

- Lee, F. (2007) 'The Research Assessment Exercise, the state and the dominance of mainstream economics in British universities', *Cambridge Journal of Economics*, vol. 31(2), pp. 309–25.
- Lee, F. and Harley, S. (1998) 'Peer Review, The Research Assessment Exercise and the Demise of Non-Mainstream Economics' *Capital and Class*, (66), pp. 23–53.
- Manning, A. (2003) *Monopsony in Motion*, Princeton: Princeton University Press.
- Mihm, S. (2008) 'Dr. Doom', *New York Times*, 15 August 2008.
- Norris, F. (2008) 'Greenspan's Lament', *New York Times*, 28 October 2008.
- The Oxford English Dictionary* (1989) 'syncretism', 2nd edition, *OED Online* Oxford: Oxford University Press. Retrieved September 2009 from <http://dictionary.oed.com/cgi/entry/50245315>
- Pettifor, A. (2006) *The Coming First World Debt Crisis*, London: Palgrave.
- Pierce, A. (2008) 'The Queen asks why no one saw the credit crunch coming', *The Daily Telegraph*, 5 November 2008.
- Portes, R. (2008) 'The Annual Report of the Secretary-General' *Royal Economic Society Newsletter*, issue 141 (April), pp. 3–5.
- Quality Assurance Agency for Higher Education (2004) *Recognition scheme for subject benchmark statements*. Retrieved September 2009 from <http://www.qaa.ac.uk/academicinfrastructure/benchmark/Recognition/Recognitionscheme.pdf>
- Quality Assurance Agency for Higher Education (2007) 'Economics'. Retrieved September 2009 from: <http://www.qaa.ac.uk/academicinfrastructure/benchmark/statements/Economics.pdf>
- Reinert, E. (2004) *Globalisation, Economic Development and Inequality: An Alternative Perspective*, Cheltenham: Edward Elgar.
- Shiller, R.J. (2006) *Irrational Exuberance* (2nd ed.), New York: Broadway Business.
- Stiglitz, J. (2008) 'The Triumphant Return of John Maynard Keynes' *Project Syndicate*, 1 December 2008.
- Tett, G. (2009) 'Could the "Tobin tax" reshape financial sector DNA?', *Financial Times*, 27 August 2009.
- Turner, A. (2009) 'The financial crisis and the future of financial regulation', The Economist's Inaugural City Lecture, FSA website. Retrieved September 2009 from [http://www.fsa.gov.uk/pages/Library/Communication/Speeches/2009/0121\\_at.shtml](http://www.fsa.gov.uk/pages/Library/Communication/Speeches/2009/0121_at.shtml)
- Turner, G. (2008) *The Credit Crunch: Housing Bubbles, Globalisation and the Worldwide Economic Crisis*, London: Pluto Press.
- Wade, R. (2008) 'Iceland pays the price for financial excess', *Financial Times*, 2 July 2008.
- Wolf, M. (2008). 'Keynes offers us the best way to think about the crisis', *Financial Times*, 24 December 2009.

## Contact details

Alan Freeman  
Association for Heterodox Economics  
62d Tunnel Avenue  
London SE10 0SD

Email: [afreeman@iwgvt.org](mailto:afreeman@iwgvt.org)

# History of Thought and Methodology in Pluralist Economics Education\*



Sheila Dow

---

## Abstract

The purpose of the paper is to develop the argument that history of thought and methodology should form part of the content of pluralist teaching in economics, where the aim of this teaching is to equip students to exercise their own judgement as economists. Discussion of the nature and scope of economics, with examples from history, helps students understand what is involved in considering a range of approaches and methods (rather than uncritically accepting one general approach, but without resorting to 'anything goes'). A way of teaching about the current crisis is used as an exemplar.

## Introduction

In teaching economics, it is important to give students a sense of the discipline. This includes a feeling for current debate (see eg Dow, 2003). Analysing the different arguments within a debate itself requires some pluralism, ie considering different approaches to a question. Indeed the pluralist pleas from the French students which led to the setting up of the Post-Autistic Economics Network and what became the *Real-World Economics Review* explicitly called for teaching economics through teaching about debates in economics (Anonymous, 2000).

Discussion of pluralist teaching in economics therefore addresses concerns that only one general approach is currently emphasised in economics teaching, and that instead students should be exposed to a range of approaches. Already we are touching on controversial questions about the nature of our discipline: how far are economics, and economics teaching, in fact dominated by one approach? What do we mean by approach? What is the justification for considering a range of approaches? If students are exposed to different approaches, how are they then to proceed as practising economists?

The purpose of this paper is to make a specific recommendation for the content of pluralist teaching in economics, as a foundation for teaching through debates. It will be argued that economics teaching should be pluralist also in the sense of including coverage of the methodology of economics and the history of economic thought. The questions posed by pluralism are essentially methodological and therefore require students to be both methodologically aware and methodologically informed. Further, once attention is paid to different approaches to economics, we find that these are best understood with reference to different episodes of development in economic thought, as the discipline addressed particular new concerns. History of thought can thus make a valuable input.

