

**MONETARY POLICY, FISCAL POLICY,
AND INFLATION EXPECTATIONS**

Yuriy Gorodnichenko
UC Berkeley

POLICY RESPONSE TO THE COVID19 CRISIS

Monetary policy

- Interest rates at record-low levels
- Massive Quantitative Easing (+ \$4 trillion on the Fed's balance sheet)
- Promise to keep interest rates low until 2023 (forward guidance)
- Assortment of lending facilities

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Too much? Larry Summers: “[new fiscal stimulus will] set off inflationary pressures of a kind we have not seen in a generation.”

INFLATION EXPECTATIONS: STATE OF KNOWLEDGE

- Alan Greenspan (1994): “I am not saying what [inflation expectations] is a function of. We know it’s a very difficult issue, but **that is the key variable**. It’s important, but just because **we can’t make a judgment** as to what these driving forces are in an econometric sense doesn’t mean that it’s not real.”

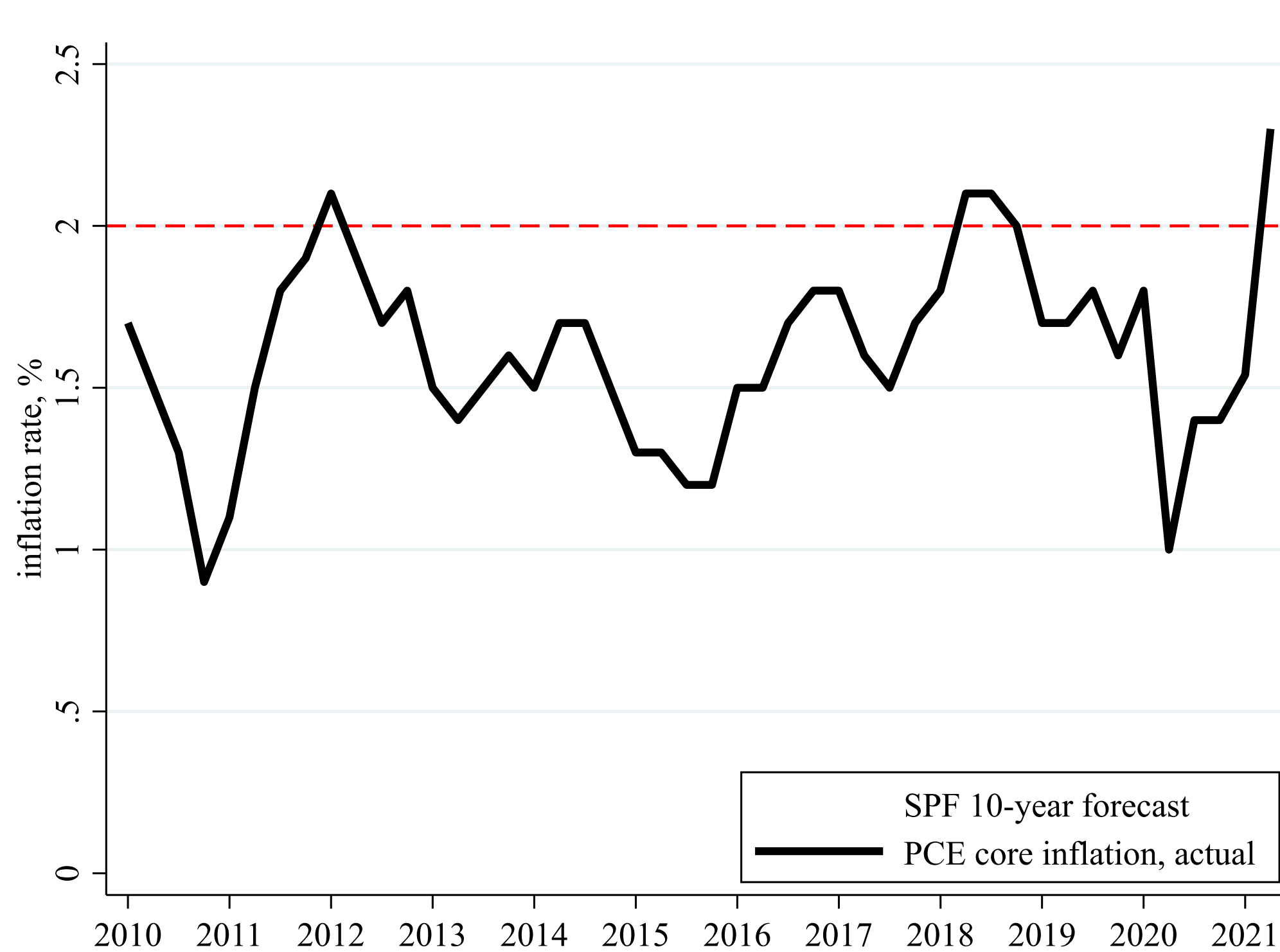
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- Ben Bernanke (2007): “How should we measure inflation expectations, and how should we use that information for forecasting and controlling inflation? **I certainly do not have complete answers** to those questions, but I believe that they are of **great practical importance**. ... Information on the price expectations of businesses--who are, after all, the price setters in the first instance--... is particularly scarce.”

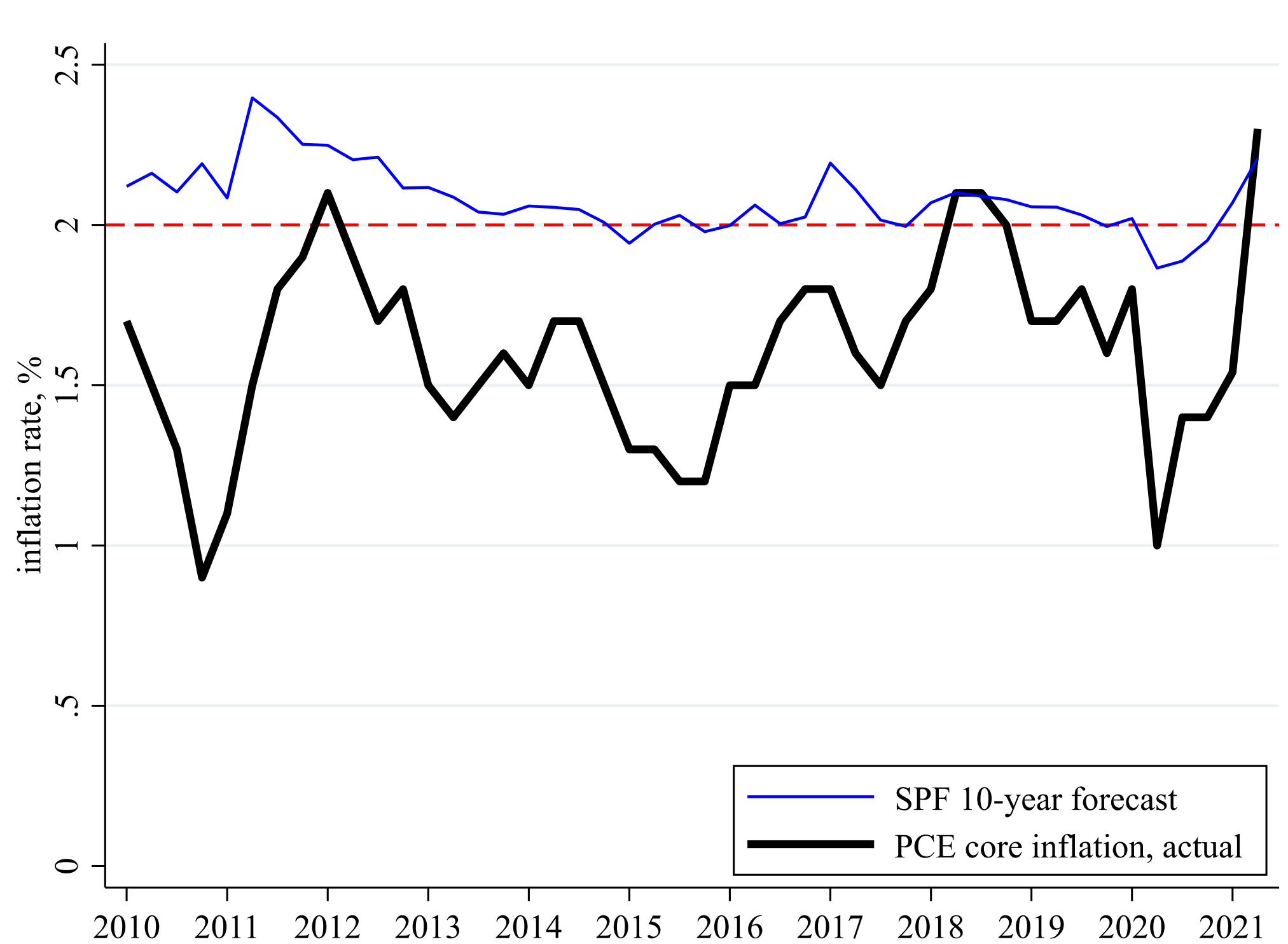
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- Janet Yellen (2016): “Perhaps **most importantly**, **we need to know more** about the manner in which inflation expectations are formed and how monetary policy influences them.”

