the association between pre-pandemic strictness and *changes* in the main outcomes of interest: job finding, and the two reemployment quality outcomes, change in occupational wages, and the probability of movement up one or more wage deciles, upon activation and deactivation of federal UI. I do this in two ways, as follows.

Pre/post federal UI comparison

First, I compare each outcome, job finding, change in occupational median wages, and movement up one or more wage deciles, in the first six months the federal UI programs were active to their respective values in the six months *prior*; similarly, I compare each outcome in the first six months *after* federal UI expired to their respective values in the final six months of activation. To isolate the role of pre-pandemic strictness, I compare changes in each of the three outcomes between the periods of interest *in strict versus less strict states*. This allows me to understand to what degree, and in what direction, job finding among the non-employed and job quality among the reemployed, changed once federal UI started, and once it ended, in strict states compared with less strict states. As in the first empirical strategy, the job-finding analysis includes the full sample of non-employed; but I confine the analysis of job quality among the reemployed to reemployed respondents. Equations 3 and 4, below, model this strategy, with the outcome shown as the probability of reemployment by month $t+1$, represented as the log odds.

(3) $$log\left(\frac{P_{ist}}{1-P_{ist}}\right) = \alpha + \beta_1 * postperiod_t + \beta_2 * index19_s + \beta_3 * (index19_s * postperiod_t) + pua_{st} + waive_{st} + \gamma_{ist} + \delta_{st} + \alpha_{st} + \varphi_t + \epsilon_{ist}$$

(4) $$log\left(\frac{P_{ist}}{1-P_{ist}}\right) = \alpha + \beta_1 * postperiod_t + \beta_2 * recip19_s + \beta_3 * (recip19_s * postperiod_t) + pua_{st} + waive_{st} + \gamma_{ist} + \delta_{st} + \alpha_{st} + \varphi_t + \epsilon_{ist}$$

As earlier, the outcomes include the probability of reemployment; for the reemployment quality analyses, the two outcomes are change in occupational medial wages , Δ_{ist}, a continuous measure, and probability of movement up one or more wage deciles, again represented as the log odds, $log\left(\frac{P_{ist}}{1-P_{ist}}\right)$. $postperiod_t$ is a binary variable capturing 12 months. When the outcome is reemployment, or job quality among the reemployed, early in the pandemic, it takes on a 1 for March to August 2020, and a value of 0 for the six prior months. When focus shifts to the final months of the federal UI programs in 2021, I confine the sample to 45 states, and split states into two groups. Spurred by media coverage of employer hiring difficulties, governors of 19 states terminated the federal UI programs by early July 2021, while 26 states maintained them until early September.

In the 19 early cut-off states, $postperiod_t$ equals 1 for July to December 2021, and 0 for the six months prior. In the 26 continuous states, it equals 1 for September 2021 to February 2022, and 0 for the six months prior.

Again, $index19_s$ represents the additive pre-pandemic strictness index, capturing whether states were strict in terms of zero non-recipiency measures, quits, denials, and replacement, and up to all three of the measures (Equation 3). As earlier, $recip19_s$, a binary variable that represents pre-pandemic state UI strictness in terms of recipiency, takes the place of $index19_s$ for analysis of the effects of pre-pandemic recipiency (Equation 4) (similarly, a binary variable that represents early cut-off status takes the place of the binary recipiency variable for analysis of strictness in terms of the premature termination of federal UI).

β_3, the coefficient of interest, represents the interaction of each pre-pandemic state UI strictness measure and the time variable, representing each 12-month period—when federal UI started, and when it ended. It allows me to compare changes in the three main outcomes in each of the two periods, *in stricter and less strict states*. As elsewhere, I include rich individual- and state-level controls, and state and month fixed effects, as captured in pua_{st}, $waive_{st}$, γ_{ist}, δ_{st}, α_{st}, and φ_t.

Difference-in-differences

Similar to Holzer, Hubbard, and Strain (2021), I also leverage the staggered termination of federal UI across 45 states in summer 2021. The two-month window, July and August 2021, provides the opportunity to compare the change in the three outcomes of interest, job finding among the non-employed and job quality among the reemployed, in the 19 early cut-off states where federal UI terminated by early July, to the change in the 26 continuous states where it remained active until early September. Using a difference-in-differences (DiD) approach, as shown in equations 5 and 6, we can attribute the *difference* in each group's change in job finding and the two reemployment quality outcomes over the two time periods to the deactivation of federal UI. Importantly, to isolate the role of pre-pandemic strictness, I compare changes in the respective outcomes over the two time periods across early cut-off, or "treatment" states, and continuous, or "control" states *within states of similar pre-pandemic strictness*. Equations 5 and

6, below, models this strategy, with the outcome shown as the probability of reemployment by month $t+1$, represented as the log odds.

$$(5)\ log\left(\frac{P_{ist}}{1-P_{ist}}\right) = \alpha + \beta_1 * earlycutoff_s + \beta_2 * postperiod_t + \beta_3 * index19_s + \beta_4 * (earlycutoff_s * postperiod_t) + \beta_5 * (index19_s * earlycutoff_s) + \beta_6 * (index19_s * postperiod_t) + \beta_7 * (index19_s * earlycutoff_s * postperiod_t) + waive_{st} + \gamma_{ist} + \delta_{st} + \alpha_{st} + \varphi_t + \epsilon_{ist}$$

$$(6)\ log\left(\frac{P_{ist}}{1-P_{ist}}\right) = \alpha + \beta_1 * earlycutoff_s + \beta_2 * postperiod_t + \beta_3 * recip19_s + \beta_4 * (earlycutoff_s * postperiod_t) + \beta_5 * (recip19_s * earlycutoff_s) + \beta_6 * (ui19_s * postperiod_t) + \beta_7 * (recip19_s * earlycutoff_s * postperiod_t) + waive_{st} + \gamma_{ist} + \delta_{st} + \alpha_{st} + \varphi_t + \epsilon_{ist}$$

$earlycutoff_s$, a binary variable, equals 1 if the state terminated federal UI early, and 0 if benefits continued. $postperiod_t$, also a binary variable, represents the two-month post-treatment period, July and August 2021; observations take on a 0 for the six months prior, January to June 2021.

As in equations 1 and 3, $index19_s$ in equation 5 represents the additive pre-pandemic strictness index, capturing whether states were strict in terms of no measures, and up to three of the measures, quits, denials, and replacement. As in equations 2 and 4, $recip19_s$ in equation 6 represents pre-pandemic state UI strictness in terms of recipiency.

β_7, the coefficient of interest, is a three-way interaction of (1) pre-pandemic state UI strictness, (2), the standard DiD treatment group variable, and (3) the post-period, or "post-treatment," variable. It enables comparison of changes in (1) job finding; (2) change in occupational median wages; and (3) probability of movement up at least one wage decile, in early cut-off and continuous states, *within states of similar strictness*. In other words, within states of similar pre-pandemic strictness, I can know how change in the respective outcomes in states without federal UI compared to change in states where federal UI continued for two additional months. β_4 enables comparison with prior estimates of the effects of early termination of federal UI, such as

those reported in Holzer, Hubbard, and Strain (2021). As in equations 1 through 4, equations 5 and 6 include an array of individual- and state-level controls (with exception of pua_{st} as all states were paying PUA by this time), plus state and month fixed effects.

Reemployment quality in the Displaced Worker Supplement

In addition to the reemployment quality analyses I conduct using the linked Basic Monthly Survey data of the CPS, to which I append OEWS occupational median wage information, I assess links between pre-pandemic strictness and post-pandemic job quality among the reemployed using the 2022 Displaced Worker Supplement. I follow Farber (2015), and assess job quality in terms of the probability of full-time reemployment, and change in weekly earnings relative to the pre-separation job.

Equations 7 and 8 below model the first outcome. $log\left(\frac{P_{ist}}{1-P_{ist}}\right)$ is the probability of full-time reemployment of individuals aged 20 to 64 displaced between calendar years 2019 and 2021. As elsewhere, $index19_s$ is the additive pre-pandemic strictness index, capturing whether states were strict in terms of no measures, and up to three of the measures, quits, denials, and replacement (Equation 7); $recip19_s$ represents strictness in terms of recipiency, in binary form (Equation 8).

(7) $log\left(\frac{P_{ist}}{1-P_{ist}}\right) = \alpha + \beta_1 * index19_s + \gamma_{is} + \delta_s + \alpha_s + \epsilon_{is}$

(8) $log\left(\frac{P_{ist}}{1-P_{ist}}\right) = \alpha + \beta_1 * recip19_s + \gamma_{is} + \delta_s + \alpha_s + \epsilon_{is}$

Drawing on information collected about the lost job by the DWS, additional individual controls in γ_{is} include tenure (5 categories); part-time status (1/0, with 35 hours as the cutoff); union status (1/0); the last year worked (either 2019, 2020, or 2021); and major industry (14 categories) and occupation (11 categories). Additional controls include UI receipt after displacement (1/0), and duration of unemployment between displacement and first reemployment (in weeks). Since the DWS is conducted in January, state-level covariates in δ_s and α_s are from a single month.

Next, I estimate links between pre-pandemic state UI strictness and change in log weekly earnings among those reemployed, as of January 2022.

(9) $\Delta_i = \alpha + \beta_1 * index19_s + \gamma_{is} + \delta_s + \alpha_s + \epsilon_{is}$

(10) $\Delta_i = \alpha + \beta_1 * recip19_s + \gamma_{is} + \delta_s + \alpha_s + \epsilon_{is}$

In equations 9 and 10, Δ_i is the change in log real weekly earnings for displaced workers, aged 20 to 64. As in equations 7 and 8 above, I control for characteristics of the lost job. But, unlike prior models, I also control for full-time status in the current job (1/0). Finally, an additional state labor market measure, captured in δ_s, but not elsewhere, is the log of 2021 state average weekly wages in covered employment.

Hypotheses

As to what we might expect from the results, an important consideration concerns rates of UI receipt in states during the pandemic months. It is likely that pre-pandemic strictness affected the outcomes, job finding and reemployment quality, to some degree through it. There are two main possibilities as to receipt rates across states. The first is for strict states to rely on federal aid to a *greater degree* than less strict states. In this scenario, PUA claimants might represent larger shares of UI claimants in strict states, and/or PUA receipt might be higher in them. The second possibility is for strict states to have more limited benefit access than less strict states, reflecting persistence of pre-pandemic heterogeneity. In this scenario, PUA claimants might make up smaller shares of UI claimants than in less strict states, and/or PUA receipt might be relatively low in them.

A relevant question concerns the conditions that would enable the unemployed in strict states to overcome pre-existing receipt barriers. Numerous factors limit UI receipt, most obviously, state UI rules. Other common factors are failure to apply. A 2018 estimate found that three-quarters of unemployed with any work experience in the prior year had not applied for UI (U.S. Bureau of Labor Statistics 2019). Common reasons for non-filing include perceived ineligibility, and to a lesser degree, attitudes about, or barriers to applying. Technically, PUA was designed to help fill

eligibility gaps left by regular state programs, as long as the reason for unemployment was pandemic-induced. And, as noted earlier, in order to receive emergency administrative funding, the federal government required states to adopt a series of temporary measures to expand benefit access, including a process for employers to notify separating employees of their potential UI eligibility. Thus, it is fair to assume that UI receipt increased, and state differences *declined* compared to before the pandemic.

However, research of post-pandemic receipt in household surveys, cited earlier, suggests otherwise (Carey et al. 2021, Forsythe and Yang 2021). Similar conclusions are drawn from a separate descriptive analysis of state UI claims data compiled by the U.S. Government Accountability Office for a June 2022 report on the PUA program (U.S. GAO 2022). For example, I find that in states distinguished by strictness in terms of pre-pandemic receipt, PUA receipt through June 2021 averaged 44.4 percent in stricter states, and 69.0 percent in less strict states.[20] Factors that might help account for this disparity include the lower success rate of initial PUA applications in stricter states, of approximately 4 in 10, compared with about half in less strict states (51.2 percent), and shorter durations per claim, on average (of 21.5 weeks in stricter states, compared with 34.7 weeks in less strict states). Even larger differences in receipt rates are found between the 15 early cut-off states and 21 continuous states with reliable PUA data, though, notably, these states did not differ meaningfully on the two other measures referenced.

Hence, despite federal efforts, certain data suggest a continuance of certain pre-existing conditions that preclude the unemployed in strict states from applying for or receiving aid at higher rates than less strict states. Therefore, we might expect links between pre-pandemic strictness and post-pandemic job finding and reemployment quality to look as follows. With evidence of lower job finding when UI benefits are more generous, we would expect strict states to have *higher* job finding than less strict states before the pandemic. Instead of convergence, we might expect *divergence* in job finding between strict and less strict states once federal UI

[20] These data reflect PUA claims in 40 states with reliable data, and were drawn from a June 2022 U.S. Government Accountability Office report on the PUA program, "Pandemic Unemployment Assistance: Federal Program Supported Contingent Workers Amid Historic Demand, but DOL Should Examine Racial Disparities in Benefit Receipt." As with rates of receipt, or recipiency, shown elsewhere, receipt here equals the ratio of PUA insured unemployed (or average PUA weekly weeks compensated) to total unemployed.

activates, reflecting steady or *heightened* rates of exit to employment in strict states and/or slower exits in less strict states, where benefit receipt is expected to be greater overall. Similarly, the deactivation of federal UI might induce *larger* job-finding waves in less strict states, due to the greater reach of UI in them relative to strict states.

As to the effects of strictness on reemployment quality, if we assume positive links with UI generosity, based on the most recent evidence from Nekoei and Weber (2017), then some divergence between strict and less strict states is expected once the federal programs are active, due to the expansion of benefits in states more generous to begin to with. Similar to job-finding changes, we would expect sharper, more adverse change in reemployment quality in less strict states once the federal programs terminate. In this scenario, strict states would exhibit *less* sensitivity to federal UI's deactivation.

Results

In the following sections, I report the results. I start with summaries of job finding and reemployment quality across each of the major pandemic phases, and the effects of pre-pandemic strictness in each phase. Then I report *changes* in outcomes, once the federal UI programs started and ended, and links with strictness. Lastly, I assess links between strictness and reemployment quality using the 2022 Displaced Worker Supplement. Unless otherwise noted, results capture transitions to employment and reemployment quality among the non-employed, aged 18 to 64.

Job finding and reemployment quality, pre- and post-pandemic

Figure 2a plots average monthly transitions from non-employment to employment among adults from all 51 states, in four pandemic phases: pre-pandemic; post-pandemic, federal UI on, in 2020 and 2021, respectively; and post-pandemic, federal UI off. (Note that Table A1 in the Appendix shows all underlying rates.) In an effort to understand the role of pre-pandemic strictness in the latter pandemic phase, independent of whether states terminated federal UI before September 2021, Figure 2a *excludes* June and July 2021.

As shown in 1a, job finding increased slightly between March and December 2020, to 25.9 percent from 24.3 percent. Then it dipped over the first half of 2021, to 22.0 percent. Once federal benefits ended, it recovered again, to 25.4 percent. As to differences between stricter and less strict states, job finding was generally higher in stricter states across the pandemic. Generally, states with two or three strict policies had greater job finding than states with one strict policy or none. Similarly, strict states in terms of recipiency, as well as the 19 early cut-off states, had greater job finding than less strict counterparts. Differences in unadjusted job finding between stricter and less strict states narrowed slightly between March and December 2020, relative to the prior six months, but then widened by a relatively large amount over the first six months of 2021.

[insert Figure 2a about here]

With the possibility that other individual and state-level characteristics influenced job-finding rates, Figure 2b plots regression estimates of job-finding differences between stricter and less strict states. Table 4 provides the full results. Note that estimates for each of the strictness levels of the additive index are compared to the base category of 0 strict policies (as in, less strict states in terms of quits, non-separation denials, *and* replacement, or all three policies).

