

Ping Chen's Comments on the Lucas Article "In Defense of the Dismal Science"

At The Economist, Aug.6th, 2009

In a recent lecture at London Economic School, Paul Krugman, the 2008 Nobel Laureate in economics at Princeton said that "Most work in macroeconomics in the past 30 years has been useless at best and harmful at worst." (*The Economist*, July 11, 2009). Simon Johnson, the former Chief Economist at IMF and now at MIT, also wrote a paper: "What went wrong with economics" (*The Economist*, July 18, 2009). Finally, Robert Lucas, the 1995 Nobel Laureate in economics at Chicago, wrote an invited reply "In defense of the dismal science" (*The Economist*, August 6, 2009).

Ping Chen, an economist at China Center for Economic Research of Peking University, made a comment on August 7 at *The Economist*:

http://www.economist.com/businessfinance/displaystory.cfm?story_id=14165405&mode=comment&sort=recommend

His comments and related references are given below.

Ping Chen's comments to "In defense of the dismal science" by Robert Lucas

The Lucas defense of the dismal science is vividly contrasted with the sharp critic by Simon Johnson, the former IMF chief economist, and the painful assessment by Paul Krugman, a Nobel Laureate in 2008.

Lucas was silent about the major questions, which were brought about by the current crisis: What is the nature of financial crisis, what is the role of government in macro management, and who should be responsible for economics' ill prevention and preparation of crisis.

Lucas was the leader of the so-called counter Keynesian revolution under the banner of rational expectations and microfoundations since 1970s. According to his simplistic but elegant theory, unemployment is worker's rational choice between work and leisure. The source of business cycles is external shocks. There is no room for government intervention, since market system is inherently stable and always in equilibrium.

We found out that Lucas theory of microfoundations had weak evidence under the Principle of Large Numbers in 2002. The rational expectations may also be defeated by arbitrage activity when pair of relative prices moving to opposite directions, say, stock

price went down but housing price went up, or wage down but consumption up under easy credit. This financial crisis gave a historic blow to his microfoundations theory, since financial crisis was rooted not from microfoundations at household level, but meso foundation, i.e. the financial intermediate itself. The Great Depression and the current crisis show clearly that financial market is inherently unstable, as many economists realized long times ago, including Schumpeter, Hayek, Keynes, and behavioral economists, but marginalized by the so-called new classical macroeconomics led by Lucas. Lucas had no courage to defend his infamous theory of microfoundations, but tried to shift the debate from macroeconomics to financial theory.

Surprisingly, Lucas claimed that the current crisis even strengthened the credit of the efficient market hypothesis (EMH). His argument was that no one could make a short-term forecast of crisis and make profit from the right forecast. Mr. Lucas seems have more belief in laissez fair economics than his knowledge of EMH and its alternatives.

The fundamental assumption behind EMH is that financial market is ruled by random walks or the Brownian motion. If this theory is true, then it is very unlikely to have large price movements like financial crisis. Even Eugene Fama himself realized the limit of regression analysis in econometric tests, which is not capable of proofing or rejecting any nonlinear models of business cycles. New tools in complexity science reveal more alternatives to the Brownian motion model behind EMH, portfolio diversification strategy, and the Black-Scholes model of option pricing. As early as 1996, we had solid evidence of persistent cycles dominated in financial market, which is endogenous and chaotic in nature. The diversification strategy is not working when persistent cycles amplify irrational herd behavior or animal spirits. Financial engineering such as credit swap would fail if trading strategy following a wrong theoretical model of geometric Brownian motion, which was found explosive in nature in 2005.

There is abundant evidence from numerous crises before that asset prices may not reflect all relevant information, or even worse, that asset prices may distort relevant information by greedy investment bankers. Robert Shiller did warn inflated housing prices before the housing market meltdown. The difficulty in short-term forecast of financial crisis has nothing to do with effectiveness of EMH. The simple fact of nonlinearities widely existed in financial market, such as over-reaction and delayed feedback would generate deterministic chaos, which imposes limitation on trajectory forecast but increases probability of erratic price movements.

Lucas was too early to name Frederic Mishkin and Ben Bernanke as valuable students of failed macroeconomics of the new classical camp. He did not even mention Simon Johnson's criticism of America's oligarchs and their potential capture of American government's rescue policy. At this moment, Bernanke seems averted a liquidity crisis and bank-run by unconventional monetary policy, but he may risk a

system meltdown by large inflation and dollar depreciation, a scenario certainly missing in the Dark Age macroeconomics and financial economics.

The only symbolic compromise Lucas did make is his last sentence, which barely mentioned the name of Keynes along with Friedman and Schwartz, but not Hayek and Minsky. For a serious reader of *the Economist* magazine, the only merit of the Lucas defense of the Dark Age in dismal science is that we need a new thinking in economics. There are alternative models in macro and finance. They are just waiting until mainstream economists open their minds and experiment fresh ideas.

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References

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Simon Johnson, 'The Quiet Coup', *Atlantic*, May, 303(4), 46-56 (2009).

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Ping Chen, Comments to “In defense of the dismal science” by Robert Lucas at:

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