

# Overcoming the Impasse in Modern Economics

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**Abstract:** In the wake of the global financial crisis of 2008, the greatest economic disaster since the Great Depression, the cover story of the July 18<sup>th</sup> 2009 issue of *The Economist*, entitled “What went wrong with economics,” opened with an unequivocally incriminating statement: “Of all the economic bubbles that have been pricked, few have burst more spectacularly than the reputation of economics itself.” In the months surrounding this indictment, many influential economists, including several Nobel laureates, were drawn to the same embarrassing conclusion. Despite the existence of a handful of Cassandras, economists, as a group, had failed to foresee the crash. This short essay reviews the criticisms addressed to modern economic theory in the immediate aftermath of the crash. Overall, a case can be made for the fact that economists have been blinded to the possibility that we live in an uncertain and complex world, and have forgotten much of the relevant insights to be found in the history of their discipline. If economics is to be reformed, theoretical and methodological pluralism should be promoted, and changes in the institutional structure of discipline need to be made.

**Keywords:** global financial crisis, critique of economics, uncertainty, complexity, economics education, history of economic thought, interdisciplinarity, pluralism

## Introduction<sup>1</sup>

In the wake of the global financial crisis of 2008, the greatest economic disaster since the Great Depression, the cover story of the July 18<sup>th</sup> 2009 issue of *The Economist*, entitled “What went wrong with economics,” opened with an unequivocally incriminating statement: “Of all the economic bubbles that have been pricked, few have burst more spectacularly than the reputation of economics itself.” In the months surrounding this indictment, many influential economists, including several Nobel laureates, were drawn to the same embarrassing conclusion (Acemoglu, 2009; Buchanan, 2009; Colander *et al.*, 2009; Hodgson, 2009; Krugman, 2009a; Shiller, 2009; Skidelsky, 2009a; Stiglitz, 2009). Despite the existence of a handful of Cassandras, economists, as a group, had failed to foresee the crash. The reason, critics have argued, is that the possibility of asset bubbles was not really taken into account in today’s dominant approaches to macroeconomics and finance that assume that capital markets work perfectly well.

Given recent events, some champions of market self-regulation, such as Alan Greenspan or Richard Posner, were forced to admit that something was wrong. Greenspan, once the world’s most powerful banker, who had warned of the market’s “irrational exuberance” but had done nothing to stop the dot.com bubble, testified before the U.S. Congress that he was “very distressed” by the fact that there may be a

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<sup>1</sup> We are grateful to John Davis, Zohreh Emami and Geoffrey Hodgson.

“flaw” in the prevailing economic theory,<sup>2</sup> while Posner (2009: xii) self-critically admitted that deregulation in the finance industry had been based on an exaggerated belief in the “self-healing powers” of markets. As governments around the world devised stimulus plans to kick-start their economies, the confidence expressed by Nobel laureate and pioneer of modern macroeconomics Robert Lucas (2003: 1), that “the problem of depression prevention has been solved,” seemed difficult to share.

In this short essay, we review the criticisms addressed to modern economic theory. Overall, a case can be made for the fact that economists have been blinded to the possibility that we live in an uncertain and complex world, and have forgotten much of the relevant insights to be found in the history of their discipline. If economics is to be reformed, theoretical and methodological pluralism should be promoted, and changes in the institutional structure of discipline need to be made.

### **The Return of Depression Economics**

In his testimony at the Congressional hearings on *Building a Science of Economics for the Real World*, held exactly a year after the official indictment of economic theory by *The Economist*, Nobel laureate Robert Solow (2010: 13) lamented the fact that modern macroeconomics, the bulk of which is built on dynamic stochastic general equilibrium (DSGE) models, has essentially “nothing useful to say about anti-recession policy,” and

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<sup>2</sup> See “Greenspan Concedes Error on Regulation,” *New York Times*, 24 October 2008.

hence nothing useful to say about the current predicament.<sup>3</sup> Not surprisingly, several authors have argued that the “return of depression economics” (Krugman, 2009b) should be taken as a cue to rehabilitate Keynesian policies and ideas (Akerlof and Shiller, 2009; Davidson, 2009; Lawson, 2009; Leijonhufvud, 2009; Skidelsky, 2009b; Keen, 2010; Mankiw, 2010; Ormerod, 2010; Frydman and Goldberg, 2011; Hodgson, 2011a).<sup>4</sup> An important idea that economists need to come to terms with is the notion of uncertainty that has been forgotten by the profession (Hodgson, 2011b).