Until the past 50 years, much of economics discourse was pluralist to some degree, in allowing for consideration of some diversity of views, and also had embedded within it methodological discussion and reference to history of thought (Blaug, 1999, 2000, 2003). Indeed we will argue that having the two subjects integral to discussion in the various fields of economics would be ideal. However, during a transitional phase, a separate teaching focus on methodology and history of thought would probably be necessary. This is because our starting point is a discipline dominated by the mainstream approach which discourages explicit study of history of thought and methodology.

In the mainstream, insofar as pluralism is considered, mathematics is seen as the solution to what is seen as a regrettable plurality, putting all argument on an equal footing. The mathematical modelling requirement has been understood as a neutral scientific requirement for rigour, on the grounds that mathematical argument translates fairly unproblematically into verbal argument (Krugman, 1998). The form of mathematics used is an application of classical logic, where propositions are derived logically from axioms taken to be true (ensuring the truth of the propositions). Where the truth-value of the axioms is open to question, as in the behavioural economics literature, the express aim is to amend these axioms for conformity with the evidence, rather than change the structure of argument.

Yet the argument has been made by heterodox economists that mathematics cannot offer a direct translation of verbal argument, and therefore that mathematical argument sets its own bounds on the subject matter (Chick and Dow, 2005; Duran, 2007). The issue is whether or not a complete argument can be expressed mathematically, or whether a mathematical argument can only contribute a partial argument. In particular, individual decision-makers face knowledge limitations, as highlighted by behavioural economists (particularly 'old' behavioural economists, who draw on Herbert Simon; see Sent, 2004) as well as Post Keynesians (Runde and Mizuhara, 2003). The resulting uncertainty is not consistent

with a complete formal expression of individual behaviour. Similarly the happiness literature, and even more so the development well-being literature (see Sen, 1985), have highlighted individuals' concern with processes rather than outcomes, which evades expression in terms of equilibrium outcomes. Depending on the definition of economics, these approaches might or might not be included in the subject.

We need to be aware that there is an important asymmetry. By specifying the bounds on economics, or indeed even going so far as defining economics in terms of method, the mainstream excludes other approaches which, by that definition, fall short. Since these other approaches define economics more in terms of subject matter, and allow a range of methods, there is no question for them of excluding mainstream economics from the discipline of economics. I am not aware of any heterodox economist ever arguing against orthodox economics on the grounds that it is not economics. Arguing for or against any one approach to economics is a totally different matter and is not at all incompatible with recognition of other approaches against which one's own approach needs to be justified. The non-mainstream approach has been more amenable to methodological pluralism, understood in this way, than mainstream economics.

If students are to understand recent developments in economics, and indeed learn about alternative approaches, then a pluralist education must be cast wider than the different theoretical approaches within the mainstream to include study of other approaches. It therefore needs to allow for methodological differences. It also needs to address the question of pluralism itself. Why should we aim to understand and teach different approaches rather than seek a common approach (monism)? The issues of debate we have touched on above, and indeed the very notion of different approaches, are all methodological. To understand what is involved in studying different approaches, therefore, a pluralist education needs to incorporate methodological and historical material to raise awareness first, and equip students with the necessary analytical tools second. We explore this argument further in the next section.

But before we proceed, some clarification of concepts may be helpful. This is important since, as we shall see, there is scope for plurality, not only in economic theory and methodology, but even in understanding of methodology, history of thought and the definition of economics itself. First, I will use the term 'methodology' in the sense of 'approach' to forming economic knowledge; an 'approach' involves a particular selection of methods, but also entails a view about how to build knowledge more generally, about history of thought and about the subject matter of economics. For some (non-pluralists) methodology simply involves questions of how to use particular methods.

Second, pluralism is the argument for plurality, and can apply at a range of levels. Methodological pluralism involves recognition of a plurality of methodologies to be analysed, and it is this sense of pluralism which will normally be used in what follows. Practising economists must adopt one methodology or another, but they can also be methodological pluralists if they recognise that there are other possibilities, and that there is no absolute set of criteria by which to decide which is best to the satisfaction of all. The methodology they adopt can be pluralist or not, ie reliance on many methods or one, respectively. So a pluralist approach to teaching involves methodological pluralism, while some of the literature being taught may itself not adopt a pluralist methodology. Similarly, within one methodological approach being taught there may be a range of theories, ie theoretical plurality.

We proceed by considering the historical development of methodology in order to understand the different approaches to methodology itself (including attitudes to pluralism), from which follow the methodological differences which underpin much of the plurality of theory. We then consider how an integrated use of this kind of material might work in practice. The case study of teaching about the explanations for the current financial and economic crisis is used as an illustration. Here students can not only learn about the different explanations for the crisis, but can also see how different theoretical approaches to money and financial market analysis in the past have themselves influenced the institutional arrangements and policy which produced the crisis.

### Pluralism, methodology and history of thought

If we are to give an explicit role for teaching the methodology of economics in a pluralist curriculum, we need to consider further what is involved in methodological analysis, since here, too, there are different possible approaches. In particular there are different approaches to pluralism itself. We will therefore start this section by discussing different approaches to methodology as the field has evolved, and in the process we will discuss how ideas about pluralism have developed. We will also explore more fully the reasons for the methodological differences within economics. It will be argued that methodological and historical understanding is a necessary ingredient in pluralist education.

