

AIER Papers #10 June, 2025

Rethinking the Fed's Framework:

Lessons from the Post-Pandemic Inflation

BRYAN P. CUTSINGER

The American Institute for Economic Research educates people on the value of personal freedom, free enterprise, property rights, limited government, and sound money. AIER's ongoing scientific research demonstrates the importance of these principles in advancing peace, prosperity, and human progress.

250 Division Street PO Box 1000 Great Barrington, MA 01230 Telephone: 1-888-528-1216 Fax: 1-413-528-0103 info@aier.org

Executive Summary

According to Federal Reserve Chair Jerome Powell, the Fed's flexible average inflation targeting (FAIT) framework played no role in the post-pandemic inflation surge, and officials acted swiftly once inflation proved demand-driven. This paper shows Powell's claims are not supported by the evidence. The rise in the price level was driven by a surge in nominal spending. Fed officials were slow to recognize the problem and waited six months after acknowledging it to meaning-fully tighten policy. Far from irrelevant, FAIT helps explain why the price level remains elevated today. The paper concludes by evaluating alternative frameworks and arguing that the Fed should adopt either a nominal spending target or a symmetrical average inflation target.

Key Points

- Post-pandemic inflation was demand-driven a result of monetary policy not supply constraints, "greedflation," or fiscal policy. The persistent rise in the price level was not an exogenous shock, but the result of excessive monetary accommodation that fueled a sharp surge in spending. Contrary to some popular views and remarks by Federal Reserve Chair Jerome Powell, supply constraints, corporate "greed," and fiscal policy cannot explain the magnitude, timing, or duration of the inflation.
- The Fed misdiagnosed the post-pandemic inflation problem and responded too slowly. Throughout 2021, Fed officials continued to view inflation as transitory and supply-driven, even as evidence to the contrary mounted. They delayed tightening until March 2022 and proceeded cautiously thereafter, allowing inflation to overshoot their own projections — which were already well above the Fed's stated two-percent objective.
- Flexible average inflation targeting (FAIT) contributed to the problem. FAIT, the Fed's monetary policy framework adopted in 2020, encouraged the Fed to tolerate above-target inflation in order to make up for past inflation undershoots, but offered no mechanism to offset overshoots. This asymmetry virtually guaranteed tolerance of higher inflation and a permanent rise in the price level — and undermined the Fed's credibility.
- The Fed's FAIT framework weakens long-run price stability. By failing to stabilize the price level or anchor inflation expectations around a predictable path, the FAIT framework increases the risks of long-term contracting and erodes confidence in the Fed's ability to deliver monetary stability.
- Reforming the framework is essential to ensure price stability. The paper evaluates four alternatives and recommends nominal spending targeting as the best option for achieving price stability and improving communication. A symmetric average inflation target is proposed as a viable second-best.

1. Investigating the Fed's Targeting Framework

At a January 2025 press conference, Federal Reserve Chair Jerome Powell (2025) claimed that the Fed's flexible average inflation targeting (FAIT) framework did not contribute to the post-pandemic inflation surge. As he put it:

There was nothing moderate about the overshoot. It was an exogenous event. It was the pandemic and it happened and, you know, our framework permitted us to act quite vigorously. And we did, once we decided that that's what we should do. The framework had really nothing to do with the decision to — we looked at the inflation as — as transitory and — right up to the point where the data turned against that. [W]hen the data turned against that in late '21, we changed our — our view and we raised rates a lot. And here we are at 4.1 percent unemployment and inflation way down. But the framework was more irrelevant than anything else — that part of it was irrelevant. The rest of the framework worked just fine as — as we used it — as it supported what we did to bring inflation down.

According to Powell, the temporary rise in inflation was beyond the Fed's control.¹ He argued that the framework did not inhibit the Fed's response; on the contrary, it supported the Fed's efforts to rein in inflation. In Powell's account, the Fed responded appropriately and aggressively as soon as the data indicated that inflation was demand-driven. This paper challenges that account.

The following section argues that the rise in inflation (and, consequently, the rise in the price level) was not exogenous, but was driven by excessively loose monetary policy, which fueled a surge in nominal spending. Although Powell is unclear about what he means by "exogenous," his explanation echoes several popular narratives that attribute the post-pandemic inflation to external factors — such as supply constraints, greedflation, and expansionary fiscal policy.² None of these explanations withstands scrutiny. After evaluating each in turn, the evidence overwhelmingly points to a demand-driven inflation surge caused by monetary accommodation (keeping interest rates low, increasing the money supply, or both).

As discussed in Section 3, the underlying problem was the Fed's delayed response to a positive aggregate demand shock of its own making. The Fed's December 2021 projections make clear that officials expected inflation to fall in the final months of 2021 without any change in the stance of monetary policy, suggesting they continued to view inflation as transitory — even though Powell had retired the term weeks earlier. In short, Fed officials viewed inflation as supply driven as late as December 2021 and, as a result, failed to adjust policy accordingly. This distinction matters: if the post-pandemic inflation surge was primarily supply-driven, there was little the Fed could have done to reduce it without causing other problems; if, on the other hand, it was demand-driven, circumstances called for tighter monetary policy to rein in excessive spending in the economy.

Section 4 shows that, contrary to Powell's claim, the Fed did not change its policy stance when the data turned against the transitory supply-side story in the back half of 2021. The Fed did not begin raising the federal funds rate target until March 2022 — three months after Fed officials publicly acknowledged the demand-side nature of inflation. Even then, officials proceeded cau-

tiously, despite inflation surging past their projections during the early months of 2022. Indeed, it was not until July 2022 that Fed officials finally took more aggressive action.

Section 5 argues that FAIT is far from "irrelevant" to understanding the Fed's delayed response to the post-pandemic inflation surge. Its adoption in August 2020 marked a clear shift from the Fed's previous inflation-targeting regime, formally introduced in 2012. Whereas the earlier framework emphasized a symmetric two-percent inflation target (a stance the Fed clarified in 2016), FAIT introduced an explicit commitment to make up for past shortfalls, allowing inflation to moderately overshoot the target following periods of undershooting.³ In practice, however, the Fed's implementation of FAIT was asymmetric: it invoked the framework to justify continued accommodation in 2021 but made no effort to offset subsequent above-target inflation with below-target inflation.⁴ This asymmetry inhibited the Fed's response in two ways. First, it gave officials a rationale for delaying tightening, since moderate overshooting was consistent with the framework's backward-looking logic. Second, it discouraged the pursuit of a superior objective – stabilizing the price level – by making no provision for correcting upward drift once inflation took hold.

Finally, Section 6 discusses several proposed alternatives and revisions to the current framework. Some of these alternatives — such as symmetric average inflation targeting and nominal GDP level targeting — appear more likely to promote price stability and reduce the risk of similar failures in the future. These options are offered to provide Fed officials and others interested in monetary policy with a fresh perspective on the current framework and suggest ways it might be revised to strengthen monetary stability.⁵

2. What Drove the Post-Pandemic Rise in the Price Level?

The price level has risen substantially since January 2020 (see Figure 1). To understand why – and to assess Chair Powell's claim that this rise was "exogenous" – it is helpful to examine how the personal consumption expenditures (PCE) price index, the Fed's preferred measure of inflation, evolved during this period. The paper begins by reviewing the trajectory of the price level, then evaluates three popular, but ultimately unconvincing, explanations for the post-pandemic inflation surge, and finally presents a more compelling alternative: a surge in nominal spending fueled by overly accommodative monetary policy.

