THE MAKING OF A REVOLUTION

How important are economic crises?

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Abstract:

As a consequence of The Great Depression in the 1930s, the mainstream economic understanding was seriously challenged by empirical facts, theoretically as well as methodologically. As such, The Great Depression gave way to what latter on become termed the Keynesian Revolution which for decades came to dominate the scene of macroeconomics.

Later on, the understanding of macroeconomics once again became classical in its core contents.

Today, modern macroeconomic mainstream is characterised and benchmarked by the use of DSGE models. Due to the present economic crisis of resent years – the Great Recession – the mainstream macroeconomic understanding is once again challenged (both theoretically as methodologically). However, although acknowledging the importance of many critical contributions made by for instance Post Keynesians, is it debatable if the critic and the present economic crisis will launch the making of a new revolution in macroeconomics, as was the case in the 1930s. In general, the macroeconomic mainstream, despite the empirical facts of the resent years, seems to be very deaf when it comes to listen to non-mainstreamers such as Post Keynesians.

A first very preliminary draft. Comments are more than welcome.

Introduction

Even since the days of Adam Smith and especially David Ricardo and the Marginal Revolution, economics has had a focus on optimality questions as a more and more important first priority as *the* core theoretical question. However, as evidence from economic history tell us; real life economics is seldom about optimal outcomes. At the microeconomic level, households and firms are typically struggling at getting the best of the second-best solutions in place as an actual economic outcome (be it temporarily or intertemporarily). Likewise, at the macroeconomic level, historical evidence is a story primarily of fluctuations in aggregate demand and aggregate production[1].

As such, core theoretical statements of mainstream economics has often been in conflict with real life phenomena. In fact, with a philosophy of science perspective coloured by the importance of doing falsification – the critical rationalism of Karl Popper – actually, many core theoretical statements of economics have been falsified[2]. Especially, this seems to be the case with macroeconomic theory.

In the history of economic thought, the mainstream understanding has often been challenged by more non-mainstream views. For instance, Karl Marx and the German Historical School confronted the classical paradigm with its lack of realism, theoretically as well as methodologically. Later on, the neoclassical theory was criticised by among others Thorstein Veblen and John Maynard Keynes. Nowadays, where many economies are characterised by depressive economic conditions in the still ongoing economic crisis, the modern macroeconomics – The New Neoclassical Synthesis – with its DSGE base line model is confronted by many critical statements from many economists (Post Keynesians as well as non-Post Keynesians).

As we all know, the Great Depression in the 1930s finally resulted in the defeat of the neoclassical theory as the Keynesian Revolution overtook the scene of macroeconomics. That is, in this particular case, the strength of the economic depression of the 1930s was so strong that phenomena of real life made it not only necessary but also actually called forward a Revolution in the mainstream macroeconomic understanding as shown in the next section. Today, however, as discussed in the third section, it might be questionable if the present economic crisis is able to launch a new Revolution in macroeconomics.

Then in the 1930s – The Great Depression

[1] For instance, see Skidelsky (2009).

[2] This fact made Blaug (1997:3,4 & 5) to state: ”Modern economics is sick. Economics has increasingly become an intellectual game played for its own sake and not for its practical consequences for understanding the economic world. Economists have converted the subject into a sort of social mathematics in which analytical rigour is everything and practical relevance is nothing … much of modern microeconomics might be fairly described as a kind of geography that consists entirely of images of cities but providing no maps of how to reach a city either from any other city of from the countryside … in recent years even macroeconomics has fallen prey to empty formalism”.

As stated elsewhere, see Olesen (2010), the writings of John Maynard Keynes can be seen as a lifelong struggle of trying to get economic theory to correspond better to real life phenomena than the mainstream understanding of his time did. Ever since the publication of his *The Economic Consequences of the Peace* in 1919, Keynes argued in almost all of his writings, that the possible macroeconomic outcome of a modern monetary production economy need not be one of optimality. Rather, as documented by empirical facts, such an outcome could certainly be (and often had been) one of less than full employment.

As we all know, Keynes finally succeeded, theoretically as well as methodologically, to give a new macroeconomic framework that came to revolutionise the understanding of how the processes of a macro economy unfold themselves with the publication of *The General Theory* in February 1936 (see e.g. Davidson (2007)[3]. Later on, based on the messages in this book, the Keynesian Revolution almost totally took over the scene of macroeconomics for decades to come[4].

