Research Statement

Francesco Amodeo *UC San Diego*

> *"Perhaps most importantly, we need to know more about the manner in which expectations are formed and how policy influences them."* Janet Yellen, 2016[1]

I am a macroeconomist. My research agenda is theoretical in discipline and empirical in structure: I believe in a research philosophy in which conceptual clarity precedes measurement. My approach to scientific investigation can be summarized by Albert Einstein's dictum *"It is the theory which decides what we can observe"*[2], which I hold has a special and renewed significance for social sciences. Theory defines the bounds of each question, making measurement precise and interpretable. Data not only executes, but motivates and extends the scope of research.

I apply these principles to the formation, evolution and effects of the expectations of economic agents. The increasing availability of information and processing tools makes modern economies ever more reliant on the degree of anticipation decision-makers embed in economic decisions, making forward-looking behavior central for positive and normative research. My work examines both, and includes:

(i) the origins and consequences of disagreement for the design of policy;
(ii) how financial markets anticipate and *price* expectations of future policy events;
(iii) the nature of the deviations from benchmark models of expectation formation;
(iv) the role of autonomous fluctuations in expectations for macroeconomic dynamics.

In what follows, I outline how my current working papers contribute to this agenda and to our understanding of key themes in macroeconomics and finance.

1 Expectations in Monetary Policy

1.1 Disagreement and Credibility for Monetary Transmission

How does interest rate disagreement affect monetary policy's transmission and effectiveness? My Job Market Paper provides an answer to this question.

Monetary policy works through beliefs as much as through rates. The literature often assumes the Fed and markets share information and outlook; I show they do not. From 1990 to 2019, Fed–Market policy rate paths diverge persistently, at times by more than 250 basis points. I find that transmission moves with this gap. When beliefs are aligned, monetary shocks shape activity with familiar dynamics. As disagreement rises, effects weaken and can even flip sign. Quantitatively, a 25-bp rise in average disagreement over the future path of policy cuts the 12-month output response by roughly half. These facts reframe credibility and communication as core state variables of monetary policy.

[1] Yellen (2016).
[2] Heisenberg (1970).

I show that incorporating a new, real-time index of Fed–Market disagreement into standard VARs improves the forecasts of macroeconomic variables, indicating valuable predictive content for policy decisions. Thus, I introduce a novel specification to study the state-dependent effects of disagreement on policy, finding that these expectations differentials dramatically reduce the impact of monetary shocks. Prevailing narratives postulate that markets might interpret policy as reflecting the Fed's superior information about future fundamentals, yielding puzzling findings like the counterintuitive impulse responses I report. However, I show that forecast comparison and information advantage tests find no evidence of a Fed edge, undermining this hypothesis. Instead, I advance a parsimonious belief-based theory of monetary transmission. First, I show that disagreement can arise intuitively and tractably in a generalized New Keynesian framework, entering the Euler equation as a wedge. Second, I establish formally that tracking the intertemporal dynamics of disagreement provides a simple rationalization of the evidence I document. Finally, I derive a general model of learning, decomposing disagreement into (misaligned) expectations of fundamentals, the policy rule, and guidance, contributing to a disciplined understanding of its sources.

1.2 Predictability and the Identification of Monetary Shocks

Correct identification of shocks determines what we learn about monetary non-neutrality. Recent contributions find a problematic predictability in commonly used instruments. Orthogonalization addresses this by removing the predictable component of high-frequency "surprises" using information available at the decision time, making the resulting shocks usable as instruments.

In Amodeo (2025a), I revisit a leading shock series (Bauer and Swanson (2023)) that aggregates FOMC-day surprises to months and only then purges them with respect to news ("sum-then-purge"). I show that the order of orthogonalization is a core identification choice, and establish why "sum-then-purge" leaves later-meeting news embedded, inflating instrumental strength and biasing inference. Thus, I purge each FOMC-day surprise of all contemporaneous releases and only then aggregate ("purge-then-sum"). This correction targets the object economists want, the innovation, and it enforces unpredictability at the observation level.

The emerging facts change dramatically. First-stage F-statistics collapse across rate series, and external-instrument SVARs yield no significant macro responses. The operational takeaway is simple: when taking seriously the robust evidence of predictability of monetary policy surprises, precise identification hinges on the timing of the orthogonalization. The only correct way to do so is to purge before aggregation.

