

Job Search, Wages, and Inflation*

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Abstract

How does inflation effect the job search behavior of workers, given that wages are typically set in nominal terms? Using data from the Survey of Consumer Expectations, we show that currently employed households who expect higher inflation are more likely to search for jobs and are more likely to have a job-to-job transition over the short term. We then develop a search model with search on the job in which wages are set in nominal terms, and workers endogenously search for outside offers. In the model, workers search harder when inflation rises, consistent with the data.

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1 Introduction

With annual inflation topping 5% in the U.S. - levels not seen since the early 1980s - more than half of Americans are reporting that the rise in the price level is causing them financial hardship.¹ At the root of this hardship is the fact that most earnings are set in nominal terms without indexation to inflation (Hajdini et al. 2022, Jain, Kostyshyna, and Zhang 2022). That is, as the price level increases, an individual's purchasing power falls.

In this paper, we study one way in which workers can ameliorate the declining real wage they experience as a result of inflation; on-the-job search (OJS). As an employee obtains outside offers, she can either leave for a higher paying job or use an outside offer to increase the wage at her current position. Recent survey evidence suggests that job search is a common way that workers respond to the financial hardship brought on by inflation.¹ *Ceteris paribus*, individuals with higher inflation expectations - and therefore lower expected real wages - should be more likely to search for new work than those with lower inflation expectations.

Using data from the Federal Reserve Bank of New York's Survey of Consumer Expectations (SCE), we first provide cross-sectional evidence showing that employed consumers with higher inflation expectations are indeed more likely to search for jobs. An employed worker with a one percentage point higher inflation expectation is 0.56 percentage points more likely to be searching for a job. Furthermore, 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 0.25 percentage point increase in the probability of making a job-to-job transition over the next four months.

A nominal wage bargaining channel that drives the currently employed to search when they anticipate higher inflation should not affect all workers uniformly. For example, those who are highly satisfied with their jobs should be less likely to leave and therefore less likely to search when they experience real wage declines relative to similar workers who are less satisfied with their jobs. Moreover, we should expect workers who have wage adjustments built into their contracts to be less likely to search in response to a rise in inflation relative to those who do not. Consistent with our hypothesis, we find that the effect of inflation expectations on on-the-job search is either not present or largely reduced for those more likely to be union members. These workers are more likely to have pre-existing cost of living provisions in their contracts and to be protected by collective bargaining agreements to make wage demands for them. We also find a weakened relationship between expected inflation and search 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 in a job match in spite of a reduction in the real wage will be less affected by the

¹https://news.gallup.com/poll/400565/inflation-causing-hardship-majority.aspx?mod=djemRTE_h

proposed channel.

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 2021). Faberman et al. 2022 show that on-the-job search is not only common, but also more efficient than the search of the unemployed, meaning that the search behavior of employed workers is more likely to result in labor market transitions and wage growth. 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 in understanding inflation dynamics as well as possible self-reinforcing wage price spirals (Blanchard 1986).

To quantify how large the (partial equilibrium) transmission of price inflation to wage inflation can be, we introduce a model of on-the-job search with price level shocks in which *nominal* wages are negotiated at the start of a match. Because of two-sided lack of commitment, the nominal wage is fixed for the duration of the match unless either party has a credible threat which induces the nominal wage to change. This implies that, conditional on the nominal wage being fixed, real wages move in response to movements in the price level.² In the baseline model where search effort is exogenous, wages are renegotiated between an employer and employee when (i) the worker gets an outside offer which allows them to bargain up the wage at their current firm, or (ii) inflation induces a large enough reduction in the worker’s purchasing power.³ Extending the baseline model to allow for endogenous search increases the frequency of these wage adjustments, and further increase the rate of job-to-job transitions in the economy, consistent with the data.

1.1 Related Literature

There is a large literature exploring the link between inflation expectations and economic decision-making. Coibion, Gorodnichenko, and Kumar 2018, Coibion, Gorodnichenko, and Røpele 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. 2021, Duca-Radu, Kenny, and Reuter 2019, Burke and Ozdagli 2021, D’Acunto, Hoang, and Weber 2016, D’Acunto, Hoang, and Weber 2018, and Ryngaert 2022b, explore the relationship between expected inflation and purchases of durables. Dräger and Nghiem 2021, Crump et al. 2015, Ichiue and Nichiguchi 2015, and Ryngaert 2022b consider the relationship between expected inflation and

²Equivalently, the surplus split moves as the price level moves.

³In theory, there are also other cases which may cause a wage change, which we go over in detail in Section 5.

consumption 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 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. 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. In the model they assume that higher inflation expectations prompt those who cannot negotiate to search and generate new offers, creating upward pressure on nominal wages. 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. We find complementary evidence for nominal wage rigidity as - among those remaining at the same employer - the likelihood of receiving a nominal raise does not increase with expected inflation.

We further contribute to an empirical literature characterizing on-the-job search. In this regard, the most closely related to ours Faberman et al. 2022, who 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 adds to theirs in that we characterize the link between the search behavior of employed workers and respondents' macroeconomic expectations about inflation.

Recently, Blanco et al. 2022 develop a framework featuring two-sided lack of commitment between workers and firms which generates inefficient job separations and nominal wage rigidity. Our model also generates nominal wage rigidity, but maintains the efficiency of separations, which only happen when match surplus becomes significantly low. More importantly, we focus on on-the-job search and how it interacts with the dynamics of nominal wages.

2 Data

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 survey for up to 12 months. It includes questions about households' macroeconomic expectations as well as their demographic characteristics, financial and employment situation. 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. This survey includes more detailed information about the respondent’s current employment situation and satisfaction, labor search behavior, and anticipation of job finding and transitions. Our sample extends from February 2014 to November 2019. The limited timing of the sample is driven by the availability of the labor market survey, which contains the search and labor market realizations, as well as the COVID pandemic. Though data from the labor market survey is available into 2020, we omit the early phases of the COVID pandemic as shutdowns and restrictions may have made it difficult for people to search.