2.1 THE TRAJECTORY OF THE PRICE LEVEL: 2020-2024

Figure 1 plots both headline and core personal consumption expenditures (PCE) indices from January 2020 alongside the Fed's two-percent target growth path, offering a clear view of when - and by how much - the price level diverged from the Fed's target. As the figure makes clear, both headline and core PCE inflation initially fell below the Fed's target, but the decline was brief. By March 2021, the price level had fully returned to the target path, and in the months that followed, surged past it.



FIGURE 1: HEADLINE AND CORE PCE PRICE INDICES

Between January 2020 and September 2021, annual headline and core PCE inflation averaged 3.1 and 2.9 percent, respectively — but over the next nine months, they accelerated sharply, averaging 7.7 and 5.6 percent.⁶ Inflation began to moderate after mid-2022. Headline PCE inflation averaged 3.2 percent between June 2022 and June 2023, and for 2024, it averaged 2.5 percent. Over the same periods, core PCE inflation averaged 4.3 and 2.8 percent, respectively.

Nonetheless, by December 2024, the headline PCE price index was 8.4 percentage points above where it would have been had the Fed consistently met its two-percent inflation target. While inflation rates have come down from their 40-year highs, the price level remains permanently elevated relative to its target path. What caused the price level to diverge so persistently from the Fed's target?

2.2 THREE UNSATISFYING EXPLANATIONS

Powell's remarks suggest that he and other Fed officials view the rise in the price level as outside their control. Consider three popular but ultimately unconvincing explanations for the inflation surge — corporate greed, expansionary fiscal policy, and supply constraints — all of which could plausibly align with Powell's description of the post-pandemic surge as "exogenous." To be clear, this is not to suggest that these factors played no role in the rise in the price level; rather, none of these explanations accounts for the timing, magnitude, and persistence of the inflation surge, indicating that some other explanation is necessary.

2.2.1 PROBLEMS WITH THE "GREEDFLATION" EXPLANATION

As the price level began to rise following the pandemic, many commentators on the political left attributed the surge in inflation to rising corporate profits, arguing that firms exploited supply disruptions and strong demand to increase prices well beyond their cost increases. Sen. Elizabeth Warren (D-MA), for example, tweeted in April 2022, "Corporations have figured out they can use inflation as cover to not only pass along their own increased costs to consumers, but also to price gouge to boost their profit margins." Echoing this sentiment, former Sen. Sherrod Brown (D-OH) remarked in 2023 that "corporate executives [...] pretend they're making 'tough choices' about prices while reporting record profit increases quarter after quarter" and suggested that "this profiteering" was "one of the biggest drivers of inflation."

While it may be tempting to dismiss these comments as mere political rhetoric, some economists have developed more formal versions of the greedflation view. Lorenzoni and Werning (2023), for example, argue that inflation arises from conflict: different economic agents have incompatible objectives over relative prices, and each exercises only partial or intermittent control over the prices they set. In their staggered-pricing model, each agent raises prices whenever it has the opportunity. The result is that even though relative prices remain unchanged, the cumulative price increases driven by this conflict generate a "general and sustained inflation in all prices."⁷

Weber and Wasner (2023) offer another version of this argument. When an external shock causes input costs to rise, they contend, firms with market power can effectively collude to raise their prices.⁸ Given that "all firms want to protect their profit margins and know that the other firms pursue the same goal," Weber and Wasner maintain, "they can increase prices, relying on other firms following suit." Moreover, if bottlenecks create temporary market power, they argue, firms can "hike prices not only to protect but to increase profits." In other words, when temporary bottlenecks create additional market power, firms might raise their markups – not merely passing on higher input costs, but increasing profits as well.

The greedflation explanation provides incumbent politicians with a convenient scapegoat, so it is no surprise that they prefer it to other, more conventional explanations. There are, however, several problems with this view. For one, it is inconsistent with basic price theory (Hendrickson 2024). Firms cannot raise prices without risking a loss of customers. Higher input costs reduce profit margins. It follows that a rise in a firm's markup implies one of three things. First, the firm may have initially set its price too low and later corrected it. Second, it may have raised its price too high and failed to make some profitable sales. Third, it may have experienced an increase in demand, allowing it to charge more without losing customers. The first two cases imply that firms were not maximizing profits before the pandemic, which, while possible, seems unlikely. In the third case, the higher demand – not greed – explains the rise in markups.⁹

Another problem with this view is that it assumes market power operates primarily by raising prices through restricting output. While such a mechanism is theoretically plausible, it cannot account for the scale of the post-pandemic inflation without implying an implausibly large contraction in aggregate output growth.¹⁰ Yet even setting that issue aside, the empirical record is

inconsistent with the greedflation narrative: output was rising alongside inflation, not falling, during the period in question, which suggests that the observed rise in markups was largely driven by stronger demand, not a rise in market power (See Figure 2).

2.2.2 PROBLEMS WITH THE EXPANSIONARY FISCAL POLICY EXPLANATION

Another common explanation for the post-pandemic inflation — popular on, though not exclusive to, the political right — is that it was driven by expansionary fiscal policy. The federal government sharply increased spending to mitigate the economic fallout of the pandemic and the accompanying restrictions on economic activity. Congress authorized \$3.3 trillion across five relief bills passed in 2020 and an additional \$1.8 trillion in 2021. As Romer (2021) observes, these measures "ran the gamut from highly useful and appropriate to largely ineffective and wasteful." Importantly, policymakers made no mention of higher future taxes to offset these expenditures. As a result, aggregate demand rose: households and firms, expecting higher current and future income but no offsetting tax burden, increased their spending. That rise in nominal spending, in turn, put upward pressure on prices.¹¹

There is certainly merit to this view. Indeed, the underlying cause of high and hyperinflation is often reckless fiscal policy (Sargent 1982). Nonetheless, some proponents of the fiscal explanation state it in a way that effectively — if not always intentionally — absolves the Fed of any culpability. Expansionary fiscal policy only boosts aggregate demand if the Fed accommodates it.¹² A rise in deficit spending by the federal government pushes interest rates higher. If, in response to higher interest rates, the Fed adjusts its policy rate upward, private spending will decline to offset the rise in public spending, leaving aggregate demand unchanged. The federal government's fiscal response to the pandemic may have made the Fed's job more difficult, but it cannot, on its own, explain the rise in inflation that followed; that outcome required monetary accommodation. In this case, rather than raising interest rates to offset the inflationary pressure of higher deficit spending, the Fed held rates near zero and continued large-scale asset purchases — policies that exacerbated, rather than countered, the fiscal stimulus and allowed aggregate demand to surge.

