



## Is Nominal GDP Targeting a Rule Policymakers Could Accept?

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Old debates about the use of rules versus discretion for conducting monetary policy and the efficacy of nominal gross domestic product (GDP) targeting have recently returned to the forefront of monetary policy discussions. The economics profession has largely sided with rules over discretion, while the debate about nominal GDP targeting continues. However, despite the support among economists for policy rules, transcripts of the Federal Open Market Committee (FOMC) meetings suggest that the Federal Reserve has never used a policy rule, and there is no evidence that any other central bank has either. On the surface, a nominal GDP-targeting rule would seem easier to agree on and, hence, more likely to be adopted. However, this essay discusses reasons policymakers have not used policy rules and are unlikely to target nominal GDP.

A policy rule specifies how policymakers will respond to changes in economic conditions when conducting policy. A well-known monetary policy rule, the Taylor rule, relates the federal funds rate target to (i) the difference between the actual inflation rate and a target rate and (ii) the output gap. The Taylor rule takes the general form

$$ff_t^T = ff^N + \alpha(\pi^a - \pi^*) + \beta gap_t,$$

where  $ff_t^T$  is the FOMC's target for the federal funds rate;  $\pi^a$  and  $\pi^*$  are the actual and targeted rates of inflation, respectively; and  $gap_t$  is the difference between the actual and desired measure of economic activity (e.g., the gap between actual and potential output or between actual and desired unemployment rates). The neutral level of the funds rate,  $ff^N$ , is the funds rate consistent with actual inflation equal to the inflation target, and  $gap = 0$ . The two coefficients,  $\alpha$  and  $\beta$ , are positive and determine how much policymakers change the funds rate target in response to deviations of  $\pi^a$  from  $\pi^*$  or economic activity from the desired outcome.

Obviously, if policymakers established such a rule and took it seriously, they would put themselves out of a job; the rule would determine the interest rate target and there would be nothing else to do. However, establishing a rule requires a great deal of discretion: Policymakers must agree on  $ff^N$ ,  $\alpha$  and  $\beta$ , and the measures of actual inflation and the gap that will trigger a policy rate change. This is an extremely difficult task for a variety of reasons. Here are just a few. The relative size of  $\alpha$  and  $\beta$  will depend on many things, not the least of which is the relative importance policymakers assign to stabilizing inflation relative to economic activity; agreement here might be very difficult. Policymakers will need to agree on which inflation measure to use and the appropriate measure of  $\pi^a$ : Should it be the current rate of inflation or the rate of inflation that is expected over some time horizon? If the latter, what is the appropriate time horizon—6 months, 1 year, 2 years—and how should expectations be measured?

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It is easy to see why policymaker agreement on a specific policy rule would be difficult. And this lack of agreement has been enough to prevent such rigid rules from being adopted in practice. However, there are reasons to believe that even a policymaker acting alone, rather than within a policy committee, might not adopt a rule. For example, in specifying a rule in terms of only the inflation and output

gaps, the Taylor rule framework does not directly include a policy response to labor or financial market conditions or other possible objectives. Furthermore, a single price index or measure of inflation expectations may not adequately reflect inflationary pressures. The same point can be made about measures of economic activity. Moreover, a rule that appears to work well during one period might not work as well at another time. Indeed, as seen since the start of the financial crisis, policymakers sometimes decide to use an alternative variable to implement monetary policy. Hence, while policy rules may perform better than discretion in economic models, they are unlikely to be used in practice.

Some economists and policymakers have suggested that the Fed or other central banks should target nominal GDP. The underlying idea with this proposed target is that, if policymakers want inflation to average—say, 2 percent—and the rate of growth of real GDP to average—say, 3 percent, they should target nominal GDP growth of 5 percent. If nominal GDP grows faster than 5 percent, policymakers could tighten policy; if it grows slower than 5 percent, policymakers could ease policy. Nominal GDP targeting can be thought of as a policy rule taking the general form

$$ff_i^T = ff^N + \delta(gdp - gdp^T)$$

if the FOMC is using a funds-rate-targeting procedure;  $gdp$  is the growth rate of nominal GDP, and  $gdp^T$  is the desired growth rate.<sup>1</sup> Getting policymakers to agree on a specific rule of this form would seem relatively easy because GDP is well defined; there would be no debate about the variables as there would be with the Taylor rule. Moreover, the range of disagreement about  $gdp^T$  also seems relatively small. The FOMC has already agreed on a 2 percent inflation objective, and there appears to be a consensus that potential output growth is probably in the range of 2.5 to 3.5 percent. The disagreement about nominal GDP target would be relatively narrow, in a range from about 4.5 percent to 5.5 percent.

So what prevents the Fed and other central banks from adopting nominal GDP targeting? Again, there are a number of reasons, but an important and sufficient reason is

that nominal GDP targeting requires policymakers to be indifferent about the composition of nominal GDP growth between inflation and the growth of real output, and, in general, they are not. For example, let's assume the target is 5 percent and nominal GDP is growing at 6 percent. Would policymakers react the same if the composition was 1 percent inflation and 5 percent real growth, or 5 percent inflation and 1 percent real growth? It seems unlikely. In addition, nominal GDP targeting suffers from the other considerations that prevent policymakers from adopting policy rules. For example, policymakers' response to the alternative situations would depend on current labor and financial market conditions and activity; the composition of GDP, especially between consumption and investment; global economic conditions; and so on. In short, adopting a nominal GDP target is unlikely for many of the same reasons policymakers are unlikely to adopt a traditional Taylor rule—or indeed, any specific policy rule. The economy is too complex to be summarized by a single rule. Economies are constantly changing in ways difficult to explain after the fact and nearly impossible to predict. Consequently, policymakers seem destined to rely on discretion rather than rules.

The fact that monetary policy has been discretionary does not mean that policy rules and other basic economic relationships are useless. Indeed, they can be quite useful as guides to monetary policy decisionmaking. For example, it is useful to know whether the policy rate is consistent with the rate implied by the historical relationship given by a Taylor rule or, as I have suggested elsewhere, the Fisher equation.<sup>2</sup> In the final analysis, however, policymakers will use discretion and not rules to conduct monetary policy. ■

## Notes

<sup>1</sup> Andolfatto (2013) has suggested that nominal GDP targeting can be thought of as a special case of a Taylor rule; see “NGDP Targeting and the Taylor Rule.” *MacroMania* (blog), September 5, 2013; <http://andolfatto.blogspot.com/2013/09/ngdp-targeting-and-taylor-rule.html>.

<sup>2</sup> Thornton, Daniel L. “The FOMC’s Interest Rate Policy: How Long Is the Long Run?” Federal Reserve Bank of St. Louis *Economic Synopses*, 2011; No. 29, September 6, 2011; <http://research.stlouisfed.org/publications/es/11/ES1129.pdf>.