2.1 Search and Job-to-Job Transitions

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. We define search as separate indicator variables for the employed and non-employed. The indicator is 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.⁴

Panel A of Table 1 gives the proportion of respondents reporting each type of search split by employed and non-employed. 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.⁵ The table shows that 15 percent of the employed sample reports recent search for new work, with an additional 6 % searching for additional work. Of the non-employed sample, 13 percent searched, but this number increases to 70 percent when we restrict the sample to those who report wanting to work.

Search - among both the employed and the non-employed - does lead to subsequent labor market transitions. In the labor market supplement, respondents give the month and year that they began work at their current job. We define a respondent as having a new employer if her tenure at her current job is less than four months, or since the prior labor market supplement was conducted. Panel B 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.

⁴We extend our analysis to include those looking for supplemental work in Appendix Table A-2.

⁵Non-employed persons are defined as unemployed if they have actively searched for work in the last four weeks. Because the definition is searched based, it does not make sense to separate the sample into unemployed and out of the labor force.

Job-to-job transitions are rare - with 3.7 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 - 26.2 percent. Transitions are more common among those who reported search in the prior labor market survey - 12.5 percent of the employed report a job-to-job transition while 31.8 percent of those not employed and wanting to work begin work.

2.2 Inflation Expectations

The core survey, conducted every month, collects detailed data on the inflation expectations of households, over both short-run and medium-run horizons. Households provide their inflation expectations in two formats, first as a point estimate and then as probabilities that inflation may fall in 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]⁶ 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.

We use as our measure of inflation expectations the implied mean of a distribution fit to the density forecast. The distribution mode is assumed to be equal to the respondent's point forecast as in Ryngaert 2022a. Aside from this assumption, the distribution is fit in the same way as in Engelberg, Manski, and Williams 2009 and Armentier et al. 2016. We drop observations 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. All subsequent analysis is survey weighted.

Table A-8 gives the average short run inflation expectation in the month before the labor market survey by employment status and search status. Employed respondents have lower inflation expectations on average. Employed searchers have higher inflation expectations than employed non-searchers. There is no statistical difference in the average inflation expectation between unemployed respondents who search and those who do not.

⁶This selection is based on the answer to a previous question.

3 Results

In this section, we discuss the link between inflation expectations and the search and subsequent labor market transitions of employed workers. We show that currently employed respondents with higher inflation expectations are more likely to search for jobs and more likely to change jobs in the four months following the survey.

3.1 Job Search

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, $c_{i,t}$ which depends on both respondent characteristics and inflation expectations in time t :

$$c_{i,t} = \alpha E_{i,t}[\pi] + \gamma \mathbf{x}_{i,t} + \epsilon_{i,t} \quad (1)$$

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

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

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

$$search_{i,t+1} = \beta E_{i,t}[\pi] + \delta x_{i,t} + u_t + \epsilon_{i,t} \quad (3)$$

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 2018, Coibion et al. 2021, 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. Accordingly, we include a number of controls, $\mathbf{x}_{i,t}$. 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 of receiving a counter offer from their current employer (OO2f), and their expected wage growth (Q24⁷). Because we are interested in the effect of expectations on future search, we use

⁷This question is elicited as both a point forecast and a histogram forecast. We use the mean implied by the

the expectations from the month prior wherever possible.⁸ 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. We control for demographic characteristics such as gender, education, household income, census region, marital status, and whether or not the respondent is a parent. We also include tenure fixed effects in line with Binder and Kim 2022 who show that forecasts tend to improve over the course of a respondent’s survey tenure. The term u_t is a survey date fixed effect; this controls for potential time-series correlations between search and inflation expectations.

Table 3 reports the coefficients and marginal effects from Equation 3 estimated separately for the employed and the non-employed. For employed workers, higher inflation expectations are positively predictive of search. A one percentage point increase in expected inflation increases the probability that a worker will search by 0.56 percentage points. An increase in expected inflation does not have the same effect on the job search 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. Perhaps counterintuitively, the probability of search decreases with the probability of receiving a matching offer from a respondent’s current employer. If a respondent anticipates a counter offer, search should have more value for increasing the wage at her current position. This question may, however, proxy for a worker’s satisfaction with her current employer.⁹

These results suggest a correlation between inflation expectations and labor search, but we may worry about reverse causation. Perhaps inflation is not prompting workers to search on the job, but rather searching is causing workers to expect higher inflation. Workers may receive offers higher than their current wage and attribute this to increases in the price level rather than changes in their own productivity. 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. To address this concern further, we include inflation expectations at various horizons to clarify the timing of the inflation expectations that are important for search:

$$search_{i,t+1} = \sum_{h=\underline{h}}^{\bar{h}} \beta_h E_{i,t+h}[\pi] + \sum_{h=\underline{h}}^{\bar{h}} \delta_h x_{i,t+h} + u_t + \epsilon_{i,t} \quad (4)$$

subjective density function as proposed by Ryngaert 2022a.

⁸This means that people who join the survey in a Labor Market Survey month are excluded.

⁹Table A-6 shows that the question about receiving a counteroffer is positively correlated with satisfaction. Table A-7 presents the estimation results from Equation 3 controlling for job satisfaction measures. When we control for satisfaction, the negative effect of this probability remains, but is reduced in magnitude.

Table 4 presents the results of various specifications of Equation 4. This includes various combinations of lags and leads of inflation expectations and control variables that are available in the core survey. $E_{i,t+h}[\pi]$ is inflation expectation of respondent i h months following the search period beginning in t and ending in $t + 1$, corresponding to the variable $search_{i,t+1}$. $E_{i,t}[\pi]$ is therefore the expectation at the beginning of the search period, $E_{i,t-1}[\pi]$ is the expectation a month before the search period begins, and $E_{i,t+1}[\pi]$ is the expectation at the end of the search period. The table shows that, regardless of the lags and leads included in the regression, $E_{i,t}[\pi]$ remains the expectation important for predicting search in the last four weeks.¹⁰

We present a number of additional robustness checks in Appendix A. Table A-1 shows that these findings are robust to excluding the controls. Table A-2 includes employed workers looking for supplemental work and recovers a similar effect of inflation expectations on search. Table A-3 splits the non-employed into those who report that they would like to work and other non-employed. We find no 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-4 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. 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.

