

**Vol. 42 No.1&2**

**Jan.-June - 2010  
&  
Jul. - Dec.- 2010**

**ISSN 0976-5409**

# **Orissa Economic Journal**



**ORISSA ECONOMICS ASSOCIATION  
BHUBANESWAR**

# **Orissa Economic Journal**

**Vol. 42 No. 1 & 2**

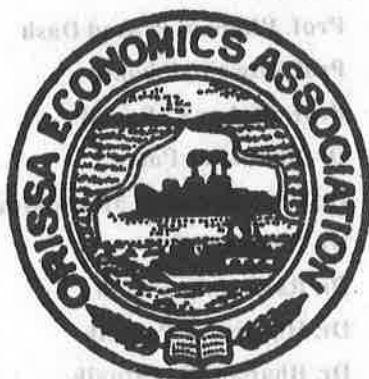
**Jan.-June & July-Dec. 2010**

**Editor :**

**Prof. Baidyanath Misra**

**17, Saheed Nagar**

**Bhubaneswar**



**ORISSA ECONOMICS ASSOCIATION**  
**BHUBANESWAR**

# ORISSA ECONOMICS ASSOCIATION

## EXECUTIVE BODY

**2010-11**

*President :*

**Prof. Sudhakar Panda**

*Vice-President :*

**Dr. L.N. Dash**

**Vol. 42 No. 1 & 2**

**Jan-June & July-Dec. 2010**

*Secretary :*

**Dr. Rabi N. Patra**

*Editor:*

*Orissa Economic Journal*

**Prof. Baidyanath Misra**

**17, Sahasrabhushan**

**Bhubaneswar**

*Members :*

**Prof. R.K. Panda**

**Prof. Bhabani Prasad Dash**

**Prof. Adwait Mohanty**

**Prof. Kishor C. Samal**

**Dr. Sudhakar Patra**

**Dr. Raghavananda Mohapatra**

**Dr. Sanjukta Das**

**Dr. Rasananda Panda**

**Dr. Harapriya Patnaik**

**Dr. Bhabani K. Patnaik**

**Dr. Satyabrata Mishra**

**Dr. Surendra Nath Behera**

**Dr. Dillip Ray**

**Smt. Susama Dash**

**Smt. Usha Satpathy**

# CONTENTS

## Editorial :

Problems and Prospects of University Administration	Prof. Baidyanath Misra	1
---	------------------------	---

## Secretary's Report :

42nd Annual Conference-2010 Orissa Economics Association	Dr. Rabi N. Patra	11
---	-------------------	----

## Presidential Address :

Global Financial Crisis and the Indian Economy	Pulin B. Nayak	15
--	----------------	----

## Prof. B. Mishra Endowment Lecture

Monetary Policy Framework in India : Experience with Multiple-Indicators Approach	Deepak Mohanty	23
--	----------------	----

## GLOBAL FINANCIAL CRISIS AND ITS IMPACT ON THE INDIAN ECONOMY

1. Impact of Global Meltdown on Indian Economy	Kishor C. Samal	45
2. Impact of Global Financial Crisis on the Fiscal Reform Process in Orissa	Prof. Bhagabata Patro Mrs. Madhuri Padhy	55
3. Global Meltdown and its impact on Capital market with respect to Automobile, FMCG, & Telecom Sectors in India	Umakanta Tripathy Prabhat Kumar Sahoo	62
4. The Global Financial Turmoil and its Impact and Challenges on the Indian Economy	Dr. Surendra Nath Behera	71
5. Global meltdown and human resource strategies of software strategies of software industry in India	Dr. R.K. Panda	76
6. Financial Crisis and The Policy Response of The Indian Economy	Reenati Mishra	86
7. Global Financial Crisis	Surendra Swain	92
8. Global Financial Crisis : Some Preventive Measures	Ritanjali Dash	96
9. Impact of Global Financial Crisis on the Poor of the Poor Countries: Focus on India	Sanjukta Das Bichitranand Seth	103