Generally, stricter states had greater job finding than less strict states. The greatest, and most significant, differences are between states with index values of two or three, versus zero, and between stricter and less strict states in terms of recipiency. Notably, while job finding in stricter recipiency states was significantly greater than less strict states in each phase, by 2.3 to 3.1 percentage points, job finding rates in states distinguished by the additive index were less likely to be significantly different from each other—states strict on all three non-recipiency policies had significantly greater job finding in the six pre-pandemic months, by 3.0 percentage points, as did states strict on two and three policies in the first six months of 2021, by 4.0 and 3.7 percentage points, respectively. Early cut-off states saw significantly greater job finding than continuous states during the active months of the federal UI programs.

Findings are more mixed when state and month fixed effects are accounted for. Estimates of job-finding differences due to strictness *decline* for the most part, and in a number of instances, drop below zero (1b). This is particularly true for states distinguished by recipiency and early cut-off status. This would suggest that stricter status is associated with job-finding declines, inconsistent with predictions; however, most estimates are small in magnitude, and of limited significance (with exception of the first phase of the pandemic, between March and December 2020).

States that were strict on three non-recipiency policies are somewhat of an exception, in that estimates are similar regardless of the inclusion of fixed effects, or else remain positive; however, differences are only significant in the first six months of 2021. Notably, states that were strict on any one of the non-recipiency policies now have significantly *lower* job finding than less strict counterparts.

With exceptions, which are noted, these findings point to relatively minor job-finding differences by state strictness.

[insert Figure 2b about here]

Reemployment quality, pre- and post-pandemic

Next, I estimate the effects of pre-pandemic UI strictness on reemployment quality in each of the four pandemic phases. I assess change in job quality in two ways: the first equals the change in the log of occupational median wages between the lost job and the reemployment job. The second is the probability of movement up at least one occupational wage decile upon reemployment.

Figure 3a plots average rates of change in occupational median wages by pre-pandemic strictness in each of the four pandemic phases under study. A few key points are evident. First, unadjusted rates of change in occupational wages between separation and reemployment increased from an average *decline* of 2.2 percent in the six months before the pandemic to very modest increases of 0.8 percent when the federal UI programs were active. Unfortunately, once the federal programs

expired, average change fell, to a decline of 1.8 percent. This suggests that the federal UI programs may have helped mitigate declines in job quality after job loss.

As to differences by state strictness, change in occupational wages was generally *lower* in less strict states relative to stricter states in both the six months before the pandemic, and the first six months without federal UI.

However, unlike job finding, rates of change in occupational wages in strict and less strict states converged somewhat during the pandemic, particularly during the first of the two phases with active federal UI, as is evident in the greater density of data points in the two middle phases in 2a. Such density partly reflects what appear to be greater increases in rates of change in occupational median wages among less strict states, including continuous states, when the federal UI programs were active; stricter states appear to exhibit lower sensitivity. For example, in states that were strict on zero non-recipiency policies, occupational wage change between separation and reemployment increased from -7.5 percent to 0.5 percent; similarly, in continuous states, it increased from -4.2 percent to 0.16 percent.

Importantly, this suggests that the federal programs may have played a particularly significant role in mitigating the impact of job loss in less strict states.

[insert Figure 3a about here]

Figure 4a, which plots average rates of movement up the occupational wage distribution in each of the four phases, shows that the large majority of non-employed made lateral or downward shifts upon reemployment. Further, despite positive movement in the first reemployment outcome between the first and second pandemic phases, as shown in 2a, the probability of upward movement *declined*, from 27.3 percent in the six months before the pandemic, to 23.8 percent. It later recovered, however, and increased relative to pre-pandemic months, to just under three in ten.

As to variation by pre-pandemic strictness, strict states, including early cut-off states, had *greater* rates of upward movement overall; such a pattern is more consistent relative to differences in rates of change in occupational wages. Yet, consistent with the earlier descriptive finding that showed greater positive change in occupational wage change in less strict states once the federal programs activated, the same is apparent in Figure 3a, which shows much flatter change in average rates of movement up one or more deciles in less strict states compared with stricter states; stricter states appear to exhibit greater volatility, including greater drops once the pandemic strikes and federal UI turns on, and sharper increases during the first six months of 2021.

[insert Figure 4a about here]

Now, I turn to multivariate results on the effects of pre-pandemic strictness on the two reemployment quality outcomes in each of the four phases. Results are plotted in Figures 3b and 4b. Table 5 provides the full results.

First, inconsistent with predictions, results without fixed effects show that stricter status is largely *positively* associated with occupational wage change between separation and reemployment. This means that the unemployed in stricter states were more likely than counterparts in less strict states to see less severe erosion, or else greater improvements, in job quality once reemployed; this is particularly true in the months before and after the federal UI programs were active.

At the same time, the shape of the data points in Figure 3b suggests a slight dip in differences associated with strict status—or convergence between stricter and less strict states—when the federal UI programs were active. Consistent with expectations, this could reflect positive consequences of the federal programs in less strict states. However, in most cases, differences are not statistically significant.

Second, as with earlier estimates of job-finding differences associated with strict status, inclusion of state and month fixed effects leads to declines in certain instances; estimates of differences

associated with strictness in terms of the additive index are an exception. Specifically, strict status in terms of recipiency, and the early termination of federal UI, are associated with significant *declines* in the first reemployment quality outcome in each of the three post-COVID phases; estimates for the pre-COVID phase are insignificant. For example, between March and December 2020, and January and June 2021, occupational wage change for the reemployed was 6.3 percent and 5.6 percent lower in stricter states than in less strict states in terms of recipiency, respectively, holding constant an array of individual- and state-level controls, and state and month fixed effects.

By contrast, results reflecting the additive index show positive associations between strictness and change in occupational median wages. States with at least one stricter non-recipiency policy (as in one, two, or three) all had significantly greater increases in occupational wage change than states with zero policies in the six-month *pre-pandemic phase*. In each subsequent phase, the direction of the relationship remains largely positive; however, the significance declines, except in states with three stricter non-recipiency policies in the six months after federal UI stopped everywhere. Again, notably, this decline in the significance of differences once the pandemic started could reflect the stronger positive impact of the federal UI programs in less strict states, such that differences relative to stricter states narrowed.

[insert Figure 3b about here]

Figure 4b plots the effects of pre-pandemic strictness, including early termination of federal UI, on the second reemployment quality outcome, the probability of movement upward one or more occupational wage deciles. Results are similar to those in figure 3b. Strict status is largely associated with a greater probability of upward movement across the pandemic phases, excluding fixed effects. Differences between stricter and less strict states appear to dip, and drop below zero in a couple of instances, when the federal UI programs are active, specifically in the first phase, in 2020. Differences are largely insignificant, however; a notable exception are states distinguished in terms of the additive index in the first six months without federal UI.

Inclusion of fixed effects leads to *declines* in estimates across the board, such that stricter status in terms of recipiency and early termination of federal UI are both associated with significant *declines* in the probability of upward movement upon reemployment, once again, as predicted. Differences are generally greater when the federal programs are active, likely reflecting the stronger benefits of federal UI in less strict states. However, respective differences between states that are stricter on one, two, or three of the non-recipiency policies, and states that are strict on *none*, while mostly negative, are smaller in magnitude than the two prior differences, in terms of recipiency and early cut-off status; they are also almost totally insignificant.

Yet, there is slight indication of a similar pattern as before—in that differences between states that were stricter on two or three non-recipiency policies (but particularly the former) and states that were stricter on none appear to grow more negative during the active months of federal UI relative to the months without them. But, again, the differences are largely insignificant.

Nonetheless, these findings suggest negative links between stricter status and change in job quality between separation and reemployment; though it depends somewhat on how strictness is measured. It appears that the binary strictness measures are distinguishing states in slightly different ways than the additive index.

[insert Figure 4b about here]

Changes in job finding with activation, and de-activation, of federal UI

The next set of results describes *change* in job finding and reemployment quality outcomes between key pandemic phases, and links with pre-pandemic UI strictness. Specifically, I focus on the first six months of active federal programs; then, I turn to the first six months *without* them. As earlier, I also assess differences by "federal UI status," or whether states terminated all three federal programs early. These results provide another dimension of insight into the effects of pre-pandemic strictness during the pandemic, and the interaction of pre-existing state features with federal aid.

Activation of federal UI in spring 2020

The first subset of results examines how job finding changed in the first six months of the pandemic (March to August 2020), relative to the six prior months (September 2019 to February 2020), and compares rates of change in stricter states to less strict states.

As shown in Table 6 (see columns 1 and 2, for the early months of COVID-19), despite the added generosity of federal aid, average job finding increased from 24.3 percent to 28.0 percent, reflecting an increase of 3.7 percentage points, or 14.8 percent. This increase likely reflects the relatively strong initial recovery in employment following the sharp drop in March and April 2020, including recalls of laid-off workers; monthly employment growth flattened slightly after summer 2020. To some degree, it also likely reflects delays in state issuance of PUA payments; an estimated 19 states had still not made any payments by early May 2020. The delay might have compelled some to return to work to replace lost income. Table 6 shows that differences between stricter and less strict states were somewhat mixed and relatively small on the whole.

Columns 1 and 2 of Table 7 display regression estimates of job-finding changes, controlling for individual and state covariates. As in earlier multivariate models, I estimate the effects of each strictness measure, including whether states terminated the three federal UI programs early, in separate models.

Focusing first on models without fixed effects (column 1), results show that job finding increased significantly and substantially between March and August 2020, in both stricter and less strict states. For example, in the model with the additive index of the three non-recipiency measures, job finding increased by 13.4 percentage points, on average.

Importantly, the role of strictness appears to be insignificant. Job-finding changes were relatively similar across stricter and less strict states when the federal programs activated, with differences, all statistically insignificant, ranging from -0.4 percentage points to 1.1 percentage points.

When fixed effects are accounted for, as shown in column 2, job-finding changes decline in magnitude, and range between approximately 6.5 and 9.0 percentage points. Estimates also lose some of their significance. Similarly, differences in job-finding changes between stricter and less strict states are also relatively small, as well as insignificant, mirroring results without fixed effects.

De-activation of federal UI in summer 2021

Next, I examine job-finding changes when federal UI terminated in summer 2021. This included termination of the fixed supplement (FPUC), extensions for the long-term unemployed (PEUC), and benefits for non-standard and lower-paid workers (PUA). Anyone receiving regular state UI benefits would have had their weekly benefit decline by $300; however, they would have been eligible to continue receiving their state benefit entitlement. Payments for PUA and PEUC recipients would have ended completely as of their state's final payable week.

This portion of analysis focuses on two groups of states, or 45 states in total: (1) the 19 "early cut-off" states that ended all three federal UI programs by early July; and (2) the 26 "continuous" states that ended them by early September. As noted earlier, I omit five states, where the mix and timing of the termination of the federal programs differed from other states, making them non-comparable.

First, I report descriptive results; then I summarize multivariate findings. For both early cut-off and continuous states, Columns 3 to 6 in Table 6 report descriptive job-finding estimates for stricter and less strict states, for the final six months of active federal programs, and the first six months without them, along with percentage-point differences in estimates. Where results in the previous section considered strictness in terms of early cut-off status alone, the same is obviously not possible here, as strictness is now assessed *within* generally stricter early cut-off states and generally less strict continuous states.

As predicted, job finding increased once the federal UI programs ended, but very modestly. Increases were only slightly larger in early cut-off states than continuous states (2.8 percentage

points versus 1.8 percentage points). As to differences by state strictness in terms of the additive index and recipiency, less strict states within both groups generally had greater job-finding increases once the federal programs stopped, though differences at any given level of the additive index among continuous states are similar, with exception of states that were strict on two non-recipiency policies. This latter finding is consistent with predictions that less strict states will have larger waves of job finding once the federal programs expire because of greater benefit receipt.

Next, I turn to multivariate results. Columns 3 to 6 of Table 7 show associations between pre-pandemic strictness in terms of the additive index and recipiency and change in the probability of reemployment in the first six months *without* federal UI, holding constant a host of individual and state characteristics.

As to differences between early cut-off and continuous states, column 3 shows that job finding increased modestly, but significantly in early cut-off states, on average. Estimates without fixed effects range from 4.0 percentage points in the model with the additive index of non-recipiency policies, to 3.1 percentage points, in the model with recipiency (column 3). In contrast, continuous states saw very small, but statistically insignificant job-finding *declines* once federal UI stopped (column 5).

Within each group, the effects of pre-pandemic strictness show no clear pattern necessarily. For example, while less strict recipiency states, among early cut-off states, saw greater job-finding increases than stricter states, differences between states distinguished by the additive index were mostly nil. Differences by strictness within continuous states suggest that stricter states had slightly greater job-finding declines once federal UI stopped; but differences are relatively small and insignificant across the board.

Inclusion of state and month fixed effects, in columns 4 and 6, impacts results for early cut-off and continuous states differently. In early cut-off states, job finding is now found to have declined in the first six months without federal UI, by 7.3 percentage points in the model with the additive index, and by 4.7 percentage points in the model assessing recipiency's effects, on

average. In contrast, job finding *increased* in continuous states, by 6.6 percentage points, and by 7.5 percentage points, respectively. However, both estimates are insignificant, as are the majority of estimates of strictness effects, for each group of states.

Differences by state strictness are somewhat patterned, in that estimates among stricter states are slightly smaller in magnitude than less strict states. Stricter status in early cut-off states is generally associated with smaller job-finding *declines* than less strict status, but differences are largely insignificant. Among continuous states, stricter status is generally linked with smaller job-finding *increases* than less strict status, but increases were insignificant, as were differences in estimates between stricter and less strict states.

[insert Tables 5 and 6 about here]

Staggered termination of federal UI in summer 2021 (Difference-in-differences)

In this section, I report multivariate results from the difference-in-differences analysis that compares the change in job finding between July and August 2021, and the six prior months, in the 19 "treatment" states that terminated all three UI programs by early July, with the change in 26 "control" states that paid benefits through early September. As an additional step, I compare change in early cut-off to continuous states, *within states of similar pre-pandemic strictness*, with the aim of understanding whether strictness helped to moderate the effects of early withdrawal. The present analysis differs from prior work by Holzer et al. (2021), which merely leveraged the staggered termination of federal UI in summer 2021 to contribute insight to the more general question of whether more generous UI benefits suppress job finding.

Note also that the present analysis is limited to job finding, as assessing links between state strictness and job quality among the reemployed over a relatively brief period—particularly over such a brief "post period," of just two months—is complicated by small sample sizes. Because early cut-off states are generally stricter than continuous states, comparing change in early cut-off to continuous states, within states of similar pre-pandemic strictness, produces relatively

small cell sizes in certain cases (for example, among states with zero strict non-recipiency policies, just one state is an early cut-off state (Arkansas)).

As to results, both non-fixed effects models, in column 1 of Table 8, show that job finding in early cut-off states increased significantly in July and August; further, changes in job finding between the two groups were significantly different from each other. For example, in the model featuring the additive index of the three non-recipiency policies, the job-finding increase in early cut-off states was 5.9 percentage points greater than in continuous states (column 1).

For the most part, this pattern holds, regardless of pre-pandemic strictness (column 1). However, in the first model, differences were only significant between states that were strict on two and three non-recipiency policies, respectively. In the model featuring recipiency, both stricter and less strict early cut-off states had significant job-finding increases once federal UI stopped (column 2); however, such increases were not significantly different from continuous states.

Second, across both models, less strict early cut-off states had generally greater job-finding increases than stricter early cut-off states. For example, with exception of states strict on 0 non-recipiency policies, early cut-off states that were strict on just one non-recipiency policy had greater job-finding increases than early cut-off states that were strict on two or three policies; the same is true among early cut-off states that were less strict in terms of recipiency (9.6 percentage points versus 5.8 percentage points). These differences align with expectations of sharper job-finding increases in less strict states, where benefit receipt during the pandemic is estimated to be higher.

However, there appears to be no consistent pattern where differences between early cut-off and continuous states are smaller (or larger) in less strict states than in stricter states. Hence, expectations that strictness—i.e., greater generosity or leniency—might have moderated the effects of early withdrawal do not seem to hold.

In models accounting for state and month fixed effects, in column 2, the same general patterns hold. Early-cutoff states had generally sharper job-finding increases than continuous states;

however, differences are largely insignificant. Also, where less strict states more consistently had sharper job-finding increases than stricter states in the models without fixed effects, such a pattern is less evident in models with fixed effects. Generally, findings suggest that pre-pandemic strictness may have mattered less in this period.

