# Job Search, Wages, and Inflation<sup>\*</sup>

Laura Pilossoph<sup>†</sup>

Jane M. Ryngaert<sup>‡</sup>

Duke University

University of Notre Dame

September 2023

#### Abstract

How do inflation expectations and inflation affect the job search behavior of workers, given that wages are typically set in nominal terms? Using pre-COVID data from the Survey of Consumer Expectations, we show that employed workers who expect higher inflation are more likely to search for jobs and are subsequently more likely to have a job-to-job transition over the short term. This behavior is consistent with the idea that people look for new jobs with higher real earnings, anticipating that real earnings at their current job will fall with inflation. We validate this hypothesis using new survey data collected via the Real Time Population Survey that asks individuals how their (i) current nominal earnings and (ii) search behavior would respond under various inflation scenarios. We then develop a model which can replicate these patterns, and use the model to study the partial equilibrium passthrough of shocks to inflation and inflation expectations to wages. We demonstrate that even short run increases in inflation expectations can affect job-to-job transitions via search on-the-job, and that the effects are larger at the lower end of the wage distribution. Together, the findings suggest that inflation dynamics may have played a role in generating the observed post-Covid wage compression.

JEL Codes: E31, J3, J6 Keywords: Inflation, Wages, Search, Wage-Price Spirals

<sup>&</sup>lt;sup>\*</sup>We thank our discussants Holly Dystra and Bart Hobijn. We also thank Samuel Arenberg, Rudi Bachmann, David Berger, Alex Bick, Adam Blandin, Jeffrey Campbell, Gregor Jarosch, Leonardo Melosi, Benjamin Pugsley, Michael Pries, and Eric Sims along with participants in the Bundesbank and Banque de France 2022 Joint Spring Conference, Bank of Finland and CEPR Joint Conference "Monetary Policy in the Post-Pandemic Era," I-85 Macroeconomics Workshop, Empirical Macroeconomics 2022 conference, NBER Monetary Economics Spring 2023 program meeting, CESifo Venice Summer Institute "The '70s are Back: Determinants and Implications of High Inflation," and the NBER Micro Data for Macro Models and The Micro and Macro Perspectives of the Aggregate Labor Market Summer Institute meeting for helpful comments. We thank Victoria Consolvo for excellent research assistance.

<sup>&</sup>lt;sup>†</sup>E-mail: pilossoph@gmail.com

<sup>&</sup>lt;sup>‡</sup>E-mail: jryngaer@nd.edu

# 1 Introduction

Theory suggests that inflation expectations prompt households to act in ways that can themselves generate further inflation. For example, when households expect higher inflation, the consumption Euler equation dictates that they should substitute intertemporally towards the present. This puts further upward pressure on prices today, making it harder for the central bank to achieve its inflation target. For this reason, monetary policymakers emphasize that keeping inflation expectations anchored can facilitate keeping inflation itself stable.

Households may also respond to elevated actual or expected inflation in the labor market via increased nominal wage demands, leading to self-perpetuating wage-price spirals. However, recent work finds that, unconditionally, people do not expect their nominal income to adjust more with higher inflation (Hajdini et al. 2022, Jain, Kostyshyna, and Zhang 2022). This is at odds with policymakers' belief that elevated inflation expectations create inflationary pressure in the labor market. How, then, does increased *expected* inflation - that arises with or without *realized* inflation - translate to nominal wage growth, if at all?

In this paper, we propose a potential channel for these wage pressures which works through search on-the-job. When households expect that their nominal wages will increase at a rate lower than their expected rate of inflation, they associate inflation with a decline in their real wages.<sup>1</sup> A natural way to combat this decline is to search for an outside offer to either use as leverage in wage renegotiations or to change jobs.<sup>2</sup> We provide novel empirical evidence that supports this mechanism and develop a theoretical model which is consistent with this behavior. The model illustrates that elevated inflation expectations that are met with or without concurrent movements in actual inflation can lead to increases in search effort, job-to-job transitions, and wage growth.

As a consequence of this finding, our framework provides a novel explanation for the postpandemic wage dynamics documented in Autor, Dube, and McGrew 2023, in which there was a compression of the U.S. wage distribution.<sup>3</sup> Our model suggests that while inflation erodes real wages throughout the wage distribution, the experience is worse for those at the bottom. Therefore, those at the bottom of the wage distribution respond relatively more to increases in inflation through increased search effort and job-to-job transitions, resulting in a compression of the distribution. These cross-sectional patterns of job transition dynamics are similar to those documented in Autor, Dube, and McGrew 2023.

<sup>&</sup>lt;sup>1</sup>Hajdini et al. 2022 theorize that households' perception of this decline causes them to view high inflation as a source of financial hardship.

<sup>&</sup>lt;sup>2</sup>Recent survey evidence suggests that job search is a common way that workers respond to the financial hardship posed by inflation. https://news.gallup.com/poll/400565/inflation-causing-hardship-majority. aspx?mod=djemRTE\_h.

<sup>&</sup>lt;sup>3</sup>Autor, Dube, and McGrew 2023 finds compression in the aggregate wage distribution due to movements up the frictional wage distribution primarily by those at the lower end of the aggregate wage distribution.

We begin with an empirical investigation of the relationship between inflation expectations and job search behavior. Using data from the Federal Reserve Bank of New York's Survey of Consumer Expectations (SCE) from 2014-2019, we first provide cross-sectional evidence for a novel finding - that employed workers with higher inflation expectations are more likely to search for new employment. An employed worker with a one percentage point higher inflation expectation is 0.6 percentage points more likely to actively search for a job in the subsequent period. For context, roughly 14.9% of the employed sample reports active search. Higher inflation expectations also predict more time spent on search, with a one percentage point increase in expected inflation generating an additional 0.1 hours of search per week among the employed from an unconditional mean of 3.8 hours. These changes in search behavior indeed translate into job switches: employed respondents with higher inflation expectations are more likely to make a job-to-job transition within the next four months; a one percentage point higher inflation expectation is associated with an 0.2 percentage point increase in the probability of making a job-to-job transition over the next four months (unconditional mean - 3.9%). Higher inflation expectations do not predict future reported promotions at the same employer or the size of a respondents' change in salary. However, salaries do increase with job-to-job transitions and - to a lesser extent - with promotions, suggesting that inflation expectations influence wage growth through the decision to search and to select higher-earning career advancements.

The evidence from the SCE relies on cross-sectional variation in inflation expectations among individuals prior to the COVID-19 pandemic, before the historically high levels of inflation were realized in the United States. More generally, cross-sectional identification naturally poses endogeneity concerns as certain respondent characteristics may be associated with both higher inflation expectations and increased search intensity at the same time. We address these concerns in several ways.

First, we control for a host of respondents' demographic characteristics, labor market characteristics, and labor market expectations, and additionally present several robustness checks aimed at addressing the endogeneity concern. Second, we included new questions in the October 2022 Real-Time Population Survey (Bick and Blandin 2021) to assess the causal effect of inflation expectations on search and to provide empirical evidence during a high inflation period. We first collected respondents' inflation forecasts. We then provided respondents with a hypothetical level of inflation and asked each respondent for their (i) expected nominal earnings growth conditional on remaining at their current job and (ii) expected search behavior under the corresponding hypothetical inflation. All respondents answered these questions for two hypothetical levels of inflation: 2% and 10%. This survey design allows us to look at the differences in respondent expectations and planned behavior at different levels of expected inflation holding respondent characteristics and information sets fixed. We find that employed respondents on average expect similar nominal earnings growth conditional on remaining in their current job under both levels of inflation, meaning they expect lower real earnings growth under the higher level of inflation if they remain with the same employer. This corroborates the first part of our hypothesis: individuals perceive that their real wages will fall if they remain at their current job and inflation rises. We also find evidence for the second part of our hypothesis, that individuals will respond to this perceived real wage decline with on-the-job search. The share of employed respondents who would search for a new job under hypothetical 10% inflation is 5.8 percentage points higher than the same share under hypothetical 2% inflation. The magnitude of this effect is strikingly in line with the size of the effect estimated cross-sectionally in the SCE data.

What do these patterns imply for the macroeconomy? At the aggregate level, the propensity of the employed to search and the frequency of job-switching are closely linked to both wage growth and inflation (Faberman and Justiniano 2015, Moscarini and Postel-Vinay 2017, Karahan et al. 2017, Faccini and Melosi 2023). If elevated inflation expectations prompt the employed to maintain their real wage through on-the-job search - and this behavior itself leads to higher inflation - on-the-job search is an important mechanism to understand when studying the passthrough of inflation to wages as well as possible self-reinforcing wage-price spirals (Blanchard 1986).

To study this mechanism more formally, we introduce a model of on-the-job search (Burdett 1978, Christensen et al. 2005, Faberman et al. 2022) which formally integrates nominal wage rigidities for incumbent workers. In our framework, the exogenous distribution of real wage offers is fixed while nominal wages for stayers are rigid.<sup>4</sup> This means that nominal wages for job switchers will track closely with inflation, while stayers' real wages will decline with inflation.<sup>5</sup> Our newly collected data from the Real-Time Population Survey suggests that workers beliefs are consistent with this assumption; they perceive that their real wages at their current positions will decline more under higher inflation. Our model predictions are also in line with our reduced form evidence. First, the model predicts that workers are more likely to search for outside work when their inflation *expectations* are higher, as their perceived return to search is higher. Second, search effort will increase with *realized* inflation because of the standard relationship between real wages and search effort (Christensen et al. 2005): those at the lower end of the wage distribution have larger returns to search, as more received offers are wage-enhancing. Inflation erodes real wages for the currently employed but not wages in the offer distribution, therefore pushing up average search effort in the economy.

We calibrate the model to the pre-pandemic U.S. economy. Specifically, we allow for exogenous variation in inflation expectations to match the pre-pandemic cross-sectional dispersion of

<sup>&</sup>lt;sup>4</sup>Given our data, we do not model the effect of inflation on raises at the worker's current job. We explore this question in a companion paper, Pilossoph, Ryngaert, and Wedewer 2023.

<sup>&</sup>lt;sup>5</sup>One can allow for partial rigidity in stayer wages by assuming that the nominal wage rises with inflation with some probability. So long as the nominal wage for stayers is slower to adjust than the wage of new hires, the incentive to search in our model will be higher for workers with higher inflation expectations. We discuss the empirical underpinnings of this assumption at length in Section 4.

year-ahead inflation expectations. We further allow for there to be an empirically disciplined bias in worker expectations such that workers, on average, overestimate inflation, as is well documented in consumer expectations data (D'Acunto, Malmendier, and Weber 2023). We allow for infrequent wage re-indexing as in Calvo 1983 which is disciplined by the frequency of wage adjustments in the data (Grigsby, Hurst, and Yildirmaz 2021). The calibrated model delivers cross-sectional relationships between inflation expectations, search behavior, and job-to-job transitions that are consistent with our empirical findings.

We then use the calibrated model to explore how (i) shocks to the cross-sectional distribution of inflation expectations will transmit to the labor market and (ii) how shocks to inflation itself transmit to the labor market. First, we show that upward shocks to inflation increase job-to-job transitions and aggregate real wages by shifting the average search intensity of the economy upward. Since real wages fall and inflation expectations rise, both effects lead workers to search harder for new jobs. A 5 percentage point increase in inflation - an increase matching that of the pandemic-era increase - that occurs with a similar percentage point increase in inflation expectations, increases search effort by 1.6 percentage points, and the job-to-job transition rate by 0.3 percentage points. Importantly, we also find that increases in inflation expectations which are not accompanied by actual changes in inflation (pure expectations shocks) induce qualitatively similar job search dynamics of a quantitatively lower magnitude. This result suggests that even increases in short-run inflation expectations - which monetary policymakers will often tolerate as long as longer-run expectations remain stable - can have implications for the labor market and wage pressures.<sup>67</sup>

The model provides a natural link between inflation, inflation expectations, and search behavior, and this link operates more strongly at the bottom of the residual wage distribution. A simple extension of the model shows that this link is also more pronounced among workers at lower wage *levels*, which we also validate in our data.<sup>8</sup> Our framework therefore suggests a potential mechanism for the "unexpected compression" in real wages that occurred over the course of the COVID-19 pandemic and its aftermath. Autor, Dube, and McGrew 2023 find that real wage growth and job-to-job transitions were concentrated among workers in the lower portion of the aggregate wage distribution during this period, resulting in a reduction in 90-10 log wage inequality after 2019. While Autor, Dube, and McGrew 2023 point to market tightness

<sup>&</sup>lt;sup>6</sup>For example Jerome Powell, in August of 2021 stated, "Policymakers and analysts generally believe that, as long as longer-term inflation expectations remain anchored, policy can and should look through temporary swings in inflation. Our monetary policy framework emphasizes that anchoring longer-term expectations at 2 percent is important for both maximum employment and price stability."

<sup>&</sup>lt;sup>7</sup>Our model predicts that changes in longer-run inflation expectation will also increase search effort, but have a smaller effect. The gains from finding a new job are lower when inflation is expected to be permanently higher because the new wage will depreciate at the higher rate of inflation as well.

 $<sup>^{8}</sup>$ In the SCE data, relationship between expected inflation and the search of employed workers is stronger and more statistically significant among low household income and non-college educated workers. See Tables A-11 and A-12

as driving this behavior, our model offers an alternative, but potentially linked, explanation for these findings. Increases in expected and realized inflation during the pandemic may have prompted a slew of job-to-job transitions, primarily concentrated among workers at the lower end of the pre-Covid wage distribution.

## 1.1 Related Literature

There is a large literature exploring the link between inflation expectations and economic decision-making. Coibion and Gorodnichenko 2015, Coibion, Gorodnichenko, and Ropele 2020 show the link between firms' inflation expectations and their hiring, investment, and price-setting. The focus of the literature on consumer-decision making has been on spending decisions. For example, Bachmann, Berg, and Sims 2015, Coibion et al. 2023b, Duca-Radu, Kenny, and Reuter 2021, Burke and Ozdagli 2021, D'Acunto, Hoang, and Weber 2016, D'Acunto, Hoang, and Weber 2018, and Ryngaert 2022, explore the relationship between expected inflation and purchases of durables. Dräger and Nghiem 2021, Crump et al. 2022, Ichiue and Nishiguchi 2015, and Ryngaert 2022 consider the relationship between expected inflation via the consumption Euler equation. We contribute to this literature by characterizing the relationship between inflation expectations and household labor market decisions - particularly the decisions to engage in on-the-job search and to transition from one employer to another.

To the best of our knowledge, ours is the first paper to use consumer surveys to address the link between expected inflation and the *realized* search and labor market transitions of employed workers.<sup>9</sup> Hajdini et al. 2022 investigate the low passthrough of inflation expectations to income growth expectations and propose a model that suggests this arises from nominal wage rigidities due to infrequent nominal wage negotiation. They ask consumers about their labor market plans and establish a link between expected inflation and the likelihood a consumer assigns to searching for a new, higher-paying job. Their paper provides evidence for a link between inflation expectations and planned labor search; our paper confirms this link by using search and transition *outcomes* to show that workers with higher inflation expectations are in fact more likely to search and to change jobs. In their model, Hajdini et al. 2022 assume that higher inflation expectations prompt those who cannot negotiate to search and generate new offers, creating upward pressure on nominal wages, which they model in a reduced-form way. We develop a model in which rigidity in nominal wages incentivizes search and subsequent job-to-job transitions when workers anticipate inflation. Bostanci, Koru, and Villalvazo 2022 posit a link between shocks to *realized* inflation and job-to-job transitions. Baek and Yaremko 2023 shows that higher wage inflation expectations are associated with higher reservation wages and preference for increased hours in an experimental labor market through Amazon's MTurk.

<sup>&</sup>lt;sup>9</sup>Theoretical work embedding nominal considerations into search models includes Blanco et al. 2022 and Moscarini and Postel-Vinay 2022.

Our model is consistent with the former relationship between reservation wages and inflation expectations; since high inflation expectations imply a lower expected real wage, workers are willing to accept lower outside offers which still improve their earnings position.

We further contribute to an empirical literature characterizing on-the-job search and its importance in the macroeconomy. Faberman et al. 2022 use a supplement of the Survey of Consumer Expectations to characterize on-the-job search. They describe not only the ways in which the employed search for new work, but also their effectiveness in yielding offers and wage increases. Our paper uses data from the same survey and adds to theirs in that we characterize the link between the search behavior of employed workers and respondents' inflation expectations. Other papers also look at the relationship between on-the job search, job-to-job transitions, and inflation, but with causality running in the other direction. Faccini and Melosi 2023 model the rate of on-the-job search as important for wage growth via the effect it has on the intensity of inter-firm competition for workers. Karahan et al. 2017 use cross-state variation to establish a link between the job-to-job transition probability and wage growth. Our emphasis is instead on how expected and realized inflation cause changes in on-the-job search.

Our paper relates to Moscarini and Postel-Vinay 2022 as the two papers together speak to the possibility of a wage-price spiral via on-the-job search. Moscarini and Postel-Vinay 2022 considers the effect of job-to-job transitions and raises prompted by counteroffers and finds that the latter predicts future wage inflation while the former reallocates workers to more productive jobs. Our work is complementary in two ways. First, we show that the expectation of inflation - especially when generated by realized inflation - can increase the rate of job-to-job transitions via an increase in on-the-job search. That is, inflation itself can affect the rate at which workers climb the job ladder. Second, Moscarini and Postel-Vinay 2022 characterize job transitions as productive wage increases (since all movements are dictated by match surplus), limiting the inflationary consequences of the on-the-job search mechanism.<sup>10</sup> We instead allow for job changes to be "lateral," possibly occurring with no productivity increase. In companion work (Pilossoph, Ryngaert, and Wedewer 2023), we consider the effect of price inflation on both transitions and on-the-job raises, and show that both of these changes in wages increase as inflation increases on-the-job search.

The possibility that realized and expected inflation may generate reallocative on-the-job search links our paper to the literature on inflation as "grease for the wheels" of the labor market. Inflation provides "grease for the wheels" when negative productivity shocks make real wage cuts desirable. When nominal wages are often downwardly rigid, positive inflation can deliver a real wage cut in the absence of a nominal wage change (Tobin 1972). Our paper considers upward rigidity in nominal wages, particularly differing degrees of rigidity between job

<sup>&</sup>lt;sup>10</sup>This is also consistent with Gertler, Huckfeldt, and Trigari 2020 who find that the apparent upward flexibility in job changer wages - which leads workers in our model to search when they expect inflation - is reduced by controlling for improvements in match quality.

switchers and stayers. We argue that workers perceive wages for switchers to be more flexible than wages for stayers and that this perceived difference is larger when expected inflation is high. Hazell and Taska 2023 find that wages for switchers are downwardly rigid in downturns and upwardly flexible in expansions, even holding the job level constant. This is consistent with our speculated mechanism, though it does not address *differential* upward flexibility in nominal wages between switchers and stayers. Other work argues that the apparent flexibility of switcher wages is an artifact of the changing composition of switchers with macroeconomic conditions. Gertler, Huckfeldt, and Trigari 2020 find that upward flexibility in wages reflects primarily improvements in match quality while Grigsby, Hurst, and Yildirmaz 2021 find that wages among lateral switchers show similar flexibility to those of stayers. These papers do not, however, consider the relative flexibility of stayer and mover wages under high inflation. There are plausible mechanisms that could create differential flexibility, including the timing of negotiations. Furthermore, the relative flexibility of switcher wages may increase when the slope of the Phillips Curve steepens, as Cerrato and Gitti 2023 show occurred after the pandemic. If upwardly flexible wages come primarily from increased productivity or search due to inflation matches people predominantly to better jobs, then expected and realized inflation can spur productivity in the labor market by driving the currently employed to find better matches.<sup>11</sup>

Finally, this paper is linked to recent work which takes expectations seriously when thinking about search behavior. Conlon et al. 2018 incorporate information frictions into an otherwise standard model of search on-the-job, and discipline their model with data on labor market expectations from the same data set we use. Mitra 2023 considers the effect of expectations in the Survey of Consumer Expectations - particularly as they relate to optimism or pessimism on search. He and Kircher 2023 use the Survey of Consumer Expectations to examine learning about one's subjective job finding probability and model the interaction of these expectations, learning, and search. In these papers- as is true in many models of search in the labor market - no distinction is made between real and nominal wages. Our model makes an explicit distinction between real and nominal wages and we focus here on a new set of expectations which are important for job search behavior - inflation expectations.

