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ABSTRACT

How do inflation expectations affect the job search behavior of workers when wages are set in nominal terms? A canonical job search model incorporating nominal wage rigidities implies that on-the-job search should increase and reservation wages should decrease with expected inflation. Higher inflation expectations therefore lead to more frequent job-to-job transitions. We show in a novel survey that workers search more under higher values of hypothetical inflation. In the Survey of Consumer Expectations, workers with higher inflation expectations have lower reservation wages and are more likely to search and to change jobs. The relationship between expected inflation and employer-to-employer transitions also appears in aggregate time series data.

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1 Introduction

Theory suggests that inflation expectations prompt households to act in ways that can themselves generate further inflation. For example, the consumption Euler equation dictates that households should substitute intertemporally towards the present when they expect high inflation, which puts further upward pressure on prices. Households may also respond to higher expected inflation in the labor market via increased nominal wage demands, potentially contributing to self-perpetuating wage-price spirals. For these reasons, monetary policymakers emphasize that keeping inflation expectations anchored can facilitate keeping inflation itself stable. However, recent work finds that workers do not expect their nominal income to unconditionally adjust more with higher inflation (Hajdini et al. 2022, Jain, Kostyshyna, and Zhang 2022). This is in contrast to policymakers’ belief that elevated inflation expectations create inflationary pressure in the labor market. How, then, does increased expected inflation translate to nominal wage growth, if at all?

In this paper, we propose on-the-job search as a potential channel for expectations-driven wage pressures. 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.¹ 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.² We provide theoretical underpinnings and novel empirical evidence that support this mechanism.

To structure our empirical investigation, we first introduce a simple model of on-the-job search (Burdett 1978, Christensen et al. 2005, Faberman et al. 2022) that formally integrates nominal wage rigidities for incumbent workers. In this framework, the exogenous distribution of real wage offers is fixed while nominal wages for stayers are rigid.³ This means that nominal wages for job switchers will track closely with inflation, while stayers’ real wages will decline with inflation.⁴ The model predicts that workers are more likely to search for a new match when their inflation expectations are higher, as the perceived return to search increases with expected inflation. Workers’ reservation wages are also decreasing in expected inflation because the inflation expectation determines the expected rate of depreciation of current real wages. As workers increase their search effort and lower their reservation wages, they are more likely to

¹Hajdini et al. 2022 theorize that households’ perception of this decline causes them to view high inflation as a source of financial hardship.

²Recent 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.

³Given 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.

⁴One 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.

match with outside offers, and the rate of job-to-job transitions increases.

In the empirical analysis, we test five particular points related to workers' labor market expectations and actions as they relate to inflation expectations. First, do workers anticipate lower real wages when expected inflation is high? Second, do these expectations prompt them to search on-the-job? Third, do higher inflation expectations lower reservation wages? Fourth, are workers with higher inflation expectations more likely to switch jobs? Lastly, is there evidence linking inflation expectations and job-to-job transitions in the time series?

To approach the first two, 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. The respondents were asked to consider a hypothetical inflation level and provide (i) expected nominal earnings growth *conditional on remaining at their current job* and (ii) expected search behavior for that inflation rate. All respondents answered these questions for two hypothetical levels of inflation: 2% and 10%. This survey design allows us to estimate the differences in expectations and planned behavior at different levels of expected inflation *while keeping the characteristics and information sets of the respondents fixed*. We find that employed respondents expect on average, conditional on remaining at their current job, similar nominal earnings growth under both levels of inflation. This means that they expect lower real earnings growth with their current employer when inflation is higher. We also find 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.

We then turn to the Federal Reserve Bank of New York's Survey of Consumer Expectations (SCE) to examine the relationship between inflation expectations and on-the-job search in a more detailed and longer-running dataset. We find cross-sectional evidence supporting our previous result - 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 0.3 percentage points more likely to actively search for a job in the subsequent period. Real reservation wages are decreasing in inflation expectations, consistent with the predictions of the model. Employed respondents with higher inflation expectations are also 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 0.17 percentage point increase in the probability of making a job-to-job transition over this period.

Finally, we investigate the relationship between expected inflation and job-to-job transitions in the time series. Expected and realized inflation are positively correlated with the rate of employer-to-employer transitions. This contributes to the totality of the evidence that on-the-job search is an important mechanism by which inflation expectations are transmitted to nominal wage demands.

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 firm inflation expectations and 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 durable purchases. Dräger and Nghiem 2021, Crump et al. 2022, Ichiue and Nishiguchi 2015, and Ryngaert 2022 consider the relationship between expected inflation and consumption using the Euler consumption equation. We contribute to this literature by characterizing the relationship between inflation expectations and household labor market decisions, particularly the decisions to search on the job and to transition from one employer to another. This work is complementary to much of the current literature that finds that households do not substitute consumption between time periods because they view inflation as a source of lost purchasing power (Jiang et al. 2024).

To our knowledge, ours is the first paper to use consumer surveys to address the link between expected inflation and *realized* search and transitions of the labor market of employed workers.⁵ Hajdini et al. 2022 investigate the low transfer of inflation expectations to income growth expectations. They ask consumers about their labor market plans and establish a link between expected inflation and the likelihood that 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 builds theoretical predictions for the effect of inflation expectations on search, reservation wages, and labor market transitions. We provide empirical evidence for these predictions using inflation hypothetical in a novel survey evidence as well as existing survey data on inflation expectations, reservation wages, and self-reported realized search and transitions. 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.

We also contribute to an empirical literature characterizing on-the-job search and its importance in the macroeconomy. Faberman et al. 2022 use a supplement to 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

⁵Theoretical work embedding nominal considerations into search models includes Moscarini and Postel-Vinay 2022, Blanco et al. 2022, Pilossoph, Ryngaert, and Wedewer 2023 and Afrouzi et al. 2024. Guerreiro et al. 2024 provides a theoretical discussion supported by survey evidence of the “conflict cost” of inflation in the labor market.

the link between the search behavior of employed workers and respondents’ inflation expectations. 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. We show that the expectation of inflation can increase the rate of job-to-job transitions via an increase in on-the-job search. Other papers also study 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. Instead, our emphasis is on how expected inflation causes changes in on-the-job search.

