



High and Volatile Inflation Begets a More Volatile Business Cycle

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Summary:

Following five years of inflation above the Federal Reserve’s 2 percent target, a pressing question for policymakers is: what are the macroeconomic consequences of inflation remaining persistently elevated? Drawing on historical lessons from the 1970s and a new theoretical framework, this Policy Hub paper shows that elevated and persistent inflation makes the economy more vulnerable to cost-push shocks. When inflation is already high, a cost-push shock generates larger and more persistent inflation and a deeper output contraction than it would in an environment of low and stable inflation. The implication: low and stable inflation is not just a goal; it is itself a macroeconomic stabilizer.

JEL classification: J62, I24, I28, N32

Key words: inflation, frequency of price changes, monetary policy

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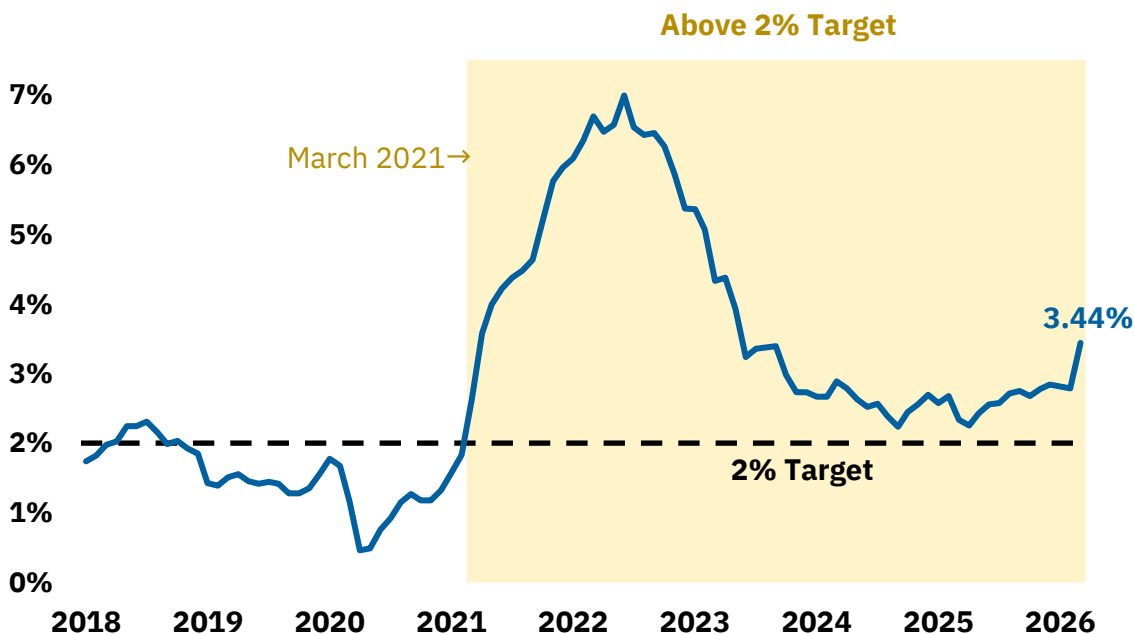
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1 Introduction

For five years, inflation in the United States has remained above the Federal Reserve’s 2 percent target. Figure 1 documents this episode using the Personal Consumption Expenditures (PCE) price index, the Federal Reserve’s preferred measure of inflation. As figure 1 shows, the dynamics of this episode were pronounced. Inflation surged after the pandemic, peaking at roughly 7 percent in 2022, its highest level in four decades. It then receded as monetary policy tightened, but it never returned to the 2 percent target. Through 2025, inflation remained above target and turned higher again, reaching 3.44 percent as of March 2026. The persistence of elevated inflation naturally raises a question that goes beyond the immediate challenge of bringing inflation back to target: *what are the macroeconomic consequences of inflation remaining persistently above target?*

Figure 1. PCE Inflation, year-over-year change



Notes: The figure plots the 12-month change in the Personal Consumption Expenditures (PCE) price index, the Federal Reserve’s preferred measure of inflation, from January 2018 through March 2026. The dashed black line marks the Federal Reserve’s 2 percent inflation target. The shaded area highlights the period beginning in March 2021, when PCE inflation first crossed above the 2 percent target and remained above it through the end of the sample. As of March 2026, PCE inflation stands at 3.44 percent.

