

The Pass-Through of Inflation Expectations into Prices and Wages: Evidence from an RCT Survey

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Inflation Expectations: Determinants and Consequences

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Pass-through of inflation expectations on firms' decisions

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- ▶ Werning (2022): pass-through varies with the price adjustment strategies.

\Rightarrow Pass-through depends on **price adjustment strategies** and **expectations horizon**.

This paper

- RCT experiment: pass-through of inflation expectations on price and wage decisions.
- Priors \Rightarrow 2 Treatments + Control \Rightarrow Posteriors
 - ▶ T1: rise in energy prices
 - ▶ T2: inflation target
- Identification strategy: treatments affect wage and price through inflation expectations.

$$y_{i,post} - y_{i,pre} = \alpha + \beta(\mathbb{E}_i^{post} \pi_h - \mathbb{E}_i^{pre} \pi_h) + \gamma X_i + \varepsilon_{it}$$

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Dependent Variables:	dWages	dPrices	dInfl. 6m	dInfl. 1y	dInfl. 5y
Model:	(1)	(2)	(3)	(4)	(5)
<i>Variables</i>					
T1	0.28* (0.14)	-0.05 (0.13)	0.10 (0.09)	0.13* (0.07)	0.13 (0.11)
T2	-0.09 (0.18)	-0.07 (0.17)	-0.18** (0.07)	-0.22*** (0.06)	-0.28*** (0.10)

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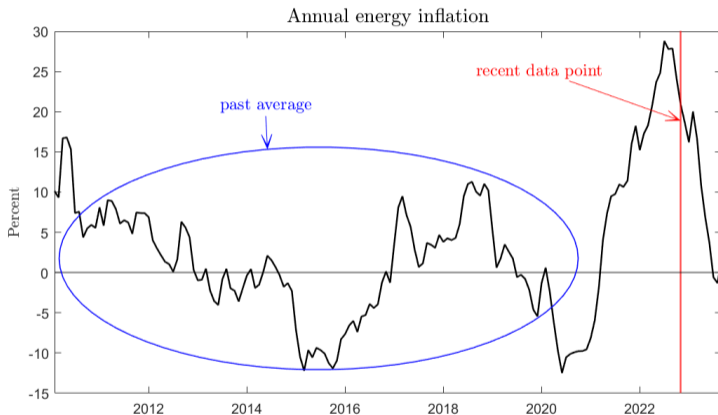
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- Identification strategy: treatments affect wage and price through inflation expectations.
- One step further: discriminate the effects by price adjustment strategy (state- vs time-dependent).
- **Results:**
 - 1 Pass-through to prices less than 1 and decreasing w/ the horizon.
 - 2 Pass-through to wages less than 1 but constant across horizons.
 - 3 Pass-through to prices smaller for firms w/ state-dependent price adjustment.

Discussion

- Overall assessment of the paper:
 - ▶ Contributes to the research agenda of quantifying effects of expectations on current decisions.
 - ▶ Accounts for pass-through being affected by price adjustment strategies and forecast horizon.
 - ▶ Informative for our models and monetary policy.
- **Comments:**
 - ① Energy prices as a (de-)anchoring information treatment.
 - ② Alternative estimation strategy.
 - ③ Implications for monetary policy.

Comment I: Energy prices as a (de-)anchoring treatment

Treatment about energy prices generally has no effect on inflation expectations.



“Energy price inflation for consumers in Switzerland has risen from its average of 0% over the ten years before the Covid pandemic to 26% in October 2022.”

Comment I: Energy prices as a (de-)anchoring treatment

- **Two** pieces of information are given: past average and one recent data point.
- How would a respondent interpret these two jointly?
 - ① Past average makes the recent increase really stand out...
 - ② Past average signals that the recent increase will not persist/is not that important for inflation expectations 6+ months out.
 - ★ E.g., decreasing gain learning framework.
- Alternative 1: information about the recent increase only.
- Alternative 2: information about a more persistent component of the consumer price index.