The paper proceeds as follows. Section 2 describes data from the Survey of Consumer Expectations and presents the results linking on-the-job search and job-to-job transitions with higher inflation expectations. Section 3 discusses our newly-collected data and provides additional evidence for increased inflation expectations precipitating on-the-job search. Section ?? describes a model in which search is endogenous to inflation expectations and demonstrates a counterfactual in which the economy transitions from near-target rate inflation to high inflation. Section 6 concludes.

 $<sup>^{11}</sup>$ An extension of our framework in the spirit of Burdett and Mortensen 1998 would generate some job changes that increase productivity, though we have not yet integrated such an extension.

## 2 Evidence from the Survey of Consumer Expectations

The Survey of Consumer Expectations is a representative monthly survey conducted by the Federal Reserve Bank of New York. Households rotate through the survey, staying in the sample for up to 12 months. The survey includes questions about households' macroeconomic expectations as well as their demographic characteristics, financial circumstances, and employment situations. In addition to the core survey, which is conducted every month, we use data from the ad hoc labor market survey conducted in March, July, and November of each year such that respondents may participate in up to three of these supplemental surveys per year. This survey includes more detailed information about the respondent's current employment situation and job satisfaction, job search behavior, and expectations regarding the likelihood of receiving offers and making and labor market transitions. Our sample extends from June 2014 to November 2019. The limited timing of the sample is driven by the COVID-19 pandemic, as well as the availability of the labor market survey, which contains the search and labor market realizations. Though data from the labor market survey is available into early 2021, we omit the early phases of the pandemic as shutdowns and restrictions may have made it difficult for people to search for work.<sup>12</sup>

#### 2.1 Data

Each time respondents participate in the Labor Market supplement, they are asked if they have looked for work or - in the case of employed respondents - for *new* work in the last four weeks. Employed respondents are further asked if they have been searching in order to leave their current job or for supplemental work. Search is an indicator equal to 1 if the respondent reports searching in the last four weeks. In the case of employed respondents, we classify searchers as those looking for work that would replace their main job.<sup>13</sup> Respondents who answer that they have searched in the last four weeks are asked more detailed questions, including the number of hours spent searching in the seven days.

Panel A of Table 1 gives the proportion of employed and non-employed respondents reporting search. Some non-employed respondents will be happy with their current labor market situation (i.e. retirees, students, caretakers) and will therefore have little reason to search. We split the non-employed sample into those who report that they were not working, but would like to work (Q10=3) and those not working who have not specifically indicated a desire to work.<sup>14</sup> The table shows that 14.9 percent of the employed sample reports recent search for new work, with

<sup>&</sup>lt;sup>12</sup>The results are robust to including the COVID-19 period. See Tables A-8.

<sup>&</sup>lt;sup>13</sup>We extend our analysis to include those looking for supplemental work in Appendix Table A-6.

<sup>&</sup>lt;sup>14</sup>Non-employed persons are defined as unemployed if they have actively searched for work in the last four weeks. Because the definition of unemployment is search-based, it does not make sense to separate the sample into unemployed and out of the labor force.

an additional 5.6 percent searching for additional work. Among the non-employed sample, 12.3 percent searched, but this number increases to 65.9 percent when we restrict the sample to those who report wanting to work. Non-employed searchers spend more time searching than their employed counterparts. Panel B describes the intensive margin of search. Conditional on reporting search, the employed spent an average 3.8 hours searching while the non-employed spent 10.9 hours.

Search among both the employed and the non-employed does lead to subsequent labor market transitions. In the core survey, employed respondents report if they are at the same employer, at the same employer with new duties and responsibilities, or at a new employer. Panel C of Table 1 gives the proportion of respondents who report being at a new employer since their last job market survey. This sample is smaller as it requires participation in two consecutive job market surveys - or a survey tenure of at least five months. Job-to-job transitions are rare - with 3.4 percent of employed respondents reporting one. A larger proportion of those who are not employed and report wanting to work transition out of unemployment between surveys - 25.9 percent. Transitions are more common among those who reported search in the prior labor market survey - 13.1 percent of the employed report a job-to-job transition while 30.5 percent of those not employed and wanting to work begin work.

The core survey, conducted every month, collects detailed data on the inflation expectations of households, over both short-run (the next twelve months) and medium-run (over the twelve months beginning two years from the survey date) horizons. Households provide their inflation expectations in two formats, first as a point estimate and then as probabilities that inflation may fall within a set of ranges. The probabilistic forecast gives information on the households' inflation uncertainty. They are first asked:

What do you expect the rate of  $[inflation/deflation]^{15}$  to be **over the next 12 months**? Please give your best guess. (Q8v2)

Respondents provide a number for this question. They also provide probabilistic forecasts over possible outcomes for inflation:

Now we would like you to think about the different things that may happen to inflation over the **next 12 months**. We realize that this question may take a little more effort. (Q9)

In your view, what would you say is the percent chance that, over the next 12 months...

The respondent then assigns probabilities to a set of ranges for the rate of inflation or deflation. The ranges are a rate of inflation 12% or higher, between 8% and 12%, between 4% and 8%, between 2% and 4%, between 0% and 2%, and the same set of bins for the rate of deflation.

As our measure of inflation expectations, we use the implied mean of a distribution fit to

<sup>&</sup>lt;sup>15</sup>This selection is based on the answer to a previous question.

the one-year density forecast. The distribution mode is assumed to be equal to the respondent's point forecast as in Ryngaert 2023. Aside from this assumption, the distribution is fit in the same way as in Engelberg, Manski, and Williams 2009 and Armantier et al. 2017. We exclude inflation expectations for which the point estimate falls outside the range of the density forecast as in this case the two forecasts are inconsistent with one another. We also winsorize inflation expectations at the 5% level by month. The distribution of responses appears in Figure 1. As is common in consumer surveys (D'Acunto, Malmendier, and Weber 2023), expectations exhibit high cross-sectional dispersion and are, on average, biased above realized inflation. We allow for these features of expectations in our model. All subsequent analysis is survey weighted.

Table 2 gives the average short run inflation expectation in the month before the labor market survey by employment status and search categories Employed respondents have lower inflation expectations on average; they expect 3.5 % inflation while the non-employed expect 3.8% inflation. Employed searchers have higher inflation expectations than employed non-searchers, with the average expectation among searchers being 3.7 and the average expectation among non-searchers being 3.4. There is no statistical difference in the average inflation expectation between unemployed respondents who search and those who do not. Among searchers, employed searchers that spend the median number of hours or more searching have higher inflation expectations ( $\bar{E}[\pi] = 3.8$ ) than those who search the less than the median number of hours ( $\bar{E}[\pi] = 3.3$ ). The corresponding difference for the non-employed is not statistically significant.

## 2.2 Job Search

In this section, we discuss the link between inflation expectations and the search of employed workers. We show that currently employed respondents with higher inflation expectations are more likely to search for jobs and to spend more time searching.

Denote search as an indicator variable  $search_{i,t+1}$ , where a value of 1 means that a worker chooses in period t to search over the next approximately four-week period ending in t + 1. We assume that the decision to search is based on an underlying value of search,  $v_{i,t}$  which depends on both respondent characteristics and inflation expectations in time t:

$$v_{i,t} = \alpha E_{i,t}[\pi] + \gamma \mathbf{x}_{i,t} + \epsilon_{i,t} \tag{1}$$

where  $\mathbf{x}_{i,t}$  is a vector of controls that may include respondents' demographic characteristics, labor market expectations, and other macroeconomic expectations. These controls are described in detail in Appendix B. The respondent will choose to search if the benefit of search exceeds some cost, c:

$$search_{i,t+1} = \begin{cases} 1 & if \quad v_{i,t} \ge c \\ 0 & else \end{cases}$$
(2)

We estimate the relationship between inflation expectations and the extensive margin of on-the-job search with the following probit regression:

$$search_{i,t+1} = \beta E_{i,t}[\pi] + \gamma \mathbf{x}_{i,t} + u_t + \epsilon_{i,t}$$
(3)

We would like to identify the causal effect of inflation expectations on search. As the variation in inflation expectations is across respondents, we need to address potential sources of endogeneity - factors that cause respondents to have both higher inflation expectations and to search more. We therefore include a number of controls,  $\mathbf{x}_{i,t}$ , for demographic characteristics such as gender, age, education, household income, census region, detailed employment status, marital status, and whether or not the respondent is a parent. The term  $u_t$  is a survey date fixed effect; this controls for potential time-series factors that influence both inflation expectations and search propensities. We also include tenure fixed effects in line with Kim and Binder 2023 who show that forecasts tend to improve over the course of a respondent's survey tenure.

Workers are likely to search for a number of reasons, including optimism or pessimism about the job market, which may be correlated with their inflation expectations. There is growing evidence that households view inflation as stagflationary (Kamdar 2019, Coibion et al. 2023b, Coibion, Gorodnichenko, and Ropele 2020, and Candia, Coibion, and Gorodnichenko 2020). They may then believe that higher inflation signals increased job loss risk and difficulty in job finding. This suggests that households with higher inflation expectations might search due to employment insecurity rather than inflation itself. Alternatively, respondents may expect both high inflation and a large degree of labor market tightness. In this case, they may search not due to inflation itself, but because they anticipate many opportunities and favorable bargaining power for workers. Accordingly, we include various measures related to the individuals expectations about their overall labor market prospects. These include the respondent's expected probabilities of job loss (Q13new), of finding a new job in the event of unemployment (Q22new), of receiving an outside offer (OO2e/OO2u), and their expected nominal earnings growth conditional on staying at the same employer and working the same number of hours  $(Q24^{16})$ . Because we are interested in the effect of expectations on future search, we use the expectations from the month prior wherever possible.<sup>17</sup> Some questions about labor market expectations are included only in the labor market supplement and therefore not available at a one-month lag. For these variables we use the contemporaneous expectation.

 $<sup>^{16}</sup>$ This question is elicited as both a point forecast and a histogram forecast. We use the mean implied by the subjective density function as proposed by Ryngaert 2023 and winsorize at the 5% level by date.

<sup>&</sup>lt;sup>17</sup>This means that people who join the survey in a Labor Market Survey month are excluded.

Table 3 reports the coefficients and marginal effects from Equation 3 estimated separately for the employed and the non-employed. Higher inflation expectations are positively correlated with the search propensities of employed workers. A one percentage point increase in expected inflation is associated with an increase in the probability that a worker will search by 0.57 percentage points. An increase in expected inflation does not have the same effect on the job search behavior of the non-employed. The labor market expectations of respondents have intuitively sensible effects. As the subjective probability of receiving an offer in the near future and the expected number of offers increase, so does the likelihood of search. Employed respondents are further more likely to search if they anticipate greater job loss risk; a 1 standard deviation change in the subjective probability of job loss results in a 2.3 percentage point change in the likelihood of search. Notably, the marginal effect of a one percentage point increase in expected nominal earnings growth is of similar magnitude and opposite sign as the effect of expected inflation. This is consistent with the effect of a percentage point increase in expected inflation on search having the same effect of a percentage point reduction in the expectated real wage, ceteris paribus. We construct nominal expected earnings growth and expected inflation into one measure of expected real wage growth. Table A-1 shows the results of Equation 3 substituting expected real wage growth for inflation. The marginal effect on real wage growth indicates that a one percentage point reduction in the expected real wage increases the likelihood of search by 0.54 percentage points. This is in line - both in magnitude and direction - with the estimated effect of expected inflation.

Search can also increase on the intensive margin. Allow  $hours_{i,t+1}$  to denote the amount of time a searcher has spent searching in the last week. We run the following regression of hours on expected inflation and controls:

$$hours_{i,t+1} = \beta E_{i,t}[\pi] + \gamma \mathbf{x}_{i,t} + u_t + \epsilon_{i,t} \tag{4}$$

Search intensity conditional on active search also increases - albiet modestly - with inflation expectations. Table 4 shows a link between expected inflation and the intensive margin of search from the regression Equation 4. This suggests that a one percentage point increase in expected inflation corresponds with an additional 7 minutes of search per week (mean = 3 hours, 47 minutes). Faberman et al. 2022, using their annual survey in the SCE, show the relationship between various margins of search and real wages, and find a negative elasticity of search with respect to real wages between -30% for hours and -50% for applications.

We present a number of robustness checks in Appendix A. While our results show a strong correlation between inflation expectations and the decision to search on the job, we may worry about reverse causality. That is, perhaps inflation is not driving workers to search, but rather searching is causing workers to expect higher inflation. For example, workers may receive nominal offers higher than their current wages and attribute this to an increase in the price level.<sup>18</sup> If higher inflation expectations cause search rather than the other way around, we should also expect that respondents who revise their forecasts up in time t will be more likely to initiate search. Table A-2 re-estimates Equation 3 using revisions to inflation expectations in time t in place of  $E_{i,t}[\pi]$ . The results show that revisions to expected inflation are positively correlated with search among the employed, but not among the non-employed. Table A-3 presents the results of extending Equation 3 to include various lags and leads of inflation expectations to clarify the timing of the expectations that matter for on-the-job search.<sup>19</sup> The table shows that, regardless of the lags and leads included in the regression,  $E_{i,t}[\pi]$ , the inflation expectation at the outset of the search period, remains the expectation important for predicting search in the four weeks spanning from t to t + 1.<sup>20</sup>

Table A-5 shows that these findings are robust to excluding some or all controls. Table A-6 includes employed workers looking for supplemental work and recovers a similar effect of inflation expectations on search. Table A-7 splits the non-employed into those who report that they would like to work and other non-employed. We find a positive but not statistically significant coefficient on inflation expectations for those wanting to work and a slightly significant negative effect of inflation expectations on the search of non-employed respondents who do not report wanting to work. Table A-8 replicates Table 3 including data from the COVID-19 pandemic period and shows a similar effect of expected inflation on search. Table A-9 presents the results in a sample including data from the Job Search supplement conducted each October and shows the results are similar when we include these data points.<sup>21</sup>

Our hypothesis is that employed workers search when they expect higher inflation because wages are set nominally, so they anticipate a real wage decline if they do not take any action. This mechanism need not affect all workers uniformly. For example, workers who have "automatic" wage adjustments should be less likely to search in response to a rise in expected inflation relative to those who do not. Consistent with our hypothesis, we find that - in the SCE - the effect of inflation expectations on search is either not present or largely reduced for those more likely to be union members. These workers are more likely to have either pre-existing cost-of-living

<sup>&</sup>lt;sup>18</sup>The timing of the data collection alleviates some of this concern. The inflation expectation included in the regression is collected the month before the respondent answers the search questions and therefore prior to the start of the four-week search period.

<sup>&</sup>lt;sup>19</sup>Table presents the same for the non-employed.

<sup>&</sup>lt;sup>20</sup>We may still be concerned that this expectation may be a mid-search expectation, particularly if the respondent has been searching for more than four weeks. However, the labor market supplement is conducted once every four months, limiting our ability to tell how long a respondent has been searching. Even among workers who have searched for longer than four weeks, the relevant expectation for a worker's decision to search in t is  $E_{i,t}[\pi]$ .

<sup>&</sup>lt;sup>21</sup>While including this additional supplement expands the sample size, this supplement does not contain all of the labor market expectations that we include in our regression. We also use the Job Search supplement to pair consecutive month observations from the November Labor Market Supplement and exclude prior searchers from the regression. Table A-10 shows that inflation expectations predict search among new searchers. For these respondents,  $E_{i,t}[\pi]$  is not a mid-search expectation because they do not begin search until the month between t and t + 1.

provisions in their contracts or to be protected by collective bargaining agreements to make wage demands for them. Similarly, employees who are more satisfied with their jobs or who have non-wage benefits that increase their attachment to their employers will be more willing to tolerate real wage reductions and therefore less likely to search due to anticipated increases in the price level. Indeed, we find that the relationship between expected inflation and search is weaker among those reporting high satisfaction with non-pecuniary aspects of their jobs, as well as employees with a pension benefit. This supports the idea that workers who are relatively more willing and/or incentivized to remain at their current employer will be less affected by the proposed channel. Appendix C discusses this in detail.

### 2.3 Job-to-Job Transitions

Consumers with higher inflation expectations may be more likely to search for work - but does this search lead to actual changes in jobs? In this section, we are interested in whether higher inflation expectations predict job-to-job transitions among employees. Households will transition jobs as they receive offers whose value dominates that of their current job. Some received offers will be dominated by the respondents current wage or met with a counteroffer from the current employer. We anticipate, though, that some offers will be accepted.

Define a transition for an employed worker as:

$$Job-to-Job Transition_{i,t+5} = \begin{cases} 1 & if new job between t+1 and t+5 \\ 0 & else \end{cases}$$
(5)

We first estimate a probit regression in which the outcome variable is a job-to-job transition between labor market survey waves:

$$Job-to-Job Transition_{i,t+5} = \beta E_{i,t}[\pi] + \gamma \mathbf{x}_{i,t} + u_{t+5} + \epsilon_{i,t+5}$$
(6)

This equation includes the dependent variable of interest,  $E_{i,t}[\pi]$ , or the inflation expectation at the beginning of the search period ending in t + 1. The first two columns of Table 5 Panel A show the estimates of Equation 6. Expected inflation has a small, but positive and significant impact on the probability of a job-to-job transition. The speculated mechanism for this effect is the propensity of consumers with higher inflation expectations to search on the job. As they search, offers should arrive more frequently. A searcher is therefore more likely than a non-searcher to draw an offer that dominates her current wage. Accordingly, the third and fourth column of Table 5 show the results of Equation 6 when we include the proposed mechanism, *search<sub>i,t+1</sub>*, as a control variable. The coefficient and marginal effect on inflation are no longer significant, with the effects of inflation expectations operating through the *search<sub>i,t+1</sub>* variable, which has a strong positive and significant effect on the likelihood of a labor market transition. Searchers are 4.9 percentage points more likely to make a job-to-job transition than non-searchers.

