## V K Sharma: Genesis, diagnosis and prognosis of the current global financial crisis

Address by Shri V K Sharma, Executive Director of the Reserve Bank of India, at the Senior Management Conference, Mumbai, 21 November 2008.

I heartily welcome you all to the Senior Management Conference 2008. As at the time of the last Senior Management Conference, the now 14-month old, and still ongoing, global financial market convulsion, with no hint even now of its cataclysmic denouement, and its recent direct outcome, the widespread global economic slowdown, provide, again, the perfect backdrop, and contextual topicality, to this year's conference theme "Financial Sector Development in India: Agenda for RBI in the next 5 years". While in my address last year, I had identified broad spectrum and generic failure of an inertial regulatory and supervisory system as being the genesis of the crisis, this year, I propose to briefly review its evolution since, and make a modest attempt at the prognosis of, and lessons from, the crisis.

As we are aware, since the onset of the global financial crisis, the worst since the Great Depression, the typical stock policy response has been to dramatically and aggressively cut interest rates and inject ever increasing doses of liquidity, giving the impression that the crisis was diagnosed to be liquidity-genic when, in fact, it was fundamentally, asset toxicity-genic. The latest data indicate that the Fed, ECB, the Bank of England, the Bank of Japan and Swiss National Bank have together injected USD 2.74 trillion in outstanding amount of liquidity. It may not be entirely fortuitous/coincidental that the estimates of total potential write-downs and losses which range from USD 1.5 to 2.5 trillion roughly match the amount of central bank liquidity outstanding! In this context, the popular refrain that banks are continuing to "hoard" liquidity borrowed from central banks, and which is why 3 month Libor-OIS spreads continue to remain elevated, is a myth for no bank will ever countenance a negative spread which will do no more than burn a bigger hole in its capital/balance sheet. Perhaps, the logical reason for this is that even after having written down a whopping USD 965 bn. of assets, and having raised USD 825 bn. in new capital, banks are still having to continue to finance huge amount of illiquid/toxic assets on their balance sheets. In other words, through their ever aggressive long-term rollover liquidity injection what central banks have done is enable banks to substitute ABCPs worth USD 1.6 trillion to USD 2 trillion and other more expensive liabilities and are thus effectively substituting what should be funded by shareholders! Thus, it is only after full recapitalization of capitalhaemorrhaged banks is behind us, will credit and money markets normalize and transmit monetary policy to the broader real

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economy by way of resumption of lending to businesses and households.

There is significant risk that the current monetary policy environment of very low interest rates and unprecedented deluge of liquidity may yet again engender another bubble in the not too distant future! Indeed, we almost had a commodity bubble which, to all intents and purposes, was caused by this very huge deluge of liquidity but burst due to the enveloping global economic downturn. Perhaps, if this swamp of liquidity and monetary easing are not unwound appropriately, and in an orderly and timely manner, the next crisis might well be a veritable "financial and economic nuclear winter"!

The foregoing inevitably leads us to seek answers to questions such as what then are the lessons going forward on how to preempt such an apocalyptic event. In this context, it must be emphasized that even if global imbalances and accommodative monetary policy provided an enabling environment for excessive leverage and risk taking, it was still the responsibility of regulators and supervisors to have taken appropriate macroprudential measures, pre-emptively and proactively, rather than reactively. Significantly, Greenspan, in a congressional hearing in October, admitted that he had found a flaw in his free market philosophy that shunned financial regulation and expressed "shocked disbelief" that financial firms failed at all to self regulate exercise sufficient surveillance over their counterparties to prevent losses. In contrast, as I had observed in my address last year, the Reserve Bank pre-emptively and proactively delivered counter-cyclical prudential measures like increasing risk weights for exposure to commercial real estate, capital market and systemically important non-deposit accepting NBFCs as also higher provisions on certain riskier categories of standard assets which were only recently rolled back again counter-cyclically to cushion the impact of tighter liquidity and slowing economic growth. This counter-cyclicality aspect of prudential regulation and supervision, which requires a systemic capital charge based on overall asset growth in good times, and which can be rundown in bad times, has gained international and recognition and represents а improvement over Basel II. The Spanish model in this regard is noteworthy and worth emulating. Besides, another Basel II incongruent prudential capital measure that has compelled attention of international regulators and supervisors is the so called "leverage ratio" so much so that Swiss regulators have required their biggest banks to introduce this measure of capital that does not allow for any risk-weighting of assets. Indeed, American lobbyists failed in their campaign for a minimum absolute leverage ratio (maximum absolute leverage) before the crisis. In particular, the case for a maximum absolute leverage has become incontrovertibly compelling after fatal consequences

