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The Global Economic Crisis of 2008: Some Thoughts on Causes and Remedies

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1. Introduction

The global economic crisis of 2008 had its proximate origins in the US sub-prime mortgage

"So on net, what can we say about how the stability of the financial system has evolved as the nature of the system has changed? While the system now exploits the risk bearing capacity of the economy by better allocating risks more widely, it also *takes on more risks than before*. Moreover, the links between markets, and between markets and institutions, are now more pronounced. *While this helps the system diversify across small shocks, it also exposes the system to large systemic shocks – large shifts in asset prices or changes in aggregate liquidity*. The incentive structure of investment managers, as well as intensified competition, may contribute to 'endogenising' the large systemic shocks….. – *not only might investment managers have a greater tendency to allow asset price misalignments, they may also have tendency to leave themselves exposed to events 'in the tail' of probability distributions, without preparing adequately for them. Tail events may well prompt a flight to quality and liquidity. Unfortunately, traditional providers of liquidity could find it harder to step up at such times*.

While it is hard to be categorical about anything as complex as the modern financial system, *it is possible that these developments are creating more financial-sector pro-cyclicality than in the past.*

deeper into the role that monetary and finance theory played and the way it has influenced policy and regulation in financial markets over recent decades. Ultimately, economic policy and regulation is based on economic theory. If that theory is flawed both policy and regulation will ultimately fail. It is the purpose of this note to offer some thoughts on what has gone wrong with monetary and finance theory and how these failings have led to failings in policy and regulation through the political process. ***It is the contention of this paper that the fundamental cause of the current global crisis can be traced to failings in the theory of money and finance.***

These failings have occurred on a global scale, in the sense that they have influenced the behaviour of international institutions like the International Monetary Fund (IMF) and the

His doctrine rests on flawed theory. In the case of finance theory, the major flaw is the gross underestimation of risk implied by the use of inappropriate statistical analysis. As Mandelbrot and Hudson (2004, p. 24) explained, that approach would grossly underestimate risk in financial markets and that is exactly what has happened:

> "The financiers and investors of the world are, at the moment [2004], like mariners who heed no warnings. This book is such a warning."

Section 4 explains how the failings in monetary theory, combined with a *laissez-faire* approach to exchange rate policy by the United States, led to the failure by the IMF to act according to its mandate and stabilise the international monetary system. On the contrary, under the influence of the Washington consensus, that *laissez faire* was best, it pushed for the removal of restrictions on all capital flows and allowed countries free reign in choice of exchange rate regime. After the Asian crisis that was seen to be a fundamental mistake. But the lesson was not learnt. Because the IMF bungled the crisis and pushed some Asian economies into deeper recession, several Asian governments foreswore any further IMF 'assistance' and took out their own insurance in the form of undervalued exchange rates. Those undervalued exchange rates resulted in growing global imbalances from 2000 to the present and produced a flood of recycled Asian dollars into US Treasury bills that depressed US interest rates. That flood increased to tsunami proportions post 2005 and effectively weakened US (and Australian) monetary policy. This is the source of the easy credit that fuelled the growth of the US 'shadow-banking' system. Consequently the Federal Reserve was powerless to reign in the credit bubble that burst in 2008.

Section 5 then outlines what needs to be done to avoid a repeat of 2008. Clearly, if the diagnosis of the cause of the crises presented in sections 3 and 4 is correct fundamental reforms are required. Simply tinkering with existing regulations will not solve the underlying problems. We all know that treating symptoms seldom works. Fortunately, as far as theory goes there is much available outside that contemporary mainstream that can be applied to guide policy. Furthermore, the charters of most central banks already contain a clear statement of objectives of monetary policy and many central banks act in accordance with them in a crisis. Little more than fine tuning may be required there. On the international stage the picture is more complex and unlikely to be quickly resolved. Nevertheless some general principles to guide policy design and regulation can be outlined.

Section 6 concludes by highlighting the change of perspective required by monetary and finance theorists and the implications for regulators and policy makers.

3. Failings in the contemporary theory of money and finance

The shortcomings of contemporary monetary theory can be usefully summarised by reference to two recent papers – one by Buiter (2008) and the other Goodhart (2008).

