

**Animal Spirits and the Economy:
Challenges for Economists and Central Banks**

Address by Gill Marcus, Governor of the South African Reserve Bank,
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Thank you for the opportunity to address you at this prestigious award of the Economist of the Year. The global economic crisis, now in its fourth year, has not been good for the reputation of economists. Many have criticised economists for having caused the crisis, for not having foreseen the crisis, or for not having a clear idea about how to get out of the crisis. It is not my intention to defend economists uncritically, but it is appropriate on an occasion such as this to reflect on the role of economists in society. Recent insights into the working of the economy and the deficiencies of mainstream economic thinking suggest that we should not be complacent about the economic models that we use, whether for policy-making or forecasting in financial markets. This also has implications for how we see the role of a central bank in the economy.

Generally, people think about the role of the economist as being in business or forecasting, and most of you today would be involved in economic analysis or forecasting in the financial markets. This is an important role as asset allocation in the financial markets has to be done on the basis of some view of how the economy is expected to evolve in the coming period. But there is a broader role for economists in society in general: and that is to act as a constraining voice in the economy. At the heart of any economic model is scarcity. This is not a theory, it is an unfortunate truth. Scarcity implies constraints on actions, choices and trade-offs, and, consequently, conflicts over the allocation of resources. The eminent US economist Kenneth Boulding has argued that economics is traditionally the dismal science because it deals with the problem of scarcity, so the role of the economist is to be dismal, or as he put it, "it is the economist's dismal duty to tell the world that it cannot have its cake and eat it"¹.

Economists may disagree on the appropriate economic theory or the appropriate models, but the role of the economist is to raise the level of debate to a more informed one – particularly about the nature and costs of trade-offs - rather than simply one of opinion or what they would like to see happening. Whatever the theory or model, the fundamental truth is that there is scarcity, and there are budget constraints.

We know there are competing paradigms and theories, and at times some views become the 'conventional wisdom'. But certain realities can shake these 'accepted truths', and it is important for economists to be willing to revisit their thinking in the light of such truths, and to be open to debate about them. One example of this to come out of the crisis was the idea that price stability is enough to guarantee financial stability. While there were some dissenting voices, it was generally argued that we did not have to worry about asset price bubbles in the context of price stability. They would either be self-correcting, or if they did pop, then central banks could clean up afterwards. I will return to this issue later.

This means that economists are not necessarily right all the time about their understanding of how the economy works, but the search for models and theories that come closer to a better understanding is ongoing, and we should recognise that. Some economists have changed the course of economic thinking, often in response to economic developments at that time. A cursory glance at the history of economic thought shows us how thinking has changed fundamentally over time, with profound implications for policy. We need only look at how this has ranged from Adam Smith's invisible hand, to the labour theories of value of Ricardo and Karl Marx, the Marshallian marginal revolution or to the innovative work of John Maynard Keynes, which laid the intellectual foundation for proactive fiscal and monetary policies. While Keynes had a major impact during the pre- and post-second world war period, the rational expectations revolution in the 1960s and 1970s, combined with the efficient

markets hypothesis in finance theory, had a profound impact on modern macroeconomic thinking, and by extension, macroeconomic policies.

At a very simple level, the rational expectations revolution was a reversion to the old classical idea of the invisible hand of Adam Smith. In terms of the modern version, people are motivated by rational economic thinking alone. There is no place in this approach for irrationality or noneconomic motives. In their recent provocative book “Animal Spirits”, George Akerlof, a Nobel Prize-winning economist and Robert Shiller² argue that the modern tradition has forgotten a central part of Keynesian thinking: that while much economic activity is governed by rational economic motivations, not all activity is. Motivations may be non-economic, or irrational, or governed by what Keynes referred to as “animal spirits”. In the same way as Adam Smith’s invisible hand explains the stability of the capitalist system, an understanding of animal spirits explains the instability of the system. According to Akerlof and Shiller, the original meaning was “of the mind”, referring to basic mental energy. In economics it has now taken on a slightly different meaning, referring to a restless and inconsistent element in the economy and refers to our peculiar relationship with ambiguity and uncertainty.

Unless we accept that human psychology drives economic activity, we cannot really explain phenomena such as crises, herd behaviour, asset market bubbles and changes in confidence that drive the economy. In fact our general models of the economy are equilibrium models, where a shock to the system will always bring us back to equilibrium. Furthermore, many of these models do not have a financial sector built in to them, or if they do, the modeling of this sector is based on efficient markets and rationality. Such models cannot explain the emergence of the sub-prime crisis, the global reaction to it, and the subsequent on-off recovery. As Akerlof and Shiller put it, “... [the crisis] was caused precisely by our changing confidence, temptations, envy, resentment and illusions - and especially by changing stories about the nature of the economy”. Fundamental to any explanation of cycles are ebbs and flows of confidence, which are caused by a wide variety of factors or circumstances, and could probably not be adequately captured in any model. And in

the challenges currently facing global economic policy makers, there seems to be an under-estimation of the weight of confidence and trust in the solutions proposed.