For John Maynard Keynes (1936), like for Frank Knight (1921) before him, uncertainty refers to situations where it is impossible to calculate any form of probability distribution of future events. In these instances, “we simply do not know” (Keynes, 1937: 214). The pervasiveness of these situations in real-world economies, and their key role in the booms and busts of capitalism, are ignored in current macroeconomic models in which agents form systematically correct rational expectations.<sup>5</sup> The main reason is expressed by Lucas (1977: 15) himself: “[i]n cases of uncertainty, economic reasoning will be of no value.” In other words, for Lucas and

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<sup>3</sup> Edward Prescott (2002: 1), another Nobel laureate and pioneer of real business cycle theory – the core of modern macroeconomics – admits that DSGE models offer “little guidance to policy except for the important policy implication that a [discretionary] stabilization effort will have either no effect or a perverse effect.”

<sup>4</sup> Posner (2009) and Bartlett (2009), both historically anti-Keynesian figures, belong to this group.

<sup>5</sup> This assumes that people have a complete understanding of the mechanisms governing the economy. It is precisely on this basis that Lucas, Prescott, and others, dismissed Keynesian fiscal policies (Lucas, 1976; Kydland and Prescott, 1977).

many other economists, uncertainty undermines the principle of rational choice, and this impairs the economist's capacity to predict human behaviour. The rhetoric of prediction, popularized by Milton Friedman's (1953) "methodology of positive economics," has prevented the economics profession from acknowledging that we live in an "unpredictable world of complexity" (Hodgson, 2011b: 166).

### **The Unpredictable World of Complexity**

To say that the DSGE models currently used by academics and central banks fall short of real-world complexity is an understatement. Two interrelated lines of criticism have accordingly been levelled at modern economic theory (Colander *et al.*, 2008; LeBaron and Tesfatsion, 2008; Colander *et al.*, 2009; Lawson, 2009; Caballero, 2010; Colander, 2010; Kirman, 2010; Hodgson, 2011a; Leijonhufvud, 2011). The first problem, as David Colander, Alan Kirman, and others have argued, stems from the conceptual reductionism involved in the use of a fully rational Robinson Crusoe-type representative agent. This has prevented macroeconomists from taking into account actual linkages, networks, and interactions between actual human beings, who not only have limited cognitive abilities but are also necessarily heterogeneous in terms of motives, information, knowledge, and capabilities. Arguably, as Tony Lawson, Geoffrey Hodgson or Axel Leijonhufvud have emphasized, portraying the economy as a "closed" system rather than the "open" system that it really is, is equally problematic.

Since openness implies at least some indeterminateness, prediction and mathematical elegance may need to be sacrificed in favour of causal explanation (Hodgson, 2011a). However, notwithstanding Paul Krugman's (2009a) claim that

economists were partly to blame in the crisis because, as a profession, they “mistook beauty, clad in impressive-looking mathematics, for truth,” there can be little argument that tackling the real-world complexity of the economy cannot be done without mathematics. Although some concern about the excessive formalization of the discipline has been expressed, critics of modern economic theory generally do not deny this.<sup>6</sup> In fact, a much more sophisticated mathematics than that used in today’s DSGE models will be needed: the new techniques that economic modellers need to embrace involve heterogeneous agent-based simulations and nonlinear dynamics (Colander *et al.*, 2009; Colander, 2010; Hodgson, 2011a; Leijonhufvud, 2011). This means that new generations of economists will need to be trained accordingly.

### **The Importance of History**

Training in new and better models is certainly needed, but models alone will not prevent future crises. Nor will they provide adequate policy advice if they are built by “idiot savants, skilled in technique but innocent of real economic issues” (Krueger, 1991: 1044-1045). Part of the profession’s failure is imputable to the lack of training and interest in both economic history and the history of economic thought (Hodgson, 2009; Earl, 2010; Mirowski, 2010; Shiller, 2010; Colander, 2011).<sup>7</sup> Larry Summers, the

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<sup>6</sup> Lawson’s (2009: 760) rejection of “mathematical deductivist modelling *per se*” is the exception that proves the rule.

<sup>7</sup> Barry Eichengreen explains “why economics needs history” in an interview with Perry Mehrling, 22 July 2011. See <http://ineteconomics.org/video/30-ways-be-economist/barry-eichengreen-why-economics-needs-history> (accessed 23 July 2011).

brilliant Harvard economist who in his capacity as U.S. Secretary of the Treasury sponsored deregulation in the banking and derivatives industries, recently observed that the works best dealing with today's financial crisis are those of Walter Baghehot, Hyman Minsky, and Charles Kindleberger, but acknowledged that these names are absent in the typical graduate education in economics.<sup>8</sup> Quite a lot of relevant economics was simply forgotten by the profession (Acemoglu, 2009; Goodhart, 2010; DeLong, 2011; Krugman, 2011; Stiglitz, 2011).