PROFESSIONAL FORECASTERS: ANCHORED EXPECTATIONS



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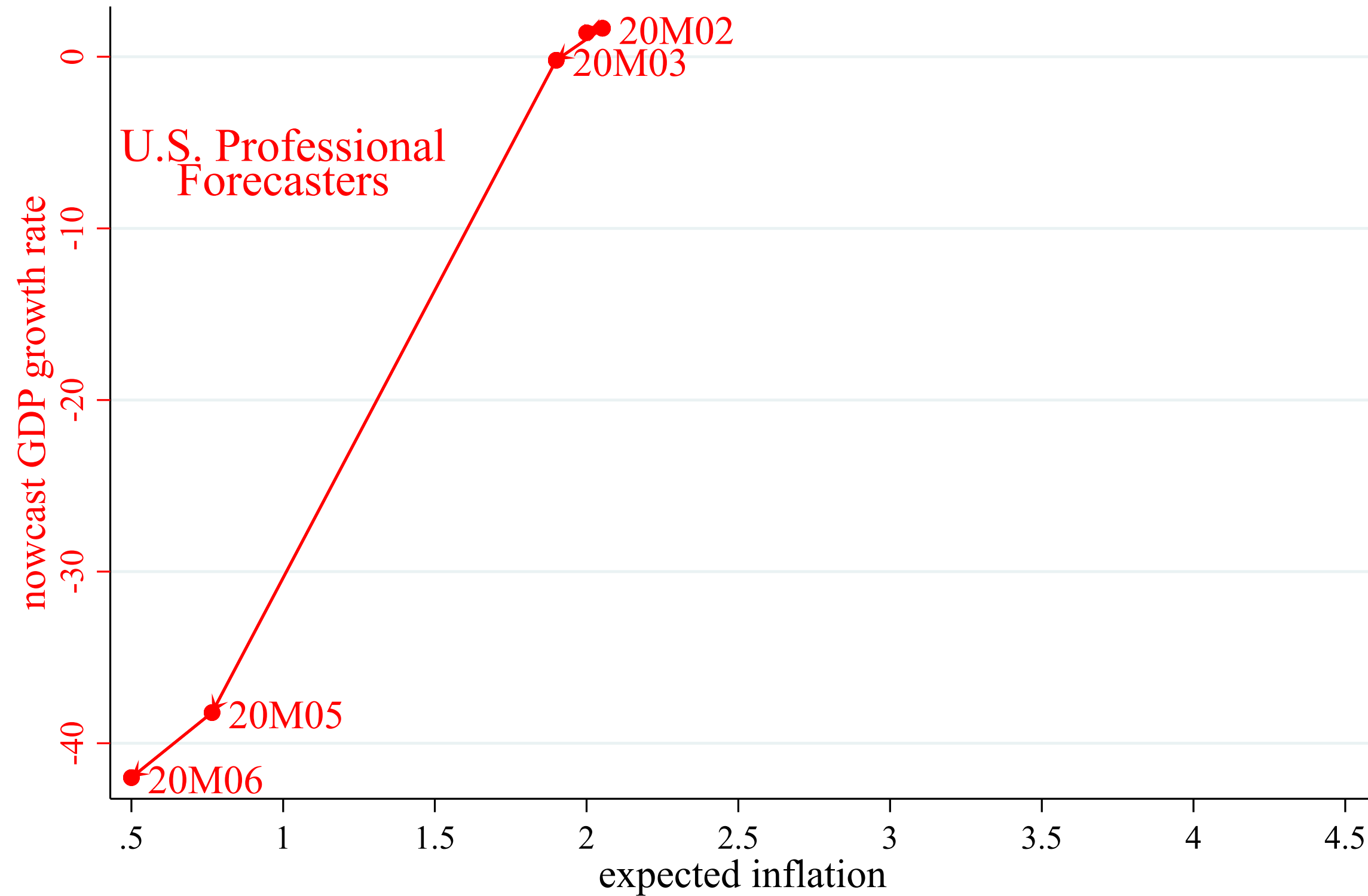
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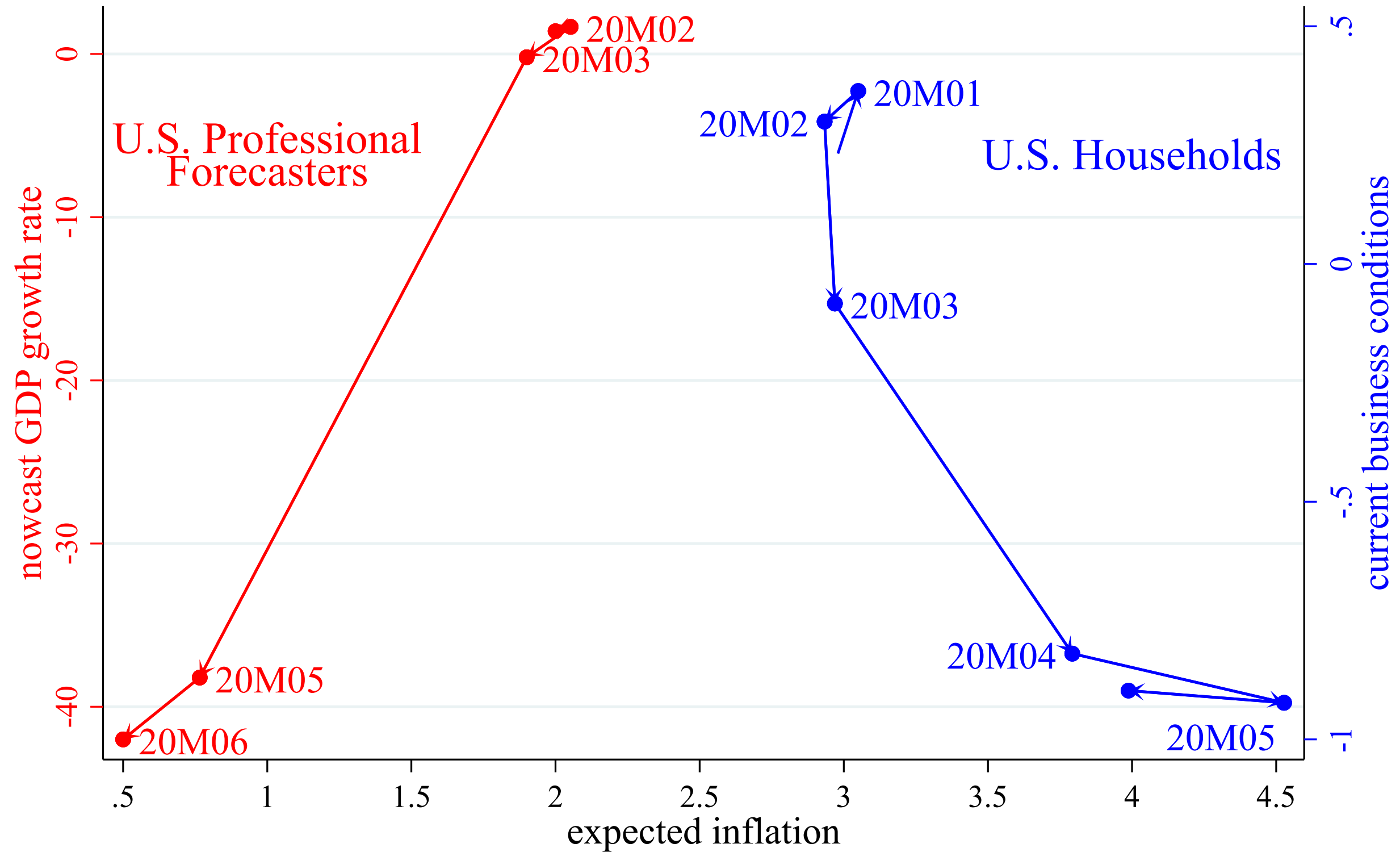
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HOUSEHOLDS AND ECONOMIC ACTIVITY