The possibility that 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. When nominal wages are downwardly rigid, positive inflation can deliver real wage cuts in response to negative productivity shocks (Tobin 1972). We argue that workers perceive wages for switchers to be more upwardly flexible than wages for stayers. Hazell and Taska 2023 find that the wages of the 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 the *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 suggest that switcher wages reflect primarily improvements in match quality, while Grigsby, Hurst, and Yildirmaz 2021 find that the wages among lateral switchers show similar flexibility to those of stayers. However, these papers do not 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 as the slope of the Phillips curve steepens.⁶

Finally, this paper is linked to recent work that takes expectations seriously when thinking about search behavior. Conlon et al. 2018 incorporate information frictions into an otherwise standard search model and discipline their model with data on labor market expectations from the same dataset that 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

⁶If upwardly flexible wages come primarily from increased productivity or search predominantly matches people to better jobs, then expected inflation can spur productivity in the labor market by driving the currently employed to find better matches. An extension of our framework in the spirit of Burdett and Mortensen 1998 would generate some job changes that increase productivity, although we have not yet integrated such an extension.

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 a model in which search is endogenous to inflation expectations and derives predictions that we will empirically test. Section 3 discusses our newly collected data and provides evidence that increased inflation expectations precipitate on-the-job search. Section 4 describes data from the Survey of Consumer Expectations and presents detailed cross-sectional results linking job search, reservation wages, and job-to-job transitions with higher inflation expectations. Section 5 presents time series evidence linking higher inflation expectations to job-to-job transitions. Section 6 concludes.

2 Model

We begin by outlining a simple model of on-the-job search (Burdett 1978) with endogenous search effort (Christensen et al. 2005, Faberman et al. 2022) that integrates nominal wage rigidities by explicitly accounting for realized and expected inflation. We use the model to explore the implications of nominal rigidities for search behavior. These implications will guide our empirical work.

Time is discrete. There is a measure 1 of ex ante identical workers of which n_t are non-employed and e_t are employed at date t . Workers have linear utility over consumption c . Each individual i has some expectation of inflation $\tilde{\pi}_{it}$ (over 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 over the same horizon, π_t .

In every period, employed and non-employed workers choose their search effort $s \in (0, 1)$, taking as a given the search cost, $c(s)$, 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 increases linearly in search effort: $\lambda_e + \lambda_e^s s$ and $\lambda_n + \lambda_n^s s$ for the employed and non-employed, respectively. Real wage offers are drawn from an exogenous distribution $F(w)$ which is bounded by $[\underline{w}, \bar{w}]$. The employed earn their real wage w in the current period while non-employed workers earn their real value of leisure b .

To incorporate nominal wage rigidities in a simple way, we assume that the nominal wages of employed workers remain fixed while they remain at the same job.⁷ Therefore, stayers' real wages decline with tenure at the same job. In contrast, the wages offered for new matches

⁷Appendix B introduces the possibility of wage adjustment on-the-job, which does not qualitatively alter the prediction of the model as long the adjustment is not perfectly indexed to inflation.

keep up with inflation; in other words, the real wage offer distribution remains constant. This is consistent with the evidence in Grigsby, Hurst, and Yildirmaz 2021 regarding *average* wage growth for movers relative to stayers, which is different from the *cyclical* of the wage growth of movers relative to stayers. Finally, workers exogenously separate into unemployment with probability δ , and they may separate endogenously depending on the evolution of real wages.

2.1 Expectations

An individual's *expectation* of inflation π_t at date t is given by:

$$E_{it}(\pi_t) = \tilde{\pi}_{it} = \bar{\pi} + \pi_t + \varepsilon_{it} \quad (1)$$

where ε_{it} is an independently and identically distributed (i.i.d.) normal random variable with mean 0 and variance σ_ε and $\bar{\pi}$ represents the average deviation of inflation expectations (“mean bias”) from the true level of inflation, π_t .⁸ When $\bar{\pi} = 0$ and $\sigma_\varepsilon = 0$, expectations align with the full information rational expectations benchmark. We think of ε_{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 $E_{it}(\pi_{t+1}) = \tilde{\pi}_{it+1} = E_t[\pi_{t+1}] + \bar{\pi}$ with certainty.

2.2 Perceived Values of Employment and Non-employment

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

$$\begin{aligned} N(\tilde{\pi}_t) = & \max_{s \in (0,1)} b - c(s) + \beta [\lambda_n + \lambda_n^s s] E_{\pi_{t+1}} \left[\int \max \{W(x, \pi_{t+1}), N(\pi_{t+1})\} dF(x) \right] \\ & + \beta (1 - [\lambda_n + \lambda_n^s s]) E_{\pi_{t+1}} [N(\pi_{t+1})] \end{aligned}$$

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 probability, $\lambda_n + \lambda_n^s s$. If she receives a wage offer x , she must decide whether to accept the offer and receive the value of employment $W(x, \pi_{t+1})$ (defined below), or to reject that offer and remain nonemployed. If she does not receive an offer, she continues into next period nonemployed. As 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.

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

⁸Allowing ε_{it} to persist into longer-run expectations would be akin to modeling persistent differences in inflation expectations across people above the persistence coming through π_t , which we abstract from in this paper.

w , and expected inflation $\tilde{\pi}_t$ is:

$$\begin{aligned} W(w, \tilde{\pi}_t) = & \max_{s \in (0,1)} w - c(s) + \\ & + \beta(1 - \delta) [\lambda_e + \lambda_e^s s] E_{\pi_{t+1}} \int \max \left\{ W(x, \pi_{t+1}), \max \left\{ W\left(\frac{w}{1 + \tilde{\pi}_t}, \pi_{t+1}\right), N(\pi_{t+1}) \right\} \right\} dF(x) \\ & + \beta(1 - \delta) (1 - [\lambda_e + \lambda_e^s s]) E_{\pi_{t+1}} \left[\max \left\{ W\left(\frac{w}{1 + \tilde{\pi}_t}, \pi_{t+1}\right), N(\pi_{t+1}) \right\} \right] \\ & + \beta \delta E_{\pi_{t+1}} \left[N(\pi_{t+1}) \right] \end{aligned}$$

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 probability of offers, $\lambda_e + \lambda_e^s s$. If she does not exogenously separate (probability $1 - \delta$), and receives an offer x , she must decide whether to accept or reject that offer. Her wage depreciates with actual inflation, but she *expects* it to depreciate according to her inflation expectations $\tilde{\pi}_t$. Importantly, the new wage offers, x , are already in real terms. If she does not receive an offer and does not exogenously separate, she remains employed and expects her real wage to depreciate according to her inflation expectations. Moreover, she may endogenously quit if the evolution of her expectations warrants it. Finally, if she exogenously separates, she continues into next period non-employed.

2.3 Search, Reservation Wages, and Job-to-Job Transitions

Reservation wages for non-employed workers with inflation expectations $\tilde{\pi}_t$ satisfy:

$$N(\pi_{t+1}) = W(\hat{r}_u(\tilde{\pi}_t), \pi_{t+1})$$

implying that reservation wages for the nonemployed are independent of inflation expectations, $\hat{r}_u(\tilde{\pi}_t) = \hat{r}_u \forall \tilde{\pi}_t$.

