

Job Search, Wages, and Inflation*

Laura Pilossoph[†]

Jane M. Ryngaert[‡]

Duke University

University of Notre Dame

September 2024

First Draft: May 2022

Abstract

How do inflation expectations and affect the search behavior of workers when wages are set in nominal terms? A labor search model incorporating nominal wage rigidities implies that on-the-job search should increase and reservation wages should decrease with expected inflation. Together, these imply that higher inflation expectations should lead to more frequent job-to-job transitions. In new survey data, employed respondents are more likely to search under higher values of hypothetical inflation. Using the Survey of Consumer Expectations, we show that workers who expect higher inflation are more likely to search on the job, have lower reservation wages, and are more likely to make a job-to-job transition over the short term. The relationship between expected inflation and employer-to-employer transitions is also present in the time series.

JEL Codes: E31, J3, J6

Keywords: Nominal wages, real wages, job-to-job transitions, survey data

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

[†]E-mail: pilossoph@gmail.com

[‡]E-mail: jryngaer@nd.edu

1 Introduction

Theory suggests that inflation expectations prompt households to act in ways that can themselves generate further inflation. For example, the consumption Euler equation dictates that households should substitute intertemporally towards the present when they expect high inflation. This puts further upward pressure on prices. Households may also respond to higher expected inflation in the labor market via increased nominal wage demands, contributing to self-perpetuating wage-price spirals. For these reason, monetary policymakers emphasize that keeping inflation expectations anchored can facilitate keeping inflation itself stable. Recent work finds, however, 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 at odds with policymakers’ belief that elevated inflation expectations create inflationary pressure in the labor market. How, then, does increased expected inflation - that arises with or without realized inflation - translate to nominal wage growth, if at all?

In this paper, we propose 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 in support of this mechanism.

To structure our empirical investigation, we first introduce a model of on-the-job search (Burdett 1978, Christensen et al. 2005, Faberman et al. 2022) which formally integrates nominal wage rigidities for incumbent workers. In 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 is increasing in expected inflation. Workers’ reservation wages are also decreasing in expected inflation because expected inflation 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 match to dominating

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.

offers and the rate of job-to-job transitions increases.

In the empirical analysis, we test four particular points relating to workers' expectations and actions under elevated 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 and lower their reservation wage? Third, are they subsequently more likely to switch jobs? Fourth, do these patterns appear in time series data?

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. Respondents were asked to consider a hypothetical level of inflation and asked each respondent for their (i) expected nominal earnings growth *conditional on remaining at their current job* and (ii) expected search behavior under the corresponding hypothetical inflation. All respondents answered these questions for two hypothetical levels of inflation: 2% and 10%. This survey design allows us to estimate the differences in respondent expectations and planned behavior at different levels of expected inflation *holding respondent characteristics and information sets fixed*. We find that employed respondents 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 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. 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 0.15 percentage point increase in the probability of making a job-to-job transition over this period. Higher inflation expectations do not predict future reported promotions at the same employer or the size of a respondents' change in salary. Salaries do, however, increase with job-to-job transitions and - to a lesser extent - with promotions. This suggests that inflation expectations influence wage growth through the decision to search and to select higher-earning career advancements.

Finally, we investigate the relationship between expected inflation and job-to-job transitions in the time series. Expected and realized inflation are both positively correlated with the rate

of employer-to-employer transitions. The effect is small, but contributes to the totality of the evidence that on-the-job search is an important mechanism by which inflation expectations transmit 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 firms’ inflation expectations and their hiring, investment, and price-setting. The focus of the literature on consumer-decision making has been on spending decisions. For example, Bachmann, Berg, and Sims 2015, Coibion et al. 2023b, Duca-Radu, Kenny, and Reuter 2021, Burke and Ozdagli 2021, D’Acunto, Hoang, and Weber 2016, D’Acunto, Hoang, and Weber 2018, and Ryngaert 2022, explore the relationship between expected inflation and purchases of durables. Dräger and Nghiem 2021, Crump et al. 2022, Ichiue and Nishiguchi 2015, and Ryngaert 2022 consider the relationship between expected inflation and 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 to transition from one employer to another. This work is complementary to much of the current literature that finds households do not intertemporally substitute because they view inflation as a source of lost purchasing power (**Puzello**).

