FINANCIAL CRISIS AND THE CHALLENGE FOR FINANCIAL MACROECONOMICS

Position paper of

Jan Toporowski

for the conference on

ECONOMICS OF CREDIT AND DEBT

Waterloo, Ontario 16-18 November 2012

1. The Challenge

The challenge posed for financial macroeconomics by the financial crisis that is affecting the 'financially advanced' economies of North America and Europe (it is common to call it, wrongly, a 'global' financial crisis: in fact the vast majority of the world's population, living in Asia and Africa, is not experiencing any financial crisis: if that population is close to or actually experiencing poverty then this predates the financial crisis and so cannot be said to be a result of that crisis; nor indeed are all the international financial centres of the world affected by it) has a number of different aspects. These may be roughly divided into challenges to the modelling of financial macroeconomics, challenges to the general method of analysis that is used in financial macroeconomics, and challenges to political economy, in the sense of the economic policy that is used to overcome the crisis. By financial macroeconomics I mean macroeconomic theory, with some consideration of financial variables or parameters.

While much of the discussion among economists of the financial crisis has concerned the latter two aspects of its implications for financial macroeconomics that is, its implications for methodology and economic policy, I would suggest that the most devastating challenge posed for financial macroeconomics is for the modelling of the crisis, because it is in this

regard that most schools of thought in macroeconomics are found wanting. Briefly, the modelling used in macroeconomics may be divided up into static general equilibrium, retrospective simulation of particular growth paths in a general equilibrium framework, and theories of financial crisis.

I have elsewhere discussed these respective approaches and the flaws in them that the current crisis has exposed (Toporowski, 2010). In the case of static general equilibrium, for example of the inter-temporal kind that inflation-targeting central banks use to inform their monetary policy decisions, the crisis poses a fundamental challenge because such policy envisages a fixed outcome (the inflation target) to current policy decisions. The link between those decisions and the outcome, the so-called monetary transmission mechanism, is a statistical relationship that is some average relationship between past monetary policy decisions and past inflation, affected by other variables such as the output gap or the rate of exchange. The inconsistency that arises from using this kind of modelling is that the major economies affected by the crisis seem to be undergoing new processes of deflation which did not exist during the periods from which central banks took their data to estimate their statistical monetary transmission mechanism. Much the same applies to stock-flow consistent modelling, in which it is possible to show stock-flow consistent effects of particular changes in expenditure or income. But it is much more difficult to show *processes* of deflation.

If we take more 'dynamic' modelling, such as dynamic stochastic general equilibrium, then we are here taking rather more roundabout approaches to equilibrium. Such modelling may give satisfactory results in simulating or mimicking a certain process. But the end result is a static equilibrium. The models are then dependent upon successive shocks to create an evolution of the economy over a long period of time. Since these are simulations, the models have very little empirical content. They may be calibrated to provide a simulation

that is fairly close to observed changes in particular variables in the real world. But on the whole the data cannot distinguish between two cases:

1) a shock that results in an eventual equilibrium, followed by a shock that eventually results in a different equilibrium, followed by another shock and so on, i.e., a shock 1 → equilibrium 1 → shock 2 → equilibrium 2 etc. kind of process. Since the shocks come conveniently after an equilibrium has been obtained those shocks cannot be said to be random; and
2) a shock that is followed by another shock, before a general equilibrium is obtained, so that no equilibrium is ever reached i.e., a shock → shock → shock → shock type of process, so that no equilibrium is ever actually reached.

The first kind of process contradicts the notion of a stochastic process, because the 'shocks' are not independent of each other but patiently wait their turn in a disorderly queue for general equilibrium to be established after the shock that is directly in front of them in the queue. Even if the model can be calibrated to reproduce the data from a particular financial crisis, this coincidence cannot be used to verify the theory because to do so would be to violate the principle of a stochastic shock, and hence the response process of the economy in reaching the new equilibrium. In the second kind of process, equilibrium is not reached, and therefore the value of knowing any potential equilibrium is questionable. The course of the crisis in the Eurozone suggests that that particular crisis is the second kind of process.

Moreover, the notion that a succession of crises is due to random shocks is something of an illicit generalisation and a way of wilfully stepping back from further investigation. The alternative explanation for a succession of 'shocks' is a structural imbalance that triggers off a succession of crises, rather than being brought by market forces into equilibrium. This last is typical of Kalecki's analysis of the cumulative process of deflation (Kalecki 1932). As someone who spent a large portion of my working life outside academia, I recall the first time

an economist told me that variables had changed because the system had experienced a ‘shock’. This aroused an almost irrepressible urge to tell the reluctant investigator to go out and find out what is really going on; maybe even think through how the system works; but at least identify some structural flaw that could make the system unstable.

