Consumers’ Attention to Monetary Policy: The Importance of Having “Skin in the Game”*

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Abstract

Using a five-year survey of over 170,000 US consumers, we provide the first direct measure of attention to monetary policy and show that the data strongly support the predictions of a rational inattention model. First, attention is incentive-driven: consumers with “skin in the game”—those planning major purchases like homes or cars—are significantly more attentive to monetary policy news. Second, attention varies systematically with interest rate volatility and news supply, exhibiting cyclical patterns around FOMC meetings. Third, marginal effects of volatility and news supply decline with “skin in the game,” implying external factors primarily affect low skin-in-the-game consumers. These findings imply that when communication is costly and attention is endogenous, central banks should target communication efforts toward consumers who bear the largest welfare losses from information frictions. This targeted communication approach increases aggregate attention to monetary policy, leading to an amplified response of consumption to interest rate changes.

JEL classifications: D8, E5

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1 Introduction

The strength of the monetary policy transmission mechanism depends, in part, on people being aware of policy changes. Information frictions can dampen transmission via canonical consumption Euler equations, and they play a role in the credit channel of monetary policy (e.g., see Bernanke and Gertler (1995)). This paper examines which consumers pay attention to monetary policy and the determinants of that attention. Understanding consumer attention is important for the effectiveness of conventional monetary policy decisions regarding interest rates and in designing effective communication strategies as central banks increasingly rely on communication as a policy tool.

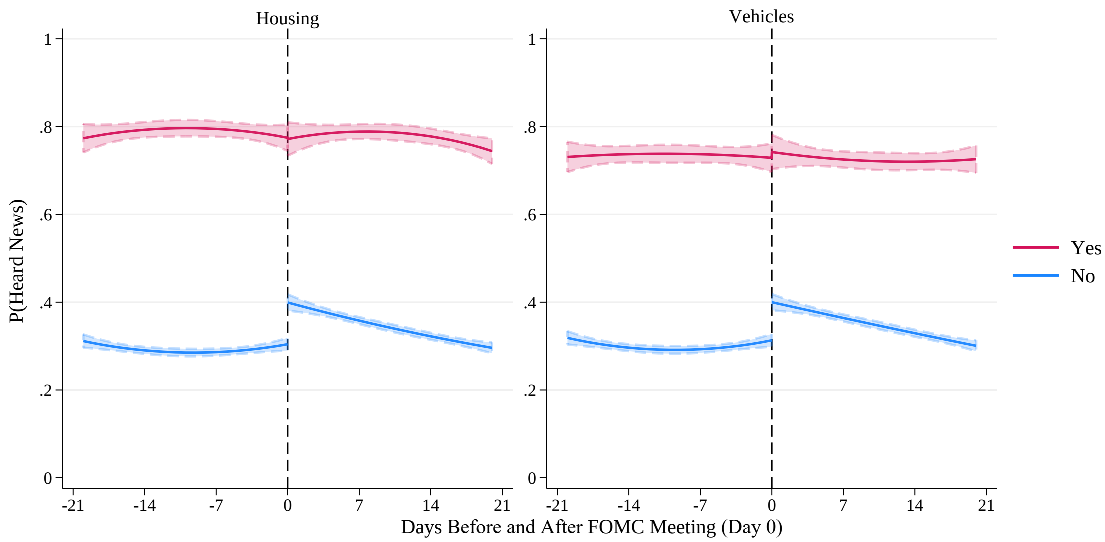
Figure 1 provides direct evidence on consumer attention using a new survey-based measure introduced in this paper that asks consumers whether they heard news about monetary policy or the Federal Reserve. We separate respondents by whether they plan to make major purchases — homes or vehicles — giving them high "skin in the game."

The figure reveals two key patterns. First, consumers with skin in the game maintain consistently higher attention to monetary policy throughout the policy cycle—direct evidence that attention is incentive-driven. Second, the cyclical volatility in attention around FOMC meetings is driven almost entirely by consumers *without* skin in the game. These consumers exhibit sharp spikes when news coverage increases around FOMC announcements, while high skin-in-the-game consumers maintain stable attention regardless of the information environment.

This pattern reflects a fundamental mechanism of rational inattention: optimal attention depends on the *interaction* between individual incentives and external information costs. When information costs decline (e.g., when news surges around FOMC meetings), consumers with weak intrinsic incentives respond most, while those with strong incentives maintain high attention regardless. While rational inattention theory predicts this interaction, we provide the first empirical documentation for monetary policy attention.

Motivated by these patterns, this paper then provides the first comprehensive study of the determinants of consumers' attention to monetary policy. We address three questions: (1) What drives consumers to pay attention — individual char-

Figure 1: Attention to Monetary Policy Around FOMC Meetings by Skin in the Game



Note: This figure shows the probability that consumers report hearing news about monetary policy in the 3 weeks surrounding Federal Open Market Committee (FOMC) meetings (day 0). Red lines (Yes) show consumers planning to purchase a home (left panel) or vehicle (right panel) within one month; blue lines (No) show those with no such plans. Lines show fitted values from a regression discontinuity design. Shaded areas represent 95% confidence intervals. Sample: March 2020—January 2025. Full specification details in Section 4.

acteristics like "skin in the game" or aggregate factors like news availability and interest rate volatility? (2) How do individual and aggregate factors interact to produce the patterns in Figure 1? (3) What do these interactions imply for optimal central bank communication when attention is endogenous and communication is costly?

We address these questions in three steps. First, we leverage a partial-equilibrium model of rational inattention. In this model, consumers optimally choose attention to the real interest rate, which captures the net effect of nominal interest rates and inflation expectations—the two key variables through which monetary policy operates. The model generates six sharp predictions about how attention varies with individual factors (skin in the game and information costs) and aggregate factors (interest rate volatility and news supply), and crucially, how these factors interact.

Second, we validate all predictions using novel survey data spanning five years (March 2020 through January 2025) and over 170,000 US consumers. Third, we derive implications for optimal central bank communication.

Our first contribution is measurement. We provide the first direct measure of US consumers' attention to monetary policy by explicitly asking about monetary policy news, rather than proxying through inflation attention. While several papers have proxied monetary policy attention through inflation attention (Pfäuti (2023), Afrouzi et al. (2024), and Weber et al. (2025)), Link et al. (2023) show in German data that the share of households who were attentive to monetary policy was much smaller than the share of those who were attentive to inflation. A follow-up question in our survey confirms that news about interest rate changes dominates other types of monetary policy news, and we verify that attention to monetary policy strongly correlates with attention to interest rates. This highlights the importance of an attention-augmented credit channel for monetary policy transmission.

Our second contribution is empirically validating a rational inattention framework that explains both cross-sectional and time-series variation in attention. Our model predicts that attention should (i) increase with "skin in the game" and interest rate volatility, (ii) decrease with information costs, and (iii), critically, show declining marginal effects of external factors (such as macro news and interest rate volatility) as skin in the game increases. The data strongly support the model's predictions. For instance, consumers planning purchases within one month are 28–32 percentage points more attentive, and the marginal effect of news supply is 19–22 percentage points smaller for these consumers. The interaction prediction, (iii), explains the pattern in Figure 1: high skin-in-the-game consumers maintain attention regardless of FOMC meetings because their strong intrinsic incentives dominate; low skin-in-the-game consumers' attention is driven primarily by external factors like the surge in news coverage around FOMC announcements. When news becomes abundant, it is precisely those with weaker incentives who adjust their attention most.

Our third contribution is using the validated model to derive implications for central bank communication when attention is endogenous and communication is costly. We formalize the trade-off: communication reduces information acquisition costs and improves welfare, but requires real resources. We show that optimal communication should target only consumers with sufficiently high skin in the game. These consumers bear the largest welfare losses from information frictions because their decisions depend critically on understanding policy. By contrast, we show that communicating to consumers whose decisions are largely independent of policy generates costs without commensurate welfare gains, since these consumers optimally remain inattentive even with lower information costs.

This targeted strategy has important aggregate implications. Communication amplifies monetary policy transmission by increasing aggregate attention: the response of aggregate consumption to the real interest rate is directly proportional to aggregate attention. When policymakers prioritize when to communicate most intensively, they should focus on periods of high interest rate volatility, when a larger share of consumers is endogenously attentive and communication reaches more people who can act on the information.

Relation to the literature. Our paper contributes to three literatures. First, we add to the growing body of work empirically documenting consumer and firm inattention to macroeconomic variables (Coibion et al. (2020b); D'Acunto et al. (2021); Hajdini et al. (2022); Link et al. (2023); Knotek et al. (2025) for consumers; Kumar et al. (2015); Candia et al. (2023); Flynn and Sastry (2024); Hajdini et al. (2025) for firms). This literature has focused primarily on attention to inflation. A key exception is de Silva and Mei (2025), who document rational inattention to mortgage interest rates. We provide the first direct measure of attention to monetary policy itself, not just specific financial products.

Second, we contribute to understanding the determinants of attention and how it evolves over time. We show that attention varies systematically with both internal factors (skin in the game and individual information costs) and external factors (interest rate volatility and aggregate information costs). This finding resonates with results in Cavallo et al. (2017), Pfäuti (2023), and Weber et al. (2025), who show that attention to inflation increases with inflation. Turen (2023) and Afrouzi et al. (2024) discuss how firms' attention depends on the incentives they face when making decisions.

Crucially, we go beyond documenting separate effects to show how these factors *interact*: the marginal effects of external factors decline with skin in the game. This interaction explains the cyclical patterns of attention around FOMC meetings and why aggregate attention responds to policy communication. Our finding that skin in the game drives attention resonates with supporting evidence of consumers' rational inattention to mortgage interest rates in de Silva and Mei (2025) and firms' rational inattention in Flynn and Sastry (2024). We show these patterns hold more broadly for monetary policy attention and derive their implications for policy transmission and communication.

Our modeling approach builds on the rational inattention models of Sims (2003), Maćkowiak and Wiederholt (2009), Luo and Young (2010), and Roth et al. (2023) to characterize consumers' incentives for acquiring information about the real interest rate. We show that such models can explain both time series and cross-sectional variation in our new survey-based measure of consumers' attention to monetary policy. Other works have shown the importance of inattention for the macroeconomy. Maćkowiak and Wiederholt (2015) show that a model where rational inattention is the only source of slow adjustment can account for macro aggregate dynamics. Exploring strategic inattention of firms, Afrouzi (2024) and Afrouzi et al. (2024) show that such frictions have relevant implications for monetary non-neutrality. Pfäuti (2023) shows that changes in attention can explain the recent inflation surge. Jeong et al. (2025) show that attention matters for the pass-through of policy news to consumers' beliefs.

Third, we contribute to the monetary policy communication literature. Blinder et al. (2008) and Haldane and McMahon (2018), among others, discuss the relevance and effectiveness of monetary policy communication. Multiple papers have shown that communication impacts consumers' macroeconomic expectations (e.g., see Coibion et al. (2020a); Blinder et al. (2024)). We show that when attention is endogenous and communication is costly, more communication is not always better—policymakers should target their efforts strategically. Our result that communication should focus on high-stakes consumers echoes findings in Angeletos and Sastry (2025) that more information is not always welfare-improving. Our work connects to research on communication challenges by Gaballo (2016), who shows how loose communication can amplify shocks; Candia et al. (2020), Andre et al. (2022), and Kamdar and Ray (2024), who discuss how communication effectiveness depends on consumers' models of the economy; and broader work on the practical challenges of communicating with the public. We provide a framework for optimal targeting of communication efforts based on who needs information most and can use it most effectively.

The rest of the paper is organized as follows. Section 2 develops the rational inattention model and derives testable implications. Section 3 introduces our survey and measurement of key variables. Section 4 presents empirical tests of all model predictions. Section 5 analyzes implications for monetary policy communication. Section 6 concludes. An online appendix contains supplementary results, as referenced in the main paper.

2 Attention to Monetary Policy

This section leverages a partial-equilibrium model of rational inattention to formalize the patterns documented in Figure 1. The model considers a standard intertemporal consumption-savings problem with one key friction: consumers have imperfect information about the real interest rate. This friction matters because optimal consumption and borrowing depend on expected real rates. Consumers can acquire costly information to reduce the noise associated with their estimate of the real interest rate. The model yields six testable predictions about how attention varies with individual incentives (skin in the game and information costs) and external factors (interest rate volatility and news supply), and, crucially, how these factors interact.

2.1 Model Setup

The economy is populated by a continuum of households, $i \in [0,1]$, with discount factor, β, who maximize utility with respect to their consumption C_{it} and real bond holdings B_{it} each period t. Household i receives exogenous real income Y_{it} and real interest payments R_{t-1} from their previous bond holdings $B_{i,t-1}$. Their optimization problem is formally given by:

$$\max_{C_{it},B_{it}} \mathbb{E}_{i0} \sum_{t=0}^{\infty} \beta^t ln\left(C_{it}\right), \tag{1}$$

subject to the intertemporal budget constraint:

$$C_{it} + B_{it} = R_{t-1} B_{i,t-1} + Y_{it}. \tag{2}$$

In steady state, the solution satisfies $\bar{R} = 1/\beta$ and $\bar{C}_i = \bar{Y}_i - (\bar{R} - 1)\bar{B}_i$. We define consumer i's "skin in the game" as $|a_i| \equiv |\bar{B}_i / \bar{C}_i|$, the absolute value of net borrowing (or saving) relative to consumption in steady state: $|a_i| = \left|\frac{\bar{B}_i}{\bar{C}_i}\right|$.[1] Consumers who borrow extensively to finance consumption (high $|a_i|$) are more sensitive to interest rate changes than those with balanced budgets (low $|a_i|$), creating stronger incentives to track monetary policy.

We denote the log of any variable, Z, in deviation from its steady state $\bar{Z}$ with a small letter, that is, $z = log(Z/\bar{Z})$. For simplicity, we assume that the log deviation of the real rate and income from steady state follow iid processes:[2]

$$r_t \sim \mathcal{N}(0, \sigma_r^2), \tag{3}$$

$$y_{it} \sim \mathcal{N}(0, \sigma_y^2) \text{ such that } \mathbb{E}(y_{it} y_{jt}) = 0 \; \forall i \neq j. \tag{4}$$

Households have perfect information about the economy in steady state, the current and past history of their real income realizations, and the unconditional distribution of the real interest rate, σ_r^2. However, consumers have imperfect information about current and previous realizations of the real interest rate. Each period they observe a noisy signal, s_{it}, about the real rate:[3]

$$s_{it} = r_t + \nu_{it}, \text{ such that } \nu_{it} \sim iid\, \mathcal{N}(0, \sigma_{\varepsilon_i}^2), \; \mathbb{E}(\nu_{it} r_t) = 0 \;\; \forall i. \tag{5}$$

[1]The absolute value is appropriate because welfare losses from interest rate forecast errors are proportional to a_i^2 (see Appendix B.2, equation (36)), making both borrowers ($a_i < 0$) and savers ($a_i > 0$) with large $|a_i|$ equally sensitive to rate changes. Our empirical analysis focuses on borrowers planning major purchases, as these represent the primary credit channel of monetary policy transmission.