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.⁵ Hajdini et al. 2022 investigate the low passthrough 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 a consumer assigns to searching for a new, higher-paying job. Their paper provides evidence for a link between inflation expectations and planned labor search; our paper confirms this link by using search and transition *outcomes* to show that workers with higher inflation expectations are in fact more likely to search and to change jobs. 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 further contribute to an empirical literature characterizing on-the-job search and its importance in the macroeconomy. Faberman et al. 2022 use a supplement of the Survey of Consumer Expectations to characterize on-the-job search. They describe not only the ways in which the employed search for new work, but also their effectiveness in yielding offers and wage increases. Our paper uses data from the same survey and adds to theirs in that we characterize the link between the search behavior of employed workers and respondents’ inflation

⁵Theoretical work embedding nominal considerations into search models includes Blanco et al. 2022 and Moscarini and Postel-Vinay 2022.

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 - especially when generated by realized 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. Our emphasis is instead on how expected and realized inflation cause 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 when negative productivity shocks make them desirable (Tobin 1972). We argue that workers perceive wages for switchers to be more upwardly flexible with inflation than wages for stayers. Hazell and Taska 2023 find that wages for switchers are downwardly rigid in downturns and upwardly flexible in expansions, even holding the job level constant. This is consistent with our speculated mechanism, though it does not address *differential* upward flexibility in nominal wages between switchers and stayers. Other work argues that the apparent flexibility of switcher wages is an artifact of the changing composition of switchers with macroeconomic conditions. Gertler, Huckfeldt, and Trigari 2020 suggests that switchers wages reflect primarily improvements in match quality while Grigsby, Hurst, and Yildirmaz 2021 find that wages among lateral switchers show similar flexibility to those of stayers. These papers do not, however, consider the relative flexibility of stayer and mover wages under high inflation. There are plausible mechanisms that could create differential flexibility, including the timing of negotiations. Furthermore, the relative flexibility of switcher wages may increase when the slope of the Phillips Curve steepens.

6

Finally, this paper is linked to recent work which takes expectations seriously when thinking about search behavior. Conlon et al. 2018 incorporate information frictions into an otherwise standard model of search on-the-job, and discipline their model with data on labor market expectations from the same data set we use. Mitra 2023 considers the effect of expectations in the Survey of Consumer Expectations - particularly as they relate to optimism or pessimism on search. He and Kircher 2023 use the Survey of Consumer Expectations to examine learning

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, though we have not yet integrated such an extension.

about one's subjective job finding probability and model the interaction of these expectations, learning, and search. In these papers- as is true in many models of search in the labor market - no distinction is made between real and nominal wages. Our model makes an explicit distinction between real and nominal wages and we focus here on a new set of expectations which are important for job search behavior - inflation expectations.

The paper proceeds as follows. Section 2 describes a model in which search is endogenous to inflation expectations and derives predictions 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 on-the-job search and job-to-job transitions with higher inflation expectations. Section 6 concludes.

2 Model

We outline 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, which will guide our empirical work thereafter.

Time is discrete. There is a measure 1 of ex ante identical workers of which n_t are nonemployed and e_t are employed at date t . Workers have linear utility over consumption c . Each individual i has some inflation expectation $\tilde{\pi}_{it}$ (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, both employed and nonemployed workers choose their search effort $s \in (0, 1)$, taking as given the cost of search, $c(s)$, with $c'(s) > 0$ and $c''(s) > 0$, their current inflation expectations $\tilde{\pi}_{it}$, and their current earnings. The probability of receiving an offer is linearly increasing 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 unemployed workers earn their real value of leisure b .

To incorporate and study nominal wage rigidities in a simple way, we assume that employed workers' nominal wages remain fixed while they remain at the same job.⁷ Therefore, stayers' real wages decline with tenure at the same job. However, offered wages for new matches keep up with inflation; in other words, the real wage offer distribution remains constant. This is consistent with evidence in (Grigsby, Hurst, and Yildirmaz 2021) regarding *average* wage growth for movers

⁷Appendix B introduces the possibility for wage indexation, which does not qualitatively alter the prediction of the model.

relative to stayers, which is distinct from the *(a)cyclical*ity of wage growth for movers relative to stayers. Finally, workers separate exogenously into unemployment with probability δ , and they may separate endogenously depending on the evolution of real wages.