Theories of financial crisis in some respects are like the attribution of economic fluctuations to ‘shocks’: an illicit generalisation that comes from seeing only one kind of event in history. As I have argued elsewhere, there are two problems with theories of financial crises (‘one damn’ crisis after another’). The first is that there are periods in which there are no crises and a proper, macroeconomically-founded theory of crises must be able to account not only for crises, but also for those periods when there are no crises. In general we may say that the problem with theories of general equilibrium is that they can account for periods of stability, but cannot account for periods of crisis. Conversely the cruder theories of crisis, for example Grossman’s theory of capitalist breakdown, or underconsumptionist theories such as those of Gesell or Major Douglas, or more recently Richard Koo’s theory of a balance sheet recession, may provide a plausible story of crisis. But they cannot explain the boom or the stability that precedes the crisis.

This is what makes Minsky’s theory of financial fragility useful in analysing the real world: the idea of a world of apparent tranquillity or equilibrium in which imbalances build up to break out in crisis is far more helpful than a theory that says merely that crisis is caused by speculation (as in Kindleberger, or cruder versions of Minsky). Minsky’s theory can account for periods of stable, crisis-free, expansion as well as financial crashes. I have tried to put forward a similar kind of theory of stability and crisis in my theory of capital market inflation (Toporowski 2010).

The second problem for theories of financial crises lies in the fact that crises are not the same: They do not repeat themselves with the same characteristics, or even the same

kinds of characteristics. The banking crises of the nineteenth century under the gold standard are not the same as the crises of the late twentieth century, as the emerging market crises of the 1990s were not the same as the Third World Debt crisis of the 1980s. The changing character and symptoms of financial crisis may be called the progressive nature of crisis. Another 'one damn' crisis after another' approach is the recent attempt by Reinhart and Rogoff to provide some kind of lasting perspective on financial crises by giving us the statistics of crises over the last 800 years may give some historical insight. But this insight is inevitably limited because next time it really will be different! (We shall not deal with here the probabilistic approach to crises implied by Reinhart and Rogoff's study, to which the best answer was provided by Marx: '…how insipid the economists are who, when they are no longer able to explain away the phenomenon of over-production and crises, are content to say that these forms contain the possibility of *crises*, that it is therefore *accidental* whether or not crises occur and consequently their occurrence is itself merely a *matter of chance*.' Marx *Capital Volume II* 1974, p. 512.)

The challenge therefore to the methods of analysis that are used in financial macroeconomics is that crises contradict the notion of equilibrium that is deeply rooted in such economics. Crises contradict any notion of a state of the economy in which it is reduced to the same routine repeated day after day, in which change no longer takes place.

Finally, the present financial crisis is a challenge to political economy, in the sense that economists have to put forward policies or reforms to reverse the adverse consequences of the crisis and, if possible, measures that might prevent its recurrence. Whether regulation, or monetary policy, or fiscal policy, or financial reform or, at the extreme, the wholesale reform of capitalism is warranted to overcome the crisis and ensure that it is not repeated, is a discussion that needs to be had somewhere, and not just among the anticapitalists of the Occupy Wall Street movement. Sadly the preponderance of unthinking property-owners in

society is such that the discussion is replaced by reassurance from politicians, central bankers, and financiers that the necessary steps are being taken to overcome the crisis and that their prudence will ensure that it does not happen again. So the unthinking mass is reassured that the best possible is being done and that the next lurch into deflation is the result of someone else's crisis (a 'global' rather than a home-made one) or Chinese obduracy. We disempower ourselves by our ignorance in the face of forces that we call 'shocks', or 'globalisation' or 'financialisation' because we cannot make the effort or are too frustrated or depressed to understand what is robbing us of our comfort and welfare.

2. My Journey

In 1972 I graduated from the University of Birmingham with an undistinguished degree in Political Science (but actually a much broader degree in social sciences, including sociology, elements of psychology, and area studies in West Africa and Eastern Europe) and, in the following year I came to London to start my first proper (graduate) employment with the Church Commissioners for England, the government agency that is charged in England with the management of the endowment of the Church of England (the state religion in that country) and that pays stipends to its clergy and pensions to retired Anglican priests and their dependents. After six months of probation in the Minerals Department (where I recorded claims for royalties on mineral wealth owned by the Commissioners) I was transferred to the Stock Exchange Investments Department, on account of the knowledge of economics that I was supposed to have obtained in one course of introductory economics at Birmingham.

