

Commentary

James Tobin

Diagnoses and prescriptions: macro vs. micro

Diagnoses of maladies afflicting the economies of the United States and other developed countries fall into two distinct classes. For convenience I give them the shorthand labels "macro" and "micro." Prescriptions differ correspondingly. Of course the physicians of each camp have plenty of disagreements among themselves. And some manage to inhabit both camps.

The common feature of macro diagnoses is the view that the central problem, today as in the past, is to reconcile high employment of labor and capital with stability of prices or, at least, of inflation rates. Conflict between these goals has been the basic dilemma of macroeconomic policy in advanced democratic capitalist economies for nearly 40 years, especially the last 10. Failure to resolve the conflict by monetary and fiscal policies has been the principal source of business fluctuations and of interruptions to economic growth. Its resolution is the key to prosperity and progress for the rest of the century.

Macro physicians do not deny that the economies of the United States and the rest of the world also face some challenging microeconomic adjustments. They do, however, deny that these are of such unusual magnitude that, given a clement macro climate, they could not occur via the normal processes of private and public initiative in our mixed economies. The impression that problems of structural adjustment are of a new, high order of magnitude reflects from two optical illusions. One is to overlook the dramatic structural changes — in the technology, composition, and location of production and employment — that have occurred in the past. The other is to misidentify as micro-structural the numerous cases of economic distress that are the natural consequences of *macro* policies and events.

The common feature of micro diagnoses is just the reverse: The recent depression, the previous stagflation, the slowdown in productivity growth, the rise of unemployment — these are much more than symptoms of macro cyclical fluctuations. They betray deep-seated structural maladies — of accelerated technological and industrial change to which increasingly arteriosclerotic rigidities impede adjustment, and of institutional obsolescence in governments, business managements, and trade unions. The diseases are new, and so must be the remedies. Without novel cures, the employment-inflation problem is likely impossible to solve. At best, macro policies can never reemploy most of the currently unemployed labor and capacity.

Robert Hall, I would say, is squarely in the macro camp. The bulk of his paper concerns the conduct of macro policy, especially monetary policy. He appears confident that if monetary policies are credibly committed to judiciously chosen targets the economy is capable of performing quite satisfactorily. He cites favorably the interpretations of productivity slowdown and related disappointments in real economic performance as symptoms of prolonged cyclical slump.

Hall does, it is true, begin his paper with a list of structural changes and trends, presumably an obligatory bow to the title of this symposium. But his list offers no support for micro diagnoses. Some of the items are long-standing trends in demography, industrial composition, and international economic integration. (As to demography, I was disconcerted to learn from Chart 4 that I am now a member of the dependent population, though my two-year-old granddaughter evidently is not.) **Other** items are not as billed "structural changes . . . with macro consequences," but according to Hall himself, the consequences and symptoms of macro difficulties. Still others result from tax and regulatory reforms deliberately motivated by micro diagnoses of the ills of the economy.

I am in the macro camp too. I observe that, with some notable exceptions, most economists will be found there. On the other hand, most practical men and women explicitly or instinctively go for structural explanations and solutions, probably because microeconomic phenomena are most salient in their experience. The idea that, in Hall's words, "what the U.S. economy needs for rejuvenation is no more than a good strong dose of [demand] stimulus" is strongly resisted by almost all non-economists. They cannot, I guess, believe that such serious ills could be so easily cured. They couldn't believe it

in 1936 or 1961 either.

Many economists, including Hall, also resist that Keynesian prescription, but their reasons are internal to the macro camp. They are worried about renewed price acceleration, the risk of lowering unemployment below its current natural rate. Hall manfully tries to base his rejection of old-fashioned demand management on the difficulties of distinguishing cyclical phenomena from structural change. But he doesn't even try to make the case that such uncertainty is extraordinarily acute right now. Knowing what he thinks he knows now and what macroeconometricians don't know, he would likewise have rejected countercyclical macro policy 10 or 20 years ago.

Before discussing further Hall's macro policy stance, I would like to offer a few brief, provocative remarks on the micro diagnoses. These come from both **right and left**. On the right, Reaganomics blames government: the size and growth of spending, the weight of taxation, the welfare state, the burden of regulation. The case was never convincingly made. The remedies have, to say the least, not yet begun to bring the promised results. Countries with bigger governments shared the pre-1973 prosperity and growth, as did those few with smaller governments. None have been spared the recent stagflation and stagnation.

On the left, prophets of the euthanasia of the worker have reappeared — a coincident indicator of every depression. Remember the Technocracy movement of the 1930s and the automation scares of 1960-61. In both cases subsequent cyclical expansion, aided by demand stimulus, created jobs in an abundance that had seemed arithmetically impossible to these and other pessimists. Pessimists? On productivity they are extravagant optimists; the problem they see is not a slowdown in its growth but an incredible spurt.