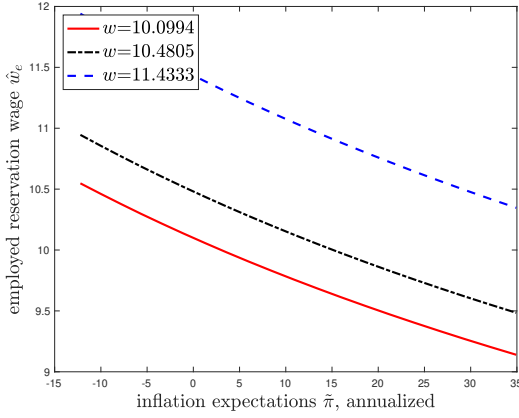
Each employed worker with a specific inflation expectation and real wage will have a different reservation wage, defined implicitly as:

$$W(\hat{r}_e(w, \tilde{\pi}_t), \pi_{t+1}) = \max \left\{ W\left(\frac{w}{1 + \tilde{\pi}_t}, \pi_{t+1}\right), N(\pi_{t+1}) \right\}$$

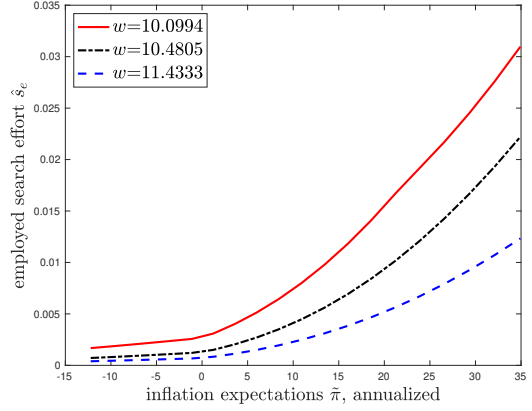
Proposition 1 *Ceteris paribus, reservation wages for employed workers are weakly decreasing in inflation expectations.*

Proof. See Appendix A. ■

Proposition 1 states that, for a given current real wage w , workers with higher inflation expectations will have lower reservation wages, exactly because they expect their current wage will depreciate more than it would under a lower rate of expected inflation. Faster depreciation implies that (absent indexation) the value of employment conditional on remaining at the same job will be lower, widening the set of acceptable real wage offers to the worker.



(a) Reservation Wages



(b) Search Effort

Figure 1: Reservation Wages and Search Policies as a Function of Inflation Expectations and Real Wages

Turning to search effort, the first order condition for optimal search effort for nonemployed workers at an interior solution is:

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

For employed workers, Optimal search behavior for an interior solution requires:

$$\hat{s}_e(w, \tilde{\pi}_t) = c'^{-1} \left(\beta (1 - \delta) \lambda_e^s E_{\pi_{t+1}} \left[\int \max \left\{ W(x, \pi_{t+1}) - \max \left\{ W\left(\frac{w}{1 + \tilde{\pi}_t}, \pi_{t+1}\right), N(\pi_{t+1}) \right\}, 0 \right\} dF(x) \right] \right)$$

Proposition 2 *Ceteris paribus, the search effort for employed workers is weakly increasing in inflation expectations.*

Proof. See Appendix A. ■

Figure 1 depicts the optimal reservation wage policy (left panel) and the search policy (right panel) for workers with different inflation expectations.⁹ The figures visually depict the comparative statics formalized in Propositions 1-2. As inflation expectations increase, reservation wages fall and the search effort increases.

Propositions 1-2 imply the following corollary.

Corollary 3 *Ceteris paribus, job-to-job transition rates are weakly increasing in inflation expectations.*

Proof. See Appendix A. ■

Corollary 3 says that the probability of a job-to-job transition increases as inflation expectations increase. Since the job-to-job transition probability for someone with current real wage w and inflation expectations $\tilde{\pi}_t$ is given by $(\lambda_e + \lambda_e^s \hat{s}_e(w, \tilde{\pi}_t)) (1 - F(\hat{r}_e(w, \tilde{\pi}_t)))$, as inflation expectations rise, contact

⁹For these figures, we use parameters roughly calibrated to match several labor market statistics including job-to-job transition probabilities and the elasticity of search with respect to inflation expectations, though the qualitative patterns do not rely on this.

rates (the first term) increase and reservation wages fall, implying that acceptance probabilities (the second term) also increase. Both channels raise the probability that a worker receives an offer that dominates her current job and moves to a new employer. Movements in realized inflation predict similar outcomes, via a movement down the real wage distribution; as Burdett 1978 (and its variants) would predict, those with lower real wages should search harder and have lower reservation wages.

We next turn to our newly collected evidence from the Real-Time Population Survey and additional evidence from the Survey of Consumer Expectations to test these model assumption and predictions formally.

3 Evidence from the Real-Time Population Survey

In this section, we investigate workers' anticipated current wage stickiness and likelihood of searching for work at different levels of expected inflation in newly collected survey data. We find evidence consistent with the hypothesis that when expected inflation rises, workers expect their current real wages to fall. We also find evidence consistent with Proposition 1 of the model, that search is more prevalent under higher inflation expectations. We test the remaining model predictions in the next Section with panel data from the Survey of Consumer Expectations (SCE).

Assessing the causal effect of inflation expectations on household behavior with survey data can be challenging, as household expectations often differ systematically with demographic characteristics (Binder and Ryngaert forthcoming). In a new survey, we ask each respondent to consider their earnings expectations and planned actions at two different hypothetical inflation levels. This provides variation in inflation expectations at the level of the individual respondent, holding constant the respondents' demographic characteristics and current labor market experiences. We can then measure differences in earnings expectations and labor market actions resulting from the change in expected inflation. 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).¹⁰

We administered these questions as part of the Real-Time Population Survey (RPS, Bick and Blandin 2021) in October of 2022.¹¹ Data collection targeted the approximate demographic breakdown of the CPS and the sample includes 1,054 employed respondents.¹² Before collecting nominal earnings growth expectations and planned decisions at different hypothetical levels of inflation, we collected respondents' inflation expectations. We elicited unconditional inflation expectations by asking the following:

¹⁰Roth, 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 the respondents' understanding of average inflation targeting.

¹¹The survey ran from October 17-21, 2022.

¹²See Bick and Blandin 2021 Appendix A for a more detailed discussion of the RPS.

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.