2.2.3 PROBLEMS WITH THE SUPPLY-CONSTRAINT EXPLANATION

The most plausible interpretation of Powell's position – and perhaps the most widely accepted explanation for the inflation surge – is that pandemic-induced supply constraints caused the price level to rise. COVID-19 and the resulting restrictions on economic activity sharply curtailed the economy's ability to produce goods and services in 2020. Although most people returned to work as governments relaxed these restrictions, supply chain disruptions lingered, constraining productive capacity through much of 2021.¹³

The supply-constraint explanation is straightforward: the pandemic reduced aggregate output (measured as real GDP), increasing the scarcity of goods and services, which in turn drove up prices. While theoretically sound - and indeed, quite intuitive - this explanation faces two fundamental problems. First, the timing is off. The sharpest contraction in output occurred in

2020, yet prices rose by less than two percent on average over the first year of the pandemic. Inflation did not begin to rise in earnest until the economy had largely recovered from the initial supply disruptions, as shown in Figure 2, which plots real GDP alongside both the headline and core PCE price indices. When inflation accelerated, output and the price level were rising together — not moving in opposite directions, as one would expect following an adverse supply shock, which tends to reduce the economy's productive capacity, leading to lower output and higher prices due to increased scarcity.¹⁴



FIGURE 2: THE PATH OF REAL GDP AND THE PRICE LEVEL

The second, and more fundamental, problem with the supply-constraint view is that it cannot account for the permanent rise in the trend price level. In the standard aggregate demand and supply framework, temporary supply shocks cause short-run deviations in output and prices but leave the long-run price level path unchanged. For a given rate of aggregate demand growth, the price level rises temporarily when output falls below potential, but returns to trend as output recovers. By the end of 2024, real GDP had nearly returned to its pre-pandemic growth path, yet the price level remained well above its two-percent target path. In short, the persistence of an elevated price level is inconsistent with a purely supply-driven explanation.

To be sure, supply disruptions likely contributed to the excess inflation observed since the start of 2020. The question is, by how much? Total spending in the economy - i.e., nominal GDP or nominal income - grew at an average annual rate of 4.1 percent over the five-year period preceding the pandemic. During that time, real GDP - inflation-adjusted output - grew by 2.5

percent per year, while inflation — as measured by the GDP deflator — averaged 1.5 percent. From the start of 2020 to the end of 2024, real GDP growth averaged just 2.3 percent. Without a change in total spending, nominal GDP would have continued to grow at its pre-pandemic pace, and the slowdown in real GDP growth would have pushed the average inflation rate up modestly — to around 1.7 percent per year. In reality, however, the GDP deflator grew at an average rate of 3.9 percent over the same period. Hence, only about 10.3 percent of the observed excess inflation can be attributed to reduced output — whether due to pandemic-related supply constraints or, as discussed earlier, rising market power.¹⁵

2.3 THE REAL PROBLEM WAS NOMINAL

While the Fed conducted monetary policy reasonably well in 2020 — especially given the peculiarities of the COVID-19 contraction — it was caught off guard when aggregate demand picked up in 2021 (Cachanosky et al. 2021). Nominal GDP, which had grown at an average annual rate of 4.1 percent in the immediate pre-pandemic period, surged by 10.7 percent from 2021:Q1 to 2022:Q1, and by 7.4 percent from 2022:Q1 to 2023:Q1. Although supply constraints contributed to excess inflation, the core problem was that the Fed failed to stabilize aggregate demand (Beckworth and Horan 2025; Luther 2024; Schibuola and Martinez 2021).

To appreciate the scale of the surge in nominal spending, it is useful to compare the actual trajectory of nominal GDP to the Federal Open Market Committee's (FOMC) implicit pre-pandemic projection. This projection can be inferred by combining the FOMC's projections of real GDP growth and inflation to estimate the expected path of nominal spending — simply the sum of those two components. In December 2019, the median projection for long-run annual real GDP growth was 1.9 percent and for inflation was two percent, implying a projected long-run nominal GDP growth rate of 3.9 percent per year. Figure 3 plots this projected path alongside the actual path of nominal GDP.

As the figure shows, nominal spending surged past the FOMC's implied projection in early March 2021 and has remained elevated ever since. By the end of 2024, nominal GDP stood 14 percent above the level implied by the FOMC's December 2019 projection. This divergence underscores the extent to which the Fed allowed aggregate demand to overshoot. It also highlights the central policy failure behind the inflation surge: had the Fed begun tightening in early 2021 – when nominal GDP began rising above its pre-pandemic trend – it might have prevented the persistent rise in the price level.

This surge also helps account for the rise in corporate profits and the fall in unemployment below its "natural rate." If output prices rise faster than input prices, then an unexpected surge in nominal spending — like the one experienced after the pandemic — will temporarily increase corporate profits.¹⁶ Firms, eager to capture these profits by meeting the rising demand, will hire more workers and thereby drive the unemployment rate lower. These developments — which the greedflation and supply-constraint views struggle to explain — follow naturally from a demand-driven story. Hence, unlike the other explanations of inflation, the focus on nominal spending can account for all the "stylized facts" of the post-pandemic inflation.



FIGURE 3: THE PATH OF NOMINAL GDP AND THE FOMC'S IMPLIED PROJECTION

Why did the Fed wait so long to tighten despite this surge in nominal spending? As the next section explains, the delay likely stemmed from policymakers' belief that the inflation was supply-driven. Had they focused on nominal spending rather than inflation, Fed officials would have seen much sooner that monetary policy was off track — and might have avoided the inflationary surge altogether. More importantly, it would have avoided the loss of credibility and real economic distortions associated with such a prolonged and preventable overshoot.

3. The Fed's Misdiagnosis: Mistaking Demand for Supply

In his remarks at the January 2025 press conference, Chair Powell claimed that the Fed began tightening monetary policy as soon as data indicated that inflation would not come down on its own. As shown, this claim is untrue; the data had turned against the supply-constraint view of inflation months before Powell officially retired the term "transitory" in November 2021. Moreover, as late as December 2021, the Fed's inflation projections implied that officials still expected inflation to decline without any policy tightening — suggesting that they continued to view inflation as the result of temporary supply constraints, despite mounting evidence to the contrary.

This failure to recognize the demand-driven nature of the problem was evident throughout 2021. FOMC members were slow to recognize the rise in aggregate demand, as reflected in their post-meeting statements in April, June, July, and September of that year. In each case, they described the rise in inflation as "largely reflecting transitory factors" (Bergman and Luther

2022). That characterization is consistent with the view that inflation was due to supply constraints – not excess aggregate demand.

This disconnect is also evident in the FOMC's 2021 Summary of Economic Projections. Table 1 reports the median FOMC member's actual and implied inflation projections — i.e., what inflation would have to be in the remaining months to hit the year-end target — along with their projections for the federal funds rate (FFR) (Federal Reserve 2021a, 2021b, 2021c, 2021d, 2022a, 2022b). For each projection round, the annualized PCE inflation rate that had already occurred — from the beginning of the year through the most recent month for which data was available at the time of the projection — is calculated. From this is derived the implied annualized inflation rate for the remaining months of the year — that is, the rate that would be consistent with the median FOMC member's full-year projection given the inflation already observed.

TABLE 1: MEDIAN FOMC MEMBER'S ACTUAL AND IMPLIED PCE INFLATION PROJECTIONS AND FEDERAL FUNDS RATE PROJECTIONS FOR 2021 AND 2022

Projection Date	Inflation Projection for Current Year	Annualized Inflation Year-to-Date	Implied Annualized Inflation for Remaining Months	Median FFR Projection for Current Year	Median FFR Projection for Following Year
Mar 2021	2.4%	5.1%	2.2%	0.1%	0.1%
Jun 2021	3.4%	5.7%	2.3%	0.1%	0.1%
Sep 2021	4.2%	5.9%	1.9%	0.1%	0.3%
Dec 2021	5.3%	5.8%	2.7%	0.1%	0.9%
Mar 2022	4.3%	6.0%	4.1%	1.9%	2.8%
Jun 2022	5.2%	5.8%	4.3%	3.4%	3.8%

Notes: Annualized inflation year-to-date reflects the change in prices from the beginning of the year in which the projection was made through last month for which PCE data was available at the time of the projection. Implied annualized inflation rate for remaining months is determined by the change in prices required over the months not yet recorded at the time of the projection to achieve the median FOMC member's projection for the year, given the change in prices that had already been recorded.