We present results on the relationship between inflation expectations and reporting a promotion - at the same employer with different duties and/or title - as well as the relationship between inflation expectations and nominal compensation changes in Appendix D. We find that higher inflation expectations are not associated with either promotions or nominal wage increases. We interpret these results to mean that inflation expectations alone do not drive change in earnings. Workers who expect higher inflation do not automatically receive larger changes in nominal compensation than their counterparts who expect lower inflation. Rather, these workers have to undertake actions to increase their wages. While we see inflation expectations driving search, search itself does not appear to generate large changes in compensation. Workers obtain these changes by getting promoted by their current employer or by transitioning to a new employer. As workers with higher inflation expectations are more likely to change jobs, but not to report receiving a promotion, we posit that when presented with the choice between a promotion and a change in employer, searchers who anticipate higher inflation choose the option that provides the larger change in nominal compensation. This implies that search due to inflation does not influence wage growth via counteroffers. Interestingly, Autor, Dube, and McGrew 2023 finds that the majority of the wage growth seen post-COVID and the accompanying inflation did not arise from offers triggering renegotiation with the current employer but through job-to-job transitions and movements up the frictional wage distribution.

# 3 Evidence from the Real-Time Population Survey

Thus far, the evidence we have presented is cross-sectional - it relies on variation across individuals in inflation expectations. In order for the effects of inflation expectations on search to have a causal interpretation, we must believe that - after controlling for observables - differences in inflation expectations are approximately exogenous. This section presents additional survey evidence in which we ask each respondent to consider two different hypothetical inflation levels and their earnings expectations and planned actions at these levels of inflation. This provides an alternative source of variation in inflation expectations at the level of the individual respondent which holds constant the respondent's demographic characteristics and current labor market experiences. We can then measure differences in earnings expectations and planned labor market actions when expected inflation is near the Federal Reserve's target and when it is above the target. Hypothetical values of macroeconomic variables have been used elsewhere in the literature to capture the response of expectations to changes in these variables, holding the rest of a respondent's information set constant (Roth, Wiederholt, and Wohlfart 2022, Andre et al. 2022, Coibion et al. 2023a).  $^{22}$ 

These questions were administered as a part of the Real-Time Population Survey Bick and Blandin 2021 in October of 2022.<sup>23</sup> The sample collection targets the approximate demographic breakdown of the CPS and includes 1,054 employed respondents.<sup>24</sup> Prior to collecting nominal earnings growth expectations and planned decisions at different hypothetical levels of inflation, we collect respondents inflation expectations so that we can replicate our cross-sectional analysis on these data. We elicit unconditional inflation expectations by asking:

By how much do you expect prices in the overall economy to change (the inflation rate) over the next 12 months)? Please give your best guess.

We winsorize these answers at the 5% level and present the distribution of answers in Figure 2. The average inflation expectation among employed respondents is 7.5% and 9.1% among non-employed respondents. This is higher than the average expectation of respondents in the SCE in the pre-COVID period, but also tracks with the increase in inflation since 2021.

### 3.1 Earnings Growth with Current Employer

Expected increases in the price level only reduce the the expected real wage when the expected rate of price inflation is expected to exceed the growth in nominal wages. We anticipate that respondents will search due to inflation if they perceive that their compensation at their current job will grow slowly relative to the general level of prices. To see if workers do perceive nominal earnings growth in these terms, we asked respondents about their anticipated nominal earnings growth under different levels of inflation. Specifically, we asked:

Suppose prices in the overall economy were to increase by [2, 10] % in the next 12 months. If you were to remain at your current main job, by what percent would your employer increase your usual earnings before taxes and other deductions. Please provide your best guess.

Each respondent answers the question under both levels of inflation. We would like to know how the average respondent changes their expected earnings growth going from low to high inflation. Accordingly, we calculate the difference in expectations under 10% inflation and under 2 % inflation and plot the distribution in Figure 3. The average difference between a respondent's expected earnings growth under 10% inflation and under 2% inflation is 0.72

<sup>&</sup>lt;sup>22</sup>Roth, Wiederholt, and Wohlfart 2022 provide survey respondents with monetary policy vignettes in which they propose a change in the federal funds rate as well as the reason for the change (outlook or composition of the FOMC, etc.) and track the change in expectations across scenarios. Andre et al. 2022 ask respondents to consider hypothetical vignettes about different exogenous shocks to the macroeconomy; respondents first consider a baseline scenario and then consider a shock scenario. Coibion et al. 2023a ask respondents to consider hypothetical values of short-run inflation and elicit their corresponding medium-run expectations to assess respondent's understanding of average inflation targeting.

 $<sup>^{23}</sup>$ The survey ran from October 17-21, 2022.

<sup>&</sup>lt;sup>24</sup>See Bick and Blandin 2021 Appendix A for a more detailed discussion of the RPS.

percentage points and the median difference is 0 (compared to an 8 percentage point difference in inflation). Furthermore, the modal difference in responses is 0 and we do not see evidence that expected earnings growth is systematically higher under high inflation than under low inflation.<sup>25</sup> This means that respondents do not anticipate changes in their current nominal compensation to keep pace with inflation and is consistent with the findings of Hajdini et al. 2022 who find that U.S. households anticipate low passthrough of price inflation to wage inflation.

### 3.2 Job Search

To see if workers respond to these anticipated reductions in real earnings, we also asked respondents what measures they would take under different levels of inflation. These actions included various labor market actions that would allow workers to increase their nominal wages: Suppose prices in the overall economy were to increase by [2, 10] % in the next 12 months. Which of the following actions would you take? Please check all that apply.

- Ask for a raise at my current job.
- Search for a new job to replace my current job.
- Search for additional work.

Figure 4 shows the difference in the share of respondents who would undertake a certain action under 10% inflation and the same share under 2% inflation along with 95% confidence intervals. Respondents are significantly more likely to search for new or additional work under 10% inflation, they are also more likely to ask for a raise, though this change is not statistically significant.<sup>26</sup> Under 2% inflation, the 11.6% and 25.6% of respondents would search for new and additional work, respectively. These shares increase by 5.8 and 4.9 percentage points. The share of respondents who would ask for a raise increases 3.1 percentage points, from 18.0% of the sample under lower inflation to 20.1% of the sample under the higher value of inflation.

We first conduct a probit analysis similar to that in Equation 3 with "Search for a new job to replace my current job" as the dependent variable. As respondents answer this question under two different hypothetical levels of inflation, we include each individual in the sample twice, controlling for the hypothetical. Specifically, we estimate:

$$search_i^{RPS} = \beta E_i[\pi] + \gamma \mathbf{x}_i + \mathbf{1}(\pi = 10) + \epsilon_i \tag{7}$$

 $\mathbf{x}_i$  is a vector of controls for employment type, gender, age, race, Census region, marital status, relationship status, and number of children. The indicator variable  $\mathbf{1}(\pi = 10)$  is equal to 1 if

 $<sup>^{25}</sup>$ We find in the SCE that, on average, earnings growth expectations at the current job do not increase with respondents' inflation expectations. See Figure A-1 to see that the expected rate of earnings growth is roughly flat with respect to expected inflation.

<sup>&</sup>lt;sup>26</sup>Note that asking for a raise does not mean the worker will get a raise.

the response was given under the high inflation hypothetical. The results appear in Table 7. The marginal effect on  $E_i[\pi]$  indicates that as a respondent's expected inflation increases by one percentage point, the probability of searching for a new job increases by 0.58 percentage points. The marginal effect on  $\mathbf{1}(\pi = 10)$  shows that respondents are 5.8 percentage points more likely to plan to search under the higher inflation scenario as shown in Figure 4.

These results imply that, holding respondent characteristics and information sets constant, workers are more likely to search for work under higher inflation. They also have consistent nominal earnings growth expectations across different levels of anticipated inflation. This means that they expect their real wages are declining in inflation. These fact will discipline our model.

## 4 Model

We now develop and analyze a simple model of on-the-job search (Burdett 1978) with endogenous search effort (Christensen et al. 2005, Faberman et al. 2022) that explicitly accounts for realized and expected inflation and integrates nominal wage rigidities. We then use the model to conduct simulations of worker behavior in response to exogenous movements in inflation and inflation expectations calibrated to match their dynamics during Covid.

Time is discrete. There is a measure 1 of ex ante identical workers of which  $n_t$  are nonemployed and  $e_t$  are employed at date t.<sup>27</sup> Workers have utility over consumption c, u(c), with u'(c) > 0 and u''(c) < 0. For simplicity, we assume there is no savings technology. Each individual i has some inflation expectation  $\tilde{\pi}_{it}$  (the rate of growth of the price level between t and t+1) at the beginning of date t, which may or may not correspond to the true level of inflation,  $\pi_t$ . Denote by  $n_t(\tilde{\pi})$  the mass of nonemployed workers with particular inflation expectation  $\tilde{\pi}$ ,  $e_t(\tilde{\pi})$  the mass of employed workers with particular inflation expectation  $\tilde{\pi}$ . We have the following identities:

$$\int [n_t(\tilde{\pi}) + e_t(\pi)] d\tilde{\pi} = 1$$
$$\int g_t(w|\tilde{\pi}) dw = 1 \quad \forall \tilde{\pi}$$

In every period, both employed and nonemployed workers choose their search effort  $s \in (0, 1)$ , taking as given the cost of search, c(s), with c'(s) > 0 and c''(s) > 0, their current inflation expectations  $\tilde{\pi}_{it}$ , and their current earnings. The probability of receiving an offer is a function of one's search effort and employment status. For the employed, the probability of receiving an

 $<sup>^{27}</sup>$  Throughout we will use unemployed and non-employed interchangeably. When we calibrate the model, we think of  $n_t$  as including unemployed only.

offer is  $\lambda_e + \lambda_e^s s$  and for the nonemployed it is  $\lambda_n + \lambda_n^s s$ ; the probability of receiving an offer is linearly increasing in search effort. Conditional on receiving an offer, real wage offers are drawn from an exogenous distribution F(w) which is bounded by  $[\underline{w}, \overline{w}]$ . Once employed, workers earn their real wage w in the current period while unemployed workers earn their value of leisure b, which is in real terms.

To incorporate nominal wage rigidities, we assume that employed workers' nominal wages remain fixed while they remain at the same job, unless they receive a "reset" or "re-indexation" shock. The reset shock happens with probability  $0 \leq \gamma_1 \leq 1$ ; if the worker's wage is reset, it is reset to a fraction  $0 < \gamma_2 \leq 1$  of the worker's initial real wage,  $w^0$ . The parameters  $\gamma_1$  and  $\gamma_2$ thus reflect the degree of upward wage rigidity in the economy.<sup>28</sup> For example, if  $\gamma_1 = 1$  and  $\gamma_2 = 1$ , nominal wages are adjusted every period so that the workers' real wage remains flat, representing a cost of living adjustment (COLA). However, if either  $\gamma_1 \neq 1$  or  $\gamma_2 \neq 1$ , stayers' real wages may decline with tenure at the same job. This form of re-indexation is consistent with the expectations of workers we documented in Section 3. We assume that offered wages for new matches keep up with inflation; in other words, the real wage offer distribution remains constant.<sup>29</sup>Finally, workers separate exogenously into unemployment with probability  $\delta$ , and they may separate endogenously depending on how inflation actually evolves, as we describe below. The timing of the model is summarized in Figure 5.

#### 4.1 Expectations

An individual's inflation *expectations* at date t about  $\pi_t$  are given by:

$$E_{it}(\pi_t) = \tilde{\pi}_{it} = \bar{\pi} + \pi_t + \varepsilon_{it} \tag{8}$$

where  $\varepsilon_{it}$  is an independently and identically distributed (i.i.d.) normal random variable with mean 0 and variance  $\sigma_{\varepsilon}$  and  $\bar{\pi}$  represents the average deviation of inflation expectations ("mean bias") from the true level of inflation,  $\pi_t$ .<sup>30</sup> We think of  $\varepsilon_{it}$  as an idiosyncratic exogenous shock to short-run inflation expectations around a longer-run expectation so that all agents expect inflation next period to be  $E_{it}(\pi_{t+1}) = \tilde{\pi}_{it+1} = \mathbf{E}_t[\pi_{t+1}] + \bar{\pi}$  with certainty. When  $\bar{\pi} = 0$  and  $\sigma_{\varepsilon} = 0$ , expectations align with the full information rational expectations benchmark.

Workers have expectations over their wage adjustment following a re-indexation event that

 $<sup>^{28}</sup>$ Since we work with a constant inflation rate, real wages are only falling in our economy, and there is no notion of downward nominal rigidity.

<sup>&</sup>lt;sup>29</sup>As we discuss below, this is consistent with evidence in (Grigsby, Hurst, and Yildirmaz 2021) regarding average wage growth for movers relative to stayers, which is distinct from the (a)cyclicality of wage growth for movers relative to stayers.

<sup>&</sup>lt;sup>30</sup>Allowing  $\varepsilon_{it}$  to persist into longer-run expectations would be akin to modeling persistent differences in inflation expectations across people above the persistence coming through  $\pi_t$ , which we abstract from in this paper.

correlate with their inflation expectations and may deviate from the true degree of wage adjustment  $\gamma_2$ :

$$E_{it}\left(\gamma_{2}|\tilde{\pi}_{t}\right) = \tilde{\gamma}_{2}\left(\tilde{\pi}_{t}\right), \quad \tilde{\gamma}_{2}'\left(\tilde{\pi}_{t}\right) \leq 0$$

That is, expectations about re-indexation vary with inflation expectations, and those with higher inflation expectations may expect their wage to be adjusted upward by less.  $\tilde{\gamma}_2(\tilde{\pi}_t) = \gamma_2$  is consistent with full information rational expectations.

## 4.2 Perceived Values of Employment and Unemployment

The value of nonemployment to a worker with current inflation expectation  $\tilde{\pi}_t$  can be written as:

$$N(\tilde{\pi}_{t}) = u(b) + \max_{s \in (0,1)} -c(s) + \beta [\lambda_{n} + \lambda_{n}^{s}s] E_{\pi_{t+1}} \left[ \int \max \{ W(x, \pi_{t+1}, x), N(\pi_{t+1}) \} dF(x) \right] + \beta E_{\pi_{t+1}} (1 - [\lambda_{n} + \lambda_{n}^{s}s]) N(\pi_{t+1})$$

In the current period, the worker earns the flow value of leisure b. She then must choose her search effort  $s \in (0, 1)$ , taking into account the cost of search c(s), and the returns to search embedded in the arrival probabilities of search. If she receives an offer x, she must decide whether to accept the offer and receive the value of employment  $W(x, \pi_{t+1}, x)$ , (defined below) or to reject that offer and remain nonemployed. If she does not receive an offer, she continues into next period nonemployed. Since we assume that b is in real terms,  $N(\tilde{\pi}_t) = N \quad \forall \tilde{\pi}_t$ , but we leave the  $\tilde{\pi}_t$  as an argument for completeness.

The first order condition for optimal search effort at an interior solution is:

$$\hat{s}_{n}(\tilde{\pi}_{t}) = c'^{-1} \left( \beta \lambda_{n}^{s} E_{\pi_{t+1}} \left[ \int \max \left\{ W(x, \pi_{t+1}, x) - N(\pi_{t+1}), 0 \right\} dF(x) \right] \right)$$

Moreover, we can define the reservation wage  $\hat{r}_n(\tilde{\pi}_t)$  for the nonemployed with inflation expectation  $\tilde{\pi}_t$  implicitly using the following condition:

$$W\left(\hat{r}_{n}\left(\tilde{\pi}_{t}\right),\pi_{t+1}\right)=N\left(\pi_{t+1}\right)$$

This condition implicitly defines the lowest real wage  $\hat{r}_n(\tilde{\pi}_t)$  the worker is willing to accept from nonemployment. Since all workers expect inflation to be the same between t + 1 and t + 2 from the perspective of t, the reservation wage of the nonemployed is independent of  $\tilde{\pi}_t$ .

Turning to employed workers, the value of employment to a worker with current real wage

w, initial real wage  $w^0$ , and expected inflation  $\tilde{\pi}_t$  is:

$$W(w, \tilde{\pi}_{t}, w^{0}) = \max \{ N(\tilde{\pi}_{t}), u(w) + \max_{s \in (0,1)} -c(s) + \beta (1-\delta) [\lambda_{e} + \lambda_{e}^{s}s] E_{\pi_{t+1}} \int \max \{ W(x, \pi_{t+1}, x), \bar{W}(w, \tilde{\pi}_{t}, w^{0}, \pi_{t+1}) \} dF(x) + \beta (1-\delta) (1 - [\lambda_{e} + \lambda_{e}^{s}s]) E_{\pi_{t+1}} \bar{W}(w, \tilde{\pi}_{t}, w^{0}, \pi_{t+1}) + \beta \delta E_{\pi_{t+1}} N(\pi_{t+1}) \}$$

where

$$\bar{W}(w,\tilde{\pi}_{t},w^{0},\pi_{t+1}) = \max\left\{ (1-\gamma_{1}) W\left(\frac{w}{1+\tilde{\pi}_{t}},\pi_{t+1},w^{0}\right) + \gamma_{1} W\left(\tilde{\gamma}_{2}\left(\tilde{\pi}_{t}\right)w^{0},\pi_{t+1},w^{0}\right), N\left(\pi_{t+1}\right) \right\}$$

In the current period, the worker earns her real wage w. She then must choose her search effort  $s \in (0, 1)$ , taking into account the cost of search c(s) and the returns to search embedded in the arrival probabilities of offers. If she does not exogenously separate (probability  $1 - \delta$ ), and receives an offer x, she must decide whether to accept or reject that offer. If her wage is not reindexed with her current employer (probability  $1 - \gamma_1$ ), her wage depreciates with actual inflation, but she *expects* it to depreciate according to her inflation expectations  $\tilde{\pi}_t$ . If her wage is re-indexed with her current employer (probability  $\gamma_1$ ), it is re-indexed to her initial real wage, but she expects it to be reindexed to a fraction  $\tilde{\gamma}_2(\tilde{\pi}_t)$  of her initial real wage. This is in line with the empirical expectations of earnings growth on the current that we document in our hypothetical experiment in Section 3 and cross-sectionally in the SCE in Figure A-1. Importantly, new wage offers x are already in real terms. If she does not receive an offer, but does not exogenously separate, she remains employed and expects her real wage to depreciate or be re- indexed according to her inflation expectations. Moreover, she may endogenously quit if the evolution of her expectations warrant it. Finally, if she exogenously separates, she continues into next period nonemployed.

Optimal search behavior for an interior solution requires:

$$\hat{s}_{e}\left(w,\tilde{\pi}_{t},w^{0}\right) = c'^{-1}\left(\beta\left(1-\delta\right)\lambda_{e}^{s}E_{\pi_{t+1}}\left[\int\max\left\{W\left(x,\pi_{t+1},x\right)-\bar{W}\left(w,\tilde{\pi}_{t},w^{0},\pi_{t+1}\right),0\right\}dF\left(x\right)\right]\right)$$

Finally, each employed worker with a specific inflation expectation and real wage will have a different reservation wage, defined implicitly as:

$$W\left(\hat{r}_{e}\left(w,\tilde{\pi}_{t},w^{0}\right),\hat{r}_{e}\left(w,\tilde{\pi}_{t},w^{0}\right),\pi_{t+1}\right)=\bar{W}\left(w,\tilde{\pi}_{t},w^{0},\pi_{t+1}\right)$$

This means that, for a given current real wage w and initial real wage  $w^0$ , workers with higher inflation expectations will have lower reservation wages, exactly because they expect their cur-

rent wage will depreciate faster. Faster depreciation implies that without reindexation, the value of employment will be lower, so that the value of remaining at the current job is lower, widening the set of acceptable real wages to the worker.