This view also has implications for the role of government policy. In the standard equilibrium models, there is a limited role for government or monetary policy. It is often more a case of nudging the system back to equilibrium. But when you have a major loss of confidence, panics and herd behaviour, the rationale for government intervention is very different. Because such instances are usually acutely felt in the financial markets, it requires extraordinary interventions on the part of governments and central banks. And this is precisely what we saw during the worst of the recent crisis.

Some analysts are critical about the perceived excessive intervention by various governments and central banks, but under such circumstances extraordinary interventions are required. If banks are not lending, there will either be a strong contraction in real output, or the authorities will need to replace the credit that is lacking in the economy. This is what the so-called quantitative easing in the United States has been about. It is not simply a mechanism to stimulate the economy because interest rates have reached a zero bound, it is a means to fill the gap left in the credit markets by financial institutions that are no longer extending credit.

This leads us to the role of the central bank in ensuring financial stability. As vividly described in Liaquat Ahamed's exceptional book, "Lords of Finance"³, the US Federal Reserve system was originally created as a response to a succession of bank failures following runs on banks. The solution was to have an institution, such as a central bank, which would provide liquidity in such instances, reassure the public about the availability of their funds, and prevent systemic shocks from permeating through the rest of the banking system. This in effect was the role the Fed played with respect to Bear Stearns in 2008 and the Bank of England with respect to Northern Rock. And arguably the role the Fed should have played with Lehman Brothers.

This is part of the original function of the central banks: to deal with such crises of confidence which often manifest themselves in a credit crunch. Furthermore, if it is a large country that is involved, such as the US at the moment, the impacts are not just felt domestically but globally. Arguably, the costs of doing nothing or a premature exit would be even higher for both the US and the rest of the world.

While there has been general agreement about the central bank's role in crisis resolution, there has been less unanimity about its role in crisis prevention. For example, in the 2000s, there were debates about whether central banks should intervene to moderate or pop these asset market bubbles which were driven by excessive credit extension and "irrational exuberance". The responses by those opposing such intervention generally took two forms: that the markets are rational, so by definition there is no bubble; or, that central banks are no more capable of recognising bubbles than the rest of the market is, and the best they can do is clean up the mess if and when the bubble pops.

However, some economists, notably Bill White at the Bank for International Settlements, argued strongly that monetary policy should lean against the wind by tightening monetary policy in the event of a build-up of such euphoria. Inflation was low at the time, and a narrow focus on price stability resulted in low interest rates and excessive, and at times reckless, credit extension that ultimately contributed to the financial crisis.

So what are some of the lessons to be learnt and the new challenges facing central banks? Certainly, there is no room for complacency. Alan Blinder, in his book "The Quiet Revolution"⁴, warns against central banks becoming too respectful of markets. He argues that slavishly following the market could lead to poor policy for two main reasons. Firstly, there is the problem of herd behaviour, which may or may not be rational, in speculative financial markets. This results in overreactions to stimuli

whereas monetary policy makers need to proceed with caution and prudence. Secondly, speculative bubbles are a fact of life. As Blinder graphically puts it, 'central bankers must steadfastly resist such whimsy and inoculate themselves against the faddish behaviour that so often dominates markets. That may be why central bankers are not much fun at parties'.

There has always been a general, implicit financial stability mandate for central banks, largely related to lender of last resort functions and liquidity provision during times of crisis. In other words, the implied (or where explicit) function was generally to deal with crisis resolution rather than crisis prevention. But where there has been a convergence in thinking in the wake of the crisis has been the idea that low inflation is not enough to ensure financial stability. The emerging consensus is that central banks should have an explicit financial stability mandate, coupled with what has now become known as macroprudential regulation. This is in addition to their monetary policy mandate.

So should central banks lean or clean, as Bill White put it⁵? As the global crisis enters its fifth year, the cost to individuals, companies and countries are still being counted, while central banks in a number of countries are still "cleaning up". And the costs are likely to be felt for a considerable time to come, as endeavours to resolve the global crisis and rebalance the world economies continues. But having an explicit financial stability mandate does not necessarily imply that central banks should use monetary policy to lean against the wind.

It is generally argued that while Bill White may have been correct in his prognosis, it may have been difficult for central banks to justify very high interest rates at a time of low inflation. In other words, we have a situation of having two targets and one instrument, which as we know would require a trade-off between them. The solution that is now becoming the conventional wisdom is that we need to find additional instruments. Such instruments would include the more active use of reserve requirements, loan-to-value ratios and counter-cyclical capital ratios for banks, which

reflects that macroprudential policies intended to address systemic matters are often implemented through microprudential actions. Some of these are instruments that were previously deficient as monetary policy instruments, but they may have more success as tools directed narrowly at credit extension, while interest rates remain the main monetary policy instrument.

This also raises the question about the relationship to monetary policy. Some, for example Lars Svensson at the Swedish Riksbank, argue that macroprudential policies and monetary policies are fundamentally different and should be carried out independently of each other by different institutions. Others see merit in coordination of such activities which involves overlapping committees, such as at the Bank of England, where some members of the MPC are members of the interim Financial Policy Committee. This is the direction in which the South African Reserve Bank is moving, with the reconstitution of the Financial Stability Committee (FSC) which includes all members of the Monetary Policy Committee, and operates within a policy mandate. It should be emphasised that macroprudential oversight is distinct from the microprudential function of the Bank, where individual banks are supervised. The FSC focus is on the macro system rather than on individual banks, with the aim to assess and reduce risk across the financial system as a whole, but recognising that the approach to macroprudential supervision is still work in progress.