That is to say, the economic crisis of the 1930s was severe enough to trigger out a revolution in macroeconomics. The old understanding had to give way to an understanding that offered answers to questions of both theoretical, empirical and conceptual anomalies that the old understanding had failed to present convincingly.

As such, at least five main achievements became the result of the Keynesian Revolution.

Firstly, of course, macroeconomists got a new view on the importance of aggregated demand as they acknowledged the necessity of having a focus on how the level of aggregated output was determined and how it could be manipulated by use of economic policy. That is, macroeconomists became concerned with how the processes of income determination could be expected to unfold themselves given various chocks to the economy; perhaps especially with a bias towards when the economy was in a situation of less than full employment.

Within the classical and neoclassical theory, aggregate demand played in general a very passive role in determining the level of aggregate output. The outcome at the macroeconomic level of the economy was in principle determined by the strength and effectiveness of the market forces at the microeconomic level. Supply side effects dominated the economic processes – in essence the battle between supply and demand on every single market in the economy – which always ended with a market clearing result at the market level. As such, the classical and especially the neoclassical theory is in fact all about how an economy due to the existence of the market mechanism is going to get at equilibrium position (at the market level as well as the macro level).

[3] "Keynes freed his mind from the binds of the classical analysis that was the conventional wisdom of economists of his (and our) time. He was able to reorient economic analysis in his mind towards a realistic analysis of the economic world in which we actually live", Davidson (2007:3).

[4] Although it is an unquestionable fact that there is a huge gulf of distance of understanding between the core elements of the economics of Keynes and that of Keynesianism, we are not going to discuss this important aspect further in the present paper.

Stated alternatively, classical and neoclassical theory is a story about the validity of Say's Law. Of course, the economy was not always necessarily immediately in a position of equilibrium in the very short run. However, a given disequilibrium position would not be that far away from the equilibrium position (only small deviations in prices and output levels were allowed), and at the same time, in normal circumstances, a disequilibrium position could not be in existence for a very long period.

With *The General Theory*, Keynes told quite a different story. In Chapter 3, he presented his macroeconomic model: 'the principle of effective demand'. By use of this model, Keynes was able to show how an economy could be locked in a disequilibrium with less than full employment for a prolonged period indeed. This kind of disequilibrium was not explained by stating inflexibility in the wage and price settlement; rather, it was lack of sufficient effective demand in the economy that made such a situation prevail. This is not to say, however, that supply side effects was not important to Keynes. Quite the contrary, an economic story could not be told the right way without having attention on both the demand side and the supply side of the economy (just read Chapter 21 of *The General Theory*). So even today, we still teach students in basic macroeconomics how to do an economic analysis within the framework of the 45^{o} diagram, the IS/LM model and the AD/AS model manipulating the level of aggregate demand by use of economic policies.

Secondly, macroeconomists got a new view on how to conduct monetary policy.

In the old understanding, monetary policy had to do with how to achieve stability in price levels (the inflation level). This was the concern of the management of the Central banks. Concern about the aggregate level of output and employment was in general left for the market mechanism to solve. With, perhaps, given that the economic situation was rather atypical; some help from government by limited use of fiscal policy could be accepted. However, with Keynes and *The General Theory* bankers were told to look after the level of total output – fluctuations in aggregate production became very important and was now a concern of bankers too[5]. As such, the management of a Central bank should no longer be independent. Rather, monetary policy should in general be coordinated with other aspects of the general economic policy (especially fiscal policy).

Thirdly, macroeconomists got a new view on how to conduct fiscal policy.

[5] As for instance, stated by Jørgen Pedersen in 1933, who was a very famous early Danish Keynesian economist; see Olesen (2001): "The object is therefore to find a phenomenon, the stabilization of which by general consent will be found desirable, no matter how the price level may behave. Such a phenomenon is, I think, economic activity, meaning by this a state of affairs in which the productive resources of individuals or economic units may find normal employment, i.e. a state of economic equilibrium … In fact, the object of the national monetary policy should be, not the stabilization of exchange rates, as under the gold standard system, but the stabilization of economic activity and the level of money income" from Pedersen (1975; 11 & 20).

Away with the classical view on fiscal policy stating that, the budget should always be balanced. Potential crowding out effects was no longer that important if the economy functioned at a level less than full employment. Budget deficits – as well as a public debt – could be acceptable. That is, from now on, the use of fiscal policy had to be evaluated according to which purposes it was designed (the principle of functional fiscal policy)[6].