Somewhere in the center are advocates of industrial policy, some combination of national planning and government-business collaboration. One motivation is the widespread impression that the United States is losing its ability to compete internationally in all goods and services. The record of our export growth, in manufactures as well as other commodities, refutes this view. In the past, the composition of national output has adjusted to shifts of comparative advantage; it can do so again. Currently our own monetary policy and our prospective monetary-fiscal ~~mix~~ are handicapping our producers in international competition by appreciating the dollar against foreign currencies. It would be a tragic irony if to bandage these self-inflicted wounds we

adopted protectionist measures or industrial policies to subsidize either "winners" or "losers:"

The second motivation is that new technologies and investment opportunities involve more risks than American businessmen can be expected to bear and American investors can be expected to finance. We have the most sophisticated financial and capital markets in the world. Why should a government development bank be required to raise funds for socially viable projects within the private sphere? Let governments concentrate on public goods, human capital, and basic research, where social returns to the nation exceed private returns. These have been neglected in the anti-government supply-side revolt, with its excessive emphasis on business physical capital as the sole way to provide for the nation's future.

I have, I admit, drawn too sharply the lines between micro and macro diagnoses, and between demand management and structural policies. Micro structure determines the terms and durations of inflation-unemployment tradeoffs and the location of the natural rate of unemployment, or what is more neutrally called the non-accelerating-inflation-rate-of-unemployment (NAIRU). From this viewpoint, the important structural shocks and trends are those that shift the NAIRU or alter the relative responses of prices and outputs to dollar spending. The major uncertainties facing macro policymakers today concern these features of the economy. And the major structural reforms needed for prosperity and growth are ones that promise to lower the NAIRU and mitigate price responses to demand stimuli from whatever sources.

The macro orientation thus suggests quite a different agenda from those of supply-siders or advocates of industrial policy. There are large differences of opinion about these reforms. Some of us advocate incomes policies. Some, not necessarily excluding the proponents of income policies, favor pro-competitive reforms in collective bargaining legislation, increased incentives for flexible labor compensation systems, removal of government regulations that establish floors, but not ceilings, for wages and prices, subsidies for training or retraining on and off the job, and for relocation.

The NAIRU, it is generally agreed, has drifted upward since 1965. The possibility that it is now still higher than the 6 percent unemployment rates achieved at the peak of recovery in 1978-79 is the underlying risk that inhibits expansionary macro policy today. The main evidence, however, is the inflation of the 1970s itself. As Hall points

out, there is some independent indication in the rise of overall unemployment rates relative to other measures of labor market tightness. But drift in this relation cannot account for today's high unemployment rates or for prevailing rates of excess industrial capacity. I suspect that the NAIRU follows with lag the history of actual unemployment. High unemployment since 1974, generated by anti-inflation policies, has denied many young workers and others the job experiences that are the most reliable creators of human capital.

There is considerable danger, I think, of misreading the experience of the 1970s. The bursts of inflation that terminated and spoiled the recoveries of 1971-73 and 1975-79 were far from wholly endogenous consequences of those recoveries. They had more to do with OPEC and Middle Eastern wars and revolutions than with American labor and product markets. If they told us about any "natural rate," it was the then operable natural rate of oil consumption. It is remarkable that Hall's catalogue of structural change and his account of recent macro history ignore oil and energy. A favorable trend is the adaptation of oil and energy consumers and producers to the post-1973 price and supply situation. The likelihood is small that a recovery in the 1980s will encounter the same stagflationary shocks as those of the 1970s. But caution bred by the 1973-74 and 1978-79 events will doubtless induce governments and central banks, here and elsewhere, to charge in excess points of unemployment a heavy premium for insurance against inflation.

Hall's recommendations for monetary policy

Hall's major recommendation is that monetary policy be committed by mandate of Congress to a *permanent, nominal, quantitative* target. He seeks a rule which will limit fluctuations of prices and quantities in the face of our inevitable uncertainties about the structure of the economy and the shocks to which it will be subject. He rejects rules committing the central bank to predetermined paths of its immediate instruments or of intermediate monetary aggregates. Stability of these measures will not stabilize variables of macroeconomic importance, as recent events have dramatically illustrated. Hall subordinates instruments and intermediate indicators to targets of macroeconomic performance. In this respect, I agree and applaud.