In March 2021, with year-to-date inflation averaging 5.1 percent annualized, the median FOMC member projected just 2.4 percent inflation for the full year. That implied they expected inflation to average only 2.2 percent annualized over the remaining months. By June, recorded year-to-date inflation had risen to 5.7 percent, and the median FOMC projection increased to

3.4 percent – but again, this assumed inflation would slow, with an implied annualized rate of just 2.3 percent for the rest of the year. In September, year-to-date inflation averaged 5.9 percent annualized, and the median projection rose to 4.2 percent – implying a sharp deceleration to just 1.9 percent annualized over the final months. In December, year-to-date inflation averaged 5.8 percent annualized, yet the median projection for the year rose only to 5.3 percent – again suggesting that FOMC officials expected a dramatic slowdown in inflation over the final two months despite no change in monetary policy.

Throughout this period, the median projection for the federal funds rate remained unchanged, signaling that FOMC members expected inflation to fall without the need for policy tightening. They could see that supply constraints had largely eased, yet they continued to expect inflation to return to normal on its own. Indeed, the FOMC's post-meeting statement from November 2021 indicated that officials continued to blame supply constraints for the elevated inflation rates, noting that they were "largely reflecting factors that are expected to be transitory."

By December, FOMC members appeared to be losing confidence in the supply-disruptions view. The word "transitory" was purged from the post-meeting statement, and Fed officials finally acknowledged the demand-side problem: "Supply and demand imbalances related to the pandemic and the reopening of the economy have continued to contribute to elevated levels of inflation," they wrote. But they still expected inflation — which had averaged 5.8 percent through October — would fall to an average of 2.7 percent over the remaining two months. Moreover, the FOMC did not immediately raise its policy rate, despite having acknowledged the demand-side problem. Instead, it began tapering asset purchases and signaling that rate hikes would not begin until March 2022.

Despite Powell's claim to the contrary, the emerging consensus among economists is that the Fed should have recognized the rise in aggregate demand much earlier. By September 2021, the evidence was clear enough that a shift in policy stance was warranted. For example, all eight policy rules evaluated by Papell and Prodan-Boul (2024) recommended raising the federal funds rate by 2021:Q3, if not earlier. Likewise, Eggertsson and Kohn (2023) argue that "from September 2021 onward, it was becoming increasingly clear, at least in retrospect, that the inflation surge was broad based and persistent."

4. A Slow and Hesitant Policy Response

Chair Powell claims that once Fed officials recognized that inflation was demand-driven, they quickly changed course. Again, however, this statement misses the mark. Although the FOMC acknowledged in December 2021 that inflation was at least partially due to excess aggregate demand, it did not begin raising rates until March 2022 — several months later — and even then proceeded cautiously. Moreover, as inflation continued to exceed the FOMC's projections during the early months of 2022, officials were slow to accelerate the pace of tightening. In short, not only did Fed officials misdiagnose the nature of the problem — once they recognized it, they were slow to act.

As shown in Table 1, the median FOMC member projected in December 2021 that inflation would reach 5.3 percent for the year. The full range of projections (not shown in the table) was 5.3 to 5.5 percent. At the time, FOMC members had access to PCE data through October 2021 and other indicators — including firsthand observations — through November. Yet they significantly underestimated inflation. In January 2022, the Bureau of Economic Analysis announced that inflation had actually been 5.8 percent in 2021 — above the entire range of projections. That estimate would later be revised up to 6.2 percent.

To illustrate how quickly prices outpaced FOMC projections following their acknowledgment of demand-side pressures in December 2021, consider the price level paths implied by the median FOMC member's inflation projections in December 2021, March 2022, and June 2022. In each case, the implied price level begins with the most recent month for which data was available at the time of the projection. Figure 4 presents the resulting series.

FIGURE 4: PERSONAL CONSUMPTION EXPENDITURES PRICE INDEX AND MEDIAN FOMC MEM-BER'S IMPLICIT PRICE LEVEL PROJECTIONS



Notes: Implicit price level projections are based on the median FOMC member's PCE inflation projections for the following years and the most recent month for which PCE data was available when the projections were made.

PCE data released in December 2021, January 2022, and February 2022 consistently showed that prices were rising much faster than the median FOMC member had projected. Yet the FOMC did not raise its policy rate in January 2022, nor did it call a special meeting to do so in February. It

was not until March 2022 — with year-to-date inflation already at 6.0 percent — that the FOMC finally raised the federal funds rate, and then only by 25 basis points. The median FOMC member revised their inflation projection for 2022 from 2.6 percent in December 2021 (not shown in Table 1) to 4.3 percent in March 2022, and their projection for the federal funds rate from 0.9 percent to 1.9 percent. Yet officials did not accelerate the pace of tightening beyond what they had previously indicated.¹⁷

Similarly, PCE data released in March and April 2022 showed that prices were still rising well above the median FOMC member's expectations. Yet the FOMC did not call an emergency meeting in April. Instead, it raised the policy rate by 50 basis points in both May and June. In June 2022, the median FOMC member revised their 2022 inflation projection up to 5.2 percent and their federal funds rate projection up to 3.4 percent. But the real federal funds rate remained negative. The Fed had eased off the accelerator — but it had not yet hit the brakes.

The Fed did not get serious about bringing down inflation until July 2022, when it surprised markets with a 75-basis-point rate hike. It then followed up with additional 75-basis-point hikes in September and November, a 50-basis-point hike in December, and 25-basis-point hikes in February, March, May, and July 2023 — at which point the federal funds rate target range had increased to 5.25 to 5.5 percent. Unfortunately, the damage had already been done: the Fed's slow response to the surge in aggregate demand had pushed the price level well above its pre-pandemic growth path. As the next section explains, the Fed's asymmetric implementation of the FAIT framework all but guaranteed that such an error would destabilize the price level path.

5. The Role of the FAIT Framework

According to Chair Powell, the FAIT framework did not inhibit the Fed's response to the post-pandemic inflation. Here, too, Powell is mistaken. The FAIT framework encouraged the Fed to delay tightening monetary policy and prevented the Fed from tightening sufficiently to bring the price level back down to its prior two-percent growth path. The delay meant prices rose higher than they otherwise would have. The inability to return the price level to its prior growth path risked unanchoring expectations from two percent.

Under FAIT, the Fed aims to achieve two percent inflation on average over time — but it does not target inflation symmetrically. Instead, it offsets only periods of below-target inflation. When inflation exceeds two percent, as it did following the pandemic, the Fed merely aims to bring inflation back down to two percent, without compensating for the overshoot. As a result, the price level remains permanently elevated relative to its initial path.

The Fed adopted FAIT to address a specific problem. Following the onset of the Great Recession in 2008, it consistently undershot its two-percent inflation target. Despite multiple rounds of quantitative easing, inflation averaged just 1.5 percent from January 2009 to January 2020.¹⁸ Fed officials worried that persistently low inflation would unanchor expectations and put downward pressure on nominal interest rates. Coupled with slower population and productivity growth – which lower real interest rates – below-target inflation risked pushing nominal rates to the

zero lower bound, thereby constraining the Fed's ability to respond to future downturns.¹⁹ By committing to offset periods of below-target inflation, Fed officials believed the FAIT framework would help anchor expectations at two percent and reduce the likelihood that nominal interest rates would again approach the zero lower bound (Brainard 2020; Clarida 2020; Powell 2020).