[2]The assumption of an iid income process has no consequences for the optimal attention problem since income is assumed to be known and uncorrelated with the real rate. Relaxing the assumption of an iid real rate complicates the attention problem – because, for instance, past signals can be informative for the current interest rate – without adding much insight for our purposes.

[3]Consumers choose the precision of their signal by selecting $\sigma^2_{r|s_i}$, but for simplicity we take as given the *form* of the signal (additive Gaussian noise), similar to, for instance, Paciello and Wiederholt (2013).

The variance of the real rate conditional on signal s_{it} is $\sigma^2_{r|s_i} = \mathbb{E}\left[(r_t - \mathbb{E}(r_t \mid s_{it}))^2\right]$. Consumers choose their information acquisition effort, which determines the signal precision $\sigma^2_{\varepsilon_i}$ and thus the posterior variance $\sigma^2_{r|s_i}$; henceforth we work directly with $\sigma^2_{r|s_i}$ as the object of choice.[4] Each consumer i tries to minimize uncertainty from imperfect information by acquiring information about the real interest rate at cost $\lambda_i \geq 0$ per unit of information flow. Following Sims (2003), we rely on an entropy-based flow of information, defined as the difference in the entropy from observing no information versus signal s_{it}:[5]

$$\mathbb{I}(\sigma^2_{r|s_i}) = \frac{1}{2} log_2 \left(\frac{\sigma^2_r}{\sigma^2_{r|s_i}} \right). \tag{6}$$

What are the trade-offs consumers face when optimizing the signal precision? On one hand, they gain in welfare by reducing idiosyncratic uncertainty about the real interest rate; on the other hand, reducing uncertainty comes at a cost. In balancing this trade-off, a unique optimal signal precision emerges. Specifically, the rational inattention problem of the consumer is given by:

$$\sigma^2_{r|s_i} = argmin_{\sigma^2_{r|s_i} \leq \sigma^2_r} \left[\underbrace{\mathbb{W}\left(\sigma^2_{r|s_i}\right)}_{welfare\ loss} + \underbrace{\frac{\lambda_i}{1-\beta} \mathbb{I}(\sigma^2_{r|s_i})}_{information\ cost} \right], \tag{7}$$

where $\mathbb{W}\left(\sigma^2_{r|s_i}\right)$ is the welfare loss that stems from uncertainty induced by imperfect information (see Appendix B.2 for details).

2.2 Optimal Attention to Monetary Policy

We now solve the consumer's attention problem in equation (7) to characterize optimal attention to monetary policy. The solution balances two forces: higher attention reduces welfare losses from consumption and borrowing mistakes, but

[4] For Gaussian signals, $\sigma^2_{r|s_i} = \sigma^2_r \sigma^2_{\varepsilon_i} / (\sigma^2_r + \sigma^2_{\varepsilon_i})$, so choosing signal precision is equivalent to choosing posterior uncertainty.

[5] More generally, the change in entropy is given by $\frac{1}{2} log_2 \left(\mathbb{E}(r^2_t | s_{i,t-1}, ..., s_{i,-1}) - \mathbb{E}(r^2_t | s_{it}, s_{i,t-1}, ..., s_{i,-1}) \right)$. Since $r_t \sim iid$, $\mathbb{E}(r^2_t | s_{i,t-1}, ..., s_{i,-1}) = \sigma^2_r$ and $\mathbb{E}(r^2_t | s_{it}, s_{i,t-1}, ..., s_{i,-1}) = \mathbb{E}(r^2_t | s_{it}) = \sigma^2_{r|s_i}$.

comes at information cost λ_i. Consumers optimally choose how precisely to track interest rates by selecting signal precision, $\sigma^2_{r|s_i}$. We then measure optimal attention as $\kappa_i \equiv 1 - \sigma^2_{r|s_i}/\sigma^2_r$ — the reduction in uncertainty about the real rate from acquiring information.[6]

Proposition 1 provides the closed-form solution and shows how attention depends on three key parameters: the consumer's "skin in the game" $|a_i|$, their unit information cost λ_i, and interest rate volatility σ_r. The solution reveals a threshold structure: consumers with sufficiently low skin in the game optimally choose zero attention, while those above the threshold acquire information with attention increasing in their stakes.

Proposition 1. *The optimal level of attention κ_i for any consumer i is given by:*

$$\kappa_i = 1 - \frac{\sigma^2_{r|s_i}}{\sigma^2_r} = \begin{cases} 1 - \frac{\lambda_i}{(\beta+(1-\beta)a_i^2)\sigma_r^2(ln2)} & \text{if } |a_i| \geq a_i^* \\ \\ 0 & \text{otherwise,} \end{cases} \tag{8}$$

where $|a_i|$ is consumer i's "skin in the game" (defined earlier) and $a_i^* = \sqrt{\frac{\lambda_i - \beta ln(2)\sigma_r^2}{ln(2)\sigma_r^2(1-\beta)}}$.

Proof. See Appendix B.2. □

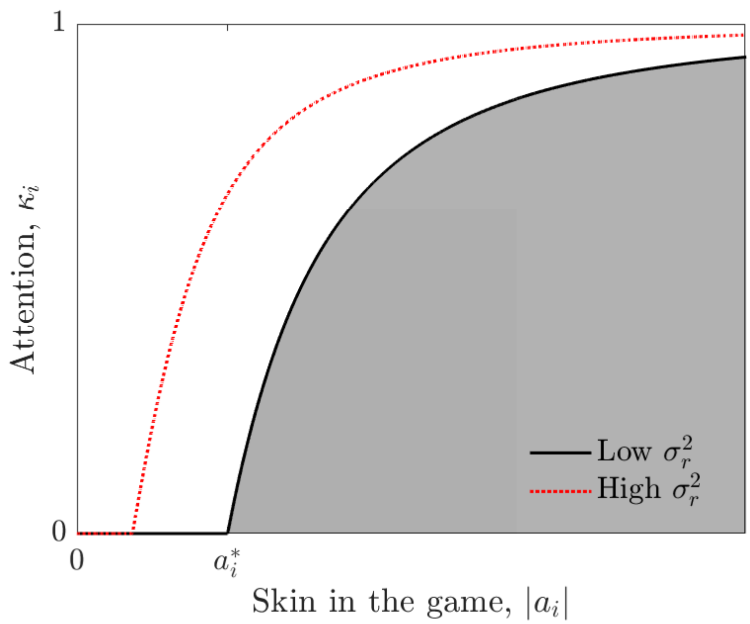
Proposition 1 formalizes the key economic mechanism behind Figure 1. Consider two consumers: one planning to buy a house with a mortgage (high $|a_i|$), another with no major purchases planned (low $|a_i|$). The prospective home buyer's consumption depends critically on mortgage rates, so they gain substantial welfare from tracking interest rate changes — making information acquisition worthwhile despite its cost λ_i. The consumer without a major purchase gains little from tracking rates, so they optimally remain inattentive unless information becomes very cheap or rate volatility becomes very high.

Figure 2 visualizes this mechanism. The upward-sloping attention frontier shows that attention increases with "skin in the game," $|a_i|$. Consumers below the threshold a_i^* optimally pay zero attention; those above it acquire information, with

[6] Technically, κ_i is the Kalman gain associated with the state and measurement equations in (3) and (5), respectively.

attention rising in $|a_i|$. The dashed red line shows how higher interest rate volatility, that is higher σ_r, shifts the entire frontier upward and lowers the threshold a_i^*. This brings more consumers into the attentive region and increases attention among those already paying attention.

Figure 2: Attention as a Function of Skin in the Game



Note: This figure plots the attention frontier as a function of "skin in the game" for two different values of interest rate volatility (low in solid black and high in dashed red). Consumers below threshold a_i^* optimally choose zero attention. Higher volatility shifts the frontier upward and lowers the threshold.

Beyond these main effects visible in Figure 2, the model generates two additional predictions. First, external factors – interest rate volatility σ_r and information costs λ_i – affect attention on both the extensive margin (who is attentive, via the threshold a_i^*) and the intensive margin (how much attention the attentive allocate). For example, higher volatility not only brings more consumers into the attentive region by lowering a_i^*, but also increases attention among those already paying attention by shifting up the entire frontier. Similarly, lower information costs λ_i both expand the attentive population and increase attention intensity.

Second, and most importantly for explaining Figure 1, the marginal effects of these external factors decline with "skin in the game." High skin-in-the-game consumers (large $|a_i|$) maintain high attention regardless of external conditions like news availability, while low skin-in-the-game consumers' attention is driven primarily by these external factors. This interaction explains why the cyclical attention patterns around FOMC meetings visible in Figure 1 are driven almost entirely by consumers without skin in the game. This declining sensitivity corresponds to the visual flattening of the attention frontier at high $|a_i|$ in Figure 2.

Why does attention matter for policy transmission? Because consumption and borrowing decisions depend on expected interest rates rather than actual rates, inattentive consumers respond less to monetary policy changes. As we derive in Appendix B.1, consumer i's consumption response to a real rate change is proportional to their attention level: $\frac{\partial c_{it}}{\partial r_t} \propto \kappa_i$. Intuitively, when the Fed changes rates, inattentive consumers do not update their rate expectations as much as attentive consumers (since $\mathbb{E}_{it} r_t = \kappa_i s_{it} = \kappa_i(r_t + v_{it})$). Because they form less accurate forecasts — their forecast error variance $\sigma_r^2(1-\kappa_i)$ is high — they do not adjust consumption much. This means aggregate policy transmission depends on the distribution of attention across consumers — a point we return to when analyzing optimal communication in Section 5 below.

2.3 Testable Implications

Suppose that in the data we observe a repeated cross-section of individuals i, so that the attention of consumer i in period t is κ_{it}. Consumer i has "skin in the game" $|a_i|$, and their cost of acquiring information $\lambda_{it} = \lambda_i + \lambda_t$ is composed of an individual component, λ_i, and an aggregate component, λ_t. Interest rate volatility in period t is captured by σ_{rt}.

Our model generates six testable implications about consumer attention to monetary policy. We organize these into three categories: individual determinants, aggregate determinants, and their interactions.

Individual determinants. Consumers with higher skin in the game optimally allocate more attention:

1. Skin in the game. Attention increases with $|a_i|$: $\partial \kappa_{it} / \partial |a_i| > 0$.
2. Information costs. Attention decreases with individual information costs λ_i:

$\partial\kappa_{it}/\partial\lambda_i < 0$.

Aggregate determinants. External factors systematically affect attention levels:

3. News supply. Attention increases when monetary policy information is cheaper to acquire: $\partial\kappa_{it}/\partial\lambda_t < 0$.
4. Interest rate volatility. Attention increases with σ_{rt}: $\partial\kappa_{it}/\partial\sigma_{rt} > 0$.

Interaction effects. Crucially, individual and aggregate factors interact:

5. News supply interaction. The marginal effect of news supply on attention declines with skin in the game (becomes less negative): $\partial^2\kappa_{it}/\partial\lambda_t\partial|a_i| > 0$.
6. Volatility interaction. The marginal effect of interest rate volatility on attention declines with skin in the game: $\partial^2\kappa_{it}/\partial\sigma_{rt}\partial|a_i| < 0$.

After introducing our data in the next section, Section 4 tests all six of these implications using regression specifications that map directly to these theoretical relationships. See Corollary 1 in the appendix for formal derivations and Corollary 2 for corresponding predictions on the extensive margin of attention.

3 Data on Attention to Monetary Policy

Our data come from a daily online survey of consumer expectations conducted by the Federal Reserve Bank of Cleveland and administered by Qualtrics Research Services (see Coibion et al. (2023); Dietrich et al. (2023); Knotek et al. (2025)). Respondents are representatively drawn from several actively managed, double-opt-in market research panels, complemented using social media (Qualtrics 2019). The survey has been conducted daily since the onset of the COVID-19 pandemic in March 2020.

This section describes how we measure each variable in our rational inattention model using our survey supplemented by external data sources.

3.1 Attention to Monetary Policy (κ_{it})

To measure attention, we ask respondents:

> *Have you heard any news about monetary policy or the Federal Reserve in the last week?*

Respondent i in period t answers yes ($\kappa_{it} = 1$) or no ($\kappa_{it} = 0$).[7]

Figure 3 plots the share of respondents reporting they heard news from 2020 through 2025. Attention exhibits cyclical patterns, with sharp increases immediately after FOMC meetings and some anticipation beforehand. Moreover, attention rose markedly as the Fed began raising rates in March 2022 and remained elevated through 2024 before rising again in 2025. Although the rise in attention in 2021-22 correlates with rising inflation, attention remained elevated even as inflation rapidly declined toward 2 percent in 2022-23.[8] This suggests that attention to monetary policy is closely linked to policy actions (or anticipation thereof)—that is, to changes in the federal funds rate.

To verify this interpretation, we asked attentive respondents a follow-up question about the type of news they heard. Figure A.2 in the appendix shows that news about interest rate changes has dominated other types of monetary policy news since 2022.[9] Although other factors affect consumers' relevant interest rates (such as their own risk premium), focusing on monetary policy news enables us to cleanly analyze drivers of attention to a margin that is fixed across all consumers yet affects all interest rates in the economy.

[7] Note that we measure the extensive margin of attention to monetary policy. Corollary 2 in the appendix shows that our testable implications apply to the extensive margin.

