

Firms' Inflation Expectations: Which Expectations Matter When?

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Inflation: Risks, Implications and Policies
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Motivation

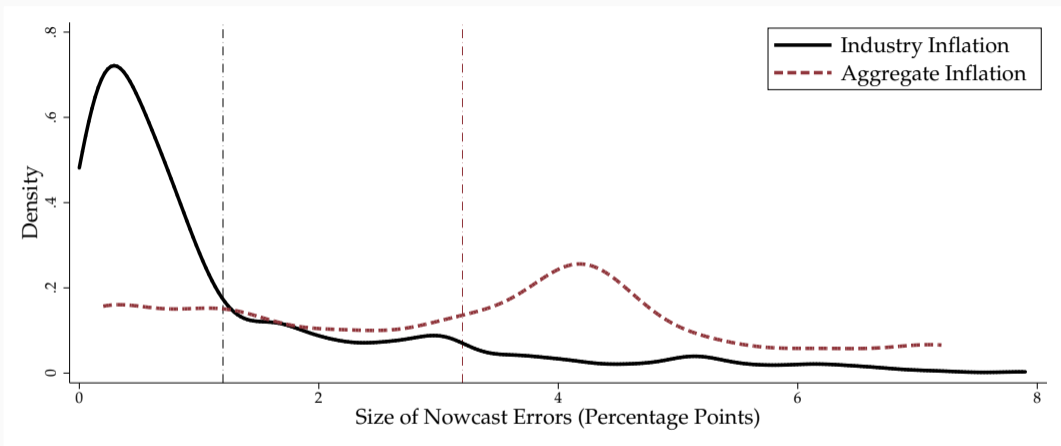
- Inflation expectations are central to many decision-makers' choices:
 - Consumption saving
 - Portfolio choice
 - Investment
 - **Firms' pricing decisions**
- Today's focus:
 - **Firms' expectations:** this is where higher inflation expectations (are predicted to) feed into more inflation
- Questions 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

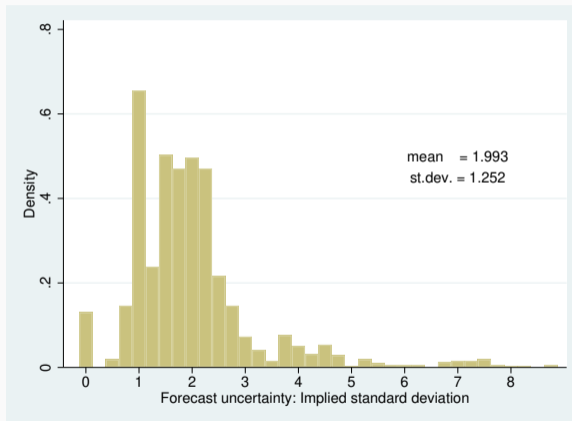
Figure 1: Distributions of the Size of Firms' Nowcast Errors ([Afrouzi, 2020](#))



- 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 \(2015\)](#)

Whose Expectations Matter? Price setters (Not a random sample)

- Firms that changed their prices recently have more accurate expectations

	Size of Nowcast Error			
	(1)	(2)	(3)	(4)
Price change (last 3m)	-1.42*** (0.14)		-1.25*** (0.14)	-0.89*** (0.12)
Freq. of price reviews		-0.81*** (0.08)	-0.54*** (0.08)	0.10 (0.08)
industry fixed effects	No	No	No	Yes
Observations	3,153	3,153	3,153	3,153

Robust standard errors in parentheses

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

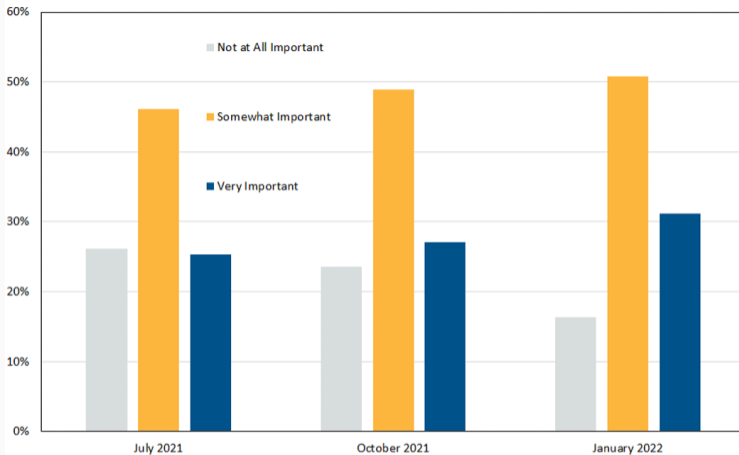
Source: [Afrouzi and Yang \(2021b\)](#)

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

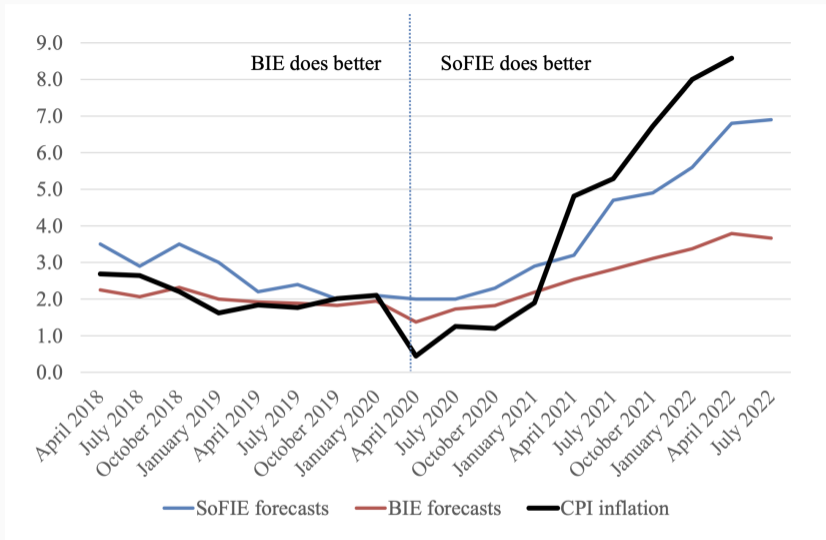
Percent of Firms



Sources: Federal Reserve Bank of Richmond (July 2021, October 2021 and January 2022).

Notes: Data included 245 firms in July, 229 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](#))

Conclusion

- 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

References

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