10. Global Financial Crisis and its impact on the Indian Economy-need for an effective and comprehensive action	Kartik Prasad Jena	115
11. Impact of global financial crisis on Indian Economy : An expository analysis	Dr. Sudhakar Patra	125
12. Global financial crisis and its impact on Indian economy	Prasanna Ku. Mohapatra	131
13. Global financial crisis and its impact on Indian economy	Dr. Rajan Kumar Sahoo	136
14. Current financial crisis and its impact on Indian economy	Dr. R.C. Mishra K.C. Mishra	141
15. A critical analysis of financial market crisis & its impact on developing countries	Dr. Gitanjali Panda Ashok Mishra	148
16. Global Financial Crisis and Its Impact on Indian Economy	Ritanjali Jena	158
17. Economic meltdown and Hotel industry in India	Kshitish Kumar Khuntia Dr. Jnana Ranjan Mohanty	165
18. Global Meltdown and Its Impact on Indian Economy	Dr. B. Eswar Rao Patnaik Mr. Simanchal Mishra Dr. Sudhansu S. Nayak	171
19. Global Financial Crisis and Its Impact on the Indian Economy	G. Dash	173
20. Global Financial Crisis And Its Impact On Indian Economy	Sk. Kalimulaha	175
21. Global Slowdown and Indian Agriculture	Dr. Kabita Kumari Sahu	176

### **ECONOMICS OF SLUMS IN ORISSA**

22. Working of Public Distribution System in Slums of Orissa—A Case study of Pattapola Area in Cuttack City	Dr. Jnana Ranjan Mohanty	179
23. Slum Culture: A Necessary Evil of Indian Urbanisation The case of Sambalpur Municipality in Orissa	Dr. Dillip Kumar Panda Dr. Narendra Kumar Behera	188
24. Problems of Urban Slums : An Empirical study of Patharbandh Slum of Bhubaneswar	Dr. Kabita Kumari Sahu Sibananda Nayak	196
25. Role of Cooperatives in Slum Improvement	Santanu Kumar Nayak	203
26. Socio-Economic Profile of Slum Dwellers in Bhubaneswar	Dr. Sheshadev Mohapatra	210
❖ List of Members		
❖ List of Annual Members		
❖ List of Presidents		



## **EDITORIAL**

# **Problems and Prospects of University Administration**

**Prof. Baidyanath Misra**

It may be mentioned here that educational administration is not the same thing as public administration. There are at least two reasons for this. First teachers, research scholars and students are not subordinates to the administrator. They are all partners to improve the quality of educational standard, those standards of thought and action which make an individual and a nation. As the Prime Minister Jawaharlal Nehru (1947) addressing the Convocation of Allahabad University (of which the author was a student of the University at that time), eloquently stated, "A University stands for humanism, for tolerance, for reason, for progress, for the adventure of ideas and for the search of truth. It stands for the onward march of the human race towards even higher objectives".

Second, the Universities must bring the academic talents of their faculties and idealism of their youthful students to bear on the problems of the common people of the land. As the University Grants Commission, 1987 affirms, "All Universities and Colleges should develop close relationships, of mutual services and support, with their local communities, and all students and teachers must be involved in such programmes as an integral part of their education".

Even though the nature of public administration in recent years has changed, it is still more concerned with maintenance of law and order which in most cases alienates the administrators from the common man. Even when the public administrators are entrusted with development work, the officers hardly maintain any productive relationship with the multitude of common men who are deprived of the minimum privileges of a dignified life. Public administration, by and large, is a bureaucratic organisation without having any conducive environment for meaningful and fruitful cooperation among different levels of administration (which is hierarchical in character) and with

common men who are desperately trying to meet the challenges of life. Educational administration therefore implies a different connotation in comparison to public administration.

### ROLE OF THE VICE-CHANCELLOR

First we have to examine the role of the Vice-Chancellor who is the Chief Executive of the University. Effective managerial performance depends upon the successful interplay of a number of factors including the personal competence (in terms of skills, knowledge and aptitude) of the Chief Executive and his senior colleagues, and the existence of a stable institutional framework in the form of policies, rules, guidelines, conventions and information. The Chief Executive has to be not only a leader, but also a motivator, coordinator and facilitator. He has to have the skill for guiding actions and controlling situations in a manner that yields results that best meet the objectives of the University (Power).

This means the Chief Executive must have (a) a clear perception about the goals and objectives of the University, (b) an understanding of strengths and weaknesses of the institution, (c) a full knowledge of the functioning of all divisions and units in the institution, (d) the ability to take timely (and sometimes unpleasant) decisions and (e) an appreciation of the need to change and with it the willingness to adopt new and innovative strategies for improving the quality of the institution.

As Goleman (1998) and Watson (2000) point out a successful administrator must have the following attributes in order to succeed in his endeavour :

- (1) **Self awareness** i.e., an understanding of one's administrative style and behavioural pattern and its impact on others. This requires a capacity to correctly judge the mood of different stakeholders and take decisions which are fair and reasonable.
- (2) **Self control** i.e., the ability to control one's disruptive impulses and moods and to think before acting. This implies that he should not take any decision in haste, examine things calmly and methodically and take actions after judicious exercise of judgement.
- (3) **Motivation** i.e., the ability to pursue goals and work with commitment without thought of personal benefit. If decisions are actuated by personal benefit, the Chief Executive cannot

inspire confidence among his colleagues, students or other officers who are working with him.