3.2 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 or compensation? In this section, we are interested in whether higher inflation expectations predict job-to-job transitions among employers. 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:

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

We first estimate a probit regression in which the outcome variable is a job-to-job transition

¹⁰We 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 $E_{i,t}[\pi]$.

between labor market survey waves:

$$\text{Job-to-Job Transition}_{i,t+5} = \beta E_{i,t}[\pi] + \delta x_{i,t} + u_{t+5} + \epsilon_{i,t+5} \quad (6)$$

This equation includes the dependent variable of interest, $E_{i,t}[\pi]$, or the inflation expectation at the beginning of the search period from t to $t + 1$. The first two columns of Table 5 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 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, $search_{i,t+1}$, as a control variable. The coefficient and marginal effect on inflation are no longer significant, with the effects of inflation expectations operating through the $search_{i,t+1}$, which has a strong positive and significant effect on the likelihood of a labor market transition.

4 Search and 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.¹¹ Our results show that these workers exhibit a weaker relationship between expected inflation and on-the-job search than their survey counterparts do.

4.1 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

¹¹In Appendix C, we show that workers with greater financial endurance are also less sensitive to this channel.

highest rates of union representation and those who live in the remaining states.¹² 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 6. 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 0.79%.¹³ Workers are asked in the Job Search Supplement each October whether they or workers at their current job are represented by a union. This roughly corresponds with the job the worker was at for the search period spanning from October to November - data collected in the November Labor Market Supplement. This measure is more direct, but cuts our sample size. Panel A of Table 6 also shows that the relationship between inflation and search is strong and highly significant among those who do not report any union members at their current place of work. While this relationship is positive for those who report union members at their job, the relationship is not statistically significant for this group.

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

4.2 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

¹²According 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.

¹³Table ?? 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 on-the-job search are significant for both groups, the effect is stronger and more significant in the right-to-work states.

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 26.3% of the employed sample and 57.6% of government workers have a pension benefit. Panel B of Table 6 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 0.65 percentage point increase in the probability that a worker searches. This supports the idea that workers are less sensitive to the nominal wage bargaining mechanism if other benefits make them more attached to their jobs. We next argue in Section 4.3 that satisfaction with non-pecuniary benefits of a job, like security and opportunity, would create the same result.

4.3 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.¹⁴ Panel C of Table

¹⁴The 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

6 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.¹⁵ 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.

5 Model

We now outline a model of search on- and off-the-job where there is a unit mass of potential firms indexed by their productivity y . We assume that the distribution of potential firms over y is uniform and $y \in (0, 1)$. Workers are homogeneous, infinitely lived, and of measure one, with linear preferences over a single final consumption good given by $u(c) = c$ whose price is p_t , which we take to be exogenous. The aggregate state of the economy is given by the joint (exogenous) dynamics of aggregate productivity z_t and the price level p_t . z_t is stochastic and changes according to the Markov transition probability $T_z(z, z')$. The price level is also assumed to be stochastic and changes according to a Markov transition probability $T_p(p, p')$. Finally, all agents discount the future at rate β .

The model closely follows Jarosch 2022, with several important differences: (i) there is no worker heterogeneity (a simplification), (ii) the price level is a state variable so that we can study how inflation affects job search behavior, and (iii) firms and workers bargain over *nominal* wages, which implies that movements in the price level and productivity will endogenously move the share of surplus going to the worker and the firm.

5.1 Meeting Technology

At the beginning of every period, there are u_{t-1} unemployed workers and $h_{t-1}(y)$ employed workers at firms of type y :

$$u_{t-1} + \int h_{t-1}(y) dy = 1$$

The aggregate state of the economy then changes from $\Omega_{t-1} = \{z_{t-1}, p_{t-1}\}$ to $\Omega_t = \{z_t, p_t\}$. As in Lise and Robin 2017 and Lentz, Lise, and Robin 2016, separations and meetings between searching workers and vacant jobs occur sequentially after the change in the aggregate state:

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.

¹⁵The there is a positive but not statistically significant relationship among the highly satisfied.

first, separations occur and then searching workers may draw a new offer.

Letting u_{t+} and $h_{t+}(y)$ denote the stock of unemployed workers and employed workers employed at firms y right after both the state changes and separations occur, the number of effective searchers L_t is then:

$$L_t = u_{t+} + s \int h_{t+}(y) dy,$$

where s represents the exogenous search effort of employed workers relative to unemployed workers.

Let $v(y, p, z)$ denote the exogenous density of type- y vacant jobs when the state is $\Omega = \{p, z\}$. Let $\lambda(p, z)$ denote the exogenous probability an unemployed searcher meets a vacant job and $s\lambda(p, z)$ is the probability an employed searcher contacts a job opening when the state is $\Omega(p, z)$.

5.2 The Value of Unemployment

Let $U(z)$ denote the value of unemployment and let $P(y, z)$ denote the value of a worker matched with a firm of type y when the state is z . Here, we are pre-empting that these values will not depend on the price level, which will also hold given the assumptions to follow.

The difference between the match value $S(y, z) = P(y, z) - U(z)$ is the match surplus, and only positive surplus matches will form. When a firm meets an unemployed worker, the firm receives the full value of the match. Assuming a worker earns $b(\Omega)$ in unemployment, the value of unemployment can be written as:

$$\begin{aligned} U(z) &= b(z) + \beta E_{\Omega'|\Omega} \left[(1 - \lambda(p', z')) U(z') + \lambda(p', z') \int U(z') v(y, z') dy \right] \\ &= b(z) + \beta E_{\Omega'|\Omega} [U(z')] \end{aligned} \tag{7}$$

5.3 Match Value $P(y, z)$ and Match Surplus $S(y, z)$

Firms with individual productivity y produce zy units of the final good when productivity is z when matched with a worker. They sell this at price p , and the numeraire in the economy is the final good, so zy is real output. At the beginning of the next period, after the aggregate state changes, the firm and worker will only remain together if surplus remains positive, or if $P(y, z') < U(z')$. If the match remains intact, we allow for the match to exogenously dissolve with probability δ so that overall, the match is destroyed with probability:

$$\mathbf{1}\{P(y, z') < U(z')\} + \delta \mathbf{1}\{P(y, z') \geq U(z')\}$$

If the job is indeed destroyed, the job disappears and the worker receives their unemployment value, so that the joint value of the match in the case of destruction is simply the value of

unemployment.

