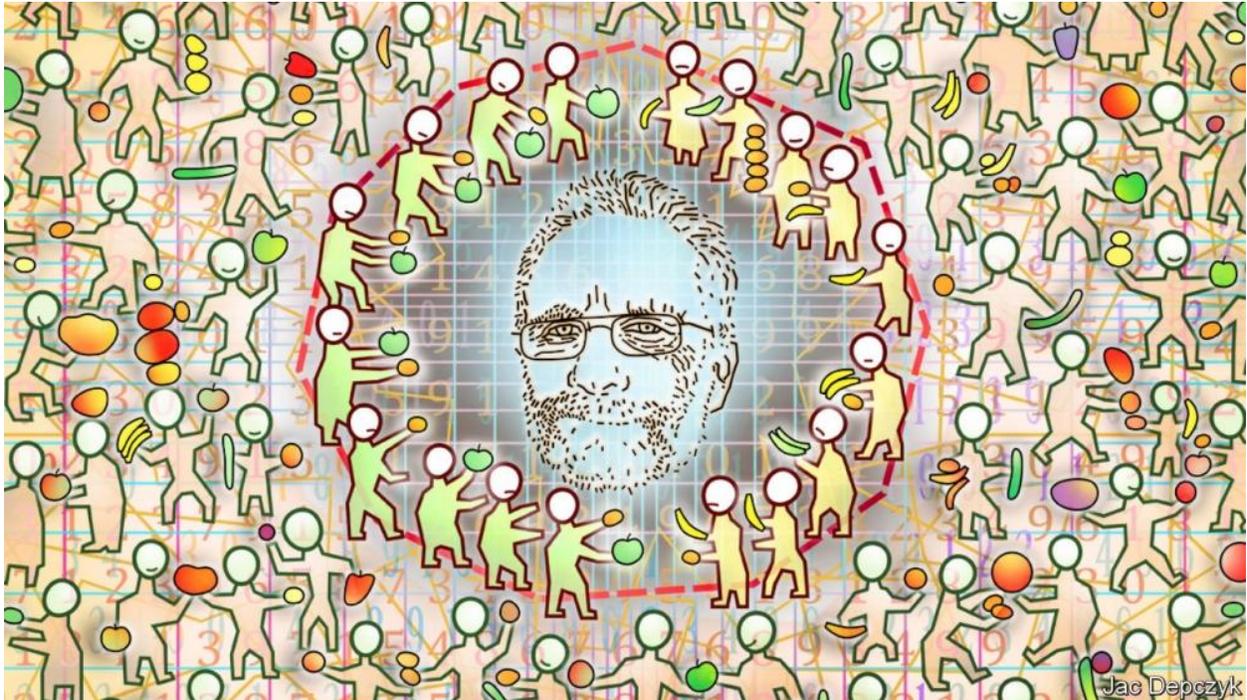


Free exchange

Why is macroeconomics so hard to teach?

Lessons from a master of the craft



LAST month Nick Rowe had a bad dream. It was five minutes before the first class of the autumn term at Carleton University in Ottawa, where he has long taught macroeconomics. But he could not find the classroom. Then he woke up and remembered with relief that he had just retired.

Learning macro is a source of anxiety for many students. Teaching it can give their professors the jitters, too. The subject is notoriously difficult to explain well. During his 37 years at Carleton Mr Rowe remained, by his own admission, “fairly low down the totem pole” as a researcher. But he became a thunderbird at conveying macroeconomic intuition. In the past decade this served him well in his second intellectual career, contributing to *Worthwhile Canadian Initiative*, an economics blog. Many a controversy has benefited from one of his ingenious analogies or numerical parables, usually involving some kind of fruit.

Professors may find themselves ill-prepared for the macro classroom. To become academics they had to answer erudite questions posed by more senior members of the discipline. To become good teachers of introductory macro, they have to give clear answers to muddled students. That requires an intuitive feel for the subject. It is not enough to crank through the equations.