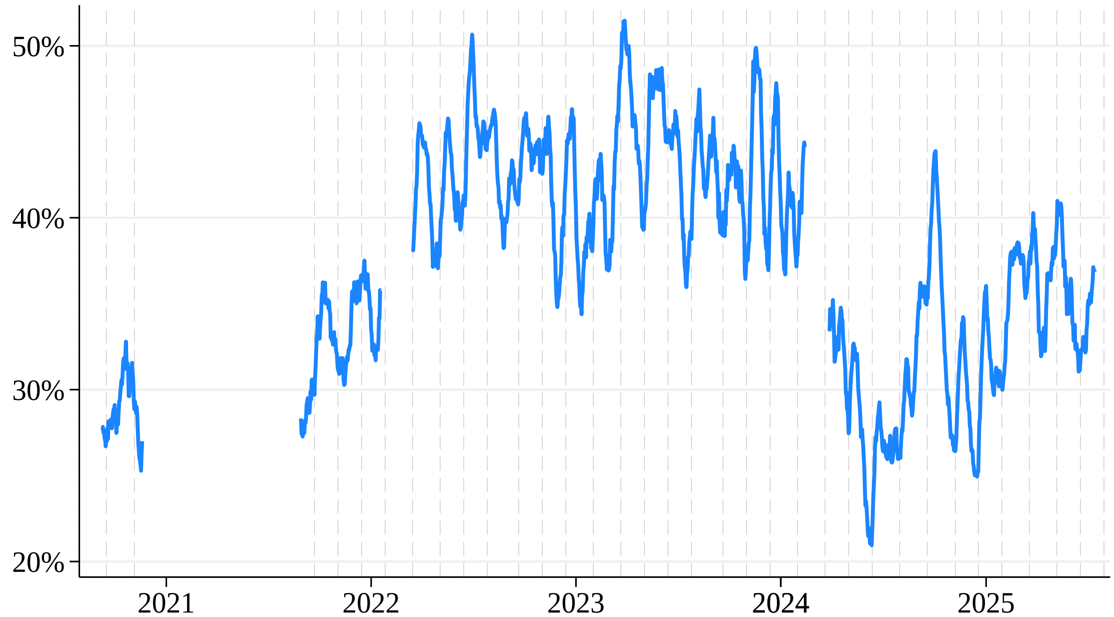
[8] See Figure A.1 in the appendix, which adds CPI inflation and the federal funds rate to Figure 3.

[9] The follow-up question asks:

> *What were the main pieces of news about monetary policy or the Federal Reserve that you heard most recently? Select all that apply.*

with the options being: *An international meeting of central bankers*; *A change in interest rates*; *Changes announced about the Federal Reserve's balance sheet*; *A change in the leadership at the Federal Reserve*; *An announcement about new strategies at the Federal Reserve*; *Other*; and *I don't remember*.

Figure 3: Consumers' Attention to Monetary Policy over Time



Note: The figure plots the two-week moving average of the daily share of respondents reporting that they heard news about monetary policy or the Federal Reserve in the past week. Vertical dashed lines indicate scheduled FOMC meeting dates.

3.2 "Skin in the Game" ($|a_i|$)

To measure "skin in the game," we directly ask consumers whether they plan to make major purchases that typically require financing:

> *Do you plan to purchase a home (for example, a house or a condominium) in the next month / year?*
>
> *Do you plan to purchase a motor vehicle in the next month / year?*

For each question, consumer i answers yes ($|a_i| = 1$) or no ($|a_i| = 0$). Big-ticket purchases such as homes or cars typically require consumers to take on large amounts of debt relative to their consumption, making their decisions highly contingent on interest rates. Hence, we consider consumers planning such purchases to have high "skin in the game."

Our measure captures a key margin where consumers use financial instruments directly affected by monetary policy. While other factors (e.g., existing mortgage debt, credit card balances, and savings decisions) also create skin in the game, planned major purchases provide a clean, forward-looking measure of interest rate sensitivity that varies across consumers and over time.[10]

3.3 Cost of Acquiring Information (λ_{it})

Recall that the cost of acquiring information λ_{it} is composed of an individual component λ_i and an aggregate component λ_t. We measure each separately.

Individual costs (λ_i). At the individual level, we proxy for information costs using education and numerical literacy, both of which plausibly reduce the cost of acquiring and processing information about monetary policy.

For education, we ask respondents to select their highest level: less than high school, high school diploma, some college, bachelor's degree, master's degree, or doctorate/professional degree. For numerical literacy, we ask:

> *Imagine there are white and black balls in a ballot box. You draw a ball 70 times. 56 times, you have drawn a white ball, 14 times a black ball. Given this record, what would you say is the probability of drawing a black ball the next time?*

We create a dummy variable equal to 1 for respondents who answer correctly and 0 otherwise. Higher education and numerical literacy are assumed to lower λ_i.

Aggregate costs (λ_t). At the aggregate level, we exploit variation in news availability. Specifically, we count the number of articles mentioning "monetary policy" or "Federal Reserve" in a given month using Factiva.[11] A larger number of articles indicates greater news supply and thus lower aggregate information costs (λ_t). Figure A.5 in the appendix shows the evolution of news counts around monetary policy events, confirming significant variation related to FOMC meetings and the policy cycle. Since λ_t and news supply move in opposite directions, we expect that the predicted negative effects of λ_t correspond to positive effects of news counts.

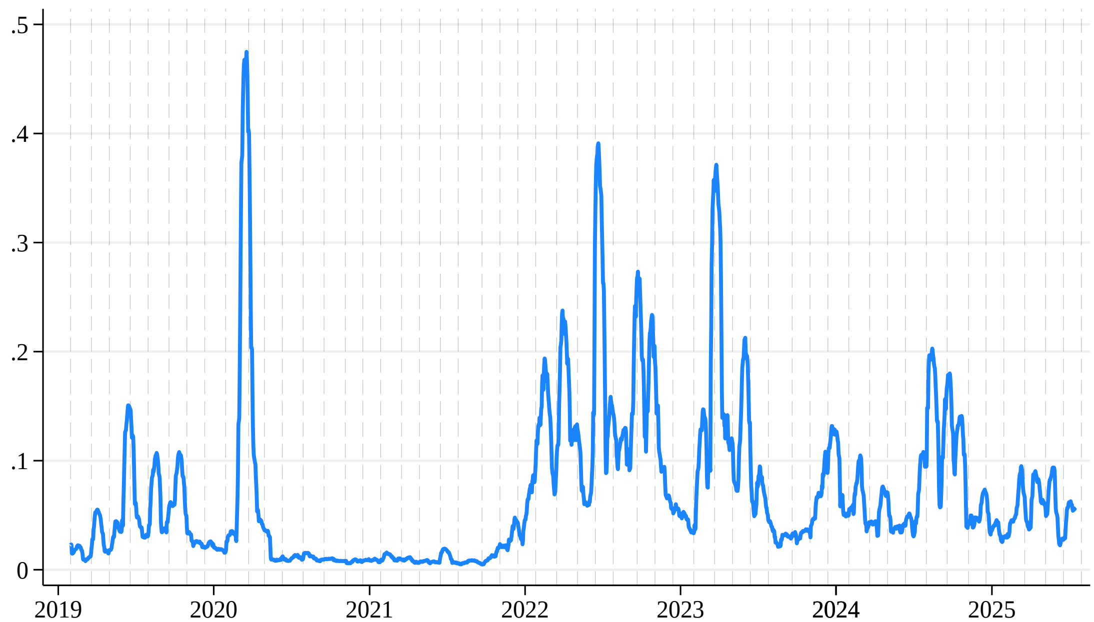
[10] We collected "skin in the game" data from August 16, 2021 through January 18, 2022; from March 3, 2022 through February 13, 2024; and from August 28, 2024 through the end of the sample.

[11] The number of articles could reflect demand for (rather than supply of) news, which could confound identification. We address this concern in Section 4 using an instrumental variables approach.

3.4 Interest Rate Volatility (σ_{rt})

We measure interest rate volatility as the standard deviation of the 1-year Treasury yield over the previous 30 days. Figure 4 shows its evolution over our sample period. Volatility rose with the onset of COVID-19, then declined as the Federal Reserve held rates at the effective lower bound for two years. Volatility increased again starting in 2022 as inflation rose and the Fed began raising rates.

Figure 4: Interest Rate Volatility over Time



Note: The figure plots the 30-day rolling standard deviation of the 1-year Treasury yield (in percentage points), calculated daily. Vertical dashed lines indicate scheduled FOMC meeting dates.

For robustness analysis, we create a dummy variable to capture the "forward guidance" period from August 26, 2020 through March 16, 2022. During this period, interest rates were more predictable, as the Federal Reserve explicitly signaled that the federal funds rate would remain steady for some time. The dummy variable takes a value of 1 during the "forward guidance" period and 0 otherwise, and it captures a time of low interest rate volatility.

4 Empirical Results

This section tests the six implications derived in Section 2.3. We organize results into three categories: individual determinants of attention (Implications 1–2), aggregate determinants (Implications 3–4), and their interactions (Implications 5–6). Throughout, we estimate specifications using both OLS and logit models, with robust standard errors. All regressions include appropriate controls as specified below.

4.1 Individual Determinants of Attention

4.1.1 Skin in the Game (Implication 1)

Our model predicts that consumers with more "skin in the game" pay greater attention to monetary policy. To test this, we estimate:

$$\kappa_{it} = \gamma_t + \beta_1 \times |a_i| + X_i'\theta + \varepsilon_{it}, \tag{9}$$

where κ_{it} is attention; $|a_i|$ equals 1 if individual i plans a big-ticket purchase, 0 otherwise; X_i includes demographic controls (education and income); and γ_t denotes monthly fixed effects that control for the common macroeconomic environment. β_1 captures the cross-sectional link between attention to monetary policy and skin in the game.

Table 1 reports results for both OLS and logit specifications, separately considering purchase plans within one month and one year. Across all specifications, we find strong support for Implication 1: higher skin in the game has a positive and statistically significant effect on attention. Consumers planning purchases within one month are 28–32 percentage points more likely to be attentive (columns 1–2). This effect diminishes to 10–13 percentage points for purchases planned within one year (as predicted by Corollary 3 in the appendix), but remains highly significant.

Table 1: Attention and "Skin in the Game"

	OLS		Logit (Odds Ratio)	
	(1)	(2)	(3)	(4)
Plan to purchase in next...				
... month	0.32***	0.28***	3.85***	3.92***
	(0.01)	(0.01)	(0.12)	(0.15)
... year	0.13***	0.10***	1.83***	1.65***
	(0.01)	(0.01)	(0.04)	(0.05)
Demographic controls	No	Yes	No	Yes
Time fixed effects	Yes	Yes	Yes	Yes
Observations	75262	75262	75262	75262
Adj./Pseudo R^2	0.12	0.20	0.09	0.16

Note: The table reports the estimates of β_1 in equation (9). Columns (1) and (2): OLS specification; columns (3)-(4): logit specification. Columns (1) and (3) report the estimates of β_1 when we do not control for demographic characteristics X_i, while in columns (2) and (4) we control for X_i. Coefficients for demographic controls, time fixed effects and constant not included in the table. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

These effects are economically large and robust across demographic groups. Figure A.3 in the appendix shows that the positive effect of skin in the game holds within different income and education groups, confirming that purchase plans drive attention beyond socioeconomic factors.

We also find that the probability that individuals with no plans to purchase a home or vehicle pay attention to monetary policy is 29 percent. This positive value indicates that even consumers without measured skin in the game exhibit some attention, and it is consistent with our model for two reasons. First, individuals may have unmeasured stakes (credit card debt, investment decisions, savings goals) that create unreported skin in the game. Second, even among consumers with $|a_i| = 0$, our model predicts heterogeneous attention. Non-hand-to-mouth consumers—those who maintain positive assets or debt during some periods for intertemporal smoothing—can choose to be attentive if their information costs are sufficiently low (specifically, $\lambda_i < \beta \ln(2)\sigma_r^2$).[12] When they do pay atten-

[12]Non-hand-to-mouth consumers with $|a_i| = 0$ have $B_{it} \neq 0$ for some periods t, but in steady state, $\bar{B}_i = 0$.

tion, their optimal attention level is $\kappa_i = 1 - \frac{\lambda_i}{(\ln 2)\sigma_r^2 \beta} \in (0,1]$. By contrast, hand-to-mouth consumers, whose consumption equals their income each period, that is, for whom $B_{it} = 0$ each period t, gain no benefit from tracking interest rates and optimally remain inattentive.[13] Hence, even without immediate purchase plans, consumers with low information costs (e.g., high education) or facing high interest rate volatility σ_r may optimally choose $\kappa_i > 0$. Our aim is not to provide an exhaustive measure of all sources of skin in the game, but to demonstrate that measured, forward-looking purchase decisions—which clearly create interest rate sensitivity—significantly increase attention.

4.1.2 Individual Information Costs (Implication 2)

Implication 2 states that attention decreases with individual information costs λ_i. Since we do not observe λ_i directly, we proxy for it using education and numerical literacy, where higher values correspond to lower costs. Specifically, letting Z_i denote these proxies, we have $Z_i = \psi_\lambda \lambda_i + \nu_i$ with $\psi_\lambda < 0$. We estimate:

$$\kappa_{it} = \gamma_t + \psi_2 \times Z_i + \varepsilon_{it}, \tag{10}$$

where a positive ψ_2 implies a negative effect of λ_i on attention.

Table 2 confirms this prediction. Column (1) shows that consumers with high numerical literacy are 5 percentage points more likely to be attentive than those with low literacy (baseline attention: 36 percent). Column (2) reveals stronger education effects: consumers with Master's degrees or higher are 38 percentage points more attentive than those without tertiary education (baseline: 26 percent). Logit specifications (columns 3–4) show similar patterns.

[13] Hand-to-mouth households consume their income each period. As a result, their consumption is the same under FIRE and rational inattention, implying no welfare losses due to imperfect information. Therefore, the solution to the problem in (7) in this case is given by $\sigma^2_{r|s_i} = \sigma^2_r$, corresponding to $\kappa_i = 0$.

Table 2: Attention and Individual-Specific Costs of Acquiring Information

	OLS		Logit (Odds Ratio)	
	(1)	(2)	(3)	(4)
Numerical literacy				
High	0.05***		1.23***	
	(0.00)		(0.02)	
Education				
Some college		0.04***		1.22***
		(0.00)		(0.05)
Bachelor's		0.20***		2.48***
		(0.00)		(0.05)
Master's or higher		0.38***		5.23***
		(0.00)		(0.11)
Time fixed effects	Yes	Yes	Yes	Yes
Observations	158316	171102	158316	171102
Adjusted R^2	0.02	0.09	0.01	0.07

Note: The table reports the estimates of ψ_z in equation (10). Columns (1) and (2): OLS specification; columns (3)-(4): logit specification. Coefficients for time fixed effects and constant not included in the table.Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

While statistically significant, these effects are notably smaller than skin-in-the-game effects (28–32 pp), suggesting that *incentives* matter more than *ability* for driving attention. Moreover, as Figure A.3 shows, higher-education consumers remain more attentive even after controlling for skin in the game, indicating independent effects of information costs.

4.2 Aggregate Determinants of Attention

4.2.1 Aggregate Information Costs (Implication 3)

Implication 3 states that attention increases when aggregate information costs λ_t decline. We proxy for λ_t using news counts Z_t, where more articles correspond to lower costs: $Z_t = \psi\lambda_t + \nu_t$ with $\psi < 0$. We estimate:

$$\kappa_{it} = \alpha + \psi_3 \times Z_t + X_i'\theta + \varepsilon_{it}, \tag{11}$$

where a positive ψ_3 confirms that lower λ_t (higher news supply) increases attention. Table 3 presents OLS estimates (columns 1–2) showing that one additional article about monetary policy or the Federal Reserve increases attention probability by 5–6 percentage points.