Some methodological argument in economics harks back to an old approach to methodology, echoes of which still appear in introductory textbooks, in discussion among non-methodologists and implicitly in discussion of theory choice. This traditional methodology (exemplified by Blaug, 1980) took the approach of specifying rules for good science, applied to economics. The dominant influence was logical positivism, which defined good science as consisting of testable

statements arrived at by means of deductive logic (Caldwell, 1982). This provided the methodological justification for defining good economics in terms of general equilibrium theory which could then be subjected to empirical testing (even if only 'in principle'; see Hahn, 1973).

But empirical testing did not prove to be as decisive in discriminating between theories as had been expected, for a wide variety of reasons. In spelling out some of these reasons, Caldwell (1982) made the first call for pluralism in economics. Given that no one approach seemed satisfactory for establishing the best methodological approach to economics, it would be better to consider a range of different approaches. This call came as methodology was changing, reflecting the changes in philosophy of science itself. One of the major challenges was to the whole notion of independent facts as arbiters of theory, without which logical positivism could not be sustained. Also a more pluralist tendency was emerging in society, promoting respect for a range of political views, social background, race, religion and gender (replacing the traditional hierarchical structure). So in social science there was a growing recognition of different methodological approaches, without any ultimate set of rules by which to demonstrate which was best, ie pluralism.

Studying economics from this pluralist perspective can benefit from an understanding of the influential framework of Thomas Kuhn (1970a, 1970b), although it requires some adaptation to the social sciences. A methodological approach is like his concept of 'paradigm'. It is based on a particular understanding of the subject matter (in the case of economics, how the economy works) and of the best way to build knowledge about it. Thus, for example, mainstream economics understands the economy in terms of markets, and seeks to build knowledge about it in terms of predictable individualistic choice behaviour. The method employed to that end is mathematical, such that a theory can be fully represented by a mathematical model. Neo-Austrians share the focus on markets and individuals, but understand markets as ever-changing, and individual behaviour as creative, so that neither can be captured adequately in a mathematical model, nor in macroeconomic analysis, so that the primary method is the case study. Post Keynesians focus more on the interdependency between the individual and social levels; mathematical modelling is used to contribute to argument, but fundamental uncertainty limits the scope for the kind of stable behaviour which lends itself to modelling, because of the scope for unpredictable discrete shifts as expectations and confidence in them undergo shifts.

A key element of Kuhn's framework was that paradigms are ultimately incommensurate. This follows because, not only are theories different, but even the meaning of words may be different, reflecting different understandings of the

economy and the different frameworks developed to analyse it. Equilibrium can be understood as an abstract requirement of theory, or as a real state of rest, for example (Chick, 2006). A great attraction of mathematics is that it appears to render arguments commensurate. But the problem is that in the process it changes and constrains arguments which have been developed deliberately beyond mathematics. Indeed it is precisely because of this that most non-mainstream approaches differ from the mainstream exclusive reliance on mathematical models.

What is involved in methodological pluralism, therefore, is studying these different frameworks, with a view to analysing each in its own terms, and also discussing the frameworks themselves. But there is no neutral ground; each methodologist, and each student as methodological observer, has his or her own approach. However, making that approach explicit at least helps the discussion escape from ever-recursive reflexivity. The reader has a clue as to how to interpret the analysis. As a result, the bulk of work in methodology now aims as far as possible to describe and analyse methodologies. As such it provides useful material for students learning about different approaches to economic theory.

Modern methodology provides the tools for students themselves to understand what lies behind the kind of debate noted above about the nature and scope of economics, as well as more specialised debates about how best to analyse a particular topic. For example, the critique of logical positivism aids the understanding of the debate between theorists and applied economists in behavioural finance. But methodological awareness also helps with debates about theory and policy, many of which are arguments at cross-purposes because the underlying methodological differences have been suppressed.

It is through debates between different positions (on methodology, theory or policy) that students can learn how to develop their own capacity for judgement as economists. By considering the different approaches as well as the different detailed arguments, students can prepare themselves for forming their own views. By stepping outside the asymmetry of the exclusivist mainstream methodology (which precludes discussion of other approaches as being not-economics), some students will discover other approaches which accord better with their own understandings of how the economy works. But for the many who conclude that they prefer the mainstream approach, understanding why that is the case, and understanding what is meant by arguments from other approaches, can only strengthen their capacity for judgement. An understanding of methodology should also engender an appropriate modesty among economists as to the limitations of our knowledge.

It is important to understand what is involved in this pluralism at the methodological level, since it is often misunderstood. While it involves an

acceptance that there is no independent way to decide which approach to adopt, and the approaches are in many respects incommensurate, this does not mean that 'anything goes'. It only means that choosing one approach over another is a matter of judgement, and debate consists of persuasion (in the absence of demonstrable proof). The choice is not free, in that the way we understand the world is the result of what Searle (1995), calls 'deep background'; we are creatures to a considerable extent of our social and personal circumstances, as well as the education we receive. But the more we are aware of this, the more we can employ reason in our choice of approach, and the more constructive is debate.