Source: Author’s calculation from US Bureau of Economic Analysis

This *Policy Hub* paper addresses that question by combining two perspectives: historical evidence from the 1970s and insights from a new theoretical framework, the Inflation Accelerator, developed in recent work by Blanco, Boar, Jones, and Midrigan (2026). The central finding is that persistently elevated inflation is itself a macroeconomic vulnerability, one that

grows over time and compounds the damage from any future shock. An economy in which inflation is already above target is more exposed to cost-push shocks than one in which inflation is low and stable. The mechanism runs through the frequency of price adjustment: when inflation is high, firms reset prices more often, which steepens the Phillips curve and causes any new cost-push shock to generate larger and more persistent increases in inflation and deeper contractions in output than it would in a low-inflation environment.

2 Lessons from the 1970s

High inflation can take hold for several reasons. In a number of countries in recent history, it has originated in the monetization of public debt, as central banks were pressed to finance persistent fiscal deficits. The 1970s offer a more instructive case for the present discussion, because they show what can go wrong when monetary policy allows inflation to become entrenched through a passive response to cost-push shocks. To understand the episode, it is useful to distinguish between the shocks that hit the economy and the policy response to those shocks.

The 1970s were a period of severe cost-push shocks. The 1973 OPEC oil embargo and the 1979 Iranian Revolution both caused sharp increases in global oil prices, raising production costs across the economy and putting upward pressure on the general price level. By themselves, such shocks need not produce a decade of elevated inflation. Their lasting impact on inflation depended critically on how monetary policy responded. When monetary policy raises nominal interest rates aggressively enough to lift the real interest rate, a cost-push shock is absorbed largely through lower output rather than higher prices. Conversely, when policy leaves nominal rates roughly unchanged, the same shock passes through mainly to inflation. When inflation began to climb in the early 1970s, as shown by Clarida, Galí, and Gertler (2000), the Federal Reserve took the second path: it raised nominal interest rates only modestly, well short of what would have been needed to keep the real interest rate from falling.

Several explanations have been offered for why the Federal Reserve allowed inflation to rise as dramatically as it did. One view emphasizes bad luck. The oil shocks of 1973 and 1979 were simply unusually large and coincided in ways that would have overwhelmed any reasonable policy response (Barsky and Kilian 2002). A second, and arguably more influential, group of views attributes the episode to bad forecasting and bad policy: policymakers systematically overestimated the economy's productive potential (Orphanides 2003), and the Federal Reserve raised nominal interest rates by less than one-for-one in response to rising inflation. This passive monetary policy stance meant that the real interest rate (the nominal rate minus expected inflation) actually fell as inflation rose, stimulating demand precisely when supply was constrained. The result was that cost-push shocks were amplified rather than dampened.

As inflation rose, firms began adjusting their prices more frequently to keep up with the rising cost environment. But this increase in the frequency of price adjustment itself made inflation more persistent: with more firms actively resetting prices at any given moment, each new cost-push shock fed more quickly and fully into the aggregate price level, which prompted yet more firms to adjust, reinforcing the inflationary spiral. The economy had entered a regime in which it was far more vulnerable to cost-push shocks than it would have been under low and stable inflation. A modest disruption that might have been transitory instead became large and self-sustaining.

The 1970s and early 1980s thus stand out as a period of both high inflation *and* high macroeconomic volatility: cost-push shocks that in other eras would have generated only moderate disruptions instead produced large and persistent swings in output and prices. In the next section, we analyze a theoretical framework capable of accounting for this feature of the data.