Buiter (2008, p. 30 fn 9, emphasis added) outlines a fundamental problem with contemporary macroeconomics and monetary theory in the following remarks:

> "Macroeconomic theory, unfortunately, has as yet very little to contribute to the key policy issue of liquidity management. The popularity of complete contingent markets models in much contemporary macroeconomics, both New Classical (e.g. Lucas (1975), L (e-0.a-8.3(E7(t)-6..y.5ecodn)-1e( )-1175)8l1101 Tc0.n.3(E((e-aodn)-1e((C6and fi1ssi)4.5(K)16(an

> contingent markets there is never any default in equilibrium, because every agent always satisfies his intertemporal budget constraint…..*The profession entered the crisis equipped with a set of models that did not even permit questions about liquidity to be asked, let alone answered*."

The reasons for this parlous state of affairs can be traced to several wrong turns that were taken by theorists in the latter half of the twentieth century and need not detain us here.[7] What is important is that central bankers, not for the first time and I doubt for the last, have been sold a pup. For the models to which Buiter is referring are those that have been employed to analyse the role of nominal interest rate rules and inflation targeting in most academic studies of the topic. The so-called New Keynesians to whom Buiter refers are the leading exponents in this field but their models are essentially bankrupt when it comes to framing sensible advice to policy makers.[8] Charles Goodhart (2008, p.14, fn 11) correctly summed up these models when he asked:
"How on earth did central banks get suckered into giving credence to a model which is so patently unsatisfactory?'

Clearly there is something amiss with contemporary monetary theory and the fault lies with the academics not the central bankers. Central bankers are pragmatists subject to political and reality constraints. Inflation clearly is what economists call a 'bad' and relative price stability is a necessary pre-requisite for macroeconomic stability – but it is not sufficient. Central bankers can commit to a policy of price level stability (low inflation) without taking on board all the non-sense embedded in contemporary academic models. But the risk they take is that their policy becomes too narrowly focussed on inflation (this is particularly the case for the European Central Bank) at the expense of the other objectives stated in their charters. [9] Stability of the financial system is one of those objectives and financial disaster can occur if it is ignored. On the evidence to date it is clear that some central banks, the Federal Reserve stands out, have failed to achieve that objective. One of the fundamental reasons for that failure is the belief in efficient markets that underpins much of the regulatory reform that has been implemented since the early 1980s.

The idea of efficient markets is implicit in the models of complete contingent markets referred to above by Buiter (2008) and employed by monetary theorists – this is where the flaws in monetary theory overlap with the flaws in the theory of finance. An apt and timely illustration of what has gone wrong here is provided in the recent book by Franklin Allen and Douglas Gale (2007) titled *Understanding Financial Crises*.

The theoretical core of the book is provided in chapter 2 titled: *Time, uncertainty and liquidity*. On examination we find that this is a most unsuitable title because the chapter has nothing to say about any of these issues! How can this be? Well, once we realise that the Allen and Gale (2007) analysis exhibits all the properties of the complete contingent claims general equilibrium model described by Buiter the concepts of time, uncertainty and liquidity take on strange properties. Liquidity, as everyone knows, is the property of an asset that enables the asset to be converted into money at short notice without significant loss. By contrast, Allen and Gale (2007, p. 53) define a short term liquid asset as:

> "... a storage technology that allows one unit of the good at date t to be converted into one unit of the good at date $t+1$, for $t = 0, 1$".

[7] For a brief overview see Goodhart (2004)
[8] See Goodhart (2004) and Rogers (2008).
[9] See Palley (2002)

The reason for this strange definition can be traced to the form of the auction that ud that ud0(1(edeauct.9(

enough to tip some of these Asian economies into trade and current account deficits that set off speculative attacks on their currencies in a world of free financial capital movements and soft pegs to the US dollar. In any event, the post-crisis response of SE Asian economies was to re-peg (softly) to the US dollar at undervalued exchange rates so as to accumulate foreign

Figure 3

As you might have guessed the theoretical basis for this neglect is to be found in the same model that has led to the distortion in economists thinking about money and financial markets. It also enables us to evaluate competing claims about what should be done to repair global and domestic monetary and financial systems.