The probability that the match continues is:

$$1 - [\mathbf{1}\{P(y, z') < U(z')\} + \delta \mathbf{1}\{P(y, z') \geq U(z')\}] = (1 - \delta) \mathbf{1}\{P(y, z') \geq U(z')\}$$

In this event, the worker draws a new offer with probability $s\lambda(z', p')$ and it will come from a job of type y' with probability $v(y, z')$. In terms of wage setting, we assume that firms engage in Bertrand competition (**Postel-Vinay Robin 2002**) so that the worker ultimately gets a value equal to the second highest bid. There are thus two cases to consider in terms of a mobility decision. First, suppose that the surplus at the poaching firm is larger than at the incumbent firm, $S(y', z') > S(y, z')$. In this case, the worker moves to firm y' and receives a net value equal to the surplus at firm y . Second, suppose the opposite; then the worker stays with the incumbent employer and earns net value equal to the minimum between $S(y', z')$ and the worker's implied current net value given his/her current nominal wage and the current price level. Since either of these alternatives plus the value of unemployment are a share of the current match surplus, the joint value of the match is $P(y, z')$ in both cases. Therefore, we can write the value of the current match as follows:

$$P(y, z) = zy + \beta E_{\Omega'|\Omega} [U(z') + (1 - \delta) \mathbf{1}\{P(y, z') \geq U(z')\} [P(y, z') - U(z')]]$$

Combining this with the value of unemployment, we can write match surplus as:

$$S(y, z') = zy - b(z') + \beta (1 - \delta) E_{\Omega'|\Omega} [\max\{S(y, z'), 0\}] \quad (8)$$

Given this surplus function, we can now explicitly define the stock of unemployed and employed workers at a firm y after the realization of the new shock and separations occur as:

$$h_{t+}(y) = (1 - \delta) \mathbf{1}\{S(y, z) \geq 0\} h_t(y) \quad \text{and}$$

$$u_{t+} = 1 - \int h_{t+}(y) dy$$

5.4 Nominal Wage Contracting

Employment contracts are fixed *nominal* wage contracts which the employer commits to for the duration of the match unless both parties agree to renegotiate the terms. Since employers can fire workers and workers can always quit, renegotiation will take place when (i) the nominal wage is such that the real wage delivers negative net value to the firm, (ii) the nominal wage is such that the real wage delivers negative net value to the worker, or (iii), the nominal wage delivers net value to the worker which is lower than the net value the worker can receive at a

poaching firm.

Hiring from unemployment results in a nominal wage such that the worker gets zero surplus. Now suppose we are at the stage right after the realization of the aggregate new state, but before the possibility of a draw for a new offer. The price level moves to p' and z' is drawn. If we assume that $b(\cdot)$ is indexed to the price level and expressed as a share of aggregate productivity z , then real benefits are simply $\frac{bzp}{p} = bz$; from Equation 8, surplus is then independent of the price level, and surplus in the match moves to $S(y, z')$. Moreover, the value of unemployment is independent of the price level, so the value moves to $U(z')$ as well. Since additionally the price level moves up, but the nominal wage does not necessarily move (unless the surplus boundary is hit), the nominal wage implies a new share of the surplus that the worker is getting, call this σ_{t+} . In particular, consider a worker currently employed at firm y when the state is Ω who is receiving a nominal wage of w . Their value at date t is:¹⁶

$$\begin{aligned}
W(y, p, y_l, p_l, z, z_l) &= \frac{w(y, p, y_l, p_l, z, z_l)}{p} + \beta E_{\Omega'|\Omega} [(\mathbf{1}\{S(y, z') < 0\} + \delta \mathbf{1}\{S(y, z') \geq 0\}) U(z')] \\
&+ \beta (1 - \delta) E_{\Omega'|\Omega} \left\{ \mathbf{1}\{S(y, z') \geq 0\} s\lambda(p', z') \left(\int_x v(x, z') \mathbf{1}\{S(x, z') > S(y, z')\} S(y, z') dx + \right. \right. \\
&\quad \left. \int_x v(x, z') \mathbf{1}\{\tilde{\sigma}_{t+} S(y, z') < S(x, z') \leq S(y, z')\} S(x, z') dx + \right. \\
&\quad \left. \left. \int_x v(x, z') \mathbf{1}\{S(x, z') \leq \tilde{\sigma}_{t+} S(y, z') \leq S(y, z')\} \tilde{\sigma}_{t+} S(y, z') dx \right) \right\} \\
&+ \beta (1 - \delta) E_{\Omega'|\Omega} [\mathbf{1}\{S(y, z') \geq 0\} (1 - s\lambda(p', z')) \tilde{\sigma}_{t+} S(y, z') dx] \tag{9}
\end{aligned}$$

where

$$\tilde{\sigma}_{t+} = \begin{cases} \frac{W(y, p', y_l, p_l, z', z_l) - U(z')}{S(y, z')} & 0 \leq W(y, p', y_l, p_l, z', z_l) - U(z') \leq S_{t+1}(y, z') \\ 0 & W(y, p', y_l, p_l, z', z_l) - U(z') < 0 \\ 1 & S(y, z') < W(y, p', y_l, p_l, z', z_l) - U(z') \end{cases}$$

That is, they earn a nominal wage equal to w which is divided by the current price level to be expressed in real terms. The first line then is the expected value the workers receives conditional on a separation. The second line is the value the worker gets when poached by a firm, which is equal to the current full match surplus. The third line is what the worker receives is they are not poached, but can use the outside offer to bid up their current nominal wage. The fourth

¹⁶Importantly, this value depends on the current distribution of workers across jobs and the unemployment rate through the λ_{t+1} and the expected vacancy posting decisions of firms. This means that this value must be solved for at every date t conditional on the above objects.

line is the case where the outside offer does not affect the worker's options, but the nominal wage may adjust because the aggregate shocks are such that the surplus boundary is hit. The last line is the case where the worker does not receive an offer.