Appendix F describes the evolution of workers in employment and nonemployment at every inflation expectation and real wage. Setting inflows and outflows at each real wage level and inflation expectation delivers a steady state mass of unemployed workers at each expectation  $\tilde{\pi}$ ,  $u^{ss}(\tilde{\pi})$ , a mass of employed workers at each real wage w and inflation expectation  $\tilde{\pi}$ ,  $e^{ss}(w,\tilde{\pi})$ , and therefore a distribution of steady state realized real wages  $g^{ss}(w|\tilde{\pi}) = \frac{e^{ss}(w,\tilde{\pi})}{\int e^{ss}(w,\tilde{\pi})d\tilde{\pi}}$ .

#### 4.3 Calibration

We calibrate the model to roughly match the pre-Covid U.S. economy. One model period is one 4-month period, as in our SCE labor market supplement data. We consider employed and non-employed workers, the latter of which includes unemployed participants only. We set  $\beta = 0.984$  to match an annual discount rate of 5% and assume  $\pi_t = \pi = .0054$  to match an annual inflation rate of 1.64%, the average annual core PCE inflation rate pre-2020. We set  $\bar{\pi}$ to .007 to match a mean bias in annual inflation expectations of +2.17%, which is the mean pre-2020 bias in our SCE data, and the standard deviation of shocks to short-run inflation expectations to  $\sigma_{\varepsilon} = .0105$ , also taken from the pre-2020 SCE cross sectional distribution of inflation expectations. Workers have CRRA utility, with a risk aversion parameter of 2. The exogenous monthly separation rate is set to  $\delta = .04$ , the employment to unemployment transition probability in the SCE over a four month period. We make a parametric assumption on the search cost function,  $c_n(s) = c_e(s) = cs^{\kappa}$ , with  $\kappa > 1$ .

The novel aspect of this model relative to standard search models is the nominal wage rigidity. To calibrate this, we set to  $\gamma_1 = \frac{1}{3}$ , so that nominal wages for stayers reset in expectation every year (Grigsby, Hurst, and Yildirmaz 2021), and set  $\gamma_2 = 1$  so that on average the workers' wage adjustments compensate for steady state inflation.<sup>31</sup>Finally, we introduce one additional feature to the model when taking it quantitatively to the data. We assume that a share  $\alpha_n, \alpha_e$  of nonemployed and employed workers, respectively, are given the opportunity to search every period, with a complementary share unable to search within the period. This allows us to match

<sup>&</sup>lt;sup>31</sup>Grigsby, Hurst, and Yildirmaz 2021 show that there is clear time-dependence in wage setting for stayers, with wages more likely to be adjusted 12 months after the last adjustment. While we follow a Calvo 1983 approach which as an assumption that appears to be rejected by their evidence at the firm level, the main differences are in (1) the prediction for separation rates by tenure and (2) the magnitude of wage changes within a firm. In this model, newly hired workers are no more likely to get a wage reset than workers with high tenure. Since workers are assumed to get nominal wage adjustments that bring them back to their real initial wage, this means, as we discuss in Figure 6, there will be some workers who have wage adjustments that are larger than annual inflation, and some that get adjustments that are smaller. It also means that the model will have the counterfactual prediction that high tenure workers are no more likely to stay with their firm, but rather the opposite, since their real wage has been declining. None of these aspects are crucial for our qualitative point regarding search behavior and expectations.

the relatively low share of employed active searchers in the data (~16%), but the relatively higher elasticity of search with respect to inflation expectations among active searchers. We set  $\alpha_n = .68$  and  $\alpha_e = .16$  using the share of active searchers within each group from our SCE sample.

The parameters left to calibrate are thus the search cost parameters  $c, \kappa$ , the marginal return to search for employed,  $\lambda_n^s$  and  $\lambda_e^s$ , the value of leisure b, and the mean and variance of the offer distribution  $\mu_w$  and  $\sigma_w^2$ . First, we set  $\lambda_n$  to the monthly probability of receiving at least one offer among non-employed non-searchers, and  $\lambda_n^s$  equal to the monthly probability of receiving at least one offer among non-employed active searchers minus  $\lambda_n$ . For the employed, we set  $\lambda_e$ equal to the average probability of receiving at least one offer among non-active searchers, and then choose  $\lambda_e^s$  to match the average probability of receiving atleast one offer among employed active searchers. The value of leisure is then chosen to match an average 4-month job-finding rate for the unemployed in our sample of 21%. We normalize  $\mu_w = 1$  and choose  $\sigma_w^2$  to match a 50-10 ratio of log wages to be 1.69, the 50-10 ratio of residual log wages in our sample of employed workers. c and  $\kappa$  are chosen to match the job-to-job transition probability and the semi-elasticity of search effort with respect to inflation expectations from our data of 2.5%.

Table 7 reports the model-generated and targeted moments, which we are able to fit quite well using the parameters listed in Table 8. The left hand panel of Figure 7 plots the chosen search effort level for employed workers at different real wages as inflation expectations vary. First, for a given inflation expectation, search effort falls as real wages rise since the return to search - getting a higher real wage - falls. This feature is present even in a real version of the model, where workers at the lower end of the real job ladder have larger incentives to search (Christensen et al. 2005, Faberman et al. 2022) as there are more beneficial offers available to them.<sup>32</sup> Second, for each real wage level, search effort increases in inflation expectations. Workers with higher inflation expectations expect their real wage to fall faster than those with lower inflation expectations; therefore, they perceive the return to search - getting a higher real wage - to be larger.

Forshadowing our quantitative exercises in the next section, Figure 7 also demonstrates that search effort will be more responsive to movements in inflation itself - which immediately lower workers' real wages - than to movements in inflation expectations. This can be seen visually by comparing the magnitude of the gap between the various lines relative to the slope of each line; real wages matter relatively more for chosen search effort than inflation expectations. In fact, at high enough real wage levels, the elasticity of search effort with respect to inflation expectations is zero. In our model, an increase in inflation expectations has more muted effects

<sup>&</sup>lt;sup>32</sup>Our model delivers a search effort elasticity with respect to real wages equal to -5%, which is a bit lower than the -30% to -50% range reported in Faberman et al. 2022 when using applications or hours, respectively, or an implied  $\sim -90\%$  elasticity implied by the Christensen et al. 2005 model at their estimated parameter values. This implies that our model elasticity is, if anything, conservative.

on search effort for two reason. First, an increase of  $\Delta$  in inflation expectations would result in an expected real wage of  $\frac{w}{1+\Delta}$ , discounted by  $\beta$ , since it happens between today and tomorrow, whereas a movement of actual inflation by the same magnitude moves today's wage by  $\frac{w}{1+\Delta}$ without discounting. Second, an increase of  $\Delta$  in inflation expectations is mediated by the possibility of re-indexation in the future, so one's expected real wage actually falls by less than  $\frac{w}{1+\Delta}$ .

Figure 8 plots the cumulative density function (CDF) of steady state real wages among the employed as well as the CDF of real offered wages. In a model without inflation eroding real wages for job stayers, the distribution of wages among the employed first order stochastically dominates the distribution of offered real wages; as workers sample job offers on the job, they move increasingly into positions in the upper part of the offer distribution. The same is true in this model, except inflation is a force pushing the distribution of existing in the other direction. Because workers can always quit to unemployment, the realized wage distribution remains bounded below by the reservation wage from nonemployment even with inflation.

Finally, Figure 6 plots a histogram of the distribution of nominal wage changes for those who have their wages reindexed in a given period. The median change is 3.1% (depicted in the dotted black vertical line). Some workers receive a wage adjustment after a single period, so their wage moves from their current wage w to  $\gamma_2 w^0$ ; since after one period,  $w = \frac{w^0}{1+\pi}$ , their wages grow from  $\frac{w^0}{1+\pi}$  to  $\gamma_2 w^0$ , or an  $\gamma_2 (1 + \pi)$  growth rate. At the same time, a worker may get an adjustment after  $\tau$ , periods implying a growth rate in their wage of  $\gamma_2 (1 + \pi)^{\tau}$ .<sup>33</sup>

# 5 Search Effort, Job-to-Job Transitions, and Shocks to Inflation and Inflation Expectations

Autor, Dube, and McGrew 2023 document that in the post-pandemic period, nominal wage growth at the bottom of the wage distribution significantly reversed the previous decades-long rise in 90-10 wage inequality, and also lowered the college/highschool wage premium. At the same time, this wage compression was accompanied by a rise in job-to-job transitions, "especially among young non-college workers." Our framework provides a lense to interpret these dynamics, and suggests that inflation and inflation expectations may have played a central role. Our model predicts that as inflation and inflation expectations rise, search effort should increase, raising the job-to-job transition rate to deliver wage growth. This mechanism should be more salient for those at the lower end of the residualized wage distribution, and, as we later discuss, also for those at the lower end of the unresidualized wage distribution.

To see this, we now consider what happens to search effort, job-to-job transitions, and wage

<sup>&</sup>lt;sup>33</sup>Taylor-type wage setting at an annual frequency would result in a single value for readjustment at  $[\gamma_2 (1 + \pi)]^3$  since 3 periods is equivalent to one year in our model.

growth in our economy when we shock inflation and inflation expectations. For this exercise, we move actual inflation  $\pi$  and the degree of wage readjustments  $\gamma_2$  by magnitudes disciplined by their pandemic counterparts. In particular, we move inflation from an annualized rate of 1.65% to 6.5%, the average post-Covid CPI inflation rate through April of 2023. We move  $\gamma_2$  from 1 to  $\left\{\frac{1+\pi_{pre-covid}}{1+\pi_{post-covid}}\right\}^3 = 0.955$ , so that wages are not fully re-indexed to inflation following the shock. This type of movement in the degree of indexation is consistent with the low realized average wage growth for stayers (~4%) relative the rise in inflation over the same timeframe, and implies that - out of steady state - wages are not indexed to trend inflation on average. When implementing these shocks, we consider repeated, one-time shocks to both actual and expected inflation. Importantly, inflation is expected to return to its trend level in t + 1, such that the shock has no expected persistence. <sup>34</sup>

Figures 9 and 10 show what happens to the dynamics of search effort, the job-to-job rate, and real wage growth in response to an increase in annualized inflation and inflation expectations. On impact, inflation increases from 1.65% to 6.5% annualized. Inflation expectations increase by the same magnitude, following Equation 8. As inflation rises, real wages in the economy fall, pushing up search effort directly following the discussion around Figure 7. The rise in search effort increases the job-to-job transition rate. Second, since inflation expectations increase with inflation, search effort increases even further, again raising the job-to-job transition rate. Overall, the roughly 5 percentage point increase in annualized inflation and its accompanying increase in expected inflation moves search effort by 1.6 percentage points and the job-to-job rate by 0.35 percentage points. As a result, Figure 10 shows that wage growth begins to move upwards following the initial decline due to inflation.

Both the movement in actual inflation and the movement in inflation expectations contribute to the rise in search effort and job-to-job transitions.<sup>35</sup> To see this, we examine what happens when only inflation expectations move, and the movement is not accompanied by a movement in inflation. In this case, as can be seen in Figure 11, search effort moves by one percentage point, a smaller though still significant increase. As a result, the job-to-job rate increases to a lesser extent (roughly .1 percentage points relative to .3 percentage points in the full exercise). Importantly, this exercise reveals that even increases in short-run inflation expectations which are not accompanied by increases in actual inflation - can have implications for the labor market. When workers' expectations about short-run inflation rise, they increase their search effort,

<sup>&</sup>lt;sup>34</sup>Appendix Section H shows what happens in the event that the shock changes inflation on a permanent basis.

 $<sup>^{35}</sup>$ The degree to which inflation expectations matter for the movements in search effort and job-to-job transitions naturally depend on the size of the shock. Empirically, the elasticity of search effort with respect to real wages is somewhere between -30 and -50 percent (Faberman et al. 2022). The semi-elasticity of search effort with respect to inflation expectations that we document is -2.5%, so movements in actual inflation will generally have larger impacts on the dynamics of these objects than movements in inflation expectations alone. Nonetheless, for large enough movements, inflation expectations alone can alter the dynamics of search effort and job-to-job transitions.

regardless of whether their expectations are in line with the dynamics of actual inflation.

The dynamics of search effort and the job-to-job transition rate following the unanticipated shock to expected and realized inflation qualitatively mimic the dynamics of their empirical counterparts in the post-Covid US economy as described in Autor, Dube, and McGrew 2023. Our evidence therefore provides an alternative and complementary narrative explaining observed post-Covid US wage dyamics. In our framework, the effect of inflation on search will be stronger for workers who are at the lower end of the residualized real wage distribution, as they have more to gain from search. For the same increase in search effort, those at the lower end of the residualized wage distribution with the same inflation expectations will receive relatively more acceptable offers given their position on their job ladder. In line with this intuition, Figure 12 shows what happens to wage growth for workers at different percentiles of the pre-shock residualized real wage distribution upon the shock's impact. Wage growth at the bottom of the pre-shock distributions grows faster than at the top of the distribution, as workers at the bottom adjust their search effort in order to change jobs more quickly. At the top of the distribution, wages actually decline, as inflation erodes their real value, but the return to search remains relatively low. Autor, Dube, and McGrew 2023 also show how the separation elasticity with respect to residualized wages increased relatively more at the bottom of the residualized wage distribution in the post-pandemic period, consistent with our model's dynamics.

The findings so far pertain to *residualized* real wages and do not explain a compression in the aggregate wage distribution, which is about wage levels. However, Appendix Section I shows that the same dynamics would apply to the wage distribution in levels if we were to model the labor market for low skilled and high skilled workers in an unresidualized fashion. That is, those at the lower end of the unresidualized wage distribution will also be more elastic with respect to inflation than those at the upper end of the unresidualized distribution. To see this, we allow low and high skill workers to draw from offer distributions which differ in their mean levels, while holding the rest of the labor market parameters they face equal. This results in an equilibrium wage distribution for high-skilled workers which stochastically dominates the wage distribution for low-skilled workers. With curvature in utility, the loss in real wages that comes with an inflation shock of the same magnitude hurts those at lower wage levels relatively more. This means that, if we were to compare a low-skilled worker with a high-skilled worker at the same percentile of their respective offer distributions, the low-skilled worker responds more to an inflation shock than the high skilled worker, which mirrors the empirical finding of Autor, Dube, and McGrew 2023 in which transitions up the job ladder were also more prevalant among lower skilled workers in the post-pandemic period.<sup>36</sup> Intuitively, both the disutility from

<sup>&</sup>lt;sup>36</sup>Tables A-11 and A-12 also show that the difference in average inflation expectations and the responsiveness of search to inflation expectations are stronger and more significant among those more likely to be low skilled in our data. We find a stronger relationship between expected inflation and search among those with low household income and non-college educated.

inflation and the gain from mobility is greater for poorer households, so that they respond more through increased search effort and subsequent job-to-job transitions when an inflation shock hits the economy.

# 6 Conclusion

Common wisdom among monetary policymakers suggests that elevated inflation expectations lead to higher nominal wage demands. There is little evidence, however, for the mechanisms for such demands and how they are obtained. This paper fills that gap by providing evidence that currently employed workers with higher inflation expectations are more likely to search for new work and more likely to have a job-to-job transition during their survey tenure. We argue that expected inflation along with perceived nominal wage rigidity for job stayers prompt workers to search for new opportunities in order to raise their nominal wage. In the data, we see that searching respondents experience changes in nominal earnings primarily by transitioning to a new employer.

We build a job search model consistent with these facts. We first use the model to formalize the intuition linking expected and realized inflation and on-the-job-search. We then use the model to show that an upward shift in the cross-sectional distribution of inflation expectations leads to greater search intensity, more frequent job-to-job transitions, and an upward trend in average real wages. These changes occurs whether the shock is purely in expectations or to expected and realized inflation, but is larger when The model suggest that even changes in short-run inflation expectations can generate upward pressure on wages. Many monetary policymakers believe that short-run fluctuations in inflation expectations will not generate persistent inflationary pressure unless those beliefs become entrenched in longer-run beliefs. Accordingly, future work may further consider the effect of short-run beliefs on labor market tightness even as inflation expectations are considered well-anchored.

The paper has some limitations that point to productive avenues for future work. First, we model the partial equilibrium transmission of exogenous shocks to inflation and inflation expectations to search effort, job-to-job transitions, and wages. This provides simplicity as it abstracts away from an endogenous firm pricing or offer decisions in response to those wage changes, but does limit the interpretability of our measure of passthrough from inflation expectations to wage inflation. Future work may extend this model to a general equilibrium model to further study the role of on-the-job search in wage-price dynamics. Our model restricts wage growth in response to inflation to wage growth for job switchers - a choice motivated by the evidence we document in the data. Future work may consider the effect of realized and expected inflation on search and wage changes for job stayers. We also currently model repeated shocks to the inflation expectations process that are not absorbed into future expectations. Incorporating learning from shocks or persistence of shocks to expectations into the model may provide further insights into how the on-the-job search mechanism may play out over the course of an inflationary episode in the economy.

Panel A: Extensive Margin of Job Search	Employed	Not Employed		
Searching		All	Want to Work	Not Working, Other
for new work	$     \begin{array}{c}       14.9 \\       (0.4)     \end{array} $	$     \begin{array}{c}       12.3 \\       (0.7)     \end{array} $	65.9 (3.1)	$6.6 \\ (0.5)$
for additional work	$5.6 \\ (0.3)$			
Not Searching	$79.5 \\ (0.5)$	$87.7 \\ (0.7)$	34.1 (3.1)	93.4 $(0.5)$
N	8,824	4,434	405	4,029
Panel B: Intensive Margin of Job Search				
Hours Searched	$3.81 \\ (0.16)$	10.89 (0.64)	$12.95 \\ (0.86)$	7.62 (0.88)
N	1,265	420	254	166
Panel C: New Employer				
All	3.4 (0.3)	$6.7 \\ (0.6)$	$25.9 \\ (3.7)$	4.6 (0.5)
Prior Search	$ \begin{array}{c} 13.1 \\ (1.6) \end{array} $	27.7 (3.7)	30.5 (4.7)	$21.9 \\ (5.7)$
N	5,247	2,734	242	2,492

Table 1: The Labor Market supplement asks respondents if they have searched for work in the last four weeks as well as their start date at their current job. Panel A reports the proportion of respondents reporting search by employment status. Panel B reports the average hours searched in the prior seven days among those reporting active search. Panel C reports the proportion of respondents at a new employer (defined as being with that employer for less than four months or being employed when previously unemployed) split out by employment status at the time of the prior Labor Market survey.

By Employment Status	Employed	Not Employed	p-value for equality of means
De Grand Status	3.47	3.83	0.00
By Search Status	Searching	Not Searching	p-value for equality of means
Employed	3.74	3.42	0.001
Not Employed	3.98	3.83	0.24
By Search Intensity	< Median Hours	$\geq$ Median Hours	p-value for equality of means
Employed	3.81	3.26	0.00
Not Employed	4.00	3.83	0.36

Table 2: The table shows the average year-ahead inflation expectation across various groupings as well as p-values from a t-test for the equality of means. It shows the average expectation by employment status and by whether or not the respondent searched in the following period.