2.1 Expectations

An individual's inflation *expectations* at date t about π_t are 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 , which will be constant at $\pi_t = \pi$ in our analysis.⁸ 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 $E_{it}(\pi_{t+1}) = \tilde{\pi}_{it+1} = \mathbf{E}_t[\pi_{t+1}] + \bar{\pi}$ with certainty. When $\bar{\pi} = 0$ and $\sigma_\varepsilon = 0$, expectations align with the full information rational expectations benchmark.

2.2 Perceived Values of Employment and Unemployment

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

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

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 probabilities, $\lambda_e + \lambda_e^s s$. 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:

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

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

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

Reservation wages for nonemployed workers with inflation expectations 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, $\hat{r}_u(\tilde{\pi}_t) = \hat{r}_u \forall \tilde{\pi}_t$.

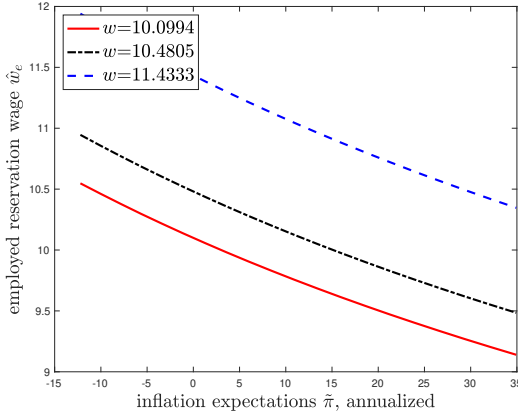
Each employed worker with a specific inflation expectation and real wage will have a different reservation wage, defined implicitly as:

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

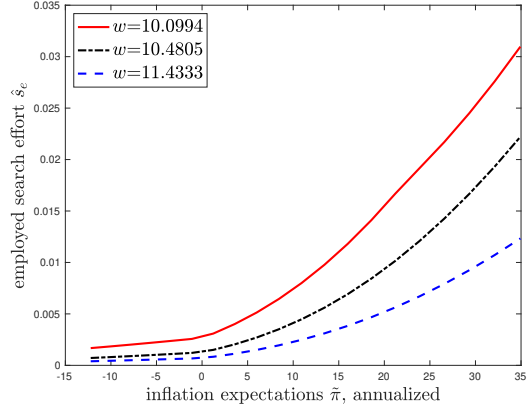
Proposition 1 *Ceteris paribus, reservation wages for employed workers are weakly decreasing in inflation expectations.*

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



(a) Reservation Wages



(b) Search Effort

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

depreciate more faster than they would under a lower rate of expected inflation. Faster depreciation implies that (absent reindexation) 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.

Turning to search effort, the first order condition for optimal search effort for unemployed 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:

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

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

Proof. See Appendix A. ■

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. ■

Figure 1 depicts the optimal reservation wage (left panel) policy and 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 rise, reservation wages fall and search cutoffs rise, implying that search effort increases in inflation expectations.

⁹For these figures, we use a more quantitative version of the model which is calibrated to roughly match several labor market statistics. For details, see Appendix B.

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 predictions.

3 Evidence from the Real-Time Population Survey

In this section, we investigate workers’ anticipated stickiness of their current wage and likelihood of searching for work at different levels of expected inflation. We find evidence consistent with Proposition 1 of the model.

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

These questions were administered as a part of the Real-Time Population Survey Bick and Blandin 2021 in October of 2022.¹¹ Data collection targets the approximate demographic breakdown of the CPS and the sample includes 1,054 employed respondents.¹² Prior to collecting nominal earnings growth expectations and planned decisions at different hypothetical levels of inflation, we collect respondents inflation expectations. We elicit unconditional inflation expectations by asking:

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

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

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 respondent’s 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.