Our recent experience with FAIT reveals that Fed officials were only partially right. The framework may help prevent inflation expectations from falling persistently below target, but it does not prevent them from drifting persistently above it. Indeed, if firms and households believe the Fed will make up for below-target inflation but refuse to offset above-target inflation, they will reasonably expect inflation to exceed two percent on average. In short, the "F" in FAIT – which gives Fed officials the flexibility to pursue their inflation target asymmetrically – conflicts with the "A," which is supposed to imply that inflation will average two percent over time.

One consequence of the FAIT framework is that, despite assertions to the contrary (see, for example, Federal Reserve (2020)), inflation expectations will not be well-anchored at two percent. Firms and households cannot reliably expect that inflation will average two percent on a go-forward basis. As a result, any long-term contracts they enter into will be based on the assumption that inflation will tend to exceed two percent. More troubling, however, is that parties to long-term contracts must account for the possibility that unexpected inflation will lead to permanent wealth transfers (e.g., from lenders to borrowers when fixed payments lose real value). Thus, long-term contracting under FAIT is riskier than it would be under alternative frameworks. To the extent that this greater risk discourages long-term contracting, FAIT may also impede economic growth.

Another consequence of the FAIT framework is that it encourages the Fed to delay tightening monetary policy when necessary. Because the framework permits inflation to run above two percent for a time in order to make up for prior undershoots, officials may hesitate to respond to early signs of rising inflation — especially if recent inflation has averaged below target. In practice, this creates an asymmetry: the Fed is quick to ease when inflation falls short of two percent but slow to tighten when it exceeds the target. This asymmetry was evident in the wake of the pandemic, when officials emphasized past inflation shortfalls to justify continued accommodation, even as nominal spending surged and inflation pressures mounted. In this way, FAIT's backward-looking nature blunted the Fed's responsiveness at a critical moment.

Chair Powell may insist that FAIT did not inhibit the Fed, but this claim does not match the data. FAIT not only contributed to the initial rise in the price level, it also offered no mechanism for correcting the price-level drift once inflation took hold.

6. What Should the Fed Do?

If FAIT did not inhibit the Fed's response, as Chair Powell claims, one might reasonably expect Fed officials to preserve the FAIT framework going forward. Why fix what is not broken? In fact, during the review process, Fed officials have indicated that they will likely remove the asymmetry implied by FAIT. Despite their public statements, Chair Powell and other Fed officials clearly recognize the problems with the FAIT framework discussed above. In any event, the question the Fed now faces is how to revise its framework in light of recent experience.

This section considers four potential revisions to the current framework:

- returning to a symmetric inflation target
- implementing a symmetric average inflation target
- raising the inflation target
- transitioning to a nominal spending target

Although the last option may offer the greatest potential benefits, it also presents significant communication challenges. A symmetric average inflation target could achieve many of the same benefits as a nominal spending target, if implemented effectively. By contrast, returning to a symmetric inflation target or raising the inflation target does not represent an obvious improvement over the current framework. Each proposal is reviewed in turn.

6.1 SYMMETRIC INFLATION TARGETING

Perhaps the least radical revision to the current framework would be to revert to the symmetric inflation target (IT) adopted in 2016. Under IT, the Fed does not attempt to make up for underor overshoots. Instead, it lets bygones be bygones and aims to deliver two-percent inflation period by period. The framework is symmetric in the sense that over- and undershoots are treated equally, with deviations from the target resulting in random short-run fluctuations around the two-percent path, rather than systematic over- or underperformance.

The main advantage of IT is that it is relatively easy to communicate to the public. The downside is that, if followed strictly, it can constrain the Fed's ability to conduct countercyclical monetary policy. Consider a sudden negative aggregate demand shock that reduces inflation. If prices are sticky, real output will temporarily fall below its potential. Under IT, the Fed would continue aiming for two-percent inflation going forward, but from a lower price level than households and firms had expected prior to the shock. Since output will remain below potential until expectations and the price level adjust, this approach can result in a sluggish recovery.

Rather than reducing the risk of long-term contracting, IT may make such contracts even riskier than under the current FAIT framework. Although households and firms can reasonably expect inflation to average two percent under IT, the potential for unexpected deviations means that permanent wealth transfers are more likely. Under IT, the Fed does not correct for past errors, so it may (randomly) over- or undershoot its target. By contrast, under FAIT, the Fed commits to making up for periods of below-target inflation, so those entering long-term contracts need only worry about above-target surprises.²⁰ In short, the range of potential wealth transfers — and, correspondingly, the risk associated with long-term contracting — is likely to be greater under IT.

6.2 SYMMETRIC AVERAGE INFLATION TARGETING

The most straightforward revision to the current framework would be to make the average

inflation target symmetrical. Under a symmetric average inflation targeting (AIT) regime, the Fed would aim to achieve two-percent inflation, on average, over time — meaning that officials would offset both over- and undershoots. As under the current FAIT framework, the Fed would allow inflation to exceed two percent temporarily following periods of below-target inflation. Unlike FAIT, however, the Fed would also allow inflation to fall below two percent temporarily following periods of above-target inflation.

This approach offers several advantages over FAIT. Most importantly, by making up for past misses in both directions, a symmetric AIT framework would tend to stabilize the price level over time. This outcome is more consistent with the Fed's price stability mandate, would help address longstanding concerns about the redistributional effects of price-level shocks, and would better reflect the historical lessons of the Volcker-Greenspan era (Binder 2025; Hetzel 2025) Moreover, it would reduce the risk associated with long-term contracting relative to both IT and FAIT.

To see how AIT would reduce the risk of long-term contracting, consider again the potential outcomes for those entering long-term contracts. Under AIT, the Fed might (randomly) err by delivering above- or below-target inflation. Unlike under the current framework, however, the Fed would then attempt to make up for this error, eventually restoring the price level to its preshock expected path. By doing so, the AIT reduces the risk of long-term contracting. In short, under AIT the price level is mean-reverting and, hence, much easier to predict.

Another advantage of AIT is that it may prompt the Fed to act more quickly following aggregate demand shocks. Because AIT requires the Fed to make up for past mistakes, the further the price level deviates from its target growth path, the more aggressively the Fed must respond to bring it back on track. For example, suppose the Fed significantly undershoots its target for an extended period. In that case, it will need to generate inflation that is higher for longer than would have been necessary had officials acted sooner. Given the political unpopularity of sustained inflation, Fed officials might prefer to keep inflation closer to target by remaining vigilant for deviations and correcting them promptly when they occur.

Nonetheless, AIT has at least one important drawback: it permits the Fed to respond to supply shocks.²¹ As Selgin (1997) explains, changes in the price level driven by supply shocks convey useful information that enables households and firms to make informed production and consumption decisions. When the Fed offsets such price-level changes, it imposes unnecessary costs – especially on firms – that would otherwise remain unaffected by the shock, since they must now adjust prices to accommodate the Fed's response.²²

The Fed might permit a temporary deviation in the price level caused by a supply shock, expecting it to dissipate as real output returns to potential. But AIT does not require such restraint; it permits — and may even encourage — offsetting those deviations, even when doing so is counterproductive.

During the Fed's most recent framework review – which ultimately produced the current FAIT

framework — AIT "garnered the most public attention...and many observers expected it to be the Fed's new framework" (Beckworth and Horan 2025). Indeed, the prominence of AIT in those discussions likely contributed to the initial confusion about the Fed's asymmetric implementation of FAIT. In sum, adopting AIT today would represent a modest — though meaningful — shift from the current framework. The public would likely find a symmetric target more intuitive, and Fed officials and journalists have already done much of the work to explain how AIT operates. For these reasons, a transition to AIT would likely be easier to communicate than more radical alternatives.