5.5 Labor Market Flows

Unemployment and employment flows will follow:

$$u_{t+1} = u_t + \left(1 - \lambda(p_t, z_t) \int v(y, z_t) \mathbf{1}\{S(y, z_t)\} dy \right)$$

$$\begin{aligned} h_{t+1}(y) = & h_t(y) \left(1 - \int s(p_t, z_t) v(y, z_t) \mathbf{1}\{S(y', z_t) > S(y, z_t)\} dy' \right) \\ & + \int h_t(y') s \lambda(p_t, z_t) v(y, z_t) \mathbf{1}\{S_t(y, z_t) > S_t(y', z_t)\} dy' + \\ & + u_t + \lambda(p_t, z_t) v(y, z_t) \mathbf{1}\{S_t(y, z_t) > 0\} \end{aligned}$$

5.6 Model Solution

The model can be solved in the following steps:

1. For a given home production function $b(z) = bz$ and output functions zy , discount rate β , exogenous separation probability δ , exogenous distribution of vacancies for all states $v(y, z)$, exogenous meeting rates for all states $\lambda(p, z)$, and stochastic transition matrices for z and p , $T(z, z')$ and $T_p(p, p')$, solve for the surplus function $S(y, z)$ as the unique solution to Equation 8.
2. Given some initial values for u_0 and $h_0(y)$, a sequence of stochastic productivity shocks $\{z_t\}_{t=0}^T$ and price level realizations $\{p_t\}_{t=0}^T$ imply a unique path for the unemployment rate, and the distribution of employed workers across firms:

$$\{u_t, h_t(y)\}_{t=0}^T$$

3. Given the path for the above objects, we can now turn to the dynamics of wages. To solve for wages, given some initial $\{z_0, p_0, u_0, h_0(y)\}$.¹⁷
 - (a) Construct a grid of wage outcomes, $w_j(y, p, y_l, p_l, z, z_l)$
 - (b) Guess an initial value function for $W_k(y, p, y_l, p_l, z, z_l)$.

¹⁷The easiest is to begin with everyone in unemployment, so that the surplus shares are irrelevant.

- (c) Construct $\sigma(y, p, y_l, p_l, z, z_l)$, the implied share of surplus the nominal wage w_j generates for the worker.
- (d) Iterate on this value using Equation 9 until convergence.
- (e) Given the updated value for $W_{k+1}(y, p, y_l, p_l, z, z_l)$, we can solve for wages for those coming out of unemployment which must satisfy $W_{k+1}(y, p, \emptyset, p, z, z) - U(z) = 0 \quad \forall p, z$.¹⁸ We can also solve for wages for any worker transitioning from one firm y to another (equal or higher surplus firm) y' when the state is Ω as $W_{k+1}(y', p, y, p, z, z) - U(z) = S(y) \quad \forall p, z$. These are the set of all possible realizations of nominal wages in the economy. Use these to update the wage grid.
- (f) Given this new wage grid, return to (c) and repeat steps (c)-(d) until convergence.

6 Calibration

[To Be Completed]

7 Conclusion

This paper provides cross-sectional 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 do not find a similar effect among unemployed workers. This effect is further weakened or not present among workers who are more likely to have high attachment to their jobs or to have a union to bargain wages on their behalf. We argue that expected inflation along with nominal wage rigidity prompt workers to search for new opportunities in order to raise their nominal wage by either taking a new position or using an outside offer to bargain with an employer who is not inclined to give raises.

In a model of on-the-job search with two-sides lack of commitment and nominal wage contracts, we show that increases in the price level reduce the real wage and prompt exogenous search, speeding the rate of job-to-job transitions and wage inflation.

¹⁸The \emptyset notation refers to the state of unemployment.

Panel A: Job Search	Employed	Not Employed		
		<i>All</i>	<i>Want to Work</i>	<i>Not Working, Other</i>
Searching				
<i>for new work</i>	15.3 (0.4)	13.0 (0.6)	70.3 (2.5)	5.3 (0.4)
<i>for additional work</i>	6.0 (0.3)			
Not Searching	78.7 (0.5)	87.0 (0.6)	29.7 (2.5)	94.7 (0.4)
N	11,027	5,289	577	4,712
Panel B: New Employer				
<i>All</i>	3.7 (0.3)	7.6 (0.5)	26.2 (2.7)	5.6 (0.5)
<i>Prior Search</i>	12.5 (1.5)	29.3 (3.3)	31.8 (4.1)	24.1 (5.9)
N	7,110	4,312	430	3,882

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 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
	3.48	3.83	0.00
By Search Status			
	Searching	Not Searching	p-value for equality of means
<i>Employed</i>	3.68	3.44	0.01
<i>Not Employed</i>	3.87	3.83	0.43

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
$E_{i,t}[\pi]$	0.0311*** (0.0090)	0.0056*** (0.0016)	0.0153 (0.0182)	0.0013 (0.0015)
$E_{i,t}[\text{Prob. Unemployment Increases}]$, (0 - 100)	-0.0013 (0.0011)	-0.0002 (0.0002)	-0.0033 (0.0023)	-0.0003 (0.0002)
$E_{i,t}[\text{Prob. Interest Rates Increase}]$, (0 - 100)	-0.0006 (0.0010)	-0.0001 (0.0002)	-0.0065*** (0.0022)	-0.0005*** (0.0002)
$E_{i,t}[\text{Prob. Stock Prices Increase}]$, (0 - 100)	-0.0022* (0.0012)	-0.0004* (0.0002)	0.0031 (0.0027)	0.0003 (0.0002)
$E_{i,t+1}[\text{Prob. Offer}]$, (0 - 100)	0.0128*** (0.0011)	0.0023*** (0.0002)	0.0144*** (0.0020)	0.0012*** (0.0002)
$E_{i,t+1}[\text{Number of Offers}]$,	0.2731*** (0.0288)	0.0498*** (0.0053)	0.1948*** (0.0471)	0.0146*** (0.0036)
$E_{i,t+1}[\text{Prob. Counteroffer}]$, (0 - 100)	-0.0070*** (0.0009)	-0.0013*** (0.0002)		
$E_{i,t}[\text{Prob. Job Loss}]$, (0 - 100)	0.0086*** (0.0012)	0.0015*** (0.0002)		
$E_{i,t}[\text{Prob. Job Finding}]$, (0 - 100)	-0.0010 (0.0008)	-0.0002 (0.0002)		
$E_{i,t}[\Delta \text{earnings}]$	-0.0088 (0.0059)	-0.0016 (0.0011)		
N	6,672		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 $E_{i,t}[\Delta \text{earnings}]$ 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

