

The Robustness Properties of Nominal GDP Targeting

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Nominal GDP (NGDP) targeting offers many advantages to today's Federal Reserve. Had they paid closer attention to stabilizing NGDP, Federal Open Market Committee (FOMC) members might have avoided the mistakes they've made in the recent past. And by paying closer attention to stabilizing NGDP, they will avoid making similar mistakes in the future. But exactly what are NGDP targeting's robustness properties, and where do they come from?

They stem, first, from the simple fact that NGDP is a nominal variable. Of course, NGDP can't be directly controlled on a quarterly or even an annual basis. But there's no question that monetary policymakers can hit any desired target for NGDP growth, when averaged over two to three years, with a tolerable degree of precision. The shorter lags from monetary actions to nominal spending than to the price level itself, documented most recently by Belongia and Ireland (2024), help in this regard.

They come, second, from another straightforward fact: that NGDP growth decomposes into an equally-weighted sum of inflation and real GDP growth. Thus, by aiming to stabilize nominal GDP growth, the FOMC can pursue modest stabilization goals for the real economy in

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the short run even as they maintain an environment of long-run price stability. These objectives, prescribed by the Federal Reserve's dual mandate, appear as complementary rather than competing under NGDP targeting.

NGDP targeting thereby allows FOMC members to avoid reference to unstable Phillips curve tradeoffs. The debacle of September 2024, when the FOMC rushed to ease monetary policy based on perceptions of cumulating weakness in the labor market that subsequently failed to materialize, and the fiasco of July-August 2025, when the FOMC held rates steady based on perceptions of labor market strength that were almost immediately called into question by routine downward revisions to previous months' data on employment growth, would have been avoided by a NGDP targeting central bank. Making monetary policy with reference to a Phillips curve and high-frequency labor market data is a suckers' game, and the FOMC falls for it again and again. NGDP targeting spares us these embarrassments.

Third, the equation of exchange equates nominal income PY with what Bennett McCallum (1985, p.589) called the "velocity-adjusted monetary aggregate" MV . Thus, NGDP targeting usefully reminds us of Milton Friedman's (1968, p.39) dictum that "inflation is always and everywhere a monetary phenomenon," which can be guarded against by monitoring broad money growth. By contrast, the FOMC ignored the post-2020 surge in M2 growth that presaged the sharp rise in inflation that followed, some of which still plagues us today. This even bigger unforced error could have easily been avoided by NGDP targeting.

A fourth source of robustness – perhaps most important of all at this moment in time – is that shocks to aggregate supply, including but by no means limited to large increases in tariffs, tend to move output and prices in opposite directions, with little or no effect on NGDP growth. Beckworth and Horan (2024) call this the "two-for-one deal" offered by nominal GDP targeting.

To take advantage of this two-for-one deal, FOMC members should abandon their distinction between “transitory” versus “persistent” inflation, which is confusing and contributed to the post-2020 inflationary policy mistake, replacing it with more precise terms from calculus. Remember: calculus was *invented* to help us keep track of these things – that’s why all college freshmen are supposed to learn it!

Tariffs will likely generate a one-time increase in the aggregate price nominal *level*, an upward-trending variable that is easiest to plot and keep track of by taking the natural logarithm of $P(t)$, denoting the price level as a function of time. Absent excessive monetary accommodation, however, tariffs will have no lasting effect on inflation, the *growth rate* of the aggregate nominal price level, computed as $\dot{P}(t)/P(t)$ by taking the derivative of $\ln P(t)$ with respect to t . Of course, explicit reference to natural logs and derivatives can and should be confined to more technical discussions. The relevant distinction for the public, emphasized by Batten (1981) long ago, is between levels and growth rates.

