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A. NARENDER*

National Water Policy and the Need for a National Water Framework Law in India: A Discussion

Abstract

Water is a state subject in India and a key national natural resource—one which is scarce, requiring comprehensive and integrated planning and management. The Ministry of Water Resources, Government of India, had formulated national water policies in 1987 and 2002; and the draft National Water Policy 2012 was recently approved. The latter has highlighted the need for a National Water Framework Law in India to develop a national perspective on water resources. The paper presents a discussion on the national water policies and the need for a national framework law in India. It highlights the need for formulating the national water framework law and its adoption by all the states in view of the fragmented and multiple legislations on water resources at the state level and the need to manage water resources in a holistic manner. This calls for evolving a consensus among the states through dialogue and discussion. The paper also highlights the need for formulating action plans by the Centre and the states to ensure the efficacy of the national water policies and legislation and to achieve the desired outcomes.

Introduction

The sources of water supply in India comprise the major river basins that flow across various states, making water a national resource. However, water supply is defined as a state subject as per the Constitution of India, empowering the states to undertake the functions of policy, planning and implementation. The Centre has a limited role, mainly relating to the adjudication of water disputes. This calls for a national-level perspective and planning for the management of the country's water resources. These resources constitute a key component of the natural resources that are critical for the survival, well-being and development of the people. Water resources cater to multiple requirements of society: as critical inputs in the production of food and non-food crops; water

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for drinking and other domestic purposes, including sanitation; for electricity generation, industrial and non-agricultural activities; sustenance of various eco-systems; and navigation.

While the demand for water for different uses is increasing, the supply of water to meet these demands is declining. Hence, there is an urgent need to develop policies and strategies to manage and allocate water for various purposes in an integrated and holistic manner with a national perspective. It is in this context that the Ministry of Water Resources, Government of India, has formulated national water policies from time to time. The state governments were expected to formulate state-level policies, based on the national policy, and adopt and implement them by incorporating them into legislations, plans, programmes and schemes. However, these policies have not resulted in improving and augmenting the country's water resources. The Indian water sector continues to experience several problems, which can be summarized as follows (Briscoe and Malik, 2007: 1–10):

1. Compared to the developed countries, India has a lower potential for water infrastructure, defined in terms of storage in dams, reservoirs and river basins.
2. There has been a decline in the quality of public irrigation and water supply services.
3. Emergence of tube well technology as an alternative, particularly to canal irrigation—20 million tube wells have been installed, accounting for 50 per cent of India's irrigated area—has become unsustainable.
4. Poor management—inadequate user charges, low revenues, weak accountability and under-capacity—has resulted in poor maintenance.
5. Instead of creating new water infrastructure, more investments have been made in the old infrastructure to overcome poor maintenance.
6. Rivers have become sewers due to the lack of treatment of waste water.
7. Urban households have resorted to a range of coping strategies—investments in private borewells and storage, purchase of bottled water from vendors, and installation of water purification systems. A huge 80 per cent of the domestic water supply in India in 2007 came from groundwater.
8. While the sources of water supply are steadily declining and water is becoming scarce, the demand for water is galloping due to

industrialization and urbanization. This has resulted in a huge demand-supply gap.

The problem needs to be addressed as follows:

- Investments in new infrastructure for the provision and distribution of water supplies.
- Augmentation and improved management of surface water—better allocation to different users, financial sustainability, accountability, competition, regulation, public-private partnership, citizen participation.
- Better management and regulation of groundwater use.
- Augmentation of groundwater through rainwater harvesting.
- Treatment and recycling of waste water.
- Better water demand management.

Review of National Water Policies

The national water policies of 1997, 2002 and 2012 have attempted to address the above issues. The key provisions of the policies are given in Table 1.

The details of the national water policies are discussed in the sections below.

Need for the Policy

The 1987 NWP stated that water is a prime natural resource that meets basic human needs, and is a national asset that needs to be governed by a national perspective. The policy emphasized that water is a precious national resource, which should be planned, developed and conserved on an integrated and environmentally sound basis, keeping in view the needs of the states concerned. The 1987 policy highlighted the concerns of the Indian water sector and underlined the need for an integrated approach. The 2002 NWP retained most of these aspects.

The draft 2012 NWP has identified the key concerns of the Indian water sector: the impact of climate change in terms of deepening of the water crisis and water-related disasters; inadequate access to water for drinking and domestic purposes; overexploitation of groundwater; planning and implementation of water resource projects in a fragmented manner without due consideration to optimum utilization, environment sustainability and holistic benefit to the people; grossly inadequate maintenance of irrigation infrastructure, resulting

Table 1: **Key Provisions of National Water Policies**

| <i>NWP 1987</i> | <i>NWP 2002</i> | <i>Draft NWP 2012</i> |
|---|---|---|
| 1. Need for a national water policy | 1. Need for a national water policy | 1. Need for NWP, present scenario and concerns |
| 2. Information system | 2. Information system | 2. Water framework law |
| 3. Maximizing availability | 3. Water resources planning | 3. Uses of water |
| 4. Project planning | 4. Institutional mechanism | 4. Adaptation to climate change |
| 5. Maintenance and modernization | 5. Water allocation priorities | 5. Enhancing the water available for use |
| 6. Safety of structures | 6. Project planning | 6. Demand management and water use efficiency |
| 7. Groundwater development | 7. Groundwater development | 7. Water pricing |
| 8. Water allocation priorities | 8. Drinking water | 8. Conservation of river corridors, water bodies and infrastructure |
| 9. Drinking water | 9. Irrigation | 9. Project planning and implementation |
| 10. Irrigation | 10. Resettlement and rehabilitation | 10. Management of floods and drought |
| 11. Water rates | 11. Financial and physical sustainability | 11. Water supply and sanitation |
| 12. Participation of farmers and voluntary agencies | 12. Participatory approach to water resource management | 12. Institutional arrangements |
| 13. Water quality | 13. Private sector participation | 13. Trans-boundary rivers |
| 14. Water zoning | 14. Water quality | 14. Database and information system |
| 15. Conservation of water | 15. Water zoning | 15. Research and training needs |
| 16. Flood control and management | 16. Conservation of water | 16. Implementation of national water policy |
| 17. Land erosion by sea or river | 17. Flood control and management | |
| 18. Drought management | 18. Land erosion by sea or river | |
| 19. Science and technology | 19. Drought-prone area development | |
| 20. Training | 20. Monitoring of projects | |
| 21. Conclusion | 21. Water sharing/distribution among states | |
| | 22. Performance improvement | |
| | 23. Maintenance and modernization | |
| | 24. Safety of structures | |
| | 25. Science and technology | |
| | 26. Training | |
| | 27. Conclusion | |

in wastage and underutilization; encroachment of natural water bodies and drainage channels, preventing groundwater recharge; and growing pollution of water bodies due to the discharge of untreated industrial effluents.

The draft 2012 NWP has presented the objectives and principles of the national water policy in a more structured fashion. The key objective of is to take cognizance of the existing scenario, propose a framework for the creation of a system of laws and institutions, and formulate a plan of action with a unified national perspective. The key principles of the policy include evolving a common and integrated perspective for planning, development and management of water resources; managing water as a common pool community resource held by the state under the doctrine of public trust to achieve food security, support livelihoods, and ensure equitable and sustainable development of all; considering river basins as the basic hydrological unit for planning; giving priority to water demand management by evolving an agricultural system that economizes water use and maximizes its value; bringing in maximum efficiency in water use and avoiding wastages; managing water quality and quantity in an interlinked and integrated manner; using economic incentives and penalties to reduce pollution and wastage; and factoring the impact of climate change on water resource availability into water management-related decisions.

Water Resource Planning and Maximizing Availability

The 1987 NWP stated that all the available water should be brought within the category of utilizable resources to the maximum possible extent through augmentation of water conservation and availability by measures for maximizing retention and minimizing losses. The policy suggested that resource planning be based on a hydrological unit, such as the drainage basin or sub-basin, and all individual projects and proposals should be formulated within this framework. It further recommended establishing appropriate organizations for the planned development and management of river basins in their entirety; multi-disciplinary teams to prepare comprehensive plans, taking into account the needs of all the users; transferring of water from one river basin to another; and recycling and reuse of waste water. The 2002 NWP also stressed inter-basin transfers, artificial recharge of groundwater, and desalination of brackish or sea water; as well as traditional water conservation practices, such as rainwater harvesting and watershed management, for improving water resources.

The 1987 and 2002 policies have highlighted the need for periodical reassessment on a scientific basis of the groundwater potential, taking into consideration the quality of water available and the economic viability of extracting it, regulating the exploitation of groundwater, developing and implementing groundwater recharging projects, and the integrated and coordinated development of surface water and groundwater. These policies have assigned top priority to drinking water, followed by irrigation, electricity generation, and non-domestic and industrial uses.

The draft 2012 NWP has suggested a scientific review and assessment, once in every five years, of the availability of water resources and their use by different sectors in various basins and states of the country. The policy emphasizes the need to augment water availability through strategies such as direct use of rainfall and avoidance of evapo-transpiration. It has recommended mapping of aquifers to know the quantity and quality of the groundwater available in the country. Other suggestions include arresting the decline in groundwater levels by introducing improved technologies of water use, incentivizing efficient water use and encouraging community-based management; and undertaking artificial recharging projects, inter-basin transfers of water, and integrated watershed development activities.

The draft 2012 policy has recommended the optimum utilization of water for diverse uses by creating awareness; ensuring access to minimum quantity of potable water to all within the easy reach of households; keeping aside a portion of river flows to meet the ecological needs of minimum flows; special impetus to adopt community-based, climate-resilient technology options, including increasing water storage in various forms, such as soil moisture, ponds, groundwater, small and large reservoirs; and better demand management, stakeholder participation, and adoption of water-saving technologies for agriculture and industry.

The draft 2012 policy has also recommended removing the large disparities in water supply and sanitation between the rural and urban areas; incentivizing low water-intensive sanitation, sewerage systems and decentralized sewage treatment plants; supply of water for drinking purposes from surface sources in urban areas; treatment of waste water from kitchens and bathrooms and reuse for flushing of toilets; publishing accounts and audited reports, including on leakages; promoting rainwater harvesting and desalination in the urban and industrial areas; integrated execution of water supply and sewerage projects; combined bills for water supply and sewerage; incentivizing the use of water-efficient technology and recycled waste water in industries.

Water Use Efficiency, Conservation, Demand Management and Pricing

All the three policies have assigned high priority to these aspects. The 1987 NWP recommended charging water rates that reflect the scarcity value and are adequate to cover the annual maintenance and operation charges and part of the fixed cost over a period, while ensuring adequate and timely supply of irrigated water. The policy further suggested that surface water and groundwater rates should be rationalized with due regard to the interests of small and marginal farmers. It recommended that measures be put in place to improve the efficiency of water utilization and a campaign be undertaken to create awareness on water as a scarce resource, and promote conservation consciousness through education, regulation, incentives and disincentives. The 2002 NWP made additional recommendations in this regard, which include maximizing retention, eliminating pollution and minimizing losses through selective linings in the conveyance system; modernization and rehabilitation of existing systems, including tanks; recycling and reuse of treated effluents; and adoption of traditional techniques like mulching or pitcher irrigation and new techniques like drip and sprinkler. The policy suggested that adequate emphasis be placed on the physical and financial sustainability of existing facilities and that water charges for various uses be fixed in such a way that they cover at least the initial operation and maintenance costs and a part of the subsequent capital costs. It further recommended that water rates should be directly linked to the quality of services provided and that subsidies to the poor should be transparent and well-targeted.

With regard to pricing, the draft 2012 policy suggested the adoption of differential rates for pre-emptive and high priority uses of water; setting up a water regulatory authority to fix and regulate water tariffs and charges in an autonomous manner; charging for water on a volumetric basis; incentivizing recycling and reuse of waste; giving water users associations the autonomy to fix the rates and the statutory powers to collect and retain a portion of the water charges, manage the volumetric quantum of water allotted to them, and maintain the distribution system in their jurisdiction; reversing the heavy under-pricing of electricity; and providing separate electric feeders for subsidized groundwater. The 2012 NWP recommendations for promoting demand management and water use efficiency include benchmarking for different water uses with regard to the water footprint and water audit, undertaking regular water balance and water accounting studies, establishing an institutional arrangement at the national level to promote and regulate the efficient use of water at the basin/sub-basin level, recycling and reusing water, incentivizing the efficient and

economic use of water, early completion of projects to reduce costs, and water saving in irrigation through methods like micro-irrigation and watershed development. The policy further advocates integrated and scientifically planned conservation through community participation, preventing encroachments and pollution of water bodies, ensuring groundwater quality, proper maintenance of the water resource infrastructure, and legally empowered dam safety services for conservation of river corridors, water bodies and infrastructure.

Institutional Arrangements

The 1987 policy did not have a separate section on institutional arrangements. However, some of these issues were dealt with at different places in the document. The 2002 policy suggested that existing institutions at various levels in the water resources sector would need to be appropriately reoriented/reorganized; and in some instances where required, even new institutions created. The draft 2012 policy also recommended that appropriate river basin organizations be established and special multi-disciplinary units be set up to prepare comprehensive plans. It called for establishing a forum at the national level to deliberate upon issues relating to water and to adopt the approach of consensus, co-operation and reconciliation among the party states in instances of disputes. A similar mechanism was suggested within each state to amicably resolve the competing demands for water amongst different users and parts of the state. A permanent Water Disputes Tribunal at the Centre was suggested to resolve inter-state disputes. Other suggestions include using the good offices of the Centre and the states for arbitration and mediation in resolving the disputes, community and private sector participation in planning and implementation of projects, restructuring the departments and organizations related to water at the Centre and in the states, and making them multi-disciplinary for integrated water resource planning.

Project Planning and Implementation

The 1987 NWP recommended planning and formulation of multi-purpose water resource projects that provide for drinking water, irrigation, flood mitigation, hydro-electric power generation, navigation, pisciculture and recreation. The policy recommended assessing the impact of the projects on the quality of the environment, displacement and re-settlements, and preservation of the ecological balance; paying special attention to the needs of the disadvantaged and weaker sections, such as SCs and STs; sound project preparation and management; optimal allocation of resources; and effective implementation.

These aspects were retained by the 2002 NWP. The draft 2012 NWP suggested that all water resource projects be planned as multi-purpose projects to the extent feasible, with maximum possible storage to maximize utilization, subject to topography and water resource availability, as per the efficiency benchmarks; with stakeholder participation, time-bound clearances and the involvement of local bodies and institutions.

Modernization, Maintenance, Monitoring and Performance Improvement

The 1987 NWP emphasized proper maintenance of the assets created by making annual provisions in the budget for this purpose and by undertaking regular monitoring and the necessary rehabilitation and modernization. The policy recommended that adequate organizational arrangements be made at the national and state levels for the safety of storage dams and other structures. It further suggested that central guidelines on the subject should be constantly reviewed and a system be put in place for continuous surveillance and regular visits by experts. The 2002 NWP policy stressed the need for suitable personnel for maintenance and monitoring, consisting of specialists in investigation, design, construction, hydrology and geology. The policy recommended the enactment of dam safety legislation to ensure adequate inspection, maintenance and surveillance of existing dams, and thorough planning, investigation, design and construction of new dams. The 2002 policy further recommended the formation of water users' associations with the authority and responsibility to facilitate the management, including maintenance, of irrigation systems in a time-bound manner.

The policy stressed the need for the careful monitoring of projects to identify bottlenecks and adopt timely measures to obviate time and cost overruns; and developing a system to monitor and evaluate the performance and socio-economic impact of projects. The 2002 policy underscored the importance of a paradigm shift from the present emphasis on the creation and expansion of water resources infrastructure for diverse users to improvement in the performance of the existing water resource facilities. The policy recommended re-prioritizing the funds allocated to the water resource sector so as to meet the needs of both development as well as operation and maintenance of facilities. The draft 2012 NWP also suggested that measures be taken to ensure proper maintenance of the water resource infrastructure and provision of legally empowered dam safety services by the states and the Centre.

Drought and Flood Management

The 1987 NWP recommended reducing the vulnerability of drought-prone areas through soil moisture conservation measures, water harvesting practices, minimization of evaporation losses, development of groundwater potential, transfer of water from surplus areas, employment and relief work. For flood control and management, the policy suggested preparation of a master plan, watershed management, construction of check dams, adequate flood cushion in storage projects, and an extensive network of flood forecasting and flood protection. These aspects were retained by the 2002 NWP. The 1987 policy suggested minimizing land erosion by suitable cost-effective measures and discouraging and regulating economic activities along the coast. The 2002 policy further recommended that each coastal state should prepare a coastal land management plan, keeping in view the environmental and ecological impact, and accordingly regulate developmental activities. For managing drought, the draft 2012 NWP suggested formulation of sound agricultural strategies through scientific planning, integrated farming systems, and non-agriculture based rural projects to promote livelihoods and alleviate poverty. For managing floods, the policy recommended developing forecasting models to ensure flood preparedness, evolving operating procedures for reservoirs to ensure flood cushion, and preparing frequency-based flood inundation maps to formulate coping strategies, including supply of safe drinking water before and after floods. The draft 2012 policy also suggested preparation of disaster management plans with community participation.

Sharing of River Waters

The 1987 NWP did not deal with this aspect. The 2002 NWP recommended developing a national perspective with regard to water availability and needs in a river basin and the necessary guidelines for future agreement among states. The policy stated that the Inter-State Water Disputes Act of 1956 be suitably reviewed and amended for timely adjudication of water disputes referred to the tribunal. The draft 2012 NWP suggested establishing a forum at the national level to deliberate upon issues relating to water, evolving a consensus, co-operation and reconciliation among the party states, and setting up a permanent Water Disputes Tribunal at the Centre to resolve disputes. The draft 2012 policy also emphasized the sharing of international river waters and recommended entering into bilateral agreements with neighbouring countries for the exchange of hydrological data on shared rivers on a near real-time basis; negotiations with riparian states with regard to international rivers; and adequate institutional arrangements at the Centre for implementing international agreements.

Information System

The 1987 NWP observed that a well-developed information system is a prerequisite for resource planning. Accordingly, it recommended putting in place a standardized national information system with a network of data banks and databases; integrating and strengthening the existing central and state-level agencies; and improving the quality of data and processing capabilities. The policy observed that the information system should generate updates on water availability and actual water use, and give comprehensive and reasonably reliable projections of the future demand for water for diverse purposes. The policy suggested that steps be taken to avoid duplication of data and provide for the free exchange of data among various agencies. While retaining the above observations, the 2002 NWP recommended developing standards for the coding, classification and processing of data, methods/procedures for collection, and efforts to develop and continuously upgrade the technological capability to collect, process and disseminate reliable data within the desired timeframe. The draft 2012 NWP suggested placing in the public domain all the hydrological data other than that classified due to national security considerations, with a periodic review for further declassification; establishing a National Water Informatics Centre to collect, collate and process hydrological data and conduct a preliminary assessment in an open and transparent manner on a GIS platform; developing a programme on data collection related to climate change; and building databases on all water-related aspects with well-defined procedures for online updation and transfer to facilitate informed decision-making.

Research in Science and Technology and Training

The 1987 NWP recommended that intensive research be undertaken in areas such as hydrology, groundwater recharge, harvesting, safety, better management, recycling and re-use. The 2002 NWP added some more areas for taking up intensive research. The 1987 policy suggested a perspective plan be evolved for imparting standardized training—covering information systems, sector planning, project planning and formulation, project management, operation and maintenance—to all personnel and farmers. This was also emphasized by the 2002 NWP policy. Suggestions of the draft 2012 NWP in this regard include promoting continuous research and advancement in technology; incentivizing innovations; providing adequate grants to the states to update technology, design practices, and plan and implement management practices; preparing annual water balances and accounts for the sites and basins; computing hydrologic

balances for water systems; benchmarking and evaluating performance; conducting re-training and quality improvement programmes for water planners and managers at all levels, with a focus on information technology and analytical capabilities; establishing an autonomous centre for research in water policy to evaluate the impact of policy decisions and to evolve policy directives; imparting regular training and courses in water management; upgrading the infrastructure of training and academic institutions; and launching a national campaign on water literacy with a view to building the capacity of different stakeholders.

Water Framework Law

This aspect was not dealt with by the 1987 and 2002 policies. The draft 2012 NWP identified the felt need to evolve a broad overarching national legal framework of general principles on water to lead the way for essential legislation on water governance in every state of the Indian Union and devolution of the necessary authority to the lower tiers of government to deal with the local water situation. The policy observed that water needs to be managed as a community resource held by the state under the doctrine of public trust to achieve food security, livelihoods, and equitable and sustainable development for all citizens; and that existing legislation, such as the Indian Easements Act, 1882, and various irrigation acts, may have to be modified as they appear to give landowners proprietary rights to the groundwater under their land.

Implementation of Policy

This aspect was not dealt with by the 1987 and 2002 policies. The draft 2012 NWP suggested that the National Water Board should prepare a plan of action based on the National Water Policy, as approved by the National Water Resources Council, and regularly monitor its implementation. The water policies of various states may need to be drafted/revised in accordance with this policy, keeping in mind the basic concerns and principles as also a unified national perspective.

Discussion on National Water Policies

The provisions of the national water policies are quite comprehensive and cover a wide range of aspects for effective water resource management. Around 15 states have formulated state water policies along the lines of these national policies at various points in time. These include Andhra Pradesh, Assam, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Odisha, Puducherry, Punjab, Rajasthan, Uttar Pradesh

and West Bengal. The state-level policies more or less follow the spirit and content of the national water policies of 1987 and 2002. However, the draft 2012 NWP is relatively new and the states are yet to accordingly revise/formulate their water policies. The Government of India has initiated discussions with the states on the 2012 policy with a focus on the provision related to drafting a water framework law at the national level.

The current status of water resources in the country presents a dismal picture, reflecting the poor implementation of the national and state water policies to achieve the desired outcomes. The *India Infrastructure Report 2011* (IDFC, 2011) has made the following observations on the status of the country's water resources:

1. The total utilizable water in the country from surface water and groundwater is 690 bcm and 432 billion cubic meters (bcm), respectively, which is barely sufficient to meet the present needs. However, if the current pattern of demand continues, about half the demand for water will be unmet by 2030. Climate change will further aggravate the problem by causing erratic weather patterns.
2. The use of water by the agricultural, industrial and energy sectors is highly inefficient.
3. Pollution of rivers and water bodies by industries and sewerage is sharply reducing the availability of clean water.
4. Over the years, there has been a steady reduction in the storage capacity of dams due to the excessive focus on the construction of new dams and the neglect in the maintenance of the older ones.
5. There is an urgent need to restrain water demand and increase conservation.
6. Water availability needs to be improved by augmenting the storage capacity for surface water, and incentivizing groundwater recharging, rainwater harvesting, waste water treatment and reuse, and minimizing losses in the transportation of water.

Though the national water policies have attempted to address the above issues since 1987, the situation on the ground has not improved; on the contrary, water resource management has deteriorated. This can largely be attributed to the failure of the states to operationalize strategies and action plans for implementing the policy. One reason for this appears to be the existence of a

plethora of water sector legislations at the state level and the lack of a national framework law to enforce the provisions of the policy. Another reason could be the failure of the states to develop and implement action plans based on the national and state water policies. It is in this context that the draft 2012 NWP has recommended the formulation of a national water framework law and of action plans by states, which merit attention.

Need for the National Water Framework Law

The draft 2012 NWP has recommended evolving a broad, overarching national legal framework of general principles on water to lead the way for essential legislation on water governance in every state of the country, and devolution of the necessary authority to the lower tiers of government to deal with the local water situation. The policy highlights the need for managing the country's water resources under the doctrine of public trust. A great deal of the literature on water law in India has lamented the presence of multiple laws at the state level and emphasized the need for a unified legal framework.

The need for an overarching national water framework law arises not only due to the presence of multiple laws but also due to their inefficiencies in ensuring effective water resource planning and management, as articulated in the *Indian Infrastructure Report 2011*. For example, it is said that the existing laws are based on the principle of riparian states, which gives exclusive rights to landowners to use the water within their lands, particularly the groundwater. This has led to excessive consumption of groundwater, which the existing groundwater laws have not been able to regulate. It is suggested that water resources, including both surface and groundwater, should be managed based on the doctrine of public trust and not on the riparian state principle. It is also stated that the existing irrigation acts provide for the participation of water user associations with wide-ranging responsibilities without requiring them to be accountable. The laws relating to the pollution of water bodies are also observed to be ineffective. In addition to the doctrine of public trust, the rights framework is also increasingly propagated by the judiciary, which needs to be incorporated into the existing acts. Moreover, the issues related to the devolution of powers to local bodies by the states for water resource management are not addressed by the existing state laws. Ramaswamy Iyer (2011) has also emphasized the need for a national water framework law more or less on the same grounds. It is in this context that the draft 2012 NWP has recommended a national water framework law and its adoption by the states.

According to Cullet and Koonan (2011), water laws in Indian states have developed in a sectoral manner over the years, and this seems to have impeded the development of a comprehensive understanding of water resource management. They argue that the laws tend to be problem-specific/issue-specific, such as addressing participatory irrigation management, or water source-specific, such as groundwater, or they deal with a specific part of the regulatory framework, such as institutional reorganization. Cullet and Koonan further observe that no initiative has been taken to introduce water legislation that would provide an integrated, comprehensive framework for the country's water resource management, and that formulating water policies at the national and state levels is not an alternative to such legislation. They strongly advocate the formulation of a national water framework law and its adoption by the states.

The Government of India had been seriously contemplating developing an overarching water framework law even before the approval of the draft national water policy 2012. The Planning Commission's Working Group on Water and Governance for the 12th Five-Year Plan had set up a Sub-Group on a National Water Framework Law, with Ramaswamy Iyer as the Chairperson. The sub-group prepared an explanatory note outlining the contours of a national water framework law (available online at: http://www.planningcommission.nic.in/aboutus/committee/wrkggrp12/wr/wg_wtr_frame.pdf). The key provisions of the draft National Water Framework Act (NWFA), formulated by the sub-group, are as follows:

- The wide-ranging concerns pertaining to water resource management cannot be addressed by the existing laws; hence, the need for an overarching legislation. Notwithstanding the significant divergences in water laws across the states, there is need for a national consensus on the core principles or basics. This is also in line with international practices where many countries have formulated national codes or laws; the European Water Directive is well-known in this regard.
- The nature and scope of the draft NWFA is not intended to centralize water management or change the Centre-state relations in any way. It is not a central water management law; rather, it is an umbrella statement of general principles governing the exercise of legislative and/or executive (or devolved) powers by the Centre, the states and local governance institutions.

- The national law can be enacted by following the procedure of the Water (Control and Prevention of Pollution) Act, 1974, or the Dam Safety Act, 2010, or by persuading a certain number of state assemblies to pass resolutions. All the states can adopt NWFA once it is enacted.
- The proposed National Water Framework Act will provide the legal basis for the water resource framework as outlined in the draft 2012 national water policy for the holistic, integrated and efficient management of water resources.
- Following its enactment, all the existing water laws at the Centre and in various states shall be reviewed and amended, where necessary, to ensure conformity with the provisions of NWFA.

In July 2012, the Government of India set up a Committee for Drafting of National Water Framework Act, under the Chairpersonship of Dr. Yogendra K. Alagh. Its report was under preparation at the time of writing this paper.

While the Government of India will hopefully to come up with the draft NWFA soon, its enactment by Parliament would depend on eliciting support across the political spectrum, and its subsequent adoption by the states will hinge on the willingness of the state governments. Going by the past experience, where certain crucial pieces of central legislation, such as the Water (Control and Prevention of Pollution) Act, 1974 and the River Boards Act, 1956, have not been adopted by the states, there could be difficulties in getting their support for NWFA. At the same time, given the concerns about water resource management and the need for holistic planning, as articulated by the draft national water policy 2012, there are enough grounds for the formulation of NWFA. Hence, the Government of India should make every effort to convince the state governments and evolve a national consensus on the subject. The National Water Framework Act, as enacted by the Centre and the states, could provide an effective basis for sound management of the country's water resources as envisaged by the national water policies over the years. There is consensus among researchers on the core principles that should be enunciated by NWFA, as presented below.

Federalism and National Interest

As per the Constitution of India, water is a state subject. Schedule VII, List II, Entry 17 states: "Water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and water power [are] subject to the provisions of Schedule VII, List I, Entry 56." Entry 56 of List I, Schedule VII,

states: “Regulation and development of inter-State rivers and river valleys to the extent to which such regulation and development under the control of the Union is declared by Parliament by law to be expedient in the public interest.” Further, Article 252 of the Constitution allows Parliament to adopt legislation in any field in which the states are competent to legislate, provided that the states have given their assent (Cullet and Koonan, 2011: 20–21). Thus, the Constitution has enabled the states to be responsible for water but conferred on the central government the power to make laws for the regulation and development of inter-state rivers and river valleys. The central government can also frame any water law provided it has the assent of the states. In spite of these provisions, a majority of the water-related activities fall within the domain of the states with a limited role for the central government.

Over the years, experience has shown that water cannot be treated purely as a state subject and should be considered as national resource with a greater role for the central government. The proponents of this view argue for the inclusion of water in the Concurrent List to enable the Constitution to empower the central government equally with the state governments. There are others who hold the view that water should be treated as a national resource and the central government should have a greater role in water management; however, they argue that this can be achieved even under the existing constitutional provisions without resorting to the inclusion of water in the Concurrent List through a constitutional amendment. The proponents of this view argue that this can be achieved by enacting a national water framework law and its adoption by the states. Given how politically sensitive the subject of federalism is in India, this paper believes that the inclusion of water in the Concurrent List could be a time-consuming and difficult proposition. Inter-state water disputes is another area that has not been effectively addressed in the present context and merits serious attention. There is also the question of interlinking of rivers, which requires the central government to play a much greater role. There are different views on the feasibility and ecological sustainability of such projects. Again, this issue cannot be addressed by the central government alone; it needs the co-operation and consent of the states. The principle of considering water as a national resource, effective redressal of inter-state water disputes, as well as addressing concerns about the inter-linking of river projects can be achieved by effective implementation of national and state water policies, as well as by formulating a national water framework law and its adoption by the states.