However, I do not believe that Congress can or should bind the Federal Reserve to *any* permanent target path.. Hall's proposals are ostensibly motivated by the observation that policies must cope with

structural uncertainties and shocks. There is significant probability that any simple, irrevocable rule will force the Fed to take the economy into regions of dangerously poor performance for long periods of time. To forbid the Fed to diagnose unexpected events and revise target paths could be as suicidal as it would have been to forbid Paul Volcker and his colleagues to rescue the economy in 1982 from the unintended consequences of obsolete M targets. To forbid Congress to amend the target path in such circumstances is politically impossible and therefore incredible from the start.

Neither do I believe that Congress and the Fed can or should confine themselves to nominal targets. Real **performance** is, after all, the name of the game of political economy. Elected officials and their servants are judged by the electorate by real outcomes — unemployment, production, growth — and not just by price or inflation stability. Properly so. The notion that since monetary instruments are nominal magnitudes they can and should be geared only to nominal outcomes is a facile play on words. The proposition that monetary policies are neutral with respect to real outcomes does not withstand either theoretical analysis or empirical test. This is not to say that the Fed should be committed, on its own or by Congressional mandate, to any permanent numbers for unemployment or real GNP growth. Nothing should be permanently pegged.

One of Hall's two favorite target variables is nominal GNP. I like it too, provided the numerical targets are subject to annual revision. Each year a five-year projection of nominal GNP, agreed upon by the administration, Congress, and the Fed, would announce the intentions of the policymakers. The first year of the projection would be a firm commitment. The implied one-to-one price-output **tradeoff** may not accord perfectly with social priorities, but its simplicity is a major compensating advantage. But let the longer-run target path be reconsidered annually in the light of experience and the state of the economy.

Hall's alternative suggestion is a permanent target for the level of the Consumer Price Index. His proposal also includes a rule for monetary policy designed to correct gradually deviations from the permanent target. As we would expect from the fertile mind and pen of the author, this is an imaginative, ingenious, and provocative recommendation. As you and he would expect, I have strong objections.

First, I do not understand the implicit welfare economics. Why should the absolute level of a price index be an argument, let alone

the argument, in anybody's social welfare function? Why, in particular, should it be there for neoclassical economists who in other contexts repeatedly assert the neutrality of money? From a less doctrinaire perspective, why should movement of the price level be ruled out as one way, frequently one of the least costly ways, of adjusting to shocks? Consider as examples changes in factor productivity, supplies and prices of internationally traded goods, and indirect-taxes. Keynes argued that increase of domestic prices could be the least disruptive way of making necessary reductions in real wages. When Chancellor of the Exchequer Churchill disregarded his warnings in 1925, Britain was plunged into long depression. Following the OPEC shock of 1973-74, a Keynesian adjustment occurred in the United States. The nominal wage path responded quite incompletely to the price shock; in 1975-78 real wages fell, relative to previous trends, more than enough to pay the nation's higher cost of imported oil.

Second, if any price index were to be a policy target, it should surely not be the CPI, subject as that index is to fluctuations from specific commodity prices, taxes, exchange rates, import costs, interest rates, and other idiosyncracies. It should be some index of domestic value added at factor cost.

Third, I worry about the path of real interest rates that will accompany deviations of actual price from the target. When upward deviations are due to excess demand shocks, it is true, the rise in the real rate will be in the right direction. It may be excessive because the Fed will also be raising nominal rates in order to keep the futures-market expected price index on Hall's prescribed return path. The serious problem arises when the upward deviation results from a stagflationary shock, like the OPEC shock of 1973-74. Then the Fed would have to generate actual deflation at a time when aggregate demand is already being reduced by the shock. Just imagine how much worse the recessions of 1974-75 and 1980-82 would have been had the Fed been bound by Hall's price level rules.

The answer, I anticipate, will be that the behavior of unions, workers, and managers in setting wages and prices would be wholly different if they understood the new policy regime. This is a popular point in theoretical ivory towers, on the Stanford campus and elsewhere, but it has scant empirical support, far too thin to bet the future of the economy on it. Actual economic distress, not the threat of it, still seems to be the main discipline of prices and wages, in Thatcher's

Britain and in Volcker's America. Why? As I mentioned above, it is hard to make threats credible given that Congresses, Presidents, and central bank governors cannot bind their successors, and maybe not even themselves. **Art** Okun's village fire department, exasperated by a careless citizenry, will not really carry out its threat to answer no more alarms for a month. Anyway, the inflation control game is not a two-person contest between government and an unruly economy. It is an $n + 1$ -person game, in which the government's threat is addressed to everybody in general and nobody in particular. **Consider**, as a metaphor in the Okun tradition, a highway police force frustrated by chronic speeding, threatening to close the freeway for a week if the *average* speed of motorists the previous week exceeds 55. In a decentralized system of wage- and price-setting, as Keynes pointed out long ago, every local group will resist nominal reductions because they appear to each group as a loss of relative income. It is naive to expect nominal inertia to disappear on the announcement of a new monetary regime, whether Hall's, the monetarists', or the gold bugs'.