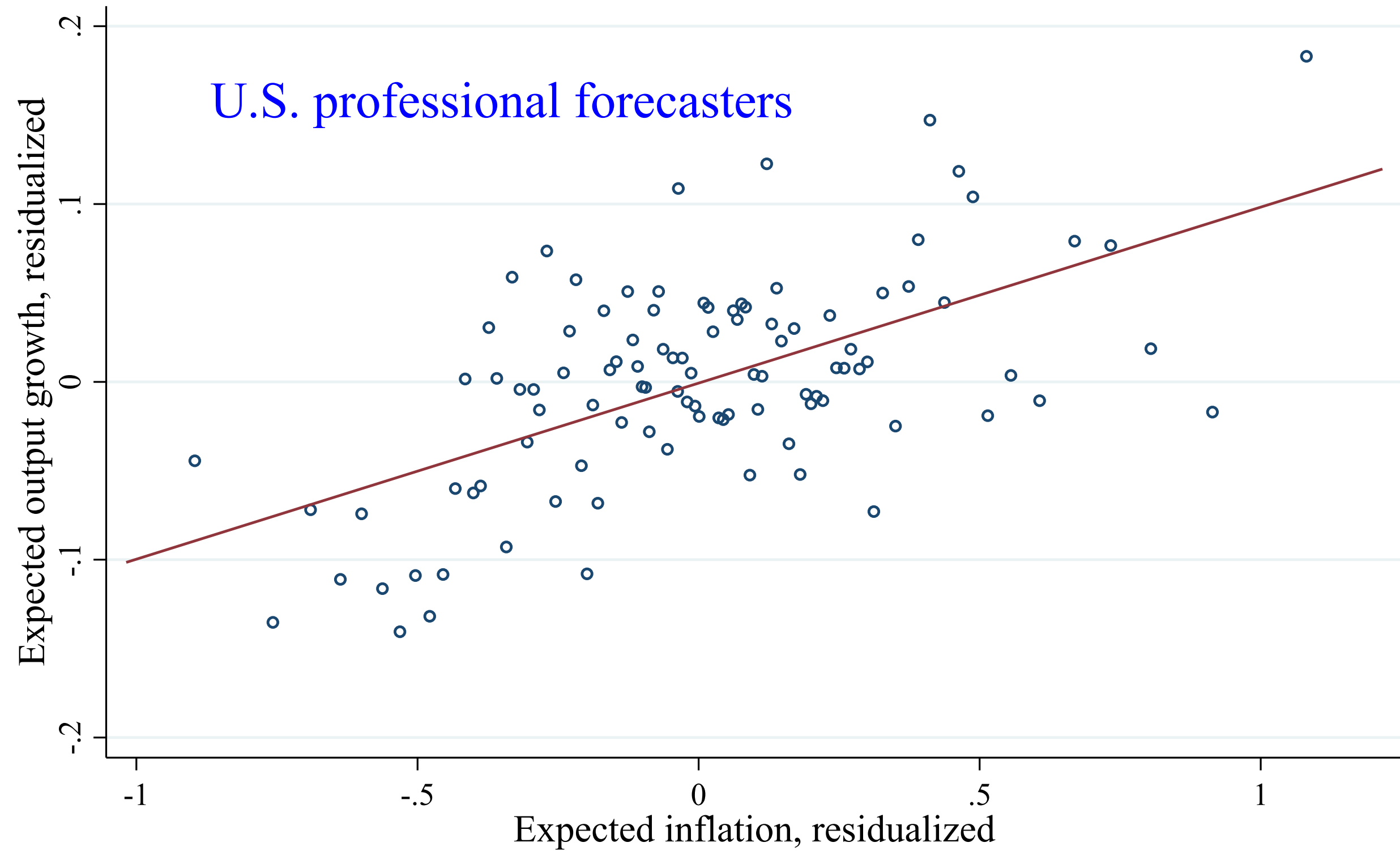
Professionals: Demand shock & a Phillips curve

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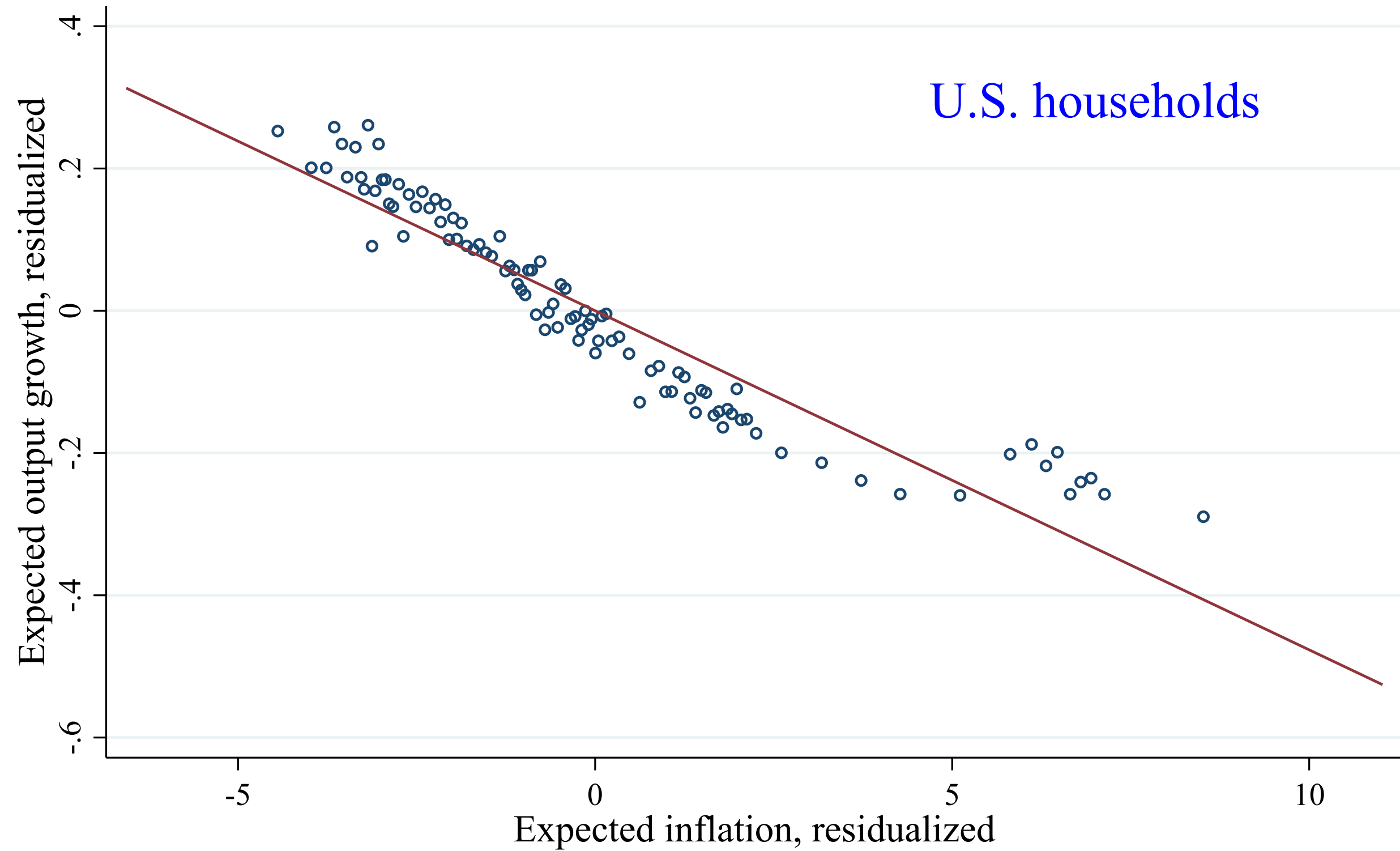


Households: Supply shock & stagflationary view

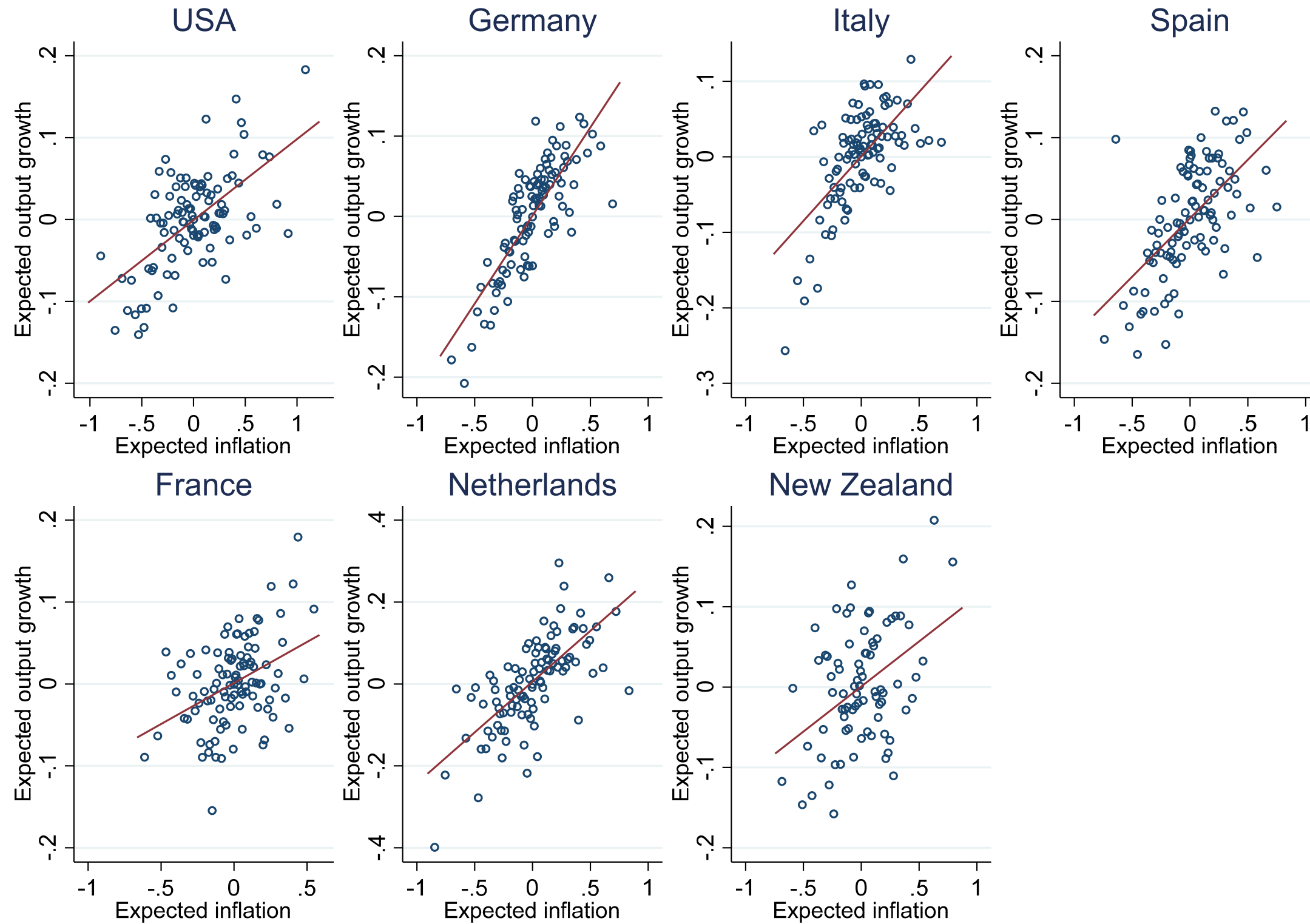
PROFESSIONAL FORECASTERS AND ECONOMIC ACTIVITY