	Two Lags		One Lag, One Lead		Two Leads	
$E_{i,t-2}[\pi]$	0.0006 (0.0153)	0.0001 (0.0026)				
$E_{i,t-1}[\pi]$	-0.0065 (0.0145)	-0.0011 (0.0025)	-0.0162 (0.0129)	-0.0028 (0.0023)		
$E_{i,t}[\pi]$	0.0370** (0.0157)	0.0063** (0.0027)	0.0498*** (0.0134)	0.0087*** (0.0023)	0.0362*** (0.0122)	0.0064*** (0.0022)
$E_{i,t+1}[\pi]$			0.0071 (0.0127)	0.0012 (0.0022)	-0.0148 (0.0126)	-0.0026 (0.0022)
$E_{i,t+2}[\pi]$					0.0144 (0.0131)	0.0026 (0.0023)
Observations	4758		5855		5731	

Table 4: 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, $h = 0$. These coefficients come from Equation 4. 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.

Job-to-Job Transition	Not Controlling for Search		Controlling for Search	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0352** (0.0155)	0.0025** (0.0011)	0.0240 (0.0163)	0.0016 (0.0011)
$E_{i,t}[\text{Prob. Unemployment Increases}]$, (0 - 100)	-0.0023 (0.0020)	-0.0002 (0.0001)	-0.0026 (0.0020)	-0.0002 (0.0001)
$E_{i,t}[\text{Prob. Interest Rates Increase}]$, (0 - 100)	-0.0008 (0.0020)	-0.0001 (0.0001)	-0.0014 (0.0020)	-0.0001 (0.0001)
$E_{i,t}[\text{Prob. Stock Prices Increase}]$, (0 - 100)	-0.0013 (0.0023)	-0.0001 (0.0002)	-0.0005 (0.0023)	-0.0000 (0.0002)
$E_{i,t+1}[\text{Prob. Offer}]$, (0 - 100)	0.0100*** (0.0021)	0.0007*** (0.0001)	0.0083*** (0.0022)	0.0006*** (0.0001)
$E_{i,t+1}[\text{Number of Offers}]$,	0.0541 (0.0458)	0.0038 (0.0033)	0.0069 (0.0457)	0.0005 (0.0031)
$E_{i,t+1}[\text{Prob. Counteroffer}]$, (0 - 100)	-0.0020 (0.0023)	-0.0001 (0.0002)	-0.0002 (0.0022)	-0.0000 (0.0001)
$E_{i,t}[\text{Prob. Job Loss}]$, (0 - 100)	0.0052** (0.0021)	0.0004** (0.0002)	0.0034 (0.0024)	0.0002 (0.0002)
$E_{i,t}[\text{Prob. Job Finding}]$, (0 - 100)	0.0043*** (0.0015)	0.0003*** (0.0001)	0.0044*** (0.0016)	0.0003*** (0.0001)
[1em] $E_{i,t}[\Delta \text{earnings}]$	0.0064 (0.0099)	0.0005 (0.0007)	0.0085 (0.0095)	0.0006 (0.0006)
$search_{i,t+1}$			0.6960*** (0.1130)	0.0469*** (0.0084)
N	3,659		3,629	

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 search. 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.

Search by Subgroups				
Panel A: Union Representation				
<i>Top 10 Most Unionized States</i>				
	Top 10		Out of Top 10	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0021 (0.0159)	0.0004 (0.0030)	0.0411*** (0.0103)	0.0070*** (0.0018)
N	1,844		4,820	
<i>Union Workers at Current Job</i>				
	Yes		No	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0327 (0.0393)	0.0037 (0.0045)	0.0462** (0.0194)	0.0073** (0.0031)
N	444		1,499	
Panel B: Pension Benefits				
	Has Pension Benefit		No Pension Benefit	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0139 (0.0174)	0.0022 (0.0028)	0.0354*** (0.0101)	0.0065*** (0.0019)
N	1,893		4,776	
Panel C: Job Satisfaction				
<i>Benefits and Flexibility</i>				
	Highly Satisfied		Less Satisfied	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0243 (0.0210)	0.0029 (0.0025)	0.0346*** (0.0098)	0.0068*** (0.0019)
N	1,751		4,876	
<i>Opportunities at Current Job</i>				
	Yes		No	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0066 (0.0144)	0.0009 (0.0019)	0.0389*** (0.0115)	0.0077*** (0.0023)
N	2,974		3,686	

Table 6: 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.

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APPENDICES

A Additional Tables and Figures

	$E_{i,t}[\pi]$	
	Coefficient	M.E.
All Controls Included	0.0360*** (0.0098)	0.0066*** (0.0018)
Exclude Macro Expectations	0.0361*** (0.0097)	0.0066*** (0.0018)
Exclude Labor Market Expectations	0.0223*** (0.0080)	0.0053*** (0.0019)
Exclude Demographic	0.0245*** (0.0093)	0.0046*** (0.0018)
Exclude All	0.0163** (0.0071)	0.0040** (0.0018)

Table A-1: 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.