(4) **Empathy** i.e., the ability to understand and appreciate the feelings and emotions of other stakeholders of the University. In other words there should be equanimity coupled with a sensitivity to the feelings of co-workers.

(5) **Social skills** i.e., proficiency in managing relationships, finding common ground and building bridges. In other words, he takes into confidence his colleagues and other partners and share with them the programmes of actions that should be pursued to improve the academic standard of the University. Nothing should be done in secrecy.

It is of course difficult to find people with all these attributes. However, the Chief Executive has to make strenuous effort to discharge the heavy responsibility that is bestowed on him. When one occupies a higher position, it is expected that he would rise to the occasion and demonstrate a reasonable level of administrative efficiency to achieve the prescribed goals of the University.

#### **MAINTENANCE OF AUTONOMY**

Another area which is important in University administration is autonomy. We emphasize autonomy because over the years there has been a continued erosion of the freedom, rights and privileges of the Universities. As Tight (1988) points out, "academic freedom refers to the freedom of individual academics to study, teach, research and publish without being subject to or causing undue interference". Now there is an attempt not only to change the courses of studies but also to appoint even senior staff members by political authorities. Even in many cases the Vice-Chancellor is appointed on political affiliation. Further, since many of the students in colleges and Universities have been given the right to vote, political parties try to utilise the students and some times staff members which destroy the academic ethos of the Universities.

Another reason why political interference becomes easy is that many of the functionaries of the University do not discharge their responsibilities, the Vice-Chancellor does not attend his office, shows favour to some who are loyal to him even though they do not have necessary academic excellence, some of the teachers neglect their teaching or research assignments, there are financial irregularities and

many such other causes which give a chance to the Government to interfere. It is true that an academic institution is not an ivory tower. As Iqbal Narain notes, "educational administration, in general, and particularly University administration, cannot be studied in isolation from the dynamics— in fact, the pulls and pressures - of polity, economy and society in the country."

Particularly when the educational institutions depend on financial support of the Government M.S. Gore, the Vice-Chancellor of Bombay University (1986) while discussing inadequate funds provided by the Government and their repercussions, said that "the Vice-Chancellor has to function on the basis of a fast dwindling prestige, since he is constantly at the doorstep of government officials for money to keep the University going and, on the other hand, he has to compromise at every step to get his way in bodies whose members are not accountable for the impact of their decisions on the working of the University."

Iqbal Narain further adds, "This is even more true when Universities have to turn to the government almost everyday for the maintenance of law and order on the campus, on the one hand, and for finances, for survival, leave alone development, on the other." Again, 'whatever still remains of University autonomy is doomed when teachers, instead of setting their own house in order, run to the government frequently to inform them that the University administration is being mismanaged and they should come to its rescue'. This implies that the Vice-Chancellor and University bodies have, on occasions, given the government a reason to intervene by taking actions that placed a liability on the government.

Though it is admitted that the Government has a right to intervene whenever there is a dislocation in normal functioning of the University, such intervention should not be to control the University authorities, but to help them to discharge their responsibilities with greater efficiency. The Gajendragadkar Committee Report (UGC, 1971, pp9-10) states, "The concept of University autonomy is often misunderstood, it is not a legal concept', not even a 'constitutional concept'. It is an ethical concept and an academic concept. The concept does not question that, in a democratic society like ours, legislatures are ultimately sovereign, and have a right to discuss and determine the question of policy relating to education, including higher education ———. The concept of University autonomy, however, means that it would be

appropriate on the part of democratic legislatures not to interfere with the administration of University life, both academic and non-academic. The claim for autonomy is made by the Universities not as a matter of privilege, but on the ground that such an autonomy is a condition precedent if the Universities are to discharge their duties and obligations effectively and efficiently.

This emphasizes that if the autonomy of the Universities is jeopardised they will not be able to deliver education of required quality and relevance. However, it has to be emphasized that the autonomy will have to be complemented by accountability. The accountability of a University can be discussed with respect to its administrative, academic and finance-related actions.

Administrative accountability relates to the managerial functions that are necessary for the smooth functioning of the University. The Chief Executive may not be able to take quick decisions and implement them effectively, if the organisational structure is heavily bureaucratised and requires confirmation by several bodies. To prevent such bureaucratisation, it is desirable to have decentralisation of authority with specific powers and responsibilities assigned to appropriate agencies. However, along with decentralisation, the Chief Executive should coordinate activities of different units through frequent meetings and interactions, monitor the progress of work from time to time and assess performance periodically, through recognised performance indicators.

