K C Chakrabarty: Banking sector – maintaining resilience to risk and shock and the role of the accounting profession

Keynote address by Dr K C Chakrabarty, Deputy Governor of the Reserve Bank of India, at the Institute of Chartered Accountants of India (ICAI) International Conference on "Accounting Profession: Leveraging Emerging Challenges for Inclusive Growth", Chennai, 7 January 2012.

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Assistance provided by Ms Dimple Bhandia in preparation of this address is gratefully acknowledged.

Shri Amarjit Chopra, past president, ICAI, Shri G. Ramaswamy, present president, ICAI, Shri Reddy and other council members, distinguished Guests and Delegates, ladies and gentlemen. It gives me great pleasure to address this august gathering of accounting professionals from around the world. I must, at the very outset, laud the initiative of The Institute of Chartered Accountants of India (ICAI) in organising this conference for accountants to dwell on issues of topical and critical interest relating to the global economy. The recent global crises have thrown up many lessons, including for the accounting profession. The years ahead are also very challenging with a disturbed global environment and all of us, in the central bank and eminent accounting professionals such as those gathered here, have a critical role to play in guiding the financial sector through these choppy waters.

The title of the current session "Banking Sector: Resilience to Risk and Shock" is also very topical. Maintaining resilience to risk and shock is an integral part of bank management and also bank regulation and supervision. However, the events of the last few years have underscored like never before the importance of ensuring that the banking sector builds up its ability to handle the headwinds of adverse events with relative equanimity. Over the years, many practices have been exposed in financial institutions that point to the importance of risk management and controls. Efforts have been ongoing, across the globe, to develop a risk management framework to identify where the key risks lie, and set out how they are to be managed. But, mishaps continue to surface, clearly indicating that the development of a fool proof risk management system is still a work in progress and whatever level of sophistication and advancement we reach, shocks are unavoidable.

The Governor, Reserve Bank of India has recently spoken on the close linkages and sharing of professional space between the accounting profession and us in the Reserve Bank. At the Reserve Bank, we depend on the accounting profession for at least two reasons – for the audit of our own balance sheet and the audit of the balance sheets of commercial banks which we regulate and supervise[1]. I will take this opportunity to share my thoughts on the role that the accounting profession can play in building up the resilience of banks to risks and shocks, as an integral part of the second aspect of their profession referred earlier.

(I) Risks and shocks

At the outset, let me first say a few words on risks and shocks. Risks are generally understood to be the uncertainties related to the outcomes (in terms of revenue and profits, for example). Risks, thus, represent "expected losses". Shocks, on the other hand, refer to unanticipated adverse events and the impact of such events represents "unexpected losses".

[1] "Challenges to the Accounting Profession Some Reflections", Inaugural address by Dr. Duvvuri Subbarao, Governor, Reserve Bank of India at the 26th Regional Conference of the Western India Regional Council of the Institute of Chartered Accounts of India in Mumbai, December 16, 2011.

Financial institutions, and, in particular, banks, are supposed to and must build up their resilience to both expected and unexpected losses.

The regulatory framework for banks provides for such resilience to be built up for both risks and shocks through a prudential framework. Provisioning requirements are aimed at providing banks with the necessary buffers to deal with expected losses while capital buffers provide banks with the wherewithal to cope with unexpected losses. The former requires robust identification and measurement of risks so as to ensure that expected losses are estimated with a fair degree of reliability. Building resilience to shocks, on the other hand, necessitates a complex judgement as to how much capital buffers need to be maintained by banks to deal with unexpected and potentially catastrophic events. Regulators attempts to identify a *minimum* level of capital which each bank must maintain in relation to their risk weighted assets. The actual level of capital maintained by banks over and above this minimum is determined by banks depending upon their own estimate of the potential impact of unexpected losses.

The role of the regulators has also been, to some extent, pedagogic in this connection. They have been sensitising banks about the importance of risk management systems. They have been guiding banks in their efforts to put in place a robust risk management system and have been sharing global best practices in this regard. In the Reserve Bank too, many efforts have been made to guide the banks in the country to put in place an effective risk management system. The guidelines on asset-liability management and risk management systems in banks were first issued in 1999 while Guidance Notes on Management of Credit Risk and Market Risk were issued in October 2002 and the Guidance Note on Operational Risk Management in 2005.

The accounting profession, both through its prescription of financial statements and through its audit in banks, has a critical role to play in ensuring that the banks are proactive in identifying the passage and path of risks and that the extant provision and capital buffers make them adequately resilient to risks and shocks as envisaged in the regulatory guidelines.