It is difficult to overstate the contrast between the research cited by Summers and the dominant belief in the efficiency of capital markets. Much of modern financial economics, based on Eugene Fama's (1970) "efficient market hypothesis," holds that stock prices fully reflect all available information, and that deviations from an asset's intrinsic value cannot last for long. This means, as Fama himself recently explained, that the notion of bubble is meaningless.<sup>9</sup> The manifest existence of devastating speculative bubbles, that more often than not burst with dramatic consequences for the real economy, clearly signals a problem with this view, and points to the need for more realistic models (Schneider and Kirchgässner, 2009; Thaler, 2009; Kirman, 2010; Zingales, 2010; Frydman and Goldberg, 2011; Krugman, 2011). The well-documented fact that bubbles have a recurring pattern throughout history (Kindleberger, 1978;

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<sup>8</sup> Interview with Martin Wolf, 8 April 2011. See <http://ineteconomics.org/videobretton-woods/larry-summers-and-martin-wolf-new-economic-thinking> at 7'49" onwards (accessed 22 July 2011).

<sup>9</sup> Interview with John Cassidy, *New Yorker*, 13 January 2010. See <http://www.newyorker.com/online/blogs/johncassidy/2010/01/interview-with-eugene-fama.html> (accessed 20 July 2011).



Minsky, 1982; Galbraith, 1990; Shiller, 2000; Reinhart and Rogoff, 2009) needs to play a greater role in the education of financial economists, macroeconomists, and regulators alike.

### **The Institutional Structure of Economics**

Unfortunately, prevailing disciplinary boundaries often discourage economists from importing insights from relevant contiguous disciplines, such as psychology, sociology, political science, philosophy, history, and law (Earl, 2010; Shiller, 2010; Hodgson, 2011a).<sup>10</sup> Despite the proliferation of cross-discipline fields, most excursions of economists outside of economics are literally extensions of Econ 101 to others fields following the example of Gary Becker. As Harold Demsetz (1997), Edward Lazear (2000), and others have argued, economics is simply more “scientific,” and this justifies its primacy. The current situation has painfully revealed, however, that “economists have no clothes” (Buchanan, 2009). Rather than pretending to have superior knowledge and methods, the time has perhaps come to more humbly take Bruno Frey’s (1993: 102)

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<sup>10</sup> Keynes (cited in Hodgson, 2011a: 194) famously pointed out that the “master-economist” must be, in some degree, a mathematician, a historian, a statesman, and a philosopher; indeed, “no part of a man’s nature or his institutions must lie entirely outside his regard.” Similarly, in a 1978 interview, Friedrich Hayek observed that “an economist who is only an economist cannot be a good economist.” See [http://www.hayek.ufm.edu/index.php/Leo\\_Rosten\\_Part\\_I](http://www.hayek.ufm.edu/index.php/Leo_Rosten_Part_I) at 49’37” (accessed 20 July 2011).

call “to embark on a new course and to switch from an exporter to an importer of ideas” seriously.<sup>11</sup>

This implies that the incentive structure within which researchers evolve needs to be revised. This is by no means an easy task, but it is clear that unless the institutions change, economists’ methods will not change (Galbraith, 2009; Colander, 2010; Shiller, 2010; Shiller and Shiller, 2011). Attention needs to be focused on the role and composition of both funding bodies and research audit panels that currently favour quantitative research over historical, institutional, and discursive analysis, thereby influencing the career choices of aspiring professional economists. Arguably, economics is fundamentally a pluralist endeavour, and this should be adequately reflected (Hodgson, 2009; Earl, 2010). Logically, teaching at both the undergraduate and postgraduate levels is likely to be affected by such changes, although the introduction and mass adoption of textbooks incorporating competing views of the economy remains difficult to imagine. Nevertheless, in the words of Robert Shiller (2010: 407), we should “tell the truth about the weaknesses of our theories to our students.”

## **Conclusion**

The global financial crisis of 2008 has led many economists to re-examine the foundations and teaching of the discipline. Most criticisms of the dismal science had

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<sup>11</sup> Peter Earl (2010) argues that behavioural economics and finance are but a first and partial step in this direction.

been voiced before the crisis, but the dramatic events of last few years have brought them back to the centre stage. One interesting aspect of the current debate is that it reveals the institutional structure of the discipline. Indeed, the suggested reforms are unlikely to succeed within the present system, given its bias toward one type of worldview and one type of methodology at the expense of other possibilities. These and other considerations are behind the creation, in October 2009, of the Institute for New Economic Thinking (INET) with a \$50 million pledge from financier George Soros, who's plea for a "new paradigm for financial markets" (Soros, 2008) now extends into all branches of economics.<sup>12</sup> INET's already well-oiled research grant programme has begun to initiate the desirable changes. The effects of these efforts, however, will take time to assess. Additional initiatives similar to INET would certainly accelerate the process.

In the meantime, the profession would do well to accept one of the main messages conveyed in Hayek's (1975: 433) Nobel Memorial Lecture, namely that it is perhaps preferable to possess "true but imperfect knowledge, even if it leaves much indetermined and unpredictable, to a pretence of exact knowledge that is likely to be false." Much of the current impasse in modern economics stems from precisely the opposite belief.

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<sup>12</sup> See [www.ineteconomics.org](http://www.ineteconomics.org).

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