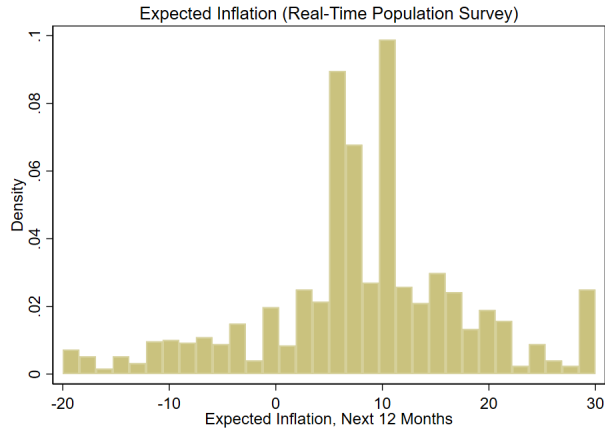


Figure 2: Inflation Expectations - October 2022

Notes: The figure shows the distribution of expected inflation over the next 12 months in the Real-Time Population Survey fielded in October 2022.

Respondents reported these expectations as point estimates. We winsorize these answers at the 5% level and present the distribution of the answers in Figure 2. The average inflation expectation among employed respondents is 7.5%. This is close to the realized 7.7% CPI inflation the month of the survey.

3.1 Earnings Growth with Current Employer

Expected increases in the price level reduce the expected real wage only if the expected rate of price inflation exceeds the expected growth in nominal wages. The model predicts 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 perceive nominal earnings growth in these terms, we asked respondents about their anticipated nominal earnings growth under different levels of inflation, conditional on remaining in their current job. 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 answered the question for both 2 % and 10 % hypothetical inflation. We would like to know how the average respondent changes their expected earnings growth from low to high inflation. Consequently, 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 percentage points and the median difference is 0 (compared to an 8 percentage point difference in the hypothetical inflation rate). Furthermore, the modal difference in responses is 0. Expected earnings growth is therefore similar under high expected

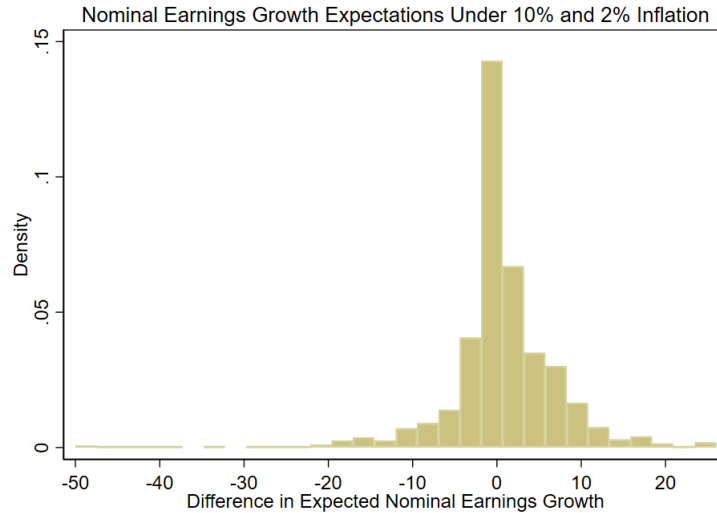


Figure 3: Earnings Growth Expectations

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.

inflation and low expected inflation. This means that respondents do not anticipate changes in their current nominal compensation to keep up with inflation.

3.2 On-the-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.¹³ Under 2% inflation, 11.6% and 25.6% of respondents would search for new and additional work, respectively. These shares

¹³Note that asking for a raise does not mean the worker will get a raise.

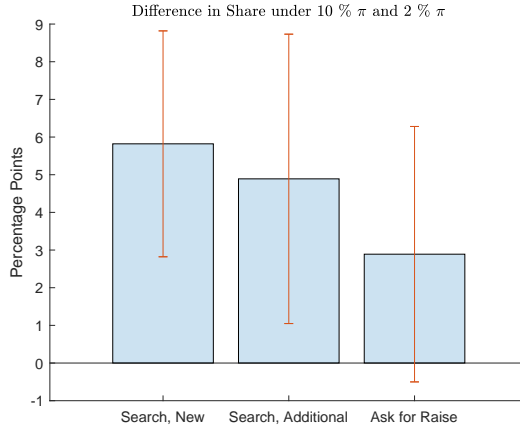


Figure 4: Labor Market Actions

Notes: The figure shows the difference in the share of respondents who would take a labor market action under 10 % inflation 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. The standard error bands indicate a confidence interval of 95%.

increase by 5.8 and 4.9 percentage points moving to 10% inflation. The percentage of respondents who would ask for a raise is 18.0% for the lower value of inflation and 21.1% for the higher value of inflation, 3.1 percentage points higher under higher hypothetical inflation.

We construct a binary variable $search_i^{RPS,\pi^h}$ which is equal to 1 if the respondent says they would “Search for a new job to replace my current job” and 0 otherwise at the hypothetical inflation level π^h . We then estimate the following probit regression using $search_i^{RPS,\pi^h}$ 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:

$$search_i^{RPS,\pi^h} = \beta_0 + \beta_1 E_i[\pi] + \beta_2 \mathbf{1}(\pi^h = 10) + \gamma \mathbf{x}_i + \epsilon_{i,h} \quad (2)$$

\mathbf{x}_i is a vector of controls for employment type, gender, age, race, Census region, marital status, education, and number of children. The indicator variable $\mathbf{1}(\pi^h = 10)$ is equal to 1 if the response was given under the high inflation hypothetical. The results appear in Table 2. 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 $\mathbf{1}(\pi^h = 10)$ shows that respondents are 5.8 percentage points more likely to plan to search under the higher inflation scenario as shown in Figure 4. Search is negatively correlated with the expected change in nominal earnings at hypothetical inflation level π^h .

These results imply that, holding respondent characteristics and information sets constant, workers are more likely to search for new jobs under higher expected inflation as the model predicts. We next turn to a long-running panel dataset to provide additional support for this finding and investigate the

	Coefficient	ME
$E_i[\pi]$	0.0269*** (0.0042)	0.0058*** (0.0009)
$\mathbf{1}(\pi^h = 10)$	0.2731*** (0.0702)	0.0587*** (0.0150)
$E_{i,\pi^h}[\Delta \text{Nom. earnings}]$	-0.0066 (0.0047)	-0.0014 (0.0010)
Observations	2,092	

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

Table 1: The table shows the results from Equation 2. The dependent variable is equal to 1 if respondents report that they would search for a new job. $E_i[\pi]$ is the respondent’s inflation expectation and $\mathbf{1}_i(\pi^h = 10)$ is an indicator equal to 1 if inflation is at its higher hypothetical level. $E_{i,\pi^h}[\Delta \text{Nom. earnings}]$ is the expected earnings growth at a hypothetical inflation level π^h .

relationship between inflation expectations and reservation wages and job-to-job transitions.

