

Fallacies of immaculate causation

By Paul Krugman

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Brad DeLong reminds us of Eugene Fama's remarkable (in the worst way) claim that stimulus can't work as a matter of logic. It was actually that claim, and its endorsement by John Cochrane, that led me to the realization that we were living in a dark age of macroeconomics.

This is, I suppose, the kind of thing that leads some people to accuse me of being uncivil and engaging in ad hominem attacks. I guess we're supposed to be respectful when economists resurrect fallacies that were corrected three generations ago, and present those fallacies as new and important insights. But I don't have it in me to do that, especially when those resurrected fallacies are being used to confuse public discussion in a time of economic crisis, when it matters a great deal whether we have the right policy response.

In any case, Fama's confusion is of a fairly common type (although we should expect better from famous economists.) Call it the fallacy of immaculate causation. I first encountered it in the field of international macro, where people used the identity $S-I = X-M$ to argue that trade balances could adjust with no need for changes in relative prices; John Williamson dubbed this the fallacy of immaculate transfer. The Fama-Cochrane fallacy is just the domestic version.

Here's what happens: you start with an accounting identity, in this case savings = investment, and treat it as a causal relationship – savings => investment – imagining that this excuses you from the need to lay out a mechanism for this alleged causation.

The immediate thing Fama should have asked himself, even if completely ignorant of the history of macroeconomics, is why the causation necessarily runs from savings to investment. Why not the other way around? In fact, in simple Keynesian models investment (determined by animal spirits) does in fact determine the level

of savings. More broadly, however, you always want to ask about the motives of economic actors; only by thinking through who does what why can you actually learn anything about the actual implications of an accounting identity.

In this case, ask what happens if consumers decide to save more. What do they actually do? They cut their spending. Now, how does the equality $S=I$ hold? In the very short run, it's likely to hold through involuntary actions – that is, the accounting identity doesn't say that "desired" saving and investment are always equal. If consumers try to save more, firms may engage in involuntary investment, as inventories pile up, and consumers may find that they're not saving as much as they intended to, because their incomes fall. Naturally, these unintended results will lead to further changes in behavior, with firms cutting production and consumers further reducing spending, until we eventually reach a sort of equilibrium in which desired saving and desired investment match up; this new equilibrium need not be one in which investment rises, and could well be one in which investment falls.

To reach the conclusion that higher desired savings lead to higher investment, you have to explain how the desire of consumers to save more gives firms an incentive to spend more. Lower interest rates could do the trick – but not in an economy where rates are already zero.

The point, in any case, is that accounting identities can only tell you so much. Anyone who claims that the identities tell you everything you know, without an actual model of how things work, is just doing bad economics. And I'm sorry, but I'm not going to be respectful or pretend that we're having a serious debate when economists who should know better engage in such obvious fallacies.