Principles of Riparian Law, Eminent Domain and Public Trust

In the past, water laws were governed by the principle of riparian law, which states that “owners of land bordering on a water way have equal rights to use the water passing through or by their property (Puthucherril, 2009: 105).” The riparian rights of water enable the use of water by all the owners who own land bordering rivers and streams. In the Indian context, the principle of riparian rights has limited purpose since the state has the power of eminent domain (the power to take private property for public use) to regulate the allocation and use of water from rivers and streams. Lately, the state’s power of eminent domain has been debated on the grounds that it may not be adequate to protect the interests of the common good. Alternatively, the principle of public trust is advocated, which enables the state to act as a trustee of all natural resources on behalf of the present and future generations, which would help in making fair and judicious decisions to protect water and other natural resources and ensure ecological sustainability. The national water framework law needs to advocate the principle of public trust as it is inclusive and covers the principles of both riparian rights and eminent domain.

Water as Human Right

Several international conventions and resolutions have emphasized water as a human right. The UN Committee on Economic, Social and Cultural Rights in 2002 has stated that water is a limited natural resource and a public good fundamental for life and health, and the human right to water is indispensable for leading a life in human dignity (Cullet and Koonan, 2011: 13). The UN General Assembly Resolution in 2010 recognized the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights (ibid.: 14). Even in India, water has been recognized by the Supreme Court as a fundamental right under Article 21 and as a basic or human right under Articles 15, 32 and 47 of the Constitution of India. The Supreme Court has stated that the right to live with dignity is a fundamental right under Article 21 of the Constitution, and it includes the right to pollution-free water and air for the full enjoyment of life (ibid.: 17–20). The NWFA should advocate the principle of water as a fundamental right or a human right.

Regulation of Groundwater Use

Traditional groundwater laws and practices have given landowners unlimited control over the use of the groundwater located in their premises. The right to

groundwater emanates from the Indian Easements Act, 1882, which states that it is the exclusive right of every owner of immovable property to enjoy and dispose of the same and all the products thereof and accessions thereto. This includes the right of every owner of land to collect and dispose of, within his/her own limits, all the water under the land that does not pass in a defined channel and all the water on its surface that does not pass in a defined channel (Cullet and Koonan, 2011: 28). This disposition has led to the indiscriminate exploitation of groundwater, leading to a sharp fall in the groundwater table to dangerous levels in many parts of the country. This alarming situation has, in turn, led to the demand to regulate the use of groundwater based on the doctrine of public trust, which recognizes groundwater as common property and not as individual property. The national water framework law needs to incorporate this principle.

Integrated Water Resource Management

According to the Global Water Partnership, an international network that offers practical advice for the sustainable management of water resources, “Integrated Water Resource Management is a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of ecosystems (Mollinga, Dixit and Athukorala, 2006: 21. Available online at: <http://www.un.org/waterforlifedecade/iwrm.shtml>.)” The International Conference on Water and Environment (ICWE), held in Dublin, Ireland, in January 1992, had issued the Dublin Statement on Water and Sustainable Development, articulating the following principles of integrated water resource management (ibid.: 23):

1. Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.
2. Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels.
3. Women play a central part in the provision, management and safeguarding of water.
4. Water has an economic value and should be recognized as an economic good.

Following the Dublin Statement, Agenda 21 of the Earth Summit, the United Nations Conference on Environment and Development (UNCED), held in Rio

de Janeiro in June 1992, made several references to integrated water resource management (IWRM), under Chapter 18 titled: “Protection of the Quality and Supply of Fresh Water Resources: Application of Integrated Approaches to the Development, Management and Use of Water Resources.” One of the principles of IWRM articulated by Agenda 21 refers to “integrated water resource management, implying an intersectoral approach, representation of all stakeholders, all physical aspects of water resources, and sustainability and environmental considerations (Bandaragoda, 2005: 2).” Drawing upon Agenda 21 and the Dublin Principles, the World Bank Policy Paper of 1993 on *Water Resources Management* (Executive Summary available online at: <http://siteresources.worldbank.org/INTWRD/214573-1111579063201/20424649/WRMExSumof1993WaterPolicy.pdf>.) elaborated the following as the principles of integrated water resource management (Snellen and Schrevel, 2004):

1. *Ecological principle*, which argues that independent management of water by different water using sectors is not appropriate, that the river basin should be the unit of analysis, that land and water need to be managed together, and that much greater attention needs to be paid to the environment.
2. *Institutional principle*, which argues that water resources management is best done when all the stakeholders participate, including the state, the private sector and civil society; that women need to be included; and that resource management should respect the principle of subsidiarity, with actions taken at the lowest appropriate level.
3. *Instrument principle*, which argues that water is a scarce resource and that greater use needs to be made of incentives and economic principles in improving allocation and enhancing quality.

The Global Water Partnership definition of IWRM is widely accepted and considered as comprehensive. The key principle of IWRM is the integration of water resources at various levels (GWP, undated. Available online at: <http://www.gwp.org/Global/The%20Challenge/Resource%20material/IWRM%20at%20a%20glance.pdf>). These levels are delineated below:

1. *Integration in the Natural System*
 - a. Between land and water use
 - b. Between surface water and groundwater
 - c. Between water quantity and quality

- d. Between upstream and downstream
 - e. Between the fresh water system and coastal waters
2. *Integration in the Human System, which is Management of the Natural System*
 - a. Mainstreaming water in the national economy
 - b. Ensuring co-ordination between various sectors
 - c. Ensuring partnership between public and private sector management
 - d. Involving all the stakeholders
 3. *From Sub-Sectoral to Cross-Sectoral Management of Water Use Sectors*
 - a. People
 - b. Food
 - c. Eco-systems
 - d. Industry and others
 4. *Enabling Environment, Institutional Roles and Instruments*
 - a. Policies and legislations
 - b. Central, local, public, private and river basin levels
 - c. Assessment, information and allocation tools

The integrated approach to water resource management requires a holistic approach towards conservation, augmentation and protection of fresh water resources, on the one hand, and effective management of the demand for water for domestic, irrigation and industrial purposes, on the other. The approved draft 2012 national water policy has articulated the approaches towards and principles of integrated water resource management, and the same should be incorporated in the national water framework law.

Integrated Approach to Urban Water Management

The demand for water in urban areas is experiencing several challenges in the form of declining water sources, deterioration of the existing infrastructure assets, poor distribution management, widening gap between demand and supply, over-exploitation of groundwater, contamination of water bodies due to untreated sewage and industrial effluents, poor cost recovery, lack of metering, high non-revenue water, and lack of access to safe drinking water by the poor and marginalized; hence, it merits special attention. Financing and institutional

arrangements and the organizational capacity for the management of water in urban areas is inadequate. The conventional approaches to urban water management have been fragmented and focused on supply-side strategies, such as source augmentation and building capital infrastructure, to the neglect of operation and maintenance, conservation and demand management. International experience has pointed to the need for and the importance of adopting an integrated urban management approach for the efficient use and management of urban water.

“Integrated Urban Water Management (IUWM) is an approach that seeks to develop efficient and flexible urban water systems by adopting a diversity of existing technologies, management, and institutional practices to supply and secure water for urban areas. The focus of this approach is the integration of planning, management, and stakeholder participation across institutions at each stage. IUWM’s view on the urban water cycle is a holistic one, by which all [the] components of the cycle (water supply, sanitation and storm water management) are integrated within the wider watershed (Closas, Schuring and Rodriguez, 2012: vii).” This calls for the protection of water sources and water bodies, regulation of groundwater use, augmentation of groundwater through rainwater harvesting, treatment and reuse of waste water, particularly for industrial and non-potable purposes, desalination plants for coastal cities, technologies and pricing mechanisms for demand management, mitigating the impact of climate change on water, storm water and flood water management, effective institutional arrangements, targeted subsidies to the poor and stakeholder participation. The national water framework law needs to articulate and highlight the principles and mechanisms of integrated urban water management.

Inter-Basin Water Transfers (IBWT)

According to the National Water Development Agency (NWDA) of the Ministry of Water Resources, Government of India, inter-basin water transfer (IBWT) from surplus rivers to deficit areas is one of the most effective ways to increase the irrigation potential for augmenting food grain production, mitigate floods and droughts, and reduce regional imbalances in the availability of water (Available online at: <http://www.nwda.gov.in/index2.asp?slid=3&sublinkid=3&langid=1>). The rivers Brahmaputra and Ganga, along with their tributaries Mahanadi and Godavari, have surplus water and experience severe floods during the monsoons. Transferring water from these rivers to deficit areas in states such as Rajasthan, Gujarat, Andhra Pradesh and Karnataka could address the

floods and drought problems effectively and improve water availability in the deficit areas. The Periyar project, the Telugu Ganga project and the Ravi-Beas-Sutlej-Indira Gandhi Nahar project are successful examples of the inter-basin water transfer approach. A National Perspective Plan (NPP) for water resource development through inter-basin water transfers was formulated in 1980 by the then Ministry of Irrigation (presently Ministry of Water Resources) and the Central Water Commission, which identified and proposed several inter-basin water transfer projects (Available online at <http://www.nwda.gov.in/index2.asp?slid=108&sublinkid=14&langid=1>). NWDA was set up as a society in 1982 to undertake water balance studies, identify projects and prepare feasibility reports for the inter-linking of rivers based on the National Perspective Plan. NWDA has identified 30 projects and prepared feasibility reports for them. These projects were criticized on the grounds that they require huge financial resources. However, the Supreme Court of India, in its judgment delivered on 27 February 2012, gave the go-ahead for these projects on the grounds that the benefits far outweigh the financial costs (Seth, 2008). The Supreme Court recommended the formation of a committee for fixing a definite timeframe for the preparation of feasibility reports and ensuring the completion of projects.

However, there are views opposing the very concept of the river linking projects on the grounds that rivers are natural systems, flowing only in one direction and cannot be linked and managed on the lines of the national power grid or highway projects. Each river basin is a unique eco-system, and the inter-linking of rivers could adversely affect their balance. A river basin has many functions; and it is difficult to define terms such as surplus and deficit with regard to water flowing in the basin. The alternative approach to the inter-linking of rivers is to manage the water scarcity in certain river basins through conservation and demand management measures specific to the basin. The alternative approach suggests that the subject of inter-linking of rivers be carefully studied and widely debated before it is taken forward for implementation (Iyer, 2012).

Thus, the national water framework law (NWFL) should develop a uniform and comprehensive legislative framework incorporating the emerging principles of effective, equitable, sustainable and integrated water resource management. The NWFL should also evolve a consensus on debated issues such as inter-basin water transfers. The law is expected to provide a comprehensive legal and legislative framework to address the emerging needs of the water sector by incorporating the international and national principles that have emerged in the light of the experiences of the past few decades. There is a broad consensus

on these principles among various studies (Iyer, 2003, 2007 and 2009; Cullet, 2009; and Cullet and Koonan, 2011). The national water framework law will incorporate the principles articulated by the approved draft 2012 NWP and provide a legal basis to the policy.

In sum, formulation of the NWFL and its adoption by the states is necessary, as it will:

1. Avoid multiple legislations across the states and provide a common framework.
2. Incorporate the principles of public trust and human right.
3. Balance the interests of water as a national resource and the principle of federalism.
4. Enable the adoption of the integrated water resources management framework.
5. Facilitate proper management of groundwater.

This paper believes that the very process of formulating the national water framework law and initiating dialogue and discussions with the states for its adoption by their governments could lead to awareness among the state leadership about the serious concerns in the management of water resources, the importance of the emerging principles and frameworks, and the need for inter-state co-operation on treating water as a national resource. The Centre should initiate regional policy workshops with the state governments on preparation of the draft national water framework law and seek their views and suggestions. As indicated by several studies, formulation of the NWFL and its adoption by the states is a must to effectively tackle the looming water resources crisis in the coming years.

Formulation of Action Plans by the Centre and States

The draft 2012 national water policy has strongly emphasized the need for a unified national perspective on the basic concerns about and the principles for the effective management of water resources, and suggested that the state water policies should reflect the national perspective. The effective implementation of these policies would be ensured by putting in place a national water framework law at the Centre and its adoption by the states, and by formulating sound strategies and implementable action plans, programmes and schemes.

A priority area for states should be the conservation and augmentation of surface water and groundwater sources. All surface water bodies should be made free from encroachments and pollutants. All drinking water sources should be free from any kind of pollution or contamination. Sewage from cities and towns should be allowed to be discharged into water bodies only after undergoing secondary treatment. All borewells and open wells should be connected by rain-water harvesting pits to recharge the groundwater. All industries, gardens, horticulture and agricultural activities should, to the extent possible, meet their requirements from treated and recycled waste water. Conservation of water in irrigation should be assigned top priority by encouraging the adoption of water-saving crops and technologies. All domestic water supply connections should be metered, and volumetric tariff should be adopted to discourage high-end consumption. The evaporation losses in the transportation of water, wastages, physical losses and non-revenue water should all be brought down by conducting water audits. Information, education and awareness (IEC) campaigns should be launched to encourage various consumer groups to adopt water conservation measures. Regular operation and maintenance of the water resource infrastructure should be ensured. Water resource projects should be planned and implemented without cost- and time-overruns and with private sector and community participation. Formulation and implementation of a sound action plan along these lines by the states could help in achieving effective water resource management.

Conclusion

Water is a precious natural resource and a basic human need which needs to be governed and managed with a national perspective. The Government of India has formulated national water policies in 1987 and 2002 and the more recent draft 2012 policy national water policy. These policies have provided a comprehensive and holistic framework, within which a number of states have formulated water policies from time to time. In spite of the national and state policies, the performance of the water resource sector has been observed to be poor, which is expected to result in a huge demand-supply gap by 2030. One of the reasons this poor performance is attributed to is the lack of a national water framework law incorporating basic principles and the presence of multiple water laws in various states. Hence, the draft 2012 national water policy has strongly articulated the need to enact the national water framework law, which could be adopted by the states to provide a national consensus and perspective on the basic principles of water resource management.

The Government of India has set up, under the Chairpersonship of Dr. Yogendra Alagh, a Committee for Drafting of National Water Framework Law. The enactment of the NWFL at the Centre and its adoption by the states will require their willingness and the support of parties of various political hues. Hence, the Government of India should make every effort to convince its allies as well as the opposition parties, at both the Centre and in the states, and evolve a national consensus on the subject. The NWFL can provide an effective basis for the proper management of water resources as envisaged by the national and state water policies over the years. At the same time, the states should be encouraged to formulate and implement sound strategies and action plans within the framework of the national water framework law and the national water policies to achieve the desired outcomes.

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Subjective Well-being in High Assertive Women Managers

Abstract

The present study examines whether high assertive women managers have better subjective well-being (SWB). Sixty women managers from the IT, ITES and manufacturing sectors were recruited for the study. Rathus Assertiveness Schedule (RAS) and Subjective Well-Being Inventory were (SUBI) administered. The sample was split into low and high assertiveness groups, and they were compared on each of the 11 dimensions of SWB. ANOVA revealed that the high assertiveness group scored significantly higher on the dimensions of general well-being positive, expectation-achievement congruence, confidence in coping, and family group support. Scores on deficiency in social contacts and general well-being negative were higher in the low assertiveness group. The implications of the study are highlighted.

Introduction

Assertiveness has received abundant attention in the management literature. It has been extensively used in business, education and leadership training. Assertiveness is characterized by confidence in interpersonal relationships, coupled with the capacity for spontaneous emotional expression (Osborn and Harris, 1975). Highly assertive individuals are more likely to engage in the following behaviours: acting in their own best interests, standing up for themselves, exercising personal rights, and expressing feelings honestly and comfortably (Alberti and Emmons, 1990). Assertive individuals are also cognizant and respectful of others' rights and power. Less assertive individuals exhibit more self-denial, allowing others to make choices for them, thereby seldom achieving their own goals.

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Assertiveness has been a very cardinal construct in the areas of conflict management (Bishop, 1997); leadership development (Bower and Bower, 1991; Faber, 2002); studying marital relations in cross-cultural settings (Farver, Narang and Bhadha, 2002; Hofstede, 1998; Rahman and Rao, 2004; Twenge, 2001); recovering mental health (Braiker, 2001; Enns, 1992); overcoming discrimination and prejudice, including violence and exploitation in gender relationships (Alberti and Emmons, 2001; Gallois and Wilson, 1993; Goodman and Fallon, 1998; Neff and Harter, 2002; Rudrappa, 2004); and personality characteristics needed for functioning in certain roles in society (Cooley and Nowicki, 1984; Costa, Terracciano and McCrae, 2001; Moskosky, 1984).

In the last few decades, the increasing interest in the well-being of the individual has been reflected in the substantial increase in research activity in the area (Ellison and Levin, 1998). Subjective well-being (SWB) represents people's evaluation of their lives, and includes happiness, pleasant emotions, life satisfaction, and a relative absence of unpleasant moods and emotions (Diener and Biswas-Diener, 2000). In Western nations such as the USA, high levels of positive emotions appear to be related to many good outcomes—for instance, better health, less divorce, less job turnover, greater work productivity and more responsible behaviour at work. It is not known whether these findings will generalize to other less Westernized nations such as India. It will be a challenge for practicing psychologists (clinicians, personnel and organizational psychologists, and so forth) to help people and organizations to move in positive directions and live happier lives. An important element in developing positive psychology in India is to accumulate indigenous research findings (*ibid.*).

It is widely acknowledged that subjective well-being (SWB) comprises the closely related components of affect and cognition (Shmotkin, 1998). Although there has been some argument against the bipolarity of affect, the most common view is that the affect component comprises the bipolar dimensions of negative and positive emotionality (Russell and Carroll, 1999; Huelsman, Nemanick and Munz, 1998). The theory of positive and negative affectivity initially proposed by Watson and Tellegen (1985) posits that individuals are inherently endowed with a tendency toward experiencing either positive or negative emotions that, in turn, influence feelings of satisfaction. The proposal that affect influences feelings of satisfaction was demonstrated in a study by Fogerty et al. (1999), who found that orientations toward either positive affectivity or negative affectivity were able to predict levels of job satisfaction by way of job-related stress, strain and coping that were perceived and experienced by the participants. For example, participants with a high orientation towards

positive affect were less likely to report experiencing stressors and were more likely to be positively associated with the use of cognitive coping strategies than negative affect-oriented participants, resulting in higher levels of job satisfaction.

Literature relates assertiveness to variables like locus of control, self-confidence, self-concept and self-esteem. It is argued that if one is high on assertiveness, one tends to have high self-confidence, positive self-esteem and an internal locus of control. The relationship between assertiveness and subjective well-being (SWB) is no less complex theoretically, and less understood. This has received little attention in the research literature. It is particularly important for those who are facing prejudice, discrimination and such other adverse situations at the workplace to have high assertive skills to enable them to manage effectively. As opposed to those who lack assertive skills, high assertive managers enjoy a better SWB. Hence, there is a need to examine the distinctive dimensions of low and high assertiveness with reference to subjective well-being.

Aim

The aim of the present study is to examine whether high assertive women managers have better subjective well-being.

Method

Sample

Sixty women managers working in the information technology (IT), information technology-enabled services (ITES), and manufacturing sectors, in the age range of 23–56 years (mean age=29.4; SD=6.87), were recruited for the study. They were all English-speaking and had graduate or postgraduate professional qualifications (BE, MBA, MTech). They signed an informed consent statement, which specified the study's general purpose and the procedures involved.

Instruments

(i) The Rathus Assertiveness Schedule (RAS), a 30-item self-report inventory developed by Rathus (1973), was used to measure assertiveness. It covers situations that may be handled by either inhibiting feelings or by responding assertively. The responses were scored on a 6-point scale, with some items keyed in the reverse direction. The total score was the sum of the individual item scores. A test-retest reliability coefficient of 0.78 over a two-month interval

was reported. Several authors (Appelbaum, Tuma and Johnson, 1975; Hollandsworth, Galassi and Gay, 1977; Rathus and Nevid, 1977) have reported significant correlations between RAS and behavioural performance.

(ii) The Subjective Well-Being (SWB) Inventory developed by Sell and Nagpal (1992) was used to measure an individual's overall feeling about life—feelings of well-being or ill-being as experienced by an individual, in various day-to-day life concerns. This instrument has 40 questions and has been found to have high inter-rater and test-retest reliability. It has also proved its validity through many experiments (*ibid.*). The inventory gauges 11 factorial dimensions: general well-being positive affect, expectation-achievement congruence, confidence in coping, transcendence, family group support, social support, primary group concern, inadequate mental mastery, perceived ill-health, deficiency in social contacts, and general well-being negative affect.

Statistical Analysis

The sample was split into low (n=29) and high (n=31) assertiveness groups on a median split (median=12) of assertiveness scores; these scores ranged from -33 to +71. ANOVA and discriminant function analysis (DFA) of the two groups were performed in addition to a univariate comparison.

Results

Low and high assertiveness groups were compared on each of the 11 dimensions of SWB.

ANOVA reveals that the high assertiveness group scored significantly higher on the dimensions of general well-being positive, expectation-achievement congruence, confidence in coping, and family group support. Scores on deficiency in social contacts and general well-being negative were higher in the low assertiveness group.

The results of the discriminant function analysis are shown in Table 2.

Table 1: Differences between Low and High Assertive Groups on Dimensions of SWB

| <i>Dimensions of SWB</i> | <i>Assertiveness</i> | | | | <i>Wilks' Lambda</i> | <i>F (df)</i> | <i>Sig. (1,58)</i> |
|------------------------------------|----------------------|-----------|--------------------|-----------|----------------------|---------------|--------------------|
| | <i>Low (n=29)</i> | | <i>High (n=31)</i> | | | | |
| | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | | | |
| General well-being positive | 6.28 | 1.36 | 7.09 | 1.54 | .924 | 4.78 | .033 |
| Expectation-achievement congruence | 6.13 | 1.27 | 6.93 | 1.29 | .909 | 5.79 | .019 |
| Confidence in coping | 6.68 | 1.25 | 7.87 | 1.26 | .814 | 13.22 | .001 |
| Transcendence | 6.86 | 1.21 | 7.03 | 1.40 | .996 | .25 | .619 |
| Family group support | 7.68 | 1.28 | 8.35 | .79 | .908 | 5.88 | .018 |
| Social support | 7.20 | 1.67 | 7.29 | 1.69 | .999 | .04 | .849 |
| Primary group concern | 2.68 | 2.87 | 2.06 | 2.63 | .987 | .77 | .383 |
| Inadequate mental mastery | 14.48 | 3.04 | 13.22 | 3.39 | .962 | 2.27 | .137 |
| Perceived ill-health | 9.75 | 2.23 | 8.77 | 2.41 | .956 | 2.67 | .107 |
| Deficiency in social contacts | 5.51 | 1.92 | 4.74 | 1.48 | .949 | 3.09 | .084 |
| General well-being negative | 4.65 | 1.17 | 3.84 | .93 | .866 | 8.95 | .004 |

Table 2. Goodness of Fit of Canonical Discriminant Function

| <i>Function</i> | <i>Eigenvalue</i> | <i>Percentage of Variance</i> | <i>Canonical Correlation</i> | <i>Wilks' Lambda</i> | <i>Chi-Square</i> | <i>df</i> | <i>Sig.</i> |
|-----------------|-------------------|-------------------------------|------------------------------|----------------------|-------------------|-----------|-------------|
| 1 | .451 | 100 | .56 | .69 | 19.53 | 11 | .052 |

In view of eigenvalue, Wilks' lambda, canonical correlation, and goodness of fit for Chi-Square being significant; it was accepted that some dimensions of SWB significantly discriminated between the high and low assertiveness groups.

Further analysis established the validity of the classification of individuals on the basis of low or high assertiveness. It was found that 78.3 per cent of the original cases and 60 per cent of the cross-validated grouped cases was correctly classified into their respective groups.

Discussion

Research in the area of assertiveness and subjective well-being is in a nascent stage. The present study is the first of its kind in which the authors have examined the association between SWB and assertiveness in women managers in the

Indian context. Although the sample size does not allow for strong inferences and conclusions, a few findings are particularly noteworthy. First, it is found that high assertive women managers have high general well-being positive, expectation-achievement congruence, confidence in coping, and family group support. Second, women managers who are low on assertiveness are deficient in social contacts and are general well-being negative. While categorical conclusions cannot be drawn, it can be safely assumed that general well-being positive, expectation-achievement congruence, confidence in coping and family group support are associated with high assertiveness. Third, discriminant loadings on the correlates of well-being—such as confidence in coping (.711), general well-being negative (-.585), family group support (.475), expectation-achievement congruence (.471), general well-being positive (.428), deficiency in social contacts (-.344), perceived ill-health (-.320)—demonstrate significant differences between the low and high assertiveness groups. Although more research is warranted, the sample studied shows that correlated well-being is associated with low/high assertiveness.

These findings have several practical implications. Learning organizations and human resources practitioners may consider including dimensions of SWB, such as general well-being positive, expectation-achievement congruence, confidence in coping, and family group support, in their module on assertiveness training for women. Similarly, practitioners must make an attempt to alleviate deficiencies in social contacts and general well-being negative. Behavioural scientists and training managers who offer assertiveness training programmes need to conceptualize and contextualize cognitive and behaviourally oriented assertiveness training programmes for women groups rather than merely give information or impart crude methods of only skill acquisition in the absence of a knowledge base.

A huge increase in the women workforce, particularly at the managerial level, has been witnessed in recent decades across the globe and in India, in particular. Women managers are required to interact and co-ordinate with their co-workers and carry out their job responsibilities during night shifts as well. This is the very reason why the present study consciously chose to look at women managers, which is a significant contribution to the existing literature.

Women in general lack assertiveness because they have traditionally been socialized into passive and non-assertive roles, especially in India. Much of the published literature on assertiveness is aimed specifically at women. Indeed, several popular books have claimed that women are in need of assertiveness

training. According to Crawford (1995), several researchers draw heavily on stereotypes of female passivity. Traits related to assertiveness, such as dominance, aggression, autonomy, achievement and endurance, are ascribed to men; and traits related to non-assertiveness, such as deference, nurturance and abasement, to women (Williams and Best, 1989). Hofstede (2001) notes that assertiveness seems to be a trait or behaviour that people associate more with men than women. The present study partially supports the findings of Crawford (1995) and those of Hofstede (2001) completely.

The limitations of the present study are its small sample size and that it is biased towards women managers. Hence, the conclusions may not be applicable to male managers. If several other behavioural measures had been used, a comprehensive picture would have emerged. This study sheds light on the following future research opportunities.

One, assertion is not an enduring personality trait. It is a behavioural repertoire that is largely, if not completely, learnt and therefore changeable. Since SWB is documented to be related to personality traits, especially mood stability, it is important to have relevant personality measures in future studies to hopefully identify if there is any common basis for both assertiveness and SWB. If it is found that personality traits are the common determining factor, then the interventions have to be addressed to strengthen these traits for more effective, long-term sustenance of both assertiveness and SWB.

Two, on the basis of the present data, it is not possible to infer a cause-effect relationship. Do managers improve in their SWB as a consequence of assertiveness training? It would be interesting to examine this issue in a prospective design on low assertiveness subjects undergoing assertiveness training.

Three, a study similar to the present one may be conducted using male managers to determine the generalisability of the findings. In spite of its limitations, the present study provides the groundwork for proactively addressing the need for conducting assertiveness training programmes for women in organizations. As Diener and Biswas-Diener (2000) rightly put it, organizational psychologists have a challenge before them in terms of helping people and organizations to move in positive directions and live happier lives.

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VIGHNESWARA SWAMY*

Institutional Reforms in Finance to the Poor

Abstract

This paper attempts to analyze the significance and merits of introducing reforms in institutional finance to the poor in the context of the Indian economy and offers some practicable suggestions from the functional perspective. India has been criticized for its lopsided pattern of development. One of the root causes for this is the country's ineffective financial architecture, which has not been successful in addressing the constraints on access to economic resources by the poor and the needy even 65 years after Independence. India's rural financial architecture (RFA) is subject to systemic policy issues and pervasive institutional weaknesses. Lack of autonomy, weak governance and poor accountability have affected the sustainability of rural financial institutions (RFI) and constrained their outreach. Access to finance for the poor is particularly important in the context of the financial exclusion of nearly three billion people from formal financial services across the world. With only 34 per cent of its population engaged in formal banking, India has 135 million financially excluded households, the second highest number after China. In addition, this paper offers specific suggestions on institutional reforms and argues that structural reforms, coupled with the new vigour in the governance of RFIs, will aid in heralding a new growth momentum in the hinterland of the Indian economy, where more than 60 per cent of the population resides, and in integrating the more developed urban India with the relatively underdeveloped rural Bharat.

Introduction

According to Justice Brandeis (1914) of the United States Supreme Court, "Sunlight is the best disinfectant (p. 92)." The phrase was later popularized by President Franklin Roosevelt while undertaking extensive financial sector reforms in the 1930s. He had argued that making public the activities and status of a financial or industrial firm has a number of positive consequences. This underlines the importance of transparency in governance and the need for institutional reforms.

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A well-developed financial sector performs the following important functions: (a) promotes overall savings in the economy by providing alternative instruments; (b) allocates resources efficiently among the sectors; and (c) provides an effective channel for the transmission of policy impulses. It is well established that a typically competitive financial sector has the following characteristics:

- There are a large number of buyers and sellers of financial products.
- The price of the products is determined by the market forces of demand and supply.
- There is a secondary market for the instruments.
- The turnover of the instruments in both the primary and secondary markets is fairly large.
- Agencies involved in the process of intermediation between buyers and sellers should provide intermediation services at a minimum spread.

India is one of the five countries (along with China, Indonesia, Brazil and Russia) categorized as big emerging market economies (EMEs) by the World Bank as they have made the critical transition from developing country to emerging market. The World Bank has predicted that these big five EMEs' share of world output will have more than doubled from 7.8 per cent in 1992 to 16.1 per cent by 2020 (World Bank, 1997: 23).

This paper attempts to examine the need for, and the role and effectiveness of, institutional reforms in development finance in making services work for the poor in the context of the Indian economy. Section 2 discusses the theoretical considerations in the context of development economics in support of institutional reforms, drawn from the new institutional economics. Section 3 examines the present status of the rural financial sector in India, with a focus on financing for the rural and agricultural sector; particularly, the structure and performance of scheduled commercial banks (SCBs), regional rural banks (RRBs), rural credit co-operatives (RCCs) and micro-finance institutions (MFIs). Section 4 discusses the need for reforming the Indian rural financial architecture and suggests how this can be taken forward. Section 5 provides the summary and conclusion of the paper.