suffered by three of the biggest 5 broker dealers in the USA. It is significant that their combined gross leverage exceeded 30 times (incidentally those of Fannie and Freddie exceeded 60 times) although they were very well capitalized on a risk-weighted basis as per the Basel II inspired rule change by SEC in 2004 permitting them to compute capital on a risk-weighted basis. Indeed, because of this high leverage, risk perception of these prime brokerages deteriorated to a point that their hedge fund clients came to eclectically decide which investment banks they will deal with rather than the other way round! This was because hedge funds leverage was much lower at about 10 to 15 times in comparison. Equally, according to a latest report in The Economist, the risk-weighted assets of two big European banks viz., Barclays and Deutsche Bank are about 25% of their total assets underscoring a very high level of absolute leverage. The same report cites this high absolute leverage of Deutsche Bank to explain why it has the highest net amount of outstanding credit default swaps written on its debt of any corporate borrower. That suggests plenty of people think that in spite of being very wellcapitalized on a risk-weighted basis, the bank is at risk of getting into trouble. Therefore, in India we might contemplate stipulating a minimum absolute leverage ratio (maximum absolute leverage) in addition to the current CRAR prescription.

Besides, the recent changes to international accounting rules mean that many more banks can reclassify assets so that they are not subject to mark-to-market accounting. Supporters of new rules argue that mark-to-market accounting forces banks into a vicious spiral of forced sales and more losses. But, avoiding write-downs will do little to restore trust to a financial system that is sorely lacking it. But in spite of this, some banks like France's Société Générale refused to use the new rule. The trouble with the new rules is that they pretend that the problem is not there because you cannot see it anymore but given today's sophisticated and efficient financial markets, investors will take their own call and incorporate their risk perception in the prices of equity and credit default swaps anyway.

The credit crisis has also thrown into sharp relief a "strong connect" between "liquidity risk" and "opaque off-balance sheet exposures" of whatever description. The appropriate supervisory and regulatory response to these risks would, therefore, be to insist on full disclosure and transparency of off-balance sheet commitments/ exposures and supervisory insistence on an appropriate mix of "stored" and "purchased" liquidity and appropriate capital charge for liquidity risk; the higher the "purchased liquidity" component, the higher the capital charge and the higher the "stored liquidity" component, the lower the capital charge. Thus, banking supervisors and regulators need to be more hands-on and pro-active in focusing supervisory attention on this critical risk category than has been the case so

far. (In fact, in India the Committee on Financial Sector Assessment almost presciently focused on this critical risk in the month of May itself, much before the liquidity and credit crunch of August 2007).