[insert Table 8 about here]

Changes in reemployment quality with activation, and de-activation, of federal UI

Where the prior section examined links between pre-pandemic strictness and changes in job finding with the activation, and deactivation, of federal UI, here I examine links between strictness and changes in reemployment quality. First, I summarize descriptive and regression results covering the first six months of active federal programs, in 2020. Then I turn to the first six months without federal UI, in 2021 and 2022.

Columns 1 to 4 in Table 9 report unadjusted means of the two reemployment quality outcomes by strictness. Results cover all 51 state programs, and are shown for the first six months of the pandemic (March to August 2020), and the six months before (September 2019 to February 2020). A couple key points are evident. First, despite an increase in the rate of change in occupational median wages, from -2.2 percent to 0.8 percent, the rate of movement upward one or more wage deciles declined by 5 percentage points to 22.2 percent.

Second, consistent with earlier findings, stricter states generally saw more adverse change in both measures than less strict states. For example, in strict states in terms of recipiency, change in occupational wages fell from +0.6 percent to -0.1 percent, compared to an increase from -4.9 percent to +1.6 percent in less strict states. Similarly, in the 19 early cut-off states, movement upward one or more wage deciles declined by 9.5 percentage points, compared with a 1.8 percentage-point decline in the 26 continuous states.

[insert Table 9 about here]

Regression estimates of the effects of strictness on changes in reemployment quality in the pandemic's initial phase tell a somewhat similar story to the descriptive results (see Figures 5a and 5b; Table A2 in the Appendix provides full results). Holding constant a host of individual and state covariates, the average change in occupational wages in the first six months of the pandemic fell by an estimated 2.2 percent in the model featuring the additive index, by 4.9 percent in the model featuring recipiency, and by 3.1 percent in the model featuring early cut-off status (and confined to 45 states) (see Table A2). This is somewhat surprising given the increase in unadjusted means from -2.2 percent to +0.8 percent, reflected in Table 9 (and earlier, in Figure 3a). Similarly, the probability of movement upward one or more occupational wage deciles declined by respective estimates of 3.7 percentage points, 4.1 percentage points, and 2.9 percentage points. In each case, however, estimates are insignificant.

As to the role of state strictness, as pictured in Figures 5a and 5b, stricter states generally saw steeper declines in each reemployment quality measure than less strict states. Again, however, results are statistically insignificant, with notable exceptions, including between states distinguished by recipiency and whether they terminated the three federal programs early. For example, occupational wage change declined by 7.8 percent in stricter recipiency states, compared with 2.3 percent in less strict states. Similarly, the probability of movement upward one or more wage deciles declined by 7.9 percentage points in early cut-off states, compared with 1.6 percentage points in continuous states. In both cases, although respective estimates for stricter and less strict states are insignificant, estimates of *differences* between stricter and less strict states are significant, as shown in the figures as well as Table A2.

Notably, the general direction of results is preserved in estimates featuring state and month fixed effects (see Figures 5a and 5b). Overall, strict states exhibited sharper declines in reemployment quality in the pandemic's first six months. *However, estimates are almost entirely insignificant*. The one exception is the estimated difference in the rate of change in occupational wages between the 19 early cut-off states and the 26 continuous states. Nonetheless, results here and elsewhere suggest that federal UI may have cushioned the pandemic's initial blow to a greater degree in less strict states.

[insert Figures 5a and 5b about here]

De-activation of federal UI

In the next subset of results, I turn to the months when federal UI ended. Results are split, due to timing differences: as noted throughout, 19 states ended all federal programs by early July 2021; 26 states ended them by early September 2021.

Once again, Table 9 provides full descriptive results (see columns 5 and higher). First, we can compare early cut-off to continuous states. While both groups saw erosion in each reemployment quality measure after the federal programs ended, the decline was steeper in (stricter) early cut-off states. For example, the rate of movement up one or more wage deciles declined by 5.5 percentage points in them, compared with a decline of just 0.1 percentage points in continuous states.

As to differences by strictness within each group, results are murkier. Unlike results showing more adverse change in reemployment quality in the pandemic's first six months in stricter states, differences by strictness in the first six months *without* federal UI are more mixed. The division of the sample into early cut-off states, in which stricter states are overrepresented, and continuous states, in which the balance between stricter and less strict states is slightly more even, is a likely contributor.

Nonetheless, a couple points from the descriptive estimates in Table 9 are worth highlighting. As to the first reemployment quality outcome, change in occupational median wages, less strict states, among both early cut-off and continuous states, appeared to experience more adverse change than stricter counterparts. Such differences are less obvious as to the second reemployment quality outcome, movement up one or more deciles. This outcome changed very little in continuous states after the federal programs stopped, such that differences by strictness are uninformative.

Table 10 provides regression estimates of the effects of strictness on change in reemployment quality, holding constant an array of individual and state characteristics. Again, we can discern certain patterns when comparing results between early cut-off and continuous states; however, the role of strictness is less clear, or consistent.

First, like the descriptive findings, results from models without fixed effects, in columns 1, 3, 5, and 7, show greater, generally more significant adverse change in reemployment quality in early cut-off states relative to continuous states. For example, the rate of change in occupational median wages in early cut-off states declined by an estimated 8.5 percent in the model featuring the additive index of non-recipiency policies, and up to 7.7 percent in the model featuring recipiency; these declines are moderately significant (column 1). This compares with respective, statistically insignificant average declines of 3.7 percent and 3.1 percent in continuous states (column 3). Similar differences between early cut-off and continuous states are found in changes in the probability of movement up the occupational wage distribution (see columns 5 and 7).

Distinctions by state strictness are less consistent. As a proxy we can focus on estimates of the effects of strictness in terms of recipiency. In models without fixed effects, less strict states among both early cut-off and continuous states exhibit slightly greater average declines in the first reemployment quality outcome than stricter states. As to the second outcome, however, *stricter* status is associated with more adverse change, relative to less strict status.

Results change, and mostly lose significance with some exceptions, in models accounting for state and month fixed effects, and as before, are hard to interpret. As to change in the first reemployment quality outcome, estimates of deterioration in occupational wage change for both early cut-off and continuous states *increase* in magnitude, particularly for the latter group, such that estimates of decline now exceed those for early cut-off states. The rate of change among continuous states is a moderately significant -18.3 percent in the model featuring the index, and an insignificant -16.6 percent in the model featuring recipiency; estimates are otherwise mostly insignificant.

In contrast, estimates of change in the probability of upward movement one or more wage deciles decline in magnitude for early cut-off states, while remaining negative, and increase sharply, turning positive, for continuous states. Notably, the sharp jump among continuous states is puzzling, given the flatness of descriptive estimates of change in the first six months without federal UI in them. For example, in the model featuring recipiency, estimates show that the probability of upward movement one or more wage deciles increased by an insignificant 13.2 percentage points in less strict states, compared with an insignificant 8.2 percentage points in stricter states. However, estimates are insignificant across the board.

[insert Table 10 about here]

Assessing reemployment quality using the 2022 Displaced Worker Supplement

The final set of results examines job finding and reemployment quality among workers, aged 20 to 64, separated from employment between 2019 and 2021, using the 2022 Displaced Worker Supplement of the CPS. The DWS provides an opportunity to examine job quality indicators from the lost job, and current job, among those displaced during the COVID-19 pandemic. Note that these results are limited to observations, as well as information collected, in a single month, January 2022. They do not rely on linked observations, as in earlier analysis.

Table 11 displays unadjusted estimates of each of the four outcomes, including probability of reemployment, probability of reemployment in part-time work, first for all job-losers, and then for full-time job losers, and percent change in real weekly earnings. Estimates are provided by pre-pandemic strictness, including the index of non-recipiency policies, recipiency, and early cut-off status. Unlike in the prior analysis of change in occupational median wages, the current analysis relies on respondent self-reports of earnings from employment.

Estimates in column 1 are consistent with earlier descriptive results that show generally greater job finding in stricter states, including the 19 early cut-off states. However, results for the three reemployment outcomes are somewhat mixed. Specifically, displaced workers in less strict states in terms of recipiency, along with the 26 continuous states, reported higher rates of part-time

reemployment (column 2); the same is true among full-time job losers (column 3). As to differences in terms of the index, the nine states that were strict on zero non-recipiency policies have lower rates of part-time reemployment than the sixteen states that were strict on one measure, and the eight states that were strict on all three measures; however, the eighteen states that were strict on any two are a bit of an outlier.

A similar mixed pattern is evident when comparing average change in weekly earnings (column 4). Notably, reemployed displaced workers report real weekly earnings declines of 6.5 percent, on average. Further, reemployed workers in less strict states in terms of recipiency, and continuous states, reported *greater* weekly earnings declines, than workers in stricter states, including early cut-off states. Differences between states distinguished by the index are similar to those observed for part-time reemployment.

Table 12 shows estimates of the effects of pre-pandemic strictness on each of the four outcomes, holding constant a rich set of individual and state controls. Unlike in earlier analyses of the Basic Monthly Survey, analysis of the DWS provides the opportunity to control for various characteristics of the lost job including tenure, schedule, and union status.

Nonetheless, despite these advantages, results are mixed, and almost entirely insignificant, with exception of links between strictness in terms of recipiency and probability of reemployment—consistent with descriptive results, strict status is associated with a moderately significant *increase* of 7.7 percentage points in the probability of reemployment. As to links between strictness and the three reemployment quality outcomes, results are mixed, in that strict status in terms of recipiency is associated with slight increases in the probability of part-time reemployment, including among full-time job losers, where early cut-off status is associated with declines; estimates are nonetheless insignificant.

Lastly, as reflected in descriptive figures, strict status in terms of the index shows declines in real weekly earnings among states that are strict on at least one non-recipiency policy relative to states that are strict on none; however, estimates are insignificant. Further, stricter status in terms of recipiency, and early cut-off status, are associated with *increases* in changes in real weekly

earnings, diverging from predictions of positive links between generosity and reemployment quality; however, again, estimates are insignificant.

[insert Tables 11 and 12 about here]

Discussion and conclusion

This paper set out to understand whether pre-existing features of state UI programs remained important in a time of unprecedented federal expansion. Before the pandemic, certain indicators pointed to erosion in state UI adequacy and performance, and greater willingness of states to depart from established norms, and break with the federal government, in a system built for "partnership." The central concern is whether the U.S. system can withstand these conditions, and continue to serve its dual objectives of stabilizing economies during recessions, and providing the unemployed with resources to stave off hardship and find suitable employment.

With evidence that states with lower UI receipt before the pandemic had lower receipt during the pandemic, expectations were for the non-employed in stricter states to transition to employment at higher rates than counterparts in less strict states, and for greater *divergence* between stricter and less strict states when the federal programs were active. As to changes in job finding spurred by the activation, and deactivation, of the federal programs, I expected greater change in stricter states than less strict states when the federal programs turned on, and smaller change when they turned off.

Similarly, I expected the non-employed in less strict states to have greater occupational advancement between separation and reemployment, or else less adverse change, compared to stricter states, particularly during the period of federal expansion. As to changes, I expected more positive change in reemployment quality in less strict states compared to stricter states when the federal programs turned on, and more adverse change in them when they stopped.

Overall, findings are mixed. Most notably, links between strictness before the pandemic and job finding during the pandemic are of limited significance, particularly in models accounting for

state and month fixed effects. The somewhat large divergence between certain estimates with and without state and month fixed effects is noteworthy, and suggests presence of omitted variable bias despite the rich controls.

Descriptive estimates show generally greater job finding in stricter states in each of the four phases, though, notably, differences are not altogether large. Mirroring descriptive results, regression estimates without fixed effects generally show significant *positive* links between stricter status and job finding in each of the four phases. These findings match predictions that link stricter status with greater job finding, due to the narrower reach of UI benefits in them compared to less strict states.

However, with fixed effects, estimates largely drop—such that the effects of strictness turn *negative* in certain instances. However, most estimates are small in magnitude and insignificant, with notable exception of states that were strict on one non-recipiency policy relative to states that were strict on zero policies—these states had significantly lower job finding in each of the four pandemic phases. Further stricter states in terms of recipiency and early cut-off status also had significantly but moderately lower job finding than less strict counterparts, but only between March and December 2020. Yet, the strictest states, as in states that were stricter on three non-recipiency policies, had significantly *higher* job finding, and by a larger magnitude, relative to states with zero strict policies in the first six months of 2021 (as did states strict on two policies, though the difference was of lower significance).

Such mixed findings do not necessarily refute prior evidence; the latter finding that the strictest states had greater job finding is consistent with much prior UI research that finds negative links between expanded UI generosity and job finding (Schmieder and von Wachter 2016). Such mixed findings perhaps point to the need to further distinguish states in terms of strictness; the strictest states in terms of the additive index are a subset of stricter recipiency states (and early cut-off states). Future research could consider more refined measures, similar to the additive index.

Estimates of job-finding changes once federal UI started, ranging from 7 to 9 percentage points, with limited significance, are also consistent in terms of magnitude with prior research showing relatively modest fluctuations in job finding in the pandemic's initial phases (e.g., Ganong et al. 2021, 2022, Petrosky-Nadeau and Valletta 2021). At the same time, despite being mostly insignificant, the generally positive direction of the estimates is interesting, given the sharp drop in employment in March and April 2020.

More importantly, findings suggest the job-finding effects of the pandemic's onset, and the activation of federal benefits, did not differ meaningfully between states distinguished by pre-pandemic strictness. However, such findings are perhaps less surprising if we consider that early state actions likely reflected a shared understanding of the pandemic's profound and distinctive economic impact. At minimum, the conditions that contributed to state differences before the pandemic seemed not to affect the speed of states' initial responses. For example, PUA payments started *earlier* in stricter states, compared to less strict states, on average (U.S. Government Accountability Office 2022). Pre-pandemic political divisions became more salient once the economy was past the initial emergency, with the debates that contributed to Congress letting the $600 supplemental payment lapse as of June 30, 2020 as early signs.

Links between pre-pandemic strictness and reemployment quality are slightly more consistent, and suggest *negative* links between stricter status and reemployment quality when holding constant a rich set of individual- and state-level controls.

Descriptive results differ from predictions, in that they generally show *lower* reemployment quality in less strict states in each of the four phases, including in the six months before the pandemic. This may be partially due to the fact that stricter states had lower unemployment, and fewer COVID-induced restrictions during the pandemic, on the whole.

The greater clustering of regression estimates without fixed effects around zero in Figures 3b and 4b suggests convergence between stricter and less strict states when the federal UI programs were active. This is generally consistent with expectations that greater benefit generosity—which the federal expansions provided in stricter and less strict states, but particularly in less strict

states where benefit receipt was estimated to be higher—is linked positively with reemployment quality. However, figures are mostly insignificant.

Notably, when fixed features of states are accounted for, estimates mostly show significant *negative* links between stricter status in terms of recipiency and early cut-off status, and reemployment quality, matching predictions. When strictness is measured in terms of the additive index, the direction of estimated differences between stricter and less strict states is positive but of mixed significance for the first reemployment quality outcome, while mostly negative but insignificant for the second outcome.

At the same time, with respect to the first outcome, change in occupational wages, the decline in the significance of differences between states distinguished by the index once federal UI started points to a stronger positive impact of the federal UI programs in less strict states, in terms of moderating the erosion in job quality that typically occurs after involuntary job loss. This finding is worth elevating. Again, it suggests some degree of convergence, at least in terms of change in job quality between job loss and reemployment. Such convergence appears driven by the uplifting of less strict states by the federal programs; this is consistent with expectations that states with higher UI receipt would benefit to a greater degree from the federal programs. While earlier research found persistence of certain pre-pandemic disparities during the active months of the federal UI programs (Carey et al. 2021, Forsythe and Yang 2021), these findings suggest they may have lessened on certain dimensions, but in slightly more surprising ways.

Similarly, results assessing links between strictness and *change* in the two reemployment quality outcomes once the federal programs turned on suggest that stricter states saw more adverse change in reemployment quality. Multivariate results with and without fixed effects largely mirror descriptive findings; however, estimates are largely insignificant as shown in Table A2.