The importance of rhetoric for persuasion was something well-understood by Keynes, and now the subject-matter of the rhetoric approach spearheaded by McCloskey (1983). We choose our approach to economics for good reasons, which we bring to debate. There also needs to be some commensurability to allow communication of reasons; that commensurability is provided substantially by a shared subject matter, even though it (and evidence about it) may be understood differently, and by shared elements of economics education, even though that might have employed different approaches. Any one individual who understood the economy completely differently from everyone else, and whose reasons were not accepted by anyone else, would not be able to engage in economics discussion (whether or not the reasons were good in their own terms, or nonsense). Kuhn's paradigms were essentially social, referring to shared views within a scientific community. He saw progress in science as occurring within these communities, by the criteria of these communities. Although for the physical sciences Kuhn saw paradigms as sequential, for the social sciences we can apply his ideas to contemporaneous paradigms. What emerges in practices, given the nonindividualistic notion of paradigms, is a pluralism structured around a limited range of approaches rather than 'anything goes' (Dow, 2004).

The methodology of the dominant approach will tend to colour the structure of economics education. Some have expressed concern that mainstream economics education has focused increasingly on mathematical methods, at the expense of other methods (Colander and Klamer, 1987; Krueger *et al.*, 1991). As we have seen, this characterises the mainstream methodological approach, although the range of mathematical methods, and of types of evidence, is expanding.

But, while it is argued by some that mathematics is necessary for the development of argument (Krugman, 1998; Backhouse, 1998), argument in practice even in the mainstream draws on a wide range of methods, ie it is pluralist. There is thus a contrast between the mathematical formalist 'official discourse' and the plurality of methods of the 'unofficial discourse' (McCloskey, 1983). Non-mainstream

approaches which do not accept the exclusivity of mathematical argument employ a range of other methods in addition in their official discourse. In particular, verbal argument is understood to allow for different content from mathematical argument, including in particular discussion of meaning (something which mathematics suppresses). For some the only logic is classical logic (which lends itself to formal expression). But others (particularly Keynesians, such as Gerrard, 1992) argue in favour of alternative logics. For example Keynes's 'human logic', which takes a pluralist approach to knowledge, is appropriate where the truth-value of premises is uncertain, and the approach lends itself to conceptual as well as mathematical analysis.

If mathematical argument is insufficient, and other types of argument are required in addition (a pluralist methodology), then judgement is required in order to arrive at conclusions (Dow, 2004). This is something made explicit by the Bank of England (1999), when discussing the role of models in monetary policy decision-making. The nature of judgement is seldom discussed in economics, yet clearly it is critical for economists in practice, when applying what they have learnt to real-world situations. It is important therefore that economics education should equip students by training them in judgement. This requires that the curriculum cover different types of argumentation and exercises in putting them together in order to arrive at a coherent conclusion.

In order to even start discussing these things, students need some training in methodology. It is not that all discussion or teaching should be explicitly methodological. The point is that without methodological awareness there can be no recognition of difference of approach, and without methodological training no conceptual apparatus with which to discuss it.

The arguments for teaching history of economic thought as part of a pluralist curriculum follow from the argument for teaching methodology. History of thought can be studied for its own sake, as intellectual history, and indeed it is out of such detailed archival work that the body of knowledge in history of thought emerges. But study of this history of thought is also important as part of a pluralist education. First, once we get away from the idea that there is one best interpretation of past ideas (as of current ideas), the history of our subject opens up. For example, does Adam Smith really provide unqualified authority for free-market economics? Or, however we regard the political conclusions Marx drew from his analysis of capitalism, might we not learn from this analysis? Or, does Austrian economics really provide the foundation for rational expectations (as Kantor 1979 suggests)? Have ideas been discarded which could now prove useful? How we understand the history of economic thought in general, and interpret texts in particular, is itself a

matter for debate (see for example Weintraub, 1999, and Backhouse, 2001). Exploring such debate in itself would contribute to a pluralist education in that it is relevant also to the interpretation of contemporary literature.

Second, to understand modern economics, with its different approaches, students need to understand how it became the way it is. If economics is not fully represented by a set of mathematical models, where meanings are taken to be uncontentious, then the significance of the models and the meanings attached to them can only be grasped by understanding their history (Blaug, 2000). This involves understanding the motivation of those who developed new ideas, and the context in which these ideas were taken up and developed. The interview format arising from the rhetoric approach, and pioneered by Klammer (1984), has helped us understand the work of leading economists by helping us to understand their motivation and the background to the different paths their work took.

Third, the pluralist mainstream approach has promoted the view that economic thought represents progress, so that everything we have in modern economics represents the best of what has been produced in the past. Thus for example Lucas (1980) represented rational expectations as progress from Keynes's formulation of expectations under uncertainty; but the very act of 'operationalising' uncertainty eliminated it. Any notion of progress is specific to one approach to economics – progress to mainstream economists may be regress to non-mainstream economists, and vice versa. Once we take a pluralist approach to economics education, the way is open to study different periods of economic thought in the terms of those periods. What were the problems of the time? Why were they studied in that particular way? Are there any ideas from the past which we might want to revive and adapt to modern circumstances?