Given the serious question mark over the credibility of rating agencies, the Basel Committee need to revisit the primacy of role assigned to ratings of such agencies. In fact, credit appraisal and measurement is the most basic function of intermediation performed by banks traditionally. In the light of this, ratings, if at all, may be meant for, and be relied upon, by unsophisticated and uninitiated retail and small investors, but not banks. Besides, given the fact that rating agencies generated almost 40% of their revenues from assigning the so-called inflated ratings to CDOs tranches, backed by sub-prime mortgages and the obvious inherent conflict of interest involved, US Congress and regulators are investigating into the role and function of rating agencies. In view of this, Basel II needs to de-emphasise rating for assigning capital charge for credit risk by banks. Indeed, if anything, given the tremendous volumes and liquidity of credit derivatives in general and of CDSs (both single-names and indices-based), it would be more market-price discovery-driven for banks and supervisors to rely on prices backed out from these. Indeed, CDSs price credit risks almost on real-time basis as much as US Treasury, foreign exchange, stock and commodities, markets do. Credit Rating agencies, in comparison, are much more lagged. Significantly, as if to redeem their lost credibility and reputation, all the three Rating Agencies viz., Fitch, Standard & Poor's and Moody's, have now started a new service which provide implied credit ratings backed out/derived from CDSs spreads! In view of the foregoing, there is a very strong case for kick starting a full fledged CDSs market in India. The popular refrain that the recent global financial crisis was caused or exacerbated by CDSs is again a myth in that CDSs which are simple plain-vanilla offbalance-sheet/non-fund based derivatives, were confused with the CDOs (collateralized debt obligations) which are on-balancesheet and funded securitized structured credit products. It was securitization/re-securitisation, involving CDOs, that played a seminal role in the crisis and no way the CDSs. In fact, it is also a myth that securitization through CDOs was an originate-todistribute model; rather, really speaking, it was an originate-todistribute-back-to-originators model! This is because almost all CDOs originated came back to sit on the SIVs/conduits sponsored by originating banks themselves! Besides, for all the overdone fears about systemic risks from the so called unregulated OTC CDSs markets, remarkably orderly and non-disruptive auctionbased settlement of CDSs claims in respect of CDSs written on Lehman Bros., Icelandic banks, Fannie Mae and Freddie Mac incontrovertibly attested to the resilience of CDSs markets! Indeed, if anything, CDSs can be an effective and neat answer, and substitute, for CDOs/securitization as it is less messy, more transparent and easily monitorable. Interestingly, the New York Fed led initiative to improve the OTC CDSs markets seeks to replicate our CCIL-model, where although OTC foreign exchange transactions are bilaterally negotiated, they are cleared and settled through CCIL. Today CDSs prices/spreads are by far the most closely monitored early warning signals for real time changes in credit risk of an entity whether private or sovereign. This is because CDSs make it possible to back out an implied credit price even when one is not discovered in the underlying cash market instruments like bonds or loans. Thus, CDS market has tremendous practical application as a reliable diagnostic tool in stress-testing for supervisors and regulators. Besides, a CDS market will also enable efficient hedging and trading of credit risk and synergise development of active and liquid corporate bond and Repo markets. Like equity, credit risk subsumes all other risks as it is a function of forex risk, interest rate risk, leverage risk, liquidity risk, governance risk and that is why CDSs and equity prices are, in equilibrium, almost perfectly negatively correlated.

As is invariably the case with any major crisis, the ongoing global financial crisis has unleashed a passionate debate over the design of a new global financial architecture. The opinion on overarching role in global financial surveillance is sharply divided between assigning it to Financial Stability Forum, on the one hand, and to IMF, on the other. However, the trouble has been not so much with the existing, inter-temporally evolved, global financial architecture as really with how it was actually worked in practice. Recent huge losses at global banks running to about USD 1 trillion are not because existing best practices failed but because those responsible for implementing and enforcing them failed them! After all, of all risks to regulators and regulatees alike, human resources risk is by far the most serious as it is the source of all risks as confirmed by the ongoing financial cataclysm. The crux of the matter is what we need is not more or regulation and governance but good regulation governance. undoing This has been the of regulators/supervisors and financial firms/banks alike. In the way of example, in the USA, the traditionally very healthy AAA rated mono-line bond insurers MBIA and Ambac changed their business model from insuring only their staple municipal bonds to insuring While this went unnoticed by insurance ABS. CDOs and regulators, Pershing Square, a hedge fund, spotted trouble and started shorting both equity and credit risk of these two companies. But even after this, regulators failed to take notice and corrective action with the two companies being eventually downgraded several notches. The same is true of financial firms and banks where independent directors on the boards, much less ask right questions, apparently didn't even understand the arcane

world of modern finance and banking and according to a column in the Financial Times, after the crisis, one leading global bank ran an advertisement inviting applications for board positions from experienced professional bankers! Besides, rather than take timely notice of, and act on, early warning signals coming from financial markets, like stock and CDSs markets, regulators chose instead to shut themselves to these early warning signals themselves by banning short selling which act effectively amounted to shooting the messenger for the unpalatable message it had to convey!

Against a global financial backdrop as sombre, traumatic portentous and sobering as the present one, it was only very sagacious on the part of the Hon'ble Finance Minister and the Governor of the Reserve Bank to have set up the Committee on Financial Sector Assessment under the very able stewardship of Dr. Rakesh Mohan, Deputy Governor, almost a year ahead of the outbreak of the crisis. This prescient action remarkably captured the spirit of the following adage from the Armed Forces: the more you sweat during peace, the less you bleed during war! As we will see in the course of the Conference, the Committee has done an excellent and superb job of its mandate, going into many new areas, much beyond the scope of the standard FSAP framework. With these words, I close my address and request the Governor to make it convenient to inaugurate and declare open the Conference.

Thank you so very much.

The views expressed are those of the author and not of the Institution with which he is associated.

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