6.3 RAISING THE INFLATION TARGET

Some economists, including Jason Furman (2023a), have argued that the Fed should use its upcoming framework review as an opportunity to raise its two-percent inflation target.²³ This revision could be implemented within the current framework, or paired with one of the alternative inflation-targeting frameworks discussed earlier. Furman contends that a higher inflation target would "cushion the economy against severe recessions" and "give the Fed more scope to cut interest rates and thereby stimulate the economy." He also argues that, since households and firms would incorporate higher expected inflation into wage and debt contracts, there is little reason to worry about its effects on workers and creditors (Furman 2023b).

There are several problems with this argument. First, the claim that higher inflation can cushion downturns relies on the view that workers are unwilling to accept nominal wage cuts (Akerlof, Dickens, and Perry 1996). But as White (2025) explains, this reluctance is not an immutable behavioral fact; it is an institutionally contingent outcome.²⁴ During the US postbellum period (1865-1896), for example, real output grew at an average annual rate of 3.7 percent while inflation averaged 2.0 percent. It is unclear how higher inflation would have improved economic performance in that context.

Second, Furman's claim that a higher inflation target would give the Fed more room to cut interest rates is misleading. The zero lower bound on nominal interest rates only constrains policy in a low-inflation environment if the Fed restricts itself to interest rate instruments. As White (2025) notes, however, there is no reason the Fed must do so. For example, it could instead conduct policy by adjusting the monetary base, in which case the zero lower bound would be irrelevant.

Finally, Furman's claim that higher expected inflation would not harm workers and creditors is mistaken. As White (2025) explains, higher expected inflation increases the cost of holding money balances, reducing the gains from exchange. It also distorts economic decisions by interacting with unindexed taxes on interest income and capital gains.²⁵ These effects are far from trivial and would ultimately harm both workers and creditors (Feldstein 1997, 1999; Lagos and Wright 2005; Lucas 2000). Fortunately, Fed officials do not appear to be taking this suggestion seriously. During his semiannual testimony to the US Senate Banking Committee, Chair Powell stated, "We think it's really important that we do stick to a two-percent inflation target and not consider changing it" (The Semiannual Monetary Policy Report to the Congress 2023).

6.4 NOMINAL SPENDING TARGETING

The best option would be for the Fed to abandon inflation targeting altogether and instead adopt a nominal spending target. Under this framework, the Fed adjusts the money supply to offset changes in money demand, thereby ensuring that nominal spending follows a predetermined growth path. Like average inflation targeting (AIT), this approach requires the Fed to make up for periods when nominal spending deviates from its target path, but it differs from AIT by allowing supply shocks to pass through to the price level and inflation rate. A nominal spending target thus behaves like AIT in the case of aggregate demand shocks, but spares the Fed having to decide whether to deviate from its inflation target in response to aggregate supply shocks, which it is ill-equipped to address directly with its existing tools (interest rate changes and asset purchases) that can only influence aggregate demand, not supply. Like AIT, it makes the price level more predictable over longer time horizons.²⁶

To be sure, there is a communication challenge associated with moving from FAIT to a nominal spending target. The Fed's past frameworks have conditioned the public to think in terms of an inflation target of one sort or another. As a result, a nominal spending target may initially seem like a radical departure from the status quo. That said, Binder (2020) argues that nominal spending targeting would ultimately improve central bank communication:

Part of the difficulty of inflation targeting is that many people either do not know what inflation is or understand it very differently than central bankers do. Many people do not understand that higher inflation can be a consequence of higher aggregate demand. On surveys of consumer expectations, for many consumers, reported inflation expectations are really a proxy for their beliefs about the general state of the economy - that is, consumers report higher inflation expectations when economic sentiment is poor.

By allowing "the Fed to frame its policy decisions in terms of income rather than inflation," a nominal spending target helps alleviate public confusion about the relationship between inflation and real output fluctuations (Binder 2020). It also reduces uncertainty among households and firms about how the Fed will balance the two sides of its dual mandate. In this way, a nominal spending target could significantly improve central bank communication.

Moreover, while a nominal spending target may sound like a dramatic departure from the status quo, it can be implemented using familiar interest rate rules. For example, Orphanides (2025) proposes a natural growth targeting rule, which prescribes how the Fed should set its policy rate based on the projected growth of nominal spending and the "natural" growth rate — defined as the sum of the Fed's two-percent inflation objective and the estimated growth rate of potential output. Had the Fed followed this rule during and immediately after the pandemic, it would have begun tightening much sooner and prevented the price level from rising as high as it did.

In sum, nominal spending targeting is not only economically sound but institutionally feasible, representing the best option for promoting monetary stability going forward.

Conclusion

Contrary to Chair Powell's claims, the 2020-2024 rise in the price level was not exogenous — it was the result of an aggregate demand shock caused by the Fed itself. Officials failed to recognize the demand-driven nature of the problem, despite mounting evidence. Nor, contrary to Powell's claim, did they act swiftly to correct course once they realized that monetary policy was far off track. Far from being irrelevant, the FAIT framework helps explain why the price level remains well above its pre-pandemic growth path. In short, FAIT has failed. It does not promote price stability — it enabled the highest inflation in forty years. It does not anchor expectations — it has eroded the Fed's credibility.

In retrospect, these outcomes are hardly surprising. By focusing narrowly on inflation, FAIT increases the risk of misdiagnosing demand shocks as supply shocks — as the Fed did in 2021. Had officials focused on nominal spending, they would have seen that aggregate demand was rising rapidly — in other words, that households and firms were increasing their spending at a pace well above the corresponding change in the economy's productive capacity, putting upward pressure on prices, warranting tighter monetary policy. The Fed's asymmetric approach to FAIT likely contributed to its slow response. If the framework had required officials to make up for above-target inflation, they would have had stronger incentives to act quickly and limit the size of the necessary correction. Instead, the asymmetry virtually guarantees that inflation will exceed two percent on average.

FAIT was designed to address the perceived problem of persistently low inflation following the Great Recession. In that narrow respect, it succeeded: it eliminated low inflation, but at the expense of price stability. What the Fed needs is a robust monetary policy framework capable of responding to a wide range of economic circumstances. Whatever its other merits, FAIT is not up to the task.

To that end, each of four potential revisions to the Fed's monetary policy framework was evaluated. Of these, two stand out as especially promising. The best option would be for the Fed to adopt a nominal spending target, which would help anchor expectations, avoid inappropriate responses to supply shocks, ensure a timely response to demand shocks, and improve communication with the public. This approach may be difficult to explain initially. A symmetric average inflation target would be a viable second-best option, offering many — though not all — of the benefits of nominal spending targeting. Either alternative would be a clear improvement over the status quo and would likely have produced better monetary policy in recent years.

Getting this history right matters. If Fed officials are to avoid repeating the same mistakes, they must acknowledge their role in driving prices permanently higher. As they review the framework this year, they should bear one thing in mind: either FAIT enabled the price level to rise permanently above its pre-pandemic path, or it failed to prevent it. Either way, it must go.

REFERENCES

Akerlof, George A., William T. Dickens, and George L. Perry. 1996. "The Macroeconomics of Low Inflation." *Brookings Papers on Economic Activity* 1:1-59.

Alvarez, Santiago, Alberto Cavallo, Alexander MacKay, and Paolo Mengano. 2024. *Markups and Cost Pass-through Along the Supply Chain*. Social Science Research Network.