Institutions and Economic Development

New institutional economics (NIE), which endeavours to integrate a theory of institutions into economics, argues that institutions matter, the relationship

between institutional structure and economic behaviour requires attention, and the determinants of institutions can be analyzed with the aid of economic theory. Led by renowned economists such as Ronald Coase, who explicitly introduced transaction costs into economic analysis (Coase, 1937), Oliver Williamson (1975) coined the term “transaction costs” in economic analysis. In neo-classical economics, the institutional framework is not assumed as given but is explicitly treated as an object of research, and the implications of any given institutional arrangements for economic behaviour are taken into account (Richter, 2005).

Institutions and Economic Performance

Only efficient institutions are growth promoting as they encourage individuals to engage in productive activities by rendering appropriate incentives and establishing a stable structure of human interactions that reduce uncertainty. It is opined that there can be two types of efficiency: (i) substantive efficiency (i.e., a rule promotes allocative efficiency), and (ii) procedural efficiency (i.e., a rule is designed to reduce the cost or increase the accuracy of using the system of rules). However, Chu (2003: 7) argues that affluence in developed countries is a cumulative result of “*efficient institutions*”, while poverty in poor countries is a result of “*inefficient institutions*.”

Successful institutions are believed to be those that are contract enforcing as well as coercion constraining; that is, they reward production and exchange rather than mere expropriation and redistribution. However, in developing countries, institutional frameworks are found to overwhelmingly favour activities that promote redistributive rather than productive activity, that create monopolies rather than competitive conditions, and that restrict opportunities rather than expand them (North, 1990). Accordingly, NIE suggests that countries need two distinct and (not necessarily) complementary sets of institutions: (i) those that encourage exchange by lowering the transaction costs and promoting trust; and (ii) those that induce the state to protect rather than expropriate private property, to cope with the challenge of development.

Institutional Development/Governance Reform

Of late, in the last two decades, the issue of institutional development or “governance reform” has become more prominent (Chang, 2006). Developing countries are poor because their current institutions provide a weak basis in terms of incentives that promote growth. This argument raises the question of not only what type of institutions they should design, but also, more importantly, of how they could develop such institutions.

There exist complex interactions between the different typologies of institutions (i.e., the interaction between formal and informal institutions, between different levels of institutions, and between economic and political institutions), which have different horizons for change and are therefore subject to very different evolutionary dynamics. Institutional reforms typically deal with formal institutions, which can be changed immediately. However, informal institutions that serve to legitimize any set of formal rules, such as beliefs and norms, will change only gradually. As such, if a country opts to adopt the formal rules of another country, it will have very different performance characteristics compared to the original country if the informal norms and the enforcement characteristics are different. This implies that applying successful Western market economies' formal political and economic rules to developing economies is not a sufficient condition for generating good economic performance (North, 1992). Another reason why underdevelopment cannot be overcome by simply importing institutions that were successful in other countries is institutional path dependency. That is, those who make policy and design institutions have a stake in the framework they have created, and will therefore resist changes that may rob them of power or property (Shirley, 2008).

However, the dynamics of institutional change, especially the interplay between economic and political markets, is a complex aspect that needs to be understood before embarking upon institutional reforms. Since institutions are by nature deeply embedded in society, and if growth truly necessitates major institutional transformation in such areas as rule of law, property rights protection and governance, among others, then the prospects for growth would seem to be dismal in poor countries.

In explaining why “good” economic policies based on “correct” economic theories have so consistently failed, orthodox economists now invoke institutions. That is, the countries that implemented these policies did not have the right institutions; which is why the policies did not work; and not because they were wrong to begin with. As a result, the original Washington Consensus of “stabilize, privatize, and liberalize” has now been augmented by a long list of so-called “second generation” reforms that are heavily institutional in nature (Rodrik, 2006). The World Bank and the IMF have been emphasizing the role of institutions in economic development.

Financial Development and Poverty Reduction

A good strand of economic literature has established that beyond long-run growth, finance can also lessen the gap between the rich and the poor and the

degree to which that gap persists across generations. Furthermore, it has potentially profound implications for poverty reduction and income distribution by affecting the allocation of capital, as finance can alter both the rate of economic growth and the demand for labour. There is an emerging body of empirical research suggesting that in practice, improvements in financial contracts, markets and intermediaries actually do tend to expand economic opportunities and reduce persistent income inequality (World Bank, 2012).

Role of the State in Financial Infrastructure

Financial infrastructure consists of credit reporting institutions (credit registries and bureaus), payment and settlement systems, and the legal framework that governs financial transactions. A well-developed financial infrastructure provides a sound platform for more efficient credit markets by reducing *information asymmetries* and *legal uncertainties* that may hamper the supply of new credit. This enhances the *depth* of credit market transactions and broadens *access to finance*. The global financial crisis has triggered the attention of researchers as well as policy-makers to renew their interest in the role of financial infrastructure in supporting *systemic stability*. Financial infrastructure promotes financial stability in several ways: (i) transparent credit reporting supports the internal risk management of financial institutions and provides the financial regulators with timely information on the risk profile of systemically important financial institutions; and (ii) well-designed payment and security settlement systems enhance financial stability by reducing counter-party risk in interbank markets, and complex securities and derivatives transactions.

The role of the state in supporting financial infrastructure has diverged over time and across countries. The state's endeavour should be to bring about improvements in how state agencies and central banks operate, regulate and oversee the financial infrastructure. Indeed, the focus of the state's role needs to be on the following areas: (a) in developing and using credit information systems; (b) in improving payment and securities settlement systems; (c) in broadening and strengthening retail payment systems; and (d) in providing a stable legal framework that governs financial transactions.

Credit Information as a Public Good

The open and transparent exchange of credit information has several characteristics of a public good that benefits both borrowers and lenders. How does a well-functioning credit-reporting infrastructure perform the role of a public good? First, credit reporting benefits banks and non-bank lenders by

mitigating the problems of moral hazard and adverse selection. This, in turn, reduces the cost of financial intermediation and allows banks to price, target and monitor loans more effectively. Second, credit reporting supports financial stability by making it easier for financial regulators to assess and monitor systemic risks. Although traditional approaches to financial oversight have focused on risks at the level of individual financial institutions, a key advantage of comprehensive credit information systems is that they allow regulators to monitor the interconnected risks of systemically important financial institutions. Third, open and transparent credit reporting benefits customers by promoting credit market competition. The exchange of credit information enables customers to build reputational collateral and to access credit outside established lending relationships. This reduces the ability of established lenders to exploit their privileged knowledge of clients' credit histories.

The state, therefore, needs to play an important role in promoting the exchange of credit information and in protecting open and equal access to the market for credit information. Some of the examples across the developing block of the globe support this argument: (i) Argentina uses credit registry information for prudential supervision of its financial institutions. (ii) Egypt has removed the regulatory barriers to the development of private credit bureau. (iii) Mexico employs state interventions to prevent market fragmentation and closed user groups. (iv) Morocco offers public support for the development of a private credit bureau.

Transparent credit information is also a prerequisite for sound risk management and financial stability. However, due to the prevalence of monopoly rents in the market for credit information, information sharing among private lenders may not arise naturally. This creates an important rationale for the involvement of the state.

Overview of the Indian Financial Sector

As the Indian economy is a bank-dominated financial system, with more than 75 per cent of its financial assets held by scheduled commercial banks (SCBs), it is desirable to strengthen and stabilize the banking system. Though India indulges in self-praise about its stable banking system, its position in international rankings is not satisfactory, as other banking systems have made significant strides in their structure as well as their performance (see Table 1). India is way behind many of its peers in terms of ATMs per 100,000 adults (8.90) during 2011, compared to Indonesia (16.47), Malaysia (56.43), South

Africa (60.01), and Brazil (119.63). The figures are way ahead for advanced banking systems like Australia (166.92), UK (122.77) and USA (173.43). In terms of outstanding loans from commercial banks as a share of GDP during 2011, India is again a laggard (52 per cent) compared to China (109 per cent), Malaysia (104 per cent), South Africa (74 per cent) and Russia (64 per cent).

Table 1: Structure and Performance of Banking Systems across the Globe, 2011

| <i>Sl. No.</i> | <i>Country</i> | <i>Commercial Bank Branches Per 100,000 Adults</i> | <i>ATMs Per 100,000 Adults</i> | <i>Outstanding Deposits with Commercial Banks (% of GDP)</i> | <i>Outstanding Loans from Commercial Banks (% of GDP)</i> | <i>Return on Assets (RoA) (%)</i> |
|----------------|--------------------|--|--------------------------------|--|---|-----------------------------------|
| 1. | Australia | 29.61 | 166.92 | 107.10 | 128.75 | 0.1 |
| 2. | Brazil | 46.15 | 119.63 | 53.26 | 40.28 | 1.5 |
| 3. | China | – | – | 159.25 | 108.74 | 1.3 |
| 4. | France | 41.58 | 109.80 | 34.77 | 42.85 | NA |
| 5. | Germany | 15.70 | 122.29 | 27.63 | 24.20 | NA |
| 6. | India | 10.64 | 8.90 | 68.43 | 51.75 | 0.9 |
| 7. | Indonesia | 8.52 | 16.47 | 43.36 | 34.25 | 1.3 |
| 8. | Malaysia | 10.49 | 56.43 | 130.82 | 104.23 | 1.5 |
| 9. | Russian Federation | 37.09 | 152.94 | 45.03 | 63.86 | 2.5 |
| 10. | South Africa | 10.71 | 60.01 | 45.86 | 74.45 | 1.5 |
| 11. | UK | 24.87 | 122.77 | 422.78 | 459.98 | 0.1 |
| 12. | USA | 35.43 | 173.43 | 57.78 | 46.83 | 0.3 |

Source: Compiled from the 2012 *Financial Access Survey* data of the International Monetary Fund. Available online at: <http://fas.imf.org/>

When compared with OECD benchmarks, Indian banking is way behind, particularly on the following parameters: (i) branches per 1,000 sq km, (ii) ATMs per 0.1 million, and (iii) number of ATMs per 1,000 sq km (see Table 2).

Table 2: **Key Banking Parameters for India, 2004–11**

| <i>Indicator</i> | <i>2004</i> | <i>2005</i> | <i>2006</i> | <i>2007</i> | <i>2008</i> | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>Benchmark OECD</i> |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------|
| Branches per 0.1 million | 8.99 | 8.96 | 8.93 | 9.04 | 9.35 | 9.63 | 10.05 | 10.64 | 10–69 |
| ATMs per 0.1 million | – | – | | 3.38 | 4.26 | 5.24 | 7.18 | 8.90 | 47–167 |
| Deposit accounts per 1,000 people | 607.61 | 607.30 | 618.04 | 648.07 | 711.42 | 794.42 | 864.52 | 953.06 | 976–1671 |
| Loan accounts per 1,000 people | 88.24 | 100.37 | 100.85 | 124.14 | 130.89 | 132.01 | 139.58 | 142.02 | 248–513 |
| Branches per 1,000 sq km | 22.75 | 23.17 | 23.58 | 24.37 | 25.69 | 27.01 | 28.73 | 30.43 | 159 |
| ATMs per 1,000 sq km | – | – | – | 9.11 | 11.70 | 14.68 | 20.51 | 25.43 | 437 |

Source: Compiled from the *2012 Financial Access Survey* data of the International Monetary Fund. Available online at: <http://fas.imf.org/>.

Note: The benchmark indicator ranges are for select high-income OECD countries, such as Australia, Canada, France, Germany, Italy, Japan, the Republic of Korea, New Zealand and the United States.

The importance of access to finance for the poor arises from the problem of financial exclusion of nearly three billion people from the formal financial services across the world (IMF, 2012). With only 34 per cent of the population engaged in formal banking, India has 135 million financially excluded households, the second highest number after China. Further, the real rate of financial inclusion in India is also very low; and about 40 per cent of the bank account holders use their accounts not even once a month. Indian banking data reveals that credit exclusion is severe in 139 districts of the country. In these districts, only 10 or less out of 100 persons have access to credit. Apart from the fact that the exclusion is large, there is also wide variation across regions, social groups and asset holdings. The poorer the group, the greater is the

exclusion (Rangarajan, 2008: 36). The results of the All-India Debt and Investment Survey of 2002 also indicate that the share of non-institutional sources in the total credit of cultivator households increased from 30.6 per cent in 1991 to 38.9 per cent in 2002 (RBI, 2012: 7). According to the NSS 59th Round (January-December 2003), 51.4 per cent of farmer households (459 lakh out of 893 lakh) are financially excluded from both formal/informal sources. Of the total farmer households, only 27 per cent access formal sources of credit; one-third of this group also borrow from non-formal sources. Overall, 73 per cent of farmer households have no access to formal sources of credit (NSSO, 2005: 24).

In spite of the directed credit policy of the government, India continues suffer from inadequate flow of finance to the rural and agricultural sectors, with the overall credit-to-deposit ratio (CDR) still hovering around 70 per cent over the last decade (based on the statistics available in the RBI Database on the Indian Economy; available online at: <http://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications>). Food credit, which is often directed towards the rural and agricultural sectors, has been experiencing unsatisfactory and unsteady growth rates (see Table 3).

Rural Finance by SCBs

Credit flow to agriculture, which is the main occupation of rural India, has been unsteady inspite of the renewed focus frequently emphasized by policy-makers and experts on the Indian economy. Though institutional lenders continue to cite their own concerns and constraints—like vagaries of rainfall, chronic defaults, inadequate collaterals, problems in the marketing of agri-produce, exploitation by middlemen and others—inadequate flow of credit to agriculture (see Table 4) still remains a huge concern for economic development in India. There is a greater need to reform the flow of institutional finance to agriculture and ensure a steady and increasing flow of credit to this vital sector to achieve inclusive growth.

Table 3: Select Macro-economic Aggregates of Scheduled Commercial Banks in India, 1991–2011

(in Rs. crore)

| Year | Aggregate Deposits | Food Credit | Growth Rate of | | Bank Credit | Credit as Percentage of Aggregate Deposits | Share of GDP (Per Cent) | |
|---------|--------------------|-------------|------------------------|-----------------|-------------|--|-------------------------|----------------------|
| | | | Food Credit (Per Cent) | Non-Food Credit | | | Cre- dit | Aggre- gate Deposits |
| 2010–11 | 52,07,969 | 64,283 | 0.33 | 38,77,800 | 39,42,083 | 75.7 | 50.1 | 66.1 |
| 2009–10 | 44,92,826 | 48,489 | 0.05 | 31,96,299 | 32,44,788 | 72.2 | 49.5 | 68.6 |
| 2008–09 | 38,34,110 | 46,211 | 0.04 | 27,29,338 | 27,75,549 | 72.4 | 49.7 | 68.7 |
| 2007–08 | 31,96,939 | 44,399 | -0.05 | 23,17,515 | 23,61,914 | 73.9 | 47.4 | 64.1 |
| 2006–07 | 26,11,933 | 46,521 | 0.14 | 18,84,669 | 19,31,189 | 73.9 | 45.0 | 60.8 |
| 2005–06 | 21,09,049 | 40,691 | -0.01 | 14,66,386 | 15,07,077 | 71.5 | 40.8 | 57.1 |
| 2004–05 | 17,00,198 | 41,121 | 0.14 | 10,59,308 | 11,00,428 | 64.7 | 33.9 | 52.4 |
| 2003–04 | 15,04,416 | 35,961 | -0.27 | 8,04,824 | 8,40,785 | 55.9 | 30.5 | 54.6 |
| 2002–03 | 12,80,853 | 49,479 | -0.08 | 6,79,736 | 7,29,215 | 56.9 | 29.7 | 52.2 |
| 2001–02 | 11,03,360 | 53,978 | 0.35 | 5,35,745 | 5,89,723 | 53.4 | 25.9 | 48.4 |
| 2000–01 | 9,62,618 | 39,991 | 0.56 | 4,71,443 | 5,11,434 | 53.1 | 24.3 | 45.8 |
| 1999–00 | 8,13,345 | 25,691 | 0.53 | 4,10,267 | 4,35,958 | 53.6 | 22.3 | 41.7 |
| 1998–99 | 7,14,025 | 16,816 | 0.35 | 3,52,021 | 3,68,837 | 51.7 | 21.1 | 40.8 |
| 1997–98 | 5,98,485 | 12,485 | 0.64 | 3,11,594 | 3,24,079 | 54.1 | 21.2 | 39.2 |
| 1996–97 | 5,05,599 | 7,597 | -0.22 | 2,70,805 | 2,78,401 | 55.1 | 20.2 | 36.7 |
| 1995–96 | 4,33,819 | 9,791 | -0.20 | 2,44,224 | 2,54,015 | 58.6 | 21.3 | 36.4 |
| 1994–95 | 3,86,859 | 12,275 | 0.13 | 1,99,286 | 2,11,560 | 54.7 | 20.8 | 38.1 |
| 1993–94 | 3,15,132 | 10,907 | 0.62 | 1,53,510 | 1,64,418 | 52.2 | 19.0 | 36.4 |
| 1992–93 | 2,68,572 | 6,743 | 0.44 | 1,45,239 | 1,51,982 | 56.6 | 20.2 | 35.7 |
| 1991–92 | 2,30,758 | 4,670 | – | 1,20,922 | 1,25,592 | 54.4 | 19.2 | 35.2 |

Source: Compiled from the RBI Database on Indian Economy. Available online at: <http://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications>.

Table 4: Flow of Credit to Agriculture from SCBs

(in Rs. billion)

| <i>Year</i> | <i>Direct</i> | <i>Indirect</i> | <i>Total</i> | <i>Direct Growth</i> | <i>Indirect Growth</i> | <i>Total Growth</i> |
|-------------|---------------|-----------------|--------------|----------------------|------------------------|---------------------|
| 1992 | 173.97 | 14.33 | 188.30 | 0.08 | 0.21 | 0.09 |
| 1993 | 189.49 | 15.52 | 205.01 | 0.09 | 0.08 | 0.09 |
| 1994 | 194.65 | 20.99 | 215.64 | 0.03 | 0.35 | 0.05 |
| 1995 | 213.34 | 28.65 | 241.99 | 0.10 | 0.36 | 0.12 |
| 1996 | 238.14 | 36.74 | 274.88 | 0.12 | 0.28 | 0.14 |
| 1997 | 274.48 | 49.86 | 324.34 | 0.15 | 0.36 | 0.18 |
| 1998 | 294.43 | 63.35 | 357.78 | 0.07 | 0.27 | 0.10 |
| 1999 | 330.94 | 81.17 | 412.11 | 0.12 | 0.28 | 0.15 |
| 2000 | 364.66 | 129.68 | 494.34 | 0.10 | 0.60 | 0.20 |
| 2001 | 404.85 | 188.25 | 593.10 | 0.11 | 0.45 | 0.20 |
| 2002 | 465.81 | 182.38 | 648.19 | 0.15 | -0.03 | 0.09 |
| 2003 | 568.57 | 236.90 | 805.47 | 0.22 | 0.30 | 0.24 |
| 2004 | 707.81 | 285.20 | 993.01 | 0.24 | 0.20 | 0.23 |
| 2005 | 955.65 | 360.71 | 1,316.30 | 0.35 | 0.26 | 0.33 |
| 2006 | 1,347.98 | 571.75 | 1,919.70 | 0.41 | 0.59 | 0.46 |
| 2007 | 1,721.28 | 825.64 | 2,546.90 | 0.28 | 0.44 | 0.33 |
| 2008 | 2,146.44 | 934.43 | 3,080.80 | 0.25 | 0.13 | 0.21 |
| 2009 | 2,648.93 | 1,107.02 | 3,755.90 | 0.23 | 0.18 | 0.22 |
| 2010 | 3,177.67 | 1,455.54 | 4,633.20 | 0.20 | 0.31 | 0.23 |
| 2011 | 3,602.53 | 1,469.23 | 5,071.70 | 0.13 | 0.01 | 0.09 |

Source: Compiled from the RBI Database on Indian Economy. Available online at: <http://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications>.

Further, region-wise exclusion is most acute in the central, eastern and North-Eastern regions of the country. A huge 64 per cent of all financially excluded farmer households (from formal sources) in the country (415.61 lakh households out of 649.54 lakh households) are concentrated in these regions. Overall indebtedness to formal sources of finance alone is only 19.66 per cent in these three regions (4.09 per cent for the North-Eastern region, 18.74 per cent for the eastern region and 22.41 per cent for the central region) (Rangarajan, 2008: 36). The un-banked population is higher in the North-Eastern and eastern regions (Thorat, 2007). Exclusion among the occupational groups is as follows: marginal farmer households constitute 66 per cent of the total farm households.

Only 45 per cent of these households are indebted to either formal or non-formal sources of finance (small farmers: 51 per cent; medium farmers: 65.1 per cent; and large farmers: 66.4 per cent). About 20 per cent of indebted marginal farmer households have access to formal sources of credit (medium farmers: 57.6 per cent and large farmers: around 65 per cent). Among non-cultivator households, nearly 80 per cent do not access credit from any source (Rangarajan, 2008: 36). The financially excluded sections largely comprise marginal farmers, landless labourers, oral lessees, self-employed and unorganized sector enterprises, urban slum dwellers, migrants, ethnic minorities and socially excluded groups, senior citizens, and more importantly women. Thus, financial exclusion is a serious concern among low-income households, mainly located in the rural areas.

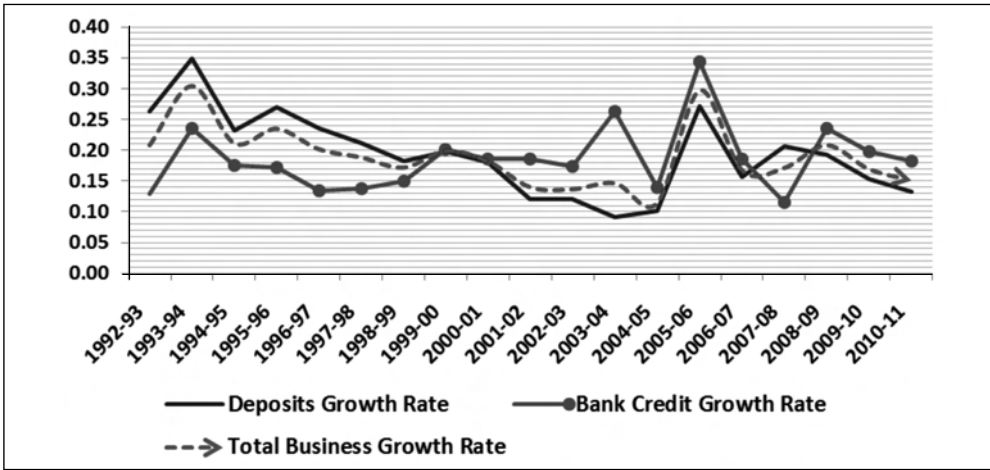
Rural Finance by RRBs

Regional rural banks, which were formed in 1975 as state-owned banks with a mandate to finance the rural sector and with a clear focus on agriculture and weaker sections, too have not met with any great success despite being in existence for four decades. Notwithstanding the support provided by the government, the business of RRBs continues to be meager—in the range of 15 to 20 per cent average growth (see Figure 1). Further, although RRB branch presence is fairly strong in rural areas, their performance in the provision of financial services is not commensurate. During 2010–11, RRBs' share in agricultural credit was 8 per cent, while that of commercial banks was about 50 per cent and of credit co-operative societies (CCS) 42 per cent (Planning Commission Report, 2011: 12). Such low market share, coupled with poor financial performance, raises serious questions about the RRB model. Studies have also pointed out that in an effort to meet the financial performance expectations of shareholders, RRBs appear to be drifting away from their mission to serve the underserved and unreached in a cost-effective way.

Rural Finance by Co-operatives

Credit co-operatives in India claim their formal origin since 1904 from the Co-operative Societies Act. They have quite a long history, which predates even that of their Chinese counterparts, which came into formal existence only in 1958. However, in terms of their loan outreach, Indian credit co-operatives have performed miserably compared to their Chinese counterparts. The annual growth rate of flow of credit from Indian co-operatives is in the negative range (see Table 5).

Figure 1: RRBs' Trend of Business



Source: Author's compilations from the RBI Database on Indian Economy.

Table 5: Flow of Credit by Co-operatives

(in Rs. billion)

| Year | PACSS | SCARDBs | PCARDBs | Total | Growth Rate |
|---------|--------|---------|---------|---------|-------------|
| 2010-11 | – | 101.28 | 56.26 | 157.54 | 0.85 |
| 2009-10 | 764.80 | 169.99 | 115.12 | 1049.91 | -0.15 |
| 2008-09 | 640.45 | 162.79 | 112.29 | 915.53 | 0.04 |
| 2007-08 | 656.66 | 183.27 | 118.00 | 957.93 | -0.07 |
| 2006-07 | 586.20 | 186.44 | 121.79 | 894.43 | -0.09 |
| 2005-06 | 517.79 | 176.78 | 128.70 | 823.27 | -0.04 |
| 2004-05 | 487.85 | 174.04 | 126.33 | 788.22 | -0.10 |
| 2003-04 | 438.73 | 162.21 | 113.36 | 714.30 | -0.04 |
| 2002-03 | 424.11 | 153.33 | 108.09 | 685.53 | -0.06 |
| 2001-02 | 407.79 | 141.10 | 100.05 | 648.94 | -0.17 |
| 2000-01 | 345.22 | 125.96 | 82.76 | 553.94 | -0.16 |
| 1999-00 | 285.46 | 115.98 | 75.74 | 477.18 | -0.48 |
| 1998-99 | 148.94 | 104.42 | 68.19 | 321.55 | -0.11 |
| 1997-98 | 139.94 | 91.82 | 58.40 | 290.16 | -0.10 |
| 1996-97 | 133.45 | 80.16 | 49.36 | 262.97 | -0.10 |
| 1995-96 | 129.80 | 68.57 | 40.98 | 239.35 | -0.57 |
| 1994-95 | 99.96 | 25.00 | 27.09 | 152.05 | -0.07 |
| 1993-94 | 93.99 | 20.91 | 27.01 | 141.91 | 0.03 |
| 1992-93 | 102.45 | 19.06 | 24.80 | 146.31 | -0.41 |
| 1991-92 | 81.77 | 0.30 | 21.43 | 103.50 | |

Source: Compiled from the RBI Database on Indian Economy. Available online at: <http://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications>.

The Indian credit co-operative sector is a three-tier structure, comprising primary agricultural credit societies (PACs); primary co-operative agricultural and rural development banks (PCARDBs); and state co-operative agricultural and rural development banks (SCARDBs). While the district central co-operative banks (DCCBs) fund the PACs, PCARDBs are funded by SCARDBs. Though, on an average, there is one PACs for every six villages, the growth rate of the overall credit extended by credit co-operatives is indeed in the negative range, which is a deeply disturbing factor. Table 6 presents a snapshot of the performance of PACs during the pre- and post-reform period. Even after being in existence for more than a century, co-operatives have not been successful in terms of either financial sustainability or outreach.

Table 6: Performance of PACs in the Pre- and Post-Reform Period

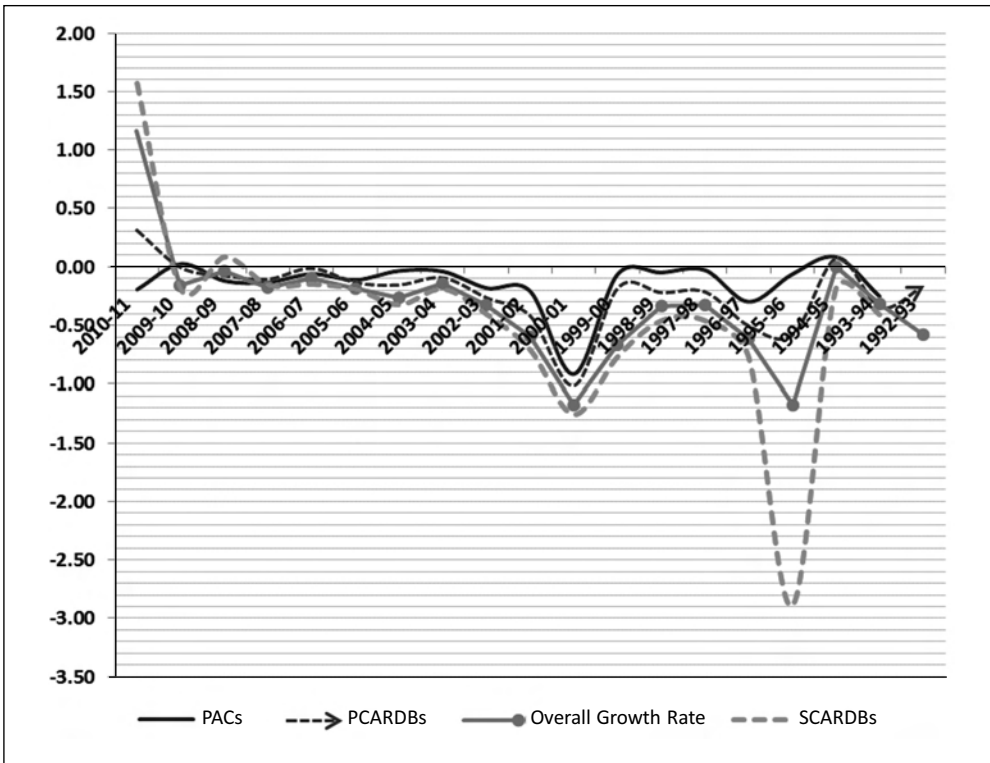
(in Rs. lakh)

| <i>Performance Parameters of PACs</i> | <i>1993–94</i> | <i>2003–04</i> | <i>2010–11</i> |
|---------------------------------------|----------------|----------------|----------------|
| Membership | 972.00 | 1281.00 | 1298.00 |
| Number of borrowers | 552.00 | 485.00 | 561.00 |
| Working capital | 17.01 | 58.68 | 154.39 |
| Reserves | 0.86 | 3.06 | 7.39 |
| Deposits | 2.29 | 17.16 | 39.86 |
| Loans and advances | 11.50 | 41.49 | 93.96 |
| Overdues | 4.57 | 15.42 | 24.29 |

Source: Data on Primary Agricultural Credit Co-operative Societies collated by the National Federation of State Co-operative Banks (NAFSCOB). Available online at: http://www.nafscob.org/publications_f.htm.

Figure 2 shows the trend of institutional credit extended by co-operatives, including PACs, PCARDBs, SCARDBs, and the overall co-operative sector during the post-reform period. It is a matter of concern to note that the annual growth rate in terms of outstanding credit has been negative during most part of the post-reform period (almost upto 2009–10).