Fourthly, macroeconomists got a new view on international affairs – countries should operate internationally in coordination not in conflict with each other (as laid down by the treaty of the Bretton Woods System). The principle of income determination was not only in action nationally but also internationally. Therefore, at best, economic policy changes should be coordinated between countries.

Fifthly, macroeconomists began doing econometrics. Thereby, they gave the politicians a vital instrument to their disposal when politicians had to decide what to do economic policy wise when they tried to minimise the fluctuations in aggregate demand and output (the policy of 'stop and go').

Now in the 2010s – The Great Recession

Later on, after a period with Monetarism, New Classical and New Keynesian theory a synthesis emerged in macroeconomics. The modern macroeconomic mainstream is now in general a story about the New Neoclassical Synthesis with DSGE modelling as a base line model.

Within this framework, some (most) of the main achievements that became the result of the Keynesian Revolution has been refuted.

It is now common to talk about policy neutrality. To be sure, that is the case in the longer run. In the short, however, a change in economic policy might be able to do a difference, if such a change is going either to improve the flexibility of price and wage settlement in the goods and factor (especially labour) markets or to minimise market imperfections in general. Fiscal policy is primarily designed to ensure that sustainability is achieved at least in the longer run, while monetary policy is conducted according to guidelines given by the Taylor Rule. That is, demand side effects may have a role to play in the short run but normally the dominant effects in modern

[6] Although the credit for this principle in general is given to Abba Lerner's contribution from 1943, it was actually the Dane Jørgen Pedersen that first introduced the principle in 1937. In this paper he writes: "Whether a public debt is to be repaid depends upon the expected effect on production and distribution and other political factors measured in terms of given political goals, and these of course will vary from case to case … We may then conclude that the question of public debts or, what is the same thing, the question of a surplus or a deficit in the public budget is a question of economic policy and consequently it is only possible to answer the question under particular assumptions about economic policy"; from Pedersen (1975:33).

macroeconomics have to do with supply side effects. As such, changes in relative prices could most often do the trick: to get actual total output and employment to become closer to that of full employment. As such, the modern macroeconomic mainstream assumes that the forces of the market mechanism are very forceful and effectively present in real life economic behaviour and phenomena of modern economies. The vision of many (most) macroeconomists is that of a statement of 'more market is better than less market' (in the private as well as in the public sector).

However, in 2008-09, most countries were hit by an international financial crisis as many of the financial created bobbles busted. Later on, as we all know, this crisis called forward the present Great Recession of many countries.

Because of this, the modern macroeconomic mainstream came under attack as many became more and more critical towards the virtues of this understanding with its base line modelling of DSGE models. Therefore, perhaps it time to revolutionise macroeconomics once again.

However, at present it is more than questionable if a shift in the macroeconomic paradigm is just around the corner. Probably we are not going to witness the birth of a new revolution in economics in the years to come. Rather, it seems most likely that the modern macroeconomic mainstream will react to the criticism by making at least two important revisions.

Firstly, it seems time so say good-bye to the hypothesis of rational expectations and probably, to a large extent, also to the representative agent in macroeconomics. As expressed by a leading mainstream macroeconomist of the New Neoclassical Synthesis, the assumption of rational expectations is:

> ”a strong one, and one may wonder if it should be relaxed, especially when considering relatively short-run responses to disturbances, or the consequences of newly adopted policies that have not been followed in the past – both of which are precisely the types of situations which macroeconomic analysis frequently seeks to address”.

Furthermore:

> ”the assumption that an economy's dynamics must necessarily correspond to an RE equilibrium may seem unjustifiably strong … It makes sense to assume that expectations should not be completely arbitrary, and have no relation to the kind of world in which the agents live; indeed, it is appealing to assume that people's beliefs should be *rational*, in the ordinary-language sense, though there is a large step from this to the RE hypothesis”.

Therefore:

> ”We should like … to replace the RE hypothesis by some weaker restriction, that nonetheless implies a substantial degree of conformity between people's beliefs and reality – that implies, at the least, that people do not make *obvious* mistakes”

Taken literately, hardly any Post Keynesian could argue against the above view, which has been put forward by Michal Woodford[7].

Secondly, it seems as if the modern macroeconomic mainstream finally has acknowledged that financial aspects matters. That is, financial aspects may have important real economic consequences. They could disturb the outcome of total output and employment. As stated by e.g. Romer (2011:358):

> ”The crisis of 2008-2009 has made it clear that non-Walrasian features of credit markets have important macroeconomic consequences. Disruptions in credit markets can cause large swings in economic activity, and credit-market imperfections can have large effects on how other shocks affect the macroeconomy”.