4 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, giving us between one and three observations per respondent. This supplement includes more detailed information about the respondent’s current employment situation and job satisfaction, and job search behavior.

Using the SCE, we find additional evidence in support of Proposition 1 as well as evidence in support of Proposition 2 and Corollary 3.

4.1 Data Description

Our sample spans from June 2014 to November 2022. The timing of the sample is determined by the availability of the labor market survey, which contains the search and labor market realizations. For our main results, we exclude data from 2020 as shutdowns and restrictions in response to the COVID-19 pandemic may have made it difficult for people to search for work, though the results are robust to

including the COVID-19 period.¹⁴

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. Panel A of Table 2 gives the proportion of employed respondents reporting search. The table shows that, on average, 15.2 percent of the employed sample reports recent search for new work, with an additional 6.6 percent searching for additional work.

Panel A: Extensive Margin of Job Search		Employed
Searching		
<i>for new work</i>		15.2 (0.4)
<i>for additional work</i>		6.6 (0.3)
Not Searching		78.2 (0.4)
N		14,565
Panel B: New Employer		
<i>All</i>		4.3 (0.3)
<i>Prior Search</i>		12.4 (1.1)
N		7,855

Table 2: 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. Panel B reports on the proportion of respondents at a new employer.

Job search among the employed leads to subsequent labor market transitions. In the core survey, employed respondents report whether (i) they are with the same employer, (ii) with the same employer with new duties and responsibilities, or (iii) with a new employer. Panel B of Table 2 shows the proportion of respondents who report working for 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 4.3 percent of employed respondents reporting one. Transitions are more common among those who reported search in the prior labor market survey with 12.4 percent of employed searchers reporting a job-to-job transition.

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

¹⁴See Table C-1.

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. 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.*

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.*

*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 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 winsorize inflation expectations at the 5% level by month. The distribution of responses appears in Figure 5. 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.¹⁶

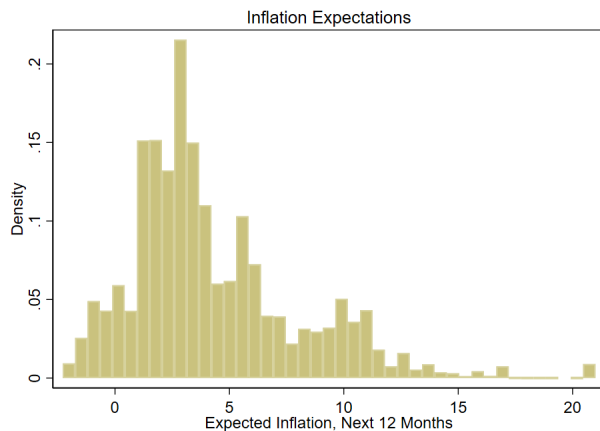


Figure 5: Inflation Expectations

Notes: The figure shows the distribution of expected inflation over the next 12 months in the Survey

¹⁵This selection is based on the answer to a previous question.

¹⁶The expectations we collected in the RTPS are, on average, closer to realized inflation during the period. Recent research has suggested that higher inflation may prompt more attention to inflation and lower forecast errors (Binder, Kamdar, and Ryngaert 2024).

of Consumer Expectations for our sample period - from June 2014 through October 2022, excluding 2020.

4.2 Inflation Expectations and On-the-Job Search

In this section, we discuss the link between inflation expectations and the search behavior of employed workers. We show that, as predicted in Proposition 1, employed respondents with higher inflation expectations are more likely to search on the job.

Denote search as an indicator variable $search_{i,t+1}$, where a value of 1 means that a worker chooses to search in period t 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 the characteristics of the respondent and the respondent’s inflation expectation:

$$v_{i,t} = \alpha E_{i,t}[\pi] + \gamma \mathbf{x}_{i,t} + \epsilon_{i,t} \quad (3)$$

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

$$search_{i,t+1} = \begin{cases} 1 & \text{if } v_{i,t} \geq c \\ 0 & \text{else} \end{cases} \quad (4)$$

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

$$search_{i,t+1} = \beta E_{i,t}[\pi] + \gamma \mathbf{x}_{i,t} + u_t + \epsilon_{i,t} \quad (5)$$

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 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. Following Kim and Binder 2023, we also include survey tenure fixed effects.

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, suggesting that households with higher inflation expectations might search due to employment insecurity rather than inflation

itself. Alternatively, respondents may expect high inflation and a high degree of labor market tightness. In this case, they may search not because of inflation itself, but because they anticipate favorable bargaining power for workers. Accordingly, we include measures related to the respondents’ expectations of the labor market. These include the expected probability of job loss, the expected probability of finding a new job in the event of unemployment, and expected nominal earnings growth.¹⁷ Because we are interested in the effect of expectations on future search, the expectations included in our regression are from the outset of the search period, t .

	Baseline		Revisions		$E_{i,t}[\Delta \text{ Real Earnings}]$	
	Coeff.	ME	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0121*** (0.0045)	0.0029*** (0.0011)				
$Rev_{i,t}[\pi]$			0.0115* (0.0061)	0.0028* (0.0015)		
$E_{i,t-1}[\pi]$			0.0158*** (0.0056)	0.0038*** (0.0013)		
$E_{i,t}[\Delta \text{ Real earnings}]$					-0.0143*** (0.0038)	-0.0035*** (0.0009)
$E_{i,t}[\Delta \text{ Nom. earnings}]$	-0.0183*** (0.0059)	-0.0045*** (0.0014)	-0.0196*** (0.0066)	-0.0047*** (0.0016)		
N	12,975		10,834		12,975	

Table 3: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 5 as well as two minor extensions or modifications. The “Baseline” specification includes the inflation expectation at the start of the search period. The column “Revisions” replaces $E_{i,t}[\pi]$ with the revision of beliefs between $t - 1$ and t as well as the expectation prior to the revision, $E_{i,t-1}[\pi]$. These specifications also control for the respondents’ expected change in her nominal earnings at her current job. The specification “ $E_{i,t}[\Delta \text{ Real Earnings}]$ ” replaces expected nominal earnings and expected inflation with the difference of the two, $E_{i,t}[\pi] - E_{i,t}[\Delta \text{ Real Earnings}]$. Standard errors are clustered at the individual level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

The first two columns of Table 3 report the coefficients and marginal effects from Equation 5 estimated for employed workers. Standard errors are clustered at the individual level to account for serial correlation in errors. Higher inflation expectations are positively correlated with search propensity. Specifically, a one percentage point increase in expected inflation is associated with an increase in the probability that a worker will search of 0.29 percentage points. This effect is significant at the 1% level. 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

¹⁷This earnings growth is conditional on staying with the same employer and working the same number of hours. We exclude from the regression respondents who believe that their earnings will double or more or those who believe their earnings will decrease by half or more.

consistent with the effect of a percentage point increase in expected inflation on search having the same effect as a percentage point reduction in the expected real wage, *ceteris paribus*.