But news counts could reflect demand for (rather than supply of) news, confounding our interpretation. To isolate supply-driven variation, we also employ an instrumental variables approach, using days before/after FOMC meetings as an instrument. FOMC meeting dates are predetermined and announced well in advance, generating exogenous variation in news coverage.[14] The instrumental variables (IV) estimates reported in Table 3 (columns 3–4) are larger (10–15 percentage points), suggesting OLS may understate the causal effect of news supply.[15] Figure 5 provides complementary visual evidence using a regression discontinuity design around FOMC meetings. Attention jumps discontinuously on meeting days when news coverage surges, consistent with news supply reducing information costs.

Table 3: Attention and the Aggregate Costs of Acquiring Information.

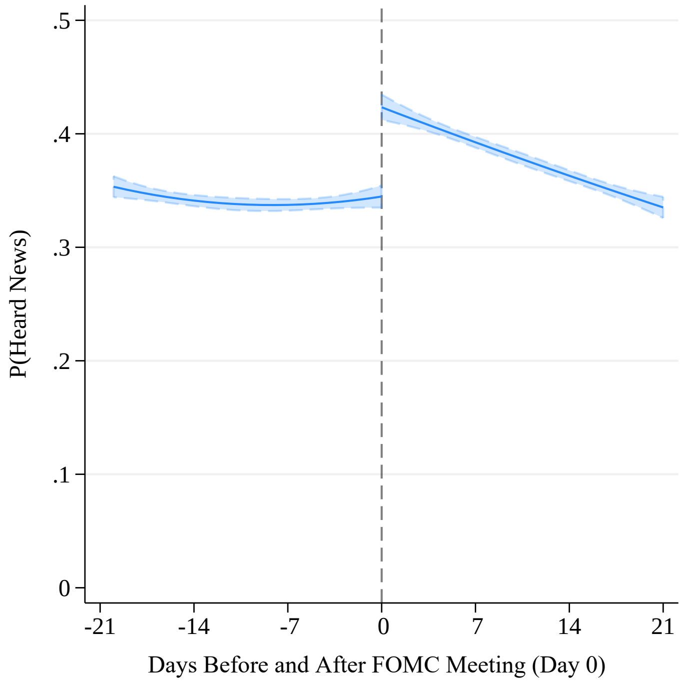
	OLS		IV	
	(1)	(2)	(3)	(4)
Monetary Policy News	0.06***		0.15***	
	(0.00)		(0.01)	
Federal Reserve News		0.05***		0.10***
		(0.00)		(0.01)
Constant	0.33***	0.31***	0.28***	0.26***
	(0.00)	(0.00)	(0.01)	(0.01)
Observations	171006	171006	171006	171006
Adjusted R^2	0.01	0.01	-0.01	-0.00
1st stage F-stat			5584.0	7425.7

Note: The table reports the estimates of ψ_3 in equation (11). Columns (1) and (2): OLS specification; columns (3)-(4): IV specification. IV uses days before/after FOMC meetings as instrument for news counts. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

[14] Figures A.4 and A.5 in the appendix document considerable variation in news article counts around FOMC meetings. Figure A.4 pools all meetings, showing sharp increases in coverage immediately before and after FOMC announcements. Figure A.5 confirms this pattern holds across different monetary policy regimes: pre-liftoff (2020-2022), liftoff (2022-2023), the first plateau (2023-2024), rate cuts (2024-2025), and the second plateau (2025). The consistency of news spikes across regimes strengthens the validity of our instrument.

[15] The first-stage F-statistics in Table 3 exceed 5,000, again indicating strong instruments.

Figure 5: Attention Before and After FOMC Meetings Pooled Across All Consumers



Note: This figure plots fitted probabilities of hearing monetary policy news in the 21 days before and after FOMC meetings. Day 0 is the FOMC announcement date. Specifically, the fitted values are computed from the estimates of this regression: $\kappa_{it} = \alpha + \beta_0 Days_t + \gamma_0 \mathbf{1}_{post} + \theta_0(Days_t \times \mathbf{1}_{post}) + \beta Days_t^2 + \theta(Days_t^2 \times \mathbf{1}_{post}) + \varepsilon_{it}$, where $\mathbf{1}_{post}$ is a dummy variable taking a value of 1 for days after the FOMC meeting and 0 otherwise, and $Days_t^2 = Days_t \times |Days_t|$. Sample: March 2020—January 2025.

4.2.2 Interest Rate Volatility (Implication 4)

Implication 4 states that attention increases with interest rate volatility σ_{rt}. We estimate:

$$\kappa_{it} = \alpha + \beta_4 \times \sigma_{rt} + X_i'\theta + \varepsilon_{it}, \tag{12}$$

using the 30-day standard deviation of 1-year Treasury yields as our measure of σ_{rt}.

Table 4 confirms this prediction. Column (1) shows that a one-unit increase in volatility raises the probability of being attentive by 49 percentage points. As a robustness check, columns (2) and (4) use a "forward guidance" dummy (equal to 1 during August 2020–March 2022), a period of explicitly low interest rate volatility.

Focusing on column (2), consumers are 7 percentage points less attentive during forward guidance periods, confirming that low volatility reduces attention.

Table 4: Attention and Volatility

	OLS		Logit (Odds Ratio)	
	(1)	(2)	(3)	(4)
1y $\sigma_{r,t}$	0.49***		11.17***	
	(0.02)		(1.11)	
Forward Guidance		-0.07***		0.71***
		(0.00)		(0.02)
Constant	0.03***	0.09***	0.10***	0.14***
	(0.01)	(0.01)	(0.00)	(0.01)
Demographic controls	No	Yes	No	Yes
Time fixed effects	No	No	No	No
Observations	163161	163161	163161	163161
Adj./Pseudo R^2	0.13	0.13	0.11	0.10

Note: The table reports the estimates of β_4 in equation (12). Columns (1) and (2): OLS specification; columns (3)-(4): logit specification. Columns (1) and (3) report the estimates of β_1 when we do not control for demographic characteristics X_i, while in columns (2) and (4) we control for X_i. Coefficients for demographic controls not included in the table. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

4.3 Interaction Effects

The most distinctive predictions of our model concern interactions: the marginal effects of aggregate factors should decline with skin in the game (Implications 5–6).

4.3.1 News Supply Interaction (Implication 5)

Implication 5 states that high-skin-in-the-game consumers respond less to changes in news supply. Following equation (11), we proxy λ_t with news counts Z_t (where $Z_t = \psi\lambda_t + \nu_t$, $\psi < 0$), and estimate the expanded regression:

$$\kappa_{it} = \alpha + \psi_5 \times (Z_t \times |a_i|) + \psi_{51} \times Z_t + \psi_{52} \times |a_i| + X_i'\theta + \varepsilon_{it}. \quad (13)$$

The rational inattention model predicts $\psi_5 < 0$: high-stake consumers' attention increases less with news supply. This prediction explains the striking pattern documented in Figure 1. Recall that consumers *without* skin in the game exhibit sharp attention spikes around FOMC announcements (when news surges), while those *with* skin in the game maintain stable, high attention throughout the policy cycle.[16] This is precisely what Implication 5 implies: external factors (news supply) primarily drive attention among low-stakes consumers, while high-stakes consumers maintain attention regardless of the information environment.

Table 5 confirms this pattern econometrically. The interaction coefficient, ψ_5, is negative and significant across all specifications for one-month purchase plans. OLS estimates (columns 1–2) indicate the positive effect of news decreases by 4 percentage points for high-stake consumers. IV estimates (columns 3–4), using the same instrument as Table 3, show substantially larger interaction effects: the positive effect of news on attention is 19–22 percentage points smaller for high-stake consumers, consistent with isolating supply-driven news variation. For one-year purchase plans, the interaction coefficient, ψ_5, weakens (as predicted by Corollary 3), but the main effect of skin in the game remains strong and significant.

[16] Figure 1 estimates a regression discontinuity specification separately for consumers with versus without immediate purchase plans: $\kappa_{it} = \alpha + \beta_0 Days_t + \gamma_0 \mathbf{1}_{post} + \theta_0 (Days_t \times \mathbf{1}_{post}) + \beta Days_t^2 + \theta(Days_t^2 \times \mathbf{1}_{post}) + \varepsilon_{it}$, where $\mathbf{1}_{post}$ equals 1 for days after the FOMC meeting and $Days_t^2 = Days_t \times |Days_t|$.

Table 5: Attention, News Supply, and Skin in the Game

	OLS		IV	
	(1)	(2)	(3)	(4)
Plan to purchase durables in next month	0.31***	0.33***	0.43***	0.53***
	(0.01)	(0.01)	(0.06)	(0.10)
Plan to purchase durables in next year	0.11***	0.11***	0.17***	0.23***
	(0.01)	(0.01)	(0.05)	(0.08)
"Monetary Policy" news	0.05***		0.24***	
	(0.00)		(0.04)	
... x Durables purchase in next month	-0.04***		-0.22**	
	(0.01)		(0.09)	
... x Durables purchase in next year	0.01		-0.10	
	(0.01)		(0.07)	
"Federal Reserve" news		0.04***		0.21***
		(0.00)		(0.03)
... x Durables purchase in next month		-0.04***		-0.19**
		(0.01)		(0.08)
... x Durables purchase in next year		0.00		-0.09
		(0.01)		(0.06)
Demographic Controls	Yes	Yes	Yes	Yes
Observations	75166	75166	75166	75166
Adjusted R^2	0.20	0.20	0.14	0.12
1st stage F-stat			198.5	145.8

Note: The table reports the estimates of ψ_5, ψ_{51}, and ψ_{52} in equation (13). Columns (1) and (2): OLS specification; columns (3)-(4): IV specification. IV uses days before/after FOMC meetings as instrument for news counts. Coefficients for demographic controls and constant not included in the table. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Note that $sign(\beta_5) = -sign(\psi_5)$, $sign(\beta_{51}) = -sign(\psi_{51})$, and $sign(\beta_{52}) = sign(\psi_{52})$. For the IV specification, we again use the number of days before or after an FOMC meeting as an instrument. Table 5 shows that the estimated coefficient, ψ_5, is negative and, in general, statistically significant for those consumers that plan a purchase within the next month. The finding that ψ_5 gets closer to 0 as the plan horizon increases is consistent with our rational inattention model (see Corollary 3 in the appendix). This effect is present for Fed news and monetary policy news. Our results imply that in periods of lower information costs, consumers with more "skin in the game," add marginally less attention, compared to consumers with less "skin in the game."

Table 6: Attention, Interest Rate Volatility, and Skin in the Game

	OLS		Logit (Odds Ratio)	
	(1)	(2)	(3)	(4)
Plan to purchase durables in next...				
... month	0.35***	0.32***	4.42***	4.52***
	(0.01)	(0.01)	(0.22)	(0.27)
... month x $\sigma_{r,t}$	-0.34***	-0.32***	0.25***	0.21***
	(0.09)	(0.09)	(0.10)	(0.10)
... year	0.13***	0.10***	1.86***	1.72***
	(0.01)	(0.01)	(0.07)	(0.08)
... year x $\sigma_{r,t}$	0.00	-0.05	0.81	0.60
	(0.08)	(0.07)	(0.26)	(0.21)
$\sigma_{r,t}$	0.43***	0.44***	7.31***	10.44***
	(0.04)	(0.04)	(1.26)	(1.94)
Constant	0.24***	-0.03***	0.32***	0.07***
	(0.00)	(0.01)	(0.01)	(0.00)
Demographic controls	No	Yes	No	Yes
Observations	75262	75262	75262	75262
Adj./Pseudo R^2	0.11	0.20	0.09	0.16

Note: The table reports the estimates of β_6 in equation (14). Columns (1) and (2): OLS specification; columns (3)-(4): logit specification. Columns (1) and (3) report estimates when we do not control for demographic characteristics X_i, while in columns (2) and (4) we control for X_i. Coefficients for demographic controls not included in the table. Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

4.3.2 Volatility Interaction (Implication 6)

Implication 6 states that high-skin-in-the-game consumers respond less to changes in interest rate volatility. We estimate:

$$\kappa_{it} = \alpha + \beta_6 \times (\sigma_{rt} \times |a_i|) + \beta_{61} \times \sigma_{rt} + \beta_{62} \times |a_i| + X_i'\theta + \varepsilon_{it}. \tag{14}$$

Table 6 confirms Implication 6. The interaction term β_6 is negative and significant for one-month purchase plans (columns 1–4): the positive effect of volatility on attention is 32–34 percentage points smaller for high-stake consumers. Again, the interaction weakens for one-year plans, but the direct effect of skin in the game remains large.

5 Implications for Monetary Policy Communication

Having validated our rational inattention model empirically, we now derive implications for central bank communication when communication is costly and attention is endogenous.

Central banks increasingly rely on communication to manage expectations, including those of consumers (e.g., see Gaballo (2016); Blinder et al. (2024); Coibion et al. (2020c); Haldane and McMahon (2018); Fadda et al. (2025)). However, our analysis reveals an important trade-off: communication can amplify monetary policy transmission by increasing attention, but when costly, optimal communication should be targeted rather than universal. Specifically, central banks should focus on consumers with high "skin in the game"—those whose decisions depend critically on interest rates.

This targeting strategy follows directly from our empirical findings. High skin-in-the-game consumers benefit substantially from communication: a lower information cost further increases their attention, reducing forecast errors and improving interest-sensitive decisions. By contrast, two groups benefit little from communication. First, as explained earlier, hand-to-mouth consumers optimally choose zero attention regardless of information costs, since interest rates do not affect their period-by-period consumption. Communicating to them generates costs without welfare gains. Second, non-hand-to-mouth consumers with low skin in the game may remain optimally inattentive even after communication reduces information costs. When communication is costly, central banks should therefore target consumers whose decisions are most interest-rate sensitive.

5.1 Optimal Monetary Policy Communication

We formalize this intuition. Suppose all consumers face baseline information cost λ. Policymakers can reduce this to $\lambda_p < \lambda$ through communication, but at cost $g(\lambda_p)$ satisfying:

> **Assumption 1.** $g(\lambda_p)$ is strictly decreasing and strictly convex in λ_p, with $g(\lambda) = 0$ and $\lim_{\lambda_p \to 0} \frac{\partial g}{\partial \lambda_p} < -\frac{1}{2\ln 2(1-\beta)}$.