Indeed, Mr Rowe attributes part of his success as a teacher to his shortcomings as a mathematician. He quotes Joan Robinson, another clear expositor of macroeconomics: “I never

learned maths, so I had to think.” Because the answers did not leap out at him from the equations, he had to dwell on the economic behaviour underneath the algebra.

Macroeconomics is difficult to teach partly because its theorists (classical, Keynesian, monetarist, New Classical and New Keynesian, among others) disagree about so much. It is difficult also because the textbooks disagree about so little. To reach the widest possible audience, most cover similar material: a miscellany of models that are not always consistent with each other or even with themselves. The result is that many professors must teach things they do not believe.

Professors can also sometimes forget that macroeconomics is full of *faux amis*: words that mean something different in everyday speech. “Saving” is an example. In ordinary life, it means the opposite of spending. In macroeconomics it means the opposite of consumption (or, more precisely, not buying new consumer goods with income earned from production). In macro, someone who spends a fortune on a house is saving even if they have emptied their bank account to do so. The term can be so confusing that Mr Rowe thinks it should be banished from the discipline.

More difficulties, Mr Rowe suggests, follow from the fact that macroeconomics is a bit “weird”. For him, the discipline’s fundamental question is the one broached by Jean-Baptiste Say 200 years ago: does supply create its own demand? The answer, which is often no, is odd. Why do people go to the trouble of producing and marketing stuff (thereby adding to supply) if not to obtain equally valuable goods with the proceeds (thereby adding to demand)? Because students take recessions for granted, they may not realise how peculiar they are. Professors may recognise the strangeness. But they sometimes struggle or neglect to explain it. Mr Rowe did not encounter Say’s law explicitly until well into graduate school.

As a monetarist, he thinks the explanation for recessions lies in an excess demand for money, the medium of exchange. To illustrate the point he has built a “minimalist” macroeconomic model, the smallest he can get away with. Its aim is to show what is required for a recession and, by what it leaves out, what is not necessarily required. Inevitably, it involves fruit.

In this model half the people have apples, the other half bananas. The two groups also have mangoes, but not as many. The apple-sellers would like more bananas; the banana-sellers more apples. But what they all want most is more mangoes.

People in this world can clearly gain from trading apples for bananas. And in a barter economy that is exactly what happens. But what if one of the fruits—mangoes—serves as the medium of exchange? What if apples and bananas can be traded for mangoes but not directly with each other? This parallels the real world where goods are typically traded for money but not each other.

In this scenario less fruit will change hands and potential gains from trade will be lost. People are unwilling to buy much with their mangoes, which they hoard. As a result they are themselves unable to sell much of their fruit for the mangoes that everyone else is similarly hoarding. This, according to Mr Rowe, is what a recession looks like. An excess demand for the medium of

exchange depresses trade. Workers are unable to sell their labour for money, partly because they (and everyone else) are unwilling to part with their money for the fruits of anyone else's labour.

Monetarists think the medium of exchange is distinctive for a variety of reasons. With any other good or asset, when people want more they must buy it. If they want more money, however, they can simply refrain from buying other things, a drop in spending characteristic of a recession. Similarly, if any other asset or good is in hot demand, its price will rise until the demand is quenched. But because everything is priced in money, it has no price of its own. It can rise in value only if the price of everything else falls, a deflationary pressure also characteristic of recessions.

The hidden fundamentals of macro

You cannot teach macro well without a strong intuitive feel for the subject. But the best way to gain a feel for the subject is to teach it. "I learn something every time," Mr Rowe says. On Rate my Professors, a website, one student paid him the ultimate tribute: he made an 8.30am class worth attending. And how, at the end of his long teaching career, did his students show their appreciation? Naturally, by giving him an apple and a banana.

This article appeared in the Finance and economics section of the print edition under the headline "Mangonomics"