Is Macroeconomics Off Track?

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Should macroeconomists begin again, particularly those at Chicago, Minnesota, Rochester and other freshwater schools? These days, commentators tell us that we should scrap all that we hold dear—neoclassical growth models, asset pricing models, and the efficient market hypothesis alike.

And not just run-of-the-mill journalists. No less than the Nobel Laureate Paul Krugman argued this September in the New York Sunday Magazine that we are "mistaking beauty for truth," dismissing "the Keynesian vision of what recessions are all about," falling "in love with the vision of perfect markets," and blaming entire recessions on laziness.

Krugman and others are getting carried away. Allow me to defend neoclassical growth models, by providing some examples of the application of these models to the current recession, and to previous recessions. The reader can then evaluate whether Krugman's accusations are at all accurate.

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THE NEOCLASSICAL GROWTH MODEL

The neoclassical growth model is an aggregate model with two basic tradeoffs: (1) current versus future and (2) market versus non-market allocations of labor. Resources are allocated over time via decisions to accumulate a homogeneous capital good, rather than consuming in the current period. People allocate their time between the market and non-market sectors via employment and hours decisions.

The model has a few equilibrium conditions. Three conditions denoted (Y), (L), and (K) relate to current consumption and work: (Y) output is produced according to capital and labor inputs, (L) the supply of labor equals its demand, and (K) the supply of capital (consumption foregone) equals its demand. The remaining two conditions are versions of (Y) and (L) for the future period.

Stated this way, the model seems to be based on the assumption that markets always clear. But twenty years of applying the model has not exactly been a love affair with perfect markets. My practice and others is to include a residual in each of the conditions: a 'productivity shock' in condition (Y), a 'labor market distortion' in condition (L), and an 'investment' or 'capital market

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distortion' in condition (K), which means that I expect there may be significant market imperfections or other unpredictabilities.[1] The not-so-subtle truth is that we often suspect that markets are not functioning efficiently: one of my papers on the topic has the title "A Century of Labor-Leisure Distortions."[2]

THREE DIAGNOSTICS

In its most basic form, the neoclassical growth model has neither money nor fiscal policy. Nevertheless, it provides some diagnostics as to how public policy variables might be affecting the private sector.

In this approach, the first step uses the macroeconomic data to suggest which of the conditions—(Y) or (L) or (K)—has the most variable residual. Much like microeconomists ask "was it supply or demand?", as Lawrence Katz and Kevin Murphy have done with changes in relative wages, we users of the neoclassical growth model ask "Was it productivity? Labor supply? Labor demand? Capital supply? Or Capital demand?" We doubt that the complexity of the larger economy will ever be understood without some means of compartmentalizing the various behaviors, and the three 'equilibrium conditions' are our means of doing so.

While a variety of tools would be appropriate for understanding the roles of monetary and fiscal policy, the neoclassical growth model's decomposition offers some suggestions as to which approaches might help the most. For example, we might think differently about monetary policy if it depressed the labor market by inadvertently raising real wages, rather than depressing capital accumulation by adding frictions to capital markets.

NOT ALL RECESSIONS ARE THE SAME

Well before the current recession began, this approach led to the conclusion that recessions have various causes, and therefore that no one government policy could fix all recessions, or be blamed for all of them.

I have long been of the opinion that the labor supply residual, rather than productivity or investment shocks, was the most important of the three residuals in the Great Depression.[3] Despite the current recession's capital market theatrics, it again seems that much of the action is with the labor supply residual.

For both 1929-33 and 2008-9, labor supply residuals seem key because employment was low while total factor productivity and real pre-tax wages were high (or, in 1929-33, at least not commensurately low): my story, then, is not so different from the business cycle described by General-Theory-Keynes himself.

In this regard, results like mine, and those in recent papers by Lee Ohanian, Robert Shimer, and Robert Hall are quite consistent with "the Keynesian vision of what recessions are all about": something made real wages high and employment low. But long ago we recognized that many other recessions cannot be characterized that way: real wages and employment frequently cycle together as Mark Bils has found. In these other cases, the "productivity shock"—the shock emphasized in the seminal work of Fin Kydland and Edward Prescott—seems to be pretty important. There was a good reason why old-time Keynesian models fell into disrepute soon after the 1970s stagflation.

EXAMINATION OF INCENTIVES

Given the recent time series for real wages and productivity, I doubt many of us are

looking for an adverse productivity shock. But we do ask how individual incentives might be consistent with those patterns. It's this type of reasoning that led Lee Ohanian to blame some of the Great Depression on Hoover's industrial policy.

When it came to this recession, the neoclassical decomposition quickly led me to look further at public policies—absent from some of the other recessions—that might have caused the supply of labor to shift relative to its demand. Like others, I noticed that the federal minimum wage was hiked three consecutive times. I also turned up a major policy (the Treasury and FDIC plans for modifying mortgages) that creates marginal income tax rates in excess of 100 percent.[4] Much research remains to be done, and undoubtedly other users of the neoclassical growth model will make convincing cases for the roles of monetary and other factors.

Paul Krugman's scorn is all we have to suggest that marginal tax rates in excess of 100 percent are not worthy of attention, and that today's low employment is not even partly a consequence of public policy. But, regardless of how economists ultimately interpret today's recession, it will be notable for the basic fact that total factor productivity advanced while employment fell, and for the initial reception suffered by the basic facts in a politicized marketplace for ideas.

Letters commenting on this piece or others may be submitted at http://www.bepress.com/cgi/submit.cgi?context=ev.

1. See Parkin, 1988, Mulligan, 2005, and Chari, Kehoe and McGratten, 2007, and the references cited therein; Barro and King, 1984, Hall, 1997 for early emphasis on the labor residual.
2. See also Gali, Gertler, and Lopez-Salido, 2007.
3. See Mulligan 2002, 2005. Well before this recession began, the basic methodology of neoclassical-growth-model-residual analysis had been repeatedly applied even to the Great Depression, as in Cole and Ohanian, 1999, 2004; Prescott 1999; the various papers in Kehoe and Prescott, 2007; and Ohanian 2009.
4. See Mulligan, 2008, 2009b.

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