Assumption 1 captures the idea that more intensive communication requires more resources, with increasing marginal costs. The limit condition ensures an interior solution to the communication problem of policymakers exists. From Proposition 1, the implied welfare loss of consumer i, after plugging the optimally chosen $\sigma^2_{r|s_i}$ into the welfare loss function $\mathbb{W}(\sigma^2_{r|s_i})$, is given by:[17]

$$\mathbb{V}(\lambda; a_i, \sigma_r^2) = \begin{cases} \frac{\lambda}{2(1-\beta)ln2} & \text{if } |a_i| \geq a^* \\ \\ \sigma_r^2 \frac{\beta + (1-\beta)a_i^2}{2(1-\beta)} & \text{otherwise.} \end{cases} \tag{15}$$

Attentive consumers' welfare losses increase with λ; inattentive consumers' losses are independent of λ. The central bank minimizes total welfare loss plus communication costs:

$$\lambda_p^*(i) = \arg \min_{\lambda_p(i) \leq \lambda} \left[V(\lambda_p(i); a_i, \sigma_r^2) + g(\lambda_p(i)) \right] \tag{16}$$

Proposition 2. *Let $g(\lambda_p)$ satisfy Assumption 1. It is optimal to communicate only to consumers with $|a_i| \geq a_p^*$. The optimal communication intensity λ_p^* solves the first-order condition $-\frac{\partial g}{\partial \lambda_p} = \frac{1}{2\ln 2(1-\beta)}$, equating the marginal cost of communication with the marginal*

[17] Note that all consumers share the same threshold $a_i^* = a^*$ since they all face the same unit cost of information λ.

welfare benefit for attentive consumers. Using this optimal λ_p^*, the threshold for targeted communication is:

$$a_p^* \equiv \sqrt{\frac{\lambda_p^*}{\sigma_r^2(\ln 2)(1-\beta)} - \frac{\beta}{1-\beta} + \frac{2g(\lambda_p^*)}{\sigma_r^2}}.$$

Proof. See Appendix C.1. □

Proposition 2 establishes that optimal communication is targeted, not universal. Only consumers with $|a_i| \geq a_p^*$ generate welfare gains exceeding communication costs. Figure 6 illustrates: communication improves attention only for consumers with sufficiently high stakes, whether by expanding the attentive population (Panel a, $a_p^* < a^*$) or increasing attention among the already-attentive (Panel b, $a_p^* > a^*$).[18]

5.2 Aggregate Implications

Targeted communication has two important implications for aggregate policy transmission.

First, communication amplifies monetary transmission. Let $\kappa_p(a_i)$ denote consumer i's attention following monetary policy communication and $\phi(a)$ be the distribution of borrowing relative to consumption, assumed to be symmetric for simplicity. Aggregate attention under communication is:

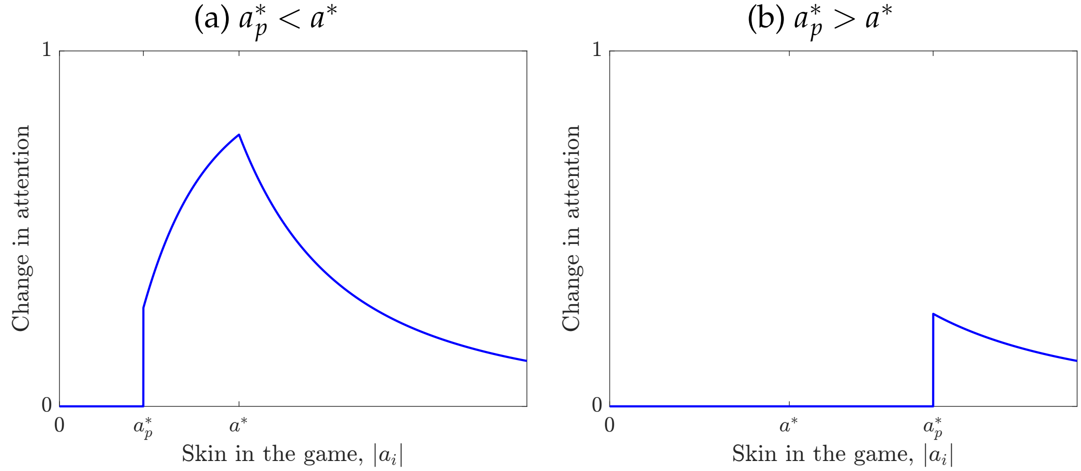
$$\mathcal{K}_p = 2\int_{\min(a_p^*,a^*)}^{\infty} \kappa_p(a)\phi(a)da. \tag{17}$$

Because consumption decisions depend on expected rather than actual interest rates, aggregate policy transmission is directly proportional to aggregate attention. Specifically, from the individual consumption response derived in equation (24) in

[18] In particular, letting $\Delta\kappa_i$ be the change of consumer i's attention due to policy communication, we have

$$\Delta\kappa_i = \begin{cases} \frac{\lambda-\lambda_p^*}{(ln2)\sigma_r^2(\beta+(1-\beta)a_i^2)} & \text{if } |a_i| > \max(a^*, a_p^*) \\ 1 - \frac{\lambda_p^*}{(ln2)\sigma_r^2(\beta+(1-\beta)a_i^2)} & \text{if } a_p^* < a^* \text{ and } a_p^* \leq |a_i| \leq a^* \\ 0 & \text{if } a_p^* > a^* \text{ and } a^* \leq |a_i| < a_p^* \\ 0 & \text{if } |a_i| \leq \min(a^*, a_p^*). \end{cases}$$

Figure 6: Change in Attention Following Optimal Communication



Note: The figure plots the change in consumers' attention due to monetary policy communication when $a_p^* < a^*$ in panel (a) and when $a_p^* > a^*$ in panel (b). In panel (a) we assume that $g(\lambda_p) = (\lambda/\lambda_p - 1)$; in panel (b) we assume that $g(\lambda_p) = 50(\lambda/\lambda_p - 1)$. The rest of the parameters are set as follows: $\beta = 0.99$, $\sigma_r^2 = 0.1$, and $\lambda = 0.5$.

the appendix, the impact of a change in r_t on aggregate consumption c_t is

$$\frac{\partial c_t}{\partial r_t} = -\int_{-\infty}^{\infty} [\beta - a(1-\beta)]\kappa_p(a)\phi(a)da = -\beta\mathcal{K}_p, \tag{18}$$

where the second equality follows from the symmetry of $\phi(a)$ and $\kappa_p(a)$, that is, $\int_{-\infty}^{\infty} a\kappa(a)\phi(a)da = 0$ since $\kappa(-a_i) = \kappa(a_i)$ and $\phi(-a_i) = \phi(a_i)$ for any i. Equation (18) implies that higher aggregate attention due to communication amplifies monetary policy's impact on aggregate consumption.

Second, if policymakers must prioritize when to communicate, they should focus on high-volatility periods. Aggregate attention $\mathcal{K}_p$ increases with interest rate volatility σ_r on both margins: higher volatility lowers the attention thresholds a^* and a_p^*, expanding the attentive population (extensive margin), and increases $\kappa_p(a)$ for any $a \geq \min(a_p^*, a^*)$ (intensive margin).[19] Therefore, during high-volatility periods communication reaches more consumers who can act on more precise information about the real rate and all the (newly or existing) attentive consumers pay

[19]See Appendix B.5 for a formal derivation showing $\partial\mathcal{K}_p/\partial\sigma_r > 0$.

even more attention.

6 Concluding Remarks

This paper provides the first direct measure of consumers' attention to monetary policy, spanning five years and over 170,000 US consumers. We use these data to test and validate a rational inattention model of monetary policy attention, deriving implications for central bank communication.

Our empirical findings strongly support the model's predictions. First, attention is incentive-driven: consumers planning major purchases (homes or vehicles) within one month are 28–32 percentage points more attentive than those without such plans. Second, attention varies systematically with aggregate factors: it increases with interest rate volatility and news supply, exhibiting sharp cyclical patterns around FOMC meetings. Third, and most distinctively, individual and aggregate factors interact: the marginal effects of volatility and news supply decline sharply with "skin in the game." This interaction explains why cyclical attention patterns around FOMC meetings are driven almost entirely by low-stakes consumers, while high-stakes consumers maintain stable, elevated attention throughout the policy cycle.

These findings have important implications for monetary policy communication. When communication is costly and attention is endogenous, central banks should target communication toward high-stakes consumers—those whose decisions depend critically on interest rates and who bear the largest welfare losses from information frictions. This targeted strategy maximizes welfare gains per dollar of communication cost. Moreover, if policymakers must prioritize when to communicate most intensively, they should focus on periods of high interest rate volatility, when more consumers are endogenously attentive and communication reaches more people who can act on the information. Such a strategy in turn amplifies the response of aggregate consumption to changes in the real interest rate.

Our framework opens several avenues for future research. First, how do firms' attention patterns compare to consumers', and should central banks communicate differently with these audiences? Second, how does attention to monetary policy interact with attention to inflation, and what does this imply for communication strategies during different phases of the business cycle? Third, can central banks design communication interventions that move consumers with low skin in the game above the attention threshold, or are some consumers optimally inattentive regardless of communication efforts? Finally, how do learning dynamics affect attention over time—do consumers who become attentive during high-volatility episodes remain attentive afterward?

By providing the first comprehensive empirical analysis of attention to monetary policy and validating a rational inattention framework, this paper establishes a foundation for addressing these questions and designing more effective central bank communication strategies.

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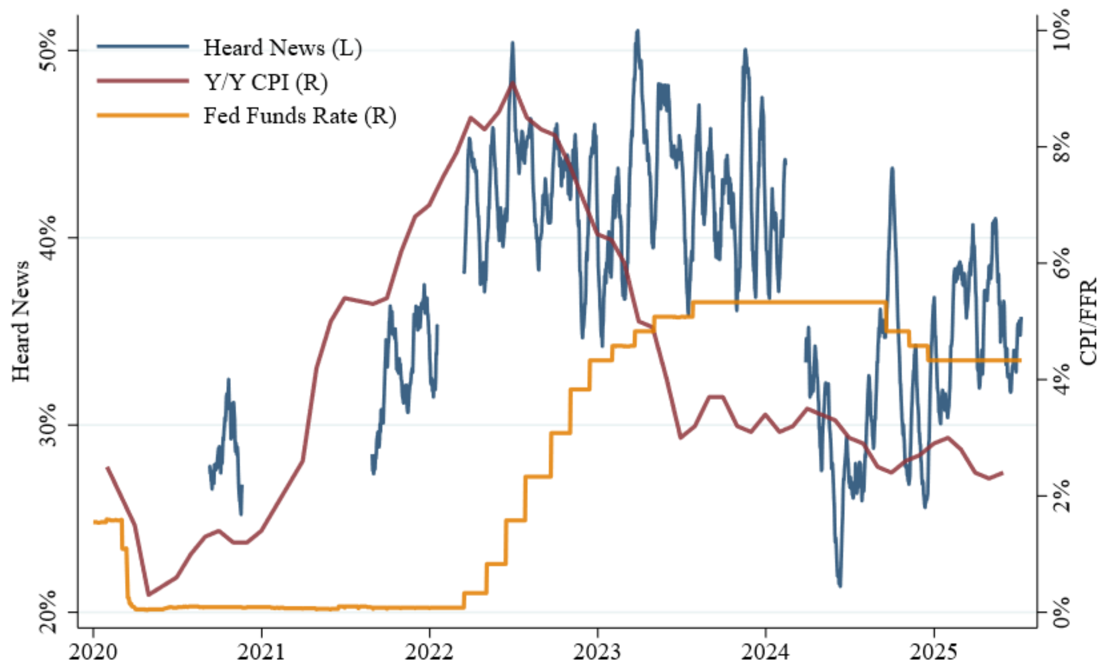
Online Appendix