Figure 2: Growth Rates of Institutional Credit Extended by Co-operatives



Source: Author's compilations from the RBI Database on Indian Economy.

Problem of Demand-Supply Gap

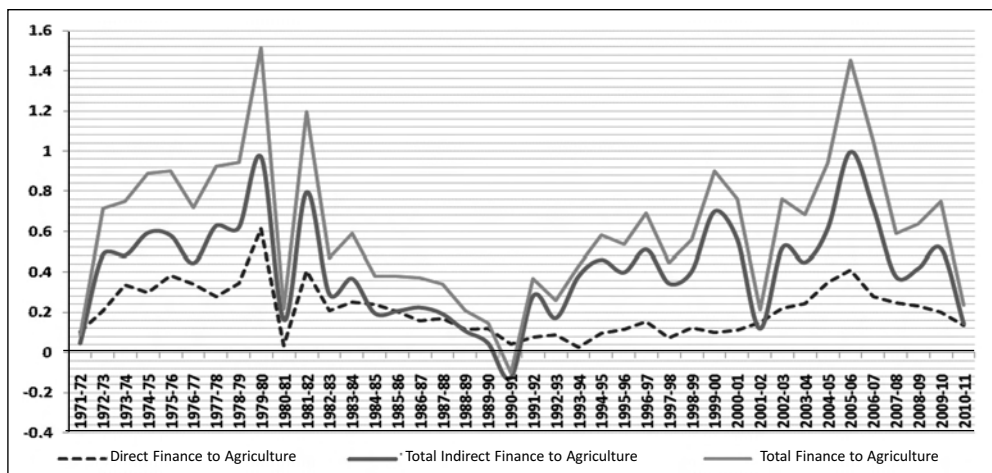
India's rural financial sector (RFS) is subject to systemic policy issues and pervasive institutional weaknesses. Lack of autonomy and weak governance have affected the sustainability of rural financial institutions (RFIs) and constrained their outreach. This, among others, impedes diversification to non-farm activities for supporting value addition and employment generation. Further, the risks in RFS due to droughts and floods are accentuated by the weak rural infrastructure and by production and marketing bottlenecks. The resulting low prices, productivity and profitability make it difficult for the rural sector to compete for capital with urban areas. During 2010–11, rural credit constituted only 10 per cent of the total commercial bank advances (RBI, 2011: 85). Thus, despite the extensive RFS, a demand-supply gap exists. The rural poor, women in particular, have inadequate access to financial services. And the disadvantages that the rural poor face due to limited access to finance are

accentuated by the inadequacy of risk-mitigating instruments to insure them against the risks they face.

Provision of Financial Services to the Poor

Developing responsive institutions in rural areas, which affect the rural poor, is a crucial question for economic policy-making as governments try to accelerate rural development and poverty reduction in economies that are increasingly market-based. It has been well established that strong and widely accepted institutions—organizations and rules—that respond to the needs and priorities of poor groups, especially the rural poor and women, are essential for rapid poverty reduction. Nevertheless, the reverse is perhaps even truer. Weak, ineffective, corrupt or narrowly based institutions create uncertainty and unfairness, discourage saving and investment, and lower growth rates. For achieving the objective of sustainable and inclusive economic growth, it is important to bring the underserved sectors/sections of society within the domain of institutional finance. In the Indian context, the flow of institutional finance to agriculture (see Figure 3) has been skewed and uneven in terms of both the period and the quantum.

Figure 3: **Growth Rates of Institutional Finance to Agriculture**



Source: Author’s compilations from RBI Database on Indian Economy.

Reforming the Rural Financial Architecture

Keeping in view the dynamics of the changing economy, there is a strong case for reforming the rural financial system. The present system that was enshrined

in the late 1970s greatly needs a rigorous re-look. Reforms in the rural financial architecture should be focused towards evolving a new architecture to suit the needs of inclusive growth. Regional rural banks, the unfinished agenda of the Indian rural financial system, need to be revitalized. This needs to be done by: (i) liberating them from the clutches of their sponsor banks; (ii) the Government of India becoming proactive, like China, in its policy on banks towards achieving the larger goals of inclusive growth; and (iii) bringing in new talent, which is abundant in the open market, at the senior management level to inject professionalism and impart focus to their operations, instead of continuing them as the retiring rooms of the sponsor bank executives. Compared to the vision and focus with which RRBs were instituted by late Prime Minister Mrs. Indira Gandhi in 1975, they have failed to live up to the expectations that were generated.

Is Privatization of RRBs a Good Measure?

Adopting a mad rush approach towards privatization, particularly in the Indian context, is harmful given the experience of privatization in the Indian financial sector since 1992–93. The Indian privatization saga has failed to demonstrate the private banks' commitment to the provision of services to the needy and the poor. Besides, private banks have not made any inroads into the rural areas for the provision of financial services, which clearly establishes their biased approach.

Even after two decades of liberalization and opening of the banking sector for new generation banks, their penetration levels have not been satisfactory. Closure of several private sector banks, like Global Trust Bank, and the high number of fraudulent NBFCs that have come up indicate that private firms have focused only on profit maximization to the exclusion of customer service and welfare. Given this backdrop, the institutional reform measures that ought to be undertaken for RRBs are suggested in Table 7.

Table 7: **Institutional Reform Measures for RRBs**

| <i>Domain</i> | <i>Current Measure</i> | <i>Suggested Reform Measure</i> |
|---|---|--|
| Legal framework | Regional Rural Banks Act, 1976. | Merger with Banking Regulation Act, 1949. |
| Regulation and supervision | Multiple regulators, like sponsor banks, NABARD and RBI. | Single regulator, i.e., RBI. |
| Governance | RRB boards lack professionalism; are dominated by the whims and fancies of the sponsor bank officials (with conflicts of interest) on the board, whose banks in turn are competitors to the same RRB of which they are directors. | Boards need to be inducted with qualified professionals and experts, along with the nominated members. Many RRBs staff complain about the high-handedness of sponsor bank officials. As such, measures need to be taken to free the RRBs from the clutches of sponsor banks. RRB chairmen should be recruited based on merit, suitability, expertise, experience and worthiness, rather than on seniority. |
| Benchmarking | So far, no benchmarking has been possible due to the inherent diversities and heterogeneities. | Relevant measures for benchmarking can be introduced once the RRBs adopt uniform parameters. |
| Technology induction for MIS and customer service | Technology has been inducted haphazardly by RRBs in their own individualistic way. | Uniform and standard computer technology needs to be inducted across all the RRBs on par with commercial banks. |
| Human resource development | Most RRBs have incapable, untrained and inefficient staff. | Rigorous training and management development programmes need to be offered to the current staff; and upgradation of their skills is foremost in carrying out their responsibilities. Career path needs to well laid-out, based on merit and performance instead of seniority alone. Accordingly, the relevant laws need to be amended. |

Reforming the Co-operative Sector

As has been often deliberated, the co-operative sector needs revitalization (Vaidyanathan, 2006). The revival package suggested by the taskforce, based on the Vaidyanathan Committee recommendations and after due deliberations, was a combination of legal and institutional reforms, capital infusion and technical support for capacity building. It was expected that the implementation of the revitalization action plan would result in the emergence of a strong, self-reliant and well-knit rural co-operative credit system. The implementation of the revival package involved formulating and executing a series of action plans for: (i) facilitating the legal, regulatory and governance framework; (ii) introducing institutional reforms for sustainability; (iii) evolving a financial package; and (iv) laying down eligibility norms. However, no perceptible change has been felt on the ground; this is probably due to the lack of political will in the implementation of the reforms. Given this background, some plausible institutional reform measures for credit co-operatives are suggested in Table 8.

Table 8: Institutional Reform Measures for Credit Co-operatives

| <i>Domain</i> | <i>Current Measure</i> | <i>Suggested Reform Measure</i> |
|----------------------------|--|--|
| Legal framework | State co-operative laws. | Enact new national co-operative laws and measures to encompass the state laws. |
| Regulation and supervision | Multiple regulators, such as state governments, NABARD and RBI. | Single regulator, i.e., NABARD. |
| Accounting standards | Different standards, age-old and archaic, not smooth and transparent for audit and supervision. | Transparent and uniform accounting standards in accordance with international practices. |
| Auditing | State government officials perform the audit. | Audit responsibilities should be vested with the regulator/supervisor, i.e., NABARD. |
| Governance | Local boards are dominated by the whims and fancies of politicians and state government officials. | Boards need to be inducted with qualified professionals and experts, along with the elected members. |

| | | |
|---|--|--|
| Recruitment of staff | Locally appointed under the influence of local politicians and state government officials, resulting in heterogeneity. | National-level recruitment boards to be established with uniformity in standards of qualification and expertise for the recruitment of staff. A national co-operative service could be considered to develop a specialized cadre for the sector. |
| Financial packages | Under the discretion of the central and state governments. | Need to be decided by a supervising and regulatory body such as NABARD. |
| Benchmarking | No benchmarking has been possible due to the inherent diversities and heterogeneities between the co-operatives. | Relevant measures for benchmarking can be introduced once the co-operatives adopt uniform parameters. |
| Technology induction for MIS and customer service | Technology has been inducted haphazardly with their own individualistic approach. | Uniform and standard computer technology needs to be inducted across all the credit co-operatives. |
| Human resource development | Most credit co-operatives are manned by incapable, untrained and inefficient staff. | Rigorous training and management development programmes require to be offered to the current staff; upgradation of their skills is crucial for effectively carrying out their responsibilities. |
| Corruption control | Complaints of huge misuse of office for personal gain impair operating efficiency, mis-allocate resources from the efficient to the dishonest, and hurt mostly the poor. | Measures need to be twined into the system so that there is significant reduction in the scope for corruption, with adequate checks and balances built in. |

Institutional Reforms in Commercial Banks

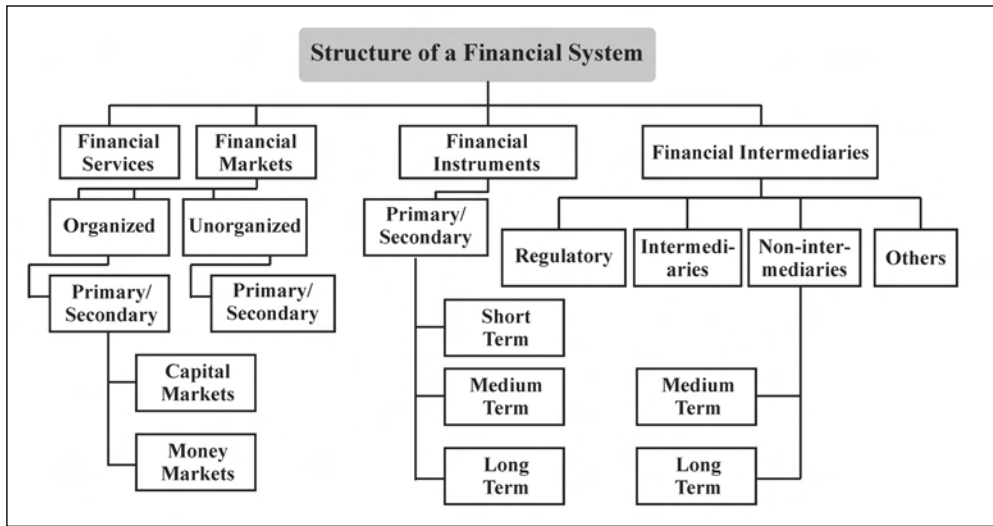
In view of their massive outreach, scheduled commercial banks continue to play a significant role in the provision of financial services to the poor, particularly the rural poor. However, due to various factors, like apathy of the bank staff, and other attitudinal issues in serving their rural clientele, as well as the lack of basic infrastructure, the effective provision of financial services by SCBs has been hindered. Further, there are also supervisory and regulatory

issues hampering the provision of rural finance by commercial banks. The current structure of Indian banking, particularly the requirement by commercial banks to provide financial services to the rural poor, needs to be strengthened. SCBs need to be made to comply with the statutory requirement of extending finance up to 40 per cent of their annual net credit disbursements towards the rural sector. Further, various sub-targets for extending finance, to the weaker sections, women and agriculture, are required to be rigorously implemented in order to channelize the much-needed credit to the rural sector.

Reform of the Regulatory Architecture and Strengthening Inter-regulatory Co-ordination

There is an urgent need to reform the regulatory structure as various regulatory bodies have cropped up with hardly any regulatory co-ordination (see Figure 4). The current system involves half a dozen apex regulatory agencies (such as RBI, NABARD, SEBI, IRDA, PFRDA, FMC, EPFO, SIDBI and NHB) apart from several ministries in the central government that retain direct regulatory powers. This structure leads to major regulatory overlaps and as well as regulatory gaps. At times, this structure can also lead to regulatory arbitrage as institutions that come under different regulators, and are therefore subject to different regulatory requirements, may offer similar financial services. The overlapping regulatory structure also becomes a barrier to innovation, as any new product might need approval from more than one regulator. In some cases, it is not even clear which regulator has primary jurisdiction over the product. In addition, a multiplicity of regulators creates severe problems in terms of inter-agency co-ordination. In India, these co-ordination mechanisms are not formalized; and though these mechanisms can be effective during emergencies, they are not quite as effective at other times. Co-ordination problems are aggravated by the uneven skills and experience across various regulators.

Figure 4: **Present Structure of the Financial System in India**



This structure needs to be revisited from the perspective of regulatory integration, as has been done in many countries across the globe.

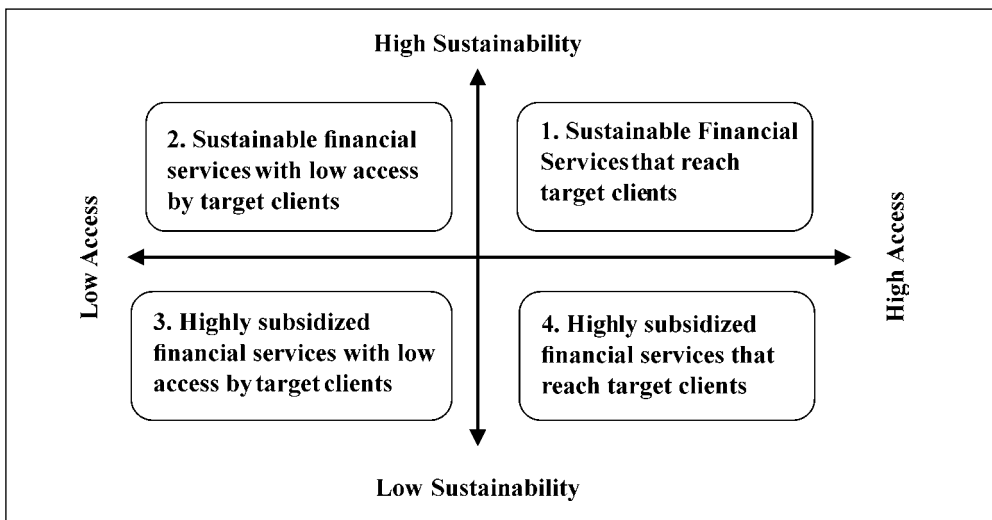
Table 9: **Pros and Cons of Integrating Financial Sector Supervision**

| <i>Potential Pros</i> | <i>Potential Cons</i> |
|--|--|
| Easier to achieve efficiency in the supervision of financial conglomerates. | If the objectives are not clearly specified, the integrated regulator may be more ineffective than the sectoral supervisors. |
| Could achieve possible economies of scale. | Possibilities of dis-economies of scale if any organization is too large to manage. |
| Could improve accountability. | Possibilities of moral hazard problems across the financial sector, resulting in less accountability. |
| Helpful in the elimination of duplicities and turf wars among sectoral supervisors, and speeds up decision-making as well as implementation. | Sometimes the process of integration may get influenced by political/extraneous, vested interest-motivated changes in the supervisory framework. |
| Easier to ensure a level playing field across market segments. | Process of integration, if not managed properly, may lead to loss of key staff or to other problems. |

Provision of Financial Services to the Poor by MFIs

The Indian microfinance sector can be categorized into three main groups: (i) the SHG-bank linkage model accounting for about 58 per cent of the outstanding loan portfolio; (ii) non-banking finance companies accounting for about 34 per cent of the outstanding loan portfolio; (iii) others, including trusts and societies, accounting for the balance 8 per cent of the outstanding loan portfolio (RBI, 2011: 3). Borrowers in the microfinance sector usually belong to the vulnerable sections of society. They lack individual bargaining power, have inadequate financial literacy, come from a fragile economic environment and are exposed to external shocks, which they are ill-equipped to absorb. Hence, financiers and MFI-NBFCs can easily exploit them. The RBI-constituted Malegam Committee, in its the *Report on the Issues and Concerns in the MFI Sector* (2011: 49), recommended that the size of an individual loan should be restricted to Rs. 25,000; further, to prevent over-borrowing, the aggregate value of all the outstanding loans of an individual borrower should also be restricted to Rs. 25,000. However, keeping in view the unabated rise in inflation, which affects the poor the most, the definition limit for MFI loans should be raised to Rs. 50,000. Another issue of great concern is that of optimizing the performance of microfinance institutions, which is dependent on access to and sustainability of the financial services offered by these institutions (see Figure 5).

Figure 5: **Optimizing the Performance of Financial Institutions**



An important aspect that needs to be built into the institutional structure of microfinance institutions, particularly MFI-NBFCs, is to provide micro-insurance services to the poor as a package that includes micro-credit. The

regulation of the microfinance sector needs to be effected with the following prioritized objectives: (i) improving transparency; (ii) enhancing accountability; (iii) reducing transaction costs; (iv) putting in place better operating systems; (iv) simplifying documentation and procedures; (v) strengthening corporate governance; and (vi) increasing healthy competition. Further, the regulatory oversight for the microfinance sector should be vested with the RBI instead of NABARD, as the latter has failed to evolve into a visible, proactive regulator inspite of its existence since 1982. Some critics have indeed referred to the functioning of NABARD as that of ‘white elephant’ in view of its inefficacy and role as a refinancing accountant under the shadow of the RBI.

Institutional Reforms Aimed at Poverty Alleviation

The most direct channel through which governance affects poverty is via its impact on service delivery. Poverty reduction depends on improvements in the quality, and accessibility to poor people, of basic education, health, potable water, and other social and physical infrastructure services. Perhaps, the most profound impact of institutional reform on poverty comes via the potential for the increase in citizen participation. There are a variety of ways in which strengthening the ‘citizen’s voice’ in general—and the voice of the poor in particular—can improve public performance. At the micro-level, they include fostering participation of parents in the governance of schools or working with communities to provide access to water. At the macro-level, they include well-designed modes of decentralization and, more broadly, various forms of representative decision-making and political oversight.

Accountability of the responsible decision-makers has to be indeed enhanced in order to improve the quality of service delivery. Mechanisms need to be incorporated into the system so that there is no scope for misuse of the official position, or ignorance or indifference or apathy on the part of employees. However, the suggested reform measures need to be accompanied with concomitant research in key areas of concern such as: (i) What is the true nature of these policies and their potential to affect the working of rural financial markets? (ii) What are the measures that have been initiated to overcome some of the negative consequences of reforms, like the exclusion of poor and small borrowers, the increasing cost of borrowing and the growing influence of informal sources? To what extent have these measures helped to reverse the negative consequences? (iii) What is the evolving institutional structure in rural areas to meet the emerging credit needs? What are the merits and demerits of institutional changes for ensuring affordable and hassle-free access to financial

services by rural households in general, and small and marginal farmers in particular? (iv) What innovative product and services have been developed by RFIs to meet the diverse financial service needs of rural households? In what way have these innovations proved to be beneficial? To what extent have some of the controversial innovations, like commodity futures and derivatives, delivered returns to the farmers? (v) What has been the impact of these reforms and innovations on the farm economy? To what extent have these measures contributed to either aggravating or mitigating the agrarian crisis?

Conclusion

Inclusion, growth and stability are the three objectives of any institutional reform process, though these objectives sometimes seem to be contradictory. If the necessary reforms are instituted, the financial sector can be an enormous source of job creation, both directly as well as indirectly, through the enterprise and consumption it will be able to support by extending finance, particularly to the poor. Institutional reforms in the Indian financial sector should hence be motivated by the prime objective of making the services work for the poor and enabling them to steer out of the chronic poverty they have been living in for generations.

Without reforms, however, the financial sector could become an increasing source of risk, as the mismatches between the capacity and needs of the real economy and the capabilities of the financial sector get aggravated. India has been a case study of how financial sector reforms can play a supporting role in the growth of an emerging market economy. The challenge is how to bootstrap from these past successes to escalate to the next level of financial sector development, so that it can continue to support growth of the Indian economy in general and inclusive growth in particular.

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Annexure 1: Glimpse of the Banking Sector in India

| <i>Indicators</i> | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Number of commercial banks | 293 | 291 | 288 | 222 | 182 | 173 | 170 | 167 | 167 |
| (a) Scheduled commercial banks (SCBs) | 288 | 286 | 284 | 218 | 178 | 169 | 166 | 163 | 163 |
| <i>of which:</i> Regional rural banks (RRBs) | 196 | 196 | 196 | 133 | 96 | 90 | 86 | 82 | 82 |
| (b) Non-SCBs | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Number of bank offices in India | 68,500 | 69,170 | 70,373 | 72,072 | 74,653 | 78,787 | 82,897 | 88,203 | 93,080 |
| (a) Rural | 32,283 | 32,227 | 30,790 | 30,251 | 30,409 | 30,927 | 31,598 | 32,529 | 33,602 |
| (b) Semi-Urban | 15,135 | 15,288 | 15,325 | 15,991 | 16,770 | 18,027 | 19,337 | 21,022 | 23,048 |
| (c) Urban | 11,566 | 11,806 | 12,419 | 13,232 | 14,202 | 15,566 | 16,726 | 18,288 | 19,156 |
| (d) Metropolitan | 9,516 | 9,750 | 11,839 | 12,598 | 13,272 | 14,267 | 15,236 | 16,364 | 17,274 |
| Population per office (in thousands) | 16 | 16 | 16 | 16 | 15 | 15 | 15 | 14 | 13 |
| Aggregate deposits of SCBs in India (Rs. crore) | 13,11,761 | 15,04,416 | 17,00,198 | 21,09,049 | 26,11,934 | 31,96,940 | 38,34,110 | 44,92,826 | 52,07,969 |
| Bank credit of SCBs (Rs. crore) | 7,46,432 | 8,40,785 | 11,00,428 | 15,07,077 | 19,31,190 | 23,61,913 | 27,75,549 | 32,44,788 | 39,42,082 |
| Deposits of SCBs per office (Rs. lakh) | 1,925 | 2,265 | 2,574 | 3,047 | 3,675 | 4,344 | 4,980 | 5,479 | 6,090 |
| Credit of SCBs per office (Rs. lakh) | 1,143 | 1,330 | 1,700 | 2,209 | 2,757 | 3,222 | 3,615 | 3,983 | 4,575 |
| Per capita deposit of SCBs (Rs.) | 12,253 | 14,089 | 16,281 | 19,130 | 23,382 | 28,610 | 33,919 | 39,107 | 46,321 |
| Per capita credit of SCBs (Rs.) | 7,275 | 8,273 | 10,752 | 13,869 | 17,541 | 21,218 | 24,617 | 28,431 | 34,800 |
| Deposits of SCBs as percentage of gross national product at factor cost (at current prices) | 58.8 | 59.4 | 60.0 | 65.4 | 70.1 | 74.4 | 78.0 | 73.7 | 71.9 |
| SCBs advances to priority sectors (Rs. crore) | 2,18,251 | 2,76,621 | 3,70,603 | 5,12,790 | 6,55,317 | 7,81,476 | 9,08,929 | 10,91,510 | 13,15,861 |
| Share of priority sector advances in total advances of SCBs (per cent) | 29.5 | 32.0 | 32.2 | 33.8 | 33.1 | 31.6 | 30.3 | 31.2 | 30.6 |
| Credit-deposit ratio (per cent) | 56.9 | 55.9 | 62.6 | 70.1 | 73.5 | 74.6 | 73.8 | 73.7 | 76.5 |
| Cash-deposit ratio (per cent) | 6.3 | 7.2 | 6.4 | 6.7 | 7.2 | 9.7 | 7.3 | 7.7 | 8.2 |

Source: RBI Database on Indian Economy. Available online at: <http://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications>.

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Volatility in USD/INR Forward Premia: Evidence from India[†]

Abstract

The spot and forward rates of currencies hardly have parity at any given point of time. The present study was undertaken to track volatility in USD/INR forward premia so as to understand its impact on certain macro-economic variables. It used monthly data for the period January 2000–March 2012 and employed co-efficient of variation, rolling window standard deviation and Granger Causality tests for this purpose. Null hypothesis of the study is rejected since the results suggest that USD/INR forward premia witnessed considerable volatility during the study period. Further, it found that there was bi-directional causality between volatility in USD/INR forward premia and RBI's net intervention in the forward market. The study observed that volatility in forward premia also had a significant effect on the movement of the average exchange rate. Besides, it is noticed that the growth rate of imports Granger causes volatility in forward premia, while sharp swings in forward premia affect the growth rate of exports from India. The results are robust and have policy implications.

Introduction

Foreign exchange markets are one of the most *continuous* markets and hence are generally considered as *efficient markets* for 'price formation'. The classical 'demand and supply' forces interact constantly with the massive volumes of foreign exchange turnover, which impart a unique property to these markets with a high level of *sensitivity*. Swings in the sentiments of one market will

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have an impact on the trading volumes of other markets, given the interlinking of international financial markets. Metaphorically, every little light tick is snapped up by the market sensor, and it gets *instantaneously* factored into the exchange rates of currencies in the market. Besides, foreign exchange rates *fluctuate* at every moment due to a wide variety of economic and political factors apart from demand and supply forces.

Global trade and investments are exposed to these fluctuations in foreign currency rates on a continuous basis; and all participants in the market regularly plan for adequate cushion pads to mitigate the 'exchange rate risk'. Market participants, viz., exporters, importers, investors and borrowers in foreign currency, face exchange rate risk especially when there are *sharp and unfavourable swings* in the foreign currency rates. These sharp swings are referred to as 'volatility' in the exchange rates.

A mechanism to offer protection in such a situation is the use of 'forward contract' in the foreign exchange market. The foreign exchange market has two main segments viz., the spot market and the forward market. On the spot market, currencies are *traded for delivery* on the second working day (T+2) from the date of transaction. On the forward market, contracts are executed to buy or sell currencies at a certain exchange rate (forward rate) for future delivery, i.e., *delivery beyond two working days*. Forward contracts can be classified into outright forwards (either sale or purchase transaction) and swaps (both sale and purchase transactions). A swap transaction involves *simultaneous* buying and selling of the same amount of foreign currency with two *different value dates*.

If a foreign currency is available at a cheaper rate on the spot market than on the forward market, it means that the foreign currency is quoted at a '*premium*'. It implies that the foreign currency is 'stronger' than the home currency on the forward market, and vice versa. On the other hand, if the currency is costlier on the spot market than on the forward market, it is quoted at a '*discount*'. If the spot and forward rates are equal, the currency is said to be at '*par*'. As the spot and forward rates hardly have *parity* at any given point of time, the present study attempts to track *volatility* in the USD/INR forward rates so as to understand its impact on various macro-economic variables, such as call money rate, exchange rate, exports, imports, turnover in the forward/swap market, RBI's intervention in the foreign exchange market. Though extensive research on volatility in exchange rates has been undertaken throughout the world,

volatility in forward premium has received relatively scant attention. Hence, the present study.

The study is divided into seven sections. The second section is a review of the literature on forward premia. Section three explains the research methodology used by the study. Section four presents an overview of USD/INR forward premia. The fifth section is devoted to empirical analysis. Section six offers some recommendations to policy-makers. The seventh section concludes the study.

Review of Literature

Mishra, Sebastain and Ramanathan (2001) conducted a research study on the causality between call money rates and forward premia in the Indian foreign exchange market. Their results showed that the call money market and the foreign exchange market were not fully integrated inspite of implementation of various liberalization measures. Hence, the authors called for further liberalization of capital account convertibility-related transactions for more effective co-ordination of the monetary and exchange rate policies.

Bhoi and Dhal (1998) found that a causal link between the call money rate and forward premia in both directions. They further noticed that the same pattern of a causal link could exist between gilts and forward premia, but at a higher level of significance.

Misra and Behera (2006) found conclusive evidence for the transmission of volatility from the spot and forward markets to the non-deliverable forward (NDF) market during the period November 2004–February 2007. However, they could not find considerable impact in the reverse direction. They concluded that there existed two-way causation between the spot and USD/INR forward rates during the period of their study.

George and Mallik (2008) studied covered interest parity (CIP) conditions and the role of the Reserve Bank of India (RBI) in achieving international financial integration. They found the presence of CIP conditions in advanced markets, viz., the UK and the USA, but not in India. The authors found an increasing level of integration between the Indian financial markets and the global markets since October 1998, primarily due to the implementation of economic reforms. The authors concluded that the RBI's intervention helped in controlling volatility in forward premia. They also found that the central bank's intervention reduced the gap between forward premia and the interest rate differential of USD/INR.

Shah and Patnaik (2005) observed that *arbitrage* alone defines the forward rate in the Indian foreign exchange market. The authors found that CIP conditions in India were violated in many months during the period October 1995–February 2004, mainly due to regulations on banks to engage in CIP arbitrage. They further observed that importers and exporters in India had an option ‘to hedge or not to hedge’ their exposures in foreign currency, and this influenced forward premia. The authors stated that the demand for and supply of USD in the market had an impact on forward premia. They opined that the *restrictions* on CIP arbitrage and the *undistorted* forward market in India generated a remarkable information source for participants to form speculative views.

Sharma and Mitra (2006) found that there was a stronger relationship between USD/INR forward premia and the interest rate differential during the period September 2000–September 2005. They also found that RBI’s intervention did not make any significant impact on forward premia; it only helped in smoothing the volatility in the USD/INR exchange rate. The authors concluded that forward premia had been mainly driven by the interest rate differential along with capital inflows from foreign institutional investors (FIIs), change in the average exchange rate, and the current account in the balance of payments (BoP).

