Federal Reserve Bank of Cleveland ISSN 0428-1276
May 21, 1984

economic commentary

Nominal Income Targeting

by John B. Carlson

In recent years prominent economists from diverse schools of thought have urged policymakers to establish long-term targets for nominal income.[1] The common thread that emerges from these proposals is to extend the announced policy horizon beyond one year, thus clarifying the longer-run intent of policy. In this *Economic Commentary*, we describe the current framework for monetary policy and suggest that a multiyear nominal income target could be viewed as a practical extension of current policy procedures. To be useful, a nominal income target for monetary policy would need to be credible and hence achievable over a reasonably predictable period of time. In this article we also identify some potential problems for nominal income control, particularly during periods of disinflation.

Semantics of Monetary Policy

The current framework for monetary policy is hierarchical, defined in terms of ultimate goals, intermediate targets, short-run or operating targets, and policy instruments. The *ultimate goals* of economic policy—price stability and high-employment economic growth—are prescribed in the Full Employment and Balanced Growth Act of 1978. Commonly called Humphrey-Hawkins, this act requires the Federal Reserve to report to Congress annual financial objectives—targets for monetary and aggregate credit growth—consistent with these ultimate goals. The reported monetary and credit objectives are *intermediate targets* that provide guidance for policy action. While not themselves the ultimate concern of policymakers, the behavior of the intermediate target variables provides information about the current and future levels of economic activity. Having intermediate targets is useful, because the transmission of monetary policy to ultimate policy targets is slow and uncertain. Another advantage to using some intermediate targets is that they can be observed more frequently than ultimate goals and hence provide more immediate feedback about the effectiveness of policy actions. If the intermediate targets are reliably related to ultimate goals, policy actions that attain intermediate target values will therefore be compatible with ultimate goals. Specification of annual intermediate target values—often called the *strategy* of monetary policy—also provides a statement to the public about the intent of policy in the period ahead.

Intermediate targets, like ultimate goals, cannot be controlled closely in the very short run. Consequently, the Federal Reserve also establishes *operating targets* for variables that it controls closely, such as reserve aggregates. The operating targets provide guidance for the trading desk as it attempts to achieve the intermediate targets through open-market operations, a policy *instrument*. Operating targets must be reliably related to intermediate targets, just as intermediate targets must be reliably related to ultimate goals. The operating targets thus provide immediate feedback as to the consistency of policy actions with achievement of the intermediate objective. The specification of operating targets is sometimes called the *tactic* of monetary policy, to be distinguished from strategy (i.e., the specification of intermediate targets).

Since the fall of 1982, the operating target has been discount-window borrowing. To achieve the targeted level of borrowings, the Federal Reserve conducts open-market operations (the instrument) that directly change the level of nonborrowed reserves. Total reserves not supplied by open-market operations are created through

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The views stated herein are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.

1. See Meade (1978), Tobin (1980, 1983), Stein (1982), Fellner (1976), Gordon (1983), and Hall (1983). Gordon essentially advocates a final spending target. The various proposals also differ on whether to target levels or rates of change, an issue that is not considered here.

discount-window borrowing. The level of borrowings affects the opportunity cost of funds and, in turn, the growth of several monetary aggregates (intermediate targets). The Federal Reserve believes its monetary growth paths are consistent with price stability and high employment (ultimate goals). This policy is referred to as a *monetary aggregate strategy* with a *discount-window-borrowing tactic.*

To summarize, the hierarchical structure of monetary policy presumes imperfect, indirect, dynamic links between instruments and ultimate goals. Targets, both operating and intermediate, are useful only insomuch as they provide a standard against which the Federal Reserve can assess the actual behavior of the operating and intermediate variables. When these variables deviate from their target paths, the Federal Reserve systematically will conduct open-market operations in a manner designed to realign variables with target settings. In pursuing its targets, the Federal Reserve takes into account all information, including behavior of nominal income, relevant to achieving high-income growth and price stability.

Price Stability

Federal Reserve Chairman Paul A. Volcker has defined price stability as "a situation in which expectations of generally rising (or falling) prices over a considerable period are not a pervasive influence on economic or financial behavior. Stated more positively, 'stability' would imply that decision making should be able to proceed on the basis that 'real' and 'nominal' values are substantially the same over the planning horizon—and that planning horizons should be suitably long" (Volcker 1983, p. 5). That is, price stability is defined in terms of the economic implications of expected price changes. Volcker's concept stresses the future as opposed to the past and suggests the importance of anticipated future influences on the economy, including economic policy.

