Opinion **Free Lunch**

The revolutions under way in macroeconomics

The view is spreading that the mainstream needs deep reform

MARTIN SANDBU

Martin Sandbu YESTERDAY

Three years ago, Free Lunch published a week-long series of articles on the Rebuilding Macroeconomic Theory Project, an effort led by Oxford university economics professor David Vines to help close the gap between mainstream macroeconomic models and the economic realities they had failed to explain, such as the global financial crisis. It was, I wrote then, "the deepest effort to date to account for how economics failed us in the crisis . . . by many of the field's top practitioners".

Since then, other currents of change in economics have accelerated. In terms of practical thinking, the policy advice from places such as the IMF has changed almost beyond recognition from the old "Washington Consensus" of fiscal conservatism and market self-regulation. In terms of intellectual change, the critiques from outside the mainstream have gained in substance and coherence. In particular, the initiative led by Angus Armstrong, of the National Institute of Economic and Social Research, has lifted approaches to modelling the macroeconomy that start from different fundamental assumptions about how the world works. In an interview with me last year (watch the recording here), Armstrong explains how and why they depart from what passes for methodologically respectable within the mainstream.

Confusingly enough, that initiative is called Rebuilding Macroeconomics — but do not confuse it with the Oxford project, which remains the primary effort "from the inside" to seriously reform macroeconomic thinking. If the mainstream is going to reform itself rather than be stormed from the outside, it will happen through something like Vines's initiative.

I wrote three years ago, however, that the Oxford project did not go far enough to achieve that. In particular, I pointed out that few of its participants saw the need to incorporate *multiple equilibria* as a standard feature of their core model — allowing that there are several different self-reinforcing states the economy can fall into, not just a single equilibrium around which it fluctuates. Instead, most contributors contented themselves with asking for more realistic behavioural assumptions to be patched on to the core single-equilibrium model.

So I was gratified (in part also because it was Vines who first taught me macroeconomics about 25 years ago) to see that in the second round of the project, now published as a dedicated issue of the Oxford Review of Economic Policy, Vines himself goes much further than in the first phase. His introductory essay with Samuel Wills is explicit:

"We believe that the existing paradigm in macroeconomic theory, the one identified with the [standard] model, is on its way out. In our view a multiple-equilibrium and diverse paradigm — the MEADE paradigm — is about to arrive. We want to speed its journey. Last time we were much more conservative. We accepted the [standard] modelling paradigm, and were optimistic about how it might be developed — providing a list of frictions to be added to the model."

When I called up Vines to ask what had prompted this change of course, he referred to Thomas Kuhn's theory of scientific revolutions. "When you've got a paradigm in your head, it's very difficult to change your mind" — but in the end there are too many ways it conflicts with the reality. (As Martin Guzman and Joseph Stiglitz put it in their contribution to the project, efforts to tweak the standard model amounts to so many "Ptolemaic" attempts to repair a framework in need of Copernican revolution.)

There is no question this would be a very big change in how macroeconomics is done. Vines is optimistic about such a change, on two counts. Admitting multiple equilibria does not render the existing body of work useless, he points out — "the piece of kit works", and the standard model can still make sense of fluctuations around the different equilibria. Second, he suggests we are near one of those points when "the world order may be rebuilt — the kind of macro I'm describing will be important for that".

That is surely right. Besides the implications for economic research, taking multiple equilibria seriously makes for fundamental change in how economics is applied to policymaking.

Consider forecasting — the projections offered by central banks, finance ministries and international organisations to underpin their policy decisions and advice. As the typical "fan chart" illustrates, these projections are presented as probability distributions around a "central tendency". Nobody thinks you will hit exactly the point projection, but the message is that you are more likely to end up close to it than far from it.

But with multiple equilibria, there is no single central tendency. If anything, there are several, and while one can give probability distributions around the precise outcome in each equilibrium, predicting in which equilibrium the economy will find itself is a different beast altogether. It may be radically uncertain and not properly understood as a matter of quantifiable probabilities (the good point made by Mervyn King and John Kay) — and it may at the same time be the much more important thing to know than the precision of the estimated outcome for any given equilibrium. As Free Lunch has insisted before, the right way to do projections in such a world is through the presentation of scenarios, fan charts with multiple "central" outcomes, and a discussion of the factors that could bring the economy to one or other equilibrium. Such a change would do wonders for an informed economic policy debate.

As for policy *advice*, a focus on multiple equilibria is transformative. The standard model, smooth and self-rectifying as it is, invites economists to see their role as identifying marginal policy changes to improve trade-offs, speed up the pace at which the economy returns to its natural equilibrium, and even nudge that equilibrium itself to a slightly better place. Once we acknowledge multiple equilibria, and that the economy can jump from a good to a bad state or vice versa, it becomes clear that by far the most important policy question is equilibrium selection: how to get the economy out of a self-reinforcing bad state, or prevent disruptions that tip it out of a good state.

That is something economists are not well-equipped to advise on. That is evidently true so long as they programmatically deny there are multiple equilibria. But even if they do, their mathematical tools are designed to identify which equilibria there are and what keeps an economy at or near whichever equilibrium it has reached. They have much less to contribute to the question of which of several possible equilibria prevail or how to get from one to the other. One hopes that giving multiple-equilibria models pride of place also encourages analysis of equilibrium-shifting policies. But there is likely to be an irreducible element of political psychology.

If this view of the world diminishes the role of economists, it elevates that of politicians. When the economy can end up in different places because people's beliefs determine their actions in ways that reinforce their initial beliefs, the ability to alter an economy's collective imagination is crucial. As Nobel laureate Robert Shiller has explained, political narratives affect economic outcomes. This is a practical as well as an intellectual point. Putting multiple equilibria at the heart of economic models would mean bringing the state back too — there is an influential role for the state and for statecraft in ensuring good economic outcomes.

All of this suggests how difficult the mainstream of macroeconomics may find it to reform itself. Expect a lot of resistance to a shift such as that of Vines. Already three years ago his contributors differed widely in how much reform they thought was needed. It is telling that some of the biggest mainstream names have not contributed this time around. Vines observed to me that "until there is a new paradigm, there's only a battlefield with lots of dead soldiers".

But in time, there may not be much choice. The more resistant "insiders" are to change, the more vocal — and the more listened to — the outsiders, such as the other "rebuilding" project I mentioned, will be. That is because economic policy practitioners are already moving on. Those who have to make decisions will reach for ideas they can use; new economic realities have already drastically changed the practical economic orthodoxy.

John Maynard Keynes famously wrote that practical policymakers are often the "slaves of some defunct economist". In reality, the ultra-practical Franklin Roosevelt put many "Keynesian" ideas into practice before Keynes himself had fully formulated them. It may be as true today as it was then that economists find themselves the slaves of practitioners — or see their influence go defunct.

Other readables

- More economic data show that when contagion is high, people stop interacting even before governments require them to. Postponing lockdown orders is therefore not going to save jobs — and if it makes contagion worse, it could cost more jobs than necessary.

Numbers news

- During the pandemic, the wealth of the 10 richest people in the world has increased by more than enough to pay for vaccinations for everyone in the world, according to number-crunching by Oxfam.