Kulkarni (2006) observed that the RBI purchases USD in order to maintain the competitiveness of Indian exports and protect the domestic industry from cheaper imports, thereby building up significant amounts of foreign exchange reserves. The author maintained that the central bank ensures complete sterilization so as to achieve stability in the growth of money supply and consequent price stability. He observed that the nature of intervention by the RBI in the spot and in the forward segments had always been with a *purpose* (either explicit or implicit) and sometimes on a *continuous* basis for several days.

Lin (2008) concluded that a central bank purchases or sells foreign exchange (in the forward market) to keep the target forward rate within a *specified* band. As against the currency peg regime, a target zone permits the exchange rate to fluctuate within a specified band so that it does not frequently require the central bank’s intervention in the foreign exchange market.

Frommel, Mende and Menkhoff (2008) found that larger-sized order flows from financial customers (*viz.*, hedge funds, mutual funds, insurance companies and banks) indicate informed trading and contribute to volatility in the foreign

exchange market. The authors pointed out that an informed order flow would be a stronger determinant of volatility than an order flow from uninformed players (viz., commercial customers/merchants).

Bauwens, Omrane and Giot (2005) studied whether market activity could be ideally measured by the flow of orders between traders and their customers. They found that exchange rate volatility was influenced by strong seasonal patterns, the financial news flow and the revelation of private information.

Evans and Lyons (2001, 2007) found that some of the participants in the foreign exchange market might have access to *insider information*, which can be exploited in the short-run; hence, transactions (i.e., turnover) play a *causal* role in the determination of exchange rates. This view was also supported by Medeiros (2005) and Bjonnes and Rime (2003). The authors pointed out that the buying/selling transactions undertaken by the players suggest that they had access to private information about fundamentals or liquidity in the market, and this would have an impact on the movement of exchange rates/forward premia.

Research Methodology

The study attempts to track volatility in USD/INR forward rates during the period January 2000–March 2012 so as to understand its impact on the following variables:

- Movement in the average exchange rate (LGUSDINR)
- Growth rate of exports (LGEXP)
- Growth rate of imports (LGIMPO)
- Growth rate in the turnover of forward/swap contracts (LGFSTO)
- RBI's net intervention in the foreign exchange market (RBINI)
- Weighted average call money rate (CMR)

Volatility in forward premia of three-month tenor (FP-3M) has been examined in the present study since forward contracts with such tenor are the most popular in the Indian foreign exchange market. Forward contracts for longer periods are not as common as those with a three-month tenor because of the great uncertainties involved (Sharma, 2012).

The above-mentioned variables have been chosen by reviewing the existing body of literature relevant to the present study. Varma (1997) observed that the forward premium acts as a bridge between domestic and foreign interest rates through covered interest arbitrage. Rose (2000) commented that exchange rate volatility (including volatility in forward premia) is of high policy relevance because it is often seen as an impediment to trade and welfare. Srinivasan and Kalaivani (2012) found that exchange rate volatility had a significant negative impact on real exports in the short term as well as in the long term. Esquivel and Larrain (2002) concluded that exchange rate volatility had a robust and significantly negative influence on the exports of developing countries. Dashmana (2012) showed that real exchange rate volatility was negatively correlated with India's trade balance in the long run. Evans and Lyons (2004) observed that order flows are also a means to transport public information. They stated that order flows react to news and thus adjust prices according to the information available; order flows contain further information, private information, that is independent from news. Keynes (1930) considered central banks' intervention in the forward market as a potentially important instrument of monetary policy. Bhatt and Virmani (2005) stated that the RBI's intervention could be considered as one of the principal factors influencing the movements in forward premia, other than the interest rate differential.

The choice of period for the empirical study, i.e., January 2000–March 2012, has been guided by the following factors: exchange rates and forward premia experienced substantial volatility during the last decade in the wake of the global financial crisis of 2007–09, followed by the sovereign debt crisis in the Euro zone in 2010–11. By using monthly data on the above-mentioned variables, the following null hypothesis has been tested as part of the study:

Null Hypothesis (H_0): USD/INR forward premia did *not* witness volatility during the period January 2000 –March 2012.

To test this hypothesis, rolling window standard deviation and coefficient of variation (CV) measures have been employed. The entire data on these variables has been sourced from the RBI website. As the data in the present study is time series in nature, the variables are tested for 'stationarity' by using the Augmented Dickey–Fuller (ADF) test. Subsequently, Granger Causality tests have been conducted. The Granger Causality test depicts the causality between two variables when both influence each other. The test is based on the following regression equations:

$$Y_t = C_{1t} + \sum_{i=1}^p \alpha_i Y_{t-i} + \sum_{i=1}^p \beta_i X_{t-i} + u_{1t} \quad (1)$$

$$X_t = C_{2t} + \sum_{i=1}^p \phi_i Y_{t-i} + \sum_{i=1}^p \psi_i X_{t-i} + u_{2t} \quad (2)$$

Where p is the number of the optimum lag length, and u_{1t} and u_{2t} are residuals in the regression estimation. It is assumed that disturbances u_{1t} and u_{2t} are not correlated with each other. It is well known that the Granger Causality test is sensitive to the choice of lag length. To avoid this problem, the Schwarz information criterion (SIC) has been applied to choose the optimum lag length.

To evaluate whether each of these two conditions hold, the null hypothesis should be that one variable does not help to predict the other. For this, the two sets of null hypotheses are as follows:

1. The null hypothesis is that X does not cause Y. For this, Y is regressed against lagged values of Y and lagged values of X, and then regress Y only against lagged values of Y.
2. The null hypothesis is that Y does not cause X. For this, X is regressed against lagged values of X and lagged values of Y, and then regress X only against lagged values of X.

The above hypotheses are tested based on F-test statistics calculated for the normal Wald test on coefficient restrictions.

Volatility in USD/INR Forward Premia—An Overview

As per the Triennial Central Bank Survey conducted by BIS (2010: 12, 72), India was ranked 15th in the world in terms of foreign exchange turnover; and stood at the 16th position in terms of turnover in the derivatives segment. The size and level of operations of the Indian foreign exchange market during the last decade are shown in Table 1.

Table 1: **Size of Indian Foreign Exchange Market***(in USD billion)*

| <i>Description</i> | <i>2000–01</i> | <i>2005–06</i> | <i>2009–10</i> | <i>2010–11</i> | <i>2011–12</i> |
|--|----------------|----------------|----------------|----------------|----------------|
| Daily avg. turnover in the outright forward & swap markets | 2.99 (53) | 8.58 (49) | 20.33 (50) | 27.59 (51) | 27.15 (50) |
| Daily average turnover in the spot market | 2.71 (47) | 8.92 (51) | 20.37 (50) | 26.70 (49) | 27.43 (50) |
| Daily avg. turnover in the foreign exchange market | 5.70 (100) | 17.50 (100) | 40.70 (100) | 54.30 (100) | 54.58 (100) |
| Total annual turnover | 1,434 | 4,404 | 10,355 | 13,791 | 13,918 |

Note: Figures in brackets indicate market share in percentage terms.

Source: RBI's *Report on Currency and Finance*. Various years.

It is clear from Table 1 that between 2000–01 to 2011–12, there was a spectacular growth (CAGR of 23 per cent) in the total annual turnover of the Indian foreign exchange market, rising from USD 1,434 billion to USD 13,918 billion during this period. This indicates the increased trade openness of the Indian economy, globalization of Indian firms and the faith of FIIs in India's growth story during the period. The daily average turnover also witnessed similar kind of growth (it rose almost 10 times) during the period under review, indicating *deep, liquid and efficient conditions in the market*. These conditions are evident not only from the higher turnover but also from the lower bid-ask spreads in the foreign exchange market. In India, the normal spot market quote has an average spread of 'half a paisa', while swap quotes are available with a spread of 'one to two paise per USD'. The bid ask-spreads of USD/INR have almost *converged* with those of other convertible currencies in the international market. On some occasions, in fact, the bid-ask spread of USD/INR was *lower* than that of some major currencies (Mohan, 2007: 11). A comparison of forward premia vis-à-vis other macro-economic variables is presented in Table 2.

Table 2: Forward Premia vis-à-vis Other Variables

(in USD billion)

| Calendar Year ^ | Avg. Three mnth. FP (Per Cent) | FSTO# | Avg. Exchg. Rate of USD/INR | RBI's Net Intervention | India's Exports | India's Imports |
|-----------------|--------------------------------|-------|-----------------------------|------------------------|-----------------|-----------------|
| 2000 | 3.69 | 704 | 44.94 | 3 | 42 | 52 |
| 2001 | 5.02 | 820 | 47.19 | 5 | 43 | 50 |
| 2002 | 4.91 | 878 | 48.60 | 14 | 50 | 57 |
| 2003 | 1.79 | 984 | 46.58 | 26 | 59 | 73 |
| 2004 | 1.27 | 1,315 | 45.32 | 20 | 77 | 100 |
| 2005 | 1.42 | 1,798 | 44.10 | 8 | 100 | 143 |
| 2006 | 1.81 | 2,802 | 45.31 | 21 | 122 | 178 |
| 2007 | 3.07 | 4,790 | 41.35 | 75 | 150 | 229 |
| 2008 | 3.01 | 6,797 | 43.50 | -11 | 195 | 321 |
| 2009 | 3.02 | 5,117 | 48.40 | -6 | 165 | 257 |
| 2010 | 4.78 | 6,372 | 45.73 | 2 | 226 | 350 |
| 2011 | 6.13 | 7,222 | 46.67 | -13 | 303 | 464 |
| 2012* | 8.22 | 1,562 | 50.28 | -8 | 78 | 125 |

^ Covers the period from January to December of each year.

Turnover of forward/swap contracts in the foreign exchange market.

* Covers the period from January to March 2012.

Source: RBI, *Handbook of Statistics on Indian Economy*, various issues.

It is observed from Table 2 that the average three-month forward premia recorded irregular movements during the last decade. It was at 3.69 per cent in the calendar year 2000 and then rose to 5.02 per cent during 2001. After a marginal decline to 4.91 per cent in 2002, the forward premia fell sharply to 1.79 per cent in 2003; and then gradually came down to 1.27 per cent in 2004, mainly due to the *trickle-down effect* of reforms in the Indian financial markets. In 2007, the average three-month forward premia increased to 3.07 per cent, doubling to 6.13 per cent in 2011 and then climbing to 8.22 per cent in the first quarter of the calendar year 2012. This volatility in the forward premia during the period January 2007–March 2012 was due to the global financial crisis, followed by the sovereign debt crisis (Euro zone crisis) and their after-effects on the Indian financial markets. Besides, the Indian economy also witnessed volatile market conditions owing to the burgeoning deficits on the trade, fiscal and current accounts, higher inflation, policy inertia, bottlenecks in the implementation of infrastructure projects, downgrading of India's international

credit rating, the deteriorating asset quality of Indian banks, and the escalating oil import bill. Consequently, the average exchange rate of USD/INR mainly showed a declining trend during the period; from 41.35 in 2007, it touched 50.28 in the first quarter of 2012.

Barring the calendar year 2009, turnover in the forward/swap markets increased during the period 2000–2012 because of India's growing foreign trade, the renewed interest of FIIs in the Indian economy and a spurt in the cover operations in the market (as part of the risk aversion approach adopted during the global financial crisis). The huge volatility in the forward premia during the period 2008–12 triggered RBI's intervention in the market. The central bank sold a total (net) amount of USD 36 billion between January 2008 and March 2012 to meet the shortage of dollars in the market (see Table 2). This shows the proactive approach of the RBI in maintaining stability in the foreign exchange market.

Intervention is a policy tool of the RBI to even out the imbalances in the domestic money supply and maintain price stability apart from curtailing exchange rate volatility. RBI's intervention in the foreign exchange market conveys information on future movement of the exchange rate. Based on this, participants take a view and *form expectations* to hedge their risks; this, in turn, has an impact on the forward premia. Central banks' interventions in the forward market have the advantage that they do not require immediate cash outlay. Central banks generally intervene in spot and forward markets through swap deals. The RBI undertakes swaps to sterilize its intervention effect in the spot market. Swaps, especially buy-sell swaps, have the advantage of *simultaneously* stabilizing the call rates as well as the forward rates.

India's foreign trade (i.e., exports as well as imports) shot up from USD 94 billion to USD 767 billion during the period 2000–2011 (see Table 2) in view of the increasingly outward orientation of the country, coupled with the robust performance of corporates and depreciation in INR against USD. India's imports touched USD 100 billion in 2004 primarily on account of the soaring oil import bill and escalation in gold/edible oil imports. From USD 50 billion in 2002, India's exports doubled to USD 100 billion in 2005; and then crossed USD 300 billion during 2011, exhibiting a CAGR of 20 per cent. It may be noted that engineering goods, petroleum products, gems and jewellery, cotton textiles, and software services are the major components of India's export basket.

If a country has a persistently wide current account deficit (CAD), say more than 3 per cent of its GDP, its currency is expected to depreciate, which ultimately affects the capital flows into the country. India's current account

has been in *deficit* for most part of the last decade. For instance, India's exports stood at USD 305 billion as against its imports of USD 489 billion during the FY 2011–12 (RBI, 2012: Table 17, p. 191). India's CAD was at around 5.4 per cent of GDP as on 31 December 2012 (Bhagawati, 2013). As a higher import bill results in a higher CAD, INR comes under tremendous pressure; this pressure is transmitted to the forward premia in the foreign exchange market.

Volatility in USD/INR Forward Premia: An Empirical Analysis

While testing the null hypothesis, statistical tools such as standard deviation and co-efficient of variation have been employed. The results of CV for one month, three month and six months' forward premia (calendar year-wise) are presented in Table 3.

Table 3: CV of the USD/INR Forward Premia

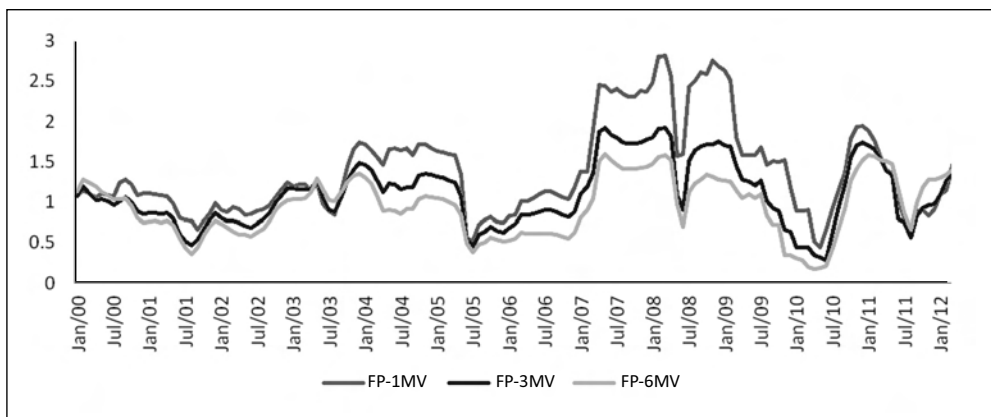
| <i>Calendar Year</i> | <i>FP-1M</i> | <i>FP-3M</i> | <i>FP-6M</i> |
|--|--------------|--------------|--------------|
| 2000 | 30.66 | 24.31 | 21.01 |
| 2001 | 18.77 | 15.78 | 14.05 |
| 2002 | 25.39 | 23.41 | 19.93 |
| 2003 | 105.27 | 82.71 | 73.62 |
| 2004 | 117.22 | 104.57 | 93.08 |
| 2005 | 45.35 | 43.99 | 41.74 |
| 2006 | 61.64 | 50.61 | 38.48 |
| 2007 | 74.65 | 60.61 | 52.87 |
| 2008 | 69.75 | 59.58 | 55.10 |
| 2009 | 28.48 | 15.42 | 11.99 |
| 2010 | 37.99 | 35.29 | 35.45 |
| 2011 | 14.13 | 16.65 | 22.90 |
| 2012 (January-March) | 8.72 | 4.61 | 3.52 |
| CV for the period January 2000–March 2012 | 64.50 | 60.73 | 60.28 |

CV = Standard Deviation / Mean x 100

FP-1/3/6M refers to volatility in the USD/INR FP of one/three/six months' tenor.

It is noticed that *USD/INR forward premia witnessed sharp swings* reflecting the prevailing volatile market conditions *during the period January 2000–March 2012*. This is evident from the fact that the coefficient of variation (CV) of forward premia (of one, three and six months’ tenor) is observed at above 60 per cent during this period. So, the null hypothesis has been rejected. Volatility in the USD/INR forward premia is captured in the following graph by using rolling window standard deviation for each tenor, i.e., one, three and six months.

Figure 1: Volatility in USD/INR Forward Premia (One, Three and Six Months’ Tenor)



It can be observed from Figure 1 that volatility in the USD/INR forward premia was especially pronounced during the following periods: August 2003 (following the twin car bomb blasts in Mumbai); May 2004 (on account of the political uncertainty ahead of the general elections in India); November 2005 (due to the appreciation of USD against all major currencies following the hike in interest rates by the United States Federal Reserve); February-December 2007 (attributed to fears of a recession in the US); May-September 2008 (linked to the eruption of the global financial crisis coupled with India’s escalating oil bill); August 2010 (on fears of a sovereign debt default by Greece); and slowing down of the Indian economy from October 2011 onwards.

Since the present study employs financial data which is time series in nature, the variables were tested for ‘stationarity’ by using the ADF test. All the variables in the present study are found to be at level i.e., I (0). The results of the ADF test are shown in Annexure I. Subsequently, pair-wise Granger Causality tests were conducted. The results are reported in Table 4.

Table 4: Results of Pair-Wise Granger Causality Tests

| <i>Hypothesis</i> | <i>F-Statistic</i> <i>/(Lag length)</i> | <i>p-Value</i> | <i>Inference</i> |
|--|--|----------------|-----------------------|
| 1. FP-3M does not Granger cause LGUSDINR | 4.17935 (6) | 0.0007* | FP-3M causes LGUSDINR |
| 2. LGUSDINR does not Granger cause FP-3M | 0.61711 (6) | 0.7163 | – |
| 3. FP-3M does not Granger cause RBINI | 4.60494 (7) | 0.0001* | FP-3M causes RBINI |
| 4. RBINI does not Granger cause FP-3M | 2.08799 (7) | 0.0495** | RBINI causes FP-3M |
| 5. FP-3M does not Granger cause LGIMPO | 0.52234 (2) | 0.5943 | – |
| 6. LGIMPO does not Granger cause FP-3M | 3.92957 (2) | 0.0219** | LGIMPO causes FP-3M |
| 7. FP-3M does not Granger cause LGEXP | 2.58761 (8) | 0.0120** | FP-3M causes LGEXPO |
| 8. LGEXP does not Granger cause FP-3M | 1.05518 (8) | 0.3991 | – |
| 9. FP-3M does not Granger cause LGFSTO | 0.18736 (2) | 0.8293 | – |
| 10. LGFSTO does not Granger cause FP-3M | 2.68654 (2) | 0.0716*** | LGSTO causes FP-3M |
| 11. FP-3M does not Granger cause CMR | 1.15720 (2) | 0.3174 | – |
| 12. CMR does not Granger cause FP-3M | 1.80745 (2) | 0.1679 | – |

Notes: Figures in parentheses represent lags automatically chosen as per the SIC criterion. *significant at 1 per cent level; **significant at 5 per cent level; ***significant at 10 per cent level.

FP-3M refers to volatility in the USD/INR FP of three-month tenor; LGFSTO refers to the growth rate in the turnover of forward and swap contracts; LGEXP refers to growth rate of Indian exports; LGIMPO refers to growth rate of Indian imports; RBINI refers to RBI's net intervention, i.e., purchases/sales of USD in the Indian foreign exchange market; LGUSDINR refers to movements in

the average exchange rate of USD/INR. CMR refers to the call money rate (weighted average).

It can be inferred from Table 4 that there was a *bi-directional* causality between volatility in USD/INR forward premia and RBI's net intervention during the study period, i.e., January 2000–March 2012. Volatility in forward premia (FP-3M) Granger causes RBINI and vice versa, since sharp swings in the movement of forward premia attracts RBI's intervention in the foreign exchange market; this (RBINI), in turn, *smoothens* volatility in forward premia. Hence, volatility in forward premia (3M) and RBINI mutually *attract* each other in the foreign exchange forward market. It is very interesting to note that FP-3M causes RBINI at 1 per cent significance level; whereas RBINI causes FP-3M at 5 per cent significance level.

It is also observed that volatility in FP-3M affects movements in the average exchange rate (LGUSDINR) at 1 per cent significance level since economic agents are driven more by *sentiments*, *self-fulfilling* expectations and *speculative/proprietary* positions in the financial markets. According to the uncovered interest parity theory, forward premia influence future exchange rates as the expectations of the market participants are “self-fulfilling” in nature (Lewis, 1995). Hence, it may be inferred that ‘expectations’ and the forward rate do play a major role in the determination of the future USD/INR spot rate (since expected changes in the nominal exchange rates are equivalent to the interest rate differentials of any two currencies).

Further, it is observed that the growth rate of imports Granger causes volatility in FP-3M during the study period since higher imports into India (more than the exports from India) lead to a deficit in the balance of trade/BoP; this exerts pressure on the forward premia, which will experience *sharp shifts* in the short term. Besides, it is observed that volatility in forward premia (FP-3M) affects the growth rate of Indian exports as exporters face uncertainty with regard to their profit margins on account of *volatility* in the exchange rate/forward premia.

Further, volatility in forward premia discourages both exporters and importers and makes them cautious while transacting overseas; and thus adversely affects the growth rate of exports and imports. It is observed that the growth rate of Indian exports and the growth rate of Indian imports showed a significant positive correlation (0.503) during the period of the study. This is mainly due to the fact that a substantial amount of Indian imports (diamonds, gems and jewellery, petroleum products, engineering goods, etc.) are either meant for export or post-processing.

It can be seen from Table 4 that LGFSTO (growth rate in the turnover of forward and swap contracts) Granger causes volatility in FP-3M. However, the impact is not very significant (at 10 per cent level). It is also observed, however, that the weighted average call money rate and volatility in forward premia did not exhibit any significant relationship during the study period—perhaps due to the restrictions on Indian banks with regard to CIP arbitrage.

Recommendations

The foreign exchange market is, perhaps, the fastest moving market among all the financial markets; the participants do not have the luxury of watching the currency movements and taking a decision later (Barua, 2012). Hence, RBI's *selective* intervention becomes necessary since the two-way movement in the exchange rates/forward premia have significant output, employment and distributional implications for the *real as well as financial* sectors. As the RBI's net intervention is found to have a significant effect on forward premia, and vice versa, policy-makers need to mull over the effect of such intervention on the import cover, volume of foreign exchange reserves, absorption capacity of capital flows and sterilization costs.

Since India depends on labour-intensive and intermediate technology to manufacture products with low profit margins, any adverse fluctuations in the exchange rates may have a negative impact on the profitability of firms (Mohan, 2004). Further, volatility in the exchange rates/forward premia increases the risks of market players, which they may not be able to *manage*. Hence, it is all the more important for policy-makers to ensure that there is *lower volatility* in the exchange rates as well as in the forward premia.

The empirical results show that volatility in forward premia affects the growth rate of exports. Hence, the Government of India may extend more export sops to compensate exporters, should there be any excessive volatility and consequent exchange losses in the forward market. As the growth rate of imports causes volatility in the forward premia, selective import curbs (such as restrictions on the import of gold/fossil fuels), coupled with concessions on the import of renewable energy generation equipment, may be explored.

When the participants are given the 'freedom to book and cancel forward contracts', turnover in the foreign exchange market increases. This enhances the breadth, depth and liquidity conditions and finally leads to market integration. Therefore, policy-makers may selectively remove restrictions, in

phases, on exports, imports, overseas investments (foreign direct investment) and borrowings in foreign currency (external commercial borrowings) so as to *enhance turnover* in the foreign exchange market. This may even out the volatility in the exchange rates as well as in the forward premia.

Conclusion

As global trade and investments are exposed to fluctuations in the foreign currency rates on a *continuous* basis, all participants in the market regularly plan to put in place adequate *cushion pads* to mitigate the ‘exchange rate risk’. Forward contracts come in handy in this situation. As spot and forward rates hardly have *parity* at any given point of time, the present study tracked the *volatility* in the USD/INR forward rates. It used monthly data for the period January 2000–March 2012, employed co-efficient of variation, rolling window standard deviation and Granger Causality tests for this purpose.

The null hypothesis of the study is rejected since the results suggest that USD/INR forward premia witnessed considerable volatility during the period. It was further found that there was *bi-directional* causality between volatility in the USD/INR forward premia and RBI’s net intervention in the forward market. It is observed that volatility in forward premia had a significant effect on the movement of the average exchange rate. Besides, it is noticed that growth rate of imports Granger causes volatility in the forward premia, and sharp swings in the forward premia affect the growth rate of India’s exports. As the RBI’s net intervention is found to have a significant effect on the forward premia and vice versa, policy-makers may weigh this option as and when there is excessive volatility in the foreign exchange market in order to minimize the adverse consequences on the operations/sustainability of the market participants. Export sops and selective import curbs may be introduced to reduce the impact of volatility in the forward premia on the growth rate of foreign trade. Further, the participants may be given freedom while booking forward contracts so as to enhance turnover, thereby achieving deep, liquid and efficient conditions in the foreign exchange market.

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Annexure I: Results of the Augmented Dickey Fuller Test

| <i>ADF Test Results</i> | <i>t-Statistic</i> | <i>p-Value</i> |
|---|--------------------|----------------|
| <i>H0</i> : FP-3M has a unit root | | |
| ADF test statistic | -3.461076 | 0.0104 |
| <i>H0</i> : RBINI has a unit root | | |
| ADF test statistic | -3.876081 | 0.0028 |
| <i>H0</i> : LGEXPO has a unit root | | |
| ADF test statistic | -4.169548 | 0.0010 |
| <i>H0</i> : LGIMPO has a unit root | | |
| ADF test statistic | -4.186045 | 0.0010 |
| <i>H0</i> : LGUSDINR has a unit root | | |
| ADF test statistic | -4.586448 | 0.0002 |
| <i>H0</i> : LGFSTo has a unit root | | |
| ADF test statistic | -12.83898 | 0.0000 |
| <i>H0</i> : CMR has a unit root | | |
| ADF test statistic | -3.363491 | 0.0139 |

SANDEEP GOEL*

Impact Analysis of the Proposed Changeover from Indian GAAP to International Financial Reporting Standards

Abstract

India is firmly moving on the path towards International Financial Reporting Standards (IFRSs). A notification issued in May 2008 by the Ministry of Corporate Affairs (MCA), Government of India, confirmed the IFRS convergence/adoption agenda for India. The Institute of Chartered Accountants of India (ICAI) has updated all the existing Indian Accounting Standards (ASs) to ensure that they are compatible with IFRSs. The National Advisory Committee on Accounting Standards (NACAS) is in the process of implementing them for all Indian public companies. The present paper explores the strategic impact of the change in the financial reporting practices of Indian corporates on account of the impending compliance with IFRSs. It is hoped that the findings thereof will be useful for the standard setters and regulators to evaluate the efficacy of the IFRS implementation machinery in the present corporate world.

Introduction

International Financial Reporting Standards (IFRSs) are a set of international accounting standards developed by the International Accounting Standards Board (IASB) for the harmonization of global reporting. IFRSs have become the global standard for the preparation of financial statements by public companies.¹ These standards are a culmination of the efforts initiated for the development of international accounting, which were necessitated in the first place by factors such as global trade practices, international capital flows and the harmonization of national accounting practices.

The major difficulties in international accounting arise due to the socio-economic, political, cultural, technological and perception-based differences that exist between nations. For instance, while financial reporting in the United

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¹ Available online at: <http://www.ifrs.com>.

States and the United Kingdom is primarily aimed at providing information to the stockholders, the primary purpose in Japan is to protect creditors.

IASB: Background

The process of setting international standards for accounting began several decades ago. The initiative was taken by the industrialized nations to formulate standards that could be used by the developing and smaller countries unable to establish their own standards. And as the business world became more integrated and globalized, regulators, investors, large multinational companies and auditing firms felt the need to have common standards in all the areas of the financial reporting chain.

In April 2001, the International Accounting Standards Board (IASB), an independent accounting standards-setter, based in London, was established as the successor organization to the International Accounting Standards Committee (IASC), formed in 1973. IASC was formed through an agreement between professional accountancy bodies of various developed countries, comprising the UK, Ireland, France, Germany, the Netherlands, USA, Mexico, Canada, Australia and Japan. By 1982, all the professional accountancy bodies that were members of the International Federation of Accountants became sponsoring members of the IASC.

From its inception in 1973 till its comprehensive reorganization in 2000, the structure for setting International Accounting Standards (IASs) was the International Accounting Standards Committee (IASC), comprising several elements, including the IASC Board. It consisted of 13 country members and up to 3 organization members. The IASC Board promulgated a substantial body of standards, interpretations, a conceptual framework, and other guidance that were directly adopted by many companies. Many national accounting standard-setters drew on its work in developing country-specific accounting standards.

After nearly 25 years of solid work in the area of international standards setting, IASC concluded in 1997 that to continue to perform its role effectively, it must explore ways to bring about convergence between national accounting standards and practices and high-quality global accounting standards. Towards this end, IASC set up the Strategy Working Party (SWP) in late 1997 to re-examine its structure and strategy. SWP published its report in December 1998 in the form of a Discussion Paper; after soliciting comments, the Final Recommendations were published in November 1999. These were unanimously approved the

following month by the IASC Board. From 1 July 2000, a new IASB Constitution took effect. The standards-setting body was renamed the International Accounting Standards Board (IASB), which took up its work in April 2001.

The International Accounting Standards (IASs) released by the IASC between 1973 and 2000 were ordered numerically, starting with IAS 1 and ending with IAS 41. When the IASB was established in 2001, it agreed to adopt all the IASs that were issued by IASC, i.e., IAS 1 to 41; but would name all future standards to be published 2001 onwards as the International Financial Reporting Standards (IFRSs). There was one rider—if there are any principles within IFRSs that contradict those of IASs, then IFRSs will supersede IASs and the older ones will be disregarded. When used collectively, International Financial Reporting Standards include both the IASs and the IFRSs.

IASB reports to the IFRS Foundation, which is an independent, not-for-profit private sector organization working in the public interest. Its principal objective is to develop and publish a single set of high quality, understandable, enforceable and globally accepted International Financial Reporting Standards (IFRSs), and to promote and facilitate their adoption through the convergence of national accounting standards and IFRSs. Currently, IASB has 15 full-time members.