Shortly after my arrival there, the London Stock Exchange crashed. A couple of broking firms were 'hammered' or forced into liquidation. Months after that, the property

(real estate) market crashed and with it a number of secondary banks whose lending to that market had fuelled its inflation in the early 1970s. The secondary banks were banks that avoided regulation because they did not call themselves banks, and did not take deposits from the public. Instead they financed themselves by taking deposits from banks in the inter-bank market. As a result of this, their crisis could not isolated to these fringe credit institutions and one of the Big Four clearing banks, the National Westminster Bank, needed assistance, organised by the Bank of England.

In the wake of the financial and real estate crises, the economy plunged deep into recession, with rapidly rising unemployment, but also accelerating inflation, that came to be known as stagflation. This challenged the conventional wisdom in economics and policy-making that there was some stable inverse relationship between inflation and unemployment.

I wanted to undertake further studies, because I enjoy cultivating new ideas. I specifically wanted to study economics because, despite having abandoned economics after my first year, I had learned from the other social sciences that they all deferred to economic relations as the constraint within which social and political relations evolved. I registered for an evening degree at Birkbeck College, University of London. Although stimulating, because the programme was taught by mostly young radicals and included some history of economic thought, and Marxist and Keynesian approaches, most of which have now disappeared from the standard curriculum. But my studies were a disappointment in the sense that nothing that I was taught illuminated in any way the developments that I was witnessing in my work during the day. My disillusionment reached its peak one evening when, in the course of a lecture on general equilibrium, we were told that ‘the world out there is in general equilibrium: we can see that the markets out there are in equilibrium.’ The lecturer, incidentally, went on to have a distinguished career in the British economics establishment and even featured in the film

Inside Job for his evidently very valuable advice to the Rekjavik Chamber of Commerce in the summer of 2008 to the effect that the Icelandic banking system was sound.

My outlook on my studies changed one evening when I found, on a shelf in the library (then in the basement of the College's premises in Gresse Street on the other side of Tottenham Court Round) a copy of Kalecki's *Studies in the Theory of Business Cycle 1933-1939* with a nice introduction by Joan Robinson. The book had only been published a few years earlier. Despite the historic character of essays, written over four decades before, they uniquely placed my knowledge of what was happening in the financial markets in the context of a theory of capitalist instability. The theory presented in them also offered an approach to Marx and Keynes that seemed to take the best out of them and integrate it systematically without being eclectic. And all this was achieved in a severe mathematical style that appealed to reason rather than sentiment. After this, I read everything that I could of Kalecki's work. Much of the three years that I spent subsequently in writing my PhD (on Polish economic planning, a topic chosen because I thought that it would allow me most time to read economic theory unrelated to Polish economic planning) was spent in reading Kalecki.

After completing my PhD I did various jobs and ended up back in the City (as the London financial district is called) working for Standard Chartered Bank. As a senior economist I spent my time assessing the credit risk of borrowers and governments which applied to the bank for loans (including, for example, Saddam Hussein's government in Iraq).

The saddest part of my work consisted in making assessments of countries whose governments were embroiled in the Third World Debt Crisis that had broken out in 1982. The abandonment of the Bretton Woods system of fixed exchange rates, closely followed by the quadrupling of the price of oil in 1974 greatly increased the foreign trade imbalances of nearly all countries: trade surpluses, especially among oil-exporting countries, and trade

deficits, notably among oil-importing countries, swelled, and were now intermediated by commercial international banks rather than, as previously, through the International Monetary Fund. When the international debt became excessive, when interest rates on that debt rose at the start of the 1980s, and as commodity prices started to fall, the scene was set for a major international banking crisis as governments in Mexico, Brazil, Poland and elsewhere announced that they could not service their foreign borrowing. The International Monetary Fund, that was called in to provide emergency assistance had insufficient resources. The U.S. Government came under pressure from the major New York banks that dominated international banking, Citibank, J.P. Morgan, Chase Manhattan and others, to come up with a solution that would protect those banks from failure due to their excessive exposure to defaulting governments in the Third World.

An initial solution was put forward in October 1985 by James Baker, the U.S. Treasury Secretary. This offered the rescheduling of debts owed by the fifteen most indebted governments, while requesting multilateral financial institutions, such as the IMF, and commercial international banks to lend more in order to facilitate the refinancing of indebted governments' foreign debts. The rescheduling was secured more or less by default. The IMF and the multilateral financial agencies lent as much as they could, under conditions that devastated the economies and polities of too many poor countries. This allowed the commercial international banks to escape the consequences of that default, which would have brought down those banks.