Fourth, I question the desirability of a stable price level even over the long run, with deflationary and inflationary episodes occurring symmetrically. One reason is that reductions in nominal wages and other incomes are harder and slower to come by than raises. In addition, as I think Scitovsky **and/or** Vickrey observed many years ago, a stable or declining price trend invites Keynesian liquidity trap problems, given the impossibility of negative nominal interest. There have been times, and may be again, when real interest rates on safe assets need to be very low or negative.

Fifth, I wonder how Hall's new regime would start. He mentions for illustration a numerical target about 3 percent above the present CPI. Should Congress adopt that target right now, inertia and bad luck on food or other items could easily force the Fed into deflationary policies before a year is out. Would Congress adopt a target allowing more room and time? Wouldn't those who voted for it be accused of officially sanctioning inflation?

Sixth, it is by no means as clear to me as it is to Hall how his feedback mechanism would work. Let me remind you of the mechanism. The Fed would be required to keep the expected future CPI, quoted today on the Coffee, Sugar, and Cocoa exchange for a year hence, one quarter of the distance between the latest actual CPI report and the permanent target. If the target were 310, the current reading 314,

"the Fed would change its portfolio as necessary to keep the expected level of the CPI a year hence at 313."

What does the Fed do to induce traders to arrive at 313 on the CSC exchange? Maybe the Fed need do nothing. The traders know the formula, and the market clicks as automatically as forward exchange rates preserve interest rate parity. But there is no arbitrage here. The Fed does not itself buy or sell CPI futures (except, Hall says, possibly to get information from an otherwise thin market). Moreover, the Fed will not be buying or selling CPI commodity bundles or proxy commodities; the FOMC will not have the power to directly determine actual CPI outcomes. So the futures price will not go to 313, in the example, unless and until traders observe the Fed taking such actions as will in their opinion indirectly make 313 a good prediction. In effect, short-run monetary operations will depend, not on the judgment of the Fed **and its** expert staff as to what actions will do the trick, but on the judgments of an anonymous and ever-shifting set of futures market traders. The performance of markets in foreign exchange, gold, interest rate futures, and stock market indexes does not give me great confidence in this method of making monetary **policy**. Whatever may be the monetary rule, I would rather trust the Fed and its staff to implement it and forget the futures market except as one of many sources of information to them.

Hall on fiscal policy and international coordination

The paper, though mainly devoted to monetary policy, treats fiscal policy too. Hall downgrades its importance and value in demand management. I have space for only two brief comments.

The first concerns Hall's main point, that international integration and floating exchange rates have diluted the effects of any single country's fiscal measures on local aggregate demand. Yes, but the reason is that the demand effects spill into other economies. Fiscal expansion throughout the OECD would raise demand throughout the OECD and the world. The same openness that dilutes the local effects of fiscal measures increases the leverage of monetary stimulus. But the reason is that exchange depreciation pulls in demand from the rest of the world; the worldwide effect of a single country's monetary policy is smaller than its local effect. Coordinated monetary stimulus would raise demand everywhere. Hall's use of the **small-open-economy-in-a-big-world** model is in any case out of place for the United States. American and foreign assets are imperfect substitutes in

American portfolios, and the United States is still the most powerful locomotive of the world economy. Hall's emphasis on international openness makes illogical his perfunctory dismissal of the problem of coordinating the macro policies of the United States, Germany and the European Community, and Japan.

My second comment concerns Hall's plug for his particular proposals for tax and fiscal reform. None of his arguments against the use of taxes and spending for macro stabilization, which I regard as overstated anyway, support those proposals. They must be judged by criteria of allocational efficiency and distributional equity, not by macroeconomic considerations. That, not agreement with the proposals, is the reason I do not discuss them here

In conclusion I shall state briefly views I have elaborated elsewhere. Macro policies should aim openly at announced paths of important real and nominal variables over a horizon of five years. These paths should be reconsidered annually. The nominal GNP target, firm for a year ahead, should be consistent with the five-year goals. Instrument settings and intermediate variable targets within a year should be consistent with the nominal GNP target for the year. By coordination among administration, Congress, and Federal Reserve, monetary, and fiscal policies should be aiming at the same longer and shorter-run targets. International coordination of macro policies among the three world-class locomotives is needed to prevent **beggar-my-neighbor** policies with respect to either demand or prices.. In the United States, income policies — wage and price guideposts with tax-based inducements to comply with them — would be a useful adjunct to fiscal and monetary instruments. They would be a less costly way of insuring against renewed acceleration of inflation than extra points of unemployment and excess capacity.