Monetary policy can’t do anything to offset the effects of tariffs, so as Beckworth and Horan (2024) explain, central bankers need to “look through” the one-time increase in the price level and keep their focus on intermediate-term trends in inflation. Nelson (2025) traces the origins of the term “look through” back to Governor John Crow’s description of the Bank of Canada’s response to increases in the national sales tax and world oil prices in the early 1990s. Nelson also outlines how, based on international experiences spanning three decades from 1973 through 2003, the approach became part of what he calls (p.2) “the policymaking consensus.” The problem is that, under inflation targeting, “looking through” one-time shocks to the price level requires what can turn into an awkward discussion of why the central bank isn’t adjusting its policies to the brief changes in measured inflation that will appear in the high-frequency data.

Nominal GDP finesses this issue. Since the level of output falls as the level of price rises, NGDP remains unchanged. NGDP targeting thereby makes clear that no monetary response is called for. This is the two-for-one deal: NGDP targeting allows the central bank to look through the one-time price-level effects of aggregate supply shocks while still successfully stabilizing intermediate-term inflation.

Critics will argue that this approach will fail if, in response to the one-time jump in the price level, private expectations of intermediate-term inflation adjust adaptively upward. Indeed, this “unanchoring” of inflationary expectations *will* then confront monetary policymakers with an even more painful tradeoff: either accommodate higher inflationary expectations with a more expansionary policy that does move intermediate-term inflation upward, or try to hold the line with contractionary policy and risk recession.

But this turns out to be another argument *for*, not against, NGDP targeting. The best way for a central bank to maintain its credibility and keep intermediate-term inflationary expectations anchored is to make consistent reference to a monetary policy strategy that *does* succeed in stabilizing intermediate-term inflation, even when confronted with the challenges of adverse supply shocks. And this is exactly what NGDP targeting, with its robustness properties, is meant to achieve.

Of course, higher tariffs or, especially, increased uncertainty driven by the threat of higher tariffs might also affect the economy through aggregate demand channels. But here, too, NGDP targeting helps guide the appropriate monetary policy response. To the extent that both the aggregate price level and aggregate output are pushed lower by any shock or set of shocks, NGDP targeting, just like inflation targeting, will call for a monetary policy easing. But again, as emphasized by Beckworth and Horan (2024), NGDP targeting has the advantage over inflation

targeting, in that it prescribes a monetary easing *only* to the extent that shocks are working through aggregate demand, and not aggregate supply, channels.

Next question: what does the recent behavior of NGDP tell us about the current stance of monetary policy and the appropriate path for policy going forward? Figure 1 shows that year-over-year NGDP growth was 4.6 percent in 2025, quarter 2, down ever so slightly from 2025, quarter 1, but more significantly from 5.9 percent in 2024, quarter 2. These readings cut through the noise in higher-frequency data and point clearly to a welcome, continued easing of intermediate-term inflationary pressures.

As noted above, NGDP growth can be interpreted as growth in a velocity shift-adjusted monetary aggregate, then decomposed into an equally-weighted sum of the growth rates of money and monetary velocity. Figure 2 shows year-over-year M2 growth in 2025 quarter 2 of 4.3 percent if measured using the Fed's official "simple-sum" aggregate and 3.6 percent using the Divisia measure based on economic aggregation and index number theory and made available through the Center for Financial Stability (see Barnett *et al* 2013). Belongia (1996), Hendrickson (2014), and Belongia and Ireland (2016) all present evidence to support what Chrystal and MacDonald (1994, p.76) call the "Barnett Critique," the general observation that statistical links between money, income, and prices appear consistently stronger when Divisia monetary aggregates are used in place of their simple-sum counterparts.

In any case, with stable velocity, broad money growth of 4 percent per annum is consistent with 4 percent NGDP growth, neatly breaking down into 2 percent inflation and 2 percent real growth. Thus, the data from figure 2 suggest that monetary policy is close to neutral, though by the Divisia measure still noticeably restrictive.

Finally, figure 3 shows that monetary velocities have converged back to flexible estimates of their long-run trends, computed as in Belongia and Ireland (2015) using a one-sided time series filter, as well as the values they took, pre-recession, in early 2020. All these data, too, are consistent with an overall renormalization of monetary conditions.

