

Financial Volatility, Sentiment, and Moral Shocks as Cost-Push Drivers in the Phillips Curve

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Abstract

This paper revisits the Phillips Curve by incorporating financial volatility, investor sentiment, and moral valuation shocks as structural cost-push components within the New Keynesian Phillips Curve framework. While conventional explanations for the flattening of the inflation–slack relationship emphasize expectation anchoring, globalization, or labor market changes, we argue that financial market instability and sentiment-driven moral re-pricing systematically alter firms’ marginal costs and pricing behavior. Financial volatility raises external financing premia, tightens balance sheet constraints, and amplifies precautionary pricing, while sentiment and moral shocks reshape demand elasticities and equilibrium markups. Embedding these channels into a hybrid NKPC highlights a previously underexplored transmission mechanism through which financial and ethical perceptions influence inflation dynamics. The framework reconciles empirical instability in Phillips Curve estimates with observed episodes of inflation persistence during periods of weak real activity, suggesting that modern inflation is increasingly driven by non-traditional cost pressures rather than labor market slack alone.

Keywords: Phillips Curve; Financial Volatility; Investor Sentiment; Moral Shocks; Inflation Dynamics

JEL Classification: E31, E44, E52, G12

1 Introduction

The Phillips Curve has long served as a cornerstone of macroeconomic analysis, offering a conceptual and empirical link between inflation dynamics and real economic activity. In its New Keynesian formulation, inflation is driven by expected future inflation and real marginal costs arising from nominal rigidities in price setting (Galí and Gertler, 1999). Despite its strong microeconomic foundations, the empirical performance of the Phillips Curve has been persistently unstable across countries, time periods, and macroeconomic regimes. Episodes of missing disinflation, missing inflation, and post-pandemic price surges have revived doubts about the adequacy of traditional inflation–slack mechanisms.

Recent literature has proposed several explanations for the apparent flattening of the Phillips Curve, including better anchored expectations, globalization, labor market polarization, and nonlinear adjustment mechanisms (Russell and Banerjee, 2008; Saman and Pauna, 2013; Faubert, 2021; Sovbetov, 2025a). While these factors are empirically relevant, they implicitly assume that the structure of financial markets and valuation norms plays a limited role in shaping inflation. This assumption has become increasingly untenable in an era characterized by heightened financial volatility, rapid information diffusion, and the growing influence of sentiment and moral narratives in asset markets.

Financial volatility affects inflation dynamics through multiple channels. It alters firms’ financing conditions, raises risk premia, and tightens credit constraints, thereby increasing effective marginal costs independently of labor market conditions. At the same time, volatility reshapes expectation formation, amplifying backward-looking behavior during periods of stress (?). These mechanisms suggest that financial instability operates as a persistent cost-push shock rather than a transitory disturbance.

Beyond volatility, sentiment and moral valuation have emerged as economically meaningful forces. Investor sentiment influences risk pricing, demand elasticity, and firms’ markups, while moral considerations shape consumption patterns, reputational risk, and capital allocation (Sovbetov, 2025b,c). Moral shocks, such as reputational backlash or ethical reclassification of industries, can impose real economic costs without formal policy intervention, effectively acting as non-price regulatory constraints.

This paper argues that financial volatility, sentiment, and moral shocks should be treated as integral components of modern inflation dynamics. By embedding these factors into a hybrid New Keynesian Phillips Curve, we provide a conceptual framework that reconciles inflation persistence with weak labor market pressure. The approach complements recent decomposition-based analyses of real marginal costs (Sovbetov, 2025d), extending them to include financial and moral dimensions that increasingly shape firms’ pricing behavior.

The remainder of the paper reviews the relevant literature on financial volatility and Phillips Curve instability, emphasizing how sentiment and moral factors naturally integrate into cost-push inflation mechanisms.

2 Financial Volatility and the Phillips Curve

The relationship between financial conditions and inflation has traditionally been treated as indirect, operating through aggregate demand or monetary transmission channels. However, a growing body of research suggests that financial volatility exerts a more direct influence on inflation dynamics by reshaping firms’ marginal costs and pricing incentives. Within the New Keynesian Phillips Curve framework, inflation responds to real marginal cost rather than the output gap per se (Galí and Gertler, 1999). This insight opens the door to incorporating financial variables as structural cost shifters.

Empirical evidence consistently documents instability in Phillips Curve estimates across tranquil and recessionary periods. Using panel data for 41 countries, Sovbetov (2019) and Sovbetov and Kaplan (2019a) show that the inflation–slack relationship collapses during recessions, while both forward- and backward-looking components of inflation gain prominence. These findings imply that non-real-activity factors dominate inflation dynamics when financial stress intensifies. Subsequent work confirms that expectation formation becomes more inertial in volatile environments, weakening the responsiveness of inflation to contemporaneous economic slack (Sovbetov and Kaplan, 2019b).

Financial volatility influences marginal costs through several mechanisms. First, higher uncertainty raises firms’ external financing costs, increasing the effective cost of working capital and investment. Second, balance sheet deterioration amplifies precautionary price-

setting behavior, leading firms to maintain higher markups to buffer against future shocks. Third, volatility interacts with exchange rate pass-through in open economies, magnifying imported cost pressures (Batini et al., 2005). These channels imply that inflation may rise even when labor market conditions remain subdued.

Recent studies employing time-varying and nonlinear methods reinforce the view that Phillips Curve parameters are state-dependent. Paloviita (2008) and Russell and Banerjee (2008) provide robust evidence of slope instability, while Komarek (2001) show that inflation responds differently to persistent versus transitory slack fluctuations. Importantly, these patterns coincide with periods of elevated financial volatility, suggesting that financial conditions alter the inflation–slack trade-off.

The role of sentiment further complicates inflation dynamics. Survey-based and market-based measures reveal that expectations are not purely rational but shaped by narratives, emotions, and moral judgments (Zhang, 2017; Czudaj, 2024). Sentiment-driven shifts in perceived risk can influence firms’ pricing power and consumers’ willingness to accept price increases, effectively modifying the slope and intercept of the Phillips Curve.

Moral valuation introduces an additional layer. Ethical perceptions of industries, firms, or countries can generate demand contractions, financing penalties, and reputational costs that function as non-traditional supply shocks. Evidence from equity markets shows that moral backlash and ethical screening produce persistent valuation effects (Sovbetov, 2025b,c). Translating these insights to macroeconomic pricing behavior suggests that moral shocks elevate marginal costs and markups in affected sectors, contributing to inflation dynamics independent of labor market slack.

Recent marginal cost decomposition studies reinforce this perspective. Sovbetov (2025d) demonstrates that non-labor cost components play a dominant role in frontier and emerging economies and become relatively more important during recessions. Financial volatility and moral constraints naturally map into this non-labor cost channel, offering a unified explanation for cross-country heterogeneity and temporal instability in Phillips Curve estimates.

Taken together, the literature indicates that the Phillips Curve has not disappeared but evolved. Inflation dynamics increasingly reflect financial and moral forces that traditional models treat as exogenous or secondary. Recognizing financial volatility, sentiment, and

moral shocks as structural cost-push drivers provides a coherent framework for understanding modern inflation behavior and the apparent flattening of the Phillips Curve.

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