3 The Inflation Accelerator: What Theory Tells Us

A key empirical regularity motivates the framework: the frequency of price adjustment is strongly correlated with the level of inflation. When inflation is low, most firms keep their prices fixed for extended periods; when inflation is high, firms adjust prices more frequently (Montag and Villar 2025). This fact, well documented in the micro-price literature, has a direct macroeconomic implication. In standard sticky-price models, the slope of the Phillips curve (that is, the relationship between output and inflation) depends on how often firms adjust their prices. More frequent adjustment means a steeper Phillips curve: a given increase in demand or costs translates into a larger and faster response of inflation. This time-varying slope of the Phillips curve has also been emphasized in recent policy discussions (Waller 2023; Hajdini et al. 2025).

A recent paper by Blanco et al. (2026) develops a parsimonious model to tackle these quantitatively hard questions formally. It does so while preserving the tractability of the Calvo model. That model is the workhorse framework that monetary policy institutions rely on to reason about policy and its consequences. Its standing rests on simplicity: the Calvo model is easy to use, but it achieves that ease by holding the frequency of price adjustment fixed. This reflects a broader trade-off between two classes of price-setting models. Time-dependent models, in the tradition of Calvo, are tractable but assume a constant frequency of price adjustment. They contrast with state-dependent (menu cost) models. These let that frequency respond to inflation. But they become difficult to bring to the data once aggregate shocks are present. The paper bridges the two. It assumes that firms sell many products and choose how many, but not which, of their prices to reset each period. That single assumption lets the economy aggregate exactly. The model then collapses to a one-equation extension of the Calvo model. It inherits Calvo's tractability while letting the frequency of price adjustment vary endogenously with inflation. That frequency, in turn, governs the slope of the Phillips curve.

At the heart of the model is a feedback loop the authors call the Inflation Accelerator. When inflation rises, firms reset prices more often. More frequent adjustment steepens the Phillips curve. A steeper Phillips curve amplifies the inflationary impact of any new shock. That impact feeds back into still more frequent price changes, making subsequent shocks both more inflationary and more recessionary when inflation is already high. The same steepening carries a direct policy implication the paper emphasizes. The Phillips curve is steeper at high inflation, so the output cost of bringing inflation back down is lower precisely when inflation is elevated. With this structure in hand, the model lets us analyze formally how high and volatile inflation begets greater macroeconomic volatility.

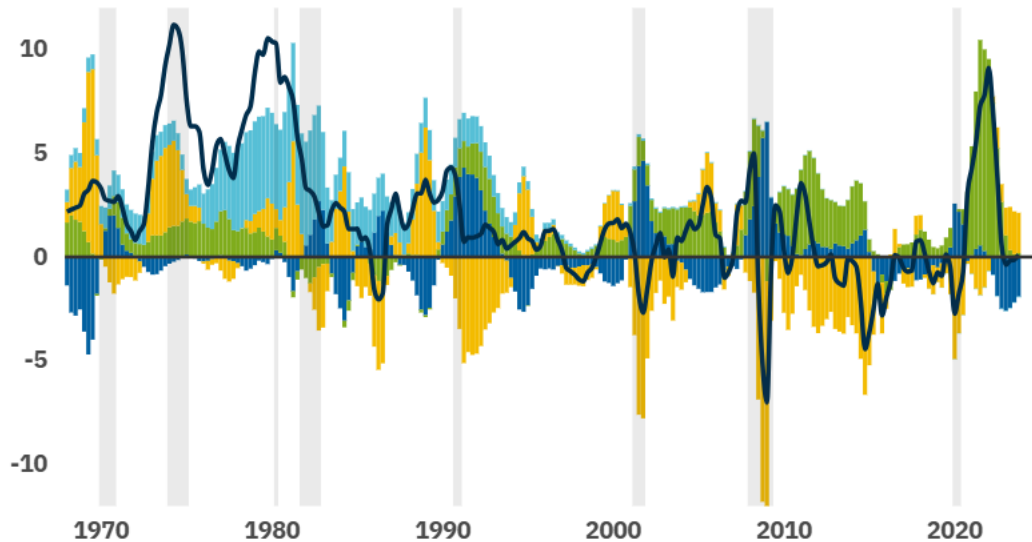
Historical decomposition. To discipline the model and connect it to the historical narrative, in particular the 1970s, Blanco et al. (2026) bring it to the data by estimating the sequence of structural shocks that best accounts for the behavior of inflation, output growth, the federal funds rate, and the frequency of price adjustment from 1968 to 2024. The model features four shocks: (i) technology shocks (shifts in aggregate productivity); (ii) cost-push shocks (disturbances to firms’ marginal costs, such as oil price increases); (iii) monetary policy shocks (transitory deviations of the federal funds rate from the Taylor rule); and (iv) inflation target shocks (persistent changes in the Fed’s implicit inflation objective over time). The Taylor rule is a widely used benchmark for monetary policy: it describes how much a central bank should raise its interest rate when inflation rises above target, so a deviation from the rule means the Fed set rates higher or lower than the benchmark would call for.

