Firms’ Inflation Expectations: Which Expectations Matter When?

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Inflation: Risks, Implications and Policies
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• Inflation expectations are central to many decision-makers’ choices:
  • Consumption saving
  • Portfolio choice
  • Investment
  • Firms’ pricing decisions
• Today’s focus:
  • Firms’ expectations: this is where higher inflation expectations (are predicted to) feed into more inflation
• Questions to contemplate:
  • Which expectations do firms use for pricing? Inflation? Unit costs? Competitors’ prices?
  • There is a lot of variation in firms' expectations. Which firms’ expectations matter?
“One useful insight into how actual inflation may affect expectations about its future path is based in the concept of ”rational inattention.” ... When inflation is low and stable, they are freer to focus their attention elsewhere.”

–J. Powell (2022)

- Massive literature on how firms and households are not well-informed about inflation (e.g. Kumar et al., 2015; Coibion et al., 2018, and many more).
- How could inflation be so stable when inflation expectations were not?
- **Answer:** firms were [rationally] inattentive to *aggregate inflation*
- Instead they focused on their own environment
Figure 1: Distributions of the Size of Firms’ Nowcast Errors (Afrouzi, 2020)

- Optimal attention to competitors’ prices is consistent with the disconnect
- See also Meyer et al. (2021): unit cost vs. aggregate inflation expectations
Whose Expectations Matter?

- Even when it comes to inflation expectations, there is a lot of heterogeneity

Source: Kumar, Afrouzi, Coibion, and Gorodnichenko (2015)
Firms that changed their prices recently have more accurate expectations.

<table>
<thead>
<tr>
<th></th>
<th>Size of Nowcast Error</th>
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<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Price change (last 3m)</td>
<td>-1.42***</td>
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<tr>
<td></td>
<td>(0.14)</td>
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<tr>
<td>Freq. of price reviews</td>
<td></td>
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<td>industry fixed effects</td>
<td>No</td>
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<td>Observations</td>
<td>3,153</td>
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</tbody>
</table>

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Source: Afrouzi and Yang (2021b)
Post 2020: High Inflation, No More Rational Inattention

• When aggregates are more volatile, firms pay attention (Maćkowiak and Wiederholt, 2009)

• In the context of inflation (Afrouzi and Yang, 2021a):
  • With more volatile inflation, inflation expectations become more sensitive to news
  • The Phillips curve [eventually] becomes steeper
  • BUT not necessarily in the short-run

• The key is to think about information as capital
  • Volatility depreciates information faster
  • Investment in information goes up but stock of it falls
Figure 2: Importance of Inflation to Prices Charged to Customers in the Next 12 Months

Percent of Firms

- Not at All Important
- Somewhat Important
- Very Important

Sources: Federal Reserve Bank of Richmond (July 2021, October 2021, and January 2022).
Notes: Data included 245 firms in July, 223 firms in October and 209 firms in January.

Source: Schwartzman and Waddell (2022) (link)
Source: Coibion (2022)—discussion of Meyer et al. (2021) at “Inflation: Drivers and Dynamics Conference 2022” (link)
• Expectations behave differently under volatile inflation
  • Armantier, Koşar, Somerville, Topa, Van der Klaauw, and Williams (2022)
• We know little about
  • how inflation expectations react to which news under high inflation
  • or how this news affects firms’ prices
• Need more research into how aggregate inflation expectations feed into prices in this new environment


