Leibniz University Hannover School of Economics and Management Institute of Money and International Finance

# Seminar Monetary Economics Using Microdata (Belegnummer: )

#### Thema:

### The Formation of Inflation Expectations

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Fachsemester: 1

Matrikelnummer: 1234567 2891740

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#### 1 Introduction

Space for our Introduction

Brainard(2022): - inflation bears high risks - stable and low inflation key for economy and labor market

Research question: - Under which circumstances do households/ordinary people update their inflation expectations?

from the papers: - people have more sensitivity for inflation in rough times, dont look at it in good times - people in advanced countries dont care, have no clue about inflation/inflation rates, because the dont have to

Idea: - Google Searches about Inflation as a proxy for expectation formation - positive correlation between crises like corona and updating behavior and therefore inflation expectations by looking at survey data and google-trends

Conclusions: - in google trends for US: cyclical updating behavior until mid 2021, after that huge increase, co movement with the expectations of inflation - cyclical updating: increases in spring and around October (black Friday), low interest in the summer and around Christmas/new year

### 2 Theoretical Background

#### 2.1 Literature

• a quick overview about the literature

Dräger,Lamla (2012): - dont know that much about formation of inflation expectations - looking at updating behavior of people in the michigan survey - Idea is to look at the participants that are interviewed twice six months later. Have they changed their expectations or not? - findings: updating on quantitative questions every 8 months, qualitative every 16 months about one-year-ahead inflation. in recessions updating behavior increases, therefore adjustments about the expectations are correlated with the business cycle. long-term less often adjusted than short-term

Coibion et al. (2020)

 $\bullet~$  there are important differences between expectations of professionals and normal

people

- people in high income countries are inattentive towards inflation, people in countries like iran, turkey, that have high inflation rates pay attention
- ordinary people see inflation only in the volatility of consumed goods, like petrol, therefore more volatility in expectations for uninformed agents
- ordinaries people inflation expectations are not anchored
- high qualtity of hhs surveys, therefore good tool for analysis
- news about inflation, monetary policy ore statements by the CB dont have any effects on normal people only on informend specialists
- when people get an information treatment about inflation, their views change, expectations change strongly
- expectations and real inflation often differ drastically from one another, as seen in a lot of surveys
- · economic environment is key for views about inflation
- S.5: "economic agents update their beliefs depending on the strengths of their priors and signals"
- shopping experience are important for formation of expectations ("Tomaten sind teuer geworden") -> Cavallo et al (2017) checken
- but some goods are more important -> gasoline very important, comovements between expectations and gasoline prices
- news about inflation can have an effect, but that is very disputable
- people dont know shit about monetary policy. but when they know, they
  update their expectations towards the real value and towards professional
  forecasts
- Summary for formation of expectations: people are very different in their knwoledge depending on their living experiences, economic environment. the successful monetary policy in adavnced countries has led to inattention by households about inflation or inflation goals

Dräger and Nghiem (2018): - approximately 50% of respondents believed that inflation over the previous twelve months had been 5% or above, at a time when actual inflation was 0.3%.

### 2.2 Our Hypothesis

positive correlation between crises like corona and updating behavior

### 3 Data

#### 3.1 Our Dataset

- we look at the survey data provided by the Survey of Consumer Expectations of the New York FED
- a plot of consumer expectations of the last ten years give a first expression



Figure 1: Expectations from 2013-present

- we can see two different phases for inflation expectations: from June 2013 until April 2020 and from May 2020 until today
- first phase: stable expectations with median and point predictions at around 2.5--3.0% inflation
- second phase: sudden increase in expectations with a peak at arond 6.5% in the last months

we can see the differences in the descriptive statistics and growth rates for the point

Table 1: Summary for expectations from 2013-2020

measure	mean	volatility	range
median	2.8083	0.2566	1.0649
point_prediction	3.3424	0.5582	1.8877
lower quantil	1.1982	0.3225	2.0000
upper quantil	5.0948	0.7455	3.3737

Table 2: Summary for expectations from 2020-present

measure	mean	volatility	range
median	4.1844	1.3553	3.9025
point_prediction	5.1892	1.5367	5.3174
lower quantil	1.9374	0.8814	2.8085
upper quantil	7.5308	1.5792	4.3110

#### estimate of both intervals

This gives us the following kables for both intervals

- we see higher value for average median, point estimate, volatility and therefore a wider range in the second sample
- we can also see higher movements by comparing the growth rates of both intervals