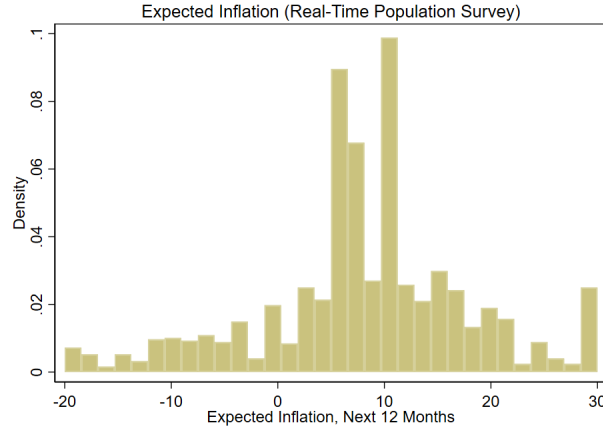


Figure 2: Inflation Expectations - October 2022

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

3.1 Earnings Growth with Current Employer

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

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

Each respondent answers the question for both 2 % and 10 % hypothetical inflation. We would like to know how the average respondent changes their expected earnings growth going from low to high inflation. Accordingly, we calculate the difference in expectations under 10% inflation and under 2 % inflation and plot the distribution in Figure 3. The average difference between a respondent's expected earnings growth under 10% inflation and under 2% inflation is 0.72 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 inflation and low inflation. This means that respondents do not anticipate changes in their current nominal compensation to keep pace with inflation.¹³

¹³Data from the SCE suggest that, on average, earnings growth expectations at the current job do not increase with workers' inflation expectations. See Figure ?? to see that the expected rate of earnings growth is roughly

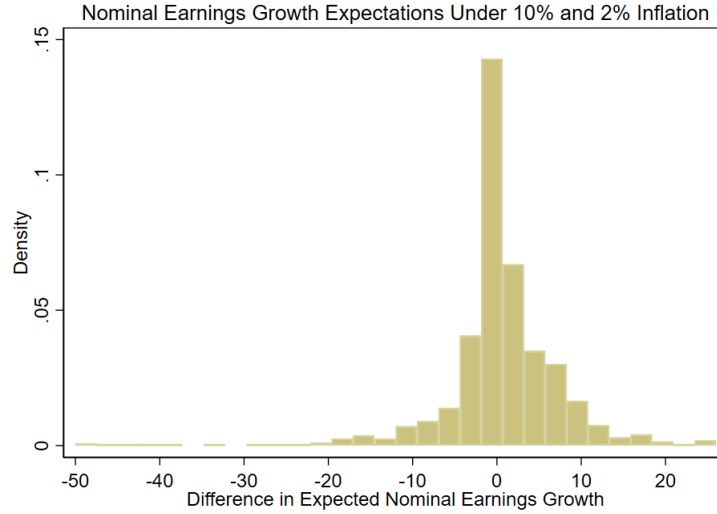


Figure 3: Earnings Growth Expectations

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.

3.2 Job Search

To see if workers respond to these anticipated reductions in real earnings, we also asked respondents what measures they would take under different levels of inflation. These actions included various labor market actions that would allow workers to increase their nominal wages:

Suppose prices in the overall economy were to increase by $[2, 10]$ % in the next 12 months.

Which of the following actions would you take? Please check all that apply.

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

Figure 4 shows the difference in the share of respondents who would undertake a certain action under 10% inflation and the same share under 2% inflation along with 95% confidence intervals. Respondents are significantly more likely to search for new or additional work under 10% inflation, they are also more likely to ask for a raise, though this change is not statistically significant.¹⁴ Under 2 % inflation, the 11.6 % and 25.6 % of respondents would search for new and additional work, respectively. These shares increase by 5.8 and 4.9 percentage points. The

flat with respect to expected inflation.

¹⁴Note that asking for a raise does not mean the worker will get a raise.

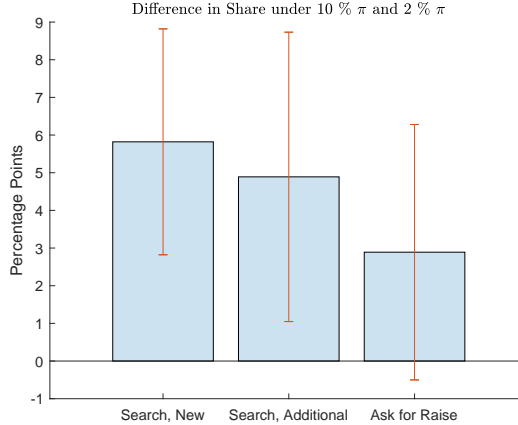


Figure 4: Labor Market Actions

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

share of respondents who would ask for a raise increases 3.1 percentage points, from 18.0 % of the sample under lower inflation to 20.1 % of the sample under the higher value of inflation.