Using a variant of the Taylor (1993) rule with a response coefficient of 1.5 on the deviation of year-over-year NGDP growth from a target of 4 percent and no separate term on real GDP (since NGDP growth already includes real GDP growth), together with the 4.6 percent rate of year-over-year NGDP growth recorded most recently for 2025, quarter 2, points to a federal funds rate target that should be 0.9 percentage points above its long-run neutral level. Taking this to be 3 percent, corresponding to the median FOMC (September 2025) estimate of the longer-run level of the federal funds rate, this calculation yields a federal funds rate target of 3.9 percent. Thus, these data justify the FOMC's recent policy actions: the two 25-basis-point cuts in the federal funds rate target at their September and October meetings. These data also suggest that a wait-and-see attitude is appropriate now, holding off on further adjustments as economic conditions continue to evolve.

Looking ahead to 2026, however, consensus forecasts appear far too pessimistic. Perhaps this is because too much attention is being paid to tariffs and not enough to the rest of the Trump Administration's economic agenda, which strongly favors growth, innovation, and entrepreneurship. The US economy will surely accelerate in 2026, as investment and hiring plans postponed this past spring are brought back online and as fiscal and regulatory incentives really kick in. Prepare to be surprised! Real GDP growth next year could easily approach 3 percent, exceeding by more than one full percentage point the median forecast of 1.8 percent from the FOMC (September 2025).