	Employed		Not Employed	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0319^{***} \\ (0.0088) \end{array}$	$\begin{array}{c} 0.0057^{***} \\ (0.0016) \end{array}$	$\begin{array}{c} 0.0153 \\ (0.0182) \end{array}$	$\begin{array}{c} 0.0013 \\ (0.0015) \end{array}$
$E_{i,t}[Prob. Unemployment Increases], (0 - 100)$	-0.0017 (0.0011)	-0.0003 (0.0002)	-0.0033 (0.0023)	-0.0003 (0.0002)
$E_{i,t}[Prob. Interest Rates Increase], (0 - 100)$	-0.0006 (0.0010)	-0.0001 (0.0002)	$-0.0065^{***}$ (0.0022)	$-0.0005^{***}$ (0.0002)
$E_{i,t}[Prob. Stock \ Prices \ Increase], (0 - 100)$	-0.0017 (0.0012)	-0.0003 (0.0002)	$\begin{array}{c} 0.0031 \\ (0.0027) \end{array}$	$\begin{array}{c} 0.0003 \\ (0.0002) \end{array}$
$\begin{array}{l} E_{i,t+1}[Prob.\ Offer],\\ (0\ -\ 100) \end{array}$	$\begin{array}{c} 0.0121^{***} \\ (0.0011) \end{array}$	$\begin{array}{c} 0.0022^{***} \\ (0.0002) \end{array}$	$\begin{array}{c} 0.0144^{***} \\ (0.0020) \end{array}$	$\begin{array}{c} 0.0012^{***} \\ (0.0002) \end{array}$
$E_{i,t+1}[Number of Offers],$	$\begin{array}{c} 0.2801^{***} \\ (0.0270) \end{array}$	$\begin{array}{c} 0.0501^{***} \\ (0.0048) \end{array}$	$\begin{array}{c} 0.1661^{***} \\ (0.0442) \end{array}$	$\begin{array}{c} 0.0136^{***} \ (0.0036) \end{array}$
$\begin{array}{l} E_{i,t}[Prob. \ Job \ Loss],\\ (0 - 100) \end{array}$	$\begin{array}{c} 0.0089^{***} \\ (0.0011) \end{array}$	$\begin{array}{c} 0.0016^{***} \\ (0.0002) \end{array}$		
$\begin{array}{l} E_{i,t}[Prob. \ Job \ Finding],\\ (0 - 100) \end{array}$	$-0.0020^{**}$ (0.0008)	$-0.0004^{**}$ (0.0001)		
$E_{i,t}[\Delta \ earnings]$	$-0.0283^{***}$ (0.0081)	$-0.0051^{***}$ (0.0015)		
N	7,347		3,747	

Table 3: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 3. The dependent variable is equal to 1 if the respondent reports searching for work in the four weeks approximately between t and t + 1.  $E_{i,t}[\pi]$  and  $E_{i,t}[\Delta earnings]$  are the means implied by the subjective distributions over inflation and earnings outcome reported at the outset of the search period. Included in the regression are a set of controls for respondents' demographic characteristics, labor market expectations, and macroeconomic expectations. We use the value of the expectations variables reported in t, as the search period begins

	Hours Searched
$E_{i,t}[\pi]$	$0.11^{*}$ (0.06)
$E_{i,t}[Prob. Unemployment Increases], (0 - 100)$	-0.00 (0.01)
$E_{i,t}[Prob. Interest Rates Increase], (0 - 100)$	$0.00 \\ (0.01)$
$E_{i,t}[Prob. Stock \ Prices \ Increase], (0 - 100)$	-0.01 (0.01)
$E_{i,t+1}[Prob. Offer], \\ (0 - 100)$	$0.00 \\ (0.01)$
$E_{i,t+1}[Number of Offers],$	$0.79^{***}$ (0.17)
$E_{i,t}[Prob. Job Loss], \\ (0 - 100)$	$\begin{array}{c} 0.01 \\ (0.01) \end{array}$
$E_{i,t}[Prob. Job Finding], (0 - 100)$	$^{-0.02^{***}}_{(0.01)}$
$E_{i,t}[\Delta \ earnings]$	-0.00 (0.05)
Ν	998

Table 4: The table show the results of a regression of hours spent searching on expected inflation. The dependent variable is equal to the numbers of hours searched in the last week conditional on respondent searching for work in the period between t and t + 1. We top code this variable at 40 hours of search in the prior week.  $E_{i,t}[\pi]$  and  $E_{i,t}[\Delta earnings]$  are the means implied by the subjective distributions over inflation and earnings outcome reported at the outset of the search period. Included in the regression are a set of controls for respondents' demographic characteristics, labor market expectations, and macroeconomic expectations. We use the value of the expectations variables reported in t, as the search period begins, wherever possible. The results are consistent with the extensive margin results presented in Table 3.

Job-to-Job Transitions	Not Controlling for Search		Controlling for Search		
	Coeff.	ME	Coeff.	ME	
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0332^{**} \\ (0.0161) \end{array}$	$0.0020^{**}$ (0.0010)	$\begin{array}{c} 0.0156 \\ (0.0166) \end{array}$	$\begin{array}{c} 0.0008 \\ (0.0009) \end{array}$	
			$\begin{array}{c} 0.9059^{***} \\ (0.1225) \end{array}$	$\begin{array}{c} 0.0490^{***} \\ (0.0079) \end{array}$	
Ν	3,849		3,828		

Table 5: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 6. The first two columns give the coefficients and marginal effects when we do not control for  $search_{i,t+1}$ . In this case, higher inflation expectations are positively predictive of a subsequent job-to-job transition. When we include the proposed mechanism through which inflation expectations influence labor market transitions - search behavior - the effect of expected inflation on the subsequent transition goes away.

	Coefficient	ME	
$E_i[\pi]$	$\begin{array}{c} 0.0269^{***} \\ (0.0042) \end{array}$	$\begin{array}{c} 0.0058^{***} \\ (0.0009) \end{array}$	
$1(\pi=10)$	$\begin{array}{c} 0.2731^{***} \\ (0.0702) \end{array}$	$\begin{array}{c} 0.0587^{***} \\ (0.0150) \end{array}$	
Observations	2,092		
Standard errors in parentheses			

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 6: The table shows the results from Equation 7. The dependent variable is equal to 1 if respondents report that they would search for a new job. E[pi] is the respondent's inflation expectation and  $\mathbf{1}(\pi = 10)$  is an indicator equal to 1 if inflation is at its higher hypothetical level.

Moment	Model	Target	Source
Monthly UN rate, non-employed	21.17%	21.00%	SCE
Search-inflation expectation elasticity, employed searchers	4.15%	2.50%	SCE
4-month job-to-job transition probability	4.36%	3.20%	SCE
4-month offer arrival probability, employed searchers	34.99%	34.70%	SCE
50-10 ratio in residualized log wages	2.19	1.7	SCE

#### Table 7: Targeted Moments

*Notes.* This table shows the model-generated moments (second column) along with the targeted moment (third column) and its corresponding data source. The moments calculated from the SCE are the authors' calculations using the same sample as the empirical analysis. The search-inflation expectation elasticity amoung employed searchers is the semi-elasticity from a regression of log hours among active searchers on inflation expectations (in percentage points).

Parameter	Value
Value of leisure b	2.19
Return to search for employed, $\lambda_e^s$	0.85
Search cost elasticity, $\kappa$	1.51
Cost of search $\bar{c}_e, \bar{c}_u$	0.45
Variance of log wages $\sigma_w^2$	0.55

 Table 8: Calibrated Parameters

*Notes.* This table shows the calibrated parameters from the procedure described in the text.



Figure 1: Inflation Expectations - Pre-2020

Notes: The figure shows the distribution of expected inflation in the Survey of Consumer Expectations for our sample period - from June 2014 through 2019.


Figure 2: Inflation Expectations - October 2022

Notes: The figure shows the distribution of expected inflation in the Real-Time Population Survey fielded in October 2022.



Figure 3: Earnings Growth Expectations

Notes: The figure shows the distribution of the difference in expected nominal earnings growth at the current employer under 10 % inflation and under 2 % inflation. The median response is 0, indicating that respondents do not expect their earnings at their current job to increase systematically with inflation.



Figure 4: Labor Market Actions

Notes: The figure shows the difference in the share of respondents who would undertake a labor market action under 10 % inflation less and the share of respondents who would undertake the same action under 2 % inflation. Workers report that they are more likely to both search and to request a raise under 10% inflation than under 2% inflation. Standard error bands indicate a 95% confidence interval.



Figure 5: Model Timeline



Figure 6: Histogram of Nominal Wage Changes for Stayers

*Notes*: This figure plots the histogram of 1-period wage changes for employed "stayers" (those who remain employed with the same employer) and have their wages reindexed.



Figure 7: Search Policy, Employed Workers

*Notes*: This figure plots the search policy function for workers at different real wage levels as a function of inflation expectations.



Figure 8: Steady State Real Wages and Offered Real Wages Notes. This figure plots the exogenous real wage offer CDF (blue dashed line) and the endogenous steady state CDF of real wages (red solid line).



Figure 9: Search Effort and Job-to-Job Transitions: 5 PP Temporary Annualized Inflation Shock

*Notes*: This figure plots the dynamics of search effort (left panel) and the job-to-job transition probability (right panel) in response to a temporary 5 percentage point shock to annualized inflation using simulated data from our model. The dashed horizontal blue line plots the pre-shock steady state mean real wage, and the black dashed horizontal lines plot 1 standard deviations.



Figure 10: Mean Real Wages

*Notes*: This figure plots the dynamics of mean real wages in response to a 5 percentage point temporary shock to annualized inflation using simulated data from our model. The dashed horizontal blue line plots the pre-shock steady state mean real wage, and the black dashed horizontal lines plot 1 standard deviations.



Figure 11: Search Effort and Job-to-Job Transitions: Temporary Annualized Inflation Expectation Shock

*Notes*: This figure plots the dynamics of search effort (left panel, red line) and the job-to-job transition probability (right panel, red line) in response to a temporary 5 percentage point shock to annualized inflation expectations using simulated data from our model. The dashed horizontal black lines are 1 standard deviation bounds for the response from 10 simulated samples of 250K workers. The blue lines plot the pre-shock steady state mean real wage and and 1 standard deviation above and below its value from a sample of 250K workers. The grey shaded corresponds to periods where the "shock" is active.



Figure 12: Real Wage Growth by Pre-Shock Residualized Wage Distribution Percentiles

*Notes*: This figure plots the dynamics of wage growth at different percentiles of the pre-shock residualized wage distribution in response to a 5 percentage point temporary shock to annualized inflation using simulated data from our model. The red, green, and blue line plot wage growth for the 10th, 50th and 90th percentiles, respectively.

## References

- Andre, Peter et al. (2022). "Subjective Models of the Macroeconomy: Evidence From Experts and Representative Samples". In: *The Review of Economic Studies* 89, pp. 2958–2991.
- Armantier, Olivier et al. (2017). "An Overview of the Survey of Consumer Expectations". In: FRBNY Economic Policy Review 23-2, pp. 51–72.
- Autor, David, Arindrajit Dube, and Annie McGrew (2023). The Unexpected Compression: Competition at Work in the Low Wage Labor Market. NBER Working Papers 31010. National Bureau of Economic Research.
- Bachmann, Rüdiger, Tim O. Berg, and Eric R. Sims (2015). "Inflation Expectations and Readiness to Spend: Cross-Sectional Evidence". In: American Economic Journal: Economic Policy 7.1, pp. 1–35.
- Baek, ChaeWon and Vitaliia Yaremko (2023). "Inflation Expectations and Labor Supply: Evidence From an Experimental Study".
- Bick, Alexander and Adam Blandin (2021). Real Time Labor Market Estimates During the 2020 Coronavirus Outbreak. Working Paper.
- Blanchard, Olivier J. (1986). "The Wage Price Spiral". In: The Quarterly Journal of Economics 101.3, pp. 543–566.
- Blanco, Andres et al. (2022). "A Theory of Labor Markets with Allocative Wages".
- Bostanci, Gorkem, Omer Koru, and Sergio Villalvazo (2022). "Changing Jobs to Fight Inflation: Labor Market Reactions to Inflationary Shocks".
- Burdett, Kenneth (1978). "A Theory of Employee Job Search and Quit Rates". In: American Economic Review 68 (1), pp. 212–220.
- Burdett, Kenneth and Dale T. Mortensen (1998). "Wage Differentials, Employer Size, and Unemployment". In: *International Economic Review* 39.2, pp. 257-273. ISSN: 00206598, 14682354.
  URL: http://www.jstor.org/stable/2527292 (visited on 07/16/2023).
- Burke, Mary and Ali Ozdagli (2021). "Household Inflation Expectations and Consumer Spending: Evidence from Panel Data". In: *The Review of Economics and Statistics*, pp. 1–45.
- Calvo, Guillermo A. (1983). "Staggered Prices in a Utility-Maximizing Framework". In: *Journal* of Monetary Economics 12 (3).
- Candia, Bernardo, Olivier Coibion, and Yuriy Gorodnichenko (2020). Communication and the Beliefs of Economics Agents. NBER Working Papers 27800. National Bureau of Economic Research.
- Cerrato, Andrea and Giulia Gitti (2023). "Inflation Since COVID: Demand or Supply?"
- Christensen, Bent Jesper et al. (2005). "On-the-Job Search and the Wage Distribution". In: Journal of Labor Economics 23.1, pp. 31-58. ISSN: 0734306X, 15375307. URL: http://www. jstor.org/stable/10.1086/425432 (visited on 07/03/2023).

- Coibion, Olivier and Yuriy Gorodnichenko (2015). "Information Rigidity and the Expectations Formation Process: A Simple Framework and New Facts". In: American Economic Review 105.8, pp. 2644–2648.
- Coibion, Olivier, Yuriy Gorodnichenko, and Tiziano Ropele (2020). "Inflation Expectations and Firm Decisions: New Causal Evidence". In: *Quarterly Journal of Economics* 135 (1), pp. 165– 219.
- Coibion, Olivier et al. (2023a). "Average Inflation Targeting and Household Expectations". In: Journal of Political Economy Macroeconomics 1 (2).
- Coibion, Olivier et al. (2023b). "How Does Consumption Respond to News about Inflation? Field Evidence from a Randomized Control Trial". In: American Economic Journal: Macroeconomics 15.3, pp. 109–152.
- Conlon, John J. et al. (2018). Labor Market Search With Imperfect Information and Learning. NBER Working Papers 24988. National Bureau of Economic Research.
- Crump, Richard K. et al. (2022). Subjective intertemporal substitution.
- D'Acunto, Francesco, Daniel Hoang, and Michael Weber (2016). The Effect of Unconventional Fiscal Policy on Consumption Expenditure. NBER Working Papers 22563. National Bureau of Economic Research.
- (2018). "Unconventional Fiscal Policy". In: American Economic Review: Papers & Proceedings 108, pp. 519–523.
- D'Acunto, Francesco, Ulrike Malmendier, and Michael Weber (2023). "What Do the Data Tell Us About Inflation Expectations?" In: *Handbook of Economic Expectations*. Ed. by Rüdiger Bachmann, Giorgio Topa, and Wilbert van der Klaauw. Academic Press.
- Dräger, Lena and Giang Nghiem (2021). "Are Consumers' Spending Decisions in Line with A Euler Equation?" In: *The Review of Economics and Statistics* 103.3, pp. 580–596.
- Duca-Radu, Ioana, Geoff Kenny, and Andreas Reuter (2021). "Inflation expectations, consumption and the lower bound: Micro evidence from a large multi-country survey". In: Journal of Monetary Economics 118, pp. 120–134.
- Engelberg, Joseph, Charles Manski, and Jared Williams (2009). "Comparing the Point Predictions and Subjective Probability Distributions of Professional Forecasters". In: Journal of Business Economic Statistics 27, pp. 30–41.
- Faberman, Jason R. and Alejandro Justiniano (2015). Job Switching and Wage Growth. Chicago Fed Letter 337.
- Faberman, R. Jason et al. (2022). "Job Search Behavior Among the Employed and Non-Employed". In: *Econometrica*.
- Faccini, Renato and Leonardo Melosi (2023). "Job-to-Job Mobility and Inflation". In: Review of Economics and Statistics, pp. 1–45.

- Gertler, Mark, Christopher Huckfeldt, and Antonella Trigari (2020). "Unemployment Fluctuations, Match Quality, and the Wage Cyclicality of New Hires". In: *The Review of Economic Studies* 87.4, pp. 1876–1914.
- Grigsby, John, Erik Hurst, and Ahu Yildirmaz (2021). "Aggregate Nominal Wage Adjustments: New Evidence from Administrative Payroll Data". In: American Economic Review 111.2, pp. 428-71. DOI: 10.1257/aer.20190318. URL: https://www.aeaweb.org/articles?id= 10.1257/aer.20190318.
- Hajdini, Ina et al. (2022). Low Passthrough from Inflation Expectations to Income Growth Expectations: Why People Dislike Inflation. Working Paper 22-21. Federal Reserve Bank of Cleveland.
- Hazell, Jonathan and Bledi Taska (2023). "Downward Rigidity in the Wage for New Hires".
- He, Qiwei and Philipp Kircher (2023). "Updating about Yourself by Learning about the Market: The Dynamics of Beliefs and Expectations in Job Search".
- Ichiue, Hibiki and Shusaku Nishiguchi (2015). "Inflation Expectations and Consumer Spending at the Zero Lower Bound: Micro Evidence". In: *Economic Inquiry* 53 (2), pp. 1086–1107.
- Jain, Monica, Olena Kostyshyna, and Xu Zhang (2022). How Do People View Price and Wage Inflation? Staff Working Papers 22-34. Bank of Canada.
- Kamdar, Rupal (2019). The Inattentive Consumer: Sentiment and Expectations. Working Paper.
- Karahan, Fatih et al. (2017). "Do Job-to-Job Transitions Drive Wage Fluctuations Over the Business Cycle?" In: American Economic Review: Papers and & Proceedings 107 (5), pp. 353– 357.
- Kim, GwangMin and Carola Binder (2023). "Learning-through-Survey in Inflation Expectations". In: American Economic Journal: Macroeconomics 15.2, pp. 254–78.
- Mitra, Anushka (2023). "Macroeconomic Sentiments and Job Search Behavior".
- Moscarini, Giuseppe and Fabien Postel-Vinay (2017). "The Relative Power of Employmentto-Employment Reallocation and Unemployment Exits in Predicting Wage Growth". In: *American Economic Review: Papers Proceedings* 107 (5), pp. 364–368.
- (2022). "The Job Ladder: Inflation vs. Reallocation".
- Pilossoph, Laura, Jane Ryngaert, and Jesse Wedewer (2023). Job Search, Raises, and Inflation. Working Paper.
- Roth, Christopher, Mirko Wiederholt, and Johannes Wohlfart (2022). The Effects of Monetary Policy: Theory with Measured Expectations. Working Paper.
- Ryngaert, Jane M. (2022). "Inflation Disasters and Consumption". In: Journal of Monetary Economics 129, S67–S81.
- (2023). "Balance of Risks and the Anchoring of Consumer Inflation Expectations". In: Journal of Risk and Financial Management 16 (79).
- Tobin, James (1972). "Inflation and Unemployment". In: American Economic Review 62.1.