### Teaching about the causes of the crisis

We have argued here at a fairly abstract level that methodology and history of thought should be part of a pluralist education in economics, not only to understand the different methodologies lying behind different theories, but also to understand pluralism itself. We now try to tie these arguments down in an illustration of how this might be done in practice. We take the case of explaining the current crisis as an excellent example of where important issues are being raised about what had conventionally been accepted as good theory and policy. We will see that these issues can be illuminated by drawing on methodology and history of thought. In particular we will see that plurality applies at the level of how the crisis is defined and how it is explained, in each case building on the history of ideas. Indeed questions of theoretical approach have become a matter for public

debate (eg in the pages of the *Financial Times*). Methodological pluralism is playing out before us.

Students need to develop awareness that the reality of the crisis itself is open to different understandings. For commentators on the financial sector it is a matter of the behaviour of some key individuals, about judgements and misjudgements, and about wild swings in market values. For others outside the financial sector the economic crisis is an occasion for increasing hardship, within those economies which had contributed to the financial crisis, but also spreading to those which had adopted more prudent financial practices, threatening even more the worsening disparities in incomes worldwide. For policy-makers, the crisis also poses important questions about confidence in domestic and international institutions.

Students can be shown too that economic theorists have different understandings of the nature of the crisis, tied into different methodological approaches and drawing on different historical ideas.

In order first for students to understand the theoretical and institutional frameworks within which the crisis arose, they need to be taught about the legacy of 1980s monetarism, with its logical positivist methodological approach. First New Classical monetary theory (see eg Lucas, 1981), then New Keynesian monetary theory (see eg Woodford 2003), treated the real economy and money-and-prices separately. Central banks could thus be charged with the primary goal of controlling inflation, while governments were concerned with real variables. This encouraged the practice of making central banks independent of government, charged with pursuing inflation targets. This practise was explicit, for example, in the conditions for European Monetary Union. At the same time, bank regulation and supervision became regarded as a micro-concern, detached from inflation targeting, and thus administered increasingly by bodies separate from the central bank. The theoretical framework had encouraged an institutional framework which proved to be highly significant as the crisis developed, in that it impeded both recognition of the seriousness of the situation and also the capacity to address it as effectively as possible.

Students can also be shown that the market conditions which led to the crisis can also be understood in terms of this theoretical framework and its underlying methodological framework which gave primacy to mathematical modelling as being capable of encompassing the complete picture (within known stochastic variation), not only of the economy (for monetary policy purposes), but also of markets. This approach reached its apex in the field of finance, where markets were regarded as being as close as possible to the perfect markets of theory. The foundation of this approach is that there is a 'correct' measure of risk (based on the capital asset pricing model), which is embodied in market prices (according to the

efficient markets hypothesis). As bank assets were increasingly securitised and complex derivatives markets developed, quantitative models became the core basis for trading, with two of its more successful purveyors (Merton and Scholes) being awarded the Nobel prize.

But the drawbacks of this methodology had already become evident, for example in the 1997–98 crisis. The limitation of these models to extrapolating from the past meant that they were unable to predict the structural shift in market pricing as perception of risk went through dramatic revisions. But there was no 'plan B'; the models had been treated as sufficient. In the current crisis, the underpricing of risk, and the inability of quantitative models to handle discrete shifts, has again been a central feature. Yet the institutional structure of markets is built on the pricing of risk, and the main plank of central bank control, capital adequacy ratios, is also built on assessment of risk, all in terms of quantitative models which were unable to predict actual risk in time of crisis.

Teaching about the central role in the crisis of these 'quants' exposes students to a methodological discussion which gets to the heart of how we build knowledge in economics (see eg Dow, 2009). Here students can explore a different tradition in the history of economic thought. Keynes (1936) was concerned precisely with these matters in the wake of the Great Depression, and drew on his theory of probability (Keynes, 1921) to analyse them. Keynes emphasised that fundamental uncertainty was the norm, ie conditions under which it was impossible to determine a quantified probability. Therefore markets develop practices (conventions) to cope with uncertainty, normally promoting stability. But since market valuations cannot be demonstrably correct (the future being fundamentally uncertain), they are vulnerable to changes in sentiment which can cause discrete shifts in prices.

Minsky (1976, 1982) developed Keynes's ideas into the financial instability hypothesis, which many have drawn on to explain financial crisis (see eg Arestis and Glickman, 2002; Kregel, 2008; Whalen, 2007; Nesvetailova, 2007; Wray and Tymoigne, 2008). The theory is built on an understanding of crisis as part of a systemic instability in capitalist economies which can be moderated but not eliminated. Minsky showed how, during a boom, market valuations become held with increasing confidence, encouraging ever-more leveraging, to the point that the financial system becomes increasingly fragile, because it is so vulnerable to expectations being disappointed. High degrees of leveraging mean that cash flow is critical to meeting debt commitments. Once perceived risk is thought to be increasing, the resulting asset price falls lead to asset sales and defaults on loans, which encourages banks to curtail their lending, further exacerbating the situation. The real economy is affected by reduced demand, with the result of increased unemployment.