Despite the overall lack of significance, however, the magnitude and relatively consistent direction of results, and the consistency between models with and without fixed effects, are consistent with the finding that less strict states may have benefited from the federal UI programs

to a greater degree than stricter states, at least in terms of the change in job quality between job loss and reemployment.

Nonetheless, findings on reemployment quality should be interpreted with some caution. Analysis of the January 2022 Displaced Worker Supplement, which relies on reported earnings in the lost job and reemployment job, instead of proxy information on occupational median wages, shows mixed, insignificant links between pre-pandemic strictness and change in weekly earnings between separation and reemployment; links are also insignificant between strictness and the two other reemployment quality indicators. However, the DWS is not without flaws, namely, the large number of missing responses to the wage questions.

Lastly, assessing links between pre-pandemic strictness and changes in job finding and reemployment quality once the federal programs *turned off* is challenging, due to the splitting of the sample based on whether states terminated the federal programs early. Results that show clear differences between the generally stricter early cut-off states and less strict continuous states are somewhat illuminating. Each group of states seemed to react to federal UI's termination differently, in terms of job finding and reemployment quality. However, the precise nature of each group's reaction is hard to firmly pin down.

Results from the DiD analysis that show significant job-finding increases following the early withdrawal of 19 states, largely regardless of state strictness, somewhat affirm the overall finding of mostly insignificant links between state strictness before the pandemic, and job finding during the pandemic. Nonetheless, scholars inferring significant work disincentive effects of generous UI from the DiD results (Holzer et al. 2021) should keep in mind that early cut-off states and continuous states are not fully comparable by any means, as indicated in results throughout.

The finding that stricter states, at least in terms of recipiency and early cut-off status, scored lower on reemployment quality outcomes, holding constant a rich set of controls, is consistent with the most recent evidence from Nekoei and Weber (2017) that positively links UI generosity and reemployment quality. But also, results from the January 2022 DWS analysis are consistent with research showing *insignificant* links between UI generosity and reemployment quality. The

finding that less strict states may have benefitted from the federal UI programs to a greater degree than stricter states in terms of change in job quality between job loss and reemployment represents a new insight into the benefits of the federal UI programs. Prior research shows that the federal UI programs boosted consumption (Farrell et al. 2020), and reduced poverty (Chen and Shrider 2021); this paper suggests they may have helped some workers avoid deeper scars associated with job loss, too. Given the dearth of research linking UI generosity and reemployment quality in general, including during the COVID-19 pandemic, this paper's findings are a contribution. Nonetheless, more research is needed to understand the links between UI generosity and reemployment quality, more generally, but also during the pandemic.

Despite the mixed findings, this paper also contributes to the small but growing literature that attempts to trace disparate labor force outcomes to state UI policy differences. Though states took actions to expand benefit access for some length of time—a few states also enacted temporary increases in their maximum durations to 26 weeks—three additional states reduced their maximum durations in 2021 and 2022. This suggests persistence of pre-pandemic contraction efforts, and the continued importance of research that aims to understand the consequences of these cutbacks and the resulting state variation. Considering that past research links increased benefit generosity to reduced job finding, the hints of evidence indicating that the strictest states had slightly higher job finding rates are not entirely surprising; at the same time, this paper's findings suggest that links at the state level between generosity and reemployment outcomes, including job finding but also change in job quality between job loss and reemployment, are more multifaceted.

This paper has limitations, namely the use of binary measures to represent strictness in rates of non-separation denials, replacement, and recipiency. By operationalizing strictness in this manner, I am unable to differentiate the impacts of more incremental change within each measure or the effects of change at various points along each measure's distribution. For instance, in terms of non-separation denials, one might expect that increases at higher points could be more detrimental than those at lower points. At the same time, using binary variables makes the results easier to interpret. More importantly, it allows me to assess the impact of *combinations* of state UI strictness measures rather than assessing the effects of each individual

measure, holding others constant. The additive index offers a useful way of stratifying states; further, it suggests that recipiency, continuously measured, may be a valid indicator of overall strictness (or adequacy). Nonetheless, for future research, one might consider grouping states further, such as by terciles or quartiles and/or exploring the effects of change at particular points along each measure's distribution.

The mixed findings make it somewhat difficult to offer policy recommendations. The benefits of the federal expansions are hard to refute, given the speed of the economic recovery, and the possibility that conditions could have been substantially worse. This paper's findings are not inconsistent with prior UI research, including research on the pandemic, that finds negative links between UI generosity and job finding. However, it contributes a new dimension of insight by exploring variation at the state level. Further, it incorporates analysis of reemployment quality, a relatively understudied area in UI research. Though differences between states distinguished by strictness before the pandemic were mostly insignificant, there were hints of greater job finding in the *strictest* states. Further, results suggest that the non-employed in stricter states, at least according to a couple measures of pre-pandemic strictness, saw more adverse change in job quality between job loss and reemployment. More importantly, findings suggest that less strict states benefited from the federal UI programs to a greater degree than stricter states, specifically in terms of reemployment quality. They most likely did so through greater overall receipt. This would suggest that the unemployed in stricter states were more likely to be deprived of this boon, raising equity concerns. Further research that uses more refined strictness measures is needed. However, if such analysis affirms this paper's suggestive findings on reemployment quality, then they would point to measures that seek to somehow bring relevant state rules, practices, and infrastructure into convergence, particularly by raising the floor across a number of policy areas, as an alternative to distributing federal dollars through pre-existing state regimes.

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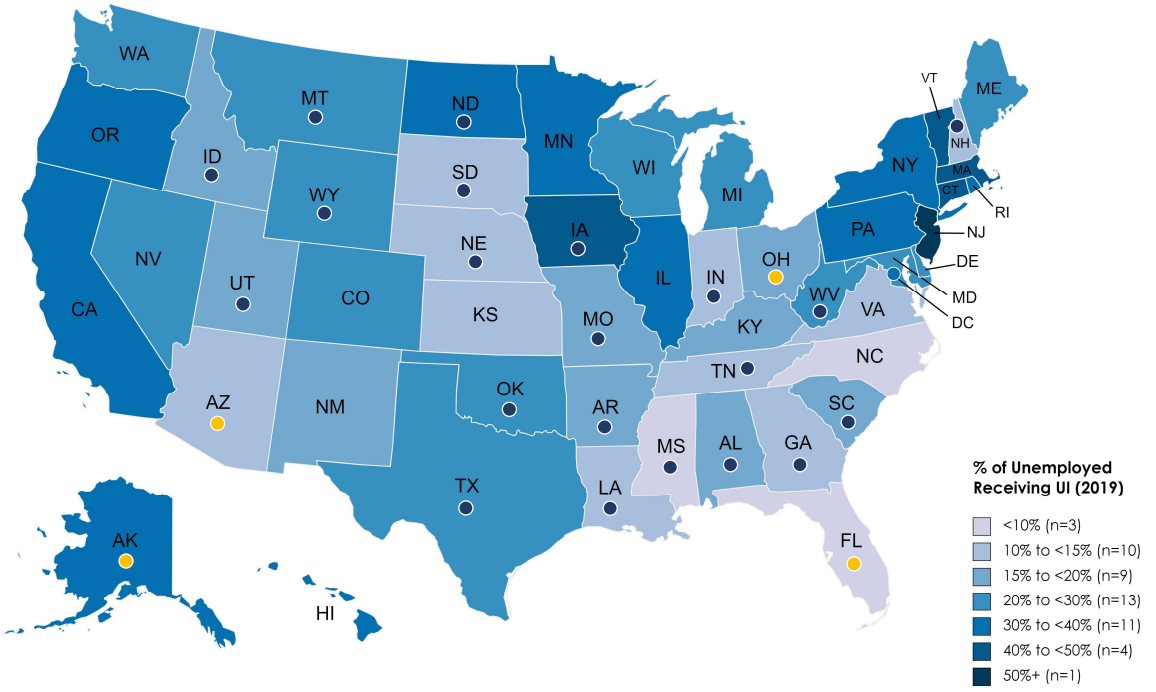
Tables and figures

Map 1. UI Recipiency in 2019 and federal UI status during the COVID-19 pandemic



Notes: Recipiency equals the ratio of state average weekly weeks paid (i.e., the number of claimants receiving weekly payments) to total state unemployment. State rates, and source information, are provided in Table 1 on the following page. States marked with a blue circle ended all three federal UI programs before September 2021; states marked with a yellow circle ended only the FPUC program (i.e., the weekly supplement) before September 2021.

Table 1. Pre-pandemic state UI strictness measures (state rank)

State	Allows quits for personal / compelling family reasons	Replacement rate		NS Denial rate (per 1,000 claimants)		Recipiency rate		Covered Employment (000s)	
Alabama	0	0.411	44	20.9	16	0.213	34	1975.8	24
Alaska	1	0.396	47	68.6	44	0.377	12	306.5	50
Arizona	1	0.325	50	20.4	13	0.121	47	2965.8	17
Arkansas	1	0.712	13	16.9	9	0.226	31	1214.5	34
California	1	0.530	34	14.9	6	0.417	9	17609.8	1
Colorado	1	0.659	19	24.2	21	0.241	27	2735.0	21
Connecticut	1	0.696	14	8.5	1	0.488	3	1651.8	28
Delaware	1	0.509	36	20.8	14	0.284	21	444.5	46
D.C.	1	0.311	51	23.2	19	0.347	17	775.6	38
Florida	0	0.399	45	31.6	29	0.098	50	8979.7	4
Georgia	0	0.514	35	18.6	11	0.136	43	4514.5	8
Hawaii	1	0.759	9	37.1	30	0.431	7	660.2	42
Idaho	0	0.659	20	64.6	43	0.232	28	744.6	39
Illinois	1	0.613	27	16.9	10	0.369	13	5902.5	5
Indiana	0	0.549	31	74.2	46	0.179	40	3033.5	15
Iowa	0	0.653	21	15.7	7	0.440	6	1525.5	30
Kansas	1	0.686	16	41.9	33	0.189	38	1380.3	33
Kentucky	0	0.808	5	18.7	12	0.207	35	1884.8	27
Louisiana	0	0.371	49	63.8	42	0.111	48	1911.4	26
Maine	1	0.603	28	23.3	20	0.280	22	605.4	43
Maryland	0	0.486	41	24.3	22	0.225	32	2661.5	22
Massachusetts	1	0.852	2	20.9	17	0.509	2	3584.5	13
Michigan	0	0.487	40	54.8	39	0.263	24	4276.7	10
Minnesota	1	0.545	32	30.7	28	0.387	10	2864.9	18
Mississippi	0	0.392	48	98.5	51	0.102	49	1127.5	35
Missouri	0	0.447	43	50.2	38	0.215	33	2782.0	20
Montana	0	0.788	7	26.8	24	0.367	14	462.7	45
Nebraska	0	0.596	29	91.8	49	0.132	46	970.7	36
Nevada	1	0.670	18	28.9	25	0.275	23	1413.0	32
New Hampshire	1	0.535	33	55.1	40	0.152	42	661.8	41
New Jersey	0	0.824	3	9.2	2	0.590	1	4041.7	11
New Mexico	0	0.677	17	42.2	34	0.182	39	839.1	37
New York	1	0.562	30	25.9	23	0.359	15	9441.1	3
North Carolina	0	0.493	37	42.6	36	0.092	51	4490.7	9
North Dakota	0	0.756	10	68.7	45	0.441	5	414.3	48
Ohio	0	0.647	24	38.4	32	0.205	36	5362.6	7
Oklahoma	1	0.784	8	42.5	35	0.256	25	1609.1	29
Oregon	1	0.817	4	22.3	18	0.349	16	1939.2	25
Pennsylvania	1	0.753	11	20.8	15	0.377	11	5866.0	6
Rhode Island	1	0.690	15	14.0	5	0.420	8	476.0	44
South Carolina	1	0.489	39	76.8	47	0.226	30	2105.0	23
South Dakota	0	0.619	26	30.0	26	0.135	45	420.7	47
Tennessee	0	0.398	46	38.0	31	0.135	44	3026.9	16
Texas	0	0.713	12	30.7	27	0.246	26	12614.6	2
Utah	1	0.795	6	94.6	50	0.202	37	1518.0	31
Vermont	0	0.652	22	12.6	4	0.460	4	309.1	49
Virginia	0	0.466	42	16.3	8	0.166	41	3921.4	12
Washington	1	0.853	1	42.7	37	0.284	20	3418.9	14

West Virginia	0	0.650	23	9.5	3	0.319	18	675.8	40
Wisconsin	1	0.492	38	56.2	41	0.317	19	2844.9	19
Wyoming	0	0.634	25	82.0	48	0.227	29	269.5	51
51 programs	25	--	--	27.1	--	0.244	--	147231.4	--

Notes: Where applicable, states are ranked from least strict (1) to most strict (51); covered employment is ranked from highest (1) to lowest (51).

Source: State quits rules are based on the author's research of state UI rules and regulations, state agency websites and claimant handbooks, and documentation from advocacy organizations, including the National Employment Law Project. State replacement rates are computed using state maximum weekly benefit amounts in place as of January 2020, as reported in the *Significant Provisions of State Unemployment Insurance Laws*, from the U.S. Department of Labor, Employment and Training Administration, Office of Unemployment Insurance (U.S. DOL ETA-OUI) (2022b), and median weekly wage amounts as reported in the May 2019 Occupational Employment and Wage Statistics. Maximum benefit amounts do not include dependents allowances. State denial rates are computed using data from the 207, 218, and 5159 reports, from the U.S. DOL ETA-OUI (2022c). For each state, the denial rate equals the mathematical product of (1) the determinations rate for non-separation issues, and (2) the ratio of denials to determinations for non-separation issues. This method was established by Corson, Hershey, and Kerachsky (1986), and later applied by the 1990's Advisory Council on Unemployment Compensation. State recipiency rates are computed using monthly UI claims data from the 5159 report, U.S. DOL ETA-OUI (2022c), and monthly unemployment data from the U.S. Bureau of Labor Statistics. The rate equals the ratio of average weekly weeks paid (i.e., the number of claimants) to total unemployment.

Table 2. Co-occurrence of pre-pandemic strictness measures across the 51 state UI programs

Measures	n	States
Zero strict	9	***Arkansas*****, Colorado**, Connecticut, Illinois, Maine, Massachusetts, Oregon, Pennsylvania, Rhode Island
One strict	16	
Quits	5	*Iowa*, **Kentucky**, New Jersey, Vermont, *West Virginia*
Denials	6	Hawaii, **Kansas**, Nevada, *Oklahoma,* ***Utah****,* Washington
Replacement	5	***Arizona***, California, Delaware, District of Columbia, New York
Two strict	18	
Quits, denials	9	***Idaho****, Montana,* ***Nebraska***, **New Mexico**, *North Dakota,* ***Ohio, South Dakota, Texas, Wyoming***
Quits, replacement	4	***Alabama, Georgia*****, Maryland***, **Virginia**
Denials, replacement	5	*Alaska*, Minnesota, ***New Hampshire, South Carolina*****,** Wisconsin
Three strict	8	***Florida, Indiana*, Louisiana*****,** Michigan, ***Mississippi, Missouri*****, North Carolina,** ***Tennessee***
	51	

Notes: Bolded states are also deemed stricter in terms of 2019 recipiency. Italicized states ended at least one federal UI program before September 2021. Efforts in Maryland and Indiana, both marked with asterisks, were blocked by state courts. In Indiana, benefits lapsed briefly.

