

# DEPARTMENT OF ECONOMICS

## Working Paper

### The Great Detour

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**Abstract:**

This note comments on the state of macroeconomics, arguing that the ‘micro founded’ macro that developed after 1970s has been a wasteful detour. The paper will appear in a symposium in *Homo Oeconomicus*, vol. 27 (2), 2010, on the crisis and the response from the British Academy to the questions from the British Queen.

JEL classification: E1, B41

By the beginning of the 2000s, a self-congratulatory consensus had taken hold among macroeconomists. According to Blanchard (2000, p. 1375) "progress in macroeconomics may well be the success story of twentieth century economics", and Blanchard (2008) maintained that "the state of macro is good". There had, he argued "been enormous progress and substantial convergence" and "a largely shared vision of both of fluctuations and of methodology has emerged".<sup>1</sup> Woodford (1999) also saw convergence, not just within macroeconomics but also in relation to the rest of economics: "modern macroeconomic models are intertemporal general equilibrium models derived from the same foundations of optimizing behavior on the part of households and firms as are employed in other branches of economics" (p. 31). This position was echoed by Chari and Kehoe (2006) who claimed that "macroeconomics is now firmly grounded in the principles of economic theory" (p.3) and that this theoretical advance had great practical value: "macroeconomic theory has had a profound and farreaching effect on the institutions and practices governing monetary policy and is beginning to have a similar effect on fiscal policy. The marginal social product of macroeconomic science is surely large and growing rapidly" (p.26).

The 'great moderation' and a dynamic American economy formed the background to this broadly shared sentiment. Business fluctuations had become milder and fast US growth demonstrated the powerful forces of free markets and a sensible economic policy with a focus on low inflation, economic incentives and liberalization. Historically the US performance during the neo-liberal era was not, in fact, particularly successful. Average growth rates were higher in 1950-1975, and the distribution of the gains was highly unequal during the neoliberal period: the rich (and especially the super rich) got richer while the median income of a male worker was unchanged between

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<sup>1</sup> The subsequent analysis shows a certain internal tension in his views. The new Keynesian model is described as a "toy model" that "lacks many of the details which might be needed to understand fluctuations". For a model that had already "become a workhorse for policy and welfare analysis" this assessment is not very reassuring.

1973 and 2007. But memories are short and most macroeconomists give little weight to distributional issues.

There are signs that the complacency within macroeconomics will be shattered by the financial crisis and the severe recession that hit most countries in 2008. Changes in the academic world can be slow -- one retirement at a time -- but the letter from the British Academy to the queen with its admission of "wishful thinking", "psychology of denial" and the "failure of the collective imagination of many bright people" can be seen as an indication of change, and increasing criticism has also come from within macroeconomics.

Outside the mainstream, post Keynesian and institutionalist critics have always been scathing in their critique. As a relatively mild example, Dutt and Skott (2006) argued that "what has happened in macroeconomics since the late 1960s has been a wasteful detour. A generation of macroeconomists has grown up learning tools that may be sophisticated, but the usefulness of these tools is questionable. Moreover, a great deal of damage may be, and has been, done when the tools are applied to real-world situations." Similar conclusions have now been reached by an increasing number of economists who were previously seen as part of the mainstream. Paul Krugman is quoted as saying that most of modern macroeconomics is "spectacularly useless at best, and positively harmful at worst" (Economist, 16 July 2009); Willem Buiter (2009) refers to the last 30 years of macroeconomics training at US and UK universities as a "costly waste of time"; Brad DeLong (2009) talks of the Chicago school's "intellectual collapse", and Robert Gordon (2009) wants to see macroeconomists retrained in "1978-era macroeconomics".

The key element of the new macroeconomics is an emphasis on rigorous and explicit microeconomic foundations. Older style Keynesian macroeconomics, it was claimed, had failed in this respect, and the Lucas critique demonstrated the implications of this failure: reliable predictions required that analysis be based on structurally invariant factors, and for economists that meant preferences and production functions.

Microeconomic behavior and the influence of expectations should clearly be taken seriously. No Keynesian will disagree with that. After all, about 90

percent of the General Theory consists of detailed discussions of microeconomic behavior in a world of uncertainty, and the crucial role of expectations has always been emphasized by Keynesians. But the importance of microeconomic behavior does not mean that macroeconomic equations must be derived directly from the intertemporal utility maximization of a representative agent with perfect foresight (or rational expectations). A good behavioral story is required, but the so-called microfoundations of new macro are mechanical, primitive and misleading.

The problems are largely well-known. Aggregation is one of them. Even if individual preferences can be taken as well-defined, exogenous and stable over time, the celebrated Sonnenschein-Debreu results show that microeconomic rationality imposes only very weak constraints on the properties of aggregate excess demand functions. Thus, the derivation of macroeconomic relations from the optimization of a representative household "is not simply an analytical convenience as often explained, but is both unjustified and leads to conclusions which are usually misleading and often wrong" (Kirman, 1992, p. 117).