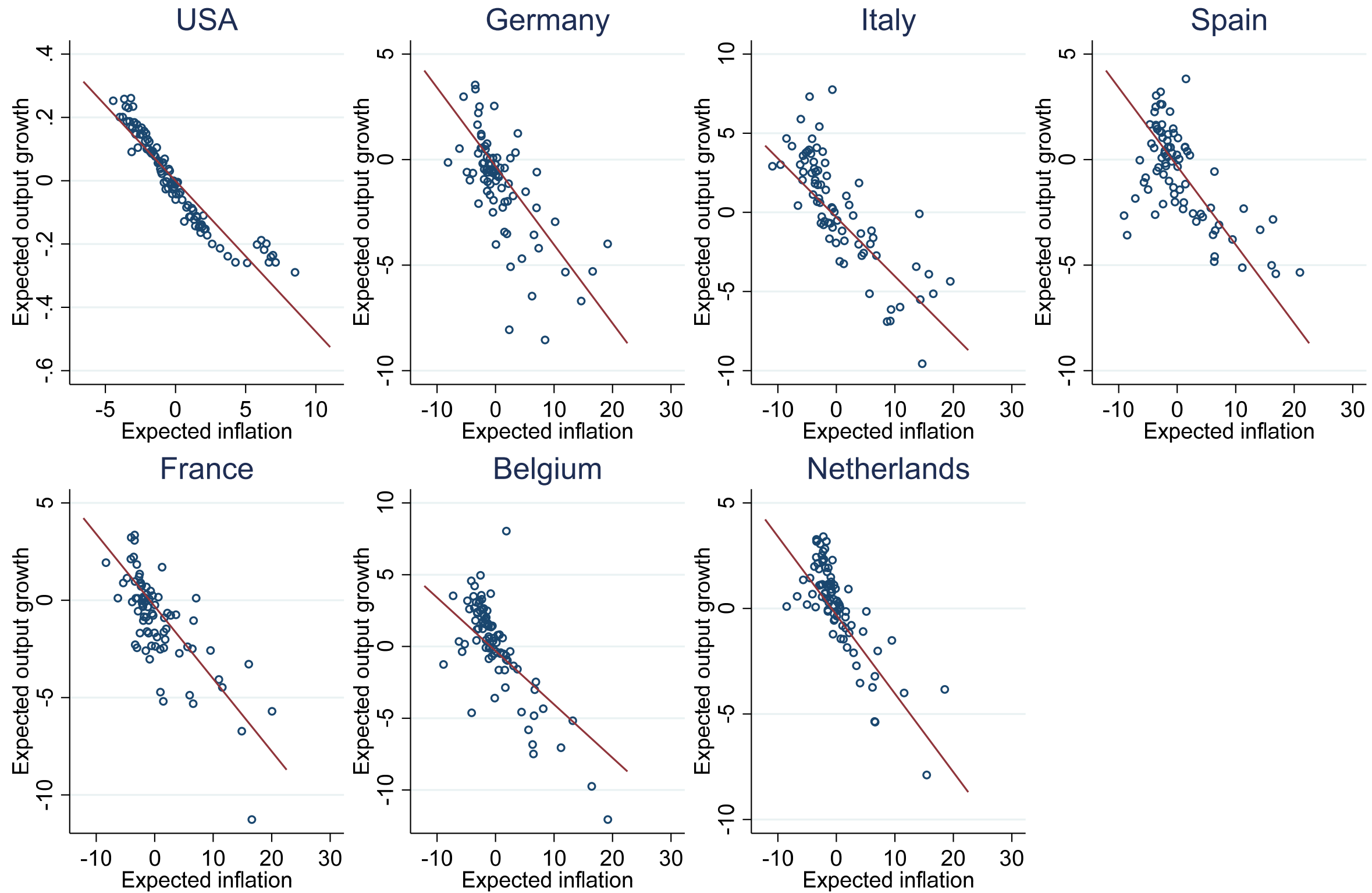
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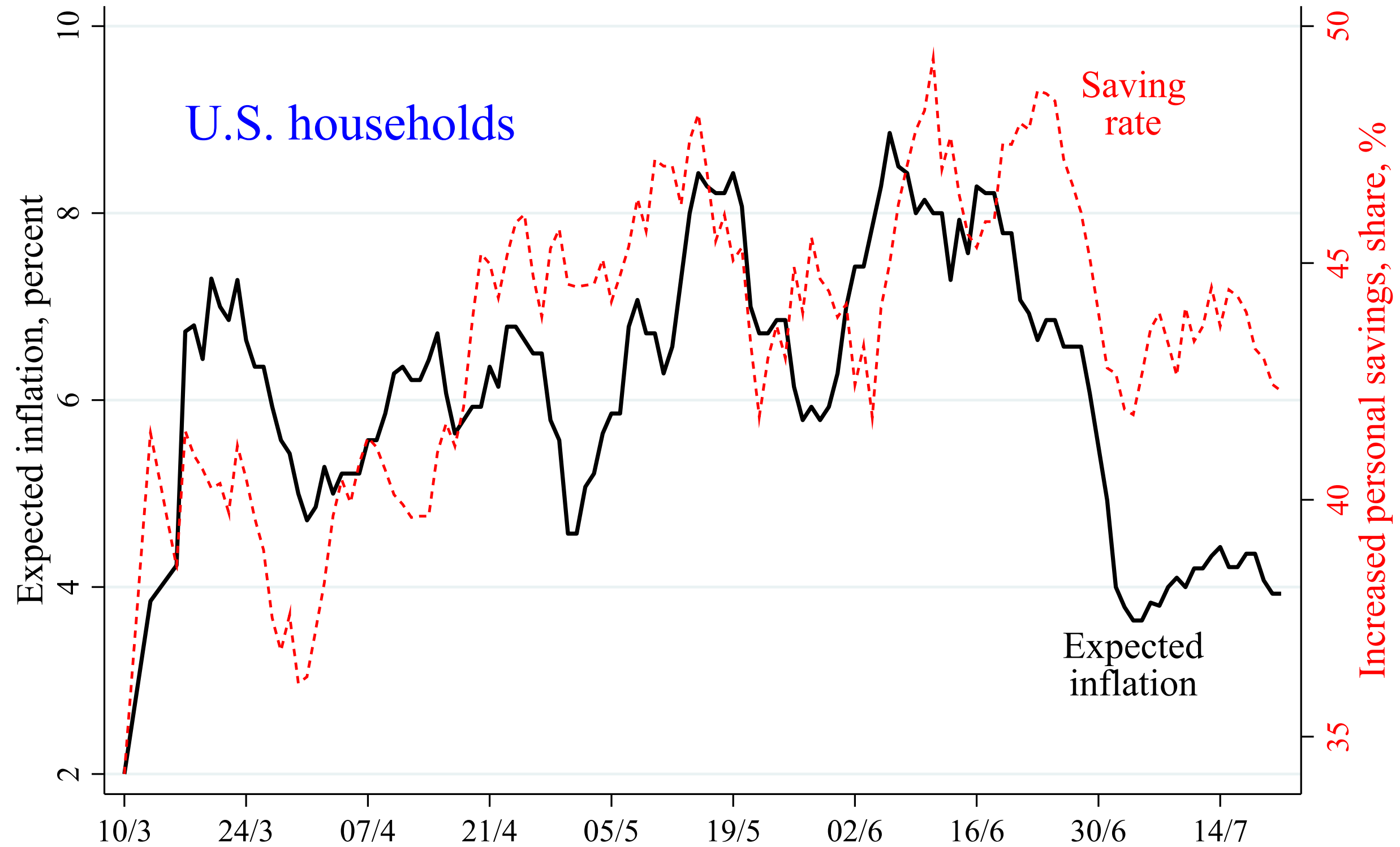
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INFLATION EXPECTATIONS AND ECONOMIC ACTIVITY