The Federal Reserve currently announces its monetary and credit objectives for at most 18 months ahead. The announcement—made by the chairman of the Federal Reserve to Congress in July—indicates preliminary intermediate targets for the coming year. The Federal Reserve is not obligated to adopt those targets at the beginning of the next year if new information indicates that the preliminary targets are inappropriate. Thus, the specified policy horizon is interpreted as annual.

To reduce uncertainty about price stability, it would seem useful to specify intermediate targets and perhaps policy objectives several years into the future. For the targets to be credible, however, they would need to be adopted with an expectation that there would be a *high degree of reluctance* to revise them. A major factor contributing to revisions in monetary targets is unanticipated changes in *velocity*, i.e., the ratio of nominal income to money. Recent experience indicates that the behavior of velocity is currently not sufficiently reliable as a basis for a multiyear policy strategy using monetary aggregates. But, some observers have noted that deviations from monetary targets since 1979 can be accurately interpreted as reflecting offsetting deviations in the velocity of money from its trend.[2] This experience suggests *velocity-adjusted monetary targets* would be a reliable strategy. Conceptually, a velocity-adjusted monetary target is indistinguishable from a nominal income target.

Nominal Income as a Policy Strategy

Given the current framework for monetary policy, it is not surprising that advocates of nominal income targeting would seek the benefits that might result from a credible extension of the announced intermediate target horizon. Adoption of a nominal income target would seem a natural extension of the current hierarchical, multistage structure for monetary policy decisions. Like the behavior of monetary measures, the behavior of nominal income is easy to explain to the public and to Congress. Multiyear nominal income targets thus could serve to aid the public in understanding the intent of complex policy decisions. Because the economic benefits of price stability depend on the public's confidence that real and nominal values will be substantially the same over suitably long horizons, it is essential that the public clearly understand the intent of policy in terms of a nominal variable over the longer term.

Multiyear targets for nominal income need not be irrevocable. A high degree of reluctance implies that targets should be revised (although infrequently) under justifiable circumstances. For example, nominal income targets might be revised in the face of sizable supply-side shocks of the type experienced in the oil markets in 1973 and 1979, but not for more readily reversible shocks such as those related to typical harvest variabilities. Advocates argue that maintaining nominal income targets over multiyear horizons should enhance the Federal Reserve's credibility in controlling inflation. If controlling inflation were the only ultimate objective, a nominal income strategy would imply that the intermediate target would be revised

2. See Karen N. Horn, "Monetary Policy in the 1980s," *Economic Commentary*, Federal Reserve Bank of Cleveland, February 27, 1984.

Caveat Deficit

Another problem raised by opponents of nominal income targeting concerns the composition of real output. Ideally, policymakers seek to create an environment that generates adequate incentives for saving and capital formation. New capital increases the capacity of the economy to produce, allowing additional output with less risk of inflation. In principle, nominal income targets would be chosen to accommodate sufficient demand over the longer term to encourage capital formation. Other government policies would also affect capital formation. For example, when federal government expenditures claim a greater share of output, and hence the resources used to produce this output, fewer resources are available for private use. If the central bank maintained an unchanged nominal income target, then additional government spending would come from either private consumption or investment. If such spending displaced investment, then the future capacity of the economy would be reduced.

It is not clear that a higher nominal income target would resolve this problem. As resources become fully employed, nominal income would approach its longer-run path. Raising (or even abandoning) the nominal income target may temporarily attract additional resources into production, but prices ultimately would accelerate. The problem is not one specific to nominal income targeting, but to *any* noninflationary monetary policy when government spending crowds out resources available for private investment.

only because of an unanticipated change in the trend of real output.

Credible policy—specified over a multiyear horizon—should reduce uncertainty about future economic performance, especially when policy is stated in terms well understood by the public. Many public and private decisions are based on assumptions about future policy. Contracts, particularly labor contracts and fixed-yield securities, are made for three or more years. When parties to these contracts fail to anticipate correctly the status of the economy in future years, they often are required to make adjustments in output that frustrate the goal of high-employment economic growth. Credible targets for nominal spending could provide better indicators of the future status of the economy, particularly concerning price stability, and thereby improve public and private decision making.

