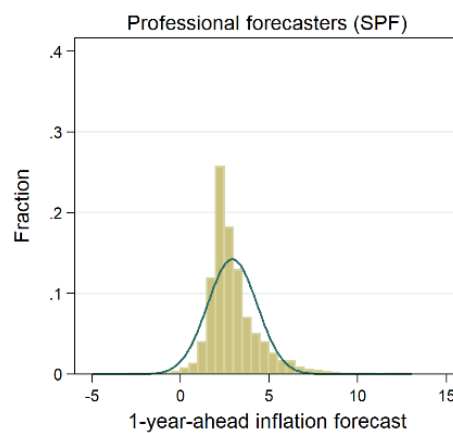


What lessons from US evidence on the heterogeneity in inflation expectations?

By Camille Cornand (Univ Lyon, CNRS, GATE), [Paul Hubert](#)

Monetary policy consists in part in managing inflation expectations of different agents. New US evidence on heterogeneous frequency of forecast revisions and disagreement among various categories of agents (households, firms, professional forecasters) suggests that targeting communication to specific groups could be a useful tool for central bankers.

Figure 1 – Distribution of inflation expectations in the US



Source: authors' computations.

Note: This figure shows the distribution of inflation forecasts over our sample with the fraction for each bin on the y-axis. The blue line represents the normal density approximation.

Most macroeconomic models are based on the hypothesis of full information rational expectations. However, empirical facts tend to reject this hypothesis and highlight the strength of information frictions. Documenting these information frictions is crucial for central banks as they may have a strong influence on the effects of monetary policy on the economy.

As macroeconomic dynamics depend on expectation processes, monetary policy consists for a large part in managing inflation expectations of different agents (households, firms, professional forecasters). It is therefore of utmost importance for central bankers to measure inflation expectations (see [Bouche et al., 2022](#)) and to determine the strength of informational frictions that affect these expectations.

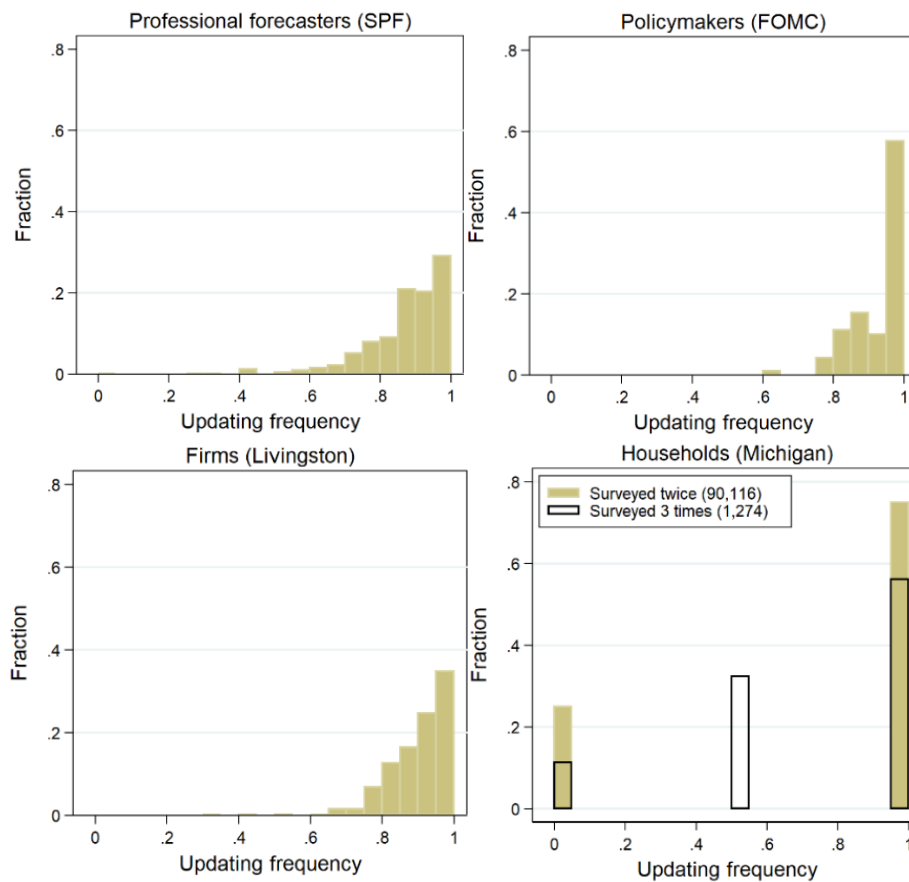
These informational frictions can be characterized by the frequency of forecast revisions (the lower the frequency, the higher the friction) and cross-sectional disagreement on inflation expectations (the larger the dispersion, the higher the friction). [Andrade and Le Bihan, 2013](#), [Coibion and Gorodnichenko, 2015](#), and [Savignac et al., 2021](#) discuss these dimensions for some economic agents.

For instance, the disagreement on inflation expectations appears small for US professional forecasters (most of the inflation forecasts are comprised between 1 and 3%, see Figure 1). However, this measure needs to be compared to other economic agents to be properly assessed. Because the cost of collecting and processing information may be different for individuals, the strength of information frictions could vary dramatically within and across various categories.

In a recent work, [Cornand and Hubert, 2022](#) focus on two dimensions of these frictions: the frequency of forecast revisions and the cross-sectional disagreement in inflation expectation surveys among and within four categories of US economic agents: households (Michigan Survey), firms (Livingston Survey), professional forecasters (Survey of Professional Forecasters of the Philadelphia Fed) and policymakers (FOMC members). By harmonizing the characteristics of different surveys to make them as comparable as possible, it is achievable to compare the frequency at which individuals revise their inflation forecasts and the cross-sectional disagreement on these inflation forecasts for households, firms, professional forecasters and policymakers in the United States (US).