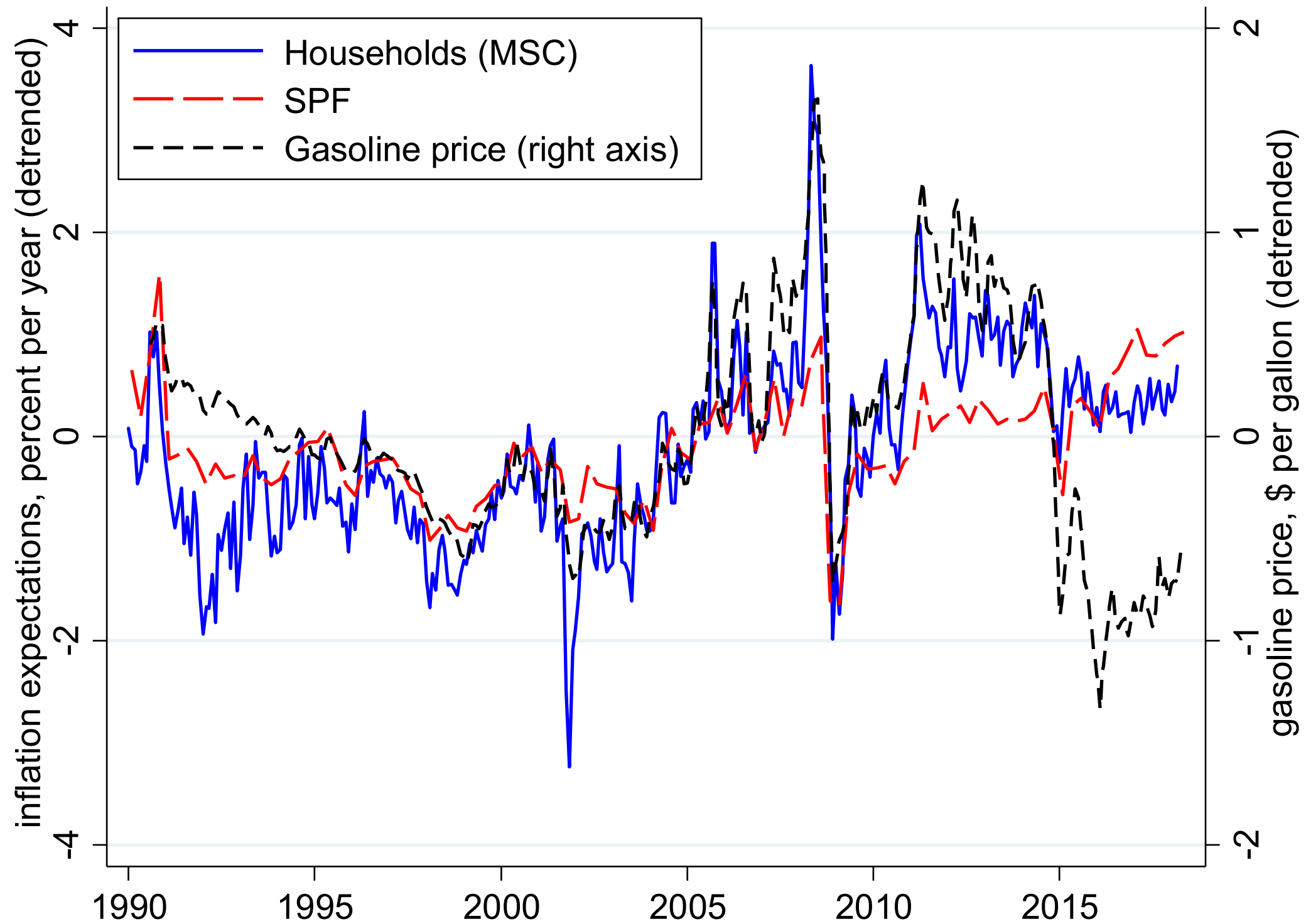
Source: Cleveland Fed

Willingness to spend declines as inflation increases

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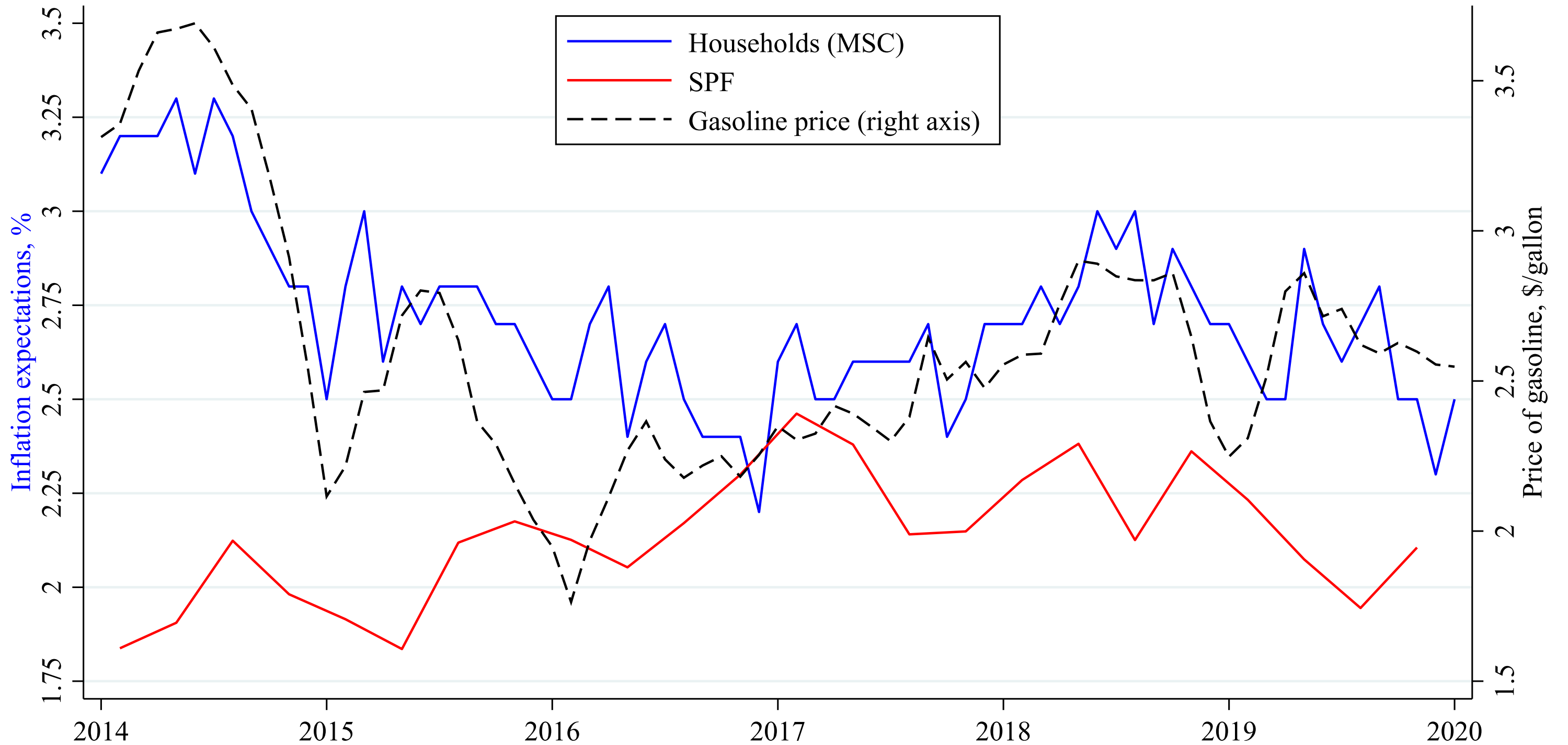
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WHAT DRIVES INFLATION EXPECTATIONS