Nothing inherent in choosing a nominal income target suggests that it in fact would, or even should, be achieved precisely in every specified year. As with the current intermediate targets, nominal spending is affected by determinants beyond the immediate and direct control of the Federal Reserve. Nor is there reason why a nominal income strategy would preclude the consideration of other guides to policy action.

Qualifications

Advocates of nominal income targeting propose it not as a panacea but as a practical improvement to current practice. If a nominal income target were to serve any useful purpose, it must be credible. Thus, the Federal Reserve would need to achieve targeted values for nominal income in a reasonably predictable amount of time.

Some opponents of nominal income targeting argue that the Federal Reserve lacks sufficient control over nominal income to make it a credible target. Whereas Federal Reserve actions—open-market operations and discount-window policies—directly affect depositories that supply money and credit, effects on nominal income are much less direct. Consequently, the time horizon over which the Federal Reserve may be expected to control nominal income reliably is considered longer and more variable than it is for money. This does not, however, imply that the Federal Reserve cannot strongly influence nominal income over periods of two or more years. Furthermore, if the current monetary policy framework (or any other framework) were effective in achieving enduring high-employment growth with price stability, then it simultaneously would achieve a nominal income target consistent with these ultimate goals.

Nevertheless, achieving any multiyear target during a period of disinflation appears problematic. Empirical models are of little help in suggesting how to formulate an optimum decelerating path for nominal income. There are two common explanations for this problem. One view holds that the formation of expectations about wages and prices is essentially adaptive. Once the underlying rate of inflation increases, the public eventually expects inflation at the higher rate. Under this hypothesis, a disinflation policy affects price expectations only after *actual* inflation slows. But, inflation slows only if economic growth slows relative to potential growth of the economy, i.e., unemployment rises. Some economists with this view argue that the appropriate long-run target for nominal income should seek only to promote a rapid return to the potential growth path. Such a target could be inconsistent with the ultimate goal of price stability as it has been defined, if the current underlying inflation rate is substantial.[3]

3. Furthermore, many economists do not accept the hypothesis of adaptive expectations as an adequate basis for forming price expectations. The sharp drop in wage settlements during the past two years may indicate that price expectations have been revised downward by more than adaptive expectations models suggest. In any case, the wide divergence of views militates against choosing a credible path for nominal income that assumes inflation expectations are simply the current actual rate.

The alternative explanation assumes that wage- and price-setting institutions have an inflationary bias. This bias arises because labor markets adjust slowly to changes in economic conditions. Wage rates often fail to reflect the availability of unemployed workers, either because of established relationships between employers and their workers or because of a lack of competitive pressure—sometimes shielded by foreign trade barriers. Some advocates of nominal income targeting who hold this view of labor markets propose such targeting as part of a broader economic strategy that includes some form of labor-market reform or policies that would lead to more competitive behavior. "This involves increasing the power of the economically disenfranchised outsiders, whose availability for work has little impact on the wages paid insiders or the prices set by their employers" Tobin (1980, p. 66).

Conclusion

The Federal Reserve has no direct authority over labor markets, nor can it prevent trade barriers. Neither does it choose the amount of the economy's resources claimed by government, a ratio that in part determines the rate of our nation's private capital formation (see box). Without complementary policies, it is doubtful that a decelerating target path of nominal income could be achieved over a period short enough for such a strategy to be credible. Thus, if nominal income trageting were to be a successful strategy during disinflation, it would need to be part of an overall economic policy that included a consistent set of micro- and macroeconomic reforms. Otherwise, the Federal Reserve would risk losing the credibility it has already established with annual targets for monetary and credit aggregates.

Reducing inflation without unfortunate labor-market consequences has proven to be extremely difficult. Without actually adopting nominal income targets, it would be unwise to claim that the nominal income target framework is superior *per se* to any other monetary policy strategy. Nevertheless, nominal income targeting offers an important advantage to policymakers compared with monetary aggregate targets alone, especially after disinflation has been achieved. Perhaps one use of a nominal income guideline would be to serve as a framework to explain adjustments to monetary targets.

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