# ONLINE APPENDIX

## A Additional Tables and Figures

	Employed	
	Coeff.	ME
$E_{i,t}[\frac{\Delta \ earnings}{]} - E_{i,t}[\pi]$	$-0.0301^{***}$ (0.0064)	$-0.0054^{***}$ (0.0012)
$E_{i,t}[Prob. Unemployment Increases], (0 - 100)$	-0.0017 (0.0011)	-0.0003 (0.0002)
$E_{i,t}[Prob. Interest Rates Increase], (0 - 100)$	-0.0013 (0.0010)	-0.0002 (0.0002)
$E_{i,t}[Prob. Stock \ Prices \ Increase], (0 - 100)$	-0.0017 (0.0012)	-0.0003 (0.0002)
$E_{i,t+1}[Prob. Offer], (0 - 100)$	$\begin{array}{c} 0.0121^{***} \\ (0.0011) \end{array}$	$\begin{array}{c} 0.0022^{***} \\ (0.0002) \end{array}$
$E_{i,t+1}[Number of Offers],$	$\begin{array}{c} 0.2806^{***} \\ (0.0270) \end{array}$	$\begin{array}{c} 0.0502^{***} \\ (0.0048) \end{array}$
$E_{i,t}[Prob. \ Job \ Loss], \\ (0 - 100)$	$\begin{array}{c} 0.0089^{***} \\ (0.0011) \end{array}$	$\begin{array}{c} 0.0016^{***} \\ (0.0002) \end{array}$
$E_{i,t}[Prob. Job Finding], (0 - 100)$	-0.0020** (0.0008)	$-0.0004^{**}$ (0.0001)
N	7,5	347

Table A-1: The table shows the estimated coefficients and marginal effects from the a probit regression similar to the one specified in Equation 3. The independent variable of interest is the respondent's expected real earnings growth - constructed from the expected nominal earnings growth and the expected inflation rate. The effect of an expected reduction in earnings growth on search is consistent in magnitude and direction with the effect of expected inflation on search.

	Employed		Not Employed	
	Coeff.	ME	Coeff.	ME
$Rev_{i,t}[\pi]$	$\begin{array}{c} 0.0577^{***} \\ (0.0127) \end{array}$	$\begin{array}{c} 0.0102^{***} \\ (0.0023) \end{array}$	-0.0025 (0.0204)	-0.0002 (0.0016)
$E_{i,t-1}[\pi] ,$	$\begin{array}{c} 0.0494^{***} \\ (0.0102) \end{array}$	$\begin{array}{c} 0.0088^{***} \\ (0.0018) \end{array}$	$\begin{array}{c} 0.0100 \\ (0.0194) \end{array}$	$\begin{array}{c} 0.0008 \\ (0.0015) \end{array}$
N	6,000		3,4	121

Table A-2: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 3 with  $Rev_{i,t}[\pi]$  and  $E_{i,t-1}[\pi]$ . We include  $E_{i,t-1}[\pi]$  in the regression as the size of the revision will depend on the level of the expectation in time-t - 1. Included in the regression are a set of controls for respondents' demographic characteristics, labor market expectations, and macroeconomic expectations. The table shows that both the level of inflation expectations and revisions in inflation expectations are positively predictive of search for the employed but not for the non-employed.

	Two	Lags	One Lag,	One Lead	Two	Leads
$E_{i,t-2}[\pi]$	$\begin{array}{c} 0.0085\\ (0.0150) \end{array}$	$\begin{array}{c} 0.0014\\ (0.0025) \end{array}$				
$E_{i,t-1}[\pi]$	-0.0086 (0.0145)	-0.0015 (0.0025)	-0.0151 (0.0134)	-0.0026 (0.0023)		
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0365^{**} \ (0.0161) \end{array}$	$\begin{array}{c} 0.0062^{**} \\ (0.0027) \end{array}$	$\begin{array}{c} 0.0491^{***} \\ (0.0141) \end{array}$	$\begin{array}{c} 0.0085^{***} \\ (0.0024) \end{array}$	$\begin{array}{c} 0.0331^{***} \ (0.0117) \end{array}$	$\begin{array}{c} 0.0058^{***} \\ (0.0021) \end{array}$
$E_{i,t+1}[\pi]$			$\begin{array}{c} 0.0166 \\ (0.0130) \end{array}$	$\begin{array}{c} 0.0029 \\ (0.0023) \end{array}$	-0.0047 (0.0128)	-0.0008 (0.0022)
$E_{i,t+2}[\pi]$					$\begin{array}{c} 0.0151 \\ (0.0128) \end{array}$	$\begin{array}{c} 0.0027\\ (0.0022) \end{array}$
Observations	4,9	946	6,0	)90	5,9	967

Table A-3: The table shows the coefficients and marginal effects on the inflation expectation at various lags, h < 0, and leads, h > 0, relative to the start of the search period, h = 0. The regression equation is:

$$search_{i,t+1} = \sum_{h=\underline{h}}^{\overline{h}} \beta_h E_{i,t+h}[\pi] + \sum_{h=\underline{h}}^{\overline{h}} \gamma_h \mathbf{x}_{i,t+h} + u_t + \epsilon_{i,t}$$
(A-2)

Across specifications, the inflation expectation that matters for the decision to search in the next four weeks is the expectation at the beginning of the search period.

	Two	Lags	One Lag,	One Lead	Two	Leads
$E_{i,t-2}[\pi]$	$\begin{array}{c} 0.0052\\ (0.0234) \end{array}$	$\begin{array}{c} 0.0004\\ (0.0018) \end{array}$				
$E_{i,t-1}[\pi]$	$\begin{array}{c} 0.0052 \\ (0.0250) \end{array}$	$\begin{array}{c} 0.0004 \\ (0.0020) \end{array}$	$\begin{array}{c} 0.0021 \\ (0.0210) \end{array}$	$\begin{array}{c} 0.0002\\ (0.0016) \end{array}$		
$E_{i,t}[\pi]$	-0.0091 (0.0256)	-0.0007 (0.0020)	-0.0185 (0.0238)	-0.0014 (0.0019)	-0.0204 (0.0227)	-0.0016 (0.0018)
$E_{i,t+1}[\pi]$			$\begin{array}{c} 0.0240 \\ (0.0213) \end{array}$	$\begin{array}{c} 0.0019 \\ (0.0017) \end{array}$	$\begin{array}{c} 0.0513^{**} \\ (0.0223) \end{array}$	$\begin{array}{c} 0.0041^{**} \\ (0.0018) \end{array}$
$E_{i,t+2}[\pi]$					-0.0089 (0.0225)	-0.0007 (0.0018)
Observations	2,7	757	3,2	296	3,2	224

Table A-4: The table shows the coefficients and marginal effects of inflation expectation at various lags, h < 0, and leads, h > 0, relative to the start of the search period, h = 0 on the search of the *non-employed*. These coefficients come from Equation A-2. Across specifications,  $E_{i,t}[\pi]$  is not a significant predictor of search for nonemployed respondents.

	$E_{i,t}[\pi]$		
	Coefficient	M.E.	
All Controls Included	$0.0315^{***}$	$0.0056^{***}$	
Exclude Macro Expectations	(0.0088) $0.0314^{***}$	(0.0016) $0.0056^{***}$	
Exclude Labor Market Expectations	(0.0088) $0.0194^{***}$ (0.0073)	(0.0016) $0.0045^{***}$ (0.0017)	
Exclude Demographic	0.0227***	0.0045***	
Exclude All	(0.0083) $0.0173^{***}$ (0.0066)	$\begin{array}{c} (0.0015) \\ 0.0042^{***} \\ (0.0016) \end{array}$	

Table A-5: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 3 with different sets of controls. The dependent variable is equal to 1 if an employed respondent reports searching for work in the four weeks before the survey.  $E_{i,t}[\pi]$  is the mean implied by the subjective distributions over inflation reported in the period in which the decision to search is undertaken winsorized at the 5% level. The coefficient on inflation expectations is positive and significant if we exclude respondents' demographic characteristics, macroeconomic expectations, labor market expectations, or all controls.

	Em	ployed	
	Coeff.	ME	
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0213^{***} \\ (0.0082) \end{array}$	$\begin{array}{c} 0.0045^{***} \\ (0.0017) \end{array}$	
$E_{i,t}[Prob. Unemployment Increases], (0 - 100)$	$-0.0018^{*}$ (0.0010)	$-0.0004^{*}$ (0.0002)	
$E_{i,t}[Prob. Interest Rates Increase], (0 - 100)$	-0.0010 (0.0009)	-0.0002 (0.0002)	
$E_{i,t}[Prob. Stock \ Prices \ Increase], (0 - 100)$	-0.0015 (0.0011)	-0.0003 (0.0002)	
$E_{i,t+1}[Prob. Offer], \\ (0 - 100)$	$\begin{array}{c} 0.0129^{***} \\ (0.0011) \end{array}$	$\begin{array}{c} 0.0028^{***} \\ (0.0002) \end{array}$	
$E_{i,t+1}[Number of Offers],$	$\begin{array}{c} 0.2839^{***} \\ (0.0260) \end{array}$	$\begin{array}{c} 0.0605^{***} \\ (0.0054) \end{array}$	
$E_{i,t}[Prob. Job Loss], \\ (0 - 100)$	$\begin{array}{c} 0.0073^{***} \ (0.0011) \end{array}$	$\begin{array}{c} 0.0015^{***} \\ (0.0002) \end{array}$	
$E_{i,t}[Prob. Job Finding], (0 - 100)$	$-0.0022^{*}$ (0.0008)	$-0.0005 \text{sym}^{*}$ (0.0002)	
$E_{i,t}[\Delta \ earnings]$	$-0.0268^{***}$ (0.0077)	$-0.0057^{***}$ (0.0016)	
Ν	7,770		

Table A-6: The table replicates Table 3 for employed workers, but redefines search to include those searching for work to supplement their current job. It shows the estimated coefficients and marginal effects from the probit regression specified in Equation 3. The dependent variable is equal to 1 if the respondent reports searching for work in the four weeks approximately between t and t + 1.  $E_{i,t}[\pi]$  and  $E_{i,t}[\Delta earnings]$  are the means implied by the subjective distributions over inflation and earnings outcome reported at the outset of the search period. Included in the regression are a set of controls for respondents' demographic characteristics, labor market expectations, and macroeconomic expectations. We use the value of the expectations variables reported in t, as the search period begins, wherever possible. The results are consistent with those presented in Table 3.

	Wanting to Work		Not Worki	ng, Other
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0391 \\ (0.0326) \end{array}$	$\begin{array}{c} 0.0090 \\ (0.0074) \end{array}$	-0.0025 (0.0206)	-0.0001 (0.0012)
$E_{i,t}[Prob. Unemployment Increases], (0 - 100)$	$\begin{array}{c} 0.0075 \ (0.0049) \end{array}$	$\begin{array}{c} 0.0017 \\ (0.0011) \end{array}$	$-0.0048^{*}$ (0.0025)	$-0.0003^{*}$ (0.0002)
$E_{i,t}[Prob. Interest Rates Increase], (0 - 100)$	$-0.0144^{***}$ (0.0042)	$-0.0033^{***}$ (0.0009)	$-0.0050^{*}$ (0.0026)	$-0.0003^{*}$ (0.0002)
$E_{i,t}[Prob. Stock \ Prices \ Increase], (0 - 100)$	$\begin{array}{c} 0.0097^{**} \\ (0.0048) \end{array}$	$\begin{array}{c} 0.0022^{**} \\ (0.0011) \end{array}$	$\begin{array}{c} 0.0017 \\ (0.0031) \end{array}$	$\begin{array}{c} 0.0001 \\ (0.0002) \end{array}$
$E_{i,t+1}[Prob. Offer], 0.0176^{***}$ (0 - 100)	$\begin{array}{c} 0.0041^{***} \\ (0.0037) \end{array}$	$\begin{array}{c} 0.0161^{***} \\ (0.0008) \end{array}$	$\begin{array}{c} 0.0009^{***} \\ (0.0023) \end{array}$	(0.0001)
$E_{i,t+1}[Number of Offers], 0.1540^{**}$	$\begin{array}{c} 0.0354^{**} \ (0.0709) \end{array}$	$\begin{array}{c} 0.1538^{***} \ (0.0163) \end{array}$	$\begin{array}{c} 0.0090^{***} \\ (0.0516) \end{array}$	(0.0031)
N	3	37	3,4	03

Table A-7: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 3 for non-employed workers. The sample is split by those who report wanting to work and those who do not. The dependent variable is equal to 1 if the respondent reports searching for work in the four weeks approximately between t and t + 1.  $E_{i,t}[\pi]$  is the implied by the subjective distributions over inflation and earnings outcome reported at the outset of the search period. Included in the regression are a set of controls for respondents' demographic characteristics, labor market expectations, and macroeconomic expectations. We use the value of the expectations variables reported in t, as the search period begins, wherever possible. The results are similar to those found for non-employed workers in Table 3.

	Emp	Employed		nployed
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0246^{***} \\ (0.0078) \end{array}$	$\begin{array}{c} 0.0043^{***} \\ (0.0014) \end{array}$	$\begin{array}{c} 0.0205\\ (0.0155) \end{array}$	$\begin{array}{c} 0.0018 \\ (0.0014) \end{array}$
$E_{i,t}[Prob. Unemployment Increases], (0-100)$	-0.0006 (0.0010)	-0.0001 (0.0002)	$\begin{array}{c} 0.0013 \\ (0.0020) \end{array}$	$\begin{array}{c} 0.0001 \\ (0.0002) \end{array}$
$E_{i,t}[Prob. Interest Rates Increase], (0-100)$	$-0.0018^{**}$ (0.0009)	$-0.0003^{**}$ (0.0002)	$-0.0074^{***}$ (0.0020)	$-0.0006^{***}$ (0.0002)
$E_{i,t}[Prob. Stock \ Prices \ Increase], (0-100)$	-0.0005 (0.0010)	-0.0001 (0.0002)	$\begin{array}{c} 0.0020 \\ (0.0024) \end{array}$	$\begin{array}{c} 0.0002\\ (0.0002) \end{array}$
$E_{i,t+1}[Prob. Offer], \\ (0 - 100)$	$\begin{array}{c} 0.0124^{***} \\ (0.0011) \end{array}$	$\begin{array}{c} 0.0022^{***} \\ (0.0002) \end{array}$	$\begin{array}{c} 0.0149^{***} \\ (0.0019) \end{array}$	$\begin{array}{c} 0.0013^{***} \\ (0.0002) \end{array}$
$E_{i,t+1}[Number of Offers],$	$\begin{array}{c} 0.3011^{***} \\ (0.0269) \end{array}$	$\begin{array}{c} 0.0524^{***} \\ (0.0047) \end{array}$	$\begin{array}{c} 0.1622^{***} \\ (0.0408) \end{array}$	$\begin{array}{c} 0.0139^{***} \ (0.0035) \end{array}$
$E_{i,t}[Prob. Job Loss], \\ (0 - 100)$	$\begin{array}{c} 0.0092^{***} \\ (0.0011) \end{array}$	$\begin{array}{c} 0.0016^{***} \\ (0.0002) \end{array}$		
$\begin{array}{l} E_{i,t}[Prob. \ Job \ Finding],\\ (0 - 100) \end{array}$	$-0.0023^{**}$ (0.0007)	$-0.0004^{**}$ (0.0001)		
$E_{i,t}[\Delta \ earnings]$	$-0.0299^{***}$ (0.0073)	$-0.0052^{***}$ (0.0013)		
N	9,1	170	4,8	339

Table A-8: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 3 including the COVID period through November 2020. The dependent variable is equal to 1 if the respondent reports searching for work in the four weeks approximately between t and t + 1.  $E_{i,t}[\pi]$  and  $E_{i,t}[\Delta earnings]$  are the means implied by the subjective distributions over inflation and earnings outcome reported at the outset of the search period. Included in the regression are a set of controls for respondents' demographic characteristics, labor market expectations, and macroeconomic expectations. We use the value of the expectations variables reported in t, as the search period begins

	On-the-Job Search	
	Coeff.	ME
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0221^{***} \\ (0.0064) \end{array}$	$\begin{array}{c} 0.0045^{***} \\ (0.0014) \end{array}$
$E_{i,t}[Prob. Unemployment Increases], (0 - 100)$	$-0.0025^{***}$ (0.0008)	$-0.0007^{***}$ (0.0002)
$E_{i,t}[Prob.\ Interest\ Rates\ Increase],\ (0 - 100)$	-0.0005 (0.0008)	-0.0001 (0.0002)
$E_{i,t}[Prob. Stock \ Prices \ Increase], (0 - 100)$	$-0.0018^{**}$ (0.0009)	$-0.0004^{**}$ (0.0002)
$E_{i,t}[Prob. \ Job \ Loss], \\ (0 - 100)$	$\begin{array}{c} 0.0138^{***} \ (0.0008) \end{array}$	$\begin{array}{c} 0.0030^{***} \\ (0.0002) \end{array}$
$E_{i,t}[Prob. Job Finding], (0 - 100)$	$\begin{array}{c} 0.0031^{***} \\ (0.0006) \end{array}$	$\begin{array}{c} 0.0007^{***} \\ (0.0001) \end{array}$
$E_{i,t}[\Delta \ earnings]$	$-0.0111^{*}$ (0.0062)	$-0.0024^{*}$ (0.0013)
N	11,	704

Table A-9: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 3. The dependent variable is equal to 1 if the respondent reports searching for work in the four weeks approximately between t and t + 1.  $E_{i,t}[\pi]$  and  $E_{i,t}[\Delta earnings]$  are the means implied by the subjective distributions over inflation and earnings outcome reported at the outset of the search period. Included in the regression are a set of controls for respondents' demographic characteristics, labor market expectations, and macroeconomic expectations. The sample is expanded to include the Job Search Supplement collected each October. While this increases the sample size, it also limits access to some of the labor market expectations we control for in Table 3. We use the value of the expectations variables reported in t, as the search period begins.

	On-the-Job Search	
	Coeff.	ME
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0326^{**} \\ (0.0165) \end{array}$	$\begin{array}{c} 0.0037^{**} \\ (0.0019) \end{array}$
$E_{i,t}[Prob. Unemployment Increases], (0 - 100)$	$\begin{array}{c} 0.0035 \\ (0.0022) \end{array}$	$\begin{array}{c} 0.0004 \\ (0.0002) \end{array}$
$E_{i,t}[Prob. Interest Rates Increase], (0 - 100)$	$\begin{array}{c} 0.0021 \\ (0.0022) \end{array}$	$\begin{array}{c} 0.0002\\ (0.0002) \end{array}$
$E_{i,t}[Prob. Stock \ Prices \ Increase], (0 - 100)$	$-0.0066^{***}$ (0.0022)	$-0.0007^{**}$ (0.0003)
$E_{i,t}[Prob. \ Job \ Loss], \\ (0 - 100)$	$\begin{array}{c} 0.0087^{***} \\ (0.0021) \end{array}$	$\begin{array}{c} 0.0010^{***} \\ (0.0002) \end{array}$
$E_{i,t}[Prob. \ Job \ Finding],$ (0 - 100)	$\begin{array}{c} 0.0035^{***} \\ (0.0013) \end{array}$	$\begin{array}{c} 0.0004^{**} \\ (0.0002) \end{array}$
$E_{i,t}[\Delta \ earnings]$	-0.0066 (0.0166)	-0.0007 (0.0019)
N	2,1	.02

Table A-10: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 3. The sample is limited to the consecutive-month observations given by the October Job Search Supplement and the November Labor Market supplement. We exclude from the regression those that searched in October such that the only searchers are new searchers. The dependent variable is equal to 1 if the respondent reports searching for work in the four weeks approximately between t and t + 1.  $E_{i,t}[\pi]$  and  $E_{i,t}[\Delta earnings]$  are the means implied by the subjective distributions over inflation and earnings outcome reported at the outset of the search period. Included in the regression are a set of controls for respondents' demographic characteristics, labor market expectations, and macroeconomic expectations. The table shows that inflation expectations predict search for new searchers.