5. The remedies

At the time of writing, the G 20 summit has come and gone and the US, UK and China have announced unprecedented stimulus packages in the old Keynesian style as have numerous

Woods scheme. In particular, the scheme as implemented meant that all the pressure for adjustment was placed on deficit countries and thereby imparted downward pressure on global growth. Furthermore, the gold exchange foundation of the Bretton Woods system was bound to fail at some point particularly as the success of the reconstruction of Europe and Asia flooded the world with US dollars and the accumulation of US dollar reserves by surplus countries led to increasing pressure on gold conversion. Faced with a drain on gold reserves Nixon cut convertibility of the US dollar to gold in 1971. That lef8(d)ae9ure fo t2t23-1.litn aie10

statistical analysis based on the Gaussian approach has proven to be an unreliable guide to the measurement of risk in financial markets. In both cases the fault lies with the reliance on special cases that do not fit the facts – a relatively simple failure that, in principle, should be easy to correct. In practice, if the history of ideas in economics is any guide, it is likely to meet with considerable resistance. Nevertheless, what is required is a change in focus along the lines suggested by Buiter (2008, p. 31, fn 9, emphasis added):

> Much of macroeconomic [and monetary] theorising of the past 30 years looks like a self-indulgent working and re-working to death of an uninteresting and practically unimportant special case. *Instead of starting from the premise that markets are complete unless there are strong reasons for assuming otherwise, it would have been better to start from the position that markets don't exist unless very special institutional and informational conditions are satisfied.* We would have a different, and quite possibly more relevant, economics if we had started from markets as the exception rather than the rule, and had paid equal attention to alternative formal and informal mechanisms for organising and coordinating economic activity. *My personal view is that over the past 30 years we have had rather too much Merton (1990) and too little Minsky (1982) in our thinking about the roles of money and finance in the business cycle.*"

Here Buiter has put his finger on the flaws in contemporary monetary theory sketched in section 3 above. Monetary theorists have in fact no general theory of markets – what they have is a special and practically uninteresting form of auction that, while convenient for analytical tractability, actually empties the theory of anything of interest to policy makers or regulators. That partly explains the failure of the efficient markets approach to money and finance. But in addition the Gaussian approach to probability has led both financial institutions and regulators to badly underestimate the risk underlying the process of securitization and trading derivatives. To some extent the estimate of risk can be improved by abandoning the Gaussian approach. But that still leaves uncertainty – the inability to quantify future events in an evolving economy. Any reform of regulation needs to be framed with that in mind.

6. Concluding remarks

The current economic crisis is a wake-up call to theorists, regulators and policy makers as the ultimate cause of the crisis is a failure at the heart of the received theory of money and finance. The belief that potentially fragile and unstable financial markets can be safely left in the hands of rational agents to self-regulate in the public interest is, to repeat Mussa's warning, a gross stupidity. Greenspan's 'free market ideology' is indeed fatally flawed. As Walter Bagehot realised over 100 years ago, highly efficient but fragile and potentially unstable financial systems need to be 'managed with discretion'. But 'management with discretion' is not something that can be reduced to a simple formula or set of rules. It requires a cohort of executives and public servants highly educated in the history of money and financial markets in addition to economic and statistical theory. To the extent that universities have failed to deliver the right mix of skills (another market failure?) they have contributed to the crisis.

All this suggests that a thorough reassessment of some fundamental principles is required and these need to refocus monetary theorists' attention on the work of Minsky (1976, 1982, 1986), Stiglitz (2001) or Soros (2008) rather than that of the New Classical or New Keynesian 'theorists'. Of course, policy makers and regulators cannot wait for theorists to get their house in order. Fortunately, for most practical purposes they do not need to. There is sufficient evidence and appropriate theory available to make the necessary changes to the focus of domestic regulation of financial systems and monetary policies. The big challenge is posed by the necessary reform to the international monetary system. Without some fundamental reforms to the global monetary system the global economy is destined to repeat the recent boom bust cycle perhaps a decade or two in the future.

To finish on a lighter but still serious note, it is worth repeating and updating a joke sketched by Goodhart (2004, p. 27).

At the time of the Soviet Union, just prior to the collapse of the Berlin Wall, a western visitor is watching an armed forces parade in Red Square. A procession of weapons increasing in power of mass destruction flows past brought up at the rear by a truck with several men in grey suits. "What are they?" asks our visitor. "Economic theorists" comes the reply, which raised the further question "But why?" prompting the cynical explanation, " You should see the devastation that they can achieve".

Goodhart goes on to note the devastation caused to the Soviet Union by the 'bad theory' behind central planning and concludes that fortunately no disasters on that scale were, at least in 2004, affecting developed economies. From today's perspective the joke is not so funny. If we had not all lost so much money it might even raise a laugh. The irony is that both the 'free market ideology' and the belief in central planning both rest on 'theory' and both reflect the inability to see the flaws in that theory.

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