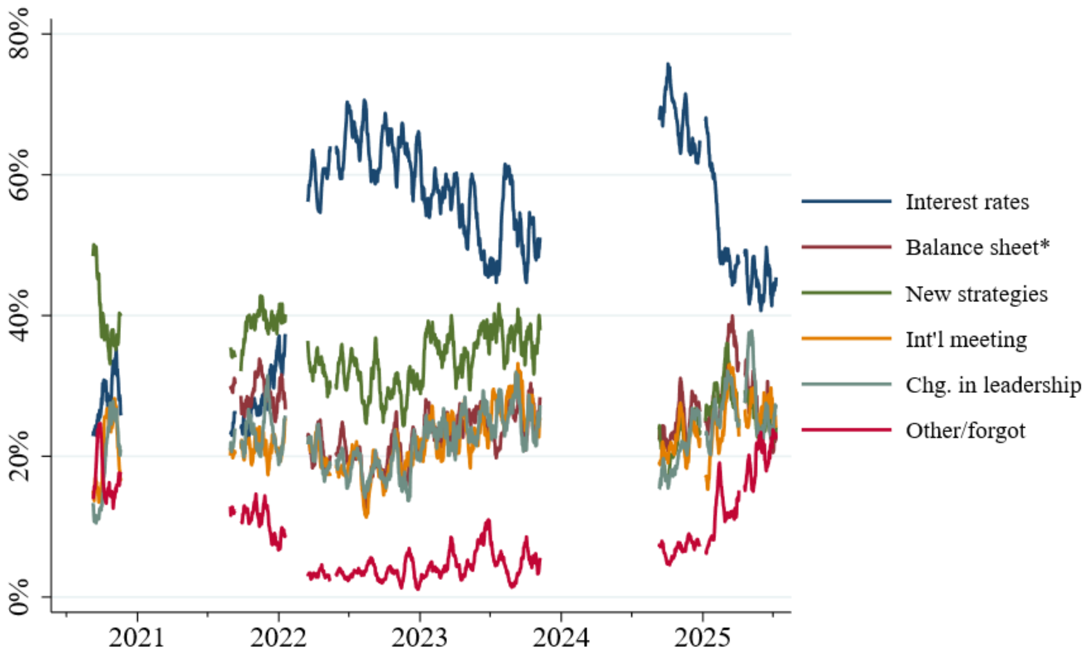
A Additional Tables and Figures

Figure A.1: Attention to Monetary Policy, Inflation, and the Federal Funds Rate



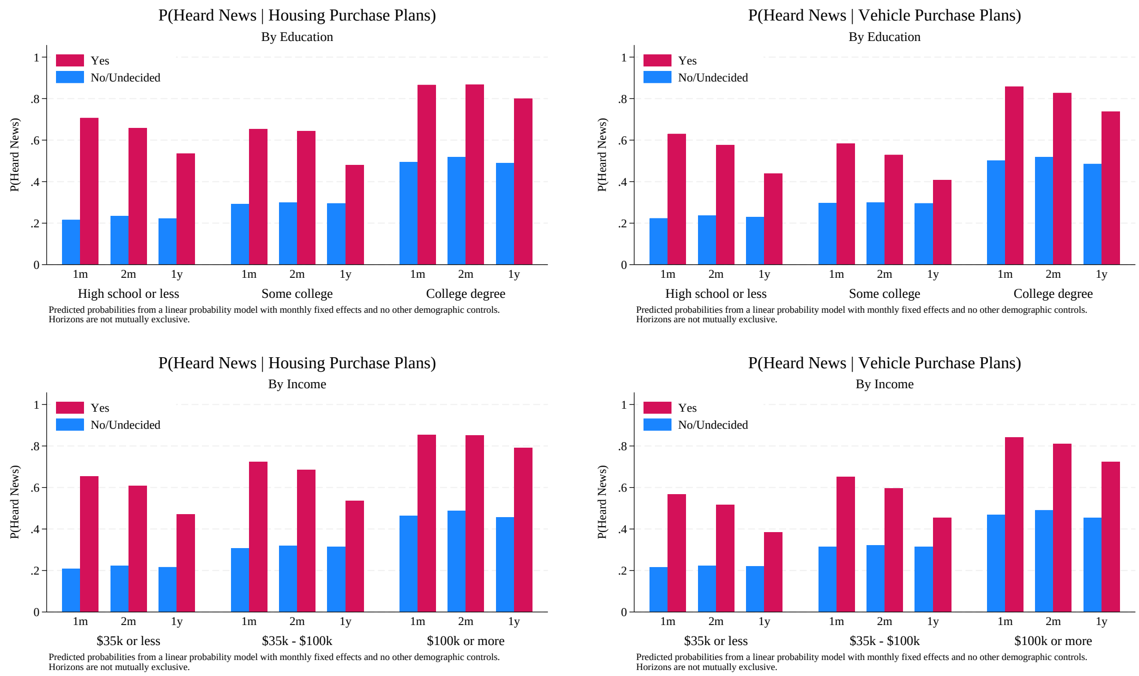
Note: The figure plots the two-week moving average of the share of consumers that are attentive to monetary policy (left axis) in blue, annual CPI inflation (right axis) in red, and the federal funds rate (right axis) in orange.

Figure A.2: Types of Monetary Policy News



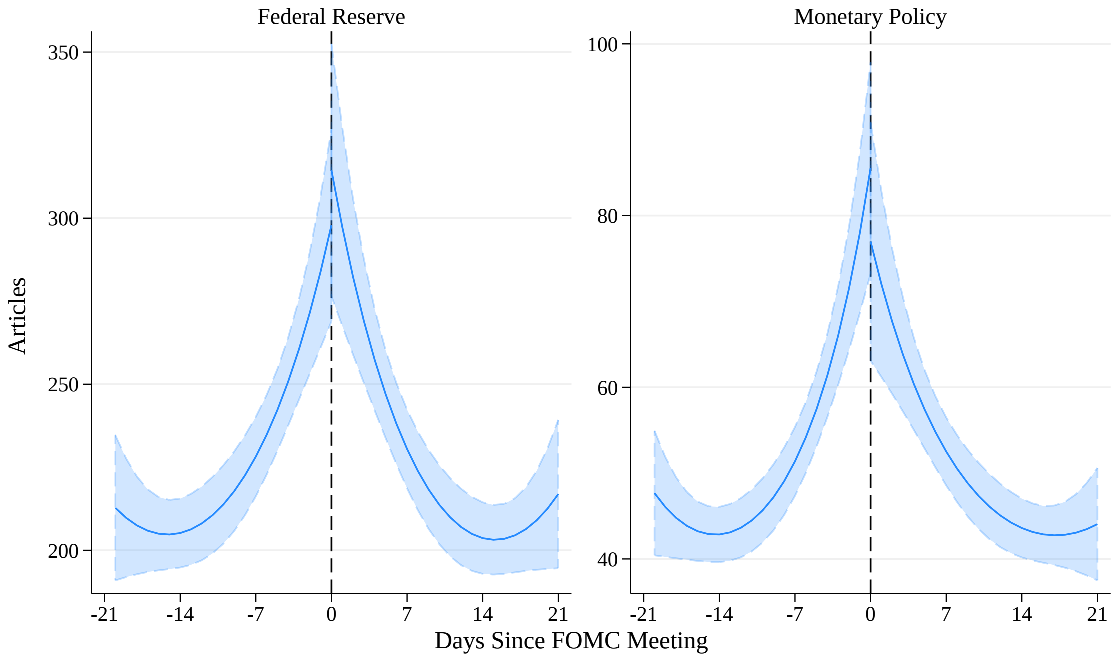
Note: The figure plots the two-week moving average of the share of attentive consumers that heard news about a change in interest rates (blue), changes announced about the Federal Reserve's balance sheet (burgundy), an announcement about new strategies at the Federal Reserve (green), an international meeting of central bankers (orange), a change in the leadership at the Federal Reserve (gray), other/I don't remember (red). Consumers can select more than one option. "Balance sheet" refers to asset purchases until 2024, and to the balance sheet in general thereafter.

Figure A.3: Attention as Conditional on Demographics and "Skin in the Game"



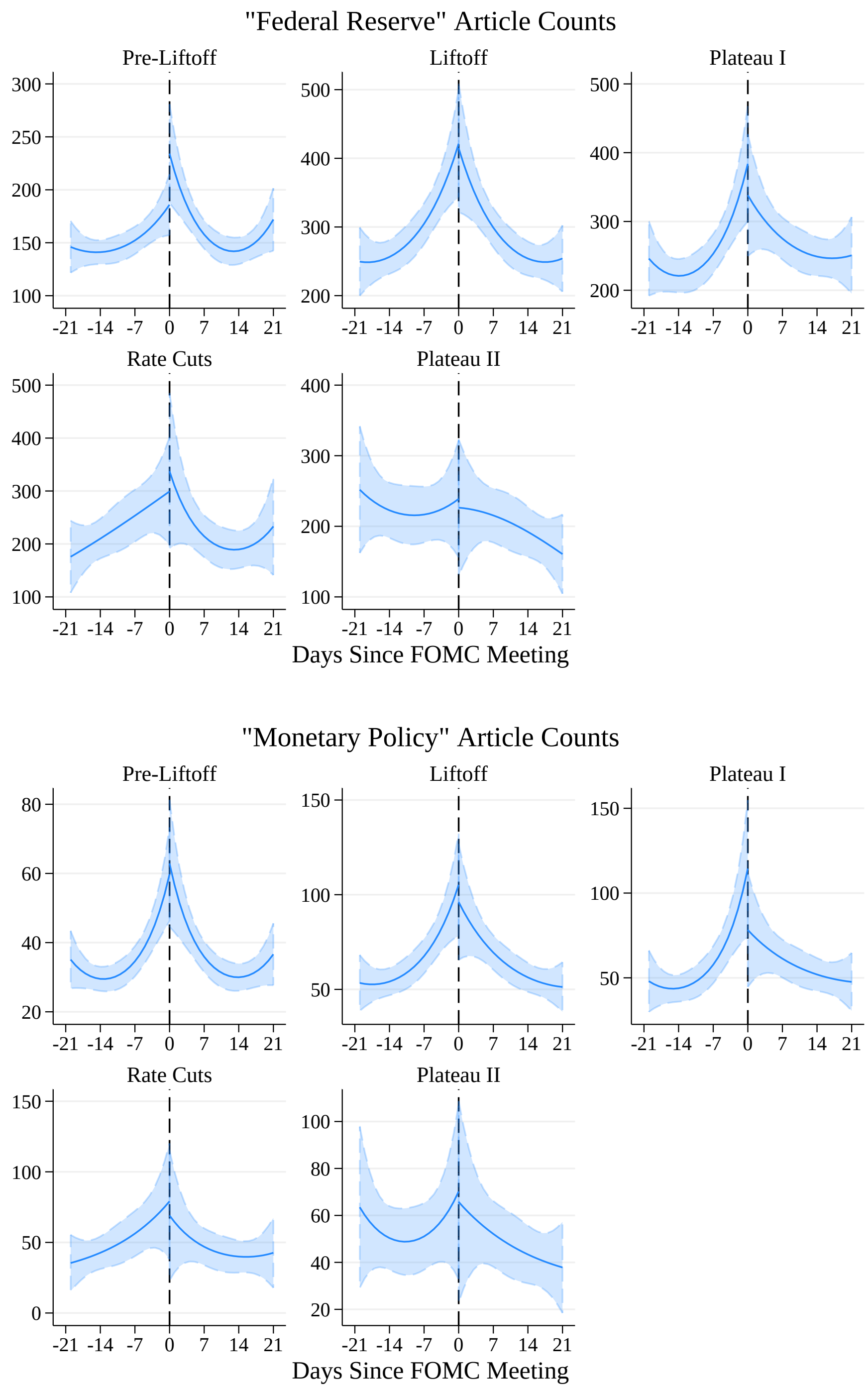
Note: The figure plots a histogram of the predicted probability of attention by education in the top two panels and income groups in the bottom two panels, implied from a linear probability model with monthly fixed effects and no other demographic controls. Each panel indicates the share of attentive consumers that have "skin in the game" (red) vs that do not (blue). "Skin in the game" is measured by plans to purchase housing in the left panels and plans to purchase a vehicle in the right panels.

Figure A.4: News Coverage Around FOMC Meetings



Note: The figure plots the evolution of fitted number of news articles about the Federal Reserve in the left panel and monetary policy in the right panel panel three weeks before and after FOMC meetings, with 0 being the day of the meetings. Specifically, the fitted values are computed from the estimates of the negative binomial regression: $Articles_t = \alpha + \beta_0 Days_t + \beta Days_t^2 + \mathbf{1}_{post}(Days_t + Days_t^2) + \varepsilon_t$, where $\mathbf{1}_{post}$ is a dummy variable taking a value of 1 for days after the FOMC meeting and 0 otherwise. Shaded areas show 95% confidence intervals. Data: Factiva.

Figure A.5: News Coverage around Various FOMC Meetings



Note: The figure plots the evolution of the fitted number of news articles about the Federal Reserve in top five panels and monetary policy in the bottom five panels panel for various FOMC meetings , using the same specification and data as in Figure A.4. Shaded areas show 95% confidence intervals. Pre-liftoff: 6/1/2020 to 3/2/2022; liftoff: from 3/3/2022 to 8/16/2023; plateau I: from 8/31/2023 to 8/21/2024; rate cuts: from 8/29/2024 to 1/8/2025; and plateau II: from 1/9/2025 to 7/9/2025.

B Rational Inattention Model: Details

This appendix derives properties of the rational inattention model in Section 2. We proceed in five steps:

B.1 – Optimal Consumption: We show that, due to imperfect information, optimal consumption depends on subjective expectations $E(r_t)$, not r_t itself. Forecast errors $\delta_{it} = r_t - E_{it}[r_t]$ cause consumers to make suboptimal consumption choices. Consumer i's consumption response to a real rate change is proportional to their attention level: $\frac{\partial c_{it}}{\partial r_t} \propto \kappa_i$.

B.2 – Welfare Losses from Inattention: We compute the welfare cost of imperfect information by comparing consumption under rational inattention to consumption under full information rational expectations (FIRE). We show that welfare losses are proportional to $[\beta + (1-\beta)a_i^2]\sigma^2_{r|s_i}$, which increases in both forecast error variance and "skin in the game."

B.3 – Testable Implications: We derive the six predictions tested in Section 4, including the key interaction effects.

B.4 – Planning Horizon Extension: We show how results extend when consumers plan purchases h periods ahead (explaining why one-month plans matter more than one-year plans).

B.5 – Aggregate Attention: We derive how communication affects aggregate attention and thus monetary policy transmission.

B.1 Optimal Consumption and Implied Borrowing

The consumer problem in Section 2.1 gives rise to the following Euler equation:

$$\frac{1}{C_{it}} = \beta \mathbb{E}_t \left(\frac{R_t}{C_{i,t+1}} \right). \tag{19}$$

The steady-state equilibrium condition for each consumer is given by:

$$\bar{C}_i = \bar{Y}_i + \frac{1-\beta}{\beta} \bar{B}_i, \tag{20}$$

where we have applied $\bar{R} = 1/\beta$. Henceforth, we denote log deviations of any variable from its steady-state value with small letters. Moreover, we define $b_{it} = ln(B_{it}/\bar{B}_i)$ if $\bar{B}_i > 0$; $b_{it} = ln(\mid B_{it} \mid / \mid \bar{B}_i \mid)$ if $\bar{B}_i < 0$; and $b_{it} = 0$ if $\bar{B}_i = 0$. Log-linearizing the intertemporal budget constraint in (2):

$$\bar{C}_i c_{it} + \bar{B}_i b_{it} = \bar{Y}_i y_{it} + \frac{\bar{B}_i}{\beta}(r_{t-1} + b_{i,t-1}). \tag{21}$$

Applying expectations on both sides of the budget constraint, we back out $\mathbb{E}_{it} b_{i,t-1}$, iterating it forward, and imposing a no-Ponzi scheme assumption, that is, $\lim_{h\to\infty} \beta^h \mathbb{E}_{it} b_{i,t+h} = 0$, we have:

$$\begin{aligned} \mathbb{E}_{it} b_{i,t-1} &= \mathbb{E}_{it}\left[\frac{\beta}{\bar{B}_i}(\bar{C}_i c_{it} - \bar{Y}_i y_{it}) + \beta b_{it} - r_{t-1}\right] \\ &= \mathbb{E}_{it}\sum_{h=0}^{\infty}\beta^h\left[\frac{\beta}{\bar{B}_i}(\bar{C}_i c_{i,t+h} - \bar{Y}_i y_{i,t+h}) - r_{t+h-1}\right] \\ &= \mathbb{E}_{it}\left[\frac{\beta\bar{C}_i}{\bar{B}_i}\sum_{h=0}^{\infty}\beta^h c_{i,t+h} - \frac{\beta\bar{Y}_i}{\bar{B}_i}y_{it} - r_{t-1} - \beta r_t\right]. \end{aligned} \tag{22}$$

Next, we linearize the Euler equation:

$$c_{it} = \mathbb{E}_t(c_{i,t+1} - r_t),$$

which we iterate forward h-periods to:

$$c_{it} = \mathbb{E}_{it}\left[c_{i,t+h} - \sum_{j=0}^{h-1} r_{t+j}\right] = \mathbb{E}_{it}(c_{i,t+h} - r_t). \tag{23}$$