Figure 2 shows the historical decomposition of inflation (that is, the contribution of each shock to the deviation of inflation from its baseline path). The results deliver a nuanced but clear message about the Great Inflation of the 1970s. Technology shocks (blue bars) played a minor role throughout the period. Cost-push shocks (yellow bars) provided the initial trigger: the oil embargoes of 1973 and 1979 generated large spikes in inflation that are well captured by this component. However, what turned these temporary disruptions into a decade-long inflationary episode was loose monetary policy. The model captures this through two complementary channels: (i) policy shocks (green bars), which measure deviations of the federal funds rate below what the Taylor rule would have prescribed (that is, periods in which the Fed was actively too accommodative given the inflation and output conditions it faced); and (ii) an increase in the implicit inflation target (teal bars), which captures a persistent deviation from the Taylor rule. The policy shocks are especially visible during the early 1970s, while the higher implicit target rationalizes the persistence of high inflation. Together, these two components, both reflections of an insufficiently tight monetary stance, account for the bulk of the sustained inflation deviation throughout the late 1970s and early 1980s.

Figure 2. Model Inflation Decomposition

■ Total ■ Technology ■ Policy ■ Cost-push ■ Target

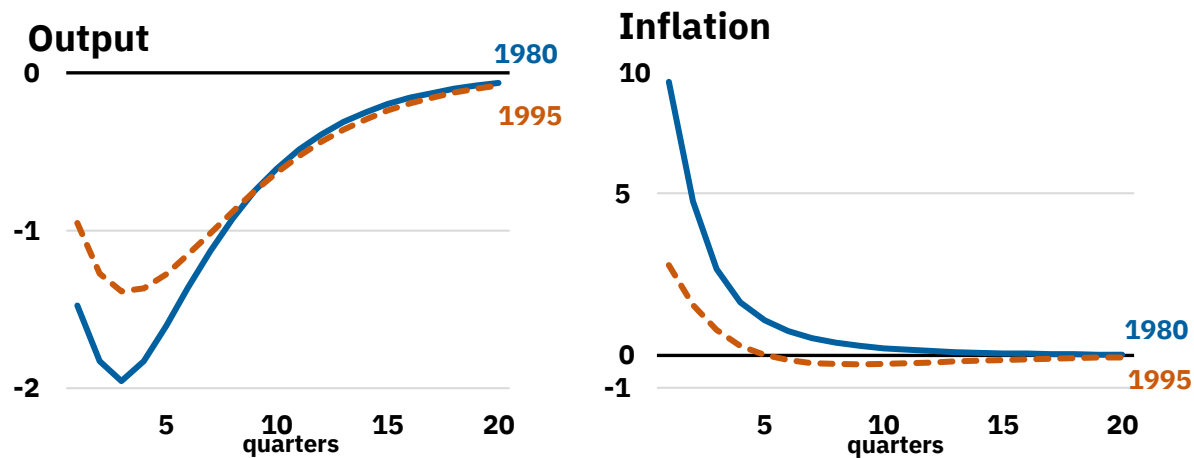
Deviation from baseline



Notes: The figure shows the historical decomposition of inflation from 1968 to 2024 using the model of Blanco et al. (2026). The bars represent the contribution of each of four structural shocks to the deviation of inflation from its baseline path: technology shocks (gray), monetary policy shocks (red), cost-push shocks (teal), and inflation target shocks (orange). The black line shows the total deviation of inflation from baseline. A positive contribution means the shock was pushing inflation above its baseline level; a negative contribution means it was pushing inflation below. The gray shaded regions mark NBER recession dates.