Nevertheless, the initiative failed. Like the recent policy initiatives to resolve the international debt crisis of 2007-2009, it treated the problem of excessive debt as merely the problem of liquidity that bankers in the international financial markets assured politicians that it was. (This is another reason why debt crises cannot be left to bankers to resolve). The crisis

lingered on until 1989, when Baker's successor, Nicolas Brady put forward his own solution, which involved refinancing through the issue of bonds backed by U.S. Treasury bonds (the so-called Brady Bonds). But it also gave indebted governments the incentive to develop the domestic capital markets through which those governments could refinance more securely their foreign debts. The external debt of the most indebted governments was thus successfully 'hedged' with processes of capital market inflation that were set off by financial liberalisation in emerging markets. Again the problem of excessive debt was not resolved by introducing more liquidity into the system. But by the time 'emerging market crises' broke out from the mid-1990s onwards, the governments of those emerging markets were largely off the hook of their external debts.

On the 19 February 1986 the *Financial Times* published my article 'Why the World Economy needs a Financial Crash'. In this article, I argued that in a market economy inflation is a 'natural' non-catastrophic way in which debt is accommodated and managed. However, with the struggle against inflation now the main priority of governments all over the world, the markets were being deprived of their mechanism for coping with excess debt, such as that of the governments that had defaulted in 1982. The result was the spreading of debt deflation in the developing countries. It was better, I argued somewhat audaciously, that some banks should be allowed to collapse, than that poor countries be further impoverished to service the balance sheets of the international banks.

That article had a devastating effect on my career. My boss at Standard Chartered had agreed to the publication of my article, provided that the Bank's name was not mentioned. However, the *Financial Times* named my employer at the end of my article. I was able to show my letter to the editor asking him not to publish my employer's name. However, my days were numbered and soon after I lost my job in a 'reorganisation' of the Department, and

found out that I was virtually blacklisted in the financial institutions of the City of London. The loss of my job imposed new stresses and insecurities on my young family. It also changed the course of my intellectual development and transformed my outlook on the discussions of policy and theory that are supposed to be the vehicle for the progress of reason in economics and politics. The article was written in the belief that, in contrast to the engaged writer in an authoritarian regime, we live in an intellectual democracy in which ideas and analysis are evaluated on their merits. Its publication marked the turning point to a realisation that the market-place for ideas is the playground of coteries vying for or exercising power. In that playground, a special place is reserved for the media whose function is 'as an opinion board telling individual agents in the market what average or conventional opinion is at any one time' (Toporowski 2000, p. 7). (Josef Steindl, went even further, and suggested that the particular coteries, or 'opinion-leaders' dominate that playground, forming the expectations of participants in markets to maintain a certain speculative enthusiasm in those markets. Arguably financial economics functions in much the same way. Steindl 1990, pp. 371-375)

The immediate consequences of that article for my professional career proved to be enriching if only because they caused me to reflect upon why what I had written was so shocking. Unable to find work in the City, I became an academic, where the loss of the daily uproar in the markets was more than made up for by the intelligent questioning of my students. I had already written some papers on banking and the financial markets. I now drafted out my first serious attempt to understand the functioning of the financial markets, my book *The Economics of the Financial Markets and the 1987 Crash*, which came out in 1993.

3. My Work

My subsequent work in finance tried to identify the conditions for steady inflation of the financial markets and how such inflation created the preconditions for financial crises. In his early work, Kalecki used the term 'credit inflation' to describe the expansion of credit. I was fascinated by the unstable expansion of the stock market, after its nadir in the 1970s, which I associated with the inauguration of a system of funded pension schemes at the end of that decade. It was the share-buying of pension funds that fuelled the recovery of the stock market, rather than any prospects of future profitability of British business. However, pension funds experience 'maturity', when the cash inflow into their portfolios dries up. This analysis, together with my attempt to lay out the principles under which financial derivatives markets, made up my second book *The End of Finance: The Theory of Capital Market Inflation, Financial Derivatives and Pension Fund Capitalism*.

Around the time of the publication of my first book (Toporowski 1993), I attended a seminar organised by Victoria Chick at University College, London, at which I heard the distinguished French monetary economist Alain Parguez describe Keynes's theory as a theory of 'capital market inflation'. The idea that capital markets are alternately inflated and then deflated brought together much of my thinking around the financial markets. The development of this idea then became the theoretical foundation for my second book (Toporowski 2000) and then my subsequent theoretical work.