2 Expectations in Fiscal Policy

2.1 High-Frequency Cross-Sectional Identification

How does the economy respond to *anticipated* changes in government spending? In Amodeo and Briganti (2025), we tackle this question by leveraging LLM methods to narratively identify salient events that shifted U.S. defense-spending expectations. Next, we validate each episode and quantify investors' expectations by examining abnormal fluctuations in defense contractors' stock returns. Finally, we extract the anticipated fiscal shocks via cross-sectional regressions

derived from a standard asset-pricing framework, exploiting each contractor's differential elasticity to government spending as proxied by its *reliance* on Department of Defense (DoD) procurement.

We show that the model predicts that, around an event of interest, contractors will exhibit returns proportional to the expected change in spending, scaled by each contractor's reliance. For example, if Lockheed Martin and Boeing derive, respectively, 70% and 30% of their sales from DoD contracts, a given military news shock will, on average, affect Lockheed Martin's stock price more than Boeing's. Leveraging this insight, we use cross-sectional variation in contractors' returns to quantify expected *aggregate* fiscal shocks. We label this approach high-frequency cross-sectional (HFXS) identification, and we show that (*i*) it is transparent, parsimonious, and portable; (*ii*) it *directly* quantifies the sign and the magnitude of each shock; (*iii*) it minimizes subjectivity by exploiting priced-in expectations at high frequency.

Applied to the United States post-2000, the method isolates 12 major fiscal episodes and produces a daily series of defense-spending news. We study real effects in a shift-share design at the MSA level, using HFXS shocks as the "shift." The two-year cross-sectional multiplier is about 1: an extra dollar of defense outlays raises local GDP by roughly a dollar two years later.
In summary, we exploit stock price variation to extract expectational shocks, disciplining the fiscal multiplier debate and providing a portable template for anticipated policy in other domains.

3 Expectation Formation and Propagation

3.1 Strategic Forecasting

Economists and policymakers routinely read "expectations" off surveys. Surveys, however, present inconsistencies and apparent anomalies. In Amodeo (2025c), I address a central puzzle in the behavioral macroeconomics literature: consensus forecasts underreact to news, while individual forecasters overreact. I argue the gap is strategic, not cognitive. I show that forecasts may differ from conditional expectations, and model professional forecasters as balancing accuracy with the incentive to stand out in a beauty contest framework. If forecasts are partly strategic, survey responses constitute biased measures of expectations, thereby misrepresenting learning, rigidities, and the effects of shocks.

I build a simple framework that separates information from strategy. Importantly, I innovate on standard incomplete information representations, treating private information as part of the outcome some participants already know. This yields a parsimonious, testable structure. It explains why the consensus moves too little while individuals move too much. Moreover, the expectation formation mechanism implies restrictions that I take to the data. Formal tests corroborate the model's restrictions and its logic, showing that estimated strategic motives are large, often exceeding half the weight on accuracy.

In summary, I replace the *wilderness of alternatives* to rational expectations with a unified, rational account of influential observed anomalies. By incorporating strategic incentives into measured expectations, my results suggest caution against using forecasts as direct measures of expectations.

3.2 Disagreement in Professional Forecasting

In Amodeo, Qu and Timmermann (2025), we assemble panels of professional forecasts from the Survey of Professional Forecasters and Bloomberg, spanning multiple variables and horizons, to distill a set of novel facts about professional forecasting. First, we introduce a peer-adjusted accuracy metric that scales errors by period-by-period uncertainty; skills differ by up to 50% and are right-skewed, with a sizable tail of chronic underperformers. Second, no individual consistently beats an equal-weighted average, which sets an empirical upper bound on accuracy and limits information asymmetry. Third, performance persistence is strong in the bottom quartile and only mild at the top. Fourth, forecasting skills comove across variables, especially around broad activity composites. Fifth, broader variable coverage is only weakly associated with skill, whereas update frequency is strongly predictive. Sixth, individual overreaction is common and most pronounced among the worst performers. Seventh, at each point in time, disagreement – forecasts'n cross-sectional dispersion – is higher for revisers than for non-revisers.