(II) Banks and risks

It is perhaps a tautology to state that banking is about risk management. Banks are in the business of taking risks as risks are inherent in the process of maturity transformation. Taking of risks is indeed central to the very existence of banking, in fact, of all enterprise cutting across all segments of the nation, the society and the financial system. As John Maynard Keynes once remarked *"If human nature felt no temptation to take a chance….. there might not be much investment merely as a result of cold calculation"*.

In recent years, however, risk management has emerged as a central issue especially for financial institutions. There is increased focus on the mechanisms for the quantification and communication of risks on multiple levels – individual risk takers within organizations, organizational units, the institution as a whole, and more recently, the entire financial system.

Having said this, it would be incorrect to assume that financial institutions, in general, and banks, in particular, had no risk management earlier. In fact, banks have always had a framework for risks within an overall asset liability management (ALM) framework. A risk management framework extends this in the context of modern financial intermediation, attempting to include a greater "risk orientation" through measuring risks in all asset and liability classes, including off balance sheet positions; to include all kinds of risks and not just interest rate based risks; and to arrive at an overall risk adjusted return framework for the financial entity.

So what has changed now? The recent increased focus on risk management can be traced to several developments in the financial sector over the last couple of decades. First, the deregulation of financial markets coupled with increased volatility. Second, the diversification of activities of banks from the traditional function of lending and borrowing to activities including, *inter alia*, custodial services, securities underwriting and corporate advisory. Third, the emergence of complex global financial institutions coupled with the growing inter-connectedness of the financial system. Fourth, regulators across the world also added to the process by increasingly requiring banks to maintain capital in accordance with their risks. Fifth, the increasing role of securities and derivative products along with increasing growth of complex financial products. As new complex products proliferated in the market place, their valuation posed challenges as did their illiquidity and opacity. As noted in a 2009 report of an Oversight Panel of the US congress, "The risks troubled assets continue to pose…depend on how many troubled assets there are. But no one appears to know for certain…. It is impossible to ever arrive at an exact dollar amount of troubled assets, but even the challenges of making a reliable estimate are formidable."

The recent financial crisis provided a further fillip to the importance of risk management frameworks for banks. It highlighted the fact that adoption of business models without taking adequate cognizance of risks involved, did matter, especially when the chips are down. It underscored the importance of pricing risks and the dangers of giving in to the temptation to under-price risks in a bid to generate maximum profits, especially during the upturn of the economic cycle. It brought to the centre stage the importance of internal controls, corporate governance and risk management in ensuring the resilience of financial institutions to risks and shocks.

The above developments have meant that the risk management challenge for banks has been steadily growing more complex over the last two to three decades. These developments have brought forth a fundamental shift in the approach to risk management. Risk management practices earlier were primarily informal and relatively simple. They were largely based on intuition and the techniques employed were primitive. Risk management in recent years has transited to a different animal – one that is complex and necessitates the use of sophisticated technology. Most importantly, risk management is now information based relying on advanced statistical techniques.

So what does putting in place an effective risk management framework involve? And what does it involve in particular for banks? For banks, risk management essentially involves a risk return trade off – minimising risks for a given return or maximising returns for a given level of risk. Critically, it requires banks to be able to price risks in a reasonably accurate manner.

The question that then arises is to what extent the risk management framework in banks, including Indian banks, are oriented to identify risks in a manner which is able to identify the passage and path of risks and to price such risks appropriately. A report by the Senior Supervisory Group entitled "Lessons on risk management from the global financial crisis" (March 2008) identified several weaknesses in the effectiveness of risk identification and analysis in financial firms. A report of the Institute of International Finance on "Reform in the financial services industry: strengthening practices for a more stable system" (December 2009) also highlighted substantial gaps in the risk management framework of large international banks.

My own view is also that the basic tenets of risk management are still to take roots in banking systems, including in the Indian banking system. While, the best way to measure, manage and mitigate risks, will differ from bank to bank, there are some basic tenets which risk management systems in banks need to follow and which we in the Reserve Bank and the audience here representing the accounting profession can help facilitate. Prudential guidelines were introduced by the Reserve Bank in 1992 and cover various areas including provision for Credit Risk, Market Risk and Operational Risk. These guidelines have been periodically strengthened in line with evolving risk perceptions. Banks have also developed their risk management systems to meet the requirements of the prudential guidelines. I will discuss these issues in greater detail shortly.

(III) Banks and shocks

I mentioned at the outset of my address today that shocks refer to the unexpected losses and that typically capital buffers are maintained to make banks resilient to such unexpected losses. I will speak on two critical aspects in this regard – the role of regulators and the importance of stress testing.