My style of work has always consisted of intensive reading of the British business and financial press, the *Economist* and the *Financial Times*, combined with theoretical explorations relevant to my, now decades long, project of an intellectual biography of Kalecki. I read academic journals lightly and only insofar as I need to keep up with current developments in theory.

4. The future for financial macroeconomics

The focus in my work on finance and Kalecki gives me, I think, an entrée into understanding the modern world which other theoretical approaches lack. I find New Classical, New Keynesian, Games-theoretic, Behavioural and neo-classical approaches unsystematic and tending to evade the complications of money and finance by 'assumptions' that do little justice to those complications. Similarly, I find that most economists who describe themselves as Marxists have little understanding of finance, or credit operations. Post-Keynesians, who, following their Master, really are the only modern school of thought that takes finance seriously. But too often they follow their Master in the ambiguity of their formulations and lack of coherence of even their truest insights into the functioning of modern capitalism. Much of this is also true of Minsky, who is nowadays counted as a Post-Keynesian. Similar criticisms (I have now doubt) could be levied at my own work, if that were subjected to the kind of critical scrutiny that more distinguished theorists may attract.

Nevertheless, I believe that the present preoccupation with finding the 'correct' or 'true' theory, or its realism, is overdone, and may even have contributed to the failure of economics in the present crisis. In fact nothing stimulates understanding (among academic economists at least) as much as passionate disagreement with some theory or policy. And this is especially true among the public, who have more to gain in the understanding of economic policy from the disagreements of economists than from their agreements. The damaging and failed policies of the past, monetarism and now austerity in Europe, were allowed to prevail because the public and governments were served up a self-proclaimed 'consensus' by economists, so that the scope for public choice and reasoning over policy was restricted to the 'wisdom' of narrow coteries who avoid critical scrutiny by claiming consensus.

This does not mean that theory is not important, or that it is less important than rhetoric or policy. In fact, a proper respect for theory is the foundation of intellectual integrity

because the serious evaluation of criticism of our theory and inconsistencies in it makes our analysis more systematic and more truthful.

I can therefore foresee two possible futures for financial macroeconomics. One, in which self-contained coteries, however publicly-spirited and concerned, continue to isolate their theories from criticism. This, in my view, will result in the deterioration of economic theory and the discredit of economics and economists. Another future is possible in which economists, respecting the personal integrity of their opponents, challenge each other publicly by pointing out inconsistencies in each others' arguments, so that the public and politicians have a chance to be educated through the incoherence of a reasoning economics profession, rather than being confirmed in prejudice and resentments by categorical pronouncements. Communicating ideas in a way that is comprehensible to the educated public is also a way of avoiding unnecessary jargon and veiling arguments in technical mystique.

I would like to hope that my kind of 'financial Kaleckianism' has a future, indeed becomes the future of financial macroeconomics. This would avoid the banalities of current thinking on finance and macroeconomics, characterised by equilibrium thinking, abstracted 'shocks' or intimations of imminent catastrophe, by placing finance in a business cycle approach to the evolution of the economy. This was already tried by Minsky, who called his theories 'financial Keynesianism'. In the mainstream there are faint echoes of this in the 'financial accelerator' models of Bernanke and Gertler. An evolutionary (or progressive) business cycle offers a comprehensive approach to history and avoids both abstraction from reality, and selectivity bias in the choice of data.

However, the purpose of economics should not be the promotion of any particular theory: such promotion too readily degenerates into dogmatism and unthinking ritualism. The purpose of economics has been, and should be in the future, the critique of political economy,

in this case the critique of the consequences of financial crisis and austerity. Economic theory is necessary for such critique and this is why the neglect of theory is so dangerous for economics. But economic theory, or the ‘correct’ economic theory is not the sole purpose of such a critique. Different theories have to be evaluated also against their implications for economic policy, and the future that they offer us.

References

Kalecki, M. (1932) ‘Wage reductions in times of crisis’ *Collected Works* Vol. I, Oxford: The Clarendon Press 1990.

Steindl, J. (1990) ‘The Dispersion of Expectations in Speculative Markets’ in *Economic Papers 1941-1988* London: Macmillan 1990.

Toporowski, J. (1993) *The Economics of Financial Markets and the 1987 Crash* Aldershot: Edward Elgar.

Toporowski, J. (2000) *The End of Finance: The Theory of Capital Market Inflation, Financial Derivatives and Pension Fund Capitalism* London: Routledge 2000.

Toporowski, J. (2010) ‘Excess debt and asset inflation’ in S. Kates (ed.) *Macroeconomic Theory and its Failings Alternative Perspectives on the Global Financial Crisis* Cheltenham U.K.: Edward Elgar, pp. 221-234.