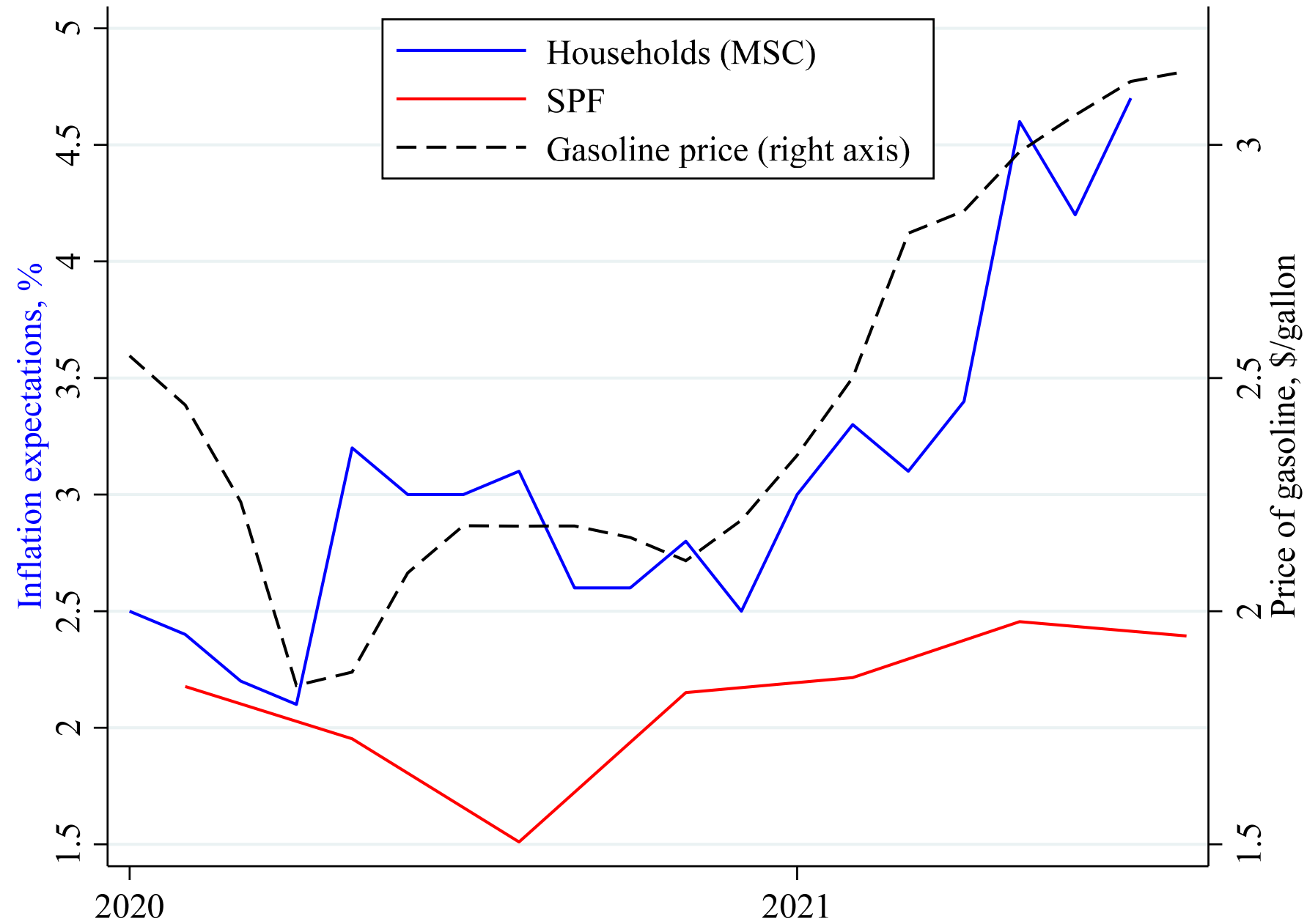
Households can confuse relative prices with inflation

PRE COVID



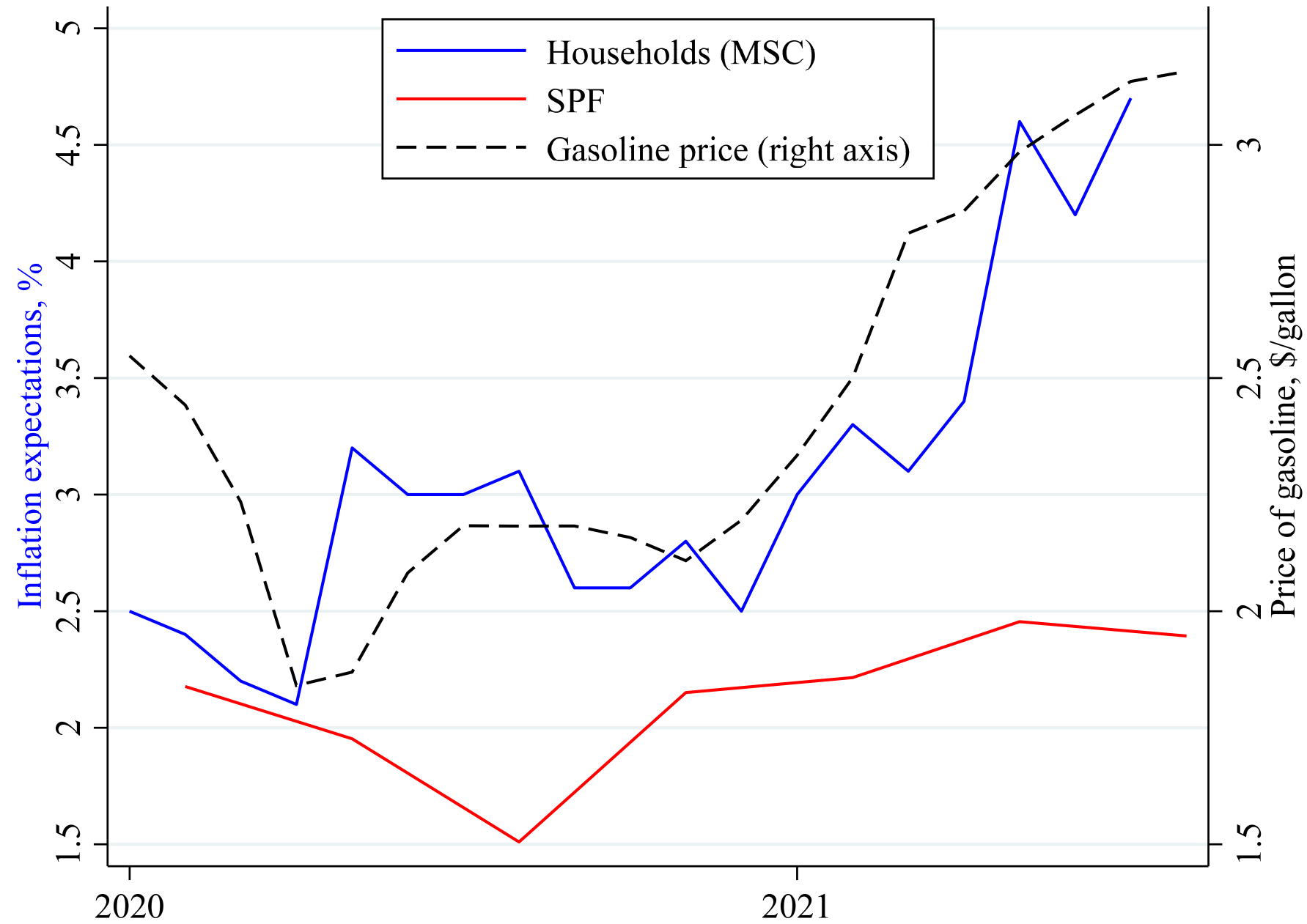
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COVID CRISIS