Nevertheless, what about the method of the macroeconomic mainstream? Is it time to abandon the DSGE modelling? Probably not. The principle of TINA seems still to govern how to do macroeconomics. As Woodford (2008:2 & 13) stated without hesitation:

> ”While the problems of the field have hardly all been resolved, there are no longer such fundamental disagreements among leading macroeconomists about what kind of questions one might reasonably seek to answer or what kinds theoretical analyses or empirical studies should even be admitted as contributions to knowledge … [and this is done by using DSGE models] … there are really no longer alternative approaches to the resolution of macroeconomic issues”.

However, some mainstreamers express themselves a little less fundamentalist (perhaps due to empirical facts of resent years):

> “First, despite the models’ complications, there is a great deal they leave out. For example, until the resent crisis, the models’ treatment of credit-market imperfections was generally minimal. Second, the microeconomic case for some important features of the models is questionable. Most notably, the models include assumptions that generate inertia in decision making … [which] … is mainly motivated not by microeconomic evidence, but by a desire to match macroeconomic facts”; Romer (2011:361).

Actually, a less fundamentalist view than that of Woodford might come in handy, as the DSGE modelling has been empirical falsified. Just to mention some important aspects.

(1): Although the DSGE models can cope with random exogenous events, events or shocks need not be random nor exogenous – often disturbances are endogenous in nature rather than exogenous[8].

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[7] From Woodford (2013:304).

[8] With Stiglitz (2012:32): “In most models, the disturbances to the tranquillity of the economy were exogenous, but historically – as now – the important shocks are endogenous”.

(2): Macroeconomic patterns in real life economics are not only patterns of unique steady states paths – real life phenomena is seldom ergodic.

(3) DSGE try to include aspects of uncertainty; however, DSGE only allows for uncertainty of an epistemological kind – there is no room in the DSGE modelling for a kind of uncertainty that is ontological (which is, of course, the more troublesome of the two mentioned kinds of uncertainty).

(4) Of course, economic behaviour is dependent on expectations; however, in real life, households and firms do not act economically based on perfect rational expectations. From real life behaviour we know that households as well as firms make mistakes not only of a stochastic nature but also, and much more importantly, of a systematic nature.

(5): Likewise, of course, households and firms make decisions of an intertemporal kind; however, these intertemporal decisions are not characterised by perfect optimality, rather decisions are often (always) of a second-best kind.

And finally, (6): Methodologically, the 'hypothetical-deductive method' used by the DSGE modelling is not the most relevant method when you acknowledge that: "unlike atoms or cells, individuals are free and, so, unpredictable, because they learn and change their behavior; because institutions also change their behavior; and because a general uncertainty permeates individual behavior and economic analysis"; Bresser-Pereira (2012:9).

To sum up; it seems certain, that the modern macroeconomic understanding is currently undergoing some revisions. However, seen from a Post Keynesian perspective, it is more than questionable if these revisions would be sufficient to make mainstreamers to be able to perform a macroeconomic analysis that really, in a relevant way, copes with the essential concepts of: *time, money, expectations & uncertainty*. Unfortunately, it seems as if mainstreamers continue to do macroeconomic analyses that are only ergodic in nature.

Concluding remarks

As stated by Davidson (2007:xiii), the macroeconomic framework given by Keynes is a "most apt description of our market-oriented, money-using entrepreneurial economy". Based on this framework, economists of today should try to give way to a modern macroeconomic understanding that is in better accordance with the facts of real life than that of the macroeconomic understanding, which is given by the construction of the basic DSGE base line model. A relevant macroeconomic theory should also be able to handle economies working outside the optimal outcome of full employment.

In good accordance with the views given by Paul Davidson in many of his writings, the behaviour of the individual household or firm has never been characterised by what is identical with the behaviour of *the rational economic man*. The behaviour of both households and firms are conducted by human beings, which are able – at least to a large extent – to change their minds up to the very last moment where they have to decide what to do. Also very importantly, these economic agents have to act in an economic environment of uncertainty both of an epistemological as well as of an ontological kind. Because of this fact, the behaviour of households as well as of firms is based on expectations. However, these expectations are not rational expectations in the modern understanding of the term. Economic behaviour is not only characterised by mistakes of a stochastic nature rather, such a behaviour – as probably all human behaviour – is also characterised at least to some extent by mistakes of a more systematic nature.

