

## Historical Disinflation Episodes: Which Falls First, Goods or Services?

[Charles Gascon](#), Senior Economist  
[Joseph Martorana](#), Research Associate

Annual inflation in the U.S. has slowed over the past year, decreasing by 2.9 percentage points from February 2023 to February 2024 and settling at 2.5%, as measured by the personal consumption expenditures (PCE) price index. Despite progress toward the Fed’s 2% target, FOMC participants in March 2024 projected only a 0.4-percentage-point drop in PCE inflation over the coming year.<sup>1</sup> Why is progress toward 2% inflation expected to slow? Historical experience—specifically, disinflationary episodes of the early and late 1980s—suggest that goods price inflation tends to fall quickly, while the last mile of disinflation is driven primarily by a lengthier disinflation of services.

### Goods Inflation: Major Contributor to Increases (and Decreases) in Headline Inflation

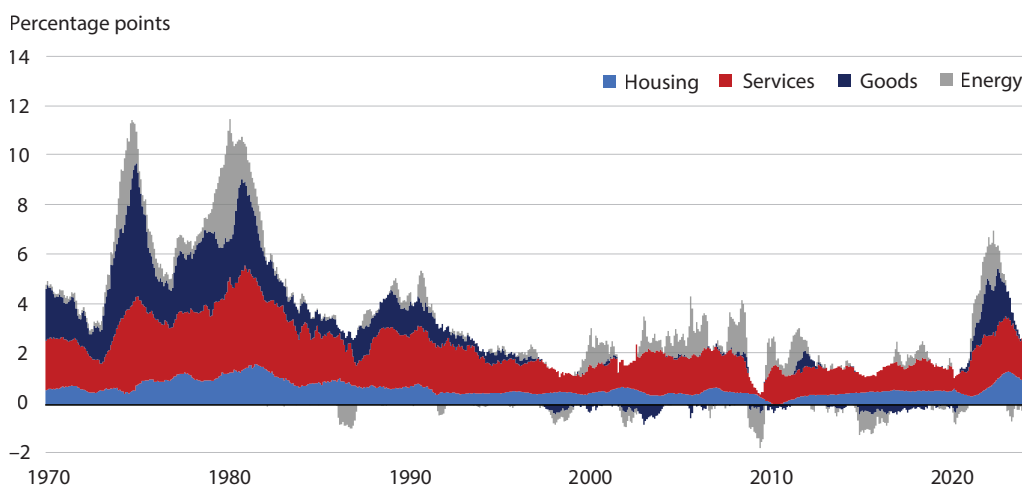
Figure 1 shows the contribution to inflation from energy, goods (excl. energy), services (excl. energy and housing), and housing (excl. energy). Historically, energy and goods

inflation have been the most volatile, with their contributions both falling within a spread of 6.3 percentage points. Similar to the episodes in the early and late 1980s, energy and goods inflation have driven inflation’s recent peak in June 2022, climbing from averages of near zero to 2.4 and 2.3 percentage points, respectively. Services inflation has been less volatile than goods inflation, with its contribution typically ranging between 1 and 4 percentage points. Housing inflation has been the most stable. Beginning in 1992, its contribution to headline inflation has hovered around 0.5 percentage points, though it peaked at 1.3 percentage points in April 2023.<sup>2</sup>

### Services Disinflation: Likely Needed to Drive the Last Mile of Disinflation

Figure 2 presents a closer look at inflation components during three disinflationary periods. It plots the 12-month inflation rate of each component for periods beginning in