Isolating $\mathbb{E}_t c_{i,t+h}$ for each $h \geq 1$ from the iterated Euler equation and plugging it into (22), we have:

$$\begin{aligned} \mathbb{E}_{it}(b_{i,t-1} + r_{t-1}) &= \frac{\beta\bar{C}_i}{\bar{B}_i(1-\beta)}c_{it} - \frac{\beta\bar{Y}_i}{\bar{B}_i}y_{it} + \mathbb{E}_{it}\left[\frac{\beta^2\bar{C}_i}{\bar{B}_i(1-\beta)}r_t - \beta r_t\right] \\ &= \frac{\beta\bar{C}_i}{\bar{B}_i(1-\beta)}c_{it} - \frac{\beta\bar{Y}_i}{\bar{B}_i}y_{it} + \frac{\beta}{\bar{B}_i(1-\beta)}\left(\beta\bar{C}_i - \bar{B}_i(1-\beta)\right)\mathbb{E}_{it} r_t, \end{aligned}$$

from where we can derive optimal consumption:

$$c_{it} = \frac{\bar{B}_i(1-\beta)}{\beta \bar{C}_i} \mathbb{E}_{it}(b_{i,t-1} + r_{t-1}) + \frac{\bar{Y}_i(1-\beta)}{\bar{C}_i} y_{it} - \left(\beta - \frac{\bar{B}_i(1-\beta)}{\bar{C}_i}\right) \mathbb{E}_{it} r_t. \tag{24}$$

The actual level of borrowing in t is pinned by the inter-temporal budget constraint in (21):

$$\begin{aligned}
\bar{B}_i b_{it} &= \bar{Y}_i y_{it} + \frac{\bar{B}_i}{\beta}(r_{t-1} + b_{i,t-1}) - \bar{C}_i c_{it} \\
&= \bar{Y}_i y_{it} + \frac{\bar{B}_i}{\beta}(r_{t-1} + b_{i,t-1}) \\
&- \frac{\bar{B}_i(1-\beta)}{\beta} \mathbb{E}_{it}(b_{i,t-1} + r_{t-1}) - \bar{Y}_i(1-\beta) y_{it} - (\bar{B}_i(1-\beta) - \bar{C}_i \beta) \mathbb{E}_{it} r_t.
\end{aligned}$$

Therefore:

$$\begin{aligned}
\bar{B}_i b_{it} = \beta \bar{Y}_i y_{it} + \bar{B}_i \mathbb{E}_{it}(b_{i,t-1} + r_{t-1}) - (\bar{B}_i(1-\beta) - \bar{C}_i \beta) \mathbb{E}_{it} r_t \\
+ \frac{\bar{B}_i}{\beta} \left[(r_{t-1} - \mathbb{E}_{it} r_{t-1}) + (b_{i,t-1} - \mathbb{E}_{it} b_{i,t-1}) \right].
\end{aligned} \tag{25}$$

The actual level of borrowing in period t, $\bar{B}_i b_{it}$, differs from the consumer's expectation $\bar{B}_i \mathbb{E}_{it}(b_{it})$. This occurs because consumers choose consumption c_{it} based on their beliefs $E_{it} r_t$ and $E_{it} b_{i,t-1}$, but the budget constraint (2) determines actual borrowing using the true values r_{t-1} and $b_{i,t-1}$. The difference between actual and expected borrowing reflects the forecast errors:

$$\bar{B}_i(b_{it} - \mathbb{E}_{it} b_{it}) = \frac{\bar{B}_i}{\beta} [(r_{t-1} - \mathbb{E}_{it} r_{t-1}) + (b_{i,t-1} - \mathbb{E}_{it} b_{i,t-1})].$$

Taking the derivative of optimal consumption (24) with respect to the real interest rate:

$$\frac{\partial c_{it}}{\partial r_t} = -\left(\beta - \frac{\bar{B}_i(1-\beta)}{\bar{C}_i}\right) \frac{\partial E_{it} r_t}{\partial r_t}. \tag{26}$$

Under rational inattention with signal $s_{it} = r_t + \nu_{it}$ (seen in (5)), the consumer forms expectations using the Kalman filter:

$$E_{it}r_t = \kappa_i s_{it} = \kappa_i r_t + \kappa_i \nu_{it}, \tag{27}$$

where $\kappa_i = 1 - \sigma^2_{r|s_i}/\sigma^2_r \in [0,1]$ is the Kalman gain, the consumer's optimal attention level. Because the consumer updates their belief about r_t only partially based on the noisy signal s_{it}, we have:

$$\frac{\partial E_{it}r_t}{\partial r_t} = \kappa_i. \tag{28}$$

Substituting (28) into (26) and using the definition $a_i = \bar{B}_i/\bar{C}_i$ (the consumer's "skin in the game"), we obtain:

$$\frac{\partial c_{it}}{\partial r_t} = -[\beta - a_i(1-\beta)]\kappa_i. \tag{29}$$

Consumers' consumption response to interest rate changes is proportional to their attention. Inattentive consumers (low κ_i) barely adjust consumption when rates change, dampening monetary transmission. This result directly implies equation (18) in the main text linking aggregate consumption responses to aggregate attention.

B.2 Optimal Rational Inattention

Define FIRE consumption, c^*_{it}, as the consumption that would obtain if the consumer observed r_t perfectly (i.e., (24) with $E_{it}r_t = r_t$).

Under FIRE:

$$c^*_{it} = \frac{\bar{B}_i(1-\beta)}{\beta\bar{C}_i}(b^*_{i,t-1} + r_{t-1}) + \frac{\bar{Y}_i(1-\beta)}{\bar{C}_i}y_{it} - \left(\beta - \frac{\bar{B}_i(1-\beta)}{\bar{C}_i}\right)r_t, \tag{30}$$

and optimal implied borrowing is:

$$\bar{B}_i b^*_{it} = \beta\bar{Y}_i y_{it} + \bar{B}_i(b^*_{i,t-1} + r_{t-1}) - (\bar{B}_i(1-\beta) - \bar{C}_i\beta)r_t. \tag{31}$$

We quantify the cost of imperfect information by comparing consumption under rational inattention to this FIRE benchmark. Under FIRE, consumers observe the real interest rate perfectly and make optimal consumption choices; under rational inattention, forecast errors cause welfare-reducing consumption mistakes.

To solve the attention problem in (7), we first derive the welfare loss function $\mathbb{W}\left(\sigma^2_{r|s_i}\right)$. This captures the utility cost from imperfect information as the difference between the second-order approximation of the utility function in (1) under rational inattention and FIRE. We rely on the derivations and results in the Online Appendix of Maćkowiak and Wiederholt (2015): setting $\gamma = 1$ (log utility) and $\omega_W = 0$ (no labor income) in their equation (79), we get the following expression for welfare losses due to inattention:

$$\mathbb{W}\left(\sigma^2_{r|s_i}\right) = \mathbb{E}_{-1,i}\sum_{h=0}^{\infty}\beta^t\left[-\frac{1}{2}\left(c_{it}-c^*_{it}\right)^2\right]. \tag{32}$$

Next, we derive an expression for $c_{it} - c^*_{it}$:

$$\begin{aligned} c_{it} - c^*_{it} = &\left(\beta - \frac{\bar{B}_i(1-\beta)}{\bar{C}_i}\right)(r_t - \mathbb{E}_{it}r_t) \\ &- \frac{\bar{B}_i(1-\beta)}{\beta\bar{C}_i}(r_{t-1} - \mathbb{E}_{it}r_{t-1}) - \frac{\bar{B}_i(1-\beta)}{\beta\bar{C}_i}(b^*_{i,t-1} - \mathbb{E}_{it}b_{i,t-1}). \end{aligned} \tag{33}$$

Then:

$$\begin{aligned} \bar{B}_i(b^*_{i,t-1} - \mathbb{E}_{it}b_{i,t-1}) &= \bar{B}_i(b^*_{i,t-2} + r_{t-2}) - (\bar{B}_i(1-\beta) - \beta\bar{C}_i)r_{t-1} \\ &\quad - \mathbb{E}_{it}\left[\mathbb{E}_{i,t-1}\left(\bar{B}_i(b^*_{i,t-2} + r_{t-2}) - (\bar{B}_i(1-\beta) - \beta\bar{C}_i)r_{t-1}\right)\right] \\ &= \bar{B}_i(b^*_{i,t-2} - \mathbb{E}_{i,t-1}b_{i,t-2}) + \bar{B}_i(r_{t-2} - \mathbb{E}_{i,t-1}r_{t-2}) \\ &\quad - (\bar{B}_i(1-\beta) - \beta\bar{C}_i)(r_{t-1} - \mathbb{E}_{i,t-1}r_{t-1}), \end{aligned} \tag{34}$$

where we have used the fact that $\mathbb{E}_{it}(\mathbb{E}_{i,t-1}(\mathbb{E}_{i,t-2}(....(\mathbb{E}_{i,t-j}b_{i,t-j})...))) = \mathbb{E}_{i,t-j}b_{i,t-j}$ and that $\mathbb{E}_{it}r_{t-1} = \mathbb{E}_{i,t-1}r_{t-1}$ (since signals are uncorrelated over time). Let $\delta_{it} = r_t - \mathbb{E}_{it}r_t$ be the real rate forecast error and $\mu_{i,t-1} = \bar{B}_i(b^*_{i,t-1} - \mathbb{E}_{it}b_{i,t-1})$ be the difference between actual bond holdings under full information and expected previous period's bond holdings under imperfect information. Then, consumption relative to perfect information is given by:

$$c_{it} - c_{it}^{*} = -\frac{(1-\beta)}{\beta\bar{C}_i}\mu_{i,t-1} + \left(\beta - \frac{\bar{B}_i(1-\beta)}{\bar{C}_i}\right)\delta_{it} - \frac{\bar{B}_i(1-\beta)}{\beta\bar{C}_i}\delta_{i,t-1}. \tag{35}$$

For simplicity, we assume that $\mu_{i,-1} = 0$ and $\delta_{i,-1} = 0$ for all consumers. Iterating forward (34), we get the following expression for $\mu_{i,t-1}$:

$$\begin{aligned}
\mu_{i,t-1} &= \mu_{i,t-2} + (\bar{B}_i(1-\beta) - \beta\bar{C}_i)\delta_{i,t-1} - \bar{B}_i\delta_{t-2} \\
&= (\bar{B}_i(1-\beta) - \beta\bar{C}_i)\sum_{0}^{t-1}\delta_{i,t-h-1} - \bar{B}_i\sum_{0}^{t-2}\delta_{t-h-2} \\
&= (\bar{B}_i(1-\beta) - \beta\bar{C}_i)\delta_{i,t-1} - \beta(\bar{B}_i + \bar{C}_i)\sum_{h=0}^{t-2}\delta_{i,t-h-2}.
\end{aligned}$$

Therefore:

$$\begin{aligned}
c_{it} - c_{it}^{*} = &\left(\beta - \frac{\bar{B}_i(1-\beta)}{\bar{C}_i}\right)\delta_{it} - \frac{\bar{B}_i(1-\beta)}{\beta\bar{C}_i}\delta_{i,t-1} \\
&+ \frac{(1-\beta)(\bar{B}_i(1-\beta) - \beta\bar{C}_i)}{\beta\bar{C}_i}\delta_{i,t-1} - \frac{(1-\beta)(\bar{B}_i + \bar{C}_i)}{\bar{C}_i}\sum_{h=0}^{t-2}\delta_{i,t-h-2} \\
= &\left(\beta - \frac{\bar{B}_i(1-\beta)}{\bar{C}_i}\right)\delta_{it} - \frac{(1-\beta)(\bar{B}_i + \bar{C}_i)}{\bar{C}_i}\sum_{h=0}^{t-1}\delta_{i,t-h-1}.
\end{aligned} \tag{36}$$

Note that forecast errors are uncorrelated over time and that $\mathbb{E}_{i,-1}(\delta_{it}^2) = \sigma_{r|s_i}^2$. Therefore, we have that:

$$\begin{aligned}
\mathbb{E}_{i,-1}\sum_{t=0}^{\infty}\beta^t(c_{it} - c_{it}^{*})^2 &= \frac{1}{1-\beta}\left[\left(\beta - \frac{\bar{B}_i(1-\beta)}{\bar{C}_i}\right)^2 + \beta(1-\beta)\left(\frac{(\bar{B}_i + \bar{C}_i)}{\bar{C}_i}\right)^2\right]\sigma_{r|s_i}^2 \\
&= \frac{1}{1-\beta}\left[(\beta - a_i(1-\beta))^2 + \beta(1-\beta)(a_i+1)^2\right]\sigma_{r|s_i}^2 \\
&= \frac{\beta + (1-\beta)a_i^2}{1-\beta}\sigma_{r|s_i}^2.
\end{aligned} \tag{37}$$

Welfare losses increase with both forecast error variance $\sigma_{r|s_i}^2$ and skin in the game. High skin in the game consumers lose more from errors, justifying higher attention.

Hence, the rational inattention problem of the consumer stated in (7) is explicitly given by:

$$\min_{\sigma^2_{r|s_i} \leq \sigma^2_r} \left[-\frac{1}{2(1-\beta)} \left((\beta + (1-\beta)a_i^2)\sigma^2_{r|s_i} + \lambda_i(log_2\sigma^2_r - \log_2 \sigma^2_{r|s_i}) \right) \right], \tag{38}$$

from where it is straightforward to see that the optimal signal noise is given by:

$$\sigma^2_{r|s_i} = \min\left(\sigma^2_r, \frac{\lambda_i}{(\beta + (1-\beta)a_i^2)(ln2)} \right). \tag{39}$$

B.3 Testable Implications

Let κ_{it} denote consumer i's attention in period t. Each consumer has skin in the game, $|a_i|$, and faces information cost, $\lambda_{it} = \lambda_i + \lambda_t$, where λ_i is individual-specific and λ_t is aggregate. Given interest rate volatility σ^2_{rt} in period t, optimal attention is:

$$\kappa_{it} = 1 - \frac{\lambda_{it}}{(ln2)\sigma^2_{rt}(\beta + (1-\beta)a_i^2)}. \tag{40}$$

Equation (40) assumes consumers treat current-period volatility σ_{rt} and information costs λ_{it} as given when solving their rational inattention problem:

$$\min_{\sigma^2_{r|s_{it}} \leq \sigma^2_{rt}} \left[-\frac{1}{2(1-\beta)} \left((\beta + (1-\beta)a_i^2)\sigma^2_{r|s_{it}} + \lambda_i(log_2\sigma^2_{rt} - \log_2 \sigma^2_{r|s_{it}}) \right) \right]. \tag{41}$$

Equation (40) reveals three properties that drive our empirical strategy. First, attention increases in individual stakes ($|a_i|$ enters the denominator as a_i^2) and volatility (σ^2_{rt}), but decreases in costs (λ_{it}). Second, the denominator shows these factors interact: higher $|a_i|$ dampens the marginal effects of λ_t and σ^2_{rt}. Third, both individual differences (cross-section) and aggregate shocks (time series) drive attention dynamics.