Comment II: Alternative estimation strategy

$$\text{Post Price}_i = \alpha + \gamma \text{Prior Price}_i + \delta \mathbb{E}_i^{\text{post}} \pi_h + \text{error}_i$$

- Similar IV strategy as in Coibion et al. (2019), Hajdini et al. (2023),...

$$\hat{\mathbb{E}}_i^{\text{post}} \pi_h = \hat{\beta}_1 T_{1i} + \hat{\beta}_2 T_{2i} + \hat{\gamma}_1 (T_{1i} \times \mathbb{E}_i^{\text{prior}} \pi_h) + \hat{\gamma}_2 (T_{2i} \times \mathbb{E}_i^{\text{prior}} \pi_h)$$

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Dependent Variables: Model:	Infl.6m post (1)	Infl.1y post (2)	Infl.5y post (3)	Wages post (4)	Prices post (5)
<i>Variables</i>					
Pre	0.67*** (0.10)	0.98*** (0.01)	0.95*** (0.06)	0.98*** (0.03)	0.98*** (0.02)
T1	0.36 (0.41)	0.38** (0.17)	0.23 (0.29)	0.09 (0.09)	0.64* (0.38)
T2	1.3*** (0.38)	0.41* (0.24)	0.13 (0.21)	0.11 (0.15)	0.30 (0.20)
Pre × T1	-0.04 (0.17)	-0.13** (0.06)	-0.04 (0.11)	0.01 (0.03)	-0.16 (0.14)
Pre × T2	-0.48*** (0.15)	-0.13* (0.07)	-0.11 (0.08)	-0.11* (0.06)	-0.18** (0.08)

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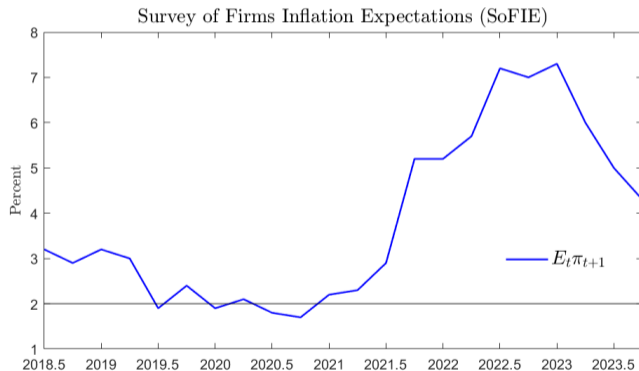
- Why is a robust range of estimates important?
 - ▶ Insights for our models; e.g. search for mechanisms that grant homogeneous pass-through to wages across horizons.
 - ▶ Insights for monetary policy.

Comment III: Implications for monetary policy

- Effects of inflation expectations on prices diminish with the forecast horizon.
 - ▶ **Prescription 1:** focus on anchoring short-term expectations.

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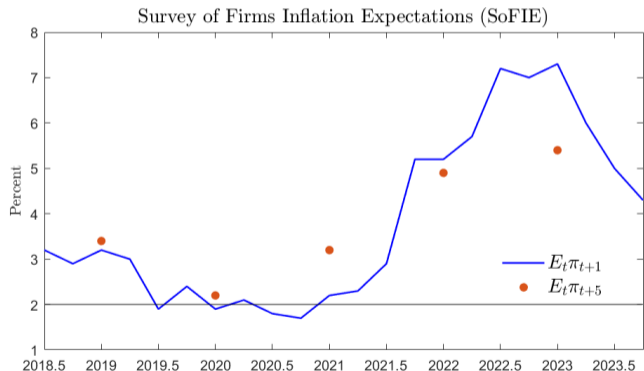
Source: Federal Reserve Bank of Cleveland

Comment III: Implications for monetary policy

- **Prescription 1:** focus on anchoring short-term expectations.
- Effects of inflation expectations on wages constant with the forecast horizon.
 - ▶ **Prescription 2:** focus on anchoring long-term expectations.

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- **Prescription 1:** focus on anchoring short-term expectations.
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 - ▶ **Prescription 2:** focus on anchoring long-term expectations.



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Questions

Main Takeaways

- Pass-through depends on **price adjustment strategies** and **expectations horizon**.
- Sarah and co-authors account for these when quantifying effects of expectations on current decisions.
- Results can provide new insights for our models and conduct of monetary policy.

Comment III: SoFIE questions

- *What do you think will be the inflation rate (for the Consumer Price Index) over the next 12 months? Please provide an answer in an annual percentage rate.*
- *What do you think will be the average inflation rate (for the Consumer Price Index) over the next 5 years? Please provide an average annual percentage rate.*

[Back to monetary policy implications](#)