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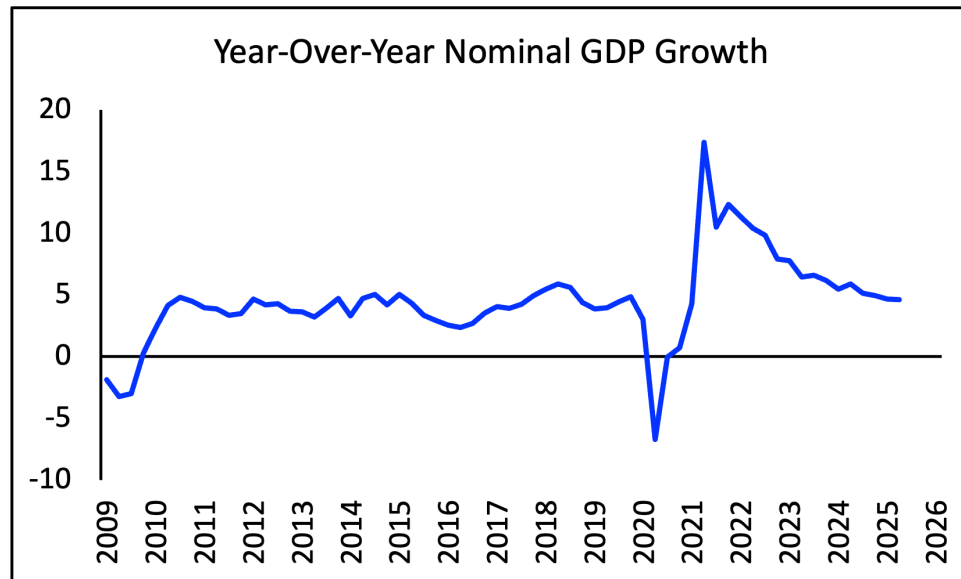
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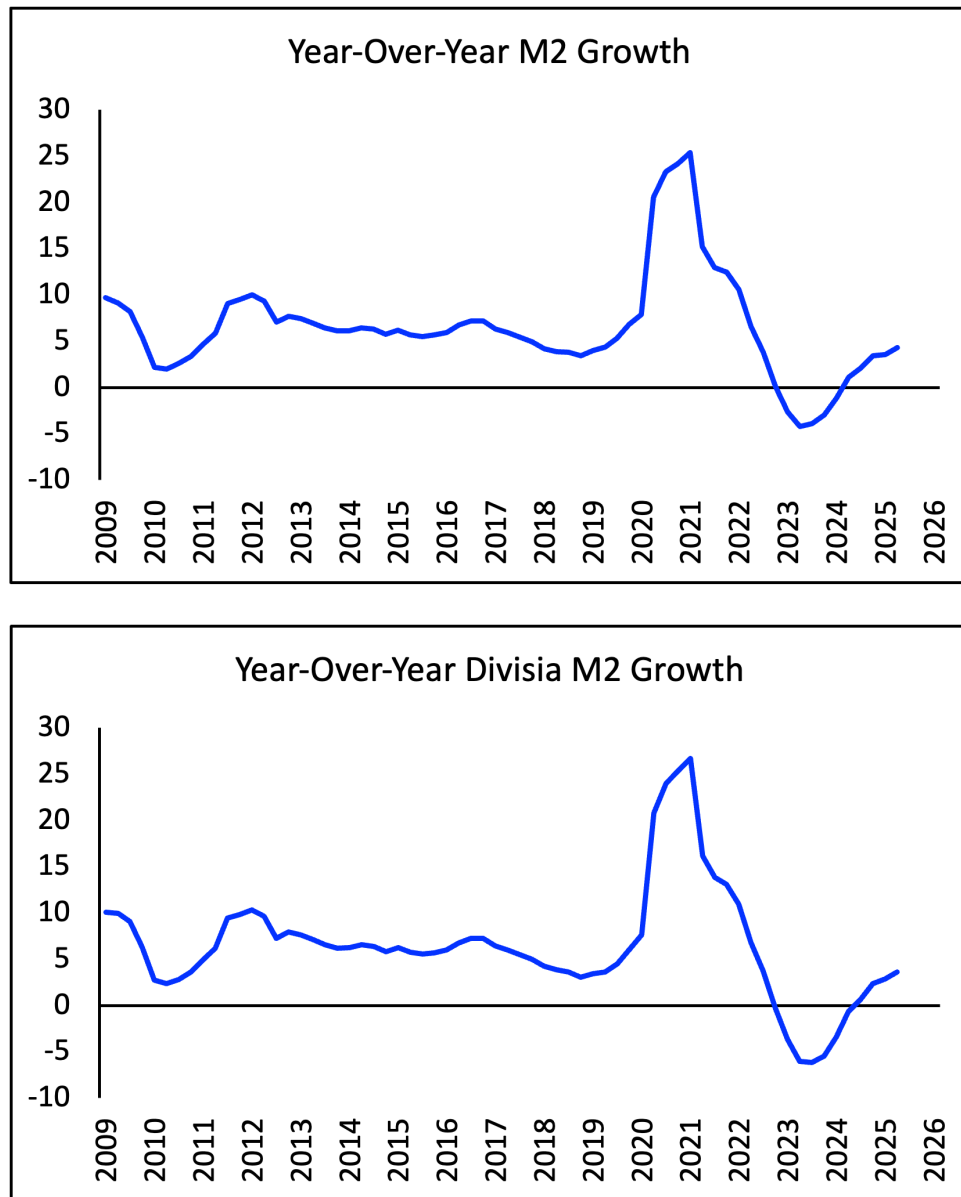
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Figure 1. Nominal GDP Growth