Corollary 1 formalizes all six testable implications from Section 2.3.

Corollary 1. *Let attention to monetary policy of consumer i be given by equation (40).*

Then, the following statements are true:

1. *Attention is increasing in a consumer's "skin in the game,"* $|a_i|$.
2. *Attention is decreasing in a consumer's individual cost of information,* λ_i.
3. *Attention is decreasing in the aggregate cost of information,* λ.
4. *Attention is increasing in interest rate volatility* σ_{rt}.
5. *The marginal effect of a change in the aggregate unit cost of information on attention is decreasing in the "skin in the game."*
6. *The marginal effect of a change in interest rate volatility on attention is decreasing in the "skin in the game."*

Proof. 1. Taking the first-order derivative of κ_i with respect to $|a_i|$ we have:

$$\frac{\partial \kappa_{it}}{\partial |a_i|} = \frac{2\lambda_{it}|a_i|(1-\beta)}{(\beta + (1-\beta)a_i^2)^2 \sigma_{rt}^2 (ln2)} > 0.$$

2. Taking the first-order derivative of κ_{it} with respect to λ_i we have:

$$\frac{\partial \kappa_{it}}{\partial \lambda_i} = -\frac{1}{(\beta + (1-\beta)a_i^2)\sigma_{rt}^2 (ln2)} < 0. \tag{42}$$

3. Taking the first-order derivative of κ_{it} with respect to λ_t we have:

$$\frac{\partial \kappa_{it}}{\partial \lambda_t} = -\frac{1}{(\beta + (1-\beta)a_i^2)\sigma_{rt}^2 (ln2)} < 0. \tag{43}$$

4. Taking the first-order derivative of κ_i with respect to σ_{rt} we have:

$$\frac{\partial \kappa_{it}}{\partial \sigma_{rt}} = \frac{2\lambda_{it}}{(\beta + (1-\beta)a_i^2)\sigma_{rt}^3 (ln2)} > 0. \tag{44}$$

5. We take the partial derivative of $\frac{\partial \kappa_{it}}{\partial \lambda_t}$ in (43) with respect to $|a_i|$:

$$\frac{\partial^2 \kappa_{it}}{\partial \lambda_t \partial |a_i|} = \frac{2(1-\beta)|a_i|}{(\beta + (1-\beta)a_i^2)^2 \sigma_{rt}^2 (ln2)} > 0. \tag{45}$$

The marginal effect of λ_t on attention gets closer to 0 the higher is "skin in the game."

6. We take the partial derivative of $\frac{\partial \kappa_{it}}{\partial \sigma_{rt}^2}$ in (44) with respect to $|a_i|$:

$$\frac{\partial^2 \kappa_{it}}{\partial(\sigma_{rt})\partial|a_i|} = -\frac{4\lambda_i(1-\beta)|a_i|}{(\beta+(1-\beta)a_i^2)^2\sigma_{rt}^3(ln2)} < 0. \quad (46)$$

The marginal effect of σ_{rt} on attention gets closer to 0 the higher is "skin in the game."

□

We now focus on the extensive margin of attention to monetary policy. The probability that consumer i is attentive is given by:

$$Pr(|a_i| \geq a_{it}^*) = 1 - \Phi(a_{it}^*), \quad (47)$$

where $\Phi(a_i^*)$ is the cumulative probability distribution of $|a|$.

Corollary 2. *The probability of being attentive to monetary policy of consumer i is given by equation (47). Then, the following statements are true:*

1. *Consumers with high "skin in the game" are more likely to be attentive.*
2. *Lower individual cost of information λ_i increases the probability of being attentive.*
3. *Lower aggregate cost of information λ_t increases the probability of being attentive.*
4. *Higher interest rate volatility σ_{rt} increases the probability of being attentive.*
5. *The marginal effect of a change in the aggregate unit cost of information on the probability of attention decreases in the "skin in the game."*
6. *The marginal effect of a change in interest rate volatility on the probability of attention decreases in the "skin in the game."*

Proof. Statement 1 follows from the fact that $1 - \Phi(a_{it}^*) = 1$ for any consumer with $|a_i| \geq a_{it}^*$, but $1 - \Phi(a_{it}^*) = 0$ otherwise. Statements 2 through 4 follow from the following three partial derivatives:

$$\begin{aligned}\frac{\partial(1-\Phi(a_{it}^*))}{\partial\lambda_i} &= -\frac{\partial\Phi(a_{it}^*)}{\partial a_{it}^*}\frac{a_{it}^*}{\partial\lambda_i} < 0;\\ \frac{\partial(1-\Phi(a_{it}^*))}{\partial\lambda_t} &= -\frac{\partial\Phi(a_{it}^*)}{\partial a_{it}^*}\frac{\partial a_{it}^*}{\partial\lambda_t} < 0;\\ \frac{\partial(1-\Phi(a_{it}^*))}{\partial\sigma_{rt}} &= -\frac{\partial\Phi(a_{it}^*)}{\partial a_{it}^*}\frac{a_{it}^*}{\partial\sigma_{rt}} > 0.\end{aligned} \tag{48}$$

To prove statement 5, consider an increase in λ_t that increases a_{it}^* from $\underline{a}_{it}^*$ to $\bar{a}_{it}^*$. Then, the change in the probability of being attentive is given by:

$$\Phi(\bar{a}_{it}^*) - \Phi(\underline{a}_{it}^*) = \begin{cases} 0 & \text{if } |a_i| \geq \bar{a}_{it}^* \\ -1 & \text{if } \underline{a}_{it}^* \leq |a_i| < \bar{a}_{it}^* \\ 0 & \text{if } |a_i| < \bar{a}_{it}^*. \end{cases} \tag{49}$$

Note that in the data we measure the extensive margin of "skin in the game." Considering the high "skin in the game" consumers to always be the ones with $|a_i| \geq \bar{a}_{it}^*$ and low "skin in the game" consumers everyone else, we have that the change in the probability of being attentive, following a change in λ_t affects consumers with sufficiently low "skin in the game." A similar proof holds for statement 6. □

B.4 Planning Horizon Extension

In this subsection, we consider a situation where consumers' attention can start having an effect on their uncertainty only h periods ahead, that is, the problem becomes:

$$\min_{\sigma^2_{r|s_{it}} \leq \sigma^2_{rt}} \left[-\frac{1}{2(1-\beta)} \left(\beta^h(\beta + (1-\beta)a_i^2)\sigma^2_{r|s_i} + \lambda_{it}(log_2\sigma^2_{rt} - \log_2 \sigma^2_{r|s_{it}}) \right) \right], \tag{50}$$

from where it is straightforward to see that the optimal attention is given by:

$$\kappa_{it} = 1 - \frac{\lambda_{it}}{\beta^h(ln2)\sigma^2_{rt}(\beta + (1-\beta)a_i^2)}, \tag{51}$$

for any $|a_i| \geq a^*_{i,h} = \sqrt{\frac{\lambda_{it}}{\beta^h(1-\beta)(ln2)\sigma^2_{rt}} - \frac{\beta}{1-\beta}}$. Corollary 3 proves testable implications related to the planning horizon, consistent with the evidence reported in Tables 5 and 6 in the main text.

Corollary 3. *Let attention to monetary policy of consumer i be given by equation (51). Then, the following statements are true:*

1. *Attention is decreasing in the planning horizon h.*
2. *The (negative) marginal effect of a change in the aggregate unit cost of information on attention is increasing in the planning horizon h.*
3. *The (positive) marginal effect of a change in interest rate volatility on attention is increasing in the planning horizon h.*

Proof. 1. Taking the first-order derivative of κ_{it} with respect to h we have:

$$\frac{\partial \kappa_{it}}{\partial h} = \frac{\lambda_{it} ln(\beta)}{\beta^h(\beta + (1-\beta)a_i^2)\sigma^2_{rt}(ln2)} < 0.$$

2. Taking the first-order derivative of κ_{it} with respect to λ_t we have:

$$\frac{\partial \kappa_{it}}{\partial \lambda_t} = -\frac{1}{\beta^h(\beta + (1-\beta)a_i^2)\sigma^2_{rt}(ln2)} < 0. \tag{52}$$

We then take the partial derivative of $\frac{\partial \kappa_{it}}{\partial \lambda_t}$ with respect to h:

$$\frac{\partial^2 \kappa_{it}}{\partial \lambda_t \partial h} = \frac{ln(\beta)|a_i|}{\beta^h(\beta + (1-\beta)a_i^2)\sigma^2_{rt}(ln2)} < 0. \tag{53}$$

A change in λ_t has a smaller effect on the attention of consumers with plans in the nearer future.

3. Taking the first-order derivative of κ_{it} with respect to σ_{rt} we have:

$$\frac{\partial \kappa_{it}}{\partial \sigma_{rt}} = \frac{2\lambda_{it}}{\beta^h(\beta + (1-\beta)a_i^2)\sigma^3_{rt}(ln2)} > 0. \tag{54}$$

We then take the partial derivative of $\frac{\partial \kappa_{it}}{\partial \sigma_{rt}}$ with respect to h:

$$\frac{\partial^2 \kappa_{it}}{\partial \sigma_{rt} \partial h} = -\frac{2\sigma_{rt}\lambda_{it} ln(\beta)|a_i|}{\beta^h(\beta + (1-\beta)a_i^2)\sigma_{rt}^2(ln2)} > 0. \tag{55}$$

A change in σ_t has a smaller effect on the attention of consumers with plans in the nearer future.

□

B.5 Aggregate Attention to Monetary Policy

Aggregate attention to monetary policy, following communication, is given by:

$$\begin{aligned}\mathcal{K}_p = 2\int_{a_p^*}^{\infty}\left(1 - \frac{\lambda_p^*}{(ln2)\sigma_r^2(\beta + (1-\beta)a^2)}\right)\phi(a)da \\ + \mathbb{1}_{a_p^* > a^*} 2\int_{a^*}^{a_p^*}\left(1 - \frac{\lambda}{(ln2)\sigma_r^2(\beta + (1-\beta)a^2)}\right)\phi(a)da.\end{aligned} \tag{56}$$

Using the Leipniz rule, we show that $\mathcal{K}_p$ increases in σ_r^2:

$$\begin{aligned}\frac{\partial \mathcal{K}_p}{\partial \sigma_r} = & \underbrace{4\int_{a_p^*}^{\infty}\frac{\lambda_p^*}{ln2\sigma_r^3(\beta + (1-\beta)a^2)}\phi(a)da}_{+} \\ & + \mathbb{1}_{a_p^* > a^*}\underbrace{2\left(1 - \frac{\lambda}{ln2\sigma_r^2(\beta + (1-\beta)(a_p^*)^2)}\right)}_{=2\frac{\lambda_p^* - \lambda}{\lambda_p^*} < 0}\underbrace{\frac{\partial a_p^*}{\partial \sigma_r^2}}_{-}\phi(a_p^*) \\ & + \underbrace{\mathbb{1}_{a_p^* > a^*} 4\int_{a^*}^{a_p^*}\frac{\lambda}{ln2\sigma_r^3(\beta + (1-\beta)a^2)}\phi(a)da}_{+}.\end{aligned} \tag{57}$$

The positive effect operates through two channels: (i) *intensive margin*—the first and third integrals capture existing attentive consumers increasing κ_i, and (ii) *extensive margin*—the middle term captures consumers crossing the attention threshold a_p^* (when $a_p^* > a^*$).

C Proofs

C.1 Proof of Proposition 2

We solve this by showing $L(\lambda_p(i))$ has a unique minimum, which depends on $|a_i|$. For any consumer with a_i, the policymaker chooses $\lambda_p(i)$ to:

$$\min_{\lambda_p(i)\geq\lambda} \left(\mathbb{V}(\lambda_p(i);a_i,\sigma_r^2) + g(\lambda_p(i))\right).$$

To ease notation, we define $\mathcal{L}_i = \mathbb{V}(\lambda_p(i);a_i,\sigma_r^2) + g(\lambda_p(i))$, that is:

$$\mathcal{L}(\lambda_p(i)) = \begin{cases} \sigma_r^2 \frac{\beta+(1-\beta)a_i^2}{2(1-\beta)} + g(\lambda_p(i)) & \text{if } \lambda_p(i) > (ln2)\sigma_r^2[\beta + (1-\beta)a_i^2] \equiv \bar{\lambda}_i \\ \frac{\lambda_p(i)}{2ln2(1-\beta)} + g(\lambda_p(i)) & \text{otherwise.} \end{cases}$$

$\mathcal{L}(.)$ is decreasing and convex for any $\lambda_p(i) > \bar{\lambda}_i$. If $\mathcal{L}(.)$ is also decreasing for $\lambda_p(i) \leq \bar{\lambda}_i$, then $\mathcal{L}(.)$ is minimized for $\lambda_p(i) = \lambda$. Since $g(\lambda) = 0$, we have that $\mathcal{L}(\lambda) > 0$ and that $\mathcal{L}(\lambda_p(i)) = 0$ for some $\lambda_p(i) > \lambda$.

Otherwise, suppose $\mathcal{L}(.)$ has a local minimum at $\underline{\lambda}_p \in [0,\bar{\lambda}_i]$, where $\underline{\lambda}_p$ satisfies $g'(\underline{\lambda}_p) = -1/(2ln2(1-\beta))$. If $\lambda < \underline{\lambda}_p$, then the solution of the problem is λ. If $\bar{\lambda}_i \leq \lambda$, then the solution is $\underline{\lambda}_p$ iff $\mathcal{L}(\underline{\lambda}_p) = \frac{\underline{\lambda}_p}{2ln2(1-\beta)} + g(\underline{\lambda}_p) < \mathcal{L}(\lambda) = \sigma_r^2 \frac{\beta+(1-\beta)a_i^2}{2(1-\beta)} \iff |a_i| > \sqrt{\frac{\underline{\lambda}_p}{(ln2)\sigma_r^2(1-\beta)} - \frac{\beta}{1-\beta} + 2\frac{g(\underline{\lambda}_p)}{\sigma_r^2}}$. Therefore, there exists a unique optimal unit cost of information $\lambda_p^* = \underline{\lambda}_p < \lambda$ applied to any consumer whose "skin in the game" satisfies $|a_i| > \sqrt{\frac{\lambda_p^*}{(ln2)\sigma_r^2(1-\beta)} - \frac{\beta}{1-\beta} + 2\frac{g(\lambda_p^*)}{\sigma_r^2}}$.