Inflation Expectations					
By Education	Searching	Not Searching	p-value for equality of means		
College Some College and High School	3.17 4.13	3.13 3.36	$\begin{array}{c} 0.34 \\ 0.00 \end{array}$		
By Income	Searching	Not Searching	p-value for equality of means		
$\geq \$50K \\ < \$50K$	3.29 4.28	3.13 3.57	$\begin{array}{c} 0.11 \\ 0.01 \end{array}$		

Table A-11: The table shows the average year-ahead inflation expectation across various groupings as well as p-values from a t-test for the equality of means. It shows the average expectation for employed respondents by whether or not the respondent searched in the following period. There is a statistically significant difference in the average expectations of searchers and nonsearchers all groups among those who have not graduated college and those of low household income. The difference in the average expectations of searchers is not significant among the college educated and high income respondents.

By Education	College		Some Colleg	e & High School	
	Coeff.	ME	Coeff.	ME	
$E_{i,t}[\pi]$	-0.0022 (0.0101)	-0.0005 (0.0021)	$\begin{array}{c} 0.0588^{***} \ (0.0130) \end{array}$	$\begin{array}{c} 0.0083^{***} \ (0.0019) \end{array}$	
Ν	4,778		2,553		
By Income	$\geq \$50K$		< \$50K		
	Coeff.	ME	Coeff.	ME	
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0127 \\ (0.0109) \end{array}$	$\begin{array}{c} 0.0023 \\ (0.0020) \end{array}$	$\begin{array}{c} 0.0647^{***} \ (0.0144) \end{array}$	$\begin{array}{c} 0.0104^{***} \\ (0.0024) \end{array}$	
Ν	$5,\!590$		1,723		

Table A-12: This table shows the coefficient on  $E_{i,t}[\pi]$  from 3, estimated separately by subgroups that are likely correlated with wage levels. We find that the effect of inflation expectations is stronger and more significant among workers who are more likely to be at the lower end of the Specifically, the effect of inflation expectations on theose who have not finished college and low-income respondents are much stronger and more significant than for their college-educated and medium- to high-income counterparts.



Figure A-1: Earnings Growth Expectations at Current Job

Notes: The figure shows a binscatter of the average expected earnings growth over the next twelve months at the respondents current job plotted against inflation expectations. The slope of the line of best fit is positive but substantially lower than 1, indicating that - cross-sectionally and on average - respondents believe that their on-the-job earnings will not increase at the same rate as inflation.

## **B** Description of Control Variables

- Age
- Married (Indicator)
- Female (Indicator)
- Hispanic (Indicator)
- Parent (Indicator)
- Numeracy (Indicator): 1 if low numeracy; 0 if high numeracy
- Census Region (Categorical): Midwest; Northeast; South; West
- Race (Categorical): White; Black; American Indian; Asian; Hawaiian/Pacific Islander; Other
- Education (Categorical): No College; Some College/Associate's Degree; Bachelor's Degree
- Household Income (Categorical): Less than 50K; 50K to 100K; More than 100K
- Labor Force Status: This variable takes on values of all of the possible combinations of these job statuses for the respondent and spouse (where No=0, Yes=1): Working full-time; Working part-time; Not working, but would like to work; Temporarily laid off; Self-employed; On sick or other leave; Permanently disabled or unable to work; Retiree or early retiree; Student; Homemaker
- Probability unemployment will increase in next twelve months
- Probability interest rates will increase in next twelve months
- Probability stock will increase in next twelve months
- Probability of losing main job in the next twelve months
- Probability of finding a job in the next three months if you were to lose main job
- Probability receive a job offer in next four months
- Expected number of offers in next four months (Categorical): 1 = 1 offer, 2 = 2 offers, 3 = 3 offers, 4 = 4 offers, 5 = 5 offers or more
- Expected nominal earning change at current job, percentage change, winsorzied at the 5% level

## C Search and the Wage Bargaining Mechanism

We argue that expected inflation induces on-the-job search as employees seek nominal wage increases to maintain their real wages. Search provides the employee with either a new higher paying job or increased bargaining power with her current employer. There is, however, substantial heterogeneity in employment situations that makes some workers more or less susceptible to this channel. In this section, we discuss several factors that may affect workers' response to a threat to the real wage. We argue that workers more likely to have union representation, employees with pension benefits, and workers highly satisfied with their jobs will have a lower incentive to increase their nominal wages through search. Workers with greater financial endurance should also be less sensitive to this channel. Our results show that these workers exhibit a weaker relationship between expected inflation and on-the-job search than their survey counterparts do.

### C-1 Union Membership

Workers represented by unions and collective bargaining agreements may feel more secure that they do not need to garner additional bargaining power as their unions will likely respond to increased inflation with increased wage demands. We repeat our analysis, using respondents' state of residence to split the sample into those who are more and less likely to be represented by a union. We first split employed respondents by those living in the ten states with the highest rates of union representation and those who live in the remaining states.<sup>37</sup> Roughly a quarter of employed respondents live in the high union participation states. We estimate Equation 3 separately for each group. The coefficients and marginal effects for each group appear in Panel A of Table C-1. There is no effect of inflation expectations on search for those living in the high-union states. In the remaining states, a one percentage point increase in expected inflation increases the probability that a respondent searches by 0.76 percentage points. Panel A shows the results of the regression in 3 splitting the sample into states with "right-to-work" laws and others. Since the Taft-Hartley Act in 1947, states are permitted to enact such laws preventing the requirement of union membership in employment contract provisions. Most of the states with the lowest percentage of union membership are right-to-work states. Roughly half of the employed sample lives in a right-to-work state. While the effects of expected inflation on onthe-job search are significant for both groups, the effect is stronger and more significant in the right-to-work states.

These results suggest that the search of non-union workers is more responsive to changes in

<sup>&</sup>lt;sup>37</sup>According to the Bureau of Labor Statistics, the ten U.S. states with the highest rates of unionization in 2021 were Hawaii, New York, Washington, Oregon, New Jersey, Minnesota, California, Alaska, Rhode Island, and Connecticut.

expected inflation and therefore expected real wages. This means that the relationship between expected inflation and the search of employed workers is more likely to contribute to increased wages in countries like the United States, where union membership is low. This does not rule out the possibility of wage increases and possible wage-price spiral in high union membership countries and states. Union workers are supported by collective bargaining agreements which can argue for higher wages in the event that inflation increases. Collective bargaining is an alternative mechanism by which inflation transmits to nominal wage growth for these workers.

### C-2 Pension Benefits

Retirement benefits provide employers with a way to incentivize workers beyond nominal wages. Retirement plans in the United States fall into two broad categories - defined contribution and defined benefit or pension. A defined contribution plan does not guarantee workers a specific benefit in retirement, but rather states the contribution the firm will make to the workers retirement account. Pension plans specify a particular benefit that the worker will receive upon retirement, often dependent on years of service. Some minimum tenure at a job may also be required for the workers pension benefit to vest. The requirement to stay at the job for a specified length of time to receive this benefit may make employees more attached to these jobs and less sensitive to fluctuations in the real wage.

While pension benefits are rare among current workers in the United States, some workers particularly public sector workers still have them. Approximately 26.7% of the employed sample and 58.1% of government workers have a pension benefit. Panel B of Table C-1 reports the coefficients and marginal effects from Equation 3 for workers with pension benefits and others. The effect of expected inflation on on-the-job search among pensioned workers is insignificant. For workers without a pension, a one percentage point increase in expectations corresponds to a 0.68 percentage point increase in the probability that a worker searches. This supports the idea that workers are less sensitive to real wage declines if other benefits make them more attached to their jobs. We next argue in Section C-3 that satisfaction with non-pecuniary benefits of a job, like security and opportunity, would create the same result.

### C-3 Job Satisfaction

We argue that the currently employed will respond to expected declines in real wages by searching for new work. This creates upward pressure on the nominal wage only if the worker is credibly willing to leave her current job as she must either change employers or convince her current employer to give a counter offer. While labor is primarily compensated with wages, other aspects of the job influence employee satisfaction. If a worker is happy with other aspects of the job - like flexible hours or opportunities for growth - changes in the expected real wage may not be enough to induce them to leave or threaten to leave their current position to receive a nominal raise.

The Labor Market Supplement includes questions asking respondents to rank their satisfaction different aspects of their jobs. We use two of these questions to split the sample into highly satisfied workers and others. We hypothesize that the relationship between inflation and on-the-job search will be weaker among these highly satisfied workers. The first question asks about satisfaction with non-wage parts of the job:

How satisfied would you say you are with other aspects of the job, such as benefits, maternity/paternity leaves, flexibility in work hours, etc?

The second asks about opportunities for advancement:

How would you rate the opportunities for a promotion or other career progression with your current employer, over the next three years?

We split the sample by those who report high satisfaction in each category.<sup>38</sup> Panel C of Table C-1 presents the results of Equation 3. The results show that the relationship between inflation expectations and search is stronger and more significant among those who are less satisfied with the benefits and flexibility at their job than among those who are highly satisfied with aspect of the job.<sup>39</sup> While there is a strong and significant relationship between inflation expectations and search for those who are less satisfied with the opportunities for advancement at their current job, there is no relationship among those who are highly satisfied. This makes particular sense in the context of the model, as these respondents should have more opportunities for nominal wage growth without searching for outside offers.

### C-4 Financial Endurance

The financial situation of the households could also affect their sensitivity to potential declines in real wages due to inflation. Households with more liquidity may be able to tolerate a real wage decline for a greater period than highly constrained households. They may also prefer to tolerate a wage decline than to search and change jobs due to match quality or satisfaction non-wage aspects of the job.

To investigate this, we split the sample into relatively constrained and relatively unconstrained groups as in Crump et al. 2022 based on the answers to questions from the SCE. The first question, from the SCE Credit Access Supplement, asks about access to liquid funds.

 $<sup>^{38}</sup>$ The benefits question has a scale of 1 to 5, with 5 being "highly satisfied." For this question, we split the sample by those who respond with 5 and those who respond with a lower rating. The opportunities question is on a scale of 1 to 7. We refer to those who respond with a 6 or a 7 as highly satisfied with opportunities for advancement.

<sup>&</sup>lt;sup>39</sup>The there is a positive but not statistically significant relationship among the highly satisfied.

What do you think is the percent chance that you could come up with \$2,000 if an unexpected need arose within the next month?

Households answer this question only when they respond to the credit access supplement; it is therefore necessary to form a measure of high and low constraint for the periods that this question is not answered. Following Crump et al. 2022, we define households as less liquidity constrained if they answer 100% every time they are asked this question. A second classification of potential financial distress or constraint relies on a question from the core SCE survey about the households ability to repay debt.

What do you think is the percent chance that, **over the next 3 months**, you will NOT be able to make one of your debt payments (that is, the minimum required payments on credit and retail cards, auto loans, student loans, mortgages, or any other debt you may have)? (Q30new)

As households answer this question every time they take the survey, we define a household as more constrained if they respond with positive probability that month. Table C-2 presents the results of Equation 3 split by less constrained and more constrained households. The effects are smaller and either less significant or insignificant for the less constrained households. This suggests that financial endurance mitigates our proposed mechanism. Wage bargaining through on-the-job search requires households to be at least somewhat willing to leave their jobs, but as established in the last section - many households are highly satisfied with non-wage aspects of their jobs. When a worker has more liquidity and less financial distress, she can tolerate a decline in the expected real wage to stay at a position that she otherwise enjoys. More constrained workers need to maintain their real wage in order to make ends meet and therefore participate in search and nominal wage bargaining when they expect higher inflation. This implies that as workers savings run low due to periods of extended inflation, on-the-job search becomes a more likely response to realized or expected inflation. Search by Subgroups

#### Panel A: Union Representation

Top 10 Most Unionized States

	Top 10		Out of Top 10	
	Coeff. ME		Coeff.	ME
$E_{i,t}[\pi]$	-0.0038 (0.0157)	-0.0007 (0.0029)	$\begin{array}{c} 0.0441^{***} \\ (0.0101) \end{array}$	$\begin{array}{c} 0.0076^{***} \ (0.0018) \end{array}$
Ν	2,012		5,325	
Right-to-Work States				
	Non Right-to-Work States		Right-to-Work States	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	$0.0224^{*}$ (0.0117)	$0.0041^{*}$ (0.0022)	$\begin{array}{c} 0.0414^{***} \\ (0.0129) \end{array}$	$\begin{array}{c} 0.0069^{***} \\ (0.0022) \end{array}$
Ν	3,752		3,573	

#### Panel B: Pension Benefits

	Has Pension Benefit		No Pension Benefit		
	Coeff.	ME	Coeff.	ME	
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0153 \\ (0.0170) \end{array}$	$\begin{array}{c} 0.0025 \ (0.0028) \end{array}$	$\begin{array}{c} 0.0375^{***} \ (0.0099) \end{array}$	$\begin{array}{c} 0.0068^{***} \ (0.0018) \end{array}$	
Ν	2	2,125	5,2	217	

#### Panel C: Job Satisfaction

Benefits and Flexibility

	Highly Satisfied		Less Satisfied	
	Coeff. ME		Coeff.	ME
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0244 \\ (0.0194) \end{array}$	$0.0030 \\ (0.0024)$	$\begin{array}{c} 0.0346^{***} \ (0.0098) \end{array}$	$\begin{array}{c} 0.0069^{***} \\ (0.0019) \end{array}$
Ν	1,951		5,346	
Opportunities at Current Job				
	Yes		No	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	$0.0106 \\ (0.0137)$	0.0014 (0.0018)	$\begin{array}{c} 0.0398^{***} \\ (0.0109) \end{array}$	$\begin{array}{c} 0.0078^{***} \\ (0.0022) \end{array}$
Ν	3,268		4,070	

Table C-1: The table shows the coefficients and marginal effects of Equation 3 for subgroups. The results show that the relationship between expected inflation and labor search is stronger and more significant among workers without a pension plan, workers less likely to have union representation, and workers who are less satisfied with their jobs than among workers with pension plans, those more likely to be represented by a collective bargaining agreement, and those who are very satisfied with their jobs.

Less Constrained	Could Come up with \$2000		No Chance of Default		
	Coeff.	ME	Coeff.	ME	
$E_{i,t}[\pi]$	$0.0298^{*}$ (0.0180)	$0.0049 \\ (0.0030)$	$\begin{array}{c} 0.0254 \\ (0.0147) \end{array}$	$\begin{array}{c} 0.0036 \\ (0.0022) \end{array}$	
Ν	2,139		2,856		
More Constrained	Might Not Come up with \$2000		Positive Pro	ob. of Default	
	Coeff.	ME	Coeff.	ME	
$E_{i,t}[\pi]$	$\begin{array}{c} 0.0356^{***} \ (0.0107) \end{array}$	$\begin{array}{c} 0.0065^{***} \\ (0.0020) \end{array}$	$\begin{array}{c} 0.0372^{***} \\ (0.0109) \end{array}$	$\begin{array}{c} 0.0070^{***} \\ (0.0021) \end{array}$	
Ν		4,363	4,	,489	

Table C-2: This table shows the coefficient and marginal effect on  $E_{i,t}[\pi]$  from 3, estimated separately for groups likely to be more and less constrained. The results show that the relationship between inflation expectations and employed search is stronger and more significant for more liquidity constrained respondents and for those who report positive probability of defaulting on their debt payments.

## D Other Labor Market Transitions

### D-1 Promotion

Aside from changing jobs, workers can improve their situation at their current jobs. In this section, we document that higher inflation expectations are not predictive of reporting a sub-sequent promotion. We estimate a parallel to Equation 6 for respondents remaining at the same employer in which the outcome variable is receiving a promotion rather than a job-to-job transition. This variable is equal to one if - since the last labor market survey - the respondent reports being at the same job but with a new title or duties.

$$Promotion_{i,t+5} = \beta E_{i,t}[\pi] + \gamma \mathbf{x}_{i,t} + u_{t+5} + \epsilon_{i,t+5}$$
(D-1)

The results appear in Table D-1. Inflation expectations have small and non-significant effect on reported promotions regardless of controlling for search. When we control for search, we find that search is positively predictive of a subsequent reported promotion, but that the size of this effect is smaller than the effect of search on making a job-to-job transition. The results suggest that those searching for reasons other than expected inflation are more likely to have a reported promotion.

### D-2 Change in Salary

Workers may search due to expected inflation, but do they receive higher wages because of that search? We expect that workers with higher inflation expectations should only receive larger nominal wages due to actual offers received or changes in employment situations. We use the self-reported annual (nominal) earnings in each labor market supplement to calculate changes in nominal earnings. As these numbers are given in annual rather than hourly terms, we limit our sample to workers who report the same detailed labor status across adjacent labor market supplements in order to hold hours worked as constant as possible. We estimate the following equation:

$$\Delta \ earnings_{i,t+5} = \beta E_{i,t}[\pi] + \gamma \mathbf{x}_{i,t} + u_{t+5} + \epsilon_{i,t+5} \tag{D-2}$$

where  $\Delta earnings_{i,t+5}$  is the percentage change in annual earnings between the labor market survey taken in t + 1 (when realized search is reported) and the labor market survey taken in t + 5.

The results of Equation D-2, with and without indicators for search, having an offer, promotion, and job-to-job transition appear in Table D-2. Across specifications, the coefficient on  $E_{it}[\pi]$  is near 0 and not statistically significant. In the second column, search has a posi-

tive, but insignificant effect on the change in earnings; the point estimate indicates that those who search obtain a 1.4 percentage point increase in their salary over non-searchers. Searchers should be more likely to receive a higher earnings change if they have successfully obtained an outside offer. Accordingly we include an indicator for receiving an offer-  $Offer_{i,t+5}$  - in the third column. The coefficients on both  $search_{i,t+1}$  and  $Offer_{i,t+5}$  are positive but insignificant, as is the sum of the two which implies searchers who generate at least one offer receive an additional 2.33 percentage points change in earnings, ceteris paribus. In the fourth column, we add an interaction of  $search_{i,t+1}$  and  $Offer_{i,t+5}$ , which can be interpreted as a variable representing successful search. The sum of the relevant coefficients suggests that a searcher with at least one offer earns a statistically significant additional 4.76 percentage point salary increase. Adding indicators for  $Promotion_{i,t+5}$  and  $Job-to-Job Transition_{i,t+5}$  reduces the magnitudes of the coefficients on  $search_{i,t+1}$  and  $Offer_{i,t+5}$ , indicating that changes in compensation occur primarily through taking on new responsibilities or changing jobs, with the latter yielding a larger change in nominal earnings (though this difference is not statistically significant). The effect of searching and obtaining an offer is diminished in magnitude (2.18 percentage points) and is no longer significant when we control transitions and promotions.