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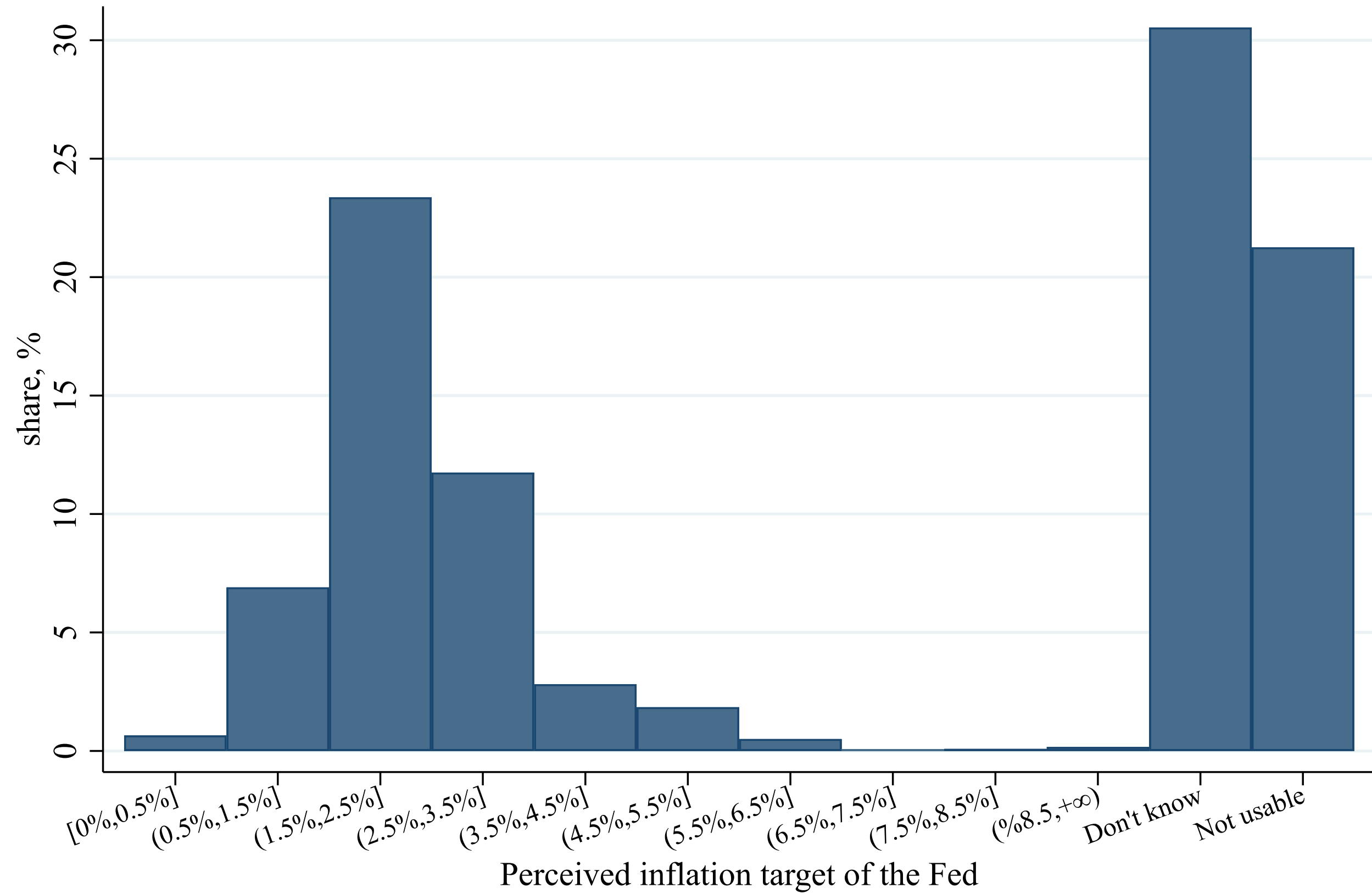
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EPOP is at 58.5% (roughly the level at the trough of the Great Recession)

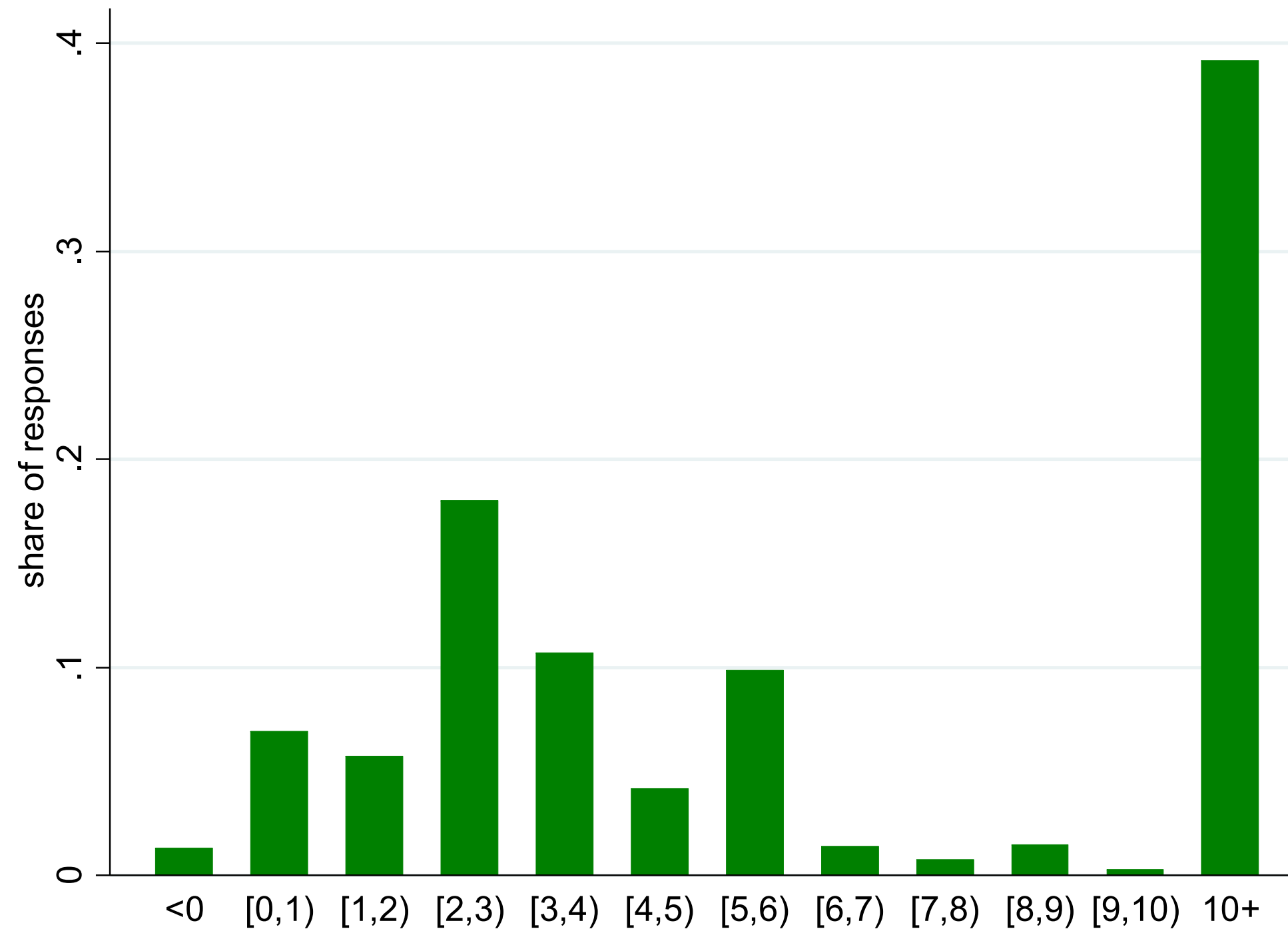
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CEO'S PERCEPTIONS ABOUT THE INFLATION TARGET

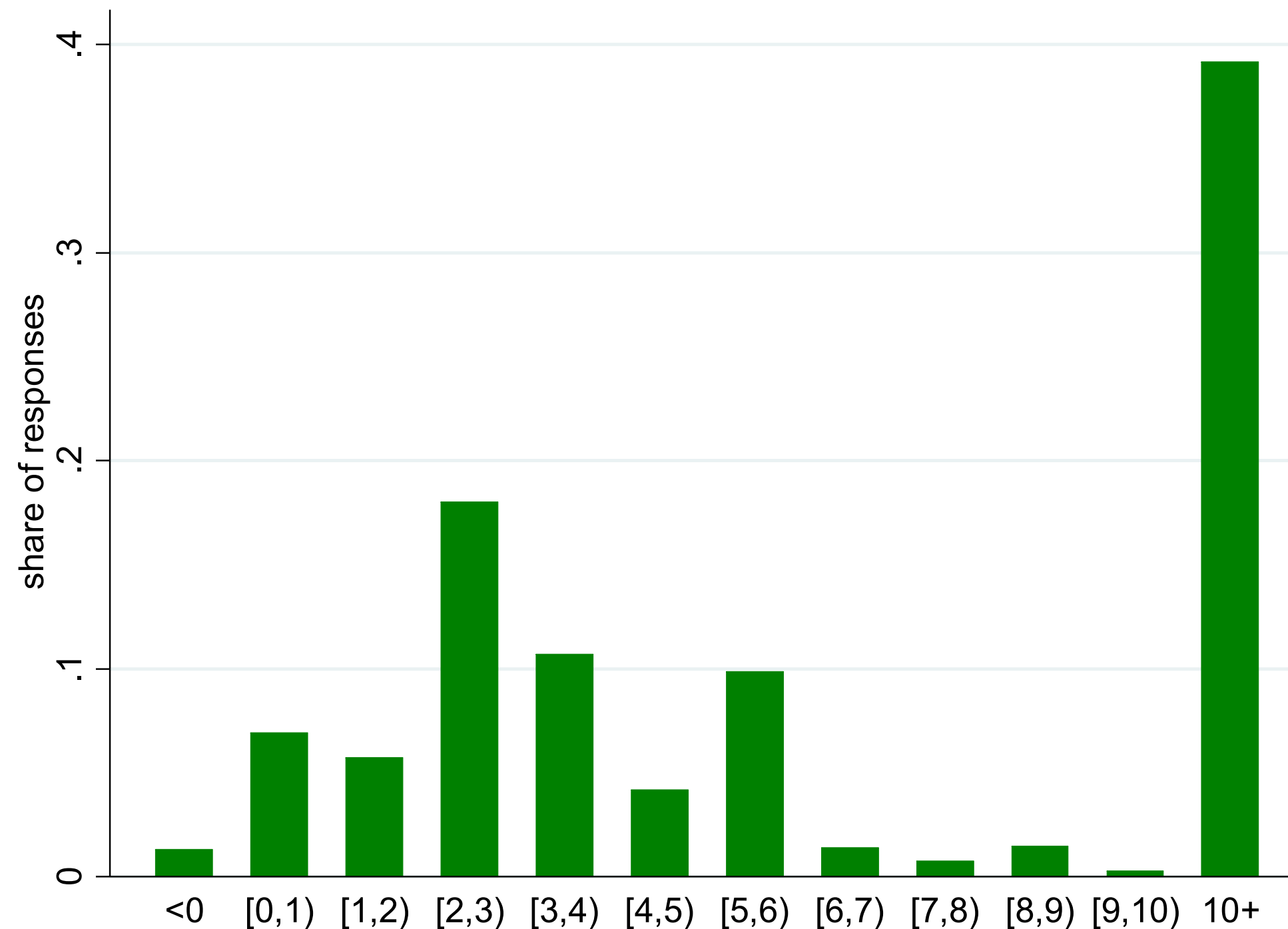


PEOPLE'S PERCEPTIONS ABOUT THE INFLATION TARGET



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Policy announcements (forward guidance, quantitative easing, average inflation targeting, etc.) are unlikely to move households' inflation expectations.