Respondents who revise their expectations are also more likely to search. The two middle columns of Table 3 give the coefficients and marginal effects estimating the following regression equation:

$$search_{i,t+1} = \beta_1 Rev_{i,t}[\pi] + \beta_2 E_{i,t-1}[\pi] + \gamma \mathbf{x}_{i,t} + u_t + \epsilon_{i,t} \quad (6)$$

where $Rev_{i,t}[\pi]$ is the change in respondent i 's year-ahead inflation expectation from $t-1$ to t . As the size of the revision may depend on the respondent's starting expectation, we control for $E_{i,t-1}[\pi]$ in the regression. The results show that respondents who start with higher inflation expectations, $E_{i,t-1}[\pi]$, are more likely to search and that revising expectations upward by one percentage point is associated with a 0.29 percentage point increase in the probability of search.

We construct nominal expected earnings growth and expected inflation into one measure of expected real wage growth. We estimate Equation 5 substituting expected real wage growth for expected inflation and expected nominal wage growth. The marginal effect on the expected growth of real wages presented in the final column of Table 3 indicates that a one percentage point reduction in the expected real wage increases the likelihood of search by 0.35 percentage points. This is in line, both in magnitude and direction, with the estimated effect of expected inflation. We present a number of robustness checks in Appendix C.¹⁸

4.3 Inflation Expectations and Reservation Wages

We now test Proposition 2: that workers with higher inflation expectations have lower reservation wages. To do this, we use respondents' self-reported reservation wages from the SCE Labor Market Supplement. Respondents are asked:

Suppose someone offered you a job today in a line of work that you would consider. What is the lowest wage or salary you would accept (BEFORE taxes and other deductions) for this job?

We convert these answers into July 2017 dollars using the CPI. Following Conlon et al. 2018, we calculate an hourly reservation wage, assuming that all respondents work 52 weeks a year, that part-time respondents work twenty hours a week and full-time respondents work forty hours a week. We drop reservation wages that are below \$4.81 an hour (\$10,000 a year for forty hour weeks) and winsorize the top 1% of reservation wages by education group at each date. The resulting number is an hourly *real* reservation wage. We apply a similar cleaning procedure to the reported annual salaries to obtain a current real wage.¹⁹ We then run the following regression:

$$r_{i,t}^w = \beta_1 E_{i,t}[\pi] + \beta_2 w_{i,t} + \gamma \mathbf{x}_{i,t} + u_t + \epsilon_{i,t} \quad (7)$$

¹⁸These tables show that the results are robust to the winsorization threshold, trimming instead of winsorizing, excluding various controls, and defining search differently.

¹⁹Respondents provide this in response to the question, "How much do you make before taxes and other deductions at your [main/current] job, on an annual basis? Please include any bonuses, overtime pay, tips, or commissions."

where $w_{i,t}$ is the respondent’s *current* real wage in hourly terms and $\mathbf{x}_{i,t}$ is a vector of controls. Table 4 shows the results.

Reservation Wage	
$E_{i,t}[\pi]$	-0.23** (0.09)
$w_{i,t}$	1.00*** (0.04)
$E_{i,t}[\Delta \text{earnings}]$	0.57*** (0.22)
N	14,320

Table 4: The table shows the results of the regression in Equation 7. $E_{i,t}[\pi]$ 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. $w_{i,t}$ is the respondent’s current real hourly wage. Standard errors are clustered at the individual level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

Reservation wages are indeed decreasing in inflation expectations. A one percentage point increase in inflation expectations reduces the hourly reservation wage by 0.23 July 2017 dollars per hour. The table also shows that reservation wages increase approximately one for one with the current real wage and that respondents who expect higher nominal income changes from their current employers have higher reservation wages.

Through the lens of our model, lower reservation wages mean that a wider set of offers will prompt a job-to-job transition. This, along with the increased probability of matching to an offer that results from the search, implies that respondents with higher inflation expectations should be more likely to change jobs (Corollary 3). We test this next.

4.4 Job-to-Job Transitions

Consumers with higher inflation expectations may be more likely to search for work and more willing to accept a lower wage. Together, these two forces should increase the likelihood that workers with higher inflation expectations will change jobs. In this section, we are interested in whether higher inflation expectations predict job-to-job transitions. Households will transition jobs as they receive offers whose value dominates that of their current job. Some received offers will be dominated by the respondent’s current wage or met with a counteroffer from the current employer. However, we anticipate that some offers will be accepted so that household search results in job-to-job transitions.

Define a transition for an employed worker as follows:

$$\text{Job-to-Job Transition}_{i,t+5} = \begin{cases} 1 & \text{if new job between } t + 1 \text{ and } t + 5 \\ 0 & \text{else} \end{cases} \quad (8)$$

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

labor market survey waves:

$$\text{Job-to-Job Transition}_{i,t+5} = \beta E_{i,t}[\pi] + \gamma \mathbf{x}_{i,t} + u_{t+5} + \epsilon_{i,t+5} \quad (9)$$

This equation includes the dependent variable of interest, $E_{i,t}[\pi]$, the inflation expectation at the beginning of the search period that ends in $t + 1$. The first two columns of Table 5 Panel A show the estimated coefficient and marginal effect on $E_{i,t}[\pi]$ from Equation 9. Expected inflation has a small, but positive, and significant impact on the probability of a job-to-job transition.

Job-to-Job Transitions	Not Controlling for Mechanisms		Controlling for Mechanisms	
	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0202** (0.0084)	0.0017** (0.0007)	0.0165* (0.0090)	0.0013* (0.0007)
$search_{i,t}$			0.7204*** (0.0642)	0.0556*** (0.0054)
$r_{i,t}^w$			-0.0018 (0.0020)	-0.0001 (0.0002)
N	6,861		6,702	

Table 5: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 9. 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 mechanisms through which inflation expectations influence labor market transitions - search behavior and reservation wages - the magnitude and significance of the effect of inflation on a subsequent transition are reduced. Standard errors are clustered at the individual level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

We propose two mechanisms for this effect in Propositions 1 and 2. The first is the propensity of workers with higher inflation expectations to search. 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. The second is the effect of inflation expectations on reservation wages. Workers with higher inflation expectations have - consistent with the model - lower reservation wages. Ceteris paribus, a worker with a lower reservation wage should be more likely to accept an offer. Omitting either of these variables will generate a positive bias in the effect of inflation expectations on job-to-job transitions. Consequently, the third and fourth columns of Table 5 show the results of Equation 9 when we include the proposed mechanisms, $search_{i,t+1}$ and $r_{i,t}^w$, as control variables. The coefficient and marginal effect on inflation are reduced in both magnitude and significance. The variable $search_{i,t+1}$ has a strong positive and significant effect on the likelihood of a labor market transition. Searchers are 5.6 percentage points more likely to make a job-to-job transition than non-searchers. The effect on $r_{i,t}^w$ indicates that respondents are less likely to change employers as their wage increases. Although the coefficient has the expected sign, it is also statistically insignificant.