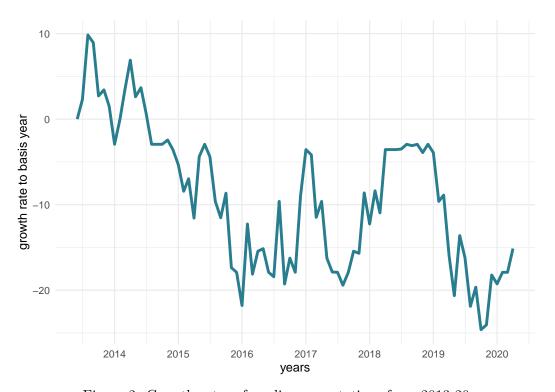


Figure 2: Growth rates of median expectations from 2013-20

### -new picture now

- only small movements, decrease of about 15% in seven years

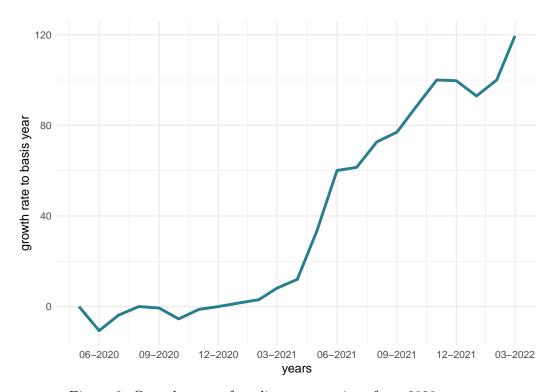


Figure 3: Growth rates of median expectations from 2020-present

• more than double the expectations in only two years! shows drastic shift in expectations

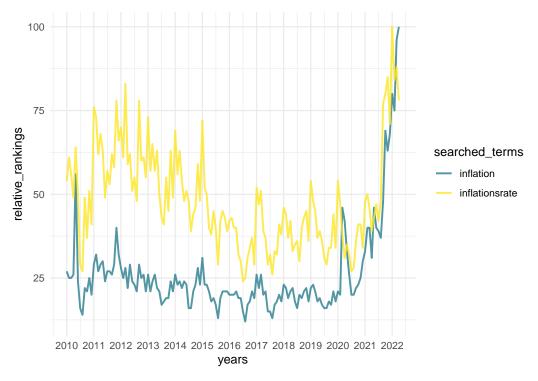


Figure 4: German Google Trends from 2010-present

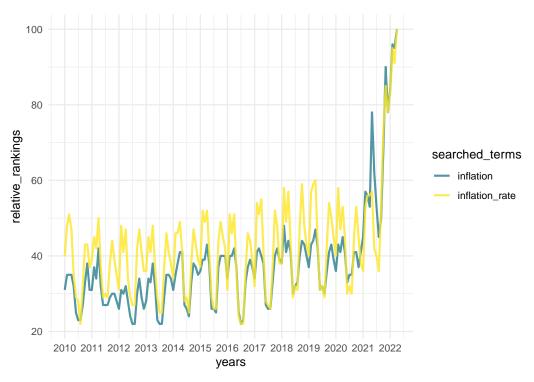


Figure 5: US Google Trends from 2010-present

3.2 Descriptive statistics

### 3.3 More statistics

-cyclical behaviour of trends for US is very interesting - no one looks after inflation in the summer, so maybe trends coincide with the sales in the winter (Winterschlussverkauf, Black Friday)

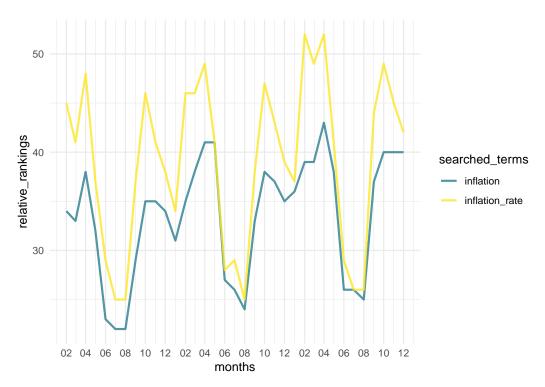


Figure 6: US Google Trends from 2013-2016

### 4 Results

- 4.1 Results for Data
- 5 Robustness
- 5.1 Robustness
- 5.2 Limitations

## 6 Conclusion

Space for our Conclusion

Research questions: How do macroeconomic expectations differ across sociodemographic groups? How do people update their inflation expectations? What is the effect of hearing economic news on inflation expectations?

# A Tables

# B Figures

# C Literature

Ehrenwörtliche Erklärung

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