Financial and economic leaders of various organizations, including Group of 20 (G-20), have announced their support for global accounting standards. A survey conducted in late 2007 by the International Federation of Accountants (IFAC) showed that a vast majority of accounting leaders from around the world agreed that a single set of international standards is important for economic growth. As of August 2012, over 120 countries require or permit the use of IFRSs for the preparation of financial statements by publicly held companies. In 2011, Canadian and Indian companies began using the global accounting standards.

Adoption of IFRSs by India

GAAP stands for Generally Accepted Accounting Principles. They are universal accounting principles. “Indian GAAP” refers to the existing Accounting Standards (ASs) notified by the Government of India (GoI) under the Companies (Accounting Standards) Rules (applicable to all companies), 2006, as amended, and to the relevant requirements of the Companies Act, 1956. Ind ASs are the Indian Accounting Standards that have been converged with IFRSs. On 25 February 2011, the Ministry of Corporate Affairs (MCA), GoI, issued 35

Ind ASs equivalent to the International Financial Reporting Standards. Although substantially similar to IFRSs, Ind ASs contain some caveats to ensure that these standards are suitable for application in India's economic environment. The date of adoption of Ind ASs is to be notified by MCA after various implementation issues (including tax-related ones) are resolved with the departments concerned within the government to ensure a smooth transition.

IFRS: Implications for Indian Corporates

The move to adopt the IFRSs is expected to have a profound impact on individual companies. It will lead to certain fundamental changes in the financial reporting practices of Indian corporates and impact the way in which businesses are managed at large.

Broad Areas of Impact

Given below are the key areas where convergence between IFRSs and the existing Indian GAAP can create fundamental changes in, and have a profound impact on, the strategic business considerations of Indian companies:

- Presentation and disclosures
- Revenue recognition
- Cash flow statements
- Fixed assets and depreciation
- Inventories
- Other items

Presentation and Disclosures

There is no separate standard for presentation in the Indian GAAP. The format and disclosure requirements for corporates are according to Schedule VI to the Companies Act, 1956. Similarly, for banking and insurance entities, the format and disclosure requirements are set out under the respective laws/regulations governing those entities. IAS 1 prescribes the minimum structure of financial statements' presentation and disclosures.

Balance Sheet Presentation

Under the Indian GAAP, assets are classified as physical fixed assets, investments and current assets. Similarly, liabilities are classified as secured

loans, unsecured loans and current liabilities and provisions. But, under IAS 1, assets are broadly categorized as current assets and non-current assets. Liabilities are categorized as current liabilities and non-current liabilities.

Profit and Loss Account Presentation

While Indian GAAP do not require Indian firms to present a statement of comprehensive income, IASs require firms to do so. The distinction between the Indian GAAP and the IASs regarding presentation of financial statements is given in Table 1.

Table 1: Differences in Financial Statements between Indian GAAP and IAS 1

| <i>Nature</i> | <i>Indian GAAP</i> | <i>IAS 1</i> |
|--------------------------------|---|--|
| Classification of assets | <ul style="list-style-type: none"> • Fixed assets • Investments • Current assets • Loans and advances | <ul style="list-style-type: none"> • Current assets • Non-current assets |
| Classification of liabilities | <ul style="list-style-type: none"> • Secured loans • Unsecured loans • Current liabilities and provisions | <ul style="list-style-type: none"> • Current liabilities • Non-current liabilities |
| Statement of changes in equity | A separate statement on changes in equity is not required. | A separate statement on changes in equity is required to be presented by the entities. |
| Comprehensive income | Indian firms do not have to present a statement on comprehensive income. | Firms have to present a statement on comprehensive income. |

Revenue Recognition

Both the Indian GAAP and the IFRSs are based on similar principles. While the latter give detailed guidance on the measurement and recognition of revenue, they do not provide any industry-specific guidance or exceptions. Indian corporates currently follow varied practices.

In the case of revenue obtained from rendering services, IAS 18 allows only the percentage of completion method. AS-9 allows either the completed service contract method or the proportionate completion method. IAS 18 requires the

effective interest method to be followed for recognizing interest income. AS-9 recognizes interest income on a time proportion basis. While the International Accounting Standards (IASs) deal with the accounting of barter transactions, the Indian GAAP do not provide any guidance on them.

Under the IASs, revenue should be measured at the fair value of the consideration received or receivable. *Fair value* is the amount for which an asset could be exchanged, or a liability settled, between the parties in an arm's length transaction. Under the Indian GAAP, revenue is measured by the charges made to the customers or clients for goods supplied or services rendered by them. Table 2 lists the comparative position of revenue recognition under the relevant accounting standards.

Table 2: Revenue Recognition under Indian GAAP and IASs

| <i>Nature</i> | <i>Indian GAAP</i> | <i>IASs</i> |
|--|--|--|
| Revenue from the sale of goods or services | The earning process is complete when the ownership of goods is transferred to the buyer. | Accounting principles are substantially the same as those stipulated in AS-9. IAS 18 provides an additional condition that revenue should be recognized only when the costs incurred, or to be incurred, in respect of the transaction can be reliably measured. |

Cash Flow Statements

There is no exemption under the IASs regarding the preparation and presentation of cash flow statements. Under the Indian GAAP, there is exemption for SMEs in this regard. IAS 7 prohibits the separate disclosure of items as extraordinary items in the cash flow statements. AS-3 requires the disclosure of extraordinary items. IAS 7 deals with the cash flows of consolidated financial statements. AS-3 does not deal with the cash flows relating to consolidated financial statements.

The principles and methods of preparation and presentation of cash flow statements are almost uniform across the globe. The difference lies in the accounting treatment of specific items. Table 3 presents the comparative picture of cash flow analysis under the Indian GAAP and the IASs.

Table 3: Cash Flow Analysis under Indian GAAP and IASs

| <i>Nature</i> | <i>Indian GAAP</i> | <i>IASs</i> |
|------------------------------|--|---|
| Cash flow presentation | Direct or indirect method for the presentation of cash flows can be followed. However, SEBI requires presentation of cash flows using the indirect method. | Accounting principles are same as those stipulated in AS-3. |
| Classification of cash flows | Cash flows are classified as those from operating activities, investing activities and financing activities. | Accounting principles are same as those stipulated in AS-3. |

Fixed Assets and Depreciation

Fixed Assets

IAS 16 mandates component accounting for fixed assets. AS-10 recommends but does not force component accounting. Under the IASs, major repairs and overhaul expenditure are capitalized if they satisfy the recognition criteria of replacement. AS-10 provides that only that expenditure to be capitalized which increases the future benefits from the existing asset beyond its predetermined performance.

The fixed assets’ accounting under the relevant accounting standards is given in Table 4.

Table 4: Fixed Assets Accounting under Indian GAAP and IASs

| <i>Nature</i> | <i>Indian GAAP</i> | <i>IASs</i> |
|-------------------|---|--|
| Acquisition costs | All costs related to the acquisition of the asset should be included in the acquisition cost. | Accounting principles are substantially the same as those stipulated in AS-10. |

Depreciation

Under the IASs, depreciation is based on the useful life of the asset. Under the Indian GAAP, depreciation is based on higher of useful life or Schedule XIV rates of the Indian Companies Act, 1956. In practice, most companies use the Schedule XIV rates. Table 5 presents a comparative analysis of depreciation accounting under the relevant accounting standards.

Table 5: **Depreciation Accounting under Indian GAAP and IASs**

| <i>Nature</i> | <i>Indian GAAP</i> | <i>IASs</i> |
|------------------------------|---|---|
| Method of depreciation | GAAP does not prescribe any specific method of depreciation. The method should be based on the economic benefits arising from the use of the asset. | Accounting principles are same as those stipulated in AS-6. |
| Commencement of depreciation | An entity should charge depreciation from the date the asset is ready for use. | Accounting principles are same as those stipulated in AS-6. |

Inventories

IAS 2 prescribes that the same cost formula be used for all the inventories that have a similar nature and use to the entity. AS-2 requires that the formula used in determining the cost of an item of inventory needs to be selected with the objective to provide the fairest possible approximation to the cost incurred in bringing the item to its present location and condition.

Inventory valuation principles and methods under the existing notified Indian Accounting Standards (AS-2) and IAS 2 are significantly similar as both provide that the inventory should be carried at lower of cost or the 'net realizable value' (NRV). The comparison between the Indian GAAP and the IASs regarding inventory accounting is given in Table 6.

Table 6: **Inventory Accounting under Indian GAAP and IASs**

| <i>Nature</i> | <i>Indian GAAP</i> | <i>IASs</i> |
|--|--|---|
| Finished goods and work-in-progress method | They are measured at cost or net realizable value, whichever is lower. | Accounting principles are same as those stipulated in AS-2. |
| Cost formulas | FIFO or weighted average cost formula. | Accounting principles are same as those stipulated in AS-2. |

Other Items

The IFRSs provide extensive guidance in many other relevant areas of accounting policy as well. These other key items are as follows:

Consolidation

Under the IFRSs, a parent company is required to present consolidated financial statements. Stand-alone statements are presented only for specific purpose. In contrast, the Indian GAAP require only the public limited companies to present consolidated statements. IFRSs focus on the ‘concept of control’ for determining the parent-subsidiary relationship. Control exists when a parent owns, directly or indirectly through subsidiaries, more than 50 per cent of a company’s voting power. IFRSs specifically require the potential voting rights to be assessed. Thus, these standards are generally expected to create increased consolidation among Indian corporates. This reporting of consolidation under the IFRSs can have a profound impact on how a company portrays itself to its various stakeholders.

Business Combination

Under the Indian GAAP, the acquirer is determined by the legal form, i.e., the surviving entity, in a merger or acquisition. However, under the IFRSs, a legal acquirer may not be the acquirer for accounting purposes. IFRSs look beyond the legal form. All business combinations are considered as acquisitions and accounted for using the purchase method. Even while applying the purchase method, IFRSs largely requires the use of fair values. These changes would probably lead to a higher charge to the income statement. The strategic impact would be important for the deal and the executives involved in making the deal.

Financial Instruments

Currently, there is no comprehensive guidance on financial instruments under the Indian GAAP. The IFRSs provide extensive guidance on identification, classification, recognition and measurement of financial instruments. IAS 39, Financial Instruments: Recognition and Measurement, establishes the principles for recognizing and measuring financial assets and financial liabilities. This standard is of particular importance to the banking sector and NBFCs, which deal primarily in financial instruments. The provisions of IAS 39 are currently applicable globally in respect of financial instruments.² The fundamental shift here is from historical costs to fair value accounting, which would bring more volatility to the income statement and equity.

² Available online at: <http://www.rbi.org.in/scripts>.

Proposed Dividends

IAS 10 provides that the proposed dividend should not be shown as a liability when proposed or declared after the balance sheet date. The companies are required to make provisions for the proposed dividend, even though the same is declared after the balance sheet date.

Provisions, Contingent Assets and Contingent Liabilities

Under IAS 37, provisions are measured at the best estimate of the expenditure required to settle the present obligation. AS-29 does not contain any such guidance.

Segment Reporting

IAS 14 encourages voluntary reporting of vertically integrated activities as separate segments; it does not mandate the disclosure. AS-17 does not make any distinction between vertically integrated segment and other segments.

Conclusion and Suggestions

Any IFRS convergence effort begins with an initial assessment of the company through an analysis of the differences between the current practices and the IFRSs. This will serve to indicate the depth and breadth of the required changes and also send a first flag about what needs to be done. Convergence with the IFRSs affects more than just the accounting policies, processes and people of a company; therefore, it is also important to identify the broader implications of the IFRS requirements. What are the system implications of the new reporting requirements? What would be the tax consequences of the differences between the Indian GAAP and the IFRSs? One issue that is currently being deliberated by companies and regulators is the taxation framework (both direct and indirect) that would be applicable for corporates that follow the IFRS-converged standards.³

The final component of the initial assessment involves designing a strategic approach to IFRS adoption and a roadmap for the eventual implementation. This will help illustrate the actions and timings necessary for convergence. The technology infrastructure of the company should not be overlooked. IFRS convergence will heavily impact the IT infrastructure required to support the

³ See <http://www.thehindubusinessline.com/features/mentor/ifrs-convergence-a-taxing-issue/article1162284.ece>.

charts of accounts, consolidation, management of multiple GAAPs, and other issues related to configuration and data capture.

In a nutshell, managements are advised to start early as the costs will escalate with the passage of time; endorse the process with commitment; build awareness within the company; develop a proper communications network at the organizational level; and most important, put in place a competent implementation team to achieves its desired goals.

Future Directions

The proposed convergence, in the form of Ind ASs, between the IFRSs and the existing notified Indian Accounting Standards is significant and will have a dramatic impact on Indian companies listing in the United States and on American companies listing in India.

There is no single path to convergence. Therefore, an open-minded approach with a commitment to high standards is required for superior financial reporting.

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ARUN MAIRA*

Reforming Institutions: The Key to Inclusive, Sustainable Growth**

Ladies and Gentlemen,

We are living, as the Chinese would say, in ‘interesting times’. I had thought to live in interesting times was a blessing. For many years, I would blithely say to friends, “May you live in interesting times.” Until one day, a Chinese friend heard me. He pulled me aside to explain that interesting times meant difficult times! Well, the world seems to be in difficult times now. And I say that these are interesting times because there is a need for fundamentally new ideas.

Institutions Are under Stress Globally

The recent Arab Spring was a rebellion by people against autocratic governments of their countries. More recently, citizens have come also out on the streets in Turkey and Brazil, both countries with democratically elected governments. Their citizens want even more accountable governments. Governments of European countries are under stress too, with citizens repeatedly on the streets demanding change.

It is not only government institutions that citizens are unhappy with. They are also disillusioned with business institutions. The global financial crisis drew out citizens’ anger against financial institutions. Multinational corporations are now being exposed for cleverly managing to disconnect themselves from the countries where they actually have their operations and earn their revenues, by claiming that they earn their revenues and profits in other countries where they do not have to pay any taxes! They are facing the ire of governments and public anger too. They are also under fire from NGOs for the damage many of them cause to the natural environment and to the livelihoods of local communities as they expand their operations in the quest for more profits.

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International organizations such as the WTO are proving to be inadequate to equitably manage global trade regulations. The institutions of the European Union are also under stress. And many countries are banging at the doors of the UN Security Council. They complain that the oligopolistic structure created by the victors of the Second World War is an undemocratic anachronism. And very recently, the United States' monopoly on the governance of the Internet has come under criticism.

From the streets of Cairo where citizens have come out in millions yet again—this time railing against a democratically elected government—through the protests against financial and business institutions, to the Internet, the theme is the demand for reforming 'Institutions'.

In India too, the mismatch between the capability of our institutions and what citizens want has become rather wide. The millions who came out, led by Anna Hazare, against corruption in the country, with their demand to make new laws and create new institutions, and the millions more who took to the streets and to social media channels with their anger against the inability of institutions to provide safety to women, were demanding overdue reforms of the institutions of governance.

The response of elected Parliamentarians of all the political parties to the Anna movement was: You have elected us; therefore, please leave governance to us. In fact, many ministers said that the citizens who demanded that they be allowed to participate in shaping new laws were destroying democracy. So also said the Prime Minister of Turkey about the citizens protesting in Taksin Square in Istanbul.

India Needs Institutional Reform Urgently

The goal of India's 12th Five-Year Plan that commenced in 2012 is 'Faster, Inclusive and Sustainable Growth'. The country is presently far from this aspirational goal. GDP growth had touched almost 10 per cent per annum in some years of the 11th Five-Year Plan. But by 2012, GDP growth had worryingly declined to below 6 per cent. During the high growth years, protests against inequities and environmental degradation were escalating as fast as GDP growth. The protests by citizens are now becoming more strident.

Clearly, the country needs a plan to accelerate progress on all the three tracks simultaneously—economic growth, social inclusion and environmental

sustainability. Histories of other nations, as well as India's own recent experience, have shown that this trinity is not easy to realize.

I was invited by the Prime Minister of India in 2009 to join the Planning Commission as a Member. The 12th Five-Year Plan has been developed with more extensive and systematic involvement of all the stakeholders and India's citizens than in any previous plan. About 1,000 civil society organizations, dozens of business associations, and many think tanks participated. New techniques of systems analysis and 'scenario planning' were used for the first time to synthesize the diverse inputs into a system diagram.

This diagram showed the principal forces pressing against India's present institutions of governance and the relationships amongst these forces. At the heart of this diagram was the growing mistrust of citizens in the institutions of government and also in the institutions of business. Impatience and protests against the slow pace of reforms of these institutions have led to a political log-jam.

Therefore, to make the Indian system work better, to get faster growth, which must also be more equitable and sustainable, it is no longer enough to announce big-ticket economic reforms. For those reforms to be supported and then implemented, citizens' must have more confidence in the country's institutions. Thus, institutional reforms must proceed alongside economic reforms. Indeed, some say that institutional reforms must now precede economic reforms so that institutions have the capacity catch up with the demands that economic reforms are imposing on them.

The Why and the How of Institutional Reform

The world is going through interesting times. And the theme everywhere is the need for better institutions. I will speak today about why this global institutional crisis has arisen. I will also present some ideas about how we may go about creating the institutions we presently need.

I will begin with the story of getting a man to the moon. Many will recollect Neil Armstrong's immortal words when he stepped onto the moon: "One small step for man, one giant leap for mankind."

John F. Kennedy's call in 1961 to the United States of America to put a man on the moon had stirred the nation's imagination. The objective, which seemed way beyond reach when he announced it, was reached within a decade. It was

made possible with the development of vehicles that could operate in the rarefied atmosphere of space. Aeronautical technology had come a long way since the design of the plane the Wright Brothers had flown for just 300 yards to the amazement of the world in 1903. When Kennedy made his speech, jet planes were flying across oceans. But the conditions in space are very different to those in the earth's atmosphere. Therefore, the mission to the moon required the development of radically new vehicles that could operate in those conditions.

Institutions—of the state, business, democracy and justice—have been developed by human beings, over centuries, to fulfill the needs of their societies. Institutions are the vehicles with which societies realize their aspirations. Indeed, homo sapiens can be distinguished from other animal species by their *deliberate* development of institutions for the management of their affairs. Animal, bird and insect communities have innate, institutionalized rules that govern their behaviour. But so far as we know, they do not, unlike human beings, consciously change and improve these institutionalized rules.

Ladies and gentlemen, I want to present two broad ideas to you. The first is how the conditions in which institutions operate have changed dramatically over the past two decades. The design of institutions must be changed to suit these new conditions. Just as aircraft designed for atmospheric flight cannot operate safely—or at all—in open space, we now need to fundamentally redesign many institutions. It is no longer enough to change the design of the seats inside the airplane: the basic structure of the craft must change. Similarly, it is no longer enough to tinker with institutions, or to merely change the personnel at the top. The structures of institutions must be fundamentally transformed.

My second set of thoughts is about the challenges in effecting such fundamental reforms: challenges that make our times very 'interesting times', as the Chinese proverb says.

The More than Perfect Storm

I begin with the forces shaping our future. I will explain their effects on the institutions of democracy, capitalism and government. I will use two images for you to visualize these forces and their implications. One, an image of a storm. The other, an image of the globe in stress.

First, the image of the storm. Many of you may recollect the non-fiction book *Perfect Storm* by American author Sebastian Junger, published in 1997. It

described how, not two, but three storm systems converged in the North Atlantic. This was unprecedented. No ship had been designed for such conditions. And no captain had the skills to steer a ship in such a 'perfect' storm.

As the 21st century unfolds, there are four strong winds blowing across the world and converging to create a more than perfect storm, which is challenging the captains of both businesses and government institutions, which are not designed for these conditions.

The first strong wind is the idea of free markets and capitalism. This is not a new idea. Often attributed to Adam Smith, it has been around for at least 200 years.

With the spread of free markets everywhere, and into India too with the opening up of our economy in the 1990s, the economies of many countries have been growing faster. Most noteworthy is the growth of the two billion-people plus countries—China and India. The growth of their economies is enabling many millions of people to escape poverty.

Economic growth in free markets follows the principle of cumulative causation. As the market is opened up, those who already have some assets—financial, educational, or access to political power—can take advantage of the opportunities available. And their incomes and wealth grow faster than that of those who do not have these assets.

Thus, economic growth in freer markets is accompanied by increases in the disparities of income and wealth. So it is no surprise that the Gini coefficients are increasing in China, Russia, India, and other countries that have embraced the free market and capitalism. In time, the benefits of economic growth trickle down to the poorer people when they begin to acquire access to education, finance and employment opportunities.

In this model, one must be patient. And, in this model, to force redistribution is 'socialist' and wrong. Whereas, to induce the rich to accelerate the growth of their assets, by giving them tax-breaks, so that the economy can become larger, is capitalist and acceptable.

The second wind that has been gaining strength across the world is respect for the rights of all human beings—white or black, male or female, rich or poor.

This is a more recent force than capitalism. Indeed, many countries, such as the United States, that have been stoutly capitalist for centuries, have only in

the last 50 years addressed the rights of large sections of their populations, such as blacks and the disabled.

This force, of respecting the rights of all, combines well with the idea of democracy. It has been gaining a lot of strength over the last two decades, with the collapse of the totalitarian governments in the Soviet Union and the revolutions of the Arab Spring.

Blowing around deep within this second strong wind is the notion of justice, equity and fairness. From the perspective of economists, there may be nothing wrong with disparities within societies increasing as economies grow. It is part of the game, they may say. But is it fair from a human perspective, ask others?

The third is a voice speaking loudly to us, literally out of the Earth.

There is concern everywhere with the state of the environment. Now we all agree that the paradigm of economic growth that has brought the rich countries their wealth is not sustainable. Mankind's global footprint—which is a measure of the pressure human activity exerts on the resources of the earth—was 60 per cent of the earth's capacity to renew itself in 1960. It has presently reached 130 per cent of the earth's capacity. We are no longer living off the revenue account. We are eating into our natural capital.

The USA's footprint on the earth's resources is as heavy as 9.7 hectares per person. Europe and Japan's footprints are half of that—4.7 hectares per person. China's is one-sixth of the USA's—1.6 hectares per person. And India's is half of China's—0.8 hectares per person. So an Indian consumes one-twelfth of the earth's resources compared to an American.

Scientists project that if India and China, which will consume more of the earth's resources as their economies grow, were to have a global footprint equal to Japan's by 2030—which is half of the USA's present footprint—then these two countries' economies will require another whole planet earth to support them alone! But we have only one earth to share amongst the rich countries and the poorer ones.

The fourth wind, of more recent origin, is the gale force of information. Within just the last 20 years, telecommunications and the Internet have enabled people to reach out and be reached in a way unprecedented in human history. This wind has become a category six storm.

Today, you can instantly make a call to most places in the world on a cell phone. Twenty years ago, you could not do this. Not even in the USA. Now cell phones are in the hands of poor people and are found all over India, and in other countries too. Today you can log onto the Internet, use Google, and find information on almost anything. You could not do it 15 years back.

Television, which picks up information from these ubiquitous sources of information, reaches almost everywhere. Today, the number of 24x7 news channels in India is over 120. Fifteen years ago, there were just two channels. Thus, people's eyes and ears have been opened up to the condition of different parts of the world, and to the condition of their lives in relation to others, in ways they were not exposed to just a decade and a half ago.

With these four storm winds converging, a more than perfect storm has formed. With information flowing around and many more voices being heard, two major concerns can be heard more loudly in this storm, about the way the world is progressing.

One is, 'Our pattern of economic growth is not sustainable.' The other is, 'Our pattern of economic growth is not fair.'

These concerns are putting pressure for reform in the institutions of capitalism, government and democracy so that economic growth can be more sustainable, more inclusive and more fair.

The Rumbling Earthquake

My first image was the more than perfect storm, with the afore-mentioned four forces converging in the 21st century, putting pressure on institutions. My second image is a rumbling earthquake, with the institutions of capitalism, democracy and government grating against each other like three tectonic plates. The misalignment amongst these plates is creating tremors in global governance.

In his internationally best-selling book *The World Is Flat* (2005 and 2006), Thomas Friedman says it has been flattened by the force of global trade and international businesses spreading across the world, fuelled by new technologies. Countries, competing for FDI from multinational companies, are accelerating the spread of MNCs. Friedman writes, "Companies have never had more freedom and less friction in the way they operate. The biggest source of friction, of course, has always been the nation-state, with its clearly defined boundaries and laws. What this will mean for the long-term relationship between companies and the country in which they are headquartered is simply unclear."

The second tectonic plate, then, is the world of nations with their boundaries and their governments. There are many tensions within national governments, with demands to improve justice within their national boundaries. At the same time, attempts to create democratic forms of governance that cross national boundaries are under strain too. The European Union is greatly stressed. The WTO is spluttering along. International negotiations to create a global regime for the governance of the environment have gone from Rio through Kyoto, Bali, Copenhagen, Durban, to Rio again, 20 years later, without having really gone anywhere.

MNCs and global finance float above the plate of national governments and straddle national boundaries. A deeper tectonic plate within the earth, also cutting across national boundaries, is communities and their unique identities. The roots of many communities go back into history and traditions, predating by centuries the present national boundaries that have either divided such communities or sought to contain them. All over the world, there are communities divided by national boundaries: in North Korea and South Korea, China and Taiwan, India and Pakistan, Northern Ireland, Israel and Palestine, North Sudan and South Sudan, and the Kurds in Iraq, Syria and Turkey. At the same time, there are many communities within national boundaries whose historical roots require special attention—the Basques in Spain, the Tamils in Sri Lanka, communities within Nigeria, multiple communities within India (including in the North-East, the tribal communities within the heartland). The list goes on.

Friedman's earlier book, *The Lexus and the Olive Tree* (1999 and 2000), written prior to the 9/11 terrorist attacks, described two forces in contention. The Lexus represented the forces of global business and global brands. The olive tree represented the 'fundamentalist' forces of tradition, religion and identity. He was convinced then that it was only a matter of time and the force of the Lexus would wipe out the olive tree. However, he did not realize how deep-rooted the olive tree is. The 9/11 terrorist attacks were a wake-up call. The olive tree reacted to being smothered, using the same forces of technology that are supposedly flattening the world, to strike back at the Empire. The terrorists used the Internet, cell phones, UPS and commercial airliners in their strikes that flattened the World Trade Center.

The Indian Peepul tree is also very strong. Carelessly leave a seed in the water in which concrete is mixed, and a Peepul tree will break through the concrete after the house is built. Plaster over it again; yet, the shoots will reappear. As I

observed in my little rooftop apartment in Pune, where a Peepul kept emerging on the terrace no matter what techniques I used to suppress it.

The tectonic plate of government sits in the fault line between the plate of capitalism above and the plate of democracy beneath. The world will keep shaking as these three tectonic plates grate against each other until a new system of governance can be developed to align them.

The storm of the four forces is swirling in India. With its economic reforms since the 1980s, India joined the world of global trade and finance just when, with the fall of the Soviet Union, the ideas of open, free market, capitalist economies had claimed an ideological victory. Concepts of democracy and human rights have been built into India's Constitution and its political discourse since the country's Independence from its colonial rulers in the middle of the last century. A noisy and free media in the country has been supplemented by communications over cell phones and Internet-enabled social media. India, with its 1.2 billion people—expected to grow to 1.5 billion—maybe the most environmentally stressed large country in the world, requiring enormous quantities of fresh water, land and green cover to meet the needs of its growing population and growing economy.

Institutions designed for the conditions of the 19th and 20th centuries cannot withstand the pressures of the more than perfect storm and the earthquake rumbling in the 21st century. They must be redesigned.

Redesigning Aircraft while Flying in Them

Reforming institutions is not easy. If institutions are the vehicles in which we are travelling, then we must 'redesign the aircraft while we are flying it.' This is a difficult, even dangerous, exercise; and so there is resistance to institutional reform, especially of the deeper kind.

'Institutions', explains Nobel Laureate Douglass C. North, an economist and a major contributor to institutional economics, are not merely 'organizations' with their hierarchies and budgets, though they are often thought of as only that. Institutions are also the processes by which societies perform functions. Institutions also include the norms by which societies conduct themselves. Therefore, deep institutional reform cannot be achieved only by redrawing organization charters, or even by creating new organizations.

The implicit ‘theories-in-use’ that have guided the design and conduct of the organizations have to be changed too. This can be very discomfoting. Yet, this is the deep level at which institutional reforms have to be carried out as we sail into the new millennium. We cannot merely redesign the seats in the airplane when it must fly out of the atmosphere into space. We have to change the airplane’s structure more fundamentally.

A fundamental and implicit ‘theory-in-use’ lies in Man’s relationship with the natural world. Man’s desire to be in charge of the world and re-order it to suit himself, places him outside the system that he wishes to redesign and control, like an engineer sitting outside his machine and tinkering with it. Whereas, in reality, man is only a component of the system, embedded within it. And, therefore, his actions within the system create reactions that affect man.

Related to these two different views of the agent and the system are two fundamental laws of science. The first is the Second Law of Thermodynamics that every engineer must learn. It says that the entropy (or useless energy) in a complex system must increase with time. Therefore, the capability of any complex machine will reduce with time. The other law—of evolutionary biology—says that the capabilities of complex systems will evolve and increase with time!

These two laws that we see in operation all around us seem contradictory. However, they are easily reconciled. The Second Law of Thermodynamics begins with, “In a closed system”, and then goes onto say that in such a system, the entropy must inevitably increase. Whereas the Law of Evolution operates in an open system, rich in diversity, which Nature is.

Multi-disciplinary studies of systems by scientists at the Santa Fe Institute, New Mexico, USA, and elsewhere have revealed the architectural principles whereby complex, self-adaptive systems, as many systems in nature are, are able to evolve themselves. They are redesigning the aircraft as it is flying. Clues to how to redesign an aircraft while flying in it, which is a good metaphor for the challenge of reforming institutions, can emerge from an understanding of the structure of complex, self-adaptive systems.

The Hubris of Man

Man is not satisfied with the natural order. He has ambitions to change the structures of natural systems to make them deliver more than they can. Man wishes to change the course of rivers. He wants to re-engineer seeds. He is on

the threshold of designing new human bodies. He does all this without sufficient understanding and respect for the innate processes of natural systems. Thus, he interferes with, and can reduce, their ‘self-adaptive’ abilities.