5 Time Series Evidence

The relationship between expected inflation and job-to-job transitions also appears in time-series data. Table 6 shows the relationship between the rate of job-to-job transitions, expected inflation, realized inflation, and measures of labor market tightness. Specifically, the table contains the coefficients from the following regression, run for the years 2000-2024:

$$J2J_t = \beta_0 + \beta_1 E_t[\pi_{t+12}] + \beta_2 \pi_t + \beta_3 u_t + \beta_4 vacancy_t \quad (10)$$

where $J2J_t$ is the rate of job transitions measured by Fujita, Moscarini, and Postel-Vinay 2024, $E_t[\pi_{t+12}]$ is the median year-ahead inflation expectation from the Michigan Survey of Consumers, π_t is the annualized monthly rate of CPI inflation, u_t is the monthly unemployment rate, and $vacancy_t$ is the monthly JOLTS vacancy rate.

	Job-to-Job Transition Rate		
$E_t[\pi_t + 1]$	0.048 (0.033)	0.061** (0.030)	
π_t	0.007 (0.005)		0.010** (0.004)
u_t	-0.062*** (0.012)	-0.063*** (0.012)	-0.059*** (0.012)
$vacancy_t$	-0.046** (0.022)	-0.044** (0.022)	-0.031 (0.022)
N	282	282	282
F	10.56	12.02	12.69

Table 6: The table show the coefficients from Equation 10. $E_t[\pi_{t+1}]$ denotes the median year-ahead inflation expectation from the Michigan Survey of Consumers. π_t is the annualized monthly rate of CPI 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, $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

We find positive - though individually insignificant - effects of both realized and expected inflation. As the median consumer inflation expectation increases by one percentage point, the rate of job-to-job transitions increases by 0.048 percentage points (an approximately 2% increase from the average monthly rate of transitions). A one percentage point increase in the realized inflation rate corresponds to a small 0.007 percentage point increase in the rate of job-to-job transitions. A Wald test on the coefficients on expected and realized inflation reveals that they are jointly significant at the 5% level. The correlation between realized and expected inflation is high. In Columns 1 and 2 of Table 6, we exclude realized and expected inflation, respectively. In the case where either variable appears on its own, the coefficient on this variable is significant. Table C-5 provides evidence on the relationship between quits and realized inflation in an earlier series, showing that in the historical data, higher

inflation is associated with a higher quits rate.²⁰

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.

We extend a canonical search model to show that nominal rigidity in incumbent workers' wages incentivizes on-the-job search. We then investigate these predictions empirically. Using hypothetical inflation levels in a novel survey, we show that workers are more likely to search under high inflation. We provide additional cross-sectional evidence showing that currently employed workers with higher inflation expectations are more likely to engage in on-the-job search, have lower reservation wages, and are more likely to make job-to-job transitions.

Many monetary policymakers believe that short-term fluctuations in inflation expectations will not generate persistent inflationary pressure unless those beliefs manifest themselves in longer-term inflation expectations. Our results suggest that short-term expectations may prompt workers to behave in ways that generate wage pressure and 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 also consider the effect of realized and expected inflation on search and wage changes for job stayers.

²⁰We do not have historical data documenting the employer-to-employer transition rate or a consistent, monthly series of historical inflation expectations. We do, however, have measures of manufacturing quits dating back to 1946. Using historical data from Hobijn 2022 and Petrosky-Nadeau and Zhang 2022, we find a positive relationship between quits and realized inflation in this period. It should be noted, however, that the quits rate includes separations to both other employers and to non-employment. To the extent that workers with higher inflation expectations search because of a declining real wage, quits to non-employment may actually fall with expected inflation. A relative strength of the cross-sectional analysis presented in Section 4 is that we can control for workers' optimism/pessimism about their labor market prospects in the event that they experienced unemployment.

References

- Afrouzi, Hassan et al. (2024). “A Theory of How Workers Keep Up with Inflation”.
- 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: *FRB NY Economic Policy Review* 23-2, pp. 51–72.
- 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.
- Binder, Carola and Jane Ryngaert (forthcoming). “Consumer and Firm Inflation Expectations”. In: *Handbook of Inflation Research*.
- Binder, Carola C., Rupal Kamdar, and Jane M. Ryngaert (2024). “Partisan Expectations and Covid-Era Inflation”. In: *Journal of Monetary Economics*.
- 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.
- Candia, Bernardo, Olivier Coibion, and Yuriy Gorodnichenko (2020). *Communication and the Beliefs of Economics Agents*. NBER Working Papers 27800. National Bureau of Economic Research.
- 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, 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.
- Fujita, Shigeru, Giuseppe Moscarini, and Fabien Postel-Vinay (2024). “Measuring Employer-to-Employer Reallocation”. In: *American Economic Journal: Macroeconomics* 16.3, pp. 1–51.
- Gertler, Mark, Christopher Huckfeldt, and Antonella Trigari (2020). “Unemployment Fluctuations, Match Quality, and the Wage Cyclicity 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>.
- Guerreiro, Joao et al. (2024). “A Theory of How Workers Keep Up with Inflation”.
- 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”.
- Hobijn, Bart (2022). “*Great Resignations*” Are Common During Fast Recoveries. Economic Letter. Federal Reserve Bank of San Francisco.
- 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.
- Jiang, Janet Hua et al. (Jan. 2024). *How do Households Respond to Expected Inflation? An Investigation of Transmission Mechanisms*. Manuscript.
- 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 (2022). “The Job Ladder: Inflation vs. Reallocation”.
- Petrosky-Nadeau, Nicolas and Lu Zhang (2022). “Inflation Expectations and Readiness to Spend: Cross-Sectional Evidence”. In: *Journal of Monetary Economics* 117, pp. 335–353.
- Pilossoph, Laura, Jane Ryngaert, and Jesse Wedewer (2023). *The Search Costs of 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.