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- Interpretation of shocks is different
 - The public believes in stagflation
- High sensitivity to salient prices
 - Price of gasoline is a strong predictor of HH inflation expectations
- Low attention to monetary and fiscal policy
 - Most households and managers don't know the inflation targets
- Behavioral response to policy changes may be different from predictions of full-information rational expectations (FIRE) models

THE SCIENCE OF INFLATION EXPECTATIONS

Thought experiment: $ConsumerSpending_h = b \times \pi_h^e + controls + error$

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- Compare control group to treatment group \Rightarrow causal effect

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Examples of treatments:

- Inform about the inflation target
- Inform about inflation forecast
- Inform about future policy rates (forward guidance)
- Inform about fiscal policy
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None of these should work in full-information rational expectations (FIRE) because treatments provide publicly available information.

WILL HIGHER INFLATION EXPECTATIONS GENERATE A CONSUMPTION BOOM?

Treatment: Forward guidance

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(1)

Expected inflation	0.248*** (0.090)
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Raising inflation expectations **stimulates spending on nondurables**

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	Log(Spending on nondurable goods)	Frequency of purchases of durable goods
	(1)	(2)
Expected inflation	0.248*** (0.090)	-1.241*** (0.285)

Raising inflation expectations stimulates spending on nondurables
... and lowers spending on durables

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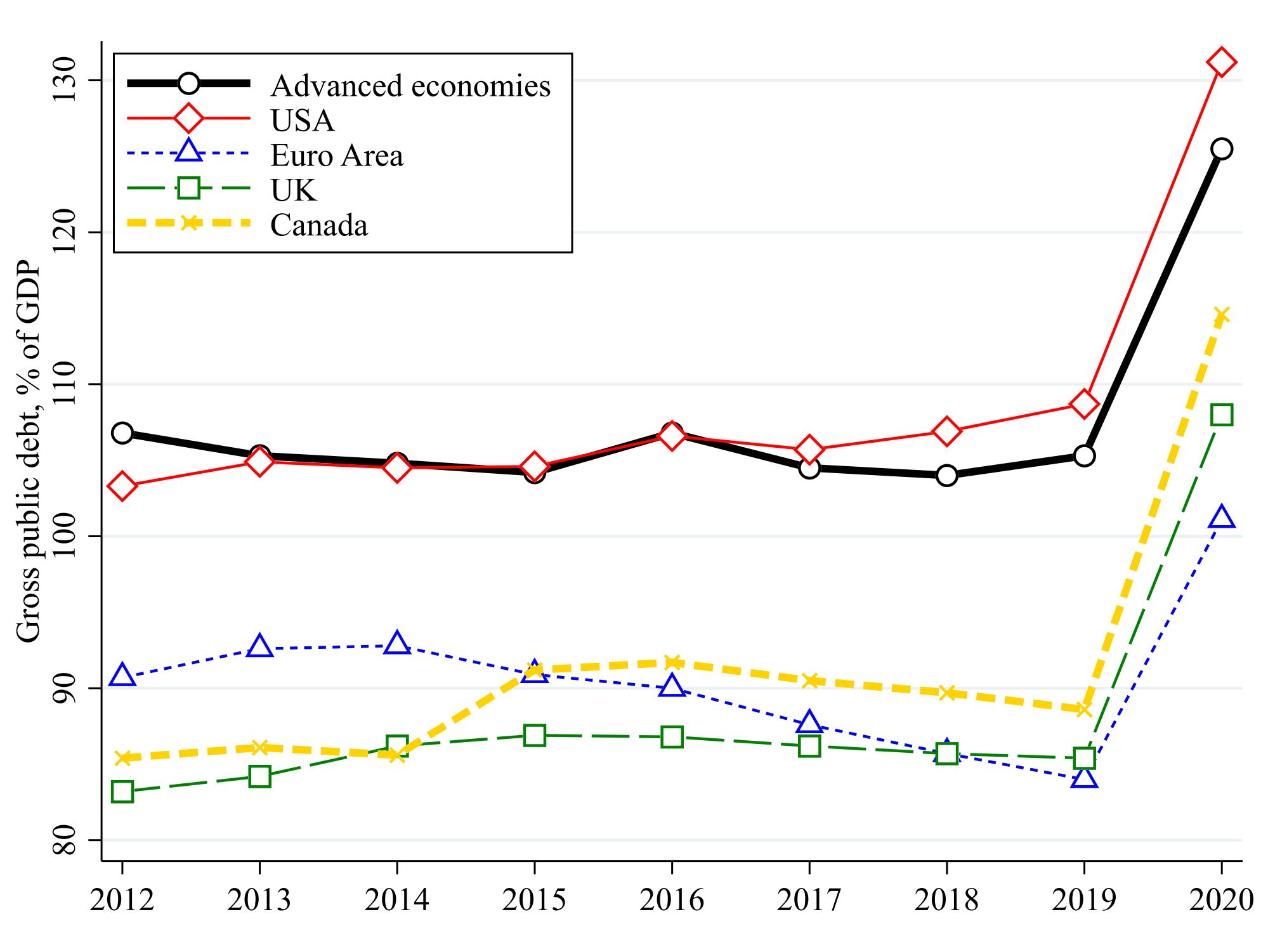
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Raising inflation expectations stimulates spending on nondurables
 ... and lowers spending on durables
 ... and can backfire

WILL FISCAL POLICY SPUR INFLATION EXPECTATIONS?



We have not seen these levels of debt since World War II.
FYI: Cumulative inflation in 1946-1948 was 33%.

FISCAL POLICY TREATMENTS (DEC 2018)

Code	Description
T0	Control group
T1	The U.S. Treasury department reports that for the 2018 fiscal year the U.S. Federal government ran a deficit of \$779 billion or 3.9% relative to the level of income (Gross Domestic Product) generated by the economy in 2018.
T2	The U.S. Treasury department reports that the current level of the public debt of the U.S. Federal government is 21.2 trillion dollars or 103.4% of the current income (Gross Domestic Product) generated by the economy in 2018.

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T4	The U.S. Congressional Budget Office reports that the budget balance of the U.S. Federal government is projected to deteriorate so that the national debt will increase by more than 10 trillion dollars by 2028.
T6	The U.S. Congressional Budget Office projects that the total debt of the U.S. Federal Government in 10 years will be more than 30 trillion dollars, or 107% of the projected level of income (Gross Domestic Product).

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T5	The U.S. Congressional Budget Office projects that prices in the U.S. economy will increase by a little over 2.0% per year on average over the next 10 years so that the level of prices in 2028 will increase by a little over 20% relative to the current level.
T6	The U.S. Congressional Budget Office projects that the total debt of the U.S. Federal Government in 10 years will be more than 30 trillion dollars, or 107% of the projected level of income (Gross Domestic Product).

TREATMENT EFFECTS ON INFLATION EXPECTATIONS

	Inflation expectations	
	12-month ahead	10-year ahead, cumulative
	(1)	(2)
Control group	3.848*** (0.058)	15.361*** (0.295)
Treatment effects relative to control		
T1 (inform about current deficit)	0.035 (0.083)	-0.319 (0.411)
T2 (inform about current debt)	0.013 (0.083)	0.132 (0.419)
T4 (inform about debt projection , change)	0.249*** (0.084)	1.018** (0.426)
T6 (inform about debt projection , level)	0.359*** (0.087)	1.284*** (0.430)

Modest effects from **future** fiscal variables

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But this depends on cost pressures (i.e., how tight labor markets are) which are likely weak given the slack

BACK TO THE 1970s?

Unlikely:

- A large output gap (“slack”) in the economy
- Expectations of “rational” players (financial markets, professional forecasters) are anchored
- Households can lower their inflation expectations as the economy improves.
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Risks:

- Rising commodity prices
- Looming debt
- Firms start to raise prices aggressively in response to cost pressures