Economic agents experience information frictions but with different relative strength

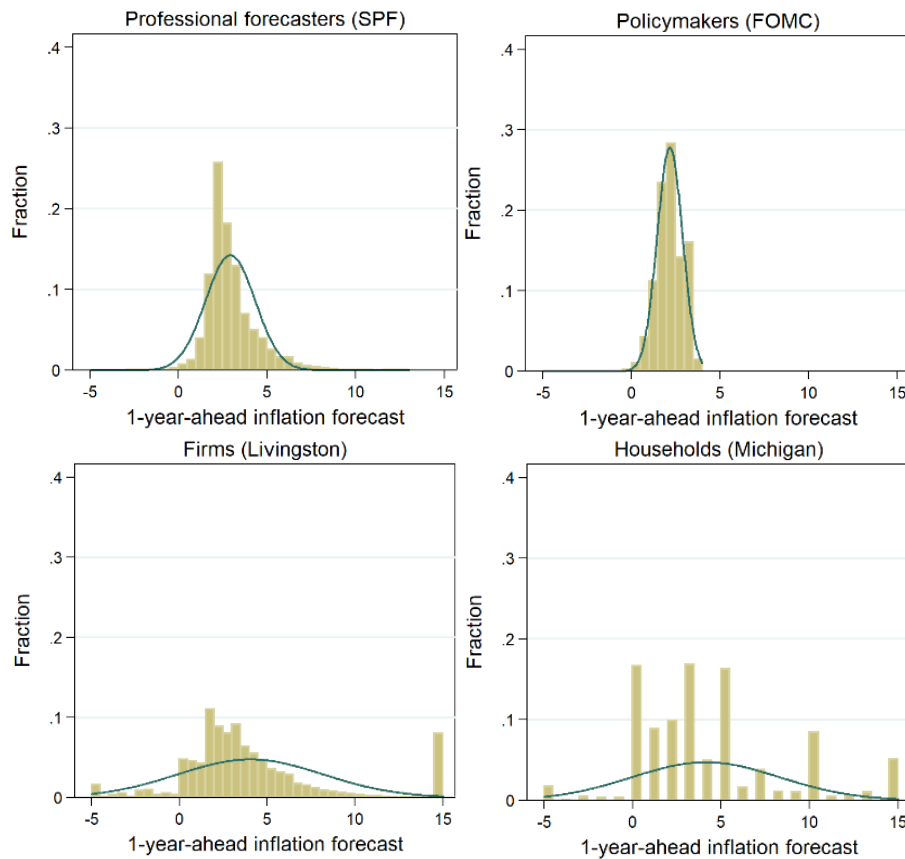
All economic agents experience information frictions. However, a strong heterogeneity in their relative strength can be documented. Figure 2 plots the frequency of forecast revisions across the four categories of agents. Policymakers revise more frequently (almost 60% of them *always* revise their forecasts, i.e. at each period) than firms and professional forecasters (for which around 30% of them always revise), who themselves revise more frequently than households. Note that this is in part –but not only– due to how the survey is conducted: households are only observed twice or thrice and then are dropped out of the survey. We also find that the frequency of forecast revisions evolves over time and is affected by the volatility of inflation.

Figure 2 – Individual frequency of forecast revisions in the US

Source : author's computations

Note: These figures show the distribution of the average, by individual, of his/her frequency of forecast revisions. The sample period considered starts in 1948 for firms, 1978 for households, 1981 for professional forecasters and 1992 for policymakers, and ends in 2020.

[Cornand and Hubert, 2022](#) also provide evidence of cross-sectional disagreement within all categories of agents, measured as the dispersion of inflation forecasts, and a strong heterogeneity across categories (see Figure 3). While policymakers and professional forecasters exhibit low disagreement, firms and households show strong disagreement.

Figure 3 - Distribution across time and individuals of inflation expectations in the US

Source: authors' computations.

Note: These subfigures show the distribution of inflation forecasts truncated at -5% and 15%. The blue line represents the normal density approximation. The sample period considered starts in 1948 for firms, 1978 for households, 1981 for professional forecasters and 1992 for policymakers, and ends in 2020.

Broadening the view on information frictions has implications for monetary policy

The literature recently focused on the comparison between firms and households. We observe that there is a greater difference between firms and households on the one hand and policymakers and professional forecasters on the other hand, than between firms and households themselves.

This result has some implications for central bank communication policies. It may inform central banks about the public they should target to improve their communication strategy in order to cope with information frictions. Because the information released by the central bank may not reach all categories of agents, and all agents within each category in the same manner, targeted communication towards each category and towards specific groups of agents (presenting the same characteristics) might represent a useful tool (such as the speech by Isabel Schnabel, Member of the Executive Board of the ECB, to graduates of the

Panthéon-Sorbonne University in Paris last June, or the [interview](#) of François Villeroy de Galhau, Governor of Banque de France, by Cyrus North, YouTube influencer, in June 2021).

This work may also shed light on the quantitative relevance of two theories of information frictions: the noisy information model (one buys the newspaper every day but reads only part of it) and the sticky information model (one buys the newspaper infrequently but reads all of it when he/she buys it). These two theories have different implications for the transmission of monetary policy to the economy. Based on [Cornand and Hubert, 2022](#) results, the sticky information model seems rejected, while the empirical evidence is compatible with the noisy information model. In addition, the heterogeneity in information frictions has to be accounted for in macroeconomic models, as different categories of agents may respond to shocks, be it monetary policy or fiscal policy, in a different manner. It also appears important to account for heterogeneity within categories of agents in macroeconomic models, especially for households.