I consciously use the term ‘Man’ when talking about humans, even though it has become politically incorrect. Because the desire to dominate rather than live in and adjust has been associated much more with the males of the human species throughout human history; as Riane Eisler points out in her remarkable book, *The Chalice and the Blade: Our History, Our Future* (1987 and 1988).

The first step, therefore, is for Man to humbly reinsert himself into the system as a part of it, and not act like an engineer sitting outside the system. From inside the system, aware of its primary load-bearing structures that he must not damage while rearranging other features of the system, he could be a collaborative force in the system’s ‘self-adaptive’ process rather than a destructive force.

That humans have ambitions to change and improve the world is as much a part of nature as everything else in nature. It is a force in nature that will not be easily suppressed. However, continuing developments in science and democracy, both man-made institutions that have contributed greatly to Man’s ability to improve his world, have created complications.

Advances in science—enabling Man to create new seeds and plants, and to re-engineer his own body—have made Man’s relationship with nature fraught. At the same time, the increasing demands for human rights in the political, social and economic spheres are complicating governance. To these complications, I now turn.

Classifying, Counting and Calculating

First to science and its hand-maiden, engineering. Science and engineering are the outcomes of the Enlightenment that began in 17th century Europe. They have changed Man’s relationship with nature, and have undoubtedly helped Man to improve the world for himself. These disciplines are founded on the requirements of objectivity and measurement. With them, the belief that ‘What you cannot measure, you cannot manage’ has become institutionalized within modern human enterprises, in business and government too.

The pursuit of numbers, in the belief that numbers alone indicate accuracy, has become the bane of economics. Many forces that shape societies and economies

cannot be easily measured, such as the trust of citizens in institutions. Such substantial forces must not be excluded from a model that seeks to explain the behaviour of the economy.

Economists have been the emperors of government policy in most countries over the last 20 years. British economist Adrian Turner, delivering the 2010 Lionel Robbins Memorial Lectures, said the time has come to reconstruct economics. Too much reality was being left out of economists' models for them to explain the world. Neither can these flawed models predict the future condition of an economy, nor can they be reliable guides for shaping public policy.

Building More Accurate Models

The reconstruction of economics will require the inclusion of many disciplines of the social and ecological sciences in a collaborative inquiry. Human societies and economies are complex systems. In order to see the whole elephant, those who have blinded themselves to others' points of view, by their conceptual and ideological differences, must come together.

Making a map of a system that shows its essential features is the primary requirement for a system of scientific management in business and in government. Maps that exclude features of the landscape, either because they cannot be measured or because they are of no value to the map-maker, can lead to unintended consequences.

For example, scientific forestry has enabled large increases in the production of timber, which is the resource of the forest that businesses and government are most interested in. To manage the forest's timber, the amount of timber in it must be measured. Therefore, the locations, numbers and sizes of timber trees must be known. The next step in scientific management is to shape the forest to maximize the production of timber, by planting only those species that produce the most timber, placing them in evenly spaced rows, stripping out all the other parts of the forest—other trees, shrubs and the undergrowth. Thus, scientific forestry increases timber production, but it destroys all the other features of the forest, the values of which it is not concerned with.

The 'de-diversifying' of a system by standardization does make measurement and management of the system easier. But the removal of diversity from a system destroys its ability to self-adapt and evolve. In the example of the forest, the removal of diversity began in the mind of the scientific forester. Then, the

diversity was reduced on the ground with unintended consequences, including a reduction in the forest's resilience.

The hazards in trying to manage a diverse and complex system through standardization and measurement show up vividly in the methods of India's Planning Commission. Our centralized planning process is driven by a need to measure and manage. Economists and the perspectives of economics sit atop this planning process. GDP is measured and pursued—too single-mindedly, complain those concerned with the other qualities of the system, such as the pace of inclusion and environmental sustainability.

Moreover, schemes for improving health and education are too centralized, imposing uniform standards on all parts of the country even though the conditions are different. Standardization does make the controller's job of measuring easier. But it damages the abilities of local systems to innovate and evolve.

The approach to planning in India (and elsewhere) must change from measurement and control to an approach that enables a diverse system to build the capabilities to evolve and improve. The principles by which complex, self-adaptive systems govern themselves will be more helpful to India's planners than the mathematical approaches of economists and engineers.

Reforming Democratic Systems Democratically

The second complication for an engineered and controlled management of development is democracy. Indeed, it is often said, when comparing the GDP growth of China and India, that India's democracy is a handicap, contrasted with China's single party, top-down political system.

Concepts of democracy and equal rights for all human beings require that the ambition for change and the direction chosen are supported by many, and are not the whims of a few. In a democracy, before imperial King Canute asks the sea to retreat, he must obtain the people's permission!

What do the people really want? This is not easy to find out. The Planning Commission's attempt to find out by wide consultation what India's billion-plus people would want the Planning Commission to direct the 12th Plan towards was not easy.

India conducts elections very successfully on a scale no other country can. But, democracy is not merely the conduct of elections to enable people to

choose those who will represent them. People want to be heard by their representatives in between elections too. They want to know what plans and policies are being cooked up; and also want to know how they are being cooked. Moreover, they also want to participate in the cooking.

The inadequacy of the processes for people's participation in democratic deliberation became clear during the anti-corruption movement in India in 2011. Elected members of Parliament of all parties reacted to people's demands for reforms in institutions, which they made on the streets and in the social media, as 'anti-democratic'.

The basic demand of the protests in Turkey in 2013, radiating out from Taksim Square in Istanbul, was for the country's elected leaders to engage with the people more often. The response of Turkey's Prime Minister was: I and my Government are democratically elected; you are disrupting democracy by protesting in the streets! This was the response of India's elected Members of Parliament too, to the Anna Hazare movement. Thus, they tried to shut out the people's demands for a dialogue with their government. They wanted the people out of the kitchen.

Deliberative Democracy and Dialogue

Processes for a 'representative democracy', such as the conduct of elections to select peoples' representatives, are not enough. And deliberation amongst these representatives, to shape policies that affect the lives of citizens, no longer satisfies them. Therefore, Europe's citizens now complain about the 'democratic deficit' in the European Union. And hence also the frustrations of Turkey's citizens with their democratically elected government, which says to them, 'now that you have elected us, leave it to us.'

For deep, deliberative democracy, processes for people to participate in the shaping of policies that affect their future are also required. An obvious difficulty in India is how to listen to a billion people, or even a million for that matter.

Modern communication technologies seem to provide the means to listen to the masses. Millions can express themselves in tweets and posts on social media platforms. However, as policy-makers using these mediums of communication have realized, their vast reach and speed may make democratic communication more difficult, not less.

What is the signal emerging from all that chatter and noise on social media platforms? And, how does one ensure that democratic principles are at work

when obtaining inputs electronically? Are some technology-savvy people ‘stuffing the ballot boxes’ with multiple responses, whereas the views of the many not-so-savvy (and some not connected) are not being counted at all?

It is even more difficult when people do not want merely to be heard but also want to be engaged in the process of deliberation, as they seem to want now. For democratic deliberation, people must be willing to listen to each other.

In the Planning Commission’s consultations with civil society organizations and business associations, the inability and unwillingness of people to engage in a dialogue with their peers was very evident. Civil society organizations that represent the same cause, such as organizations representing women’s issues, are in competition each with other, as are business associations with each other. Each holds on to its version of the truth and its preferred solution. And everyone has egos too!

Shutting Out ‘People Not Like Us’

The underlying ideologies and beliefs of the civil society organizations that are competing for attention may be the same. Yet, they were not willing to talk to each other and hammer out agreements amongst themselves. Each preferred to talk separately to the Planning Commission.

When there are ideological differences amongst persons and organizations, there is much greater reluctance to meet others, who they consider as the opposition. This makes the processes of deliberation amongst the people much more difficult. Sections of citizens may agree on what ‘people like them’ want. However, citizens cannot come to an agreement about what ‘we, the people’ really want.

The ubiquity of information with which people are being bombarded, through the Internet, social media, and multiple 24x7 news channels, has surpassed human capacities—biological and mental—for the amount of information that a person can process at any one time. Therefore, to cope with the increasing ‘attention deficit disorder’ that we are suffering from due to the information overload, we must consciously or unconsciously choose what and who we pay attention to. We must choose the channels and Internet communities that we will connect with, and the opinion-makers we will follow.

Our choices will, inevitably, be guided by our underlying beliefs about the sort of ideas and people we like and those we do not. Thus, people are being driven

into ‘conceptually gated communities’ in which they listen to people with the same beliefs. And they shut out others who may have fundamentally different beliefs.

Processes of Deliberation Must Be Founded on Democratic Principles

Technology is not the panacea to fundamental problems of communication amongst people. Processes for consultation and decisions must be formed around sound democratic principles. Technology can then facilitate these processes.

I mentioned earlier that a storm had built up as we entered the new millennium. This storm, stirred by the gale force of ubiquitous communications, has been created by the clash of the institutions of capitalism and free markets with the institutions of human rights and democracy. The institutions of capitalism operate on different principles to the institutions of democracy. Capitalist institutions run on the principle that one dollar equals one vote. Therefore, those who have more dollars invested in the enterprise must have a larger say on how the enterprise is run. On the other hand, democracy says that every human being, rich or poor, has an equal vote. When systems that run on different principles connect, there will be dissonance. It is like connecting an appliance that runs on DC electricity into a socket with AC current. Something will blow up.

The determination of the democratic principles that must guide the reform of many institutions that are part of the human enterprise—business organizations, the media, the Internet, government organizations, political parties, and civil society organizations—is the meta-level institutional reform that has become necessary now.

Summarizing My Story

Ladies and gentlemen, let me recall and summarize what I have said to you. I have used several images to explain my case for institutional reforms.

The first was the rocket to the moon, to make the point that when conditions change, we need new vehicles, new institutions.

Then I painted two pictures, of the more than perfect storm and the earthquake, to illustrate how conditions have greatly changed in the 21st century, and why institutions are under immense strain.

I used the metaphor of redesigning an aircraft while it is flying, to explain the nature of the process of institutional transformation, and why it is difficult.

I introduced the concept of complex, self-adaptive systems, as systems in nature are, to suggest how airplanes can be redesigned as they are flying. I further pointed out that the obsession to measure and manage, without a comprehension of the whole system, is causing damage to our environment and our societies too. I also pleaded for Man to be more humble in his relationship with Nature, of which he is a part.

I drew attention to the need to improve democratic processes for democratically determining what our aspirations are, and to democratically design the institutions we need. I mentioned that technology is not a panacea. It must be a servant to facilitate the democratic processes of dialogue and deliberation.

My conclusion is that the democratic redesigning of democratic institutions, and the introduction of stronger democratic principles into the governance of capitalist institutions, have become the core agenda for institutional reforms in the 21st century. And here I pleaded for more tolerance of the views of others.

In conclusion I say, as the Chinese proverb would put it, that India is specially 'blessed' at this time. Because India probably has the greatest challenges compared to any nation on earth. It is proudly democratic. But its democratic institutions, particularly those required for democratic deliberation, are under a lot of strain and must be reformed. Its economy must grow inclusively to provide jobs to India's burgeoning population of youth, the largest pool of young people in the world. Our natural environment is highly stressed—its water sources, its forests, its mountains. Therefore, economic growth must not strain the environment any further. The achievement of 'Faster, Inclusive and Sustainable Growth', which is India's goal, requires new ideas. And it requires that we reform our institutions very urgently.

Perhaps, while solving its own institutional challenges, India may provide the world with solutions too. I end with this aspiration.

I hope you share my aspiration. And I thank you for hearing me patiently.

Book Reviews

Business and Community: The Story of Corporate Social Responsibility in India.
PUSHPA SUNDAR. New Delhi: Sage Publications and Response Business Books.
2013; xix + 392 pages; Rs. 895 (hardback).

Corporate social responsibility is a subject that has been written about at great length—ad infinitum and ad nauseam, in many books, management journals and newspaper articles—without any of us being much the wiser about the true nature of the beast. That is why this reviewer initially approached *Business and Community* with a sense of deep trepidation. Fortunately, Pushpa Sundar’s approach is refreshingly different, for several reasons, and so merits the serious attention of lay readers as well as of the corporate world and the management community.

The first reason is that corporate social responsibility (CSR) has become one of those catch words that seem to have an infinitely elastic meaning—covering charity, philanthropy, corporate giving and organizational social enterprise. So what exactly *is* it? Most business authors have chosen to tread the well-worn path of management science and prefer to define CSR in precise terms, each with his or her take. But this has an inherent danger. As Humpty Dumpty said to Alice in Lewis Carroll’s *Through the Looking-Glass*,¹ “when I use a word, it means just what I choose it to mean (p.196).” Sundar avoids this management trap of apparent clarity and instead interprets Humpty’s advice in the more practical and holistic way that Carroll probably meant. At the very outset, she states her recognition that whilst one may use ‘CSR’ as a convenient catch-all term, the activity itself is complex, and includes elements of each of the components mentioned above. Her way of unravelling this complexity is not by privileging one form of CSR over the others through definitions; but by adopting a historical approach, which traces the gradual evolution of the concept. This method of treatment allows the different facets of CSR in India—each with its riches as well as its flaws—to reveal themselves to the reader in a very natural way.

¹ Lewis Carroll, *Through the Looking-Glass and What Alice Found There* in the *Penguin Complete Lewis Carroll* (London: Penguin Books, 1982).

The second reason to read this work is that—unlike the majority of management books which seem to delight in dense jargon—it is well organized and is written with simplicity, clarity and a felicity with language. This helps Sundar to keep the flow going, so that the narrative does not flag whilst navigating nearly 400 pages. *Business and Community* is organized into three sections, with a succinct Foreword by Ratan Tata, which tells us why it is vital at this time for Indian business to engage in some “soul-searching (p. xv)” on the subject of corporate social responsibility. The first section deals with the history of CSR right up to the reforms of the early 1990s. The second takes us up to the present; whilst in the final portion, Sundar offers up some informed speculations as to what the future could hold for CSR in India. The appendices contain useful accounts of some actual corporate practices of CSR, and there is—yet another thoughtful touch—a glossary which explains the many acronyms that pepper the text.

At the very outset, Sundar nails her flag to the mast by stating her objectives in writing the book. And it is as well to briefly mention them:

1. To enhance public knowledge and understanding of the contribution of Indian business to society.
2. To enthuse the business community by highlighting role of exemplary individuals/companies in the history of Indian CSR.
3. To identify the factors which inhibit or encourage CSR.

The reader can thus easily evaluate whether or nor these goals have been met by the time s/he finishes reading the work. The reviewer too will offer his opinion by the close of this piece.

The historical section of the book is indeed both interesting and thought-provoking. The stories and brief sketches of the early pioneers of industry in India—J. N. Tata, G. D. Birla, Bajaj and several others—reveal their breadth of vision and insights at a time when building businesses in a colonized India must have been beset with incredible challenges. Some of their convictions (as brought to life by the author’s choice of quotations) bring out vividly the deeply ingrained morality and humanity that infused at least a good number of these early industrialists. In contrast, so much of what passes off for CSR today, whilst slickly packaged and presented, seems highly instrumental and contrived. At the same time, Sundar points out that the CSR activity of some of the early pioneers was motivated as well as

accompanied by a very evident religiosity, which some might feel is inappropriate as a public activity in our era.

But the subject of how these industrialists formulated, developed and later demonstrated their moral and civic values through concrete action also needs to be addressed. In India, any discussion of morality or ‘values’ in education tends to get drowned in a passionate political debate between the proponents and opponents of secularism, howsoever defined. But the question cannot be ducked: Can indeed CSR be sustained without the overall development of a conducive moral climate? The author has mined a rich vein here and returns to this theme at various places in the book; but further exploration of where these thoughts reach is necessary. Perhaps, other researchers (or the author herself) will do so in future.

The second section of the book covers, at a fast trot, the socio-political environment after 1991, the course of CSR in response to globalization, the rise of civil society organizations and the mind-set of a new breed of entrepreneurs. Throughout *Business and Community*, the author’s sense of balance is evident. There are some very inspiring examples of CSR initiatives by industrialists who could embrace in full the ethical and visionary spirit of CSR. However, these are counterpoised by the depressingly large mass of Indian businesses who do very little, and who are not above the prolific use of bribery and other shortcuts to ‘success’. Moreover, this is not just an Indian—or emerging country—phenomenon. Recent revelations about the tax havens where multinational companies park their profits, and about their relative lack of accountability to national governments, present a sobering picture even when several of these marquee companies are lauded as the standard-bearers of CSR! Taken as a whole, the evidence seems to reveal that CSR has not markedly improved the condition of the Indian people. The trouble is, benchmarks in this area are hard to get; and so there is little comparative data as to whether other nations in like situations have fared better or worse. Still, as a summary, the author’s quote of Prof. Sumantra Ghoshal’s observation that Indian business leaders have “failed to articulate a moral philosophy for their own profession (p. 276)” is probably both telling and apt.

In the final part of this work, Sundar tackles the challenges facing CSR today: land acquisition, natural resource mining, environmental issues, business and ethics, the tension between the costs of CSR and the globalization-driven pressures for competitive pricing, and the like. These

are complex issues that not only involve trade-offs between outcomes but differentially affect various segments of society—with the poorest usually coming off worst. Globalization and the waning power of the state have also resulted in the excessive marketization of what once were socially common goods. The meaning of ‘development’ has therefore become highly divisive; there are some who swear by it, and others see in it the destruction of all meaning in their lives.

Overall, this is an excellent work which amply justifies the expectations earlier stated. Sundar has collected and organized the material logically and convincingly. Though, what *Business and Community* needs, to round it off, is a grand finale. And it is only at the very end—in the last few pages of book—that Sundar approaches a likely solution to the conundrum she points to in the last paragraph. She raises the question of a “Gandhian trusteeship” model that will order a different alignment of forces, which could then lead to more equitable outcomes. The author, though, cannot fully work through this concept to indicate how India could design a new future. That is understandable because, ultimately, this is a question of political economy and so outside the scope of the present work. Still, it is a nettle that must be grasped at some point by any writer on CSR. And with the edifice that Sundar has already constructed, this reviewer would suggest that it be her next project. It is only when there is a root-and-branch rethink of the meaning of ‘development’ that CSR is likely to be free of the contradictions pointed out by Sundar. Here, therefore, lies fertile ground for her next work. She will do our country a yeoman service by taking it up as the theme for another book.

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Organizational Schizophrenia: Impact on Customer Service Quality. GOPAL K. GUREJA. New Delhi: Sage Publications and Response Business Books. 2013; xxx + 346 pages; Rs. 550 (paperback).

Organizational Schizophrenia embodies an interesting discourse on the widening gap between intent and execution, promise and performance, in organizations with reference to customer service quality. It appears to be an attempt to explore the reasons why operating practices in a company tend to drift away from the declared policy, particularly with reference to customer care, and to investigate the phenomenon of ‘cultural schizophrenia’ even in well-meaning companies. Recent years have witnessed a diverse and wide-ranging set of publications pertaining to customer service. The book under review appears to fill a conspicuous gap in the existing body of knowledge.

The book consists of 18 chapters divided over four parts with a stimulating Foreword by R. Gopalakrishnan. Part I, titled “The Promise”, is predominantly descriptive, dealing with the mission and vision statements, and the internal and external communications, of respondent companies. It purports to examine organizational policies and “promises”. Part II, “The Performance”, attempts to capture the actual practices in organizations. It is partly autobiographical, illustrating, to a great extent, the real-life interactions and experiences of the author. Part III, “The Cultural Schizophrenia”, outlines the reported outcome of the author’s empirical research, leading to the formulation of the construct “organizational schizophrenia”—a term that the author appears to have coined to describe issues related to policy-practice gaps. Part IV, “Back to Basics”, underscores the essence and magic of living the core values as enunciated in the ‘promise’ of organizational policy. Overall, the book has touched upon various aspects related to the promises and the actual performance of organizations, and the cultural schizophrenia that appears to fracture the two.

The distinctive aspect of *Organizational Schizophrenia* is its focus on the gaps and organizational dynamics within a company. The voices of various employees in different functions at several levels of the organizational hierarchy are also neatly captured, which is an appreciable effort. However, what is offered in the process is a rather cumbersome journey, from a reader’s perspective, because the transitions in the discussions on organizational policy, practice, and the gaps therein, are not well-mapped. Also, the reader cannot help but wonder about the relevance and appropriateness of the “Afterthought”.

The book is supposedly an outcome of an empirical research study. However, the reader has to struggle to identify the details of the methodology followed, as they are not systematically documented. *Organizational Schizophrenia* is also rather ambiguous on how the qualitative analysis and related aspects have been carried out. Furthermore, it is not clear as to what thematic matrix has emerged out of the qualitative empirical research.

Mixed methods (qualitative plus quantitative) research is the contemporary approach to understanding the paradigm that the book deals with, and is likely to offer robust scientific findings. It is therefore surprising that there is no mention as to why such an approach has not been contemplated by the author. In the light of this, Gureja's fuzzy methodology might seem dubious to academicians, behavioural scientists, and serious management thinkers.

At first glance, the main title *Organizational Schizophrenia* arrests the attention of the reader. But on reading the book, one gets the impression that this title has been chosen for impact value. Moreover, the terms "organizational schizophrenia" and "cultural schizophrenia" appear to have been used synonymously. An effort to operationally define "organizational schizophrenia" would have been useful, especially since the author claims to have carried out an empirical study. Perhaps, *Organizational Neuroses* would have been a more apt title as the phenomenon described in the book has similarities with the concept of neurosis.

The key theme enunciated by Gureja is that the eternal conflict between 'maximizing customer's satisfaction' and 'maximizing shareholder's value' leads to organizational schizophrenia. It appears that he has drawn inspiration from Jim Collins's *Good to Great: Why Some Companies Make the Leap...and Others Don't* (2001). Gureja advocates a culture of disciplined thought and action across the organization to fill the gap between promise and performance—a solution which has already been suggested by Collins.

On the one hand, India has witnessed tremendous growth in the services sector. On the other hand, it has been documented that the distance between the service provider and the customer is steadily widening. In this context, *Organizational Schizophrenia* is timely, the first of its kind publication in India, and should serve as an eye-opener to executives across the company—right from the front-line customer contact personnel to the top management. In a rare exercise, Gureja has experimented with blending the perspectives of the theoretician and the practitioner, which adds value to the work.

Organizations in the country will certainly benefit from the author's experience, which the book attempts to capture. All those who believe that the 'customer is king' may want to read this title.

By **K. N. Viswanatham**, Professor, Human Resources area, Centre for Management Studies, Administrative Staff College of India (ASCI), Hyderabad (e-mail: viswanath@asci.org.in).

Public Debt Sustainability in Developing Asia. BENNO FERRARINI, RAGHBENDRA JHA and ARIEF RAMAYANDI (Eds). Metro Manila, Philippines: Asian Development Bank and Abingdon, Oxfordshire, UK: Routledge, Taylor & Francis Group. 2012; xv + 211 pages; US\$ 152 (hardback).

The response to the global financial crisis (GFC) 2007–2009¹ was expected to drastically alter national fiscal positions and therefore the future course of public debt. *Public Debt Sustainability in Developing Asia* intends to summarize current practices in the measurement of national public debt with a view to assess the situation in respect of its sustainability in the developing nations of Asia in general and, in particular, for China, India and Vietnam. Data utilized by the contributors is drawn from the outlook publications of multilateral funding agencies (including Asian Development Bank's (ADB) *Asian Development Outlook* and the International Monetary Fund's (IMF) *World Economic Outlook*) with several details also drawn from the government finance statistics (GFS) of the IMF and individual country governments' accounts.

Chapter 1, the "Introduction", contributed by all the three editors, describes the post-GFC scenario in terms of a brief comparison between the advanced economies and the emerging economies on their debt and aggregate fiscal deficit positions. They opine that "...Most of the financial systems of the region's economies were well prepared for the crisis (p. 4)" and draw out the broad objectives of the subsequent chapters "...*(i)* to assess the foundations underlying the apparently benign outlook for developing Asia, *(ii)* with particular focus on economy-specific vulnerabilities, and *(iii)* [the] global risk factors that may undermine the sustainability of public debt (pp. 5–6)."² An appendix to the chapter lists the responses of several developing Asian economies to the unfolding GFC. However, it is not clear if those actions of various countries were triggered in response to the crisis (for example, waiver of electricity surcharge in Sri Lanka (p. 9).

¹ The crisis began with a series of tremors between early February and late August 2007, revealing the infirmities of certain financial institutions. Some among the largest in the world also announced losses, and the crisis came to a head on 15 September 2008 with the collapse of Lehman Brothers; its bankruptcy filing being the largest in US history. By mid-September 2009, the so-called financial contagion had spread rapidly to consume several other bank and non-bank financial institutions.

² Numbering here is introduced by this reviewer.

Chapter 2, “Analytical Approaches to Assessing Public Debt Sustainability”, by Raghendra Jha is a review that emphasizes uniformity in the principles for analysis and for recognizing the differences among countries in their initial conditions, stage of development of institutions, etc. The chapter highlights several limitations of the extant practices in adjudging sustainability of debt, including its “bias in the direction of discovering sustainability” and being “exclusively concerned with market-access countries (p. 19).” Other highlighted issues include a deeper understanding of the composition of public debt, revenue and expenditure in the context of diverging practices in arranging data. Sustainability of debt is reflected from a non-positive IRGD (interest rate-growth rate differential). Alternatively, debt may be stabilized if the current period primary surplus pays exactly for the last periods IRGD (where, primary balance (deficit/surplus) is the fiscal balance minus interest payments). The chapter also discusses the “dynamic tests” that (a) analyze the time-series properties of debt; (b) estimate the fiscal reaction function to analyze the primary balance; and (c) define stress tests that subject certain variables to shocks.

In Chapter 3, “Public Debt Sustainability Assessments for Developing Asia”, Benno Ferrarini and Arief Ramayandi assess several countries of developing Asia, reviewing the period between the mid-1990s and 2010, on macro/fiscal indicators. A recurring theme of the chapter, the longest in the book, is the relatively benign situation of most countries and sub-regions with respect to their debt projected up to 2016. The results from the stress tests under standard (deterministic) debt sustainability analysis (DSA) and under some stochastic assumptions are more or less reinforcing.

Chapters 4–6 relate to specific country studies that often appear to repeat the general drift in Chapter 3. However, each of these also attempts to highlight country-specific vulnerabilities of domestic or foreign origin that escape attention in the cross-country discussions (often oriented to observe similarities). For example, Chapter 4 by Richard Hemming on People’s Republic of China (PRC) reveals that in their budget plans, revenue is generally under-estimated, while in Indian budgets, it is often over-estimated. Despite the strong central command, local investment companies (LICs) and state-owned companies (SOCs) in China appear to be contributing significantly to the country’s infirmities. The former may give rise to liabilities from collateralized debt (based on revenue from land sales) and the latter (for example) from rising pension costs. The chapter discusses classification

of debt according to attributes that may reflect seniority and/or hardness of obligations and associated risks. In this context, Hemming also alludes to the idea of broadening the measure to assess fiscal policy, suggesting a measure akin to public sector borrowing requirement (PSBR), instead of fiscal deficit, to enhance fiscal transparency.

In Chapter 5 on India, Mukul Asher draws from other research to suggest that despite a negative IRGD, there remain strong apprehensions on the sustainability of debt even in the medium term. Asher emphasizes the important role of the constitutional features and institutional structures that simultaneously reveal some strengths and debilitating weaknesses for debt management in a diverse federation. Predominant recourse to domestic debt with a significant conduit of public sector enterprises may conceal several weaknesses in the labyrinth of non-transparent transactions. Such measures also inhibit the efficient allocation of resources available for investment, which is likely to scupper growth prospects.

Chapter 6 on Vietnam, contributed by Charles Adams, highlights the country's large proportion of external (and foreign currency-denominated) debt. Thus, when compared to countries with greater reliance on domestic debt, the IRGD is less relevant for Vietnam. However, fiscal stress tests also do not sound any alarm for the medium term.

The editors recombine their effort in the final chapter to summarize the findings and further draw lessons from a brief description of the South Korean experience. In particular, they draw attention to the divergent scope of accounting terminologies. Theoretically, cumulating fiscal deficits (a flow variable) over a specific period should provide clear exposition for debt (a stock variable) at the end of that period (provided the opening balance on debt is known with a fair degree of certainty). In practice, however, the link between the estimate of deficits and the emerging debt position is not reflective of this smooth relationship. Items covered to assess fiscal balance differ from those constituting national public debt. This discrepancy is, however, not limited to developing countries alone, nor to only the developing countries of Asia. Needless to say that greater harmonization in the scope of the accounting entities emerges as one suggestion, for pressing reform, from this book.

The Asian region was leading global growth even as the ripples from the euphemistically named GFC were rapidly spreading out in giant waves over

large parts of North America and Europe. However, with very few countries emerging unscathed, the crisis forced some rethinking on the part of all nations. *Public Debt Sustainability in Developing Asia* attempts to document this phenomenon.

Financial repression and the preponderance of negative real interest rates in several economies of developing Asia have been often documented as the norm, rather than an exception. Thus, there are no surprises in this book to find non-positive IRGD and the conclusion on sustainability of extant debt.³ But, as a corollary perhaps, this offers a cue to the observations by other researchers, relating to inadequate financial inclusion and the existence of large informal or unorganized sectors, which dampen the effectiveness of monetary and fiscal policy tools, especially the former.

Sustainability, however, may be distinguished from perpetuity, to signify 'soundness' assessed within the bounds of 'natural expectation of life' but subject to a 'natural process of aging'. Often, sustainability can be assessed only along a few attributes of an economic entity. The economic entity may be an individual, a corporation, a government or (as in this case) a state. In the extant case, the domain for sustainability is circumscribed to communicate financial well-being measured along the public debt dimension. This implies an institutional structure for regular and improved monitoring to accurately assess the assets at risk or the exposure to risk. In other words, is the state, and its institutions, capable of providing adequate security to protect the value of savings by investing in productive enterprise?

The pedagogy for sustainability, as in other spheres of human endeavour, continues to evolve. There is unlikely to be a magic potion for eternity. But, if one follows accounting principles as applied to corporate finance, then sustainability analysis should include testing for both (a) liquidity and (b) solvency.⁴ The former is necessary in the short to medium term, and the latter a sufficient requirement in the long term. The introductory chapter circumscribes the scope of analysis to the medium term (up to 2016), focusing on liquidity and obviating the need to assess solvency.

