How Do Households Respond to Expected Inflation? An Investigation of Transmission Mechanisms

Jiang, Kamdar, Lu, Puzzello

Ina Hajdini[*]

[*]Federal Reserve Bank of Cleveland

Structural Changes and the Implications for Inflation

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Pass-through of Inflation Expectations on Consumption

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   ▶ Different information sets and/or forms of bounded rationality, etc... (e.g., hetero cognitive discounting as in Gabaix (2020))

   ▶ Liquidity constraints, labor market environments, income risk, etc... (e.g., TANK, HANK models,...)

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$\Rightarrow$ Pass-through can be **heterogeneous** and can depend on **expectations horizon**.

This Paper

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	(1) SD	(2) SN	(3) LD	(4) LN	(5) All
Extensive Margin (Percentage)					
No Change	70.3	57.4	57.2	66.5	63.2
Same Spending Different Bundle	7.2	11.9	14.7	9.8	10.8
Increase	5.7	5.6	6.7	5.8	6.0
Decrease	16.8	25.0	21.4	17.9	20.0
Intensive Margin (Dollar Spending)					
Prior Spending	533.10	888.46	538.75	831.72	687.39
Spending Change	11.59	-6.40	-44.27**	-16.35	-13.86
Percentage Change	2.17%	-0.72%	-8.22%	-1.97%	-2.02%
N	504	504	497	498	2,003

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- Prominent channels:
  - **No change:** fixed budget, not a consideration, liquidity constraint
  - **Decrease:** savers wealth effect, rigid income, inflation hedge

Discussion

- Overall assessment of the paper:

  - Contributes to the research agenda of quantifying effects of expectations on current decisions.

  - Engages into a broad exploration of mechanisms through which inflation expectations might affect (or not) consumption plans and accounts for the forecast horizon.

  - Informative for our models and monetary policy.

- **Comments:**

  1. Implications for monetary policy.

  2. Intensive margin and nominal income rigidity.

  3. Extensive margin.

Comment I: Implications for Monetary Policy

- "[...] average effect of an increase in expected inflation is either insignificant or a significant decrease in spending [...], implying that using inflation expectations as a policy tool to encourage consumer spending could backfire."

- Inflation expectations as a MP tool in a different environment, i.e., ZLB binding.

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$$c_t = \mathbb{E}_t c_{t+1} - (R_t - \mathbb{E}_t \pi_{t+1})$$

$$R_t = \phi \mathbb{E}_t \pi_{t+1}, \text{ for any } t$$

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- Let $\nu_t > 0$,

$$c_t = (1-\phi)\nu_t = \begin{cases} < 0 & \text{if } \phi > 1 \\ 0 & \text{if } \phi = 1 \\ > 0 & \text{if } \phi < 1 \end{cases}$$

Comment II: Intensive Margin and Income Rigidity

- Posterior expected losses in income growth increase prob. of decreasing consumption.

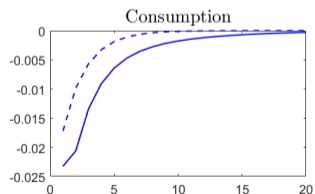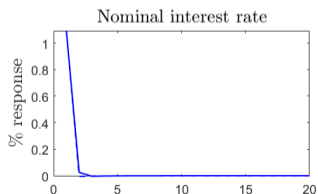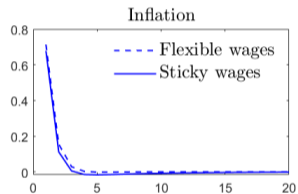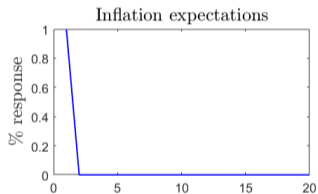Table 7: Decrease in Consumption

Education, Race, Sex			Political Stance			Age		
Var. Name	Coef.	SE	Var. Name	Coef.	SE	Var. Name	Coef.	SE
Cognitive Avg	-0.023	(0.042)	Democrat	-0.038	(0.034)	30 to 55	0.074*	(0.044)
College	-0.017	(0.029)	Prefer not to say	-0.074	(0.055)	55 to 65	0.103**	(0.051)
Female	0.054**	(0.026)	Republican	-0.015	(0.033)	Above 65	0.041	(0.047)
White	-0.033	(0.035)						
Liquid Savings			Income			FFR Change		
Var. Name	Coef.	SE	Var. Name	Coef.	SE	Var. Name	Coef.	SE
1k to 5k	-0.044	(0.037)	50k to 100k	0.073**	(0.031)	Adjust upwards	0.003	(0.030)
5k to 20k	-0.038	(0.039)	100k to 150k	0.076*	(0.046)	Adjust downwards	0.032	(0.063)
20k to 100k	-0.069	(0.042)	150k to 200k	0.069	(0.058)			
Above 100k	-0.098**	(0.046)	Above 200k	0.079	(0.063)			
Financial Predictability			Income Growth			Economic Outlook		
Var. Name	Coef.	SE	Var. Name	Coef.	SE	Var. Name	Coef.	SE
More difficult	0.082**	(0.033)	Adjust downwards	0.229***	(0.075)	Improve	-0.014	(0.030)
Less difficult	-0.060*	(0.036)	Adjust upwards <3	0.038	(0.044)	Worsen	0.145***	(0.035)
			Adjust upwards by 3	0.050	(0.041)			
			Adjust upwards >3	0.075*	(0.041)			

Comment II: Intensive Margin and Income Rigidity

- Posterior expected losses in income growth increase prob. of decreasing consumption.

- Explore the role of nominal wage rigidity.

    ▶ NK model w/ search-and-matching frictions and nominal wage rigidity of Calvo type.
      Christoffel and Kuester (2008), Hajdini et al. (2022)

    ▶ Shock inflation expectations by a one-time positive shock (1 pp).

    ▶ Flexible wages versus sticky wages.

Comment II: Intensive Margin and Income Rigidity

- On the intensive margin, posterior expected losses in income growth increase prob. of decreasing consumption.
- Explore the role of nominal wage rigidity.

Comment III: Extensive Margin

- Majority of respondents (60% - 70%) anticipate a decline in real income growth.

  Hajdini et al. (2022), Pilossoph and Ryngaert (2023), Stantcheva (2024)

	(1) SD	(2) SN	(3) LD	(4) LN	(5) All
(A) *Household Income Growth*					
Adjust downwards	4.9	10.3	6.7	5.4	6.6
No change	49.0	50.9	39.9	50.4	47.4
Adjust upwards by less than 3	12.0	12.1	10.9	10.7	11.4
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- More nuanced view on economic outlook.
  - Maybe not all inflationary news are perceived as stag-flationary?

(D) *General Economic Outlook*					
Improve	25.3	20.7	25.9	22.6	23.7
No change	40.0	33.3	33.2	34.9	35.5
Worsen	34.8	46.0	40.9	42.6	40.8

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- Yet (!) only a small fraction of respondents adjust consumption plans. Why?
  - ▶ Myopic consumers: income growth will likely not catch up, but I will internalize that at a later point.

Main Takeaways

- Implications for monetary policy should be interpreted subject to the type of economic environment.

- Income growth rigidity can amplify declines in consumption.

- Results seem to hint towards a mass of myopic consumers.