We 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 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:

$$search_i^{RPS} = \beta E_i[\pi] + \gamma \mathbf{x}_i + \mathbf{1}_i(\pi = 10) + \epsilon_i \quad (2)$$

\mathbf{x}_i is a vector of controls for employment type, gender, age, race, Census region, marital status, relationship status, and number of children. The indicator variable $\mathbf{1}(\pi = 10)$ is equal to 1 if 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 $\mathbf{1}(\pi = 10)$ shows that respondents are 5.8 percentage points more likely to plan to search under the higher inflation scenario as shown in Figure 4.

These results imply that, holding respondent characteristics and information sets constant, workers are more likely to search for new jobs under higher expected inflation as the model predicted. Employed respondents also have similar nominal earnings growth expectations across

	Coefficient	ME
$E_i[\pi]$	0.0269*** (0.0042)	0.0058*** (0.0009)
$\mathbf{1}(\pi = 10)$	0.2731*** (0.0702)	0.0587*** (0.0150)
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 $\mathbf{1}_i(\pi = 10)$ is an indicator equal to 1 if inflation is at its higher hypothetical level.

different levels of anticipated inflation. This means that - consistent with the assumption of the model - they expect that their real wages are declining in inflation.

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.

We find additional evidence in support of Proposition 1 from Section 2 as well as evidence in support of Propositions 2 and 3.

4.1 Data Description

Our sample extends from June 2014 to November 2022. The timing of the sample is determined by availability of the labor market survey, which contains the search and labor market realizations. 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.¹⁵

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.

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		14,562
Panel B: New Employer		
<i>All</i>		4.2 (0.3)
<i>Prior Search</i>		12.4 (1.1)
N		7,854

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 the proportion of respondents at a new employer.

Search among the employed leads to subsequent labor market transitions. In the core survey, employed respondents report if they are at the same employer, at the same employer with new duties and responsibilities, or at a new employer. Panel B of Table 2 gives the proportion of respondents who report being at a new employer since their last job market survey. This sample is smaller as it requires participation in two consecutive job market surveys - or a survey tenure of at least five months. Job-to-job transitions are rare - with 4.2 percent of employed respondents reporting one. Transitions are more common among those who reported search in the prior labor market survey - 12.4 percent of the employed report 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

¹⁵The results are robust to including the COVID-19 period. See Table C-1.

months beginning two years from the survey date) horizons. Households provide their inflation expectations in two formats, first as a point estimate and then as probabilities that inflation may fall within a set of ranges. The probabilistic forecast gives information on the households' inflation uncertainty. They are first asked:

*What do you expect the rate of [inflation/deflation]¹⁶ 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.

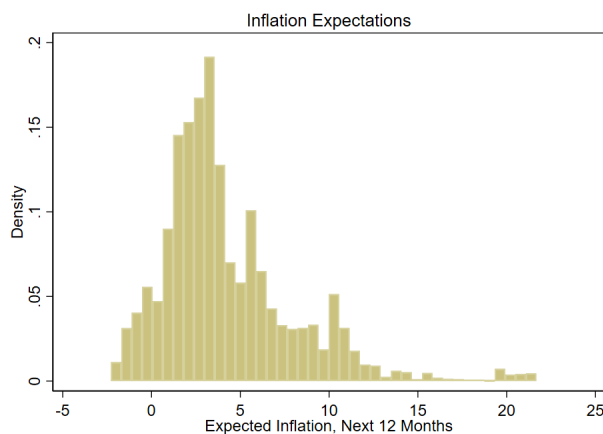


Figure 5: Inflation Expectations

Notes: The figure shows the distribution of expected inflation in the Survey of Consumer

¹⁶This selection is based on the answer to a previous question.

Expectations for our sample period - from June 2014 through October 2022.

Currently employed workers who are looking for a new job have higher inflation expectations in period t than those not searching.¹⁷ The average expectation among searchers at the beginning of the search period is 4.46 and the average expectation among non-searchers is 4.24. This difference is significant at the 5% level.