But students can be shown how a very different explanation arises when the crisis is seen, not as part of a normal instability, but as an aberration from the norm. A different and highly influential explanation of the crisis comes from the New Keynesian tradition, within the mainstream so still with optimising agents, but subject to market imperfections. This approach focuses on knowledge issues, stressing the role of asymmetric information. Their critique of the efficient markets hypothesis is based on the idea that market players have different information sets on which they base their price expectations and risk assessments (see eg Furman and Stiglitz, 1998). Indeed this focus on knowledge lay behind the dominant explanation for the South-East Asia crisis, and led to the IMF emphasis on improving governance in South-East Asian banking, and thus improving information flows (see further Stiglitz, 2002, who inspired this 'Post Washington Consensus'). It is still maintained that, even if only in principle, there is a correct measure of risk which can be incorporated in asset prices.

Students could be asked to consider, as just one example of the current literature, Calomiris's (2008) comparison of analyses of the current crisis, presented at an IMF conference in November 2008. His own New Keynesian approach analyses the origins of the crisis in underpricing of risk due to a combination of such factors as asymmetric information, market imperfections arising from government involvement in financial markets, agency problems and poor governance. He regards as inadequate the New Classical ('fundamentalist') focus on the need for a correction back to trend from the long market rise which these factors had caused, on the grounds that this does not explain the initial deviation from trend in this particular case. Similarly he rejects the Minsky explanation because it relies on 'irrational myopia' without supplying a universal theory of human behaviour which can explain why risk is underpriced at some times and overpriced at others, and to differing degrees.

But then it can be shown to students that Minsky is here being interpreted within the New Keynesian approach, which (like the 'fundamentalist' approach) presumes a rational objective risk measurement benchmark with respect to which the market may underprice or overprice. From the Post Keynesian perspective, Minsky is arguing rather that, in the absence of such an objective benchmark, markets value risk as best they can. The dynamic of rising markets reduces the perception of risk, while that of falling markets increases it, but not in such a way that timing and degree can be forecast quantitatively. In these different ways of understanding what is happening, we have a clear example of the significance of the methodological framework within which we consider competing explanations.

More generally this type of analysis helps students see how different understandings of what the crisis means, and whether it is systemic or an

aberration, lead to quite different explanations. In turn, a methodological approach predisposes economists to understand the crisis in these different ways. Students can also be shown how the reality itself can be shaped by the implementation of theories, not only in policy but in institutional design. We can look to the history of economic thought in Niebyl's (1946) history of monetary theory for an enlightening discussion of how reality, ideas, institutional arrangements and policy impact on each other. But they can get seriously out of phase, such that ideas encouraged by one set of circumstances eventually become embedded in a new institutional structure which delimits subsequent monetary policy, which may be quite inappropriate to new circumstances. Students then need to get a sense, not only of how banking and central banking have evolved, but also of how the theory of monetary policy has evolved and led to particular institutional arrangements and policy stances. A particularly fruitful framework has been developed by Chick (1986; 1988; 1993) for analysing the development of banking systems, and the theory of monetary policy appropriate to the different stages, through history. The analysis has been updated to apply to the current crisis (Chick, 2008).

In conclusion, in teaching the material covered in this section, students can be shown that the crisis raises key methodological issues about market pricing and behaviour in financial markets (and indeed in any market), and the nature of the knowledge base. These issues apply also to how we theorise about economic behaviour, and therefore about the knowledge base of economics more generally. How we resolve these questions (which will differ depending on our methodological approach) will determine how we understand markets, and formulate policy. Analysis of the crisis at a methodological level also helps students understand the nature of the different analyses on offer, and the source of much of the debate about how to proceed. We have also seen how each of the different approaches on offer has drawn on different traditions in the history of thought.

## How to proceed

We have argued here for promotion of methodological awareness as a central part of pluralist teaching in economics. But dealing with methodological issues poses a particular challenge when students are new to this kind of teaching. When the impression has been created that there is only one legitimate approach to economics (within which there may be differences of theory and method, but not methodology), it is hard to get across a methodologically-pluralist approach. There is therefore a question of managing the transition to pluralist teaching; indeed the transition may be equally important for teachers themselves who are not accustomed to a pluralist approach to economics education.

I would suggest an initial exercise which I have found effective in managing the transition. I use this exercise for students embarking on a course in history of thought and methodology, but it could equally be used more generally in a pluralist economics course where students have been accustomed to monist teaching. The critical step for students to take, and one which is difficult for many to contemplate, is for them to accept that they can legitimately express opinions about economics (not just about the choice between this or that model; see Earl, 2000).

The exercise is to ask them to choose any piece of writing in economics which has struck them for some reason. It may be particularly persuasive, or particularly repellent; it may be intriguing, or well-written, or just interesting. Students are asked to write a page explaining why they chose that piece, and be prepared to present it to the group, who may have differing opinions. Some students grasp the exercise quickly, particularly if they have had prior experience of methodological pluralism. But for many it is a struggle to understand that they can legitimately form their own opinions. However, my experience has been that, once that understanding is achieved, there is no looking back. There is no problem thereafter encouraging class discussion, and students put great effort into written work. In the process of the pluralist education which follows, students learn how to develop their own capacity to judge issues and to understand the basis for their judgements. As a result, students become equipped to choose their own approach and address alternatives as they become practising economists.