Table 3. Pre-pandemic state UI strictness measures and federal UI status

State	Index (0 to 3)	Stricter, Recipiency (1/0)	Ended at least one federal program before 9/2021	
Alabama	2	1	1	
Alaska	2	0	1	*
Arizona	1	1	1	*
Arkansas	0	1	1	
California	1	0	0	
Colorado	0	1	0	
Connecticut	0	0	0	
Delaware	1	0	0	
District of Columbia	1	0	0	
Florida	3	1	1	*
Georgia	2	1	1	
Hawaii	1	0	0	
Idaho	2	1	1	
Illinois	0	0	0	
Indiana	3	1	1	**
Iowa	1	0	1	
Kansas	1	1	0	
Kentucky	1	1	0	
Louisiana	3	1	1	
Maine	0	0	0	
Maryland	2	1	0	**
Massachusetts	0	0	0	
Michigan	3	0	0	
Minnesota	2	0	0	
Mississippi	3	1	1	
Missouri	3	1	1	
Montana	2	0	1	
Nebraska	2	1	1	
Nevada	1	0	0	
New Hampshire	2	1	1	
New Jersey	1	0	0	
New Mexico	2	1	0	
New York	1	0	0	
North Carolina	3	1	0	
North Dakota	2	0	1	
Ohio	2	1	1	*
Oklahoma	1	0	1	
Oregon	0	0	0	
Pennsylvania	0	0	0	
Rhode Island	0	0	0	
South Carolina	2	1	1	
South Dakota	2	1	1	
Tennessee	3	1	1	
Texas	2	1	1	
Utah	1	1	1	
Vermont	1	0	0	
Virginia	2	1	0	
Washington	1	0	0	

West Virginia	1	0	1
Wisconsin	2	0	0
Wyoming	2	1	1

Notes: Four states marked with a single asterisk ended just the supplemental payment before September 2021 (FPUC). Efforts by Indiana and Maryland, both marked with two asterisks, to terminate benefits were blocked by judges; nevertheless, benefits lapsed briefly in Indiana in June 2021.

Source: See source information in Table 1.

Figure 1. States' 2019 UI recipiency (continuous) by additive index values

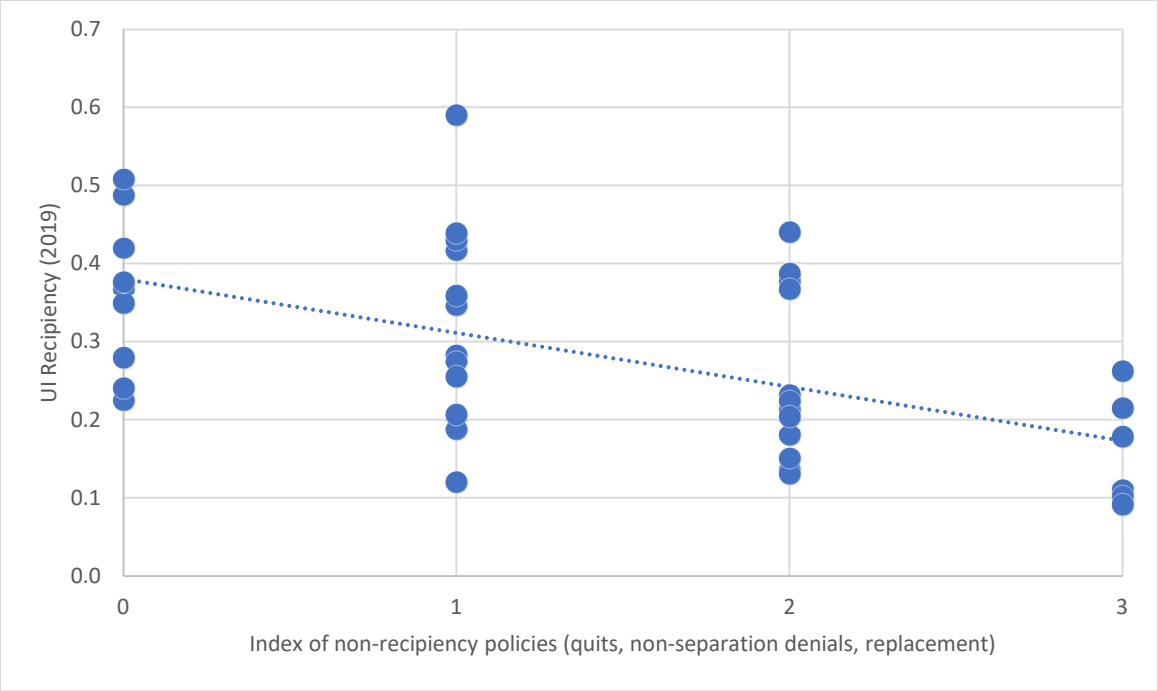
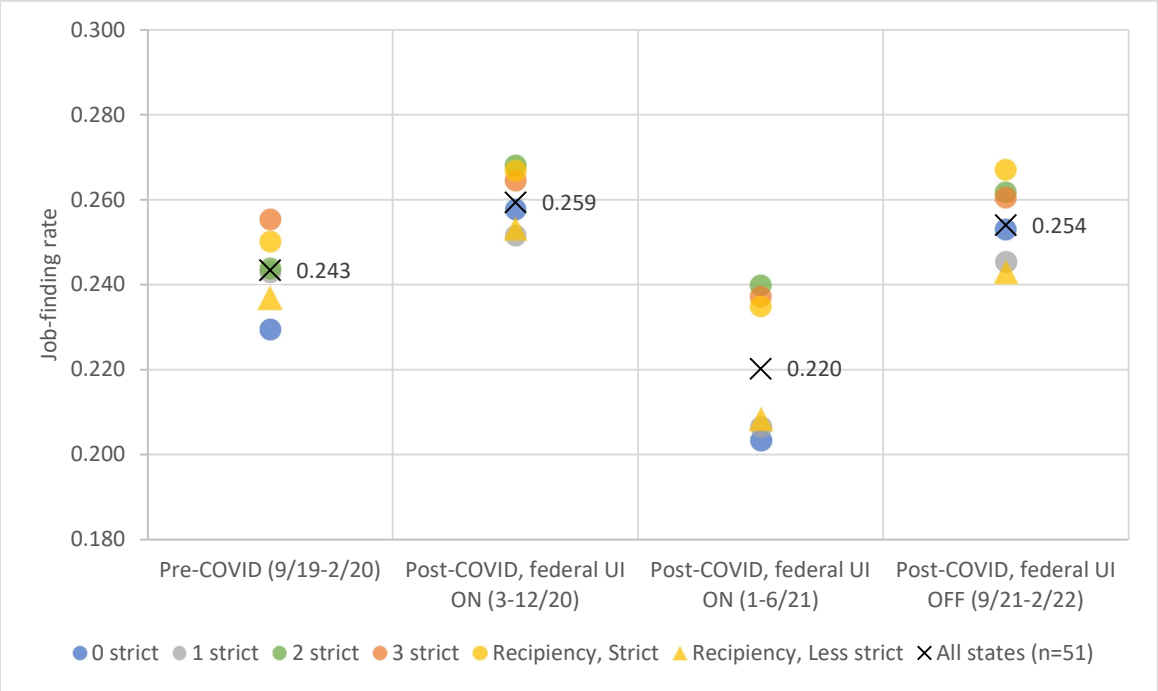
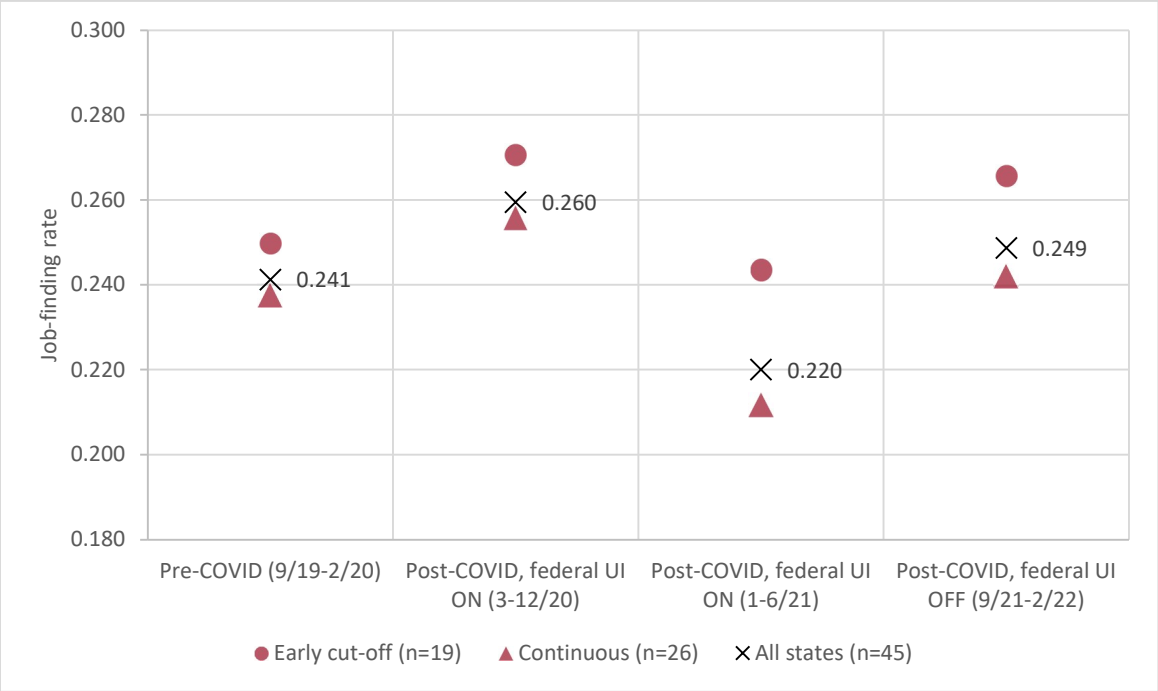


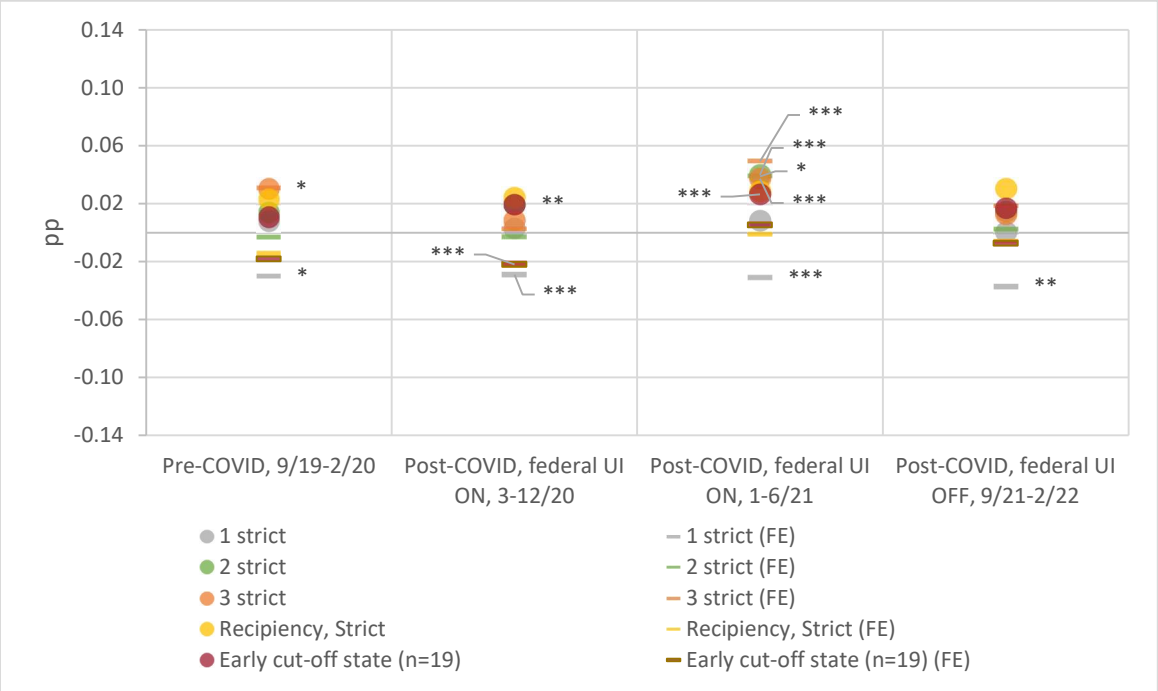
Figure 2a. Unadjusted monthly job finding among non-employed adults, aged 18-64, by pre-pandemic state UI strictness (51 state programs)





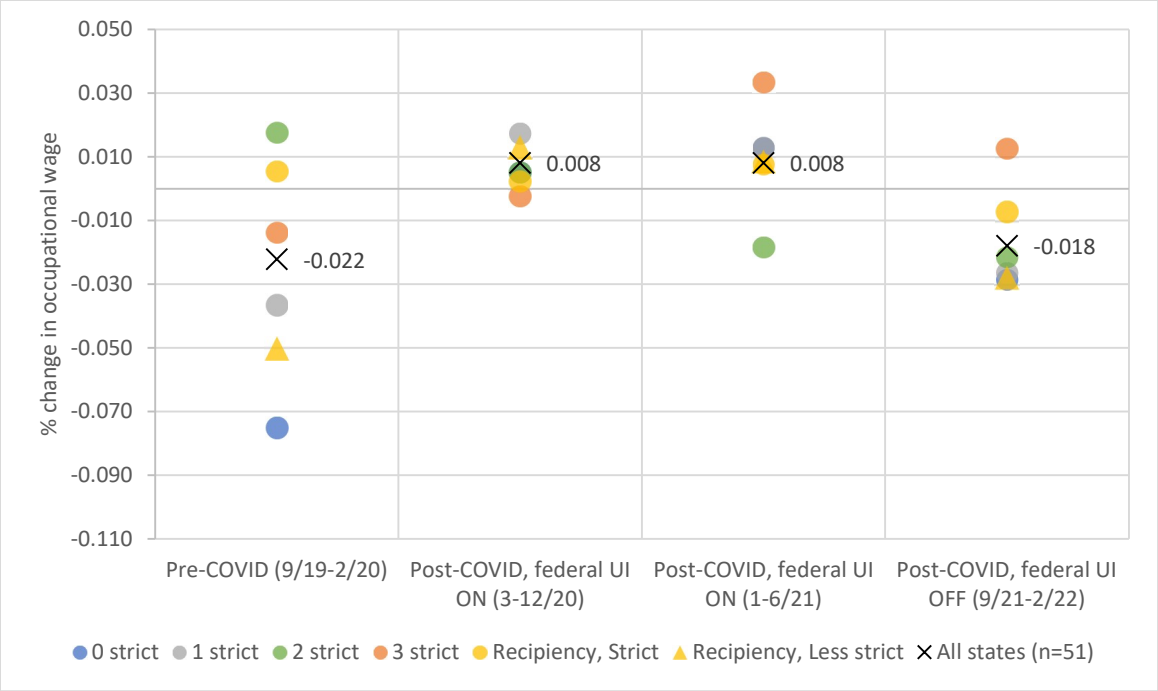
Notes: Estimates are weighted using CPS sampling weights.