Ball, Laurence. 2014. The Case for a Long-Run Inflation Target of Four Percent. Working Paper. WP/14/92. International Monetary Fund.

Beckworth, David, and Patrick J. Horan. 2025. "The Fate of FAIT: Salvaging the Fed's Framework." *Southern Economic Journal* 91(4):1391–1403.

Bergman, William, and William J. Luther. 2022. "When Did The Fed Change Its Tune?" https://aier.org/article/ when-did-the-fed-change-its-tune/.

Binder, Carola. 2020. "NGDP Targeting and the Public Fed Policy." Cato Journal 40(2):321-42.

Binder, Carola. 2025. "The Rise of Inflation Targeting." *Southern Economic Journal* 91(4):1229-46.

Blanchard, Olivier J., Giovanni Dell'Ariccia, and Paolo Mauro. 2010. *Rethinking Macroeconomic Policy*. International Monetary Fund.

Blanco, Andrés. 2021. "Optimal Inflation Target in an Economy with Menu Costs and a Zero Lower Bound." *American Economic Journal: Macroeconomics* 13(3):108-41.

Brainard, Lael. 2020. "Bringing the Statement on Longer-Run Goals and Monetary Policy Strategy into Alignment with Longer-Run Changes in the Economy." Presented at the Brookings Institution, September 1, Washington, D.C.

Brown, Sherrod. 2023. "Brown To Powell: Put Workers First in the Fight Against Inflation | U.S. Senator Sherrod Brown of Ohio." https://www.brown.senate.gov/ newsroom/press/release/sherrod-brown-to-powell-putworkers-first-fight-against-inflation.

Cachanosky, Nicolás, Bryan P. Cutsinger, Thomas L. Hogan, William J. Luther, and Alexander W. Salter. 2021. "The Federal Reserve's Response to the COVID-19 Contraction: An Initial Appraisal." *Southern Economic Journal* 87(4):1152-74.

Clarida, Richard H. 2020."The Federal Reserve's New Framework: Context and Consequences." Presented at the Bookings Institution, November 16, Washington, D.C.

Cochrane, John H. 2023. *The Fiscal Theory of the Price Level*. Princeton University Press.

Cutsinger, Bryan P., and William J. Luther. 2022. "Seigniorage Payments and the Federal Reserve's New Operating Regime." *Economics Letters* 220:110880.

Di Giovanni, Julian, Șebnem Kalemli-Özcan, Alvaro Silva, and Muhammed A. Yildirim. 2023. *Pandemic-Era Inflation Drivers and Global Spillovers*. National Bureau of Economic Research.

Eggertsson, Gauti B., and Don Kohn. 2023. *The Inflation Surge of the 2020s: The Role of Monetary Policy*. 87. Brookings Institution.

Federal Reserve. 2020."2020 Statement on Longer-Run Goals and Monetary Policy Strategy." https://www. federalreserve.gov/monetarypolicy/review-of-monetarypolicy-strategy-tools-and-communications-statement-onlonger-run-goals-monetary-policy-strategy.htm.

Federal Reserve. 2021a. "December 2021: Summary of Economic Projections."

Federal Reserve. 2021b. "June 2021: Summary of Economic Projections."

Federal Reserve. 2021c. "March 2021: Summary of Economic Projections."

Federal Reserve. 2021d. "September 2021: Summary of Economic Projections."

Federal Reserve. 2022a."June 2022: Summary of Economic Projections." https://www.federalreserve.gov/ monetarypolicy/fomcprojtabl20220615.htm.

Federal Reserve. 2022b."March 2022: Summary of Economic Projections." https://www.federalreserve.gov/ monetarypolicy/fomcprojtable20220316.htm.

Feldstein, Martin. 1997. "The Costs and Benefits of Going from Low Inflation to Price Stability." Pp. 123-56 in *Reducing inflation: motivation and strategy*, edited by C. D. Romer and D. H. Romer. Chicago, IL: University of Chicago Press.

Feldstein, Martin. 1999. "Capital Income Taxes and the Benefit of Price Stability." Pp. 9–40 in *The costs and benefits of price stability*, edited by M. Feldstein. Chicago, IL: University of Chicago Press.

Furman, Jason. 2023a. "The Fed Should Carefully Aim for a Higher Inflation Target." *Wall Street Journal*, August 20.

Furman, Jason. 2023b. "Unexpected Inflation Can Lead to Redistribution, Hurting Creditors and Possibly Workers." https://x.com/jasonfurman/status/1693791191760781471.

REFERENCES

Gordon, Robert J. 1996. "Comment on Akerlof et Al." *Brookings Papers on Economic Activity* 1:60-66.

Grimm, Maximilian, Òscar Jordà, Moritz Schularick, and Alan M. Taylor. 2023. "Loose Monetary Policy and Financial Instability."

Hendrickson, Josh. 2024. "Price Theory as an Antidote." https://www.economicforces.xyz/p/price-theory-as-an-antidote.

Hendrickson, Joshua. 2025. "The Case for Nominal GDP Level Targeting." *Southern Economic Journal* 91(4):1404-19.

Hetzel, Robert L. 2025. "Monetarism and Monetary Policy." *Southern Economic Journal* 91(4):1347-71.

Hogan, Thomas L. 2025. "The Failure of Forward Guidance: Lessons from the Pandemic Recovery." *Southern Economic Journal* 91(4):1265-86.

Ireland, Peter N. 2025. "The Devolution of Federal Reserve Monetary Policy Strategy, 2012-24." *Southern Economic Journal* 91(4):1247-64.

Jordan, Jerry L., and William J. Luther. 2022. "Central Bank Independence and the Federal Reserve's New Operating Regime." *The Quarterly Review of Economics and Finance* 84:510-15.

Lagos, Ricardo, and Randall Wright. 2005. "A Unified Framework for Monetary Theory and Policy Analysis." *Journal of Political Economy* 113(3):463-84.

Lorenzoni, Guido, and Iván Werning. 2023. *Inflation Is Conflict*. National Bureau of Economic Research.

Lucas, Robert E. 2000. "Inflation and Welfare." *Econometrica* 68(2):247-74.

Luther, William J. 2024. "Neutral Nominal Spending and the Nominal Spending Gap."

Mankiw, N. Gregory. 1996. "Comment on Akerlof et Al." Brookings Papers on Economic Activity 1:66-70.

Miller, Tracy. 2024. "Fiscal Policy and Inflation Control: Insights from the COVID Economic Response." *Mercatus Policy Brief Series*.

Nelson, Bill. 2025. "How the Federal Reserve Got so Huge, and Why and How It Can Shrink." *Southern Economic Journal* 91(4):1287-1322.

Orphanides, Athanasios. 2025. "Enhancing Resilience with Natural Growth Targeting." *Southern Economic Journal* 91(4):1420-39. Papell, David H., and Ruxandra Prodan-Boul. 2024. *Policy Rules and Forward Guidance Following the Covid-19 Recession*. Social Science Research Network.

Powell, Jerome. 2020."New Economic Challenges and the Fed's Monetary Policy Review." https://www. federalreserve.gov/newsevents/speech/powell20200827a. htm.

Powell, Jerome. 2025."FOMC Press Conference Transcript of January 29, 2025," January 29, Washington, D.C.

Romer, Christina D. 2021. "The Fiscal Policy Response to the Pandemic." *Brookings Papers on Economic Activity* 89-110.

Rouanet, Louis, and Alexander William Salter. 2025. "Mission Creep at the Federal Reserve." *Southern Economic Journal* 91(4):1323-46.