	Employed	
	Coeff.	ME
$E_{i,t}[\pi]$	0.0229** (0.0091)	0.0049** (0.0020)
$E_{i,t}[\text{Prob. Unemployment Increases}]$, (0 - 100)	-0.0022** (0.0011)	-0.0005** (0.0002)
$E_{i,t}[\text{Prob. Interest Rates Increase}]$, (0 - 100)	-0.0005 (0.0010)	-0.0001 (0.0002)
$E_{i,t}[\text{Prob. Stock Prices Increase}]$, (0 - 100)	-0.0021* (0.0012)	-0.0005* (0.0002)
$E_{i,t+1}[\text{Prob. Offer}]$, (0 - 100)	0.0129*** (0.0011)	0.0028*** (0.0002)
$E_{i,t+1}[\text{Number of Offers}]$,	0.2848*** (0.0272)	0.0612*** (0.0057)
$E_{i,t+1}[\text{Prob. Counteroffer}]$, (0 - 100)	-0.0062*** (0.0009)	-0.0013*** (0.0002)
$E_{i,t}[\text{Prob. Job Loss}]$, (0 - 100)	0.0072*** (0.0012)	0.0016*** (0.0002)
$E_{i,t}[\text{Prob. Job Finding}]$, (0 - 100)	-0.0013 (0.0008)	-0.0003 (0.0002)
$E_{i,t}[\Delta \text{earnings}]$ -0.0025**		-0.0117** (0.0013)
N	6,540	

Table A-2: 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 $E_{i,t}[\Delta \text{earnings}]$ 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 Working, Other	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0560 (0.0368)	0.0119 (0.0077)	-0.0439* (0.0230)	-0.0022* (0.0012)
$E_{i,t}[\text{Prob. Unemployment Increases}]$, (0 - 100)	0.0114** (0.0050)	0.0024** (0.0011)	0.0014 (0.0026)	0.0001 (0.0001)
$E_{i,t}[\text{Prob. Interest Rates Increase}]$, (0 - 100)	-0.0152*** (0.0044)	-0.0032*** (0.0009)	-0.0036 (0.0027)	-0.0002 (0.0001)
$E_{i,t}[\text{Prob. Stock Prices Increase}]$, (0 - 100)	0.0146*** (0.0051)	0.0031*** (0.0011)	-0.0019 (0.0030)	-0.0001 (0.0002)
$E_{i,t+1}[\text{Prob. Offer}]$, (0 - 100)	0.0207*** (0.0039)	0.0044*** (0.0008)	0.0171*** (0.0025)	0.0009*** (0.0001)
$E_{i,t+1}[\text{Number of Offers}]$,	0.1042 (0.0742)	0.0222 (0.0158)	0.2106*** (0.0521)	0.0106*** (0.0028)
N	312		3,150	

Table A-3: 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.

	On-the-Job Search	
	Coeff.	ME
$E_{i,t}[\pi]$	0.0221*** (0.0070)	0.0048*** (0.0015)
$E_{i,t}[\text{Prob. Unemployment Increases}]$, (0 - 100)	-0.0031*** (0.0009)	-0.0007*** (0.0002)
$E_{i,t}[\text{Prob. Interest Rates Increase}]$, (0 - 100)	-0.0004 (0.0008)	-0.0001 (0.0002)
$E_{i,t}[\text{Prob. Stock Prices Increase}]$, (0 - 100)	-0.0016* (0.0009)	-0.0004* (0.0002)
$E_{i,t}[\text{Prob. Job Loss}]$, (0 - 100)	0.0136*** (0.0009)	0.0030*** (0.0002)
$E_{i,t}[\text{Prob. Job Finding}]$, (0 - 100)	0.0029*** (0.0006)	0.0006*** (0.0001)
$E_{i,t}[\Delta \text{earnings}]$	-0.0053 (0.0046)	-0.0012 (0.0010)
N	10,844	

Table A-4: 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 $E_{i,t}[\Delta \text{earnings}]$ 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.

By Right-to-Work States	Non Right-to-Work States		Right-to-Work States	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0245* (0.0131)	0.0046* (0.0025)	0.0446*** (0.0140)	0.0076*** (0.0024)
N	2,983		3,183	

Table A-5: This table shows the coefficient and marginal effect on $E_{i,t}[\pi]$ from Equation 3, estimated separately for those living right-to-work states and those living in states without right-to-work laws. States with right to work laws should be less unionized than those without. Consistent with our predictions, the relationship between inflation expectations is stronger and more significant in right-to-work states than in others.

	Compensation	Benefits	Fits Skills	Opportunities	Overall
$E_{i,t}[\pi]$	-0.0152*** (0.0059)	-0.0155*** (0.0059)	-0.0082 (0.0067)	-0.0104* (0.0058)	-0.0091 (0.0061)
$E_{i,t}[\text{Prob. Unemployment Increases}]$, (0 - 100)	-0.0020*** (0.0007)	-0.0030*** (0.0007)	-0.0000 (0.0007)	-0.0022*** (0.0007)	-0.0013* (0.0007)
$E_{i,t}[\text{Prob. Interest Rates Increase}]$, (0 - 100)	0.0012* (0.0007)	-0.0004 (0.0007)	-0.0003 (0.0007)	0.0017*** (0.0007)	0.0002 (0.0007)
$E_{i,t}[\text{Prob. Stock Prices Increase}]$, (0 - 100)	-0.0005 (0.0008)	0.0019** (0.0008)	-0.0003 (0.0008)	-0.0002 (0.0008)	0.0010 (0.0008)
$E_{i,t}[\text{Prob. Job Loss}]$, (0 - 100)	-0.0057*** (0.0009)	-0.0073*** (0.0009)	-0.0080*** (0.0010)	-0.0095*** (0.0009)	-0.0115*** (0.0009)
$E_{i,t}[\text{Prob. Job Finding}]$, (0 - 100)	0.0023*** (0.0005)	0.0020*** (0.0006)	0.0028*** (0.0006)	0.0037*** (0.0005)	0.0028*** (0.0005)
$E_{i,t+1}[\text{Prob. Counteroffer}]$, (0 - 100)	0.0047*** (0.0006)	0.0033*** (0.0006)	0.0047*** (0.0006)	0.0079*** (0.0006)	0.0074*** (0.0006)
$E_{i,t+1}[\text{Prob. Offer}]$, (0 - 100)	-0.0060*** (0.0008)	-0.0031*** (0.0008)	-0.0025*** (0.0008)	-0.0007 (0.0008)	-0.0058*** (0.0008)
$E_{i,t+1}[\text{Number of Offers}]$,	-0.0434** (0.0177)	-0.0691*** (0.0196)	-0.1089*** (0.0198)	-0.0455** (0.0186)	-0.1151*** (0.0184)
$E_{i,t}[\Delta \text{ earnings}]$	0.0202*** (0.0042)	0.0162*** (0.0042)	0.0072 (0.0048)	0.0502*** (0.0045)	0.0293*** (0.0043)
Observations	8023	8019	8023	8021	8024