We interpret these results to mean that inflation expectations alone do not drive the change in earnings. That is workers who expect higher inflation do not automatically receive larger changes in nominal compensation than their counterparts who expect lower inflation. Rather, these workers have to undertake actions that increase their wages. While we see inflation expectations driving search, search itself does not appear to generate large changes in compensation. Workers obtain these changes by getting promoted by their current employer or by transitioning to a new employer. Our results have shown that workers with higher inflation expectations are more likely to change jobs, but not to report receiving a promotion. This indicates that when presented with the choice between a promotion and a change in employer, searchers who anticipate higher inflation may choose the option that provides the larger change in nominal compensation.

Promotion	Not Controlling for Search		Controlling for Search	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	-0.0121 (0.0131)	-0.0014 (0.0015)	-0.0156 (0.0133)	-0.0018 (0.0015)
$search_{i,t+1}$			$\begin{array}{c} 0.1924^{**} \\ (0.0923) \end{array}$	$\begin{array}{c} 0.0217^{**} \\ (0.0105) \end{array}$
N		3,888	3,	867

Table D-1: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation D-1. The first two columns give the coefficients and marginal effects when we do not control for  $search_{i,t+1}$ . We find that higher inflation expectations do not predict subsequent changes in title or duties. Search is positively predictive of promotions, as shown in the second column. A searcher is 2.17 percentage points more likely to make a job to job transition than a non-searcher.

Percentage Change in Annual Earnings					
	(1)	(2)	(3)	(4)	(5)
$E_{it}[\pi]$	$0.06 \\ (0.15)$	$0.06 \\ (0.15)$	$0.06 \\ (0.15)$	$0.06 \\ (0.15)$	$\begin{array}{c} 0.06 \\ (0.15) \end{array}$
$search_{i,t+1}$		$\begin{array}{c} 0.85 \\ (1.04) \end{array}$	$\begin{array}{c} 0.76 \\ (1.03) \end{array}$	-0.40 (1.05)	-0.73 (1.07)
$Offer_{i,t+5}$			$ \begin{array}{c} 1.57 \\ (1.12) \end{array} $	$\begin{array}{c} 0.38 \\ (1.27) \end{array}$	-0.01 (1.26)
$search_{i,t+1} \times Offer_{i,t+5}$				$4.78^{*}$ (2.77)	$2.91 \\ (2.89)$
$Promotion_{i,t+5}$					$4.00^{***}$ (1.42)
$Job-to-Job\ Transition_{i,t+5}$					$8.33^{**}$ (4.03)
N	3,437	3,423	3,422	3,422	3,411

Standard errors in parentheses \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table D-2: The table shows the results of regressing  $\Delta \ earnings_{i,t+5}$  on the the inflation expectation at the outset of the search period,  $E_{i,t}[\pi]$ . The second column includes a dummy for  $search_{i,t+1}$ . The third column presents the results adding a dummy for having at least one offer between t + 1 and t + 5 to the regression. The fourth column includes the interaction of these two dummies - a control for successful search. The fifth adds dummies for reporting a promotion and changing employers between labor market surveys.

## **E** Time Series Evidence

In this section, we show that the relationship between aggregate household inflation expectations and the rate of job-to-job transitions appears in time series data. We further show that there is a positive relationship between the difference in wage growth for job switchers and wage growth for job stayers and expected and realized inflation. This means that the average "penalty" for stayers in terms of forgone nominal earnings growth is increasing in the rate of average expected and realized inflation.

### E-1 Inflation Expectations and the Rate of Job-to-Job Transitions

Table E-1 shows the realtionship between the rate of job-to-job transitions, expected and realized inflation and, and measures of labor market tightness. Specifically, the table contains the coefficients from the following regression, run for years 2000-2022:

$$J2J_t = \beta_0 + \beta_1 E_t[\pi_{t+12}] + \beta_2 \pi_t + \beta_3 u_t + \beta_4 vacancy_t \tag{E-1}$$

where  $E_t[\pi_{t+12}]$  is the average year-ahead inflation expectation from the Michigan Survey of Consumers,  $\pi_t$  is the annualized monthly rate of PCE inflation,  $u_t$  is the monthly unemployment rate, and *vacancy<sub>t</sub>* is the monthly vacancy rate. The coefficient on expected inflation is positive and statistically significant. It indicates that as the average consumer inflation expectation increases by one percentage point, the rate of job-to-job transitions increases by 0.045 percentage points (a roughly 2% increase from the average monthly rate of transitions).

### E-2 Wage Changes for Switchers and Stayers

Our findings suggest that employees believe that the wages at their current job will not keep up with the rate of inflation, consistent with Hajdini et al. 2022 and Jain, Kostyshyna, and Zhang 2022. If stayer wages are sticky relative to switcher wages, expected inflation creates a penalty to remaining at one's current job - that is the worker experiences a greater loss in earnings by remaining at her current job than she would have had she found a new job. Figure E-1 plots the difference in average wage growth for job switchers and average wage growth for job stayers against realized and expected inflation. The figure shows that wage gains exceed those for job stayers more when realized and expected inflation are high.

	Job-to-Job Transition Rate
$E_t[\pi_t+1]$	$\begin{array}{c} 0.045^{**} \\ (0.020) \end{array}$
$\pi_t,$	-0.019 (0.011)
$u_t,$	$-0.060^{***}$
$vacancy_t$ ,	(0.011) -0.03 (0.02)
Ν	264
F	11.17

Table E-1: The table show the coefficients from Equation E-1.  $E_t[\pi_t + 1]$  denotes the average year-ahead inflation expectation from the Michigan Survey of Consumers.  $\pi_t$  is the annualized monthly rate of consumer inflation, and  $u_t$  and  $vacancy_t$  represent the monthly unemployment rate and vacancy rate, respectively. The rate of job-to-job transitions is increasing in aggregate consumer inflation expectations and decreasing in the unemployment rate, vacancy rate, and realized inflation rate. Newey West standard errors with a lag length of three are in parentheses, p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.



Figure E-1: Job Switcher Wage Growth - Job Stayer Wage Growth

Notes: The figure plots the difference in the average wage growth for job switchers and the average wage growth for job stayers between 2000 and 2022. This difference is increasing in both the rate of inflation and the rate of expected inflation. Wage growth data are from the Federal Reserve Bank of Atlanta's wage tracker.

## F Inflows and Outflows

We can write the evolution of the mass of unemployed workers with inflation expectation  $\tilde{\pi}$  as

$$n_{t+1}(\tilde{\pi}) = \phi \left( \tilde{\pi} - (\pi_t + \bar{\pi}); \sigma_{\varepsilon}^2 \right) \int_{\tilde{z}} \left\{ n_t \left( \tilde{z} \right) \left( 1 - \bar{\lambda}_n \left( \tilde{z} \right) \int_{\hat{r}_n(\tilde{z})} f\left( w \right) dw \right) \right\} d\tilde{z} + \phi \left( \tilde{\pi} - (\pi_t + \bar{\pi}); \sigma_{\varepsilon}^2 \right) \int_{\tilde{z}} \left\{ \int_w e_t \left( \tilde{z} \right) \left[ \delta \mathbf{I}_{w \ge \hat{r}(\tilde{z})} + \mathbf{I}_{w < \hat{r}_n(\tilde{z})} \right] g_t \left( w \left( 1 + \pi_t \right) | \tilde{z} \right) dw \right\} d\tilde{z}$$

where  $\phi\left(\cdot;\sigma_{\varepsilon}^{2}\right)$  denotes the normal pdf with variance  $\sigma_{\varepsilon}^{2}$  and

$$\bar{\lambda}_{n}\left(\tilde{\pi}\right) = \lambda_{n} + \lambda_{n}\hat{s}_{n}\left(\tilde{\pi}\right) \quad \forall \tilde{\pi}$$

is the probability an unemployed worker with inflation expectations  $\tilde{\pi}$  of receiving an offer. Unemployed workers with inflation expectations  $\tilde{\pi}$  in t + 1 will be those workers who either remain unemployed, and then draw an  $\varepsilon$  such that their new expectations are  $\tilde{\pi}$ , or employed workers who separate and draw a similar  $\varepsilon$ . We can write the evolution of employed workers with different beliefs as:

$$e_{t+1}(\tilde{\pi}) = \phi\left(\tilde{\pi}_t - (\pi + \bar{\pi}); \sigma_{\varepsilon}^2\right) \int_{\tilde{z}} \left\{ n_t(\tilde{z}) \,\bar{\lambda}_n(\tilde{z}) \int_{\hat{r}_n(\tilde{z})} f(w) \,dw \right\} d\tilde{z} + \int_{\tilde{z}} \left\{ \int_w e_t(\tilde{z}) \,(1 - \delta) \,\mathbf{I}_{w \ge \hat{r}_n(\tilde{z})} g_t\left(w\left(1 + \pi_t\right) |\tilde{z}\right) dw \right) \right\} d\tilde{z}$$

That is, employed workers with inflation expectations  $\tilde{\pi}$  in t+1 will be those unemployed workers that find a job and draw an  $\varepsilon$  such that their new expectations are  $\tilde{\pi}$ , or employed workers who remain employed and draw a similar  $\varepsilon$ . The distribution of real wages among employed workers with inflation epectation  $\tilde{\pi}$  is:

$$\begin{split} e_{t+1}\left(\tilde{\pi}\right)g_{t+1}\left(w|\tilde{\pi}\right) &= \int_{\tilde{z}} \Bigl(n_{t}\left(\tilde{z}\right)\bar{\lambda}_{u}\left(\tilde{z}\right)f\left(w\right)\mathbf{I}_{w\geq\hat{r}_{n}\left(\tilde{z}\right)} \\ &+ \mathbf{I}_{w\geq\hat{r}_{n}\left(\tilde{z}\right)}\left(1-\delta\right)e_{t}\left(\tilde{z}\right)g_{t}\left(w\left(1+\pi_{t}\right)|\tilde{z}\right)\left(1-\bar{\lambda}_{e}\left(w,\tilde{z}\right)\right) \\ &+ \mathbf{I}_{w\geq\hat{r}_{n}\left(\tilde{z}\right)}\left(1-\delta\right)e_{t}\left(\tilde{z}\right)g_{t}\left(w\left(1+\pi_{t}\right)|\tilde{z}\right)\bar{\lambda}_{e}\left(w,\tilde{z}\right)F\left(\hat{r}_{e}\left(w,\tilde{z}\right)\right) \\ &+ \int_{y}\mathbf{I}_{y\geq\hat{r}_{n}\left(\tilde{z}\right)}\left(1-\delta\right)e_{t}\left(\tilde{z}\right)g_{t}\left(y\left(1+\pi_{t}\right)|\tilde{z}\right)\bar{\lambda}_{e}\left(w,\tilde{z}\right)f\left(w\right)\mathbf{I}_{w\geq\hat{r}_{e}\left(y,\tilde{z}\right)}dy\Bigr)d\tilde{z} \end{split}$$

where

$$\lambda_{e}\left(w,\tilde{\pi}\right) = \lambda_{e} + \lambda_{e}^{s} \hat{s}_{e}\left(w,\tilde{\pi}_{t}\right) \quad \forall w \in \left[\underline{w},\bar{w}\right], \forall \tilde{\pi}$$

That is, some nonemployed workers find jobs at real wage w, some employed workers previously employed at wage  $w(1 + \pi_t)$  who do not separate endogenously or exogenously and do not receive an offer or receive an unacceptable offer will have their wage depreciate to w, and finally, some workers will find new employment at a job with real wage w.

In the steady state where  $\pi_t = \frac{\mu_{\pi}}{1-\rho} \forall t$ , we have  $n_{t+1}(\tilde{\pi}) = n_t(\tilde{\pi}) = n^{ss}(\tilde{\pi})$ ,  $e_{t+1}(\tilde{\pi}) = e_t(\tilde{\pi}) = e^{ss}(\tilde{\pi})$ , and  $g_{t+1}(w|\tilde{\pi}) = g_t(w|\tilde{\pi}) = g^{ss}(w|\tilde{\pi}) \forall \tilde{\pi}$ .

## G Extended Quantitative Model

In this section, we modify the value functions from the main text to reflect the quantitative version of the model we use in the calibration. The new piece relative to the main text is the introduction of the explicit possibility that an individual will be unable to search. For search opportunities, we introduce a parameter  $\alpha_n$  for the nonemployed and  $\alpha_e$  for the employed which represent the probability that nonemployed and employed workers have the opportunity to search within the period. The value functions are then:

$$N(\tilde{\pi}_{t}) = u(b) + \alpha_{n} \left[ \max_{s \in (0,1)} - c(s) + \beta \left[ \lambda_{n} + \lambda_{n}^{s} s \right] E_{\pi_{t+1}} \left[ \int \max \left\{ W(w, \pi_{t+1}, w), N(\pi_{t+1}) \right\} dF(w) \right] \right. \\ \left. + \beta \left[ 1 - (\lambda_{n} + \lambda_{n}^{s} s) \right] E_{\pi_{t+1}} N(\pi_{t+1}) \right] \\ \left. + (1 - \alpha_{n}) \left[ \beta \lambda_{n} E_{\pi_{t+1}} \left[ \int \max \left\{ W(w, \pi_{t+1}, w), N(\pi_{t+1}) \right\} dF(w) \right] \right] \right. \\ \left. + \beta E_{\pi_{t+1}} \left( 1 - \lambda_{u} \right) N(\pi_{t+1}) \right] \right]$$

and

$$W(w, \tilde{\pi}_{t}, w^{0}) = \max \{ N(\tilde{\pi}_{t}), u(w) + \alpha_{e} \Big[ \max_{s \in (0,1)} - c(s) \\ + \beta (1 - \delta) [\lambda_{e} + \lambda_{e}^{s}s] E_{\pi_{t+1}} \int \max \{ W(x, \pi_{t+1}, x), \max \{ \bar{W}(w, \tilde{\pi}_{t}, \pi_{t+1}, w^{0}), N(\pi_{t+1}) \} \} dF(x) \\ + \beta (1 - \delta) (1 - [\lambda_{e} + \lambda_{e}^{s}s]) E_{\pi_{t+1}} \max \{ \bar{W}(w, \tilde{\pi}_{t}, \pi_{t+1}, w^{0}), N(\pi_{t+1}) \} \Big] \\ + \beta \delta E_{\pi_{t+1}} N(\pi_{t+1}) \\ + (1 - \alpha_{e}) \beta (1 - \delta) \lambda_{e} E_{\pi_{t+1}} \int \max \{ W(x, \pi_{t+1}, x), \max \{ \bar{W}(w, \tilde{\pi}_{t}, \pi_{t+1}, w^{0}), N(\pi_{t+1}) \} \} dF(x) \\ + (1 - \alpha_{e}) \beta (1 - \delta) (1 - \lambda_{e}) E_{\pi_{t+1}} \max \{ \bar{W}(w, \tilde{\pi}_{t}, \pi_{t+1}, w^{0}), U(\tilde{\pi}_{t+1}) \} \}$$

We modify the inflow-outflow equations to reflect these changes.

# H Permanent Shocks to Inflation and Inflation Expectations

In this section, we consider the effects of *permanent* shocks to inflation and inflation expectations. Because this type of shock means that individuals expect that inflation will be permanently higher, this should lower the impact that the shock has on search behavior through the
expectations channel. Since the original return to search is the higher real wage, if individuals now expect that the higher real wage will deteriorate faster once they change jobs, then they perceive the return to search to be lower, and will thus respond less through increased search effort. However, if the shock is accompanied by a rise in actual inflation, there is still an erosion of real wages which pushes up search effort and job-to-job transitions.

To see this, Figure H-1 plots search effort and job-to-job transitions when the shock is permanent, while Figure H-3 plots the same objects when we impose an permanent shock to inflation expectations only. In both cases, search effort rises, but by less than was the case under the temporary shock. This is because any real wage gain that would come with job change up the job ladder is now expected to last for less time, since inflation is expected to be higher permanently. Therefore, the return to search is lower all else equal, and so search effort is less responsive to a shock of the same magnitude.

## I Explaining the Autor, Dube, and McGrew 2023 Facts

The facts in Autor, Dube, and McGrew 2023 relate to both wage levels and residualized wages, while the model is one of residual wage dispersion. To study the model's predictions when wage levels matter, we consider two worker types: low skill and high skill. Both workers face the same labor market parameters, with the exception of the offer distribution: low skill workers face a lower mean offer than high skilled workers. Since the return to search in this environment is a function of the share of wage offers that are higher than the workers' current wage, one might think that a low skill and high skilled worker may react the same to an inflation shock, so long as their current wage is in the same percentile of their respective offer distributions. Here, we show that this is not the case, and that the mechanism we describe naturally effects low skill workers,

To demonstrate this, we solve the model again with the same parameters, except we move  $\mu_w$  from 1 to 1.5, representing a 50% offer wage premium for high-skill workers. We then fix the real wage of the low wage worker to  $w_{\text{low}}$ , and search for the wage of the high-wage worker that has the same share of offers above it. That is, we define  $w_{\text{high}} = F^{-1} \left( F\left(w_{\text{low}}; \mu_w, \sigma_w\right); \mu_w^{high}, \sigma_w \right)$  so that we are comparing two workers - one low-skilled and one high-skilled-that have the same benefits of search in terms of the probability of receiving higher wage offers. Figure ?? shows the optimal search effort for each type for different inflation expectations. Two things stand out: first, the search effort for the low-skilled type is always larger than the high-skilled type. Second, the elasticity of search effort with respect to inflation expectations is larger for the low-skilled type. This suggests that, while the mechanism we describe in the text is about residual wage dispersion, it follows also for a broader framework which models differences in wage levels that are not residualized.



Figure H-1: Search Effort and Job-to-Job Transitions: 5 PP Permanent Annualized Inflation Shock

*Notes*: This figure plots the dynamics of search effort (left panel) and the job-to-job transition probability (right panel) in response to a 5 percentage point shock to annualized inflation using simulated data from our model. The dashed horizontal blue line plots the pre-shock steady state mean real wage, and the black dashed horizontal lines plot 1 standard deviations.



Figure H-2: Mean Real Wages

*Notes*: This figure plots the dynamics of mean real wages in response to a 5 percentage point shock to annualized inflation using simulated data from our model. The dashed horizontal blue line plots the pre-shock steady state mean real wage, and the black dashed horizontal lines plot 1 standard deviations.



Figure H-3: Search Effort and Job-to-Job Transitions: Permanent Annualized Inflation Shock

*Notes*: This figure plots the dynamics of search effort (left panel, red line) and the job-to-job transition probability (right panel, red line) in response to a 5 percentage point shock to annualized inflation expectations using simulated data from our model. The dashed horizontal black lines are 1 standard deviation bounds for the response from 10 simulated samples of 250K workers. The blue lines plot the pre-shock steady state mean real wage and and 1 standard deviation above and below its value from a sample of 250K workers. The grey shaded corresponds to periods where the "shock" is active.



Figure I-1: Search Policy Functions for High- and Low-Skilled Workers

*Notes*: This figure plots the search policy function for a low-skilled worker and high-skilled worker at the same percentiles of their respective offer distributions. The chosen wage for the low type is the mean equilibrium wage for the high type; the wage for the high type is then the wage corresponding to the same percentile in its respective offer distribution.