IS THERE A CORE OF PRACTICAL MACROECONOMICS THAT WE SHOULD ALL BELIEVE?

Is There a Core of Usable Macroeconomics We Should All Believe In?

By Robert M. Solow *

Real output in most advanced capitalist economies fluctuates around a rising trend. One can argue about whether it is best to think about that trend as passing through successive cyclical averages, defined in one way or another, or best to think of it as passing through cyclical peaks, or some other measure of "potential" output. While the outcome of that argument has consequences for macroeconomic theory, I will bypass it for now.

The important observation is that, on the whole, the observed fluctuations around trend are contained within a moderately narrow corridor. Unemployment rates tend to run between, say, 5 percent and 10 percent in the United States. (Other countries have different typical ranges, and in each of them, the range can shift from time to time. It is important, theoretically and practically, to understand why; but that remains an open question.) There are notable exceptions to this generalization, of course, the most famous being the depression of the 1930's; but they are exceptions. Again it is important to know why fluctuations are so contained. This could reflect some natural equilibrating process, or it could reflect the intervention of automatic or discretionary government policy, or it could be a mixture of both. That is another issue on which opinions differ.

I think it is part of the usable common core of macroeconomics that the trend movement is predominantly driven by the supply side of the economy (the supply of factors of production and total factor productivity) and that the appropriate vehicle for analyzing the trend motion is some sort of growth model, preferably mine.

Now, what about those fluctuations around the trend of potential output? A moment ago I put the normal range of unemployment rates at 5–10 percent. By Okun's law I am talking about fluctuations of real GDP with an amplitude of 8–10 percent or so from peak to trough—contained, but not trivial. In my picture of the usable common core of macroeconomics, those fluctuations are predominantly driven by aggregate demand impulses, and the appropriate vehicle for analyzing them is some model of the various sources of expenditure.

I am not so obtuse as not to have observed that the whole point of "real-business-cycle theory" is the assertion that these short-run motions of the economy are in fact supply-driven. But my view is that this explanation has been an empirical failure, or at best a non-success. There are now two possibilities. As for the first, I entertain the hope that flexible, observant members of the real-business-cycle school, like Martin Eichenbaum and his coworkers, have come more or less to the same conclusion, and they have found ways to open up the fabric of their underlying model so that it will allow—or insist—that demand-side impulses play the dominant role in short-run macroeconomic fluctuations. Then this proposition is indeed part of the usable core of macroeconomics, and economists can go on to argue back and forth about the best way of modeling those demand-side forces.

The other case is that the situation is as before, and the real-business-cycle school holds monolithically to the view that short-run fluctuations are just optimal supply-side adjustments to unforeseeable shocks to tastes and

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technology. In that case, I think they are mistaken. I would still nominate the aggregate-demand origin of most short-run fluctuations as part of the common core of macroeconomics, but I would have to recognize that there is some dissent from that proposition.

If fluctuations in aggregate demand dominate short-run variations in real output, that must be because some wages and prices are not flexible enough to clear their markets more or less continuously. A lot of analytical and econometric ingenuity has gone into figuring out why this is so. Probably several mechanisms are at work, and many of them (especially, but not exclusively, in the labor market) have been elucidated. Luckily the rest of macroeconomics does not have to stand around and wait for this issue to be clarified further.

There remains the question of the proper modeling strategy for the macroeconomics of aggregate demand in the short run. There are two main options: I know which I prefer, but I also know that some macroeconomists, even among those who would agree with me up to this point, prefer the other.

My choice would be to model the main components of aggregate demand more or less opportunistically. By “opportunistically” I mean that whatever works (empirically) works. By “more or less” I mean I would want consumption functions, investment functions, import functions, and the like to look as if they could plausibly arise from aggregation of economic behavior of some reasonable kind at the micro level. That has always been the custom in macroeconomics, and I would not want to abandon it.

The alternative, of course, is to impose the structure of intertemporal utility-maximization from the very beginning. Then the only admissible expenditure functions are those that are very nearly exact aggregates of first-order conditions of some well-defined household optimization problem. This is obviously not the time to rehash the arguments pro (otherwise you miss the deep, stable parameters altogether and replace them with too many superficial and unstable ones) and con (households and firms are heterogeneous, satisficers at best, and driven by all sorts of motives anyway).

Unless there is recent news, this argument is still unsettled. I have said where I stand. I would nominate as part of the usable core of macroeconomics any reasonable, empirically successful set of equations for describing aggregate demand. Most such macroeconometric models are modified or extended versions of something like IS-LM. One has to expect the standard approach in this area to change from time to time, both because economists learn to do these things better and because the underlying behavior patterns actually do change from time to time, for all sorts of reasons that are either too deep or too unpredictable to be treated as endogenous. I described this as a nomination; I do not know if it could win an election at all, let alone by any sort of comfortable margin.

So far I have left expectations out of the account, although all would agree that the response of the macroeconomy to disturbance will depend on the beliefs, perceptions, and expectations of participants. I would not know what set of statements about these things deserves to be included in the core of usable macroeconomics. I feel acutely uncomfortable with this unobservable fudge factor that is capable of having drastic effects but is so conjectural that it can be used to explain just about anything. Maybe there is a better way, but no one knows what it is.

I suppose I should say that the main, perhaps the only, merit of the rational-expectations hypothesis in the macro field appears to be its definiteness. The question is whether that should be thought of as a plus or a minus. I can see a role for rational expectations in the modeling of long-run equilibrium. In the short-run part of macroeconomics, the rational-expectations hypothesis seems to have little to recommend it. In that context, I suspect that expectations are best handled ad hoc, that is, in a commonsense way. This takes self-discipline. If the danger with the rational expectations hypothesis is that it is too often definitely wrong, the danger with my suggestion is that it may be vacuously right. That is what you get for dealing with unobservables.

Here is one last observation in this connection. One major weakness in the core of macroeconomics as I have represented it is the lack of real coupling between the short-run picture
and the long-run picture. Since the long run and the short run merge into one another, one feels they cannot be completely independent. There are some obvious, perfunctory connections: every year's realized investment gets incorporated in the long-run model. That is obvious. A more interesting question is whether a major episode in the growth of potential output can be driven from the demand side. Can demand create its own supply? The magnitudes suggest that it would be awfully difficult for a surge of aggregate demand to generate enough investment to provide the capacity necessary to accommodate it. In special circumstances it might be done, say, in an economy that has a pool of labor (rural, foreign) that it can mobilize. It might also work if strong aggregate demand can induce a rise in total factor productivity (TFP). This may be less far-fetched than it sounds, if we recognize that a large part of TFP originates not in the research laboratory, but on the shop floor, as production workers figure out how to gain a little efficiency here and a little there. The demand-driven growth story sounds quite implausible to me under current conditions; but it is an example of the kind of question that needs to be asked.

Even this spare picture of the core of practical macroeconomics is far from empty. There is plenty to use. There will always be more to find out.