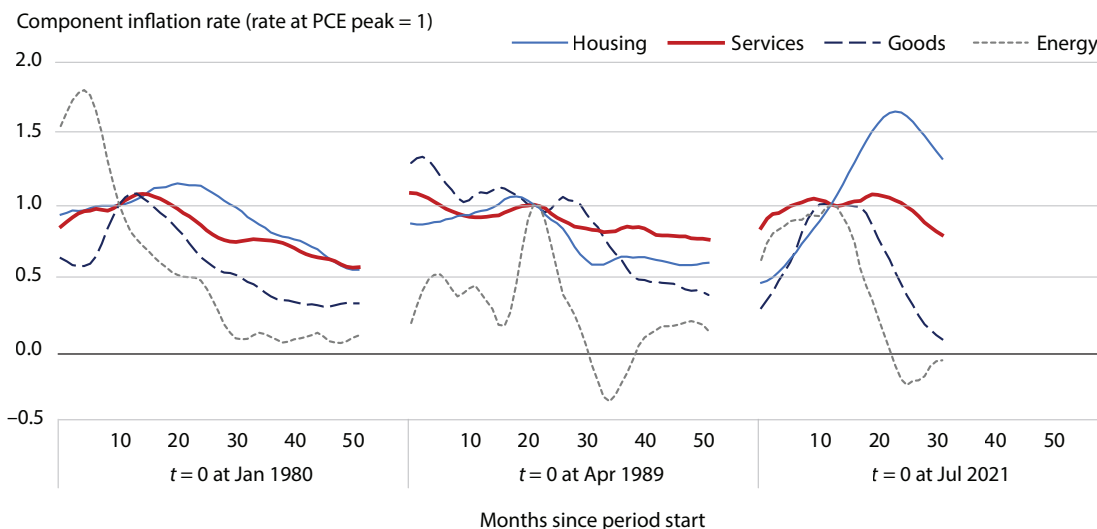
Figure 1  
**Component Contribution to PCE Inflation**



NOTE: Housing includes housing services excluding utilities; services includes non-housing and non-energy services; goods includes non-energy goods; and energy includes energy goods and services. The components are weighted by their shares of nominal household PCE for each month (excl. final consumption expenditures of nonprofit institutions serving households). These are not the actual weights the Bureau of Economic Analysis uses, but a close approximation.

SOURCE: Bureau of Economic Analysis and authors’ calculations.

Figure 2  
**Path to Disinflation by Subcomponent**



NOTE: A 6-month trailing average of the unweighted year-over-year inflation rates of each component is shown above. The unweighted rates are used to avoid the influence of each component’s changing share in the consumption basket on the disinflation path. The 6-month average is used for graphical smoothing. However, using the unaveraged weighted inflation rates does not materially change our analysis.

SOURCE: Bureau of Economic Analysis and authors’ calculations.

January 1980, April 1989, and July 2021. The rates have been scaled for each component to be 1 when headline PCE inflation reached its peak, and the horizontal axis shows the number of months that have passed in each period.

Two points are worth noting. First, goods and services disinflation tend to begin before housing disinflation. In the 1980 episode, goods and services disinflation began within three months of the headline inflation peak; housing inflation continued to rise for eight months after the peak. The 1989 episode was similar in that housing inflation peaked roughly 17 months after goods and services inflation peaked. The current episode appears to be more of the same, though both housing and services inflation peaked long after goods inflation had peaked (12 and 8 months later, respectively).

Second, services disinflation is more prolonged than housing or goods disinflation. In fact, housing and goods take the same amount of time to return to their long-run average rates. In the 1980 episode, goods and housing inflation both normalized around 23 months after their peaks, while services normalized in 33 months. And to be clear, the reason that services disinflation took longer is not because services required a greater magnitude of disinflation: Both goods and services inflation fell by approximately

5 percentage points in that episode. In the 1989 period, both fell by roughly 3 percentage points, and services disinflation was again the longer process. In comparing the first 12 months of disinflation after their respective peaks in the current period, services inflation had come down by only 1.2 percentage points, while goods inflation had come down by 3 percentage points.

The projected change in headline inflation over 2024 is consistent with recent historical episodes. Steep goods disinflation contributed to a reduction in headline inflation during 2023. History indicates that, absent any shocks to the economy, the future pace of progress toward 2% inflation will likely be set by a delayed, protracted, and gradual disinflation in services.

**Notes**

<sup>1</sup> See the difference in Q4 year-over-year inflation projections for 2023 in the [December 2023 Summary of Economic Projections](#) and for 2024 in the [March 2024 Summary of Economic Projections](#).

<sup>2</sup> The standard deviations of the unweighted component inflation rates are 2.1, 2.4, 2.7, and 12.2 percentage points for housing, services, goods, and energy, respectively. While the distributions of the rates are not symmetric, the standard deviations still hint at the relative volatility of each component, with a greater standard deviation representing greater volatility.