At this stage, in South Africa we are not seeing signs of an excessive build-up credit, or rapidly rising asset prices. Credit extension has remained subdued, while the various house price indices indicate a relatively weak housing market. Unfortunately domestic financial stability on its own is not enough. The animal spirits are alive at the global level, with ebbs and flows of confidence, and there are significant risks still emanating from a range of problems, which will require continued central bank focus on financial stability issues.

To illustrate the extent of fallout when things do go horribly wrong, I will focus briefly on some of the challenges facing Europe, and not on the significant issues facing the

US and the very different circumstances confronting many developing countries. This also illustrates just how complex and difficult it is to find workable solutions.

A recent European Commission publication⁶ showed that the debt crisis in peripheral Greece in particular is deteriorating at an alarming rate under the weight of unfavourable debt dynamics. Greek debt is now expected to exceed 166 per cent of GDP by 2012, while Irish and Portuguese debt is expected to increase to 117 per cent and 107 per cent respectively. More disturbing is the 25 per cent spread that is being paid on 2-year Greek debt, indicating that the markets are effectively closed to that country.

While some form of debt restructuring would seem to be inevitable, and some would say overdue, the impact on the European banking system could be significant, given that a significant proportion of the US\$ 2 trillion debt of Greece, Ireland and Portugal is on the balance sheets of German and French banks. The IMF estimates that the European banks' exposure to the periphery constitutes around 10 per cent of Europe's GDP and about 80 per cent of the capital of European banks.

This would require support from the ECB for the banks that hold this debt. But the ECB has already been very active in providing support to banks in Europe. Apart from the EUR 75 billion in secondary market purchases of peripheral country bonds that the ECB has made, there is an estimated EUR 390 billion in rediscount lending to the periphery, mainly through the discount window. As the collateral requirements have been steadily relaxed, there is the possibility of the ECB being exposed to significant losses in the event of default.

In the absence of the exchange rate adjustment option, the only way that these indebted countries can restore their competitiveness is through severe austerity measures, which will contract their economies further, and worsen the debt ratios. Desmond Lachman at the American Enterprise Institute has illustrated the enormity

of the problem: a 20 per cent write-down of Greece's public debt would merely spare the country the need to make around 1 percentage point of GDP of additional fiscal adjustment to stabilize its public debt to GDP ratio. Greece would still be required to make at least around a further 8 percentage-points of GDP fiscal adjustment to restore long-run fiscal sustainability. Such a large degree of fiscal adjustment, within a fixed exchange rate system, is almost certain to add considerably to the more than nine percent real GDP decline that Greece has already experienced over the past eighteen months.

The challenges to the ECB in this context are considerable.. Failure to contain this systemic problem would have financial stability implications not only for the European economies, but for the global economy in general. As the former managing director of the BIS, Alexandre Lamfalussy said in a speech last week⁷, what was new for central banks is that they have had to "conduct liquidity boosting operations in an environment where the liquidity shortage turned rather quickly into solvency problems of frightening dimensions, for which there has been no precedent since the 1930s." This aspect of central bank operations remains relatively uncharted territory, but is becoming an increasingly important part of central bank mandates.

In conclusion, I wish to congratulate all the finalists in this competition. You have reached this stage of the competition on the basis of the accuracy of your forecasts of a number of economic variables. But technical forecasting is only one aspect of being an economist. I refer back to the work of Akerlof and Shiller who, in their book "Animal Spirits", identified five psychological factors of importance, namely confidence, fairness, corruption and bad faith, money illusion and stories. They argue that it is human interest stories that give vitality and emotional resonance to economic views that drive animal spirits. This is the challenge to all economists who analyse data, weigh options, consider the trade-offs and often want certainty in a time of great uncertainty about the future – tell the stories of the challenges facing South Africa and the world, and recognise that behind the statistics and opinions are ordinary people whose lives are affected by all that we say and do.

Footnotes:

¹ Kenneth E Boulding. "The Role of the Economist in a Political World". An address delivered at the Economics Club at the University College of the West Indies, November 18, 1959.

² George A Akerlof and Robert J Shiller (2009). *Animal Spirits: how human psychology drives the economy, and why it matters for global capitalism*. Princeton University Press.

³ Liaquat Ahamed (2009). *Lords of Finance: the bankers who broke the world*. Penguin Books.

⁴ Alan S Blinder (2004). *The Quiet Revolution: Central Banking Goes Modern*. Yale University

⁵ William R White (2009). "Should Monetary Policy 'Lean or Clean'?" Federal Reserve Bank of Dallas Globalization and Monetary Policy Institute, Working Paper No. 34.

⁶ European Commission (2011). *European Economic Forecast Spring 2011*.

⁷ Alexandre Lamfalussy (2011) Address to the ACI World Congress, Budapest, 27May.