Role of regulators

Regulators have played a major role in facilitating the build up of capital buffers by banks to enable them to face the headwinds arising from unexpected events. The first major joint international regulatory initiative to put in place a framework for banks to recognise risks and to provide for risks was in the form of the Basel Capital Accord in 1988. The Basel Accord, as the prescriptions came to be called, asked banks to identify the credit risk in their activities and to provide capital to meet obligations and absorb unexpected losses arising from such risk. The Basel I framework was later extended to cover market risks. In 2004, the first Basel Accord was replaced by a new Accord, called Basel II, which sought to shift the focus from a single broad brush risk measure to measures which were more risk sensitive and flexible, provided more emphasis on banks' internal methodologies, supervisory review and market discipline and which provided incentives for stronger and more efficient risk management by banks. In the wake of the crisis, a package of reform measures titled Basel III was announced. The policy package is aimed at improving both the quantity and quality of the capital maintained by banks, strengthening liquidity standards and also its risk coverage and will also facilitate more effective risk management by banks.

Stress testing

Let me now say a few words on the importance of stress testing in building up banks' resilience to shocks. Stress tests typically assess the resilience of banks to shocks in an extreme adverse scenario as compared to a baseline scenario. It also provide banks' management with a tool to improve their internal risk managements by identifying the stress points in their operations. The relevance of stress tests for assessing banks' resilience to shocks lies in the fact that these tests focus on the unexpected or "tail" events going beyond typical risk management assessments which focus on events within the "three sigma" doubled interval.

The importance of stress testing as part of banks overall risk management framework has been recognised under Basel II. In the wake of waning investor confidence and concerns about the health of the banking sector, the Federal Reserve Bank and the European Banking Authority conducted a series of stress tests to assess the resilience of the banking system as a whole, and the capacity of individual banks to absorb potential shocks. The Dodd Frank Act goes a step further and requires that policy makers in the US conduct annual stress tests of, inter alia, large bank holding companies and publish a summary of the results of the stress tests. The Act, in fact, mandates both supervisory stress tests (regulators specify the adverse scenario and determine the resulting loss estimates on a standardized basis drawing on information submitted by each firm) and bank-run stress tests (regulators specify the scenario but require each bank to model the stress event itself).

In India, too, the importance of stress testing was realised well ahead of the recent global crisis. Stress testing guidelines were issued by the Reserve Bank to banks in 2006. Of late, the Reserve Bank has been conducting a series of top down and bottoms up stress testing to assess the resilience of the banking system to a series of shocks in specific risk factors and to deterioration in the overall macrofinancial environment. Various other techniques to assess the resilience of banks to simulated distressed conditions in the banking sector and in the larger financial sector through tools such as network analysis and modelling of the distress dependencies between banks are also being deployed for the purpose.

Going forward, it would be critical that the stress testing results be incorporated in the business and capital assessment and planning exercise of banks. The overall acceptable levels of expected and unexpected loss willing to be incurred by banks should be a management decision driven based on rigorous and analytical assessment of available information. While it is not expected that banks provide for unexpected losses in the manner prescribed for expected losses, the "economic capital" which the bank seeks to maintain must be driven by considerations which encompass such losses.

(IV) Role of banks' management in building up resilience to risks and shocks

As the regulatory architecture has evolved over a little over the last couple of decades, it has been accompanied by an increasing emphasis on internal controls and methodologies for building up the banks' resilience to risks and shocks. First line of defence for risk management has to come from bank managements and specially from bank boards. Assessment and planning of capital adequacy by banks is key to ensuring that banks remain resilient to risks and shocks. For the management of losses arising from realisation of risks or emergence of shocks, there is no substitute for senior management and the Board asking the right questions. Unless the bank's management is geared to internalize and institutionalize a risk and control culture in banks, any attempts to increase the resilience of banks can be effective only to a limited extent.

If management has to pose the right questions, it is critical that information systems in banks are geared to respond to these questions. Banks today will be hard pressed to respond to questions about the risk return characteristics of different activities, for example. Unless information systems are developed to answer such questions, effective decision making, which takes into account associated risks, will remain a casualty. I recollect in this context, a comment made by Governor Alan Greenspan who stated that: *"It has been my experience that competency in mathematics, both in numerical manipulations and in understanding its conceptual foundations, enhances a person's ability to handle the more ambiguous and qualitative relationships that dominate our day-today financial decision making"*[2]. Given that financial decision making is becoming complex, it is up to us to design information systems which facilitate such decision making. In the context of putting in place a risk management framework in particular, there is a need to ensure that information systems in banks are able to provide "information on "returns" at activity level and segmental reporting in a granular manner"[3].