A Proofs

Proof of Proposition 1 Reservation wages for employed workers satisfy:

$$W(\hat{r}_e(w, \tilde{\pi}_t), \pi_{t+1}) = \max \left\{ W \left(\frac{w}{1 + \tilde{\pi}_t}, \pi_{t+1} \right), N(\pi_{t+1}) \right\}$$

For $\frac{w}{1 + \tilde{\pi}_t} \geq \hat{r}_u$, the condition becomes:

$$W(\hat{r}_e(w, \tilde{\pi}_t), \pi_{t+1}) = W \left(\frac{w}{1 + \tilde{\pi}_t}, \pi_{t+1} \right)$$

so that

$$\hat{r}_e(w, \tilde{\pi}_t) = \frac{w}{1 + \tilde{\pi}_t}$$

which is strictly decreasing in $\tilde{\pi}_t$. For $\frac{w}{1 + \tilde{\pi}_t} < \hat{r}_u$, the condition becomes:

$$W(\hat{r}_e(w, \tilde{\pi}_t), \pi_{t+1}) = N(\pi_{t+1})$$

so that

$$\hat{r}_e(w, \tilde{\pi}_t) = \hat{r}_u$$

which is independent of $\tilde{\pi}_t$. Therefore, ceteris paribus, the reservation wage policy is weakly decreasing in inflation expectations. ■

Proof of Proposition 2 Optimal search effort for the employed is given by:

Rearranging,

$$\hat{s}_e(w, \tilde{\pi}_t) = c'^{-1} \left(\beta(1 - \delta) \lambda_e^s E_{\pi_{t+1}} \left[\int \max \left\{ W(x, \pi_{t+1}) - \max \left\{ W \left(\frac{w}{1 + \tilde{\pi}_t}, \pi_{t+1} \right), N(\pi_{t+1}) \right\}, 0 \right\} dF(x) \right] \right)$$

Start with $\frac{w}{1 + \tilde{\pi}_t} < \hat{r}_u$. In this case,

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

since $N(\pi_{t+1})$ is independent of inflation expectations, the right hand side is independent of inflation expectations and equal to:

$$\hat{s}_e(w, \tilde{\pi}_t) = c'^{-1} \left(\beta(1 - \delta) \lambda_e^s E_{\pi_{t+1}} \left[\int_{\hat{r}_u}^{\bar{w}} \left(W(x, \pi_{t+1}) - N(\pi_{t+1}) \right) dF(x) \right] \right)$$

Now consider $\frac{w}{1+\tilde{\pi}_t} \geq \hat{r}_u$. In this case,

$$\max \left\{ W \left(\frac{w}{\tilde{\pi}_t}, \pi_{t+1} \right), N(\pi_{t+1}) \right\} = W \left(\frac{w}{1 + \tilde{\pi}_t}, \pi_{t+1} \right)$$

so that the optimal search condition becomes:

$$\hat{s}_e(w, \tilde{\pi}_t) = c'^{-1} \left(\beta(1 - \delta) \lambda_e^s E_{\pi_{t+1}} \left[\int_{\frac{w}{\tilde{\pi}_t}}^{\bar{w}} \left\{ W(x, \pi_{t+1}) - W \left(\frac{w}{1 + \tilde{\pi}_t}, \pi_{t+1} \right) \right\} dF(x) \right] \right)$$

Using Leibniz rule with respect to the term in brackets, the derivative with respect to $\frac{w}{1+\tilde{\pi}_t}$ is:

$$-W_w \left(\frac{w}{1 + \tilde{\pi}_t}, \pi_{t+1} \right)$$

Since the value of employment is increasing in the real wage (therefore decreasing in $\tilde{\pi}_t$), the term in brackets is increasing in $\tilde{\pi}_t$, so search effort is increasing in inflation expectations for $\frac{w}{1+\tilde{\pi}_t} \geq \hat{r}_u$. Since at the point where $\frac{w}{1+\tilde{\pi}_t} = \hat{r}_u$ the two policies are equivalent, search effort is increasing in inflation expectations. ■

B Wage Indexation

Suppose there was a probability $0 \leq \gamma < 1$ that the wage gets indexed to inflation. Then the expected future value of remaining employed at the same job would be:

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

Since $\bar{W}(w, \tilde{\pi}_t, \pi_{t+1})$ is also decreasing in $\tilde{\pi}_t$, Propositions 1-2 hold.

C Additional Tables and Figures

Employed		
	Coeff.	ME
$E_{i,t}[\pi]$	0.0102** (0.0044)	0.0025** (0.0011)
$E_{i,t}[\Delta \text{ earnings}]$	-0.0168*** (0.0056)	-0.0041*** (0.0014)
N	14,462	

Table C-1: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 5 including the COVID period. 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.

Employed		
	Coeff.	ME
$E_{i,t}[\pi]$	0.0124*** (0.0041)	0.0035*** (0.0012)
[1em] $E_{i,t}[\Delta \text{ earnings}]$	-0.0138*** (0.0053)	-0.0039*** (0.0015)
N	13,817	

Table C-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 5. 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. The results are consistent with those presented in Table 3.

	$E_{i,t}[\pi]$	
	Coefficient	M.E.
All Controls Included	0.0117*** (0.0043)	0.0029*** (0.0011)
Exclude Macro Expectations	0.0117*** (0.0043)	0.0029*** (0.0010)
Exclude Labor Market Expectations	0.0079* (0.0042)	0.0020* (0.0011)
Exclude Both	0.0096** (0.0041)	0.0024** (0.0010)

Table C-3: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 5 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' non-inflation macroeconomic expectations, respondents' labor market expectations, or both.

	$E_{i,t}[\pi]$	
	Coefficient	M.E.
Trimmed, 1%	0.0099*** (0.0037)	0.0024*** (0.0009)
Trimmed 5%	0.0105* (0.0058)	0.0026* (0.0014)
Trimmed 10%	0.0174** (0.0077)	0.0042** (0.0019)
Winsorized, 1%	0.0082** (0.0034)	0.0020** (0.0008)
Winsorized, 5%	0.0121*** (0.0045)	0.0029*** (0.0011)
Winsorized, 10%	0.0141** (0.0055)	0.0034** (0.0013)

Table C-4: The table provides the estimated coefficients and marginal effects from the probit regression specified in Equation 5 with different sets of controls. The dependent variable is equal to 1 if an employed respondent reports searching for work in the four weeks prior to 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 made winsorized or trimmed at the 1%, 5%, or 10% levels.

Manufacturing Quits	
π_t	0.017** (0.008)
u_t	- 0.27*** (0.030)
$vacancy_t$	0.212*** (0.047)
N	408
F	87.99

Table C-5: The table show the results of a regression of manufacturing quits on unemployment, monthly annualized inflation, and historical vacancies. The data spans at a monthly frequency from 1946 to 1981. The results suggest that inflation is positively predictive of quits. Newey West standard errors with a lag length of three are in parentheses, $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.