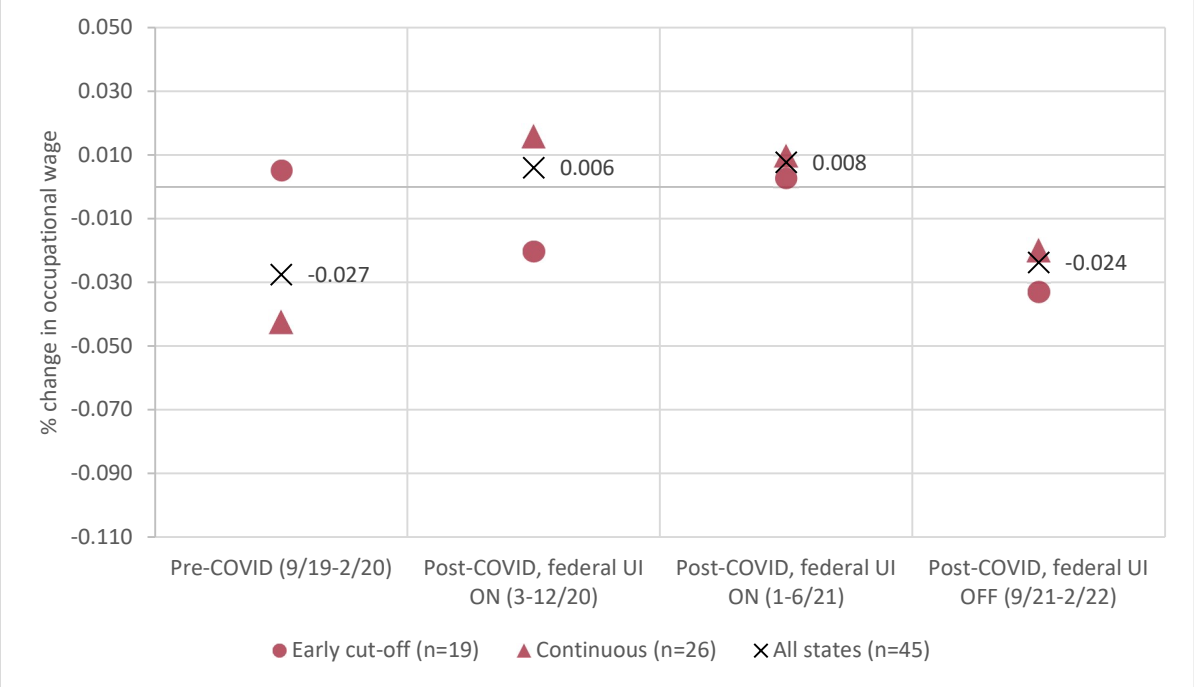
Figure 2b. Effects of pre-pandemic state UI strictness on job finding among non-employed adults, aged 18-64 (51 state programs)



Notes: Estimates shown are average marginal effects. They reflect the percentage-point change in the probability of job finding among non-employed, ages 18 to 64, associated with strictness on 3, 2, or 1 of the measures (either quits, denials, or replacement) relative to strictness on 0 measures; strict status in terms of recipiency (1) relative to less strict status (0); and early cut-off status (1) relative to continuous status (0), in each of the four phases. Estimates control for individual-level covariates, state PUA payment status, state job-search waiver status, state labor market slack measures, and state COVID measures. Results are weighted using CPS sampling weights. Standard errors are clustered at the state level. *p<.10, **p<.05, ***p<.01

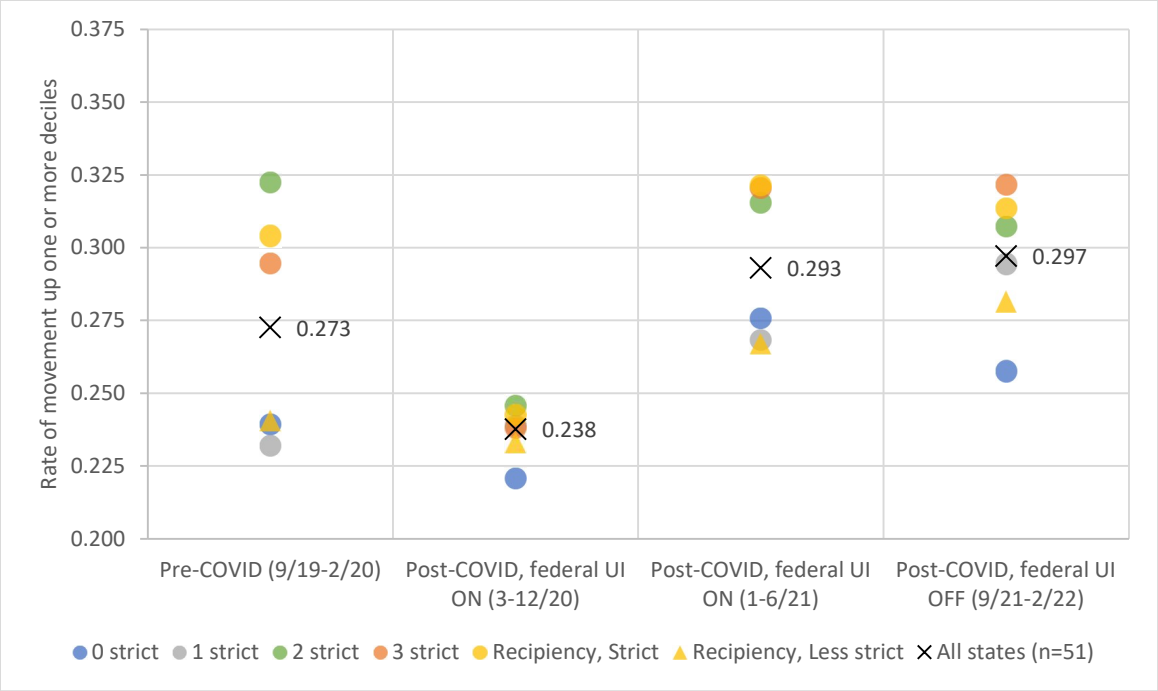
Figure 3a. Unadjusted rates of change in occupational median wages among reemployed adults, aged 18-64, by pre-pandemic state UI strictness (51 state programs)

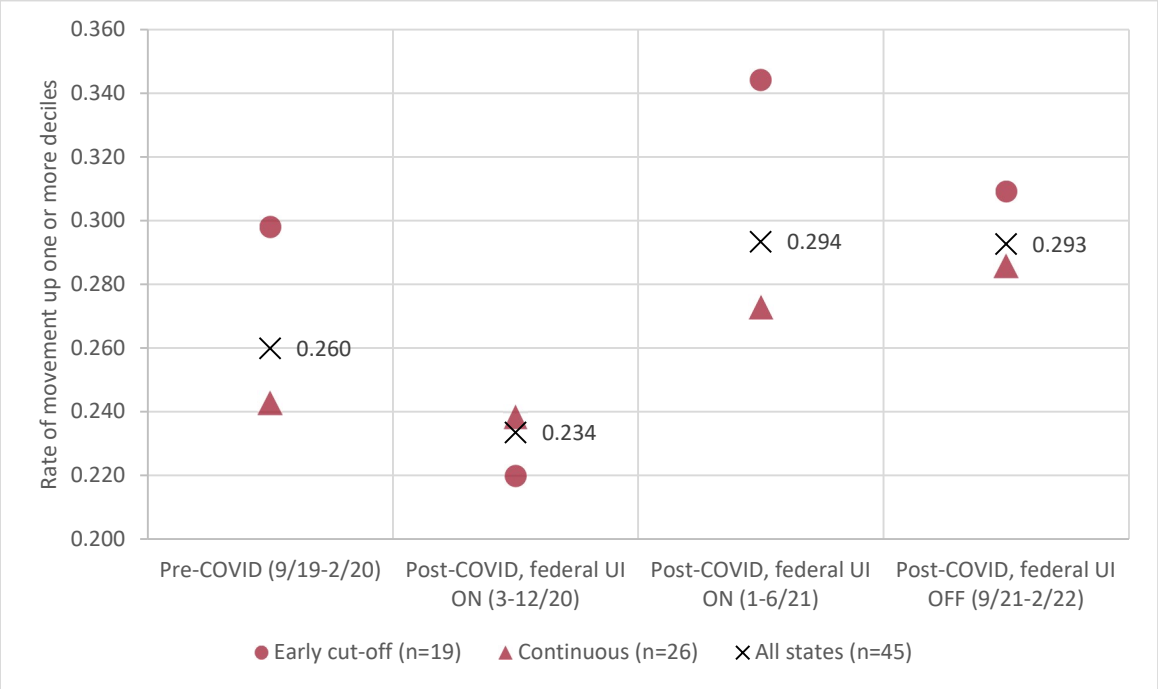




Notes: Estimates are weighted using CPS sampling weights.

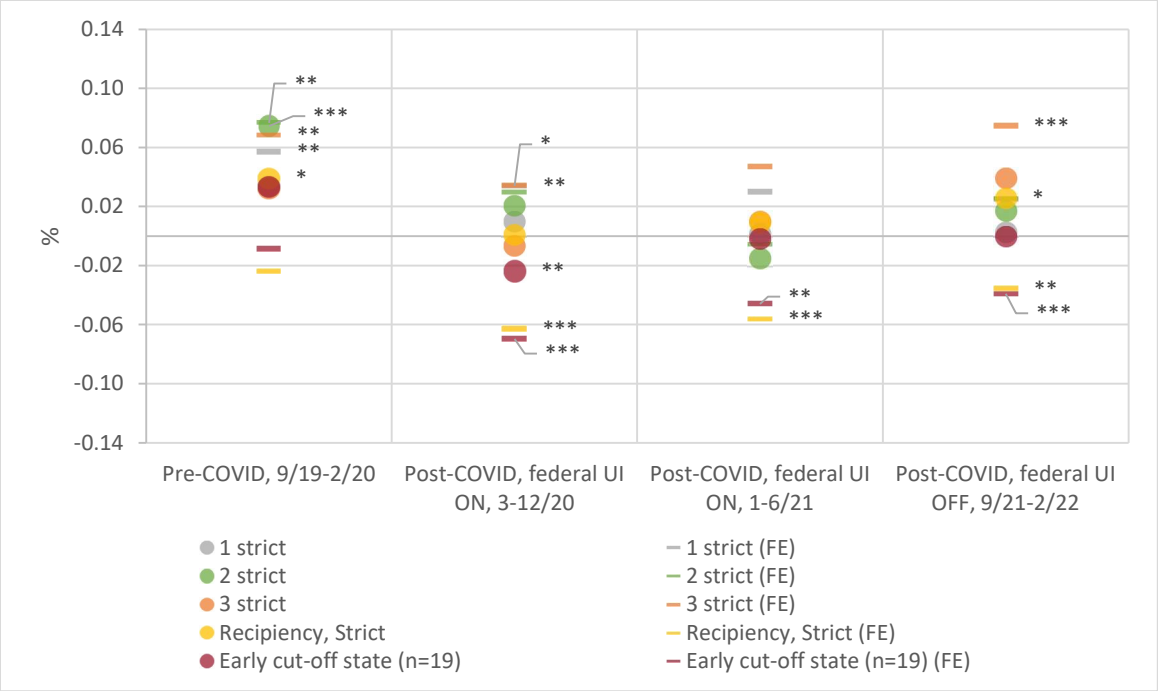
Figure 4a. Unadjusted rates of movement up one or more occupational wage deciles among reemployed adults, aged 18-64, by pre-pandemic state UI strictness (51 state programs)





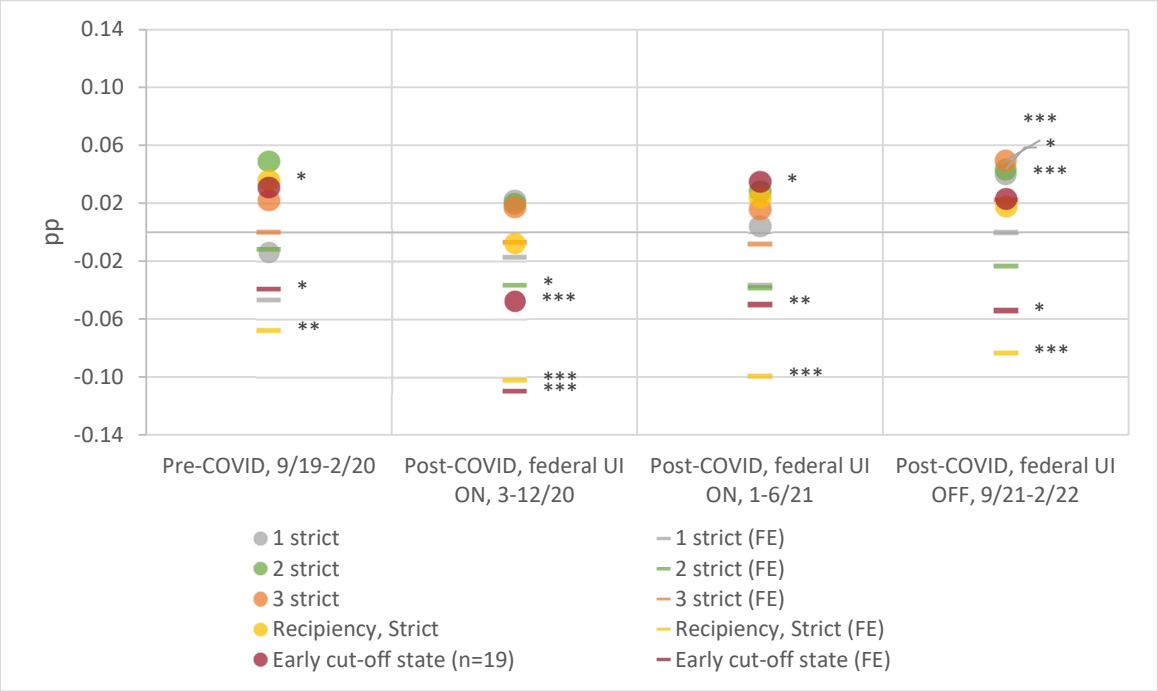
Notes: Estimates are weighted using CPS sampling weights.

Figure 3b. Effects of pre-pandemic state UI strictness on changes in occupational median wages among reemployed adults, aged 18-64 (51 state programs)



Notes: Estimates shown are average marginal effects. They reflect the percent change in the change in occupational median wages among reemployed adults, ages 18 to 64, associated with strictness on 3, 2, or 1 of the measures (either quits, denials, or replacement) relative to strictness on 0 measures; strict status in terms of recipiency (1) relative to less strict status (0); and early cut-off status (1) relative to continuous status (0), in each of the four phases. Estimates control for individual-level covariates, state PUA payment status, state job-search waiver status, state labor market slack measures, and state COVID measures. Results are weighted using CPS sampling weights. Standard errors are clustered at the state level. *p<.10, **p<.05, ***p<.01

Figure 4b. Effects of pre-pandemic state UI strictness on movement up one or more occupational wage deciles among reemployed adults, aged 18-64 (51 state programs)



Notes: Estimates shown are average marginal effects. They reflect the percentage-point change in the probability of movement up one or more occupational wage deciles among reemployed adults, ages 18 to 64, associated with strictness on 3, 2, or 1 of the measures (either quits, denials, or replacement) relative to strictness on 0 measures; strict status in terms of recipiency (1) relative to less strict status (0); and early cut-off status (1) relative to continuous status (0), in each of the four phases. Estimates control for individual-level covariates, state PUA payment status, state job-search waiver status, state labor market slack measures, and state COVID measures. Results are weighted using CPS sampling weights. Standard errors are clustered at the state level. *p<.10, **p<.05, ***p<.01

Table 4. Effects of pre-pandemic UI strictness on job finding over the COVID-19 pandemic

Sample	Non-employed, 18-64		Non-employed, 18-64		Non-employed, 18-64	
	51 states		Early cut-off states (n=19)		Continuous states (n=26)	
Index (Quits, NS Denials, Replacement)						
Pre-COVID, 9/19-2/20						
1 strict	0.008	-0.030 *	0.016	-0.018	0.004	-0.021
2 strict	0.014	-0.003	0.006	-0.003	-0.001	0.002
3 strict	0.030 *	0.031	0.037 ***	0.040 *	0.039 ***	0.017
Post-COVID						
Federal UI on, 3-12/20						
1 strict	0.003	-0.029 ***	0.017	-0.023	-0.001	-0.017 *
2 strict	0.020	-0.003	0.015	0.020	0.003	-0.004
3 strict	0.009	0.003	0.012	0.021	0.027 **	0.000
Federal UI on, 1-6/21						
1 strict	0.009	-0.031 ***	0.017 *	-0.024	0.006	-0.024 ***
2 strict	0.040 ***	0.039 *	-0.010	-0.016	0.048 **	0.082 ***
3 strict	0.037 ***	0.049 ***	0.037 ***	0.048 ***	0.015 *	-0.005
Post-COVID, federal UI off, 9/21-2/22						
1 strict	0.001	-0.037 **	0.052 **	0.003	-0.005	-0.032 **
2 strict	0.015	0.003	0.001	-0.008	-0.009	0.010
3 strict	0.013	0.019	0.020 ***	0.010	0.009	-0.020
State and month FE	No	Yes	No	Yes	No	Yes
R-squared	0.029	0.032	0.031	0.036	0.031	0.035
Observations	56762	56762	16685	16685	34688	34688
*p<.10, **p<.05, ***p<.01						
Recipiency						
Pre-COVID, 9/19-2/20	0.023 **	-0.015	0.021	0.067 **	0.008	0.014
Post-COVID						
Federal UI on, 3-12/20	0.024 ***	-0.022 ***	-0.001	0.034 **	0.039 ***	0.025
Federal UI on, 1-6/21	0.029 ***	-0.001	-0.016	0.024	0.027	0.051 *
Post-COVID, federal UI off, 9/21-2/22	0.031 **	-0.006	-0.037	0.010	0.005	0.014
State and month FE	No	Yes	No	Yes	No	Yes

R-squared	0.029		0.032		0.030		0.036		0.031	0.034
Observations	56762		56762		16685		16685		34688	34688

*p<.10, **p<.05, ***p<.01

Federal UI status (n=45)										
Pre-COVID, 9/19-2/20	0.011		-0.018							
Post-COVID										
Federal UI on, 3-12/20	0.020	**	-0.022	***						
Federal UI on, 1-6/21	0.027	**	0.005							
Post-COVID, federal UI off, 9/21-2/22	0.017		-0.007							
State and month FE	No		Yes							
R-squared	0.029		0.033							
Observations	49138		49138							

*p<.10, **p<.05, ***p<.01

Notes: Estimates shown are average marginal effects. They reflect the percentage-point change in the probability of job finding among non-employed, ages 18 to 64, associated with strictness on 3, 2, or 1 of the measures (either quits, denials, or replacement) relative to strictness on 0 measures; strict status in terms of recipiency (1) relative to less strict status (0); and early cut-off status relative to continuous status, in each pandemic phase. Estimates control for individual-level covariates, state PUA payment status, state job-search waiver status, state labor market slack measures, and state COVID measures. Results are weighted using CPS sampling weights. Standard errors are clustered at the state level.