Finally, management has to play a critical role to get the balance between the business units and risk management right if banks have to develop adequate resilience. Experience has shown, time and again, that, in good times particularly when there is a tendency for misaligned incentives to emerge, there is a tendency to listen more to the business side.

(V) Role of the accounting profession

Let me now spend a few minutes dwelling on the role which the accounting profession plays and can potentially play in ensuring the banks remain resilient to risks and shocks.

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2 www.alangreenspan.org.

3 "Introduction of IFRS – Issues and Challenges", Dr. K. C. Chakrabarty, Deputy Governor, Reserve Bank, at the inauguration of a national level seminar on IFRS, Prahladrai Dalmia Lions College of Commerce and Economics, Mumbai, on February 11, 2011.

Role of accounting statements

Modern accounting as we know today owes its origin to a Venetian monk Luca Pacioli, who till today, holds the distinction of being called the "Father of Accounting". In the year 1494, Pacioli published his famous book "Summa de arithmetica, geometria, proportioni et proportionalita" ("The Collected Knowledge of Arithmetic, Geometry, Proportion and Proportionality"). One section in the book, "Particularis de Computis et Scripturis", was a treatise on accounting that, for the first time, described double-entry accounting, also known as the Venetian method.

The development of the accounting profession as we know it today owes its origin to the emergence of the joint stock company which resulted in the separation of ownership from management necessitating the need for an independent and informed opinion on how the funds entrusted to the management were being used / accounted for. In India, the origin of the profession can be traced to the enactment of the Companies Act in 1857. The profession has since come a long way and its opinions and assessment of the accounts of companies serve to provide assurance to a wide base of stakeholders – share holders, lenders, investors, the banking system, regulators, the government and society itself.

What is, however, clear is that neither the origin of accounting nor that of the accounting profession had their *"raison d'etre"* in risk management. Notwithstanding, considerable reliance has been placed on accounting statements for assessing the risk management framework of financial firms. A BIS working paper[4] succinctly states the purpose of accounting statements: *"First, information about any firm – be it a financial or non-financial firm – should concern three characteristics, namely: estimates of its current financial condition and profitability; estimates of its risk profile; and a measure of the uncertainty surrounding those two types of estimate"*.

While the accounting statements undoubtedly present estimates of the current financial conditions, the extent to which they have been successful in estimating the risk profile of firms is open for debate. Referring to the words of Harvard professor Eddie Riedl to his MBA class that "Accounting= Economic truth + Measurement error + Bias", Satyajit Das, in his recent book "Extreme Money", in fact, comments that accounting is now mainly "measurement error" and "bias" – a remarkable progress!

The recent global financial crisis also revealed several weaknesses in accounting statements, indeed in the accounting standards based on which the statements are prepared. Accounting practices, or at least some of them, were criticised for either contributing to, or at least, exacerbating the severity of the crisis. The issues identified included the failure of accounting standards to deal with illiquid markets and distressed sales, delayed recognition of losses associated with loans, structured credit products, off-balance sheet financing structures, permitting certain structured/ special purpose entities and exposure to remain off-balance sheet, lack of "visibility" in accounting statements, to name just a few. The manner of preparation of accounting statements shared at least some of the blame in aggravating pro-cyclicality and causing volatility in financial statements, all of which added to systemic risks. In any case, the extraordinary complexity of accounting standards especially those related to financial instruments came under severe criticism in the wake of the crisis.

Consequent to the identification of these issues, the Basel Committee issued a set of "Guiding principles for the replacement of IAS 39" which, *inter alia*, reflect the lessons learned from the financial crisis and emphasize the need for earlier recognition of loan losses to ensure robust provisions; recognise that fair value is not effective when markets become

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4 BIS Working Papers, No 180, "Accounting, prudential regulation and financial stability: elements of a synthesis", Claudio Borio and Kostas Tsatsaronis, Monetary and Economic Department, September 2005.

dislocated or are illiquid; permit reclassifications from the fair value to the amortised cost category; which should be allowed only in rare circumstances following the occurrence of events having clearly led to a change in the business model; promote a level playing field across jurisdictions.

Some critical accounting standards have been/are being amended to take cognisance of the lessons of the crisis and will contribute significantly to ensuring that the capital and provisions held by the bank are better aligned to the risks in the banks' balance sheet. The estimation of both expected and unexpected losses is an inexact science. The attempts to better estimate, provide for them and to present an assessment of the adequacy of buffers, therefore, remains a continuing one.