Furthermore, as Davidson repeatedly has argued, due to existence of an ontological kind of uncertainty, money has never been neutral. Neither in the long run nor in the short run. This is to say, that almost all of the economic behaviour of modern households and firms are hinged on financial aspects (restrictions) of some kind. Due to this fact, economic decisions are often carried out in real life by making contracts. In addition, you have to remember, that these contracts are nominated in money terms. That in itself is a clear evidence of the fact that money and in general financial aspects matters.

As shown in the above, the modern macroeconomic understanding is probably going to make at least two necessary revisions of a more fundamental kind.

Firstly, they have to accept that modern economies are financial dominated economies. Without a thoroughly understanding of the crucial interaction between the real and the financial sector of the economy, macroeconomists are never going to get the right answers when they pose complex questions. There is more behind the processes of a modern macroeconomic system, which develops through time in a path-depended, and to some degree, unforeseeable way than what changes in relative price relationships can explain (as it is the case with the modern mainstream understanding).

Secondly, they have to give up using rational expectations in the strict meaning of the term. As Woodford stated, the economic behaviour we model has to depicture to some degree what we know about actual economic behaviour. Unfortunately, households and firms often make mistakes not only stochastically but sadly also of a more fundamental systematic nature. So in fact, they have of course never made expectations that was rational in the way we understand the term rational expectations. This is of course not the same as saying that households and firms do not make rational choices – or try to do so – when they act economically without using rational expectations. Rather is it a statement saying that households as well as firms can behave rationally accordingly to other rules than those given by what is behind the term rational expectations (and that of the term *rational economic man*). In real life, you can act rational when you run for the best of perhaps many possible second-best solutions (as e.g. stated by the representatives of the Bounded Rationality School).

As a non-mainstream economist, you have to give credit to the modern macroeconomic mainstream for relaxing the assumptions on the above-mentioned two aspects. In doing so, they are gaining a better correspondence between the theoretical framework and the facts of real life. However, it is for the future to come to see if these changes are of such a fundamental character to insure some room for the non-neutrality of money and financial elements in general in mainstream macroeconomic theory.

Furthermore, as long as the mainstream understanding is avoiding incorporating the existence of an ontological kind of uncertainty as a core element in its theoretical models, it is doubtful that mainstreamers are going to get the things right when they are trying to explain what is currently going on in the economy. Not to mention the problems they have of foreseeing an unforeseeable future.

You have to remember, as stated by Paul Davidson, that Keynes broke away from the mainstream of his time by not accepting three classical axioms: i) money is neutral; ii) the existence of gross substitution[9]; and, iii) the ergodic character of the economy system[10]. At present, it seems more than questionable if the modern macroeconomic mainstream would ever wholeheartedly accept the rejection of these three classical axioms.

This time, therefore, we are probably not going to get a new Revolution in macroeconomics, as was the case in the 1930s; all there is room for are, although important, only revisions of the theoretical framework of modern mainstream. Methodologically, mainstream itself seems not to accept any changes. The DSGE modelling is *the* only way to do macroeconomics. Unfortunately, mainstreamers only do analyses that are ergodic in nature. The non-ergodic view on economics is regrettable only accepted by the Post Keynesian understanding, as non-mainstreamers have hitherto had *no* influence at all on the modern macroeconomic New Neoclassical Synthesis.

[9] With Davidson (1984:567 & 568-69): "a basic axiom of Keynes's logical framework is that nonproducible assets that can be used to store savings are not gross substitutes for producible assets in savers' portfolios … In the absence of the axiom of gross substitution, income effects (e.g., the Keynesian multiplier) predominate and can swamp any hypothetical neoclassical substitution effects. Consequently, relative price changes via a flexible pricing mechanism will not be the cure-all "snake-oil" medicine usually recommended by many neoclassical doctors for the unfortunate economic maladies that are occurring in the real world".

[10] See e.g. Davidson (1984:572 & 2003-4:253): "Keynes (1936, Ch. 12) rejected this view that past information from economic time series realizations provides reliable, useful data which permit stochastic predictions of the economic future … Keynes's nonergodic uncertainty and animal spirits concepts … means that although we can have perfect hindsight, there is no lens that can provide corrected vision regarding the future. Entrepreneurial vision of the future is not faulty, but is, instead, based on dreams or nightmares"

In other words, there is still a vital role for a Post Keynesian understanding to play in modern macroeconomic reasoning. The need of a Revolution in macroeconomics according to Post Keynesian arguments is eminently present for the years to come.

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