Table 5. Effects of pre-pandemic state UI strictness on reemployment quality over the COVID-19 pandemic

Outcome	% change in occupational wages				Movement upward one or more occupational wage deciles (pp)			
Sample	Employed (from non-employed), 18-64				Employed (from non-employed), 18-64			
Index (Quits, NS Denials, Replacement)								
Pre-COVID, 9/19-2/20								
1 strict	0.034		0.057	**	-0.014		-0.047	
2 strict	0.075	***	0.077	**	0.049		-0.012	
3 strict	0.032		0.069	**	0.022		0.000	
Post-COVID								
Federal UI on, 3-12/20								
1 strict	0.010		0.034	**	0.022		-0.017	
2 strict	0.021		0.029		0.020		-0.037	*
3 strict	-0.006		0.034	*	0.017		-0.007	
Federal UI on, 1-6/21								
1 strict	0.001		0.030		0.004		-0.037	
2 strict	-0.015		-0.006		0.028		-0.038	
3 strict	0.010		0.047		0.016		-0.008	
Post-COVID, federal UI off, 9/21-2/22								
1 strict	0.003		0.025		0.040	***	0.000	
2 strict	0.017		0.025		0.043	*	-0.023	
3 strict	0.039		0.074	***	0.049	***	0.022	
State and month FE	No		Yes		No		Yes	
R-squared	0.176		0.180		0.076		0.082	
Observations	14132		14132		14132		14132	
Recipiency								
Pre-COVID, 9/19-2/20	0.039	*	-0.024		0.036	*	-0.068	**
Post-COVID								
Federal UI on, 3-12/20	0.001		-0.063	***	-0.008		-0.102	***
Federal UI on, 1-6/21	0.009		-0.056	***	0.024		-0.099	***
Post-COVID, federal UI off, 9/21-2/22	0.026	*	-0.036	**	0.018		-0.083	***
State and month FE	No		Yes		No		Yes	
R-squared	0.175		0.180		0.075		0.082	
Observations	14132		14132		14132		14132	
Federal UI status (n=45)								
Pre-COVID, 9/19-2/20	0.033		-0.009		0.031		-0.039	*
Post-COVID								
Federal UI on, 3-12/20	-0.024	**	-0.069	***	-0.047	***	-0.109	***
Federal UI on, 1-6/21	-0.002		-0.046	**	0.035	*	-0.050	**
Post-COVID, federal UI off, 9/21-2/22	0.000		-0.039	***	0.023		-0.054	*
State and month FE	No		Yes		No		Yes	
R-squared	0.172		0.177		0.077		0.085	
Observations	12231		12231		12231		12231	

*p<.10, **p<.05, ***p<.01

Notes: Estimates shown are average marginal effects. Estimates on the left-hand side reflect the percent change in the change in occupational median wages among reemployed adults, ages 18 to 64, associated with strictness on 3, 2, or 1 of the measures (either quits, denials, or replacement) relative to strictness on 0 measures; strict status in terms of recipiency (1) relative to less strict status (0); and early cut-off status relative to continuous status, in each pandemic phase. Estimates on the right-hand side reflect the percentage-point change in the probability of movement up one or more occupational wage deciles among reemployed adults, ages 18 to 64, associated with movement in the same strictness measures. Estimates control for individual-level covariates, state PUA payment status, state job-search waiver status, state labor market slack measures, and state COVID measures. Results are weighted using CPS sampling weights. Standard errors are clustered at the state level.

Table 6. Unadjusted job-finding rates, before and after federal UI benefits started, and ended, by pre-pandemic UI strictness

		51 programs		Early cut-off states (n=19)		Continuous states (n=26)
Year-Months	9/2019-2/2020	3-8/2020	1-6/2021	6-12/2021	3-8/2021	9/2021-2/2022
Observations	*8194*	*17984*	*3739*	*2512*	*6889*	*4641*
51 programs	0.243	0.280	0.244	0.272	0.224	0.242
change (pp)		*0.036*		*0.028*		*0.018*
Index (Quits, NS Denials, Replacement)						
0 strict	0.229	0.273	0.234	0.285	0.229	0.251
change (pp)		*0.043*		*0.051*		*0.022*
1 strict	0.243	0.270	0.262	0.314	0.212	0.234
change (pp)		*0.027*		*0.052*		*0.022*
2 strict	0.244	0.288	0.234	0.264	0.261	0.241
change (pp)		*0.044*		*0.030*		*(0.020)*
3 strict	0.255	0.292	0.271	0.271	0.232	0.258
change (pp)		*0.037*		*(0.000)*		*0.026*
Recipiency						
Stricter	0.250	0.287	0.241	0.267	0.249	0.247
change (pp)		*0.037*		*0.026*		*(0.003)*
Less strict	0.237	0.273	0.264	0.308	0.219	0.241
change (pp)		*0.037*		*0.044*		*0.022*
Federal UI status (n=45)						
Early cut-off (n=19)	0.250	0.295				
change (pp)		*0.045*				
Continuous (n=26)	0.238	0.275				
change (pp)		*0.037*				

Notes: Estimates are weighted using CPS sampling weights

Table 7. Effects of pre-pandemic state UI strictness on job-finding changes, with activation and de-activation, of federal UI

	51 programs		Early cut-off states (n=19)		Continuous states (n=26)	
Year-months	Federal UI activates: 3-8/2020 v. 9/2019-2/2020		Federal UI de-activates: 7-12/2021 v. 1-6/2021		Federal UI de-activates: 9/2021-2/2022 v. 3-8/2021	
	(1)	(2)	(3)	(4)	(5)	(6)
All states	0.134 ***	0.082 *	0.040 ***	-0.073	-0.010	0.066
Index (Quits, NS Denials, Replacement)						
0 strict	0.131 ***	0.087 *	0.037 ***	-0.097 *	-0.001	0.088
1 strict	0.134 ***	0.078 *	0.063 ***	-0.066	-0.014	0.055
Difference (pp)	0.003	-0.008	0.026	0.031	-0.013	-0.033
2 strict	0.142 ***	0.090 *	0.037 ***	-0.057	-0.024	0.056
Difference (pp)	0.011	0.003	0.000	0.040	-0.023	-0.032
3 strict	0.127 ***	0.075	0.037 **	-0.131 *	0.005	0.065
Difference (pp)	-0.004	-0.012	0.000	-0.034 *	0.006	-0.023
State and month FE	No	Yes	No	Yes	No	Yes
R-squared	0.039	0.042	0.033	0.040	0.026	0.031
Observations	26178	26178	6251	6251	11530	11530
All states	0.128 ***	0.080 *	0.031 **	-0.047	-0.011	0.075
Recipiency						
Stricter	0.127 ***	0.074	0.028 **	-0.045	-0.015	0.054
Less strict	0.128 ***	0.085 *	0.056	-0.057	-0.010	0.078
Difference (pp)	0.001	-0.011	-0.028		-0.005	-0.024
State and month FE	No	Yes	No	Yes	No	Yes
R-squared	0.039	0.042	0.032	0.040	0.026	0.031
Observations	26178	26178	6251	6251	11530	11530
All states	0.130 ***	0.073				
Federal UI status (n=45)						
Stricter (n=19)	0.135 ***	0.066				
Less strict (n=26)	0.128 ***	0.075				
Difference (pp)	0.007	-0.009				
State and month FE	No	Yes				

R-squared	0.039	0.042
Observations	22579	22579

*p<.10, **p<.05, ***p<.01

Notes: Estimates shown are average marginal effects. They reflect the percentage-point change in the probability of job finding, or transitioning from non-employment to employment, between two time periods, distinguished by federal UI active status; results are shown for (a) states stratified according to the additive index, which ranges from 0 to 3, and (b) strict states and less strict states, in terms of recipiency. Columns 1 and 2 reflect the change in job finding in the first six months of active federal UI benefits (1), compared with the six months prior (0). Columns 3 to 6 reflect the change in the first six months without federal UI benefits (1), compared with the six months prior (0). Here, states are split into early cut-off states and continuous states. Estimates control for individual-level covariates, state PUA payment status (in the early pandemic months), job-search waiver status, state labor market slack measures, and state COVID measures. Results are weighted using CPS sampling weights. Standard errors are clustered at the state level.

Table 8. Effects of early cutoff of federal pandemic UI benefits on job-finding				
Sample	Non-employed, 18-64			
Change in job-finding (pp):				
Early cut-off states (n=19)	0.068	***	0.086	**
Continuous states (n=26)	0.009		0.077	*
Difference (pp)	0.059	**	0.009	
Index (Quits, NS Denials, Replacement)				
0 strict				
Early cut-off states (n=1)	0.039	***	0.046	**
Continuous states (n=8)	0.038	*	0.103	**
Difference (pp)	0.001		-0.058	*
1 strict				
Early cut-off states (n=4)	0.093	**	0.121	**
Continuous states (n=11)	0.043	**	0.102	**
Difference (pp)	0.050		0.019	
2 strict				
Early cut-off states (n=11)	0.057	***	0.069	**
Continuous states (n=5)	-0.056	**	0.025	
Difference (pp)	0.113	***	0.044	
3 strict				
Early cut-off states (n=3)	0.051	**	0.088	*
Continuous states (n=2)	-0.013		0.069	
Difference (pp)	0.064	**	0.019	
State and month FE	No		Yes	
R-squared	0.030		0.034	
Observations	14290		14290	
Early cut-off states (n=19)	0.082	**	0.121	***
Continuous states (n=26)	0.014		0.087	**
Difference (pp)	0.068	*	0.033	
Recipiency				
Stricter states				
Early cut-off states (n=14)	0.058	***	0.145	***
Continuous states (n=7)	-0.001		0.101	**
Difference (pp)	0.058		0.044	
Less strict states				
Early cut-off states (n=5)	0.096	*	0.082	**
Continuous states (n=19)	0.022		0.065	
Difference (pp)	0.074		0.017	
State and month FE	No		Yes	
R-squared	0.029		0.034	
Observations	14290		14290	

*p<.10, **p<.05, ***p<.01

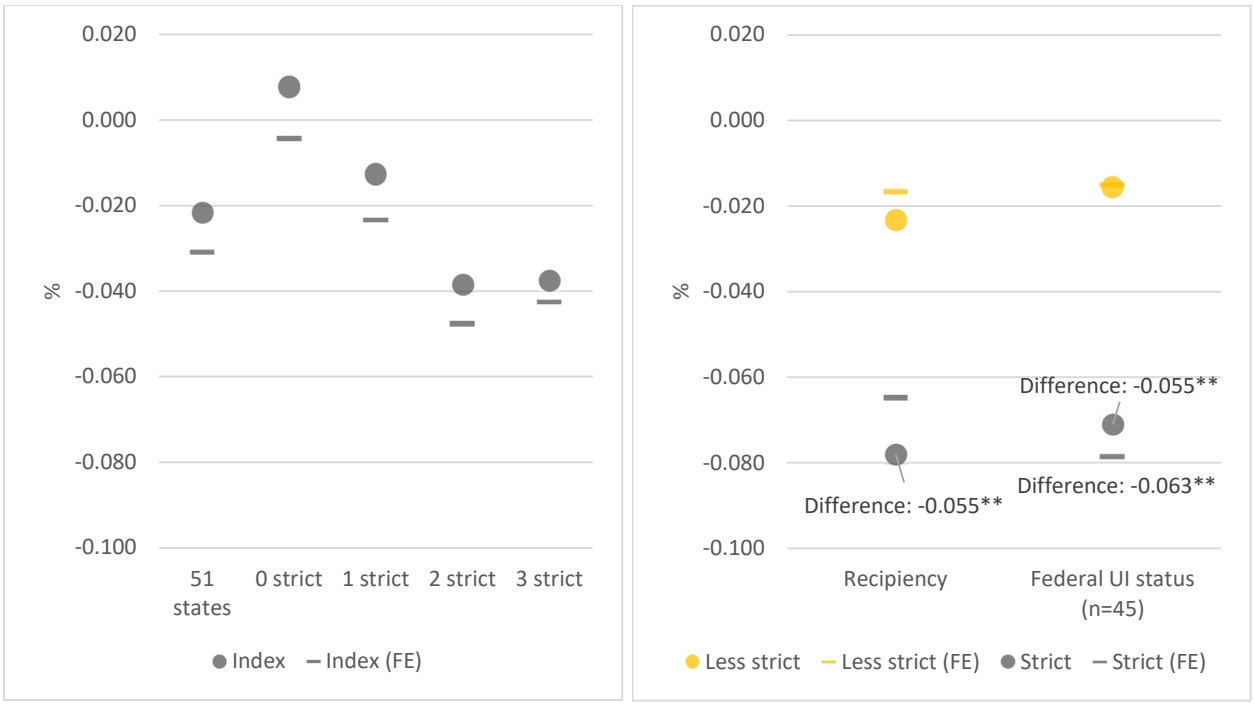
Notes: Estimates shown are average marginal effects. They reflect the percentage-point change in the probability of job finding, or transitioning from non-employment to employment, between January to June 2021, and July to August 2021, in states distinguished by pre-pandemic strictness. Estimates control for individual-level covariates, state job-search waiver status, state labor market slack measures, and state COVID measures. Results in red should be interpreted with caution, as sample sizes are small (i.e., n=50) Results are weighted using CPS sampling weights. Standard errors are clustered at the state level.