Source: Blanco, Boar, Jones, and Midrigan (2026)

In the model, this prolonged period of loose policy allowed inflation to remain elevated long enough that the frequency of price adjustment rose durably, steepening the Phillips curve and making the economy increasingly vulnerable to every subsequent shock. To illustrate this mechanism, figure 3 compares the economy’s response to an identical cost-push shock under two scenarios: one in which the shock occurs in the high-inflation environment of the first quarter of 1980, when inflation was running at 11.7 percent, and one in which it occurs in the low-inflation environment of the first quarter of 1995, when inflation was just 2.8 percent

Figure 3 Model Impulse-Response Function

Notes: The figure shows the dynamic response of output (left panel) and inflation (right panel) to an identical cost-push shock under two initial inflation environments: 1980 (high inflation, solid line) and 1995 (low inflation, dashed line). Responses are expressed as percent deviations from steady state and are plotted at a quarterly frequency. The cost-push shock is calibrated to the same size in both scenarios; differences in the response reflect the state-dependence generated by the Inflation Accelerator mechanism.

Source: Blanco, Boar, Jones, and Midrigan (2026)

Starting from the high-inflation conditions of 1980, the same cost-push shock produces an inflation spike several times larger than it does starting from the low-inflation conditions of 1995, and that extra inflation fades more slowly; output also falls more sharply. The magnitudes from figure 3 make this concrete. Starting from 1995, the cost-push shock raises inflation by about 3 percentage points on impact and pushes output down by roughly 1.4 percent at its trough. Starting from 1980, the same shock raises inflation by about 8 percentage points, some three times as much, and output falls by about 2 percent. The difference reflects the slope of the Phillips curve, which the model estimates to have been several times steeper in the high-inflation 1970s and early 1980s than in the low-inflation 1990s. When inflation is already high, more firms are actively resetting their prices at any given moment, so an increase in costs passes through to the price level faster and more fully, and the same shock therefore translates into a jump in inflation several times larger. The mechanism is self-reinforcing: higher initial inflation leads to more frequent price adjustment, which steepens the Phillips curve and amplifies the inflationary response to any given shock, which in turn keeps inflation elevated and the Phillips curve steep. This phenomenon is the Inflation Accelerator.

The implication for policy is direct, and it speaks to the current moment. The US economy has now experienced five years of inflation above the 2 percent target. The model suggests that this episode has likely steepened the Phillips curve relative to the low-inflation

2010s, meaning that any new cost-push shock today would generate larger and more persistent inflation than it would have a decade ago.

4 Conclusion

The past five years have posed a substantial challenge for the Federal Reserve. After decades of low and stable inflation, the US economy experienced a surge in inflation that has persisted well above the 2 percent target. This *Policy Hub* paper has argued that the persistence of elevated inflation matters not just for households facing higher prices today, but for the economy's resilience tomorrow.

The title of this paper captures the core message: high and volatile inflation begets a more volatile business cycle. The corollary is just as important. Low and stable inflation is not only a goal of monetary policy but a stabilizing force in its own right. An economy that maintains low and stable inflation is better insulated against the inevitable shocks that any modern economy faces. One that allows inflation to drift persistently above target has, in a meaningful sense, already made itself more fragile, quietly accumulating a vulnerability that will be revealed only when the next shock arrives. The Inflation Accelerator gives precise content to this intuition: it shows that the macroeconomic costs of elevated inflation extend well beyond its direct effects on purchasing power (see, for example, Afrouzi et al. 2026), and that restoring price stability is the surest way to rebuild the economy's resilience for whatever shocks tomorrow might bring.

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