Academic accountability is concerned with the implementation of academic programmes to ensure minimum standards of education. Two or three problems most of the time create dissensions in the academic field. Courses are not covered in time. Some of the students often demand postponement of examinations. Even when examinations are held, there is delay in publication of results. It is the responsibility of the Vice-Chancellor to take personal initiative in tackling these problems by involving teachers, students and officers who are entrusted with the conduct of examinations and publication of results. An efficient information system along with good inter-personal relationship may solve some of these problems without much difficulty.

Financial accountability deals with not only procurement of funds, but also efficient utilisation of resources. When funds are plenty there is proliferation of programmes and activities. When funds are scarce,

there is an all-round cut in expenditure. This is not a healthy feature of financial management. Since in most cases, resources are limited, two things should be done for efficient utilisation of funds. The budget should be divided in two parts, one is core and the other is peripheral or additional. The core budget should take care of essential requirements of the institute and peripheral budget to meet the optimum needs of the programme. And second, there should be constant monitoring of expenditure so that there is no misutilisation of funds.

### RESTRUCTURING UNIVERSITY EDUCATION

Today it is recognised that University education is not only an important element in improving high intellectual standard, but also to provide right kind of leadership for social and economic improvement and strive to promote equality and social justice by reducing social and cultural differences through diffusion of education. The National Policy on Education, 1986 (Government of India) also visualised that education is to be :

- (a) a process of empowerment which is to be promoted through the development of knowledge, skills and values (Education for Development), and
- (b) an instrument of social change that provides means for upward economic and social mobility through enhancement of qualification (Education for Equality).

The major question which needs a critical analysis is how far higher education in India has been an instrument for the nation's progress, security and welfare and what kind of changes should be introduced so that they can meet the challenges of the 21st century.

**1) Partnership between world of knowledge and world of work.** It will not be an exaggeration to say that most of the Universities in India have an 'ivory tower existence', sharply differentiated between theory and practice and placed a premium on aloofness. The traditional value system have made them more or less elitist in character and divorced from realities of life. A time has come when the Universities will have to function under the all pervading influence of the electronic communication revolution which has underwritten world economy globalised knowledge, accelerated innovation and facilitated individual



access to information and skills (Lucas, 1998a). The Director General of UNESCO (Mayer, 1991) also pointed out, "I should like to see the University cultivate closer relations with the worlds of business, commerce, industry, agriculture, journalism and administration ...," This means the Universities in the coming years should build partnerships with the various sectors of the society. The growing relationship between the 'World of Knowledge' and 'World of Work' would facilitate employment opportunities for all those who get the privilege of studying in Universities.

**2) Access.** Since higher education investments are important for economic growth, increase in individuals' productivity and incomes also having significant external benefits, it is necessary that access to higher education should significantly increase to utilise the benefits of knowledge society. In fact a highly competitive knowledge society will make unprecedented demands on Universities in the areas of higher education. Though there has been some improvement in the number of students, yet the stark reality is that only 10-11% of India's population in the relevant age group of 17 to 23 is generally getting the benefit of higher education compared to over 50% in OECD countries and 21% in middle income countries. Though India has reached the stage of middle income countries, the level of higher education is not more than that of low income countries. Every effort has therefore to be made to increase the level of higher education at least upto 20 % during the second decade of twenty first century.

**3) Relevance and Quality.** The type of education imparted in most of the Universities is not relevant to the needs of the society. There is a mismatch between what is taught in our academic institutions and requirements of the industry, business, administration, the professions and 'society at large'. According to World Declaration on Higher Education, 'Relevance in higher education should be assessed in terms of the fit between what society expects of institutions and what they do'. Relevance is a dynamic concept, it goes on changing from time to time according to social and economic changes. Kothari Commission

Report therefore emphasized that there has to be (a) a radical improvement in the quality and standard of higher education to make it an instrument for the nation's progress, security and welfare and (b) an expansion of higher education to meet manpower requirement of the nation and rising social ambitions and expectations of the people.

This implies that since there is explosion of knowledge and new areas of innovation in the technique of production, students should have the capacity to adapt themselves to the constantly changing needs of a knowledge based society. Therefore University courses of higher education should change from time to time in order to enable the students to convert information into knowledge. There should not be a rigid course programme. As has been done in most of the developed countries, there should be a flexible structure of course programme, a 'cafeteria type' approach which will allow the students to select courses from a wide ranges of options. A time has come when teaching has to shift from teacher oriented to student oriented courses.

However to improve quality of higher education, we have to make huge investment in infrastructure so as to provide basic facilities for introduction of knowledge based course programme. We have now a few 'islands of excellence in