4.2 Inflation Expectations and On-the-Job Search

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

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

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

where $\mathbf{x}_{i,t}$ is a vector of controls that may 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 or not the respondent is a parent. The term u_t is a survey date fixed effect; this controls for potential time-series factors that influence both inflation expectations

¹⁷We classify searchers as those looking for work that would replace their main job. We extend our analysis to include those looking for supplemental work in Appendix Table C-2.

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 both high inflation and a large degree of labor market tightness. In this case, they may search not due to inflation itself, but because they anticipate 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 growth¹⁸ 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 .

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 of errors. Higher inflation expectations are positively correlated with search propensity. A one percentage point increase in expected inflation is associated with an increase in the probability that a worker will search by 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 consistent with the effect of a percentage point increase in expected inflation on search having the same effect of a percentage point reduction in the expected real wage, *ceteris paribus*.

Respondents who revise their expectations are also more likely to search. The middle two 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

¹⁸This earnings growth is conditional at staying with the same employer and working the same number of hours. We exclude from the regression respondents who believe their earnings will double or more or those who believe their earnings will decrease by half or more.

	Baseline		Revisions		$E_{i,t}[\Delta \text{ Real Earnings}]$	
	Coeff.	ME	Coeff.	ME	Coeff.	ME
$E_{i,t}[\pi]$	0.0117*** (0.0043)	0.0029*** (0.0011)				
$Rev_{i,t}[\pi]$			0.0119** (0.0058)	0.0029** (0.0014)		
$E_{i,t-1}[\pi]$			0.0147*** (0.0053)	0.0035*** (0.0013)		
$E_{i,t}[\Delta \text{ Real earnings}]$					-0.0154*** (0.0042)	-0.0035*** (0.0010)
$E_{i,t}[\Delta \text{ Nom. earnings}]$	-0.0183*** (0.0059)	-0.0045*** (0.0014)	-0.0194*** (0.0066)	-0.0047*** (0.0016)		
N	12,973		10,832		12,972	

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 “Revisions” column replaces $E_{i,t}[\pi]$ with the revision of beliefs between $t - 1$ and t as well as the expectation prior to 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 - $E_{i,t}[\Delta \text{ Real Earnings}]$. Standard errors are clustered at the individual level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

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 expected real wage growth 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 further robustness checks in Appendix C.¹⁹

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 employed respondents' reported annual salaries at their current jobs to obtain a current real wage.²⁰ We then run the following regression:

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

where $w_{i,t}$ is the respondent's *current* real wage in hourly terms. Table 4 shows the results.

Reservation wages are indeed decreasing in inflation expectations. A 1 percentage point increase in inflation expectations reduces the hourly reservation wage by 0.22 2017 dollars. The table also shows that reservation wages increase 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.

¹⁹These tables show that the results are robust to the winsorization threshold, trimming instead of winsorizing, excluding various controls, and defining search differently.

²⁰Respondents 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."

Reservation Wage	
$E_{i,t}[\pi]$	-0.22*** (0.08)
$w_{i,t}$	1.00*** (0.04)
$E_{i,t}[\Delta earnings]$	0.57*** (0.22)
N	14,317

Table 4: The table shows the results of the regression in Equation 7. The the respondent's real. $E_{i,t}[\pi]$ and $E_{i,t}[\Delta earnings]$ are the means implied by the subjective distributions over inflation and earnings outcome reported at the outset of the search period. $w_{i,t}$ is the respondent's current real hourly wage. Standard errors are clustered at the individual level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

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 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. These two forces together 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. We anticipate, though, that some offers will be accepted such that household search results job-to-job transitions.

Define a transition for an employed worker as:

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

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

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

This equation includes the dependent variable of interest, $E_{i,t}[\pi]$, or the inflation expectation

at the beginning of the search period ending in $t + 1$. The first two columns of Table 5 Panel A show the estimates of Equation 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
$E_{i,t}[\pi]$	0.0189** (0.0079)	0.0016** (0.0007)	0.0151* (0.0166)	0.0012* (0.0009)
$search_{i,t}$			0.7200*** (0.0643)	0.0556*** (0.0054)
$r_{i,t}^w$			-0.0018 (0.0020)	-0.0001 (0.0002)
N	6,860		6,701	

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. Accordingly, the third and fourth column 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. While 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 and realized inflation and, and measures of labor market tightness. Specifically, the table contains the coefficients from the following regression, run for 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 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 (a roughly 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 ?? provides evidence on the relationship between quits and realized inflation in an earlier series.²¹

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. 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-run fluctuations in inflation expectations will not generate persistent inflationary pressure unless those beliefs become entrenched in longer-run beliefs. Our results suggest that short-run 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.