Sargent, Thomas J. 1982. "The End of Four Big Inflations." Pp. 41-98 in *Inflation: Causes and Effects*, edited by R. E. Hall. University of Chicago Press.

Schibuola, Alexander D., and Andrew B. Martinez. 2021. "The Expectations Gap."

Selgin, George. 1997. *Less than Zero: The Case for a Falling Price Level in a Growing Economy*. London: The Institute of Economic Affairs.

Selgin, George. 2018. Floored!: How a Misguided Fed Experiment Deepened and Prolonged the Great Recession.

The Semiannual Monetary Policy Report to the Congress. 2023.

Warren, Elizabeth. 2022. "One of the Reasons Why Prices Are Up?" https://x.com/SenWarren/ status/1520495104380874760.

Weber, Isabella M., and Evan Wasner. 2023. "Sellers' Inflation, Profits and Conflict: Why Can Large Firms Hike Prices in an Emergency?" *Review of Keynesian Economics* 11(2):183-213.

White, Lawrence H. 2025. "Should the Federal Reserve Raise Its Inflation Target?" *Southern Economic Journal* 91(4):1372-90.

ENDNOTES

- 1. Inflation refers to the rate at which the price level is rising. The price level itself is a measure of the average prices of goods and services at a point in time. A temporary rise in inflation means prices are rising faster for a period; a permanent rise in the price level means they remain elevated even after inflation returns to normal, which is essentially what happened over the past few years.
- 2. While Chair Powell has not explicitly endorsed the greedflation or fiscal-policy-driven explanations, these views have shaped the broader public discourse around post-pandemic inflation and often inform the interpretation of external or "exogenous" causes. Including them here clarifies the contrast between demand-driven inflation and non-monetary accounts of the inflation surge. Moreover, even if Powell attributes inflation primarily to supply-side factors, those claims rest on the broader premise that inflation stemmed from forces outside the Fed's control.
- 3. The framework was intended to anchor expectations and prevent interest rates from approaching the zero (or, effective) lower bound. Some economists prefer the word "effective," which recognizes that, due to transaction costs, nominal interest rates might fall to a level slightly below zero.
- 4. The asymmetry in the Fed's new framework was not initially obvious. Its 2020 Statement on Longer-Run Goals and Monetary Policy Strategy (Federal Reserve 2020) explicitly addresses only the case of belowtarget inflation. But it also replaced the language of "deviations of employment from the Committee's assessments of its maximum level" with "shortfalls of employment from the Committee's assessment of its maximum level," signaling a more one-sided focus.
- 5. This effort is part of a broader symposium reviewing the Fed's framework, including contributions that examine the historical evolution of inflation targeting (Binder 2025; Hetzel 2025), assess the Fed's implementation of FAIT (Beckworth and Horan 2025; Ireland 2025), and consider alternative rules-based frameworks (Hendrickson 2025; Orphanides 2025; White 2025). The symposium also explores issues of mission creep (Rouanet and Salter 2025), forward guidance (Hogan 2025), and operating regimes (Nelson 2025).

- 6. Unless otherwise stated, inflation rates reported herein are calculated as the continuously compounded annualized rate of change in the personal consumption expenditures price index. This approach produces more interpretable and comparable rates across time periods.
- 7. Although Lorenzoni and Werning's conflictinflation model offers an elegant formalization of how staggered price-setting by different agents can generate sustained inflationary pressures, there is no role for money, monetary policy, or other nominal determinants of the price level. As a result, the model's notion of "inflation" reflects ongoing relative price adjustments in a purely real environment, raising questions about whether it meaningfully describes the dynamics of inflation as economists typically understand it.
- 8. The collusion need not be explicit. "Besides a formal cartel and norms of price leadership," Weber and Wasner write, "there can be implicit agreements that coordinate price hikes."
- 9. Alvarez et al. (2024) find that total markups were stable over the period. Since a rise in input costs puts downward pressure on markups, one might interpret the evidence as indicating a relative increase in markups following the pandemic. In other words, firms were able to pass on higher costs to consumers without reducing their margins – suggesting stronger demand, not rising greed.
- 10. For a given rate of nominal spending growth, there is a one-to-one tradeoff between inflation and real output growth. Hence, for reduced output to explain even one percentage point of inflation, market power would need to have lowered real GDP growth by a full percentage point. That would represent a roughly 50 percent reduction in trend real GDP growth implausible given the observed recovery. In other words, blaming inflation on falling output due to increased market power would require an unrealistically large collapse in real economic activity something we simply did not observe.
- 11. See Cochrane (2023) for a theoretical account of the fiscal theory of the price level the view that prices rise when people believe the government will not raise enough future tax revenue to cover its debts.
- 12. Many advocates of the fiscal theory of the price level, including Miller (2024), acknowledge that the recent excess inflation resulted from "a combination of monetary and fiscal policy."

ENDNOTES

- 13. Compounding these challenges, Russia's invasion of Ukraine in February 2022 further disrupted global supply — especially in energy markets — pushing oil and other commodity prices higher. The invasion was largely unanticipated, however, so its contribution to the observed rise in the price level (much of which happened earlier) is limited.
- 14. Unemployment was also falling as inflation accelerated, further undermining the supply-shock explanation.
- 15. Di Giovanni et al. (2023) estimate a multi-country, multi-sector New Keynesian model and similarly conclude that a surge in aggregate demand – not adverse supply shocks – was the primary driver of inflation in 2021 and 2022.
- 16. Another reason unexpected increases in nominal spending tend to raise measured corporate profits is that the Fed's remittances to the Treasury – which are likely to rise with excessive monetary stimulus – are recorded as corporate profits in the National Income and Product Accounts.
- 17. As Orphanides (2025) explains, rising inflation reduced the real policy rate over this period – passively loosening monetary policy when tighter monetary policy was required.
- 18. Selgin (2018) explains how the Fed's new floor system, adopted in October 2008, prevented the large increase in reserves from restoring the price level. See also: Cutsinger and Luther (2022), Jordan and Luther (2022), and Nelson (2025).
- 19. As discussed below, White (2025) notes that the zero lower bound only limits the Fed's interest rate policy, not its overall ability to influence aggregate demand.
- 20. Technically, whether they must worry about belowtarget inflation depends on the length of the contract, timing of payments, and the speed at which the central bank makes up for undershooting its target. But the general point remains.
- 21. As discussed earlier, inflation driven by supply shocks - such as disruptions to production or increases in input costs - is generally outside the Fed's control. Attempts to counteract these shocks risk imposing unnecessary economic distortions, especially if real output is already constrained.
- 22. Moreover, AIT may amplify macroeconomic volatility (Grimm et al. 2023).

- 23. Such proposals are not new. See, for example, Blanchard et al. (2010), Ball (2014), and Blanco (2021).
- 24. Gordon (1996) and Mankiw (1996) make a similar point.
- 25. When taxes are levied on nominal interest income and capital gains rather than inflation-adjusted amounts, higher expected inflation increases the tax burden on savers and investors. This discourages saving and investment, even though the real (inflation-adjusted) return may not have changed.
- 26. As Hendrickson (2025) explains, nominal spending targeting replicates a Pareto-optimal competitive monetary equilibrium that is, an outcome in which no one can be made better off without making someone else worse off.



250 Division Street | PO Box 1000 Great Barrington, MA 01230-1000 Telephone: 1-888-528-1216 | Fax: 1-413-528-0103 Press and other media outlets contact 888-528-1216 press@aier.org