³ It appears that not all the contributors to the book share the same understanding on the notion of IRGD as described in endnote 8, p. 42. Where, IRGD equals $((r - g) / (1 + g))$; r is the real interest rate, and g is the real growth rate.

⁴ However, whether analogous metrics are adequate, and whether institutional structures are enabled to identify lurking dangers, remain matters of moot concern.

Liquidity requirements are often satisfied, especially in the developing countries where several structural features relating to social security (including health and pensions) are at a nascent stage. But, even there, it is useful to test for liquidity over the average maturity period of extant liabilities. Also, the opening balance on the debt-to-GDP ratio assumes tremendous importance in short-term analysis. However, the solvency of sovereign governments is extremely hard to test with the extant government national accounting capacity. Perhaps, some lessons on solvency checks may be usefully drawn from the experience of the European Union (a supra national body)⁵ and the institutional mechanism for federal control of provincial finances in large federations.

The 2007–2009 turmoil in the financial markets was not brewing entirely un-noticed. Indeed, soon after the trailer rushes of the Asian financial crisis (AFC), towards the end of the last millennium, voices expressing concern were raised frequently. Similar observations of low amplitude tremors were also reported in the Latin American economies. But, the bandwagon had gained momentum, and voices expressing concern about the rapid acceleration in international finance were either ignored or got suppressed in the louder din around.

The earlier alibi of weak oversight of financial markets in some developing or emerging economies came to haunt the developed world and was duly acknowledged when the bandwagon went off the rails, claiming a high-profile victim in September 2008, and precipitating a full-fledged crisis of global dimensions. Several collateral damages were quickly unearthed, but several others also sank into oblivion. However, like with natural events, this financial crisis not only exposed the raw features but also forced several economies to seek common/co-ordinated cover.

While, there is little to disagree with in terms of the broad thrust of reform emerging from *Public Debt Sustainability in Developing Asia*, there is little that may be considered as novel. In Chapter 5, Asher briefly discusses institutions and the legal system in India; and in Chapter 4, Hemming lays more emphasis on social systems in PRC. While advocating accrual accounting in place of cash accounting, there is, however, a need to appreciate the likelihood of incongruence in assessment on items of expenditure and revenue. In that context, the arguments to clearly identify and include hidden

⁵ External constraints become swiftly binding to force large adjustments.

liabilities to assess debt and its sustainability could be made more compelling.⁶ Notwithstanding some of its editorial infirmities, the book would be of interest to researchers in academia and in credit rating agencies.

The existence of long-dated assets and liabilities may induce financial innovation, especially when the mature life of assets and the maturity period of liabilities differ significantly. But, unless monitored fervently, such innovation could attain parasitic dispensation to jeopardize stability. Public debt has attributes of long-dated liability, but the corresponding assets appear to be amorphous. This lacuna needs correction and should engage the attention of several practitioners of dismal science for the foreseeable future.

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⁶ Some elements in the book appear insufficiently differentiated or inadequately integrated and suffer from repetition. Consequently, crispness was claimed as a sacrifice at the altar of timeliness and most chapters appear as working-paper versions. This is compounded by inadequate copy-editing and the absence of a list of abbreviations and an index.

Emerging India: Economics, Politics and Reforms. BIMAL JALAN. New Delh: Penguin Books India; 2013; 336 pages; Rs. 399 (paperback).

Bimal Jalan—known as a “maverick economist within the establishment”—has put together another brilliant compilation of his notes, lectures and contemplations in his recent book *Emerging India: Economics, Politics and Reforms*.

The gist of the essays in this volume is premised on the paradigm shifts India was exposed to, with a deliberate and politically motivated economic track, over the past two decades. During this period, India’s capacity to grow faster than ever before, and therefore reduce poverty, increased substantially because of certain changes in its comparative advantage in relation to other countries. However, whether the Indian state, through the successive governments at the Centre since 1995, has been able to adequately seize the opportunities is the question posed by the author. Around this debatable issue and related questions, he cogently builds his discourse on the broad themes of economic policies, the Indian polity and the politics that weaves the former.

The book consists of 25 chapters, which Jalan very meticulously divides into four formal segments, to make for lucid reading. The first section discusses the current political stalemate and “crisis” that require urgent attention if India is to maintain its position as an emerging global economic power of the twenty-first century. He explains the “ups and downs” of Indian democracy, which despite its infirmities is benchmarked as the model for the peaceful transfer of power. In this section, he delineates, in four distinct phases, India’s trajectory over the six decades since Independence, and pleads for the imperative to undertake critical structural reforms, which ought to be rooted in public institutions, so that the model of growth and economic development that India has opted for can succeed. The author served as Governor of the Reserve Bank of India (RBI) during 1997–2003 and as a Member of Parliament during 2003–09.

According to Jalan, during the first phase, from when India became a republic until 1962, the country was positively driven, building and strengthening its democratic political institutions, which augured faster economic growth. The second phase, from the early sixties up to 1979, which included the Emergency years, was volatile in the political sphere. With some exceptions, economic growth was low during this period, with frequent balance-of-payments crises. The third phase, up to 1989, was one of status quo vis-a-vis

the strengthening of India's democracy as well as its economy. The last phase, 1989 onwards, has seen the emergence of a new scenario of coalition politics, with parties with different ideologies forming governments both at the Centre and in the states. This period has been marked by political instability and uncertainty, with major and clearly detrimental consequences for the functioning of democratic institutions. Jalan notes that due to the "compulsions of coalitions", India's political system is plagued by division, corruption, parochialism and several other ills that were not anticipated at the time of the adoption of India's Constitution in 1950. Among these are: the shrinking role of Parliament and the legislatures, politicization of the bureaucracy, and the rising power of small regional parties in the formation of government at the Centre.

He laments that in the game of "limited" expectancy of remaining in power, governments have become largely non-accountable, inner-party democracy has virtually disappeared; and political corruption seems to have acquired legitimacy as a necessary requisite for a coalition government to remain in power. The role of Parliament in ensuring the accountability of government and the performance of ministries has also diminished. Though the judicial system is ostensibly independent, it has become politicized and hence is less effective in delivering speedy, people-centric justice.

Against this background, Jalan suggests fundamental political reforms that may improve governance: viz., the need to create an effective and transparent administrative mechanism at arm's length from government; to simplify procedures; make ministries accountable for implementing public programmes; and introduce electoral reforms to reduce political corruption.

A chapter in the first section examines MGNREGA—a much showcased poverty alleviation scheme introduced by the UPA government—and its working to expose the redundancy of revenue administration and how dysfunctional the latter has become in the last two decades. Jalan highlights the roadblocks in the effective implementation and administration of national schemes, as also the problems at the planning stage. He proposes doing away with the innumerable agencies involved in the decision-making since most of them do not work in unison because of their conflicting objectives. For efficient accountability in the decision-making process, the author suggests a single public sector agency to implement such programmes. He dares to propose a minister (minus the paraphernalia of a typical minister) without a

formal portfolio and call him ‘barefoot’ minister (!) to monitor the efficacy of implementation of various national programmes, by travelling to all the states and ensuring the removal of financial and administrative bottlenecks at different levels.

Section 2 dwells on India’s economic policy and prospects, particularly in the light of the changes witnessed after “the deep crisis of 1991”, and whether these are likely to last or (have been) frittered away in the face of unforeseen global and domestic developments. Despite raising doubts on the sustainability of the economic reforms, Jalan is cautiously optimistic that India has the capacity to realize its potential provided the country’s economic managers avoid over-exuberance and adopt timely measures to leverage India’s emerging strengths in technology, skill-based services and high-productivity industries. Though it is commonplace to correlate India’s emergence as a fast-growing nation with the economic reforms of the post-1991 crisis period, according to Jalan, India’s comparative advantage in providing skill-based services to the rest of the world played a crucial role in the country’s emergence as a global economic power over the past quarter of a century.

The author observes that the financial crises which occurred before and after the Asian financial crisis in 1997 generated enormous international concern about the financial stability of the world. This led to an intense debate in international forums on how to prevent and manage such crises in the future. Various reforms were deliberated upon in the committees set up by the IMF, the World Bank and the United Nations. And there was general agreement that the existing international financial architecture, designed at the Bretton Woods, was no longer relevant to cope with the instability and volatilities that had been witnessed in the global financial system during the 1980s and 1990s. Some crucial fundamental reforms were required to strengthen the structure of the old architecture by introducing greater transparency, early detection, better supervision, higher capital requirements and sustainable exchange rate regimes.

In Section 2, Jalan also prophetically discusses—in a paper written nearly two decades ago in July 1992 (“After the Crisis: Need for a New Strategy”) and another in January 2001 (“India’s Economy in the Twenty-First Century: A New Beginning or a False Dawn?”)—the prospects of India in the global economy and the need for policy reform to achieve its growth potential.

The second chapter in this section, perhaps the most gripping of all the presentations, analyzes India's prospects in the twenty-first century. It deals with both the positives and negatives in the country's policy framework. On the positive side, Jalan holds up India's comparative advantage during the period when phenomenal changes occurred in the world economy, courtesy the country's economic and fiscal policies in the early 1990s, which empowered it to meet global competition. On the negative side, he decries the growing dichotomy between the 'public' and the 'private' in India's economic sphere. Jalan concedes that economic renewal and growth occurred largely outside the public sector—i.e., in private corporations and autonomous institutions (e.g., IIMs or IITs), and was driven by individuals at the top of their professions in India and abroad, who were the real stakeholders in the growth story. Simultaneously, there was a marked deterioration in the government and public sector sphere, not only in terms of output, profits and public savings, but also in the provision of vital public services in the fields of education, health, water and transport. He apologetically refers to India's dubious distinction of having a large number of dollar billionaires—the assets of the top 20 billionaires are more than 20 per cent of India's gross domestic product (GDP)! This is larger than the share contributed to the country's GDP by the entire agricultural sector, on which more than 600 million Indian citizens are dependent for their survival. No wonder economic disparities are worsening and becoming a major source of concern and discontent in several parts of the country.

The next chapter touches the very nerve of India's nation-building exercise and its abysmal record in the delivery of public services to the *aam aadmi*. It delineates how by the end of the twentieth century, India's ranking on almost any of the main socio-economic indicators was among the bottom third of the countries in the world. In the light of past experience, Jalan suggests a programme of action to improve delivery systems to the poor in three vital areas: viz., food, education and health care. He proposes decentralization of the delivery system and that local authorities be given greater managerial and financial autonomy in implementing programmes, with better monitoring. At the local level, he suggests three principles in the organization of social services for the poor: (i) prioritizing resources and expenditures to target the poor, (ii) introducing a voucher system for the poor, and (iii) involving local non-governmental organizations (NGOs) in the provision of essential services.

Section 3 is primarily a compilation of Jalan's papers on money, finance and banking, based on his lectures and deliberations at various conferences. The first chapter in this section traces the evolution of India's financial system in the 1990s, and describes the initiatives to make the country's financial institutions safer and more robust, which went a long way in relatively insulating India from the global meltdown of 2008. In various international forums, an intensive effort was then under way to evaluate the existing norms and practices being followed by banking systems in different countries, and to assess how far these norms had helped or prevented instability in the banking system. India was an active participant in these discussions, helping in the formulation of norms and guidelines that took into account the special interests of the emerging economies and developing countries. In the context of India's pivotal role in framing the post-crisis global regulatory norms, it was suggested that the country must remain in the forefront of the movement to ensure the robustness and stability of the international banking system by adopting best practices and standards of performance and prudence.

The chapter on information technology (IT) and financial institutions deals with the impact of, and the revolutionary changes brought in by, IT in the functioning of the banking sector in India and abroad. The paper on ethics in banking deals with the special role of commercial banks as institutions of "public interest". Jalan opines that banks, whether state-owned or those in the private sector, are essentially custodians of people's savings. They are institutions set up and licensed to accept deposits from the public, most of which are small in magnitude. The *raison d'être* of banks is lending to carry out business activities, which in turn generate production, employment and growth for the country as a whole. This function places enormous responsibility on the banking sector to ensure transparency in respect of the use of depositors' money and its safety and security.

The final section provides a historical perspective on India's economic reforms launched in 1991 in the midst of a severe crisis. Jalan explains, even rationalizes, why India delayed comprehensive industrial and trade reforms for so long when the need for such reforms had been evident for quite some time. His contemplations and articulations in the chapter on "The Politics of India's Reforms" sum up perhaps the key questions, challenges and, naturally, the public concerns about the widening net of corruption, almost subsuming the system of public administration. He wraps up by briefly dwelling on the measures that are necessary to reduce the levels of corruption in India.

The main areas of concern, according to Jalan, are (a) the growing disjuncture between economics and politics, and (b) the emergence of a 'public-private' dichotomy in the growth trajectory. He mulls over its dangerous potential. While indisputably, especially in recent years, the Indian economy has become vibrant, politics has proven to be more fragmented and complicated, and become messier.

Jalan rues over the country's predicament vis-a-vis its political firmament, with the fast diminishing accountability of the executive to Parliament, unprecedented corruption and the predominance of criminals in politics, not to mention the disproportionate power of small regional parties in multi-party coalitions. Despite the paradigm-altering economic reforms undertaken in the early 1990s, which begot outstanding results and enabled India to emerge as an economic power to reckon with, today, reforms are conspicuous by their absence in several key policy areas—for example, the power sector, rigid labour laws, the multi-layered and complex administrative system (which is a major cause of corruption and delays), and significant disinvestment in public sector undertakings (despite high fiscal deficits), to mention just a few.

According to Jalan, corruption has always existed in some form or the other; but in contemporary India, it has acquired institutional status, posing a serious threat to the security, freedom and well-being of the ordinary citizen. He suggests that drastic measures ought to be taken to reduce the attractiveness of politics for criminals. Among the most urgent reforms suggested are: (a) withdrawal of the discretionary powers available to ministers to allocate public resources; (b) amendment of the 'anti-defection' law, making it applicable to all parties, small and large, which opt to join a coalition government; and (c) reversal of the incentives for criminals to join politics—and thereby further delay investigation and prosecution—by making it mandatory for their pending cases to be decided within six months after their election to Parliament or the state legislatures.

Emerging India exposes and puts on the front burner the wide and deep line that divides what can be reformed and what cannot. Jalan defines this line as politically determined, which controls the direction and pace of reforms, irrespective of the parties in power. He concludes that in view of the compulsions of coalition politics, the political impasse is likely to take precedence over economic development and the much warranted reforms in most areas of India's public delivery agencies. On a more optimistic note, he believes that India has developed the capacity to remain politically stable

and realize its full economic potential to emerge as one of the fastest-growing countries in the world, provided its political and economic establishment is able to undertake the reforms that are urgently required.

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When Not in Rome, Don't Do as the Romans Do: A Candy D Italian in Emerging Markets. STEFANO PELLE. New Delhi: Sage Publications and Response Business Books. 2013; xxxiii + 203 pages; Rs. 450 (paperback).

The Prologue of *When Not in Rome, Don't Do as the Romans Do* begins with “Buongiorno! Namaste!”, an Indo-Italian greeting. It sets the pace for the innumerable details of the multicultural life of the author, Stefano Pelle, which pepper the entire book. *When Not in Rome* is about business practices in the emerging markets and is both autobiographical and insightful.

An Italian, Pelle is the youngest of five brothers and has always been an ‘A’ student in school and college. With a degree in Political Science and a Masters in Economics (with 100 per cent marks), he started his career as Assistant Product Manager with Johnson and Johnson in Italy. He worked in diverse sectors—pharma, mineral water, railways, airlines and confectionery—in different countries, including Italy, Iberia, India, Bangladesh, Russia, Sri Lanka, Dubai and South Africa. Currently, he is Executive Vice President and Chief Operating Officer of the Perfetti Van Melle Group, heading the operations in South Asia, Middle East and Africa. He received the National Award for Energy Conservation on Behalf of Perfetti Van Melle, presented by Dr. A. P. J. Abdul Kalam, in December 2005.

The book is divided into 12 chapters, with three to four sections in each chapter. It follows a time line from Stefano Pelle’s education to his current business role. The narrative is laced with wit and humour, and uses simple language with no management jargon at all.

In Chapter 1, titled “Italy and India: So Different and So Similar”, comparisons are made between the two countries on the geography, politics and nature of the people. Geography is one of the similarities with both countries being peninsulas; one lies in the central position in the south of Europe, and other in the central position in the south of Asia. In terms of dimension, Italy is just a fraction of the size of India. Politically, both the nations are parliamentary republics with a bi-cameral Parliament and a federalist set-up: states endowed with considerable autonomy from the Centre. As a people, Italians feel at home in India—as in both the countries, the traffic rules are interpreted in a flexible way; parking in double/triple lanes is very common. When in public places, citizens in both the countries find it difficult to wait patiently in a queue. National sports (soccer in Italy, cricket

in India) break all barriers; and all internal conflicts are set aside when one's country is playing the game with an arch rival.

Commenting on the differences between the two countries, Pelle remarks that while India is emerging, Italy is in an emergency! On the 2011–2012 Global Competitiveness Index published by the World Economic Forum, the Indian economy is ranked 56th out of 142 countries, with average GDP growth of above 7 per cent during the period 2007–12 (p. 13–14). The population of India (1.2 billion as of 2011) is likely to be the highest in the world by 2030; 31 per cent of Indians are below 14 years of age, with average life expectancy below 70 (p. 14). During 2001–2011, Italy witnessed growth of just 1 per cent; the government has a huge debt burden (120 per cent of the GDP in 2011) (*ibid.*). Low birth rates and death rates, an aging population, and a very sluggish economy are some of the challenges faced by the country.

Chapters 2 and 3, “Welcome to India” and “Working in India”, respectively, depict Indian practices from an expatriate perspective. Certain things amuse the author greatly. For example, while working with the Perfetti Group in New Delhi, Stefano Pelle set up his residence and was advised by the HR manager to hire a gardener, a maid, a cook and a driver. The author wondered why he required so many people and was worried about how much he would have to pay them. But when he paid the salaries, he realized that the cost of hiring one help in Italy was slightly more than hiring four in India!

On various occasions, such as entering the new home, inaugurating a new factory/office, he was expected to partake in the traditional rituals and ceremonies, with no scope for him to have any say in the matter. During his stay in India, the author developed a great interest in art and culture; he was a regular at musical concerts and visited many historical places in and around Delhi. He was also involved in philanthropy and various social causes.

An interesting anecdote which gave him very anxious moments was when Pelle purchased a used Royal Enfield motorcycle. When he wanted to transport it to Dubai, he realized that the papers were fake; the seller provided the original documents only after the author threatened legal action!

In his capacity as the head of the Indian operations of Perfetti Van Melle, Stefano Pelle brought about many changes: In order to create a trusting environment, he made communication transparent between the New Delhi office and the Italian office. He started the practice of regular interactions, both official and social, within the Indian team. He integrated the work of

different departments and ensured that all the department goals were aligned with the core goals of the organization. Pelle began hiring management trainees from reputed business schools of the country; however, he soon realized that the most skilled trainees were leaving the organization for better salary packages elsewhere. Yet, the company was able to retain some of the talented pool, who then went on to craft the success story in India. He found that while the educated managerial employees displayed ambition and were hardworking and motivated, the staff at the lower levels had a resigned attitude, and showed inconsistent performance and behaviour patterns. The author theorises that this pattern has its roots in the caste system followed in India.

To understand the behaviour of people, Pelle uses the cultural dimensional analysis developed by Geert Hofstede (1980) (p. 57). The author was rather surprised to find that in India, work schedules and the timings of meetings were highly flexible; and the *chalta hai* (anything goes) attitude dominated the larger population. *Jugaad* (quick fix/temporary solution) is a North Indian approach to solving problems, informed by the attitude that “even if one cannot fix all the problems, one can make it work.” The author summarizes his experience of India as one where it is difficult to work because of the *chalta hai* attitude, but where nothing is impossible because *jugaad* comes to the rescue!

Success of Perfetti Van Melle in India

Perfetti Van Melle started manufacturing confectionery in India in the early 1990s. By 1994, the company was fully operational. Some of their famous brands are: Big Babol (chewing gum), Center Fresh (liquid-filled chewing gum), Alpenliebe (toffee), and Chlormint (mint). Initially, the packaging and formats of the products were similar to those in Italy: stick packs of five pieces each, both for Big Babol and Center Fresh. The packs were sold in display boxes, each containing 24 pieces, at a consumer price of Rs. 7 for each piece (Rs. 168 for each display box). The local competitors sold each piece for Re. 0.5–Re. 1, available in singles. The communication employed was the standardized one used in Italy; Italian commercials were dubbed in English and aired. There were complaints regarding the quality of Center Fresh, with the liquid in the gum oozing out due to the summer heat in India. All this indicates that there was an ethnocentric approach to marketing—i.e., companies tend to think that a strategy successfully used by them in the home country can also be followed in other countries; however, this generally

leads to problems due to the lack of adaptation to the host country's weather requirements and cultural milieu.

Subsequently, the formulations and packaging were modified; the mono packs were re-designed to keep leakage problems to a minimum. Gums were individually wrapped and sold at Rs. 1.5 per piece; thereafter, gums at the Re. 1 price point were also launched. Communications were significantly changed; Perfetti tied up with the Indian cricket team, and this improved visibility and sales. After an initial boost and good sales promotion activities, the company was able to make stocks available at the majority of dealers and retailers. But the steep targets set by Perfetti Van Melle saw overstocking at the dealer level; the problem was further compounded by the fact that sales at the retailer level were not very good. The chewing gums started deteriorating in the peak summer heat, and dealers began returning the products. The Big Babol brand was embroiled in an intellectual property rights (IPR) battle with a local company, which had a brand The Big Bubble Gum. For three weeks, Perfetti's Big Babol brand was taken off the market, aggravating the crisis. The year 1998 closed with a 12 per cent reduction in its sales turnover (p. 74).

The company made concerted efforts to revamp its business model. Measures were taken were to strengthen the brand, both internally and externally. A more diversified product portfolio was put in place. The marketing division realized the dangers of going for the overkill. Use of localized communication resulted in very effective advertising. The advertisement for the brand Chlormint depicted a local *paan-wala* who becomes irritated with a customer asking about the usage of the product, to the point of dunking the customer into a bucket of water. The Center Shock chewing gum also had unique advertising. The baseline of the advertisement *Hilake rakh de* (leaves the customer shaken) was very successful. At the same time, the company focused on creating an effective supply chain department, clubbing the purchase and logistic functions.

In order to tap the fortune at the bottom of the pyramid and foray more aggressively into rural markets, Perfetti adopted a hub-and-spoke model in 2005. Research was undertaken to arrive at the right product mix, the right stock-keeping unit and the best distribution model for rural India. The company used vans to transport its products to the villages for distribution and improving market awareness; advertising with the national and local broadcasters on TV and radio was increased. Participation in *melas* (local

fairs) and school contact programmes resulted in 30 per cent of the total business coming from rural India in 2011 (p. 86).

Conquering South Asia

Perfetti Van Melle's initial strategy was to export its products to Bangladesh, Sri Lanka and Pakistan. The high costs of importing their products into these countries prompted the company to enter into a leased manufacturing system with Nestle in Bangladesh. Even though the local competition was pricing their product at 1 taka per piece, Perfetti decided to offer innovative products at higher price points rather than playing the price game. This strategy worked, as local consumers were willing to pay a slightly higher price for a unique chewing experience with products like Center Fresh and Center Shock. Perfetti began its own manufacturing unit in Bangladesh in June 2009. In five years' time, its market share in gums stood at 50 per cent and its overall share in the confectionery market at 20 per cent (p. 94).

In 2005, the company started a direct investment in Sri Lanka. However, till 2007, there were several hurdles due to political uncertainties. Their plans had to be changed several times, and the marketing mix was repeatedly revised as the distribution channel in Sri Lanka was proving to be quite costly. The distributors' vans would carry the products to retailers, accompanied by a three-member team comprising the driver, a salesperson and a cash collector. This escalated the cost of distribution compared to other countries like India, where one delivery person travels on a cycle or a motorbike and performs all these tasks. Distributors need to have strong financial capacity as the working capital required to manage the set-up is high, and they expect higher margins of profit because of the increased exposure and the limited number of distributors. Perfetti explored various options like directly servicing modern trade outlets and reducing the number of sales staff. In Sri Lanka, as in Bangladesh, the company adopted the "innovative products at [a] premium price point" strategy and focused on modern supermarkets. This helped to keep the costs low and the products profitable.

Pelle draws some interesting contrasts between the personality traits of Bangladeshis and Sri Lankans. According to him, while the Bangladeshis are emotional, passionate, extroverted and hard-working, the Sri Lankans more detached, introverted and relatively laid back.

The company restricted its operations in Pakistan to an exporting strategy, which began in 2008.

The Big Fat Indo-Italian Wedding

The author met his wife, Ms. Shama from Kerala, at a party in Delhi, and they decided to get married in November 2006. The wedding itself was a great confluence of Italian and Indian cultures, with guests coming in from various parts of the world. In an amusing aside, Pelle narrates that the elephant on which he was travelling for the wedding reception refused to kneel down and allow its rider to alight. Despite several attempts by the mahout to calm the pachyderm, it was getting rather irritated. Fearing that the elephant would become even more restless, with the attendant risk of a stampede, the bridegroom decided to jump ... in order to attend his reception function!

Other Markets

Chapters 8–12 focus on the author's experience in Russia, Eurasia and later in Dubai. Chapter 9 dwells on how the UAE government has been able to convert desert land into a favourable investment destination. There is a detailed record of the real estate market in UAE and its collapse, followed by an analysis of the real estate sector across the emerging markets.

In Chapter 11, Pelle describes his visits to the African continent to explore expansion opportunities. Perfetti Van Melle has a limited presence here due to the premium nature of its products. The author observes that though Africa has 50 countries, it has a thousand cultures, each very unique and hence difficult to connect with.

The final chapter, "BRICS Over the Past Decade", provides an analysis of the emerging market economies of Brazil, Russia, India, China and South Africa: their growth rates, the opportunities available and the myriad challenge they face, including the political and social environment. The fact that the BRICS countries will witness the highest growth rates in the world over the next two decades means that while companies will have to negotiate the unique hurdles in each of these countries, they cannot achieve sustained growth unless they tap into the economic potential of the BRICS' markets.

However, this chapter relies heavily on published literature and thus does not hold the readers' interest as much as do the earlier chapters, which are mostly drawn from the author's own experiences. This is one of the weak areas of the book.

When Not in Rome provides valuable insights into the nature of doing business in emerging countries such as India, Sri Lanka, South Africa, Bangladesh,

Pakistan and Russia. Many comparisons are made regarding the diverse practices between various countries, and some similarities are also shared.

The major strengths of the book are its engaging narrative, and in-depth analysis of the political, economic and cultural distinctiveness of the various emerging market economies. The author blends his personal experiences of working in different countries with published data from various sources to convey the complexity of operations in international business.

When Not in Rome will appeal to entrepreneurs, managers, academicians and students of business. It is recommended reading for those who wish to understand the business environment, marketing strategies, cultural conflicts, social etiquette, and the challenges of doing business in emerging markets.

By **Shahaida P.**, Chairperson and Associate Professor, Marketing area, Centre for Management Studies, ASCI, Hyderabad (e-mail: shahaida@asci.org.in).

Books Received

- ***Marketing: A Critical Textbook.*** NICK ELLIS, JAMES FITCHETT, MATTHEW HIGGINS, GAVIN JACK, MING LIM, MICHAEL SAREN and MARK TADAJEWSKI. New Delhi: Sage Publications. Sage South Asia edition. 2012; 245 pages; Rs. 395 (paper).
- ***Organisation Change: Theory and Practice.*** W. WARNER BURKE. New Delhi: Sage Publications. Sage South Asia edition. Third edition. 2012; 362 pages; Rs. 395 (paper).
- ***Perspectives on Governance and Society.*** NEELAM TRIVEDI, TIM A. MAU, DHIRENDRA VAJPEYI and SRINATH PRASAD DWIVEDI (Eds). Jaipur: Rawat Publications. 2013; 338 pages; Rs. 895 (hard).
- ***Social Marketing: Influencing Behaviors for Good.*** NANCY R. LEE and PHILIP KOTLER. New Delhi: Sage Publications. Sage South Asia edition. Fourth edition. 2012; 502 pages; Rs. 550 (paper).
- ***The Essential MBA.*** SUSAN MILLER (Ed). New Delhi: Sage South Asia edition. 2012; 354 pages; Rs. 450 (paper).
- ***Total Quality Service in Healthcare.*** USHA MANJUNATH. Jaipur: Rawat Publications. 2012; 273 pages; Rs. 500 (hard).

Notes for Contributors

Manuscript submission: Copies of the paper, notes, or book reviews to be considered for publication must be sent to the Associate Editor, ASCI Journal of Management, as a Word file attachment via e-mail. Additionally, a hard copy in 1.5 spacing—on one side of the paper, with sufficient margins on both sides—can also be sent. It is a condition for publication that the material sent is original work, which has neither been previously published nor been submitted for publication elsewhere. It is in the author's interest to submit a clearly written and carefully proofread manuscript.

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Format and style: Bibliographical references should be cited in the text by the author's last name and date, e.g., (Ghurye, 1962); or, if the author's name is mentioned in the text, by the date only, e.g., Ghurye (1962). Where figures are cited or text has been quoted, the page number should also be mentioned, e.g., (Ghurye, 1962: 17). Notes and references should be typed separately at the end of the paper. The text should refer to notes numbered consecutively. Entries in the references should be in alphabetical order of authors and should conform to the following style:

Commission on Graduate Study in Public Relations. 1985. *Advancing Public Relations Education*. New York: Foundation for Public Relations Research and Education.

Fiske, S. T., and S. E. Taylor. 1991. *Social Cognition*. New York: Random House.

Rajan, S. Irudaya, Mala Ramanathan, and U. S. Mishra. 1993. "Female Autonomy and Reproductive Behaviour in Kerala." Paper presented at a Workshop on Female Education, Women's Status and Fertility Change. Jagori, New Delhi, 8–10 April.

Raju, B. Y. 1996. "Small Scale Industries in India: A Policy Perspective." *ASCI Journal of Management* 25 (2): 47–59.

Sivakumar, K. 1994. "Is Your Company Creating Wealth for You?" *The Hindu Business Line*. Mumbai, 13 February, p. 12.

Virmani, B. R. 1996. "Human Resources for Advancement of Management Education." In V. Gautam, ed., *Learning Management*, 75–85. New Delhi: Allied.

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