We use these facts to discipline models of expectation formation. Popular single-friction frameworks like sticky or noisy information cannot jointly match most of these newly documented facts. We advance a parsimonious heterogeneous-agent hybrid model that nests both and adds cross-sectional heterogeneity along two margins, updating frequency and signal precision. The structure is tightly parameterized and calibrated to the documented moments, matching persistence, right-skew, cross-variable comovement, and revision behavior. The result is a disciplined mapping from observable survey behavior to underlying information frictions that improves measurement and raises the bar for models that aim to explain forecast data.

3.3 Confidence Cycles

What is the role of confidence ("animal spirits") in credit-driven booms and busts? In Amodeo and Giovanardi (2025), we address a classic question in macroeconomics with a clear-sighted application: the 2007-2008 Great Financial Crisis. The profession has hardly identified quantitatively compelling mechanisms to rationalize the largest recession of the modern era. This is what this paper aims to provide.

We operationalize confidence as belief shifts orthogonal to fundamentals and we identify them using the University of Michigan's Survey of Consumers. In a monthly VAR, we exploit the preliminary releases of the Michigan Sentiment Index to impose timing and recover confidence shocks. Empirically, we find that a positive shock lifts house prices, credit, and output with familiar persistence. Moreover, through forecast error variance decompositions, we show that confidence explains a material share of house-price variation ($\approx 20\%$ over 1987–2019).

Thus, we estimate a medium-scale DSGE model with collateral constraints and nominal and real rigidities. Confidence enters the model through perturbations to higher-order beliefs (*waves* of optimism/pessimism). The logic chain is as follows: shocks to confidence raise demand, including durables demand, pushing up house prices and, crucially, relaxing collateral constraints. This further amplifies credit. Bayesian estimation matches macro moments and the housing cycle. Importantly, the model-implied series for confidence tracks the Michigan Sentiment closely (`corr` = 0.74) *without* the survey data ever entering the estimation as a target. In summary, our findings augment financial frictions mechanisms with belief fluctuations validated by the data, rationalizing the timing and magnitude of credit/housing cycles.

4 Risk and Network Economies

In Amodeo and Sellemi (2024), we ask how production networks shape aggregate risk when shocks are correlated, not idiosyncratic. We show theoretically that assuming diagonal shock covariance imposes implausible restrictions on input–output weights, and derive a variance decomposition with a new "between-partners concentration" term that captures substitutability across trading partners. Empirically, this measure explains variation in sector returns and output volatility; precision is strongest when correlations are proxied by product similarity (demand) and technological proximity (supply). A production-based asset-pricing model with upstream/downstream propagation delivers two priced factors that forecast consumption and output. In summary, shock correlation is first-order for understanding network propagation, and supply chain substitutability insures against it, dampening its negative effects.

References

Amodeo, Francesco (2025a). "A Corrected Measure of Orthogonalised Monetary Policy Surprises". In: Working paper.

Amodeo, Francesco (2025b). "Mind the Gap: Disagreement and Credible Monetary Policy". Job Market Paper.

Amodeo, Francesco (2025c). "Strategic Forecasting". Working paper.

Amodeo, Francesco and Edoardo Briganti (2025). *High-Frequency Cross-Sectional Identification of Military News Shocks*. Tech. rep.

Amodeo, Francesco and Francesco Giovanardi (2025). "Confidence Cycles". Working paper.

Amodeo, Francesco, Ritong Qu, and Allan Timmermann (2025). "Disagreement in Professional Forecasting". Working paper.

Amodeo, Francesco and Victor Sellemi (2024). "Risk and Network Economies". Working paper.

Bauer, Michael D and Eric T Swanson (2023). "A reassessment of monetary policy surprises and high-frequency identification". In: *NBER Macroeconomics Annual* 37(1), pp. 87–155.

Heisenberg, Werner (1970). "Physics and Beyond: Encounters and Conversations". In: *Bulletin of the atomic scientists* 26(9).

Yellen, Janet (2016). *Macroeconomic Research After the Crisis: a speech at "The Elusive Great Recovery: Causes and Implications for Future Business Cycle Dynamics" 60th annual economic conference sponsored by the Federal Reserve Bank of Boston, Boston, Massachusetts, October 14, 2016*. Tech. rep. Board of Governors of the Federal Reserve System (US).