Low passthrough from inflation expectations to income growth expectations: Why people dislike inflation

Discussion by Maarten van Rooij

DeNederlandscheBank

EUROSYSTEEM

Key points paper

Design RCT experiment with information treatments affecting inflation and income expectations

IV regressions showing 20% pass through of inflation expectations to income expectations and no pass through the other way around

Higher inflation expectations increase probability to search for another job (not to ask for a raise or work longer)

Calibrate DSGE/structural model with search-and-matching in the labor market showing:

- Incomplete responses of real wages to demand and supply shocks translate into greater fluctuations in output
- Wage push channel does not make much of a quantitative difference
- Regress consumer utility on expected inflation using data from model simulation

Taken together, survey results and model exercises provide a labor market channel to explain why people dislike inflation.

Research relevant for many topics

Concerns about wage price spiral in a period of high inflation

Understanding supply side view on inflation by consumers (Candia et al, 2020)

Are consumers capable of DSGE thinking or do their beliefs depart from rationality

Understanding why people dislike inflation

What is to like?

TOP 3

- RCT experiment to generate exogenous variation in inflation/wage expectations
- Novel combination with labor market expectations
- Calibration of structural model with search and matching in labor market, IRF for incomplete versus complete pass through and with and without wage-push factor

What is to like? Questions!

TOP 3

- RCT experiment to generate exogenous variation in inflation/wage expectations
- Novel combination with labor market expectations
- Calibration of structural model with search and matching in labor market, IRF for incomplete versus complete pass through and with and without wage-push factor

<u>Questions</u>

- How well do the survey/RCT exercise and DSGE structural model go together?
- Is explaining "why people dislike inflation" really the most important take away?

Conclusions from RCT

- Significant transmission of inflation expectations to wage expectations
- Transmission is incomplete and equal to 20 percent
- No causal transmission from wage expectations to inflation expectations

Interpretation

How to interpret the survey responses and RCT results?

- Do respondents recognize labor market frictions, delays in wage adjustment or are they mistaking?
- Do respondents associate high inflation with lower output and employment losses, putting downward pressure on wages?
- How about heterogeneity? Some respondents see a high pass through, and others see a zero pass through? =>Representative versus heterogeneous agent models

Possible extensions for future research

More info on the bigger picture would require expectations questions on:

- Longer term expectations of inflation and income: Do wage expectations fully adjust to inflation expectations?

- Macro expectations on output and employment developments, i.e., do respondents associate inflation with a supply or a demand shock?

- Personal expectations: expected probability of job loss

Questions on empirical estimates

- How about timing? Basically, the IV regression links expected inflation for (most of) 2022 to expected income increases in 2023 (or 2024 wording is a bit confusing: between Dec 2022 and Dec 2023, expect income to increase over the next 12 months). What would we expect a priori: which pass-through fits this timing?

- Placebo treatment leads to higher inflation expectations (in comparison to the control group). What is the interpretation?

- Paper highlights significant IV-estimate from expected prices to expected wages, but not the other way around. To what extent is this related to lower number of observations (about half for the latter regressions)?

- Why not perform regressions of pass through from income growth expectations to inflation expectations by demographics (as done the other way around)

RCT results highlight heterogeneity

Overall pass through of inflation expectations to income expectations is driven by high income groups (and men)

Paper suggests higher income are better protected against inflation. Does this also apply to men? Or is this relation a reflection of higher income and men being more literate/knowledgeable about the economy?

Female and middle-income respondents do want to work longer hours in response to higher inflation expectations

High and middle-income respondents do tend to ask for a raise in response to higher inflation expectations.

Utility

- Positive demand shock overall negatively effects utility
- Cost push shock overall positively effects utility

Negative effect of hours worked has a strong effect on utility!

Is this related to the economy functioning close to full capacity?

Increases in number of hours worked (intensive margin) may have a negative utility effect (PM: RCT shows that people do not intend to change number of hours worked)

On the other hand, would an increase in hours worked due to more people finding a job (extensive margin) not imply positive effects on utility

Possible to differentiate between employed and unemployed consumers?

Robustness/generalization

How robust is the relation between expected inflation and utility in the model exercise?

- The 20% pass-through of expected inflation to expected wages is used to calibrate the per period fraction of contracts that is renogatiated and the response of wages (in non-renogatiated contracts) to past inflation

- What if respondents are incorrect? Can you vary these parameters?

- Labor market search and matching is calibrated to the current tight labor market situation; What happens if it calibrated to a situation of high unemployment?

- Possible to including taxation to balance government budget? This could potentially have a large impact on findings. Would this make demand (supply) shocks to have a positive (negative) effect on utility?

Why people dislike inflation?

Two arguments:

(1) Survey results: almost all respondents report loss of purchasing power (this is about beliefs). A very intuitive reason to dislike inflation!! Do you need a second argument?

(2) Structural model analysis showing that inflation expectations lower the utility of a representative family (based on effects on consumption/hours worked)

The latter assumes implicitly that consumers recognize these mechanisms (either know the model; or have a gut-feeling that inflation works out this way): a heroic assumption

If the model intends to show that inflation shocks lead respondents in a worse economic situation, then why not use actual data to estimate parameters

How about average respondent/consumer versus all other people?

Summary

Great paper

Great research

Several avenues for additional analysis/projects

Definitively worth reading