Role of audit

Let me now turn to the role of audit in ensuring the efficacy of risk management and capital adequacy systems in banks. Put in an extremely narrow perspective, auditors ensure that the audited entity is adhering to the prevailing accounting standards pretty much like supervisors are tasked with ensuring that banks are following the prescribed regulatory framework. But expectations from supervisors and auditors – from society, from the financial system and from ourselves – goes beyond this narrow perspective.

In the context of the current discussion, both supervisors and auditors have a vested interest in ensuring that banks are resilient both to "known" risks and to "unknown" shocks. In particular, both supervisors and auditors are keen to ensure that banks put in place an effective system of risk management which ensures that risks are identified, measured, managed and correctly priced.

It is important in this connection that the auditors ask probing questions about the adequacy of banks' provisions and capital. This is not to suggest that auditors currently are not focussing on these aspects at the moment. Gaps, however, remain as suggested by the findings of the Annual Financial Inspection of banks by the Reserve Bank. There remains thus scope for more rigorous attention to the issues of adequacy of capital and provisions by auditors.

Going forward

Accounting standards and accounting statements were not geared to take into account the compulsions of the risk-return trade off. To some degree, the post crisis reforms to accounting standards are addressing this. Going forward, however, it will be critical that accounting statements assess and present the gamut of issues related to the level of provisions and capital maintained by banks and their adequacy in ensuring the resilience of banks to risks and shocks.

The role of auditors will also remain key as they gear themselves to play a more effective role as part of the control systems of banks. For the purpose, auditors need a deeper understanding of the bank's business. Their review must transcend the ordinary to enable them to critically analyse the operations of the banks they audit and recommend improvements to the internal control framework. The ever increasing complexity of products and operations, the parallel development of regulations such as the Basel Accords and the impending migration to the International Financial Reporting Standards (IFRS) add to these challenges and place intense demands on the technical resources and authority of auditors.

To gear up to these challenges, auditors need to take into account a system wide understanding of markets, products and their inter connectedness, especially in times of stress. Auditors will need to move beyond narrow transaction audit considerations to look at the larger picture. They will need to ask pointed and relevant questions. Do decisions in the bank take adequate cognisance of risk considerations? Is the focus on returns or income adequate given that higher returns can only be possible with higher risks? Do banks adequately understand the risk reward characteristics of product/market/business they are entering into?

Against this backdrop, the recent comments of the Governor, Reserve Bank, on the need for auditors to concentrate on the audit of head office of banks as against audit of branches given the emergence of core banking, centralised record keeping and even centralised risk management, are very relevant.

Concluding remarks

The recent global financial crisis underscored the fact that risks and shocks are unavoidable. Taking risks is an inevitable part of the business of banks. Management of risks is thus, key, to banks, but risk management practices in banks remain misaligned from some of the basic tenets of the risk-return trade off. It is, therefore, incumbent upon us, as central banks and the accounting profession, to ensure that these risks are managed and banks develop an acceptable degree of resilience to risks and shocks.

In many respects the concerns of banking supervisors and auditors are complementary. The crisis has proved that we have to learn to be more proactive and more intrusive. As the world around us becomes more complex, we will need to gear ourselves up to the challenges. Critical in this context will be building up of skills and expertise and continuing research and education in these areas.

Accountants, in particular, have to move beyond the narrow considerations of accounting standards and continuously seek answers. This is not to suggest that they should not work within the accepted conceptual framework for risk management but that they should be proactive to emerging risks within the parameters of the framework. Let me conclude with the words of Sir David Tweedie[5], recently retired Chairman of the International Accounting Standard Board,

> *"I do believe the accountant is an artist, but he has to portray his subject faithfully. I don't believe the accounting profession's ………..judgement should be replaced by a search engine and most questions are answered by the standard-setter or relevant accounting authorities. I don't, on the other hand, believe the painting can be a personal creation. The world has moved on. The picture to be painted is no longer a personal conception about business. How the success or failure of a business should be measured is now determined by standards defining more precisely a conceptual framework agreed by the global financial community".*

All these notwithstanding, the mainstay of accounting profession or, for that matter, "supervision" lies always on the concept of, as former President of USA, Ronald Reagan believed, "Trust….but verify". To what extent should we trust and what extent we verify is a matter of judgement. I am sure the deliberations at this conference have given some clue to arrive at a better judgement. Thank you ladies and gentlemen for a patient hearing.

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5 "Beancounters or Market Drivers? – The Role of the Reporting Accountant", Address by Sir David Tweedie at the Institute of Chartered Accountants of Scotland (ICAS) on 4 September 2008.