²¹We 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 1948. 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

- 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: *FRTBNY 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*.
- 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 Cyclicalilty of New Hires”. In: *The Review of Economic Studies* 87.4, pp. 1876–1914.
- Grigsby, John, Erik Hurst, and Ahu Yildirmaz (2021). “Aggregate Nominal Wage Adjustments: New Evidence from Administrative Payroll Data”. In: *American Economic Review* 111.2,

pp. 428–71. DOI: 10.1257/aer.20190318. URL: <https://www.aeaweb.org/articles?id=10.1257/aer.20190318>.

Hajdini, Ina et al. (2022). *Low Passthrough from Inflation Expectations to Income Growth Expectations: Why People Dislike Inflation*. Working Paper 22-21. Federal Reserve Bank of Cleveland.

Hazell, Jonathan and Bledi Taska (2023). “Downward Rigidity in the Wage for New Hires”.

He, Qiwei and Philipp Kircher (2023). “Updating about Yourself by Learning about the Market: The Dynamics of Beliefs and Expectations in Job Search”.

Ichiue, Hibiki and Shusaku Nishiguchi (2015). “Inflation Expectations and Consumer Spending at the Zero Lower Bound: Micro Evidence”. In: *Economic Inquiry* 53 (2), pp. 1086–1107.

Jain, Monica, Olena Kostyshyna, and Xu Zhang (2022). *How Do People View Price and Wage Inflation?* Staff Working Papers 22-34. Bank of Canada.

Kamdar, Rupal (2019). *The Inattentive Consumer: Sentiment and Expectations*. Working Paper.

Karahan, Fatih et al. (2017). “Do Job-to-Job Transitions Drive Wage Fluctuations Over the Business Cycle?” In: *American Economic Review: Papers and Proceedings* 107 (5), pp. 353–357.

Kim, GwangMin and Carola Binder (2023). “Learning-through-Survey in Inflation Expectations”. In: *American Economic Journal: Macroeconomics* 15.2, pp. 254–78.

Mitra, Anushka (2023). “Macroeconomic Sentiments and Job Search Behavior”.

Moscarini, Giuseppe and Fabien Postel-Vinay (2022). “The Job Ladder: Inflation vs. Reallocation”.

Pilosoph, Laura, Jane Ryngaert, and Jesse Wedewer (2023). *Job Search, Raises, and Inflation*. Working Paper.

Roth, Christopher, Mirko Wiederholt, and Johannes Wohlfart (2022). *The Effects of Monetary Policy: Theory with Measured Expectations*. Working Paper.

Ryngaert, Jane M. (2022). “Inflation Disasters and Consumption”. In: *Journal of Monetary Economics* 129, S67–S81.

— (2023). “Balance of Risks and the Anchoring of Consumer Inflation Expectations”. In: *Journal of Risk and Financial Management* 16 (79).

Tobin, James (1972). “Inflation and Unemployment”. In: *American Economic Review* 62.1.

A Proofs

Proof of Proposition 1 Reservation wages for employed workers satisfy:

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

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

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

so that

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

which is strictly decreasing in $\tilde{\pi}_t$. For $\frac{w}{\tilde{\pi}_t} < \hat{r}_u$, 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,

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

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

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

so that the optimal search condition becomes:

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

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

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

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 $\frac{w}{\tilde{\pi}_t} \geq \hat{r}_u$. Since at the point where $\frac{w}{\tilde{\pi}_t} = \hat{r}_u$ 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:

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

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

	Not Employed	Employed
	Coeff.	ME
$E_{i,t}[\pi]$	0.0099** (0.0042)	0.0024** (0.0010)
$E_{i,t}[\Delta \text{earnings}]$	-0.0168*** (0.0056)	-0.0041*** (0.0014)
N	14,460	

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
$E_{i,t}[\pi]$	0.0119*** (0.0040)	0.0034*** (0.0011)
[1em] $E_{i,t}[\Delta \text{earnings}]$	-0.0138*** (0.0053)	-0.0039*** (0.0015)
N	13,815	

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.