Table A-6: The table shows the coefficients on macroeconomic expectations from ordered probit regressions of ranked job satisfaction on expected inflation. Higher inflation expectations are correlated with lower satisfaction with compensation and benefits. Inflation expectations have a less significant effect on perceived future opportunities and are uncorrelated with respondents satisfaction with the job's fit for their skills and experience as well as their overall satisfaction. This suggests that expected inflation leads to dissatisfaction with the current job primarily through dissatisfaction with the real wage rather than non-financial aspects of the job. The probability of receiving a counteroffer is positively correlated with measures of satisfaction, meaning that this question may reflect respondents happiness with their current match rather than the motive to search in order to obtain an outside offer.

	Employed	
	Coeff.	ME
$E_{i,t}[\pi]$	0.0320*** (0.0102)	0.0050*** (0.0016)
$E_{i,t}[\text{Prob. Unemployment Increases}]$, (0 - 100)	-0.0030** (0.0012)	-0.0005** (0.0002)
$E_{i,t}[\text{Prob. Interest Rates Increase}]$, (0 - 100)	-0.0003 (0.0011)	-0.0000 (0.0002)
$E_{i,t}[\text{Prob. Stock Prices Increase}]$, (0 - 100)	-0.0023 (0.0014)	-0.0004 (0.0002)
$E_{i,t+1}[\text{Prob. Offer}]$, (0 - 100)	0.0118*** (0.0013)	0.0019*** (0.0002)
$E_{i,t+1}[\text{Number of Offers}]$,	0.2487*** (0.0296)	0.0391*** (0.0047)
$E_{i,t+1}[\text{Prob. Counteroffer}]$, (0 - 100)	-0.0029*** (0.0010)	-0.0005*** (0.0002)
$E_{i,t}[\text{Prob. Job Loss}]$, (0 - 100)	0.0051*** (0.0013)	0.0008*** (0.0002)
$E_{i,t}[\text{Prob. Job Finding}]$, (0 - 100)	0.0008 (0.0010)	0.0001 (0.0002)
$E_{i,t}[\Delta \text{earnings}]$	0.0021 (0.0070)	0.0003 (0.0011)
N	6,178	

Table A-7: The table replicates Table 3 for employed workers, but includes measures of job satisfaction in the set of controls. 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 $E_{i,t}[\Delta \text{earnings}]$ 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. Including measures of satisfaction reduces the size of the negative coefficient on the reported probability of receiving a counteroffer from one's current employer.

Inflation Expectations			
By Education	Searching	Not Searching	p-value for equality of means
<i>College</i>	3.28	3.16	0.08
<i>Some College and High School</i>	4.19	3.66	0.01
By Income	Searching	Not Searching	p-value for equality of means
$\geq \$50K$	3.48	3.31	0.07
$< \$50K$	4.22	3.73	0.03
By Age	Searching	Not Searching	p-value for equality of means
<i>Under 40</i>	3.12	3.13	0.53
<i>40 or Older</i>	4.20	3.61	0.00
By Gender	Searching	Not Searching	p-value for equality of means
<i>Male</i>	3.43	3.13	0.01
<i>Female</i>	3.97	3.84	0.23
By Numeracy	Searching	Not Searching	p-value for equality of means
<i>High Numeracy</i>	3.58	3.40	0.03
<i>Low Numeracy</i>	4.06	3.54	0.07

Table A-8: 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 non-searchers for all groups by women and respondents under 40.

By Education				
	College		Some College & High School	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0029 (0.0113)	0.0006 (0.0024)	0.0632*** (0.0150)	0.0091*** (0.0022)
N	4,128		2,037	
By Income				
	$\geq \$50K$		$< \$50K$	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0157 (0.0122)	0.0029 (0.0022)	0.0673*** (0.0158)	0.0110*** (0.0027)
N	4,779		1,400	
By Age				
	Under 40		40 or Older	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	-0.0090 (0.0147)	-0.0019 (0.0031)	0.0575*** (0.0123)	0.0091*** (0.0020)
N	2,405		3,770	
By Gender				
	Male		Female	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0544*** (0.0158)	0.0094*** (0.0028)	0.0258** (0.0120)	0.0048** (0.0022)
N	3,454		2,717	
By Numeracy				
	Highly Numeracy		Low Numeracy	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0184* (0.0111)	0.0034* (0.0020)	0.0654*** (0.0171)	0.0106*** (0.0029)
N	4,966		1,211	

Table A-9: This table shows the coefficient on $E_{i,t}[\pi]$ from 3, estimated separately by subgroup. The results show that both men and women and high numeracy and low numeracy respondents with higher inflation expectations are more likely to search. Inflation expectations have a positive and significant effect on the search of those who have not finished college, low income respondents, and those who have not finished college. Among college graduates, medium to high income respondents, and those under 40, inflation expectations are not predictive of search behavior.

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

C 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. 2015 based on the answers to questions from the SCE. The first question, from the SCE Credit Access Supplement, asks about access to liquid funds.

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. 2015, 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-1 presents the results of Equation ?? 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.

Less Constrained				
	<u>Could Come up with \$2000</u>		<u>No Chance of Default</u>	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0344* (0.0031)	0.0056* (0.0106)	0.0254 (0.0244)	0.0036 (0.0035)
N	1,955		1,020	
More Constrained				
	<u>Might Not Come up with \$2000</u>		<u>Positive Prob. of Default</u>	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0390*** (0.0117)	0.0071*** (0.0022)	0.0409*** (0.0244)	0.0076*** (0.0035)
N	3,941		5,158	

Table C-1: 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.