Table 9. Unadjusted reemployment quality measures, before and after federal UI benefits started, and ended, by pre-pandemic UI strictness

Outcome	1: % change in occupational median wage		2: Movement up one or more wage deciles		1: % change in occupational median wage				2: Movement up one or more wage deciles			
			51 state programs		Early cut-off states (n=19)		Continuous states (n=26)		Early cut-off states (n=19)		Continuous states (n=26)	
Year-Months	9/2019-2/2020	3-8/2020	9/2019-2/2020	3-8/2020	1-6/2021	7-12/2021	3-8/2021	9/2021-2/2022	1-6/2021	7-12/2021	3-8/2021	9/2021-2/2022
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Observations	*1992*	*5126*	*1992*	*5126*	*953*	*690*	*1542*	*1131*	*953*	*690*	*1542*	*1131*
51 programs	-0.022	0.008	0.273	0.222	0.003	-0.044	0.015	-0.020	0.344	0.289	0.287	0.286
change (pp)		0.03		(0.05)		(0.05)		(0.03)		(0.06)		(0.00)
Index (Quits, NS Denials, Replacement)												
0 strict	-0.075	-0.004	0.239	0.188	0.102	-0.007	-0.010	-0.035	0.321	0.249	0.244	0.255
change (pp)		0.07		(0.05)		(0.11)		(0.02)		(0.07)		0.01
1 strict	-0.037	0.022	0.232	0.234	-0.047	-0.141	0.042	-0.026	0.292	0.205	0.303	0.293
change (pp)		0.06		0.00		(0.09)		(0.07)		(0.09)		(0.01)
2 strict	0.018	0.010	0.322	0.234	-0.007	-0.028	-0.038	-0.001	0.350	0.301	0.276	0.289
change (pp)		(0.01)		(0.09)		(0.02)		0.04		(0.05)		0.01
3 strict	-0.014	-0.009	0.295	0.213	0.052	-0.030	0.009	0.028	0.360	0.316	0.333	0.329
change (pp)		0.01		(0.08)		(0.08)		0.02		(0.04)		(0.00)
Recipiency												
Stricter	0.006	-0.001	0.304	0.224	0.009	-0.031	-0.039	-0.002	0.352	0.299	0.293	0.285
change (pp)		(0.01)		(0.08)		(0.04)		0.04		(0.05)		(0.01)
Less strict	-0.050	0.016	0.241	0.221	-0.045	-0.131	0.027	-0.024	0.282	0.217	0.285	0.286
change (pp)		0.07		(0.02)		(0.09)		(0.05)		(0.07)		0.00
Federal UI status (n=45)												
Early cut-off (n=19)	0.005	-0.019	0.298	0.203								
change (pp)		(0.02)		(0.09)								
Continuous (n=26)	-0.042	0.016	0.243	0.224								
change (pp)		0.06		(0.02)								

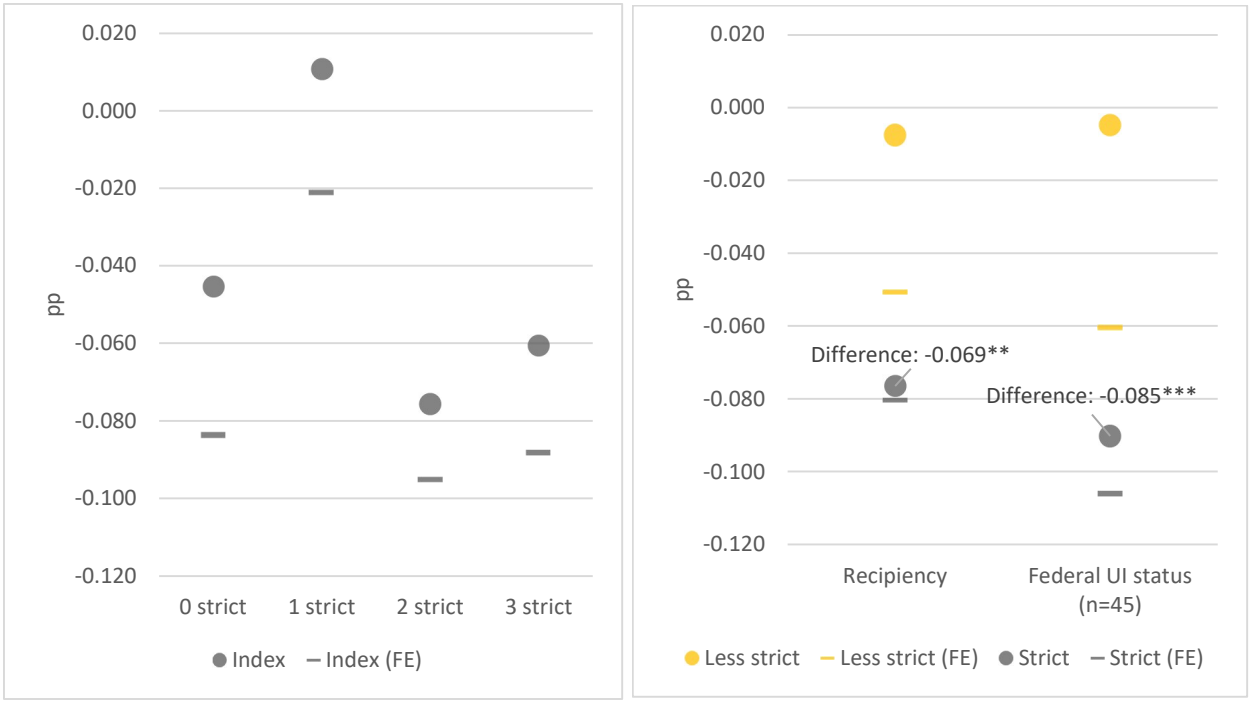
Notes: Estimates are weighted using CPS sampling weights

Figure 5a. Effects of pre-pandemic state UI strictness, and federal UI status, on *change* in occupational wage change, from before to after federal UI benefits *started*



Notes: Estimates shown are average marginal effects. Values reflect how the percentage change in occupational wages in the first six months of active federal UI benefits (1), compares with the change in the six months prior (0). Estimates control for individual-level covariates, state job-search waiver status, state labor market slack measures, and state COVID measures. Results are weighted using CPS sampling weights. Standard errors are clustered at the state level. *p<.10, **p<.05, ***p<.01

Figure 5b. Effects of pre-pandemic state UI strictness, and federal UI status, on change in probability of movement up one or more wage deciles, from before to after federal UI benefits *started*



Notes: Estimates shown are average marginal effects. Values reflect the percentage-point change in the probability of movement upward one or more occupational wage deciles in the first six months of active federal UI benefits (1), compared with the six months prior (0). Differences shown reflect the percentage-point difference between stricter and less strict states. Estimates control for individual-level covariates, state job-search waiver status, state labor market slack measures, and state COVID measures. Results are weighted using CPS sampling weights. Standard errors are clustered at the state level. *p<.10, **p<.05, ***p<.01

Table 10. Effects of pre-pandemic state UI strictness on change in reemployment quality measures, from before to after federal UI benefits ended

Outcome	1: Change in occupational median wage (%)				2: Probability of movement up one wage decile (pp)			
	Early cut-off states (n=19)		Continuous states (n=26)		Early cut-off states (n=19)		Continuous states (n=26)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
All states	-0.085 **	-0.130	-0.037	-0.183 *	-0.089 **	-0.037	-0.016	0.100
Index (Quits, NS Denials, Replacement)								
0 strict	-0.154 ***	-0.195	0.002	-0.150	-0.107 ***	-0.052	0.023	0.120
1 strict	-0.120 **	-0.142	-0.073 **	-0.214 *	-0.112 ***	-0.042	-0.034	0.083
Difference (pp)	-0.034	0.054	-0.075 *	-0.064 *	-0.005	0.010	-0.057 *	-0.038
2 strict	-0.066 **	-0.106	0.002	-0.137	-0.083 **	-0.022	-0.021	0.090
Difference (pp)	0.088 **	0.090 **	0.000	0.013	0.024	0.030	-0.044	-0.030
3 strict	-0.118	-0.201	-0.011	-0.173	-0.090	-0.055	-0.028	0.105
Difference (pp)	0.036	-0.005	-0.013	-0.023	0.017	-0.003	-0.052 ***	-0.016
State and month FE	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	0.250	0.260	0.222	0.231	0.112	0.133	0.113	0.123
Observations	1643	1643	2673	2673	1643	1643	2673	2673
All states	-0.077 **	-0.080	-0.031	-0.166	-0.084 **	-0.013	-0.006	0.126
Recipiency								
Stricter	-0.076 *	-0.083	0.008	-0.142	-0.086 **	-0.013	-0.044	0.082
Less strict	-0.083	-0.056	-0.041 *	-0.172	-0.071 **	-0.005	0.003	0.132
Difference (pp)	0.007	-0.027	0.049	0.030	-0.015	-0.007	-0.047	-0.050
State and month FE	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	0.248	0.259	0.220	0.231	0.111	0.132	0.110	0.122
Observations	1643	1643	2673	2673	1643	1643	2673	2673

*p<.10, **p<.05, ***p<.01

Notes: Estimates shown are average marginal effects. For the first outcome, and for any given level of pre-pandemic strictness, values reflect how the percentage change in log occupational wages in the first six months without federal UI (1), compares with the percentage change in the six months prior (i.e., the final six months of active federal UI benefits) (0). The differences in the values, in terms of strictness, are in units of percentage points. For the second outcome, and for any given level of pre-pandemic strictness, results reflect the percentage-point change in the probability of movement upward one or more occupational wage deciles in the first six months without federal UI (1), compared with the six months prior (0). Results are weighted using CPS sampling weights. Standard errors are clustered at the state level.

Table 11. Unadjusted rates of job finding and reemployment quality outcomes, as of January 2022, among displaced workers (DW), aged 20-64, separated between 2019 and 2021, by pre-pandemic state UI strictness

Outcome	Employment	Part-time employment	Part-time employment	Change in log weekly earnings (%)
Sample	Employed DW, 20-64	Employed DW, 20-64	Employed DW, 20-64, displaced from FT emp.	Employed DW, 20-64
Observations	*1390*	*1132*	*937*	*877*
All states (n=51)	0.831	0.260	0.216	-0.065
Index (Quits, NS Denials, Replacement)				
0 strict	0.812	0.245	0.217	0.004
1 strict	0.813	0.287	0.243	-0.082
2 strict	0.861	0.216	0.178	-0.120
3 strict	0.840	0.291	0.230	-0.004
Recipiency				
Stricter	0.860	0.238	0.189	-0.047
Less strict	0.808	0.280	0.242	-0.081
Federal UI status				
Observations	*1231*	*1002*	*828*	*780*
All states (n=45)	0.828	0.265	0.219	-0.077
Early cut-off (n=19)	0.844	0.240	0.182	-0.045
Continuous (n=26)	0.823	0.275	0.234	-0.091

Notes: Results are weighted using CPS Displaced Worker supplemental weights.

Table 12. Job finding and reemployment quality, as of January 2022, among displaced workers (DW) separated between 2019 and 2021

Outcome	Employment		Part-time employment	Part-time employment	Change in log weekly earnings (%)
Sample	DW, 20-64		Employed, 20-64	Employed, 20-64, displaced from FTE	Employed, 20-64
Index (Quits, NS Denials, Replacement)					
1 strict	0.023		-0.050	-0.054	-0.109
2 strict	0.047		0.000	-0.047	-0.077
3 strict	0.024		0.032	-0.018	-0.063
R-squared	0.116		0.105	0.075	0.339
Observations	1390		1132	937	877
Recipiency					
Stricter states	0.077	*	0.015	0.008	0.020
R-squared	0.116		0.102	0.074	0.337
Observations	1390		1132	937	877
By federal UI status					
Early cut-off states	-0.044		-0.048	-0.048	0.062
R-squared	0.112		0.109	0.075	0.350
Observations	1231		1002	828	780

*p<.10, **p<.05, ***p<.01

Notes: Except for results for the change in log weekly earnings, estimates shown are average marginal effects. They reflect the average percentage-point change in each outcome—or percentage change, in the case of the weekly earnings outcome—associated with (a) movement along the additive index, which ranges from 0 to 3, (b) strict status in terms of recipiency, relative to less strict status; or (3) early cut-off status, relative to continuous status. The first set of models, estimating the effects of strictness on reemployment probability (column 1), control for individual characteristics, including tenure in the lost job, full-time status, union status, major industry and occupation, the last year worked, and UI receipt after displacement; state labor market slack measures; and state COVID measures. The second and third set of models, estimating the effects of strictness on part-time reemployment probability (conditional on employment) (columns 2 and 3), also include duration of unemployment between displacement and first reemployment. The final set of models, estimating the effects of strictness on change in weekly earnings (column 4), also control for full-time status in the current job; of state labor market measures, it also includes the log of average weekly wages in covered employment, as of 2021. All results are weighted using CPS Displaced Worker supplemental weights. Standard errors are clustered at the state level.

Appendix

Table A1: Unadjusted job finding and reemployment quality outcomes across major pandemic phase

Sample	Non-employed, 18-64				Employed (from non-employed), 18-64				Employed (from non-employed), 18-64			
Year-months	Pre-COVID (9/19-2/20)	Post-COVID, federal UI ON (3-12/20)	Post-COVID, federal UI ON (1-6/21)	Post-COVID, federal UI OFF (9/21-2/22)	Pre-COVID (9/19-2/20)	Post-COVID, federal UI ON (3-12/20)	Post-COVID, federal UI ON (1-6/21)	Post-COVID, federal UI OFF (7-12/21)	Pre-COVID (9/19-2/20)	Post-COVID, federal UI ON (3-12/20)	Post-COVID, federal UI ON (1-8/21)	Post-COVID, federal UI OFF (9/21-2/22)
Outcome	Job finding				% change in occupational wages				Movement up one or more wage deciles			
Observations	*8194*	*27581*	*12858*	*8129*	*1992*	*7186*	*2884*	*2070*	*1992*	*7186*	*2884*	*2070*
All states	0.243	0.259	0.220	0.254	-0.022	0.008	0.008	-0.018	0.273	0.238	0.293	0.297
Index (3 policies)												
0 strict	0.229	0.258	0.203	0.253	-0.075	0.005	0.013	-0.029	0.239	0.221	0.276	0.258
1 strict	0.243	0.252	0.207	0.245	-0.037	0.017	0.013	-0.026	0.232	0.239	0.268	0.294
2 strict	0.244	0.268	0.240	0.262	0.018	0.005	-0.018	-0.022	0.322	0.246	0.316	0.307
3 strict	0.255	0.265	0.237	0.261	-0.014	-0.002	0.033	0.013	0.295	0.238	0.320	0.322
Recipiency												
Less strict states	0.237	0.253	0.208	0.243	-0.050	0.013	0.008	-0.028	0.241	0.233	0.267	0.282
Strict states	0.250	0.267	0.235	0.267	0.006	0.002	0.008	-0.007	0.304	0.243	0.321	0.314
Observations	*7012*	*23873*	*11174*		*1696*	*6234*	*2519*		*1696*	*6234*	*2519*	
Federal UI status												
All states (n=45)	0.241	0.260	0.220		-0.027	0.006	0.008		0.260	0.234	0.294	
Early cut-off (n=19)	0.238	0.256	0.212		-0.042	0.016	0.010		0.243	0.239	0.273	
Continuous (n=26)	0.250	0.271	0.244		0.005	-0.020	0.003		0.298	0.220	0.344	

Notes: Estimates are weighted using CPS sampling weights.

Table A2. Effects of pre-pandemic UI strictness on change in reemployment quality, from before to after federal UI benefits started

Outcome	1: Change in log occupational wage (%)		2: Probability of movement up one wage decile (pp)	
All states	-0.022	-0.031	-0.037	-0.069
Index (Quits, NS Denials, Replacement)				
0 strict	0.008	-0.004	-0.045	-0.084
1 strict	-0.013	-0.023	0.011	-0.021
Difference (pp)	-0.020	-0.019	0.056	0.063
2 strict	-0.039	-0.048	-0.076	-0.095
Difference (pp)	-0.046	-0.043	-0.030	-0.012
3 strict	-0.037	-0.043	-0.061	-0.088
Difference (pp)	-0.045	-0.038	-0.015	-0.005
State and month FE	No	Yes	No	Yes
R-squared	0.163	0.169	0.070	0.079
Observations	7118	7118	7118	7118
All states	-0.049	-0.039	-0.041	-0.070
Recipiency				
Stricter	-0.078	-0.065	-0.076	-0.080
Less strict	-0.023	-0.017	-0.007	-0.051
Difference (pp)	-0.055 **	-0.048	-0.069 **	-0.030
State and month FE	No	Yes	No	Yes
R-squared	0.162	0.169	0.068	0.078
Observations	7118	7118	7118	7118
All states (n=45)	-0.031	-0.033	-0.029	-0.079
Federal UI status				
Early cut-off (n=19)	-0.071	-0.079	-0.090	-0.106
Continuous (n=26)	-0.016	-0.015	-0.005	-0.060
Difference (pp)	-0.055 **	-0.063 **	-0.085 ***	-0.046
State and month FE	No	Yes	No	Yes
R-squared	0.163	0.171	0.067	0.077
Observations	6147	6147	6147	6147

*p<.10, **p<.05, ***p<.01

Notes: Estimates shown are average marginal effects. For the first outcome, and for any given level of pre-pandemic strictness, values reflect how the percentage change in log occupational wages in the first six months of active federal UI benefits (1), compares with the change in the six months prior (0). The differences in the values, in terms of strictness, are in units of percentage points. For the second outcome, and for any given level of pre-pandemic strictness, results reflect the percentage-point change in the probability of movement upward one or more occupational wage deciles in the first six months of active federal UI benefits (1), compared with the six months prior (0). Results are weighted using CPS sampling weights. Standard errors are clustered at the state level.