The transition to incorporating history of thought and methodology into pluralist teaching may require some initial specialist teaching of the history of economic thought and methodology to provide some background for applying them to particular fields, like monetary/macroeconomics as above. These introductory courses could be supplemented by specialist history of thought and methodology courses for those with a special interest in them. But the main priority should be to equip all students to approach economics with an awareness of methodology, and the scope for methodological difference, and with a basic knowledge of the history of their subject (with its different methodological approaches). Ideally, methodology and history of thought are most effective when woven into economic teaching as the best way to understand a field and the debates within it. Indeed this is the political economy tradition; history of thought and methodology only became specialist fields, separated from the rest of the discipline, when economics came to be taught largely without any reference to them.

## Conclusion

The argument for pluralism is a methodological one, itself requiring reference to history of thought. But what I have argued here is that methodology and history of thought should themselves be an integral part of pluralist teaching in economics. We are only in the position of having to consider such questions because the non-pluralist development of mainstream economics takes its methodological approach as given (and thus an arbiter of quality in the discipline) and makes scant reference to history of thought. Once a pluralist approach to teaching economics is established, methodology and history of thought would be such a natural part of the discourse that we would cease to regard them as separable specialisms. They would become part and parcel of how we teach economics.

## Notes

\* I am grateful to Victoria Chick and anonymous referees for helpful comments.

## References

- Anonymous (2000) 'Student Petition of Autisme-Economie' (English translation). Retrieved September 2009 from <http://www.paecon.net/PAEtexts/a-e-petition.htm>
- Arestis, P. and Glickman, M. (2002) 'Financial crisis in Southeast Asia: dispelling illusion the Minskyan way', *Cambridge Journal of Economics*, vol. 26, pp. 237–60.
- Backhouse, R.E. (1998) 'If mathematics is informal, then perhaps we should accept that economics must be informal too', *Economic Journal*, vol. 108(451), pp. 1848–58.
- Backhouse, R.E. (2001) 'How and Why Should We Write the History of Twentieth-Century Economics?', *Journal of the History of Economic Thought*, vol. 23, pp. 243–51.
- Bank of England (1999) *Economic Models at the Bank of England*. London: Bank of England.
- Blaug, M. (1980) *The Methodology of Economics*. Cambridge: Cambridge University Press, second edition 2002.
- Blaug, M. (1999) 'The Formalist Revolution or What Happened to Orthodox Economics After World War II?' in: R.E. Backhouse and J. Creedy (eds.) *From Classical Economics to the Theory of the Firm: Essays in Honour of D.P. O'Brien*. Cheltenham: Edward Elgar, pp. 257–80.
- Blaug, M. (2000) 'No History of Ideas, Please, We're Economists', *Journal of Economic Perspectives*, vol. 14(1), pp. 145–64.
- Blaug, M. (2003) 'The Formalist Revolution of the 1950s' in: W. J. Samuels, et al. (eds.), *A Companion to the History of Economic Thought*. Malden, MA and Oxford, UK: Blackwell, pp. 395–410.
- Caldwell, B.J. (1982) *Beyond Positivism: Economic Methodology in the Twentieth Century*. London: Allen & Unwin.
- Calomiris, C.W. (2008) 'The Subprime Turmoil: What's Old, What's New, What's Next', Annual Jacques Polak Conference, IMF, November.
- Chick, V. (1986/1992) 'The Evolution of the Banking System and the Theory of Saving, Investment and Interest', *Economies et Sociétés, série Monnaie et Production* no. 3, pp. 111–26, reprinted in: P. Arestis and S. C. Dow (eds) *On Money, Method and Keynes*. London: Macmillan.