The prototype models of new macro effectively abandoned the concerns that defined traditional macro. "New Keynesian" versions of new macro may include non-clearing labor markets and allow for real effects of aggregate demand policy. But it is assumed that in the absence of shocks, the economy converges to a structurally determined NAIRU, and cyclical fluctuations are generated by introducing stochastic shocks into models with a stable equilibrium solution. If only prices and wages were flexible, there would be no Keynesian problems of effective demand. It is not just that new macro gives another answer to old questions; new macro has stopped asking some of the main questions.

The coordination and stability problems that were at the heart of macroeconomics (and of Keynes's message) have been forgotten, and this implicit dismissal of stability concerns cannot be justified by reference to Walrasian general equilibrium theory. In fact, the realization that stability had not and probably could not be established under reasonable assumptions may

have been a critical factor behind the virtual abandonment in microeconomics of all research on Walrasian general equilibrium theory.

Is there a New Keynesian answer to the stability concerns? Not really. Stability is simply assumed. The models typically involve saddlepoints and jump variables, and the presumption of stability is used to pin down the outcome in the short run. Agents have rational expectations, and the jump variables seek out the stable saddlepath.

Rational expectations have been used before Muth and Lucas, although without using that name. Harrod's 'warranted growth path' represents a rational expectations path, but the extension of rational expectations to all models, not just steady growth paths or Robinsonian mythical ages, lacks both theoretical and empirical foundations. Systematic deviations of outcomes from expectations may lead to changes in expectation formation -- and shifts of this kind may be an source of instability, as suggested by the role of 'animal spirits' in Keynesian analyses -- but the possibility of endogenous changes in expectation formation does not justify a focus on rational expectations. It is difficult to get convergence to rational expectations even in simple models of rational learning, and the real-world learning process takes place within a complex overall environment and one that is subject to constant and profound technical and institutional change. Indeed, institutional or structural change is often invoked to justify expectations that would otherwise seem unreasonable, viz. the appeal to a 'new economy' during the stock market boom of the 1990s and the faith in financial engineering in the early 2000s.

It is sometimes claimed that no one predicted the crisis and the end of the great moderation. This claim may be questionable, even if one confines attention to economists within the mainstream. But more importantly, the claim is testimony to how isolated and marginalized the heterodox tradition in economics has become. Minsky may be grudgingly referred to these days as someone with important insights on the instability of financial systems and their interaction with the real economy. But a long tradition in heterodox economics has emphasized the instability problems and crisis tendencies in unregulated market systems. The process of "financialization" figured

prominently in some of this literature and the implications and sustainability of this process was the subject of intense debate.<sup>2</sup>

These heterodox traditions were marginalized in the profession. There may be many reasons for that. The mainstream will see it as a reflection of weaknesses in the heterodox position rather than as an indication of the close-mindedness of the mainstream itself. In the words of the Economist (16 July 2009, "What went wrong with economics"), "[t]oday's economists tend to be open-minded about content, but doctrinaire about form. They are more wedded to their techniques than to their theories. They will believe something when they can model it".

There is some truth in this claim. But the distinction between content and modeling technique breaks down in the case of macroeconomics. It is reasonable to demand that an argument be clearly articulated, logically coherent and consistent with relevant empirical evidence, but the prevailing orthodoxy in macroeconomics asked for something different. The call for microfoundations was interpreted as an imperative for all macro models to be based on full intertemporal optimization. It is precisely this imperative that has been challenged by both the old critics (including Keynesians like Tobin and Solow as well as heterodox economists) and the more recent strand of behavioral economics which, -- drawing on work from outside economics -- has pointed out systematic departures from the standard presumption of rational economic behavior.

The problems with the new macroeconomics do not derive from "too much mathematics" or from the need for aggregation. All useful models represent drastically stylized pictures of a complex reality and all macro theory needs to work with aggregates. But the straightjacket of full intertemporal optimization misrepresents real-world decision making. It also reduces the ability of the theory to incorporate important aspects of reality in a tractable manner, and therefore encourages the theorist to ignore them. If one insists on rigorous intertemporal optimization as the basis of any macro relation then

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<sup>2</sup> See, among others, Palley (2007), Crotty (2005) and Epstein (2005); formalizations of Minsky type mechanisms include Taylor and O'Connell (1985), Foley (1986), Skott (1994) and Ryoo (2009). More general, Keynesian inspired theories of instability and endogenous cycles include Skott (1989) and Chiarella et al. (2005).

simplifications need to be made in other areas in order to keep the model tractable. Thus, over the last 30 years macroeconomists have struggled to solve problems of intertemporal optimization. These optimization problems grossly simplify real-world decision problems, and the astounding implicit presumption has been that agents in the real world solve (or act as if they had solved) these much more complex problems. The neglect of aggregation problem and the use of representative agents in models that purport to provide microeconomic foundations only serve to make the picture even more bizarre. In fact, the new macro with its sophisticated and perfectly rational representative agents would seem to embody a good example of how not to use mathematics: mathematical models arguably are useful primarily because they allow a clear analysis of complex interactions between agents, each of whom may follow relatively simple (but possibly changing) behavioral rules.

Macroeconomics is about the interactions across sectors and markets, and it has to address the stability and coordination problems that can arise from these interactions. It also needs behavioral foundations, but aggregation must be taken seriously and it should be recognized that bounded rationality and uncertainty characterize real-world decision-making. The "micro founded" macro that developed since the 1970s has been a wasteful detour.

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