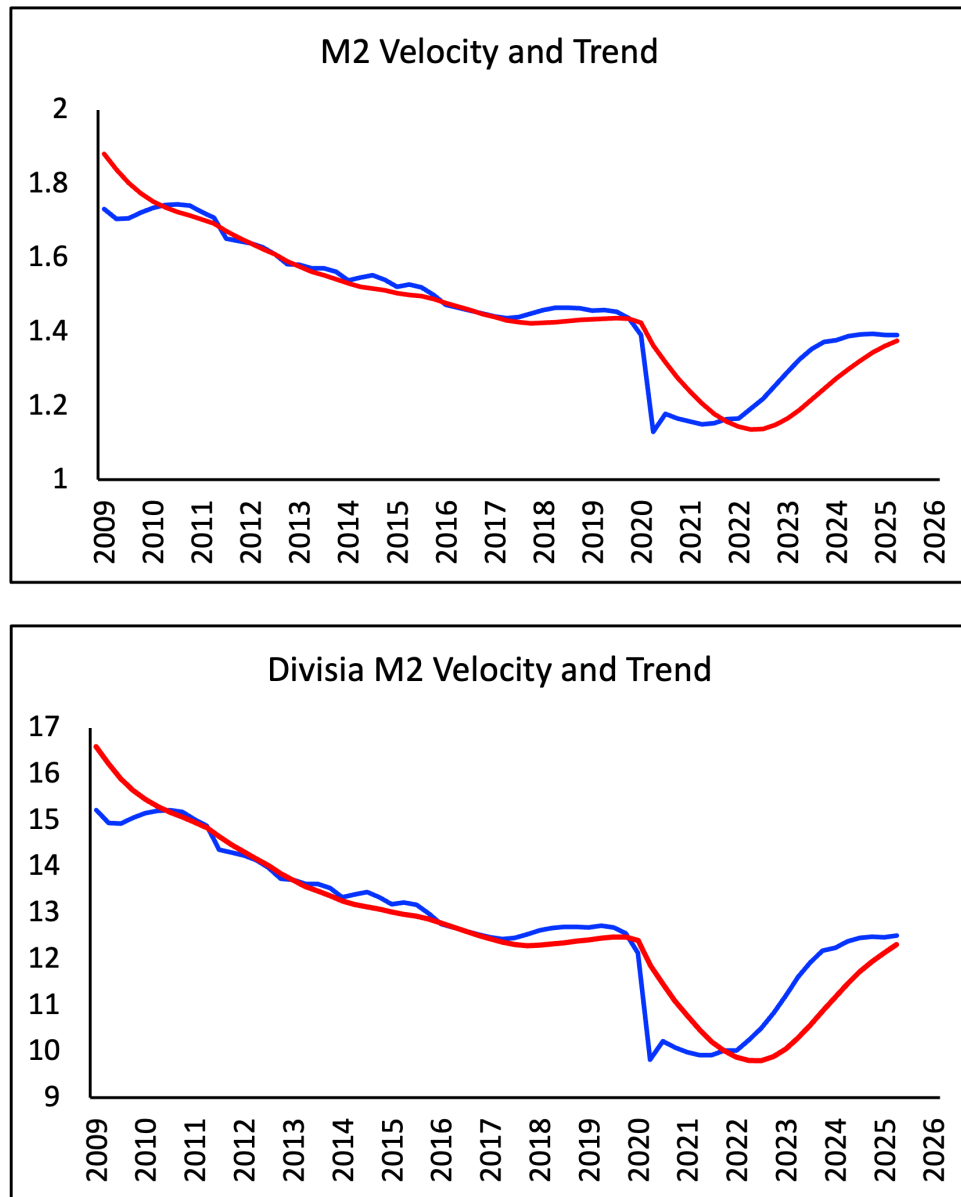
Source: Federal Reserve Bank of St. Louis, FRED database. The data run from 2009:Q1 through 2025:Q2.

Figure 2. M2 Growth



Sources: FRED (M2), Center for Financial Stability (Divisia M2). The data run from 2009:Q1 through 2025:Q2.

Figure 3. M2 Velocity and Long-Run Trend



Notes: The top graph plots the velocity of M2 (blue line), computed by dividing nominal GDP by the M2 money stock, together with its long-run trend (red line), estimated as in Belongia and Ireland (2015) using a one-sided time series filter. The bottom graph plots the velocity of Divisia M2 (blue line) and its long-run trend (red line), computed similarly. The data run from 2009:Q1 through 2025:Q2.

Sources: FRED, CFS.