- Chick, V. (1988) 'Sources of Finance, Recent Changes in Bank Behaviour and the Theory of Investment and Saving' in: P. Arestis (ed.), *Contemporary Issues in Money and Banking: Essays in Honour of Stephen Frowen*. London: Macmillan, pp. 30–48.
- Chick, V. (1993) 'The Evolution of the Banking System and the Theory of Monetary Policy' in: S.F. Frowen (ed.), *Monetary Theory and Monetary Policy: New Tracks for the 1990s*. London: Macmillan, pp. 79–92.
- Chick, V. (2006) 'Equilibrium in Economics: Some Concepts and Controversies' in: V. Mosini (ed.) *Equilibrium in Economics*. London: Routledge.
- Chick, V. (2008) 'Could the Crisis at Northern Rock have been Predicted?: An Evolutionary Approach', *Contributions to Political Economy*, vol. 2, pp. 1–12.
- Chick, V. and Dow, S.C. (2005) 'The Meaning of Open Systems', *Journal of Economic Methodology*, vol. 12(3), pp. 363–81.
- Colander, D., and Klamer, A. (1987) 'The Making of an Economist', *Journal of Economic Perspectives*, vol. 1, pp. 825–43.
- Dow, S.C. (2003) 'The Relevance of Controversies for Practice as well as Teaching' in: E. Fullbrook (ed.), *The Crisis in Economics: The Post-Autistic Economics Movement: The first 600 days*. London: Routledge.
- Dow, S.C. (2004) 'Structured Pluralism', *Journal of Economic Methodology*, vol. 11(3), pp. 275–90.
- Dow, S.C. (2009) 'The Psychology of Financial Markets: Keynes, Minsky and Emotional Finance' in: D.B. Papadimitriou and L.R. Wray (eds), *The Elgar Companion to Hyman Minsky*. Cheltenham: Elgar, forthcoming.
- Duran, M. (2007) 'Mathematical Needs and Economic Interpretations', *Contributions to Political Economy*, vol. 26, pp. 1–16.
- Earl, P.E. (2000) 'Indeterminacy in the Economics Classroom' in: P.E. Earl and S.F. Frowen (eds) *Economics as an Art of Thought: Essays in Memory of G.L.S. Shackle*. London: Routledge.
- Furman, J. and Stiglitz, J.E. (1998) 'Economic Crises: Evidence and Insights from East Asia', *Brookings Papers on Economic Activity*, vol. 2, pp. 1–135.
- Gerrard, B. (1992) 'Human Logic in Keynes's Thought: Escape from the Cartesian Vice' in: P. Arestis and V. Chick (eds) *Recent Developments in Post-Keynesian Economics*. Aldershot: Edward Elgar, pp. 1–16.
- Hahn, F.H. (1973) 'The Winter of our Discontent', *Economica* vol. 40, pp. 322–30.
- Kantor, B. (1979) 'Rational expectations and Economic Thought', *Journal of Economic Literature*, vol. 17, pp. 1422–41.
- Keynes, J.M. ([1921] 1973) *A Treatise on Probability. Collected Writings of John Maynard Keynes* Vol. VIII. London: Macmillan.
- Keynes, J.M. ([1936] 1973) *The General Theory of Employment, Interest and Money. Collected Writings of John Maynard Keynes* Vol. VII. London: Macmillan.
- Klamer, A. (1984) *Conversations with Economists: New Classical Economists and Their Opponents Speak Out on the Current Controversy in Macroeconomics*. Totowa, NJ: Rowman and Littlefield.
- Kregel, J. (2008) 'Minsky's Cushions of Safety: Systemic Risk and the Crisis in the U.S. Subprime Mortgage Market', *Levy Institute Public Policy Brief* No. 93A.
- Krueger, A.O. et al. (1991) 'Report of the Commission on Graduate Education in Economics', *Journal of Economic Literature*, vol. 29, pp. 1035–53.
- Krugman, P. (1998) 'Two Cheers for Formalism', *Economic Journal*, vol. 108(451), pp. 1829–36.
- Kuhn, T.S. (1970a) *The Structure of Scientific Revolutions*, second edition. Chicago: University of Chicago Press.
- Kuhn, T.S. (1970b) 'Reflections on My Critics' in: I. Lakatos and A. Musgrave (eds) *Criticism and the Growth of Knowledge*. Cambridge: Cambridge University Press.
- Lucas, R.E., Jr (1980) 'Methods and Problems in Business Cycle Theory', *Journal of Money Credit and Banking*, vol. 12, pp. 696–715.
- Lucas, R.E., Jr (1981) *Studies in Business Cycle Theory*. Oxford: Blackwell.
- McCloskey, D.N. (1983) 'The Rhetoric of Economics', *Journal of Economic Literature* vol. 21, pp. 434–61.
- Minsky, H.P. (1976) *John Maynard Keynes*. London: Macmillan.
- Minsky, H.P. (1982) *Inflation, Recession and Economic Policy*, Brighton: Wheatsheaf.
- Nesvetailova, A. (2007) *Fragile Finance*. London: Palgrave.
- Niebyl, K.H. (1946) *Studies in the Classical Theories of Money*. New York: Columbia University Press.
- Runde, J. and Mizuhara, S. (eds) (2003) *The Philosophy of Keynes's Economics: probability, uncertainty and convention*. London: Routledge.
- Searle, J. (1995) *The Construction of Social Reality*. New York: Free Press.
- Sen, A. (1985) *Commodities and Capabilities*. Amsterdam: North-Holland.
- Sent, E.-M. (2004) 'Behavioural Economics: How Psychology Made Its (Limited) Way Back into Economics', *History of Political Economy*, vol. 36(4), pp. 735–60.
- Stiglitz, J.E. (2002) *Globalization and its Discontents*. London: Allen Lane.
- Weintraub, E.R. (1999) 'How Should We Write the History of Twentieth-Century Economics?', *Oxford Review of Economic Policy*, vol. 15, pp. 139–52.
- Whalen, C. J. (2007) The US Credit Crunch of 2007: A Minsky Moment, *Levy Institute Public Policy Brief* No. 92.
- Woodford, M. (2003) *Interest and Prices: Foundations of a Theory of Monetary Policy*. Princeton: Princeton University Press.
- Wray, L. R. and Tymoigne, E. (2008) 'Macroeconomics Meets Hyman P. Minsky: The Financial Theory of Investment', *Levy Institute Working Paper* No. 543.'

## Contact details

Sheila Dow  
 Department of Economics  
 University of Stirling  
 Stirling FK9 4LA  
 UK  
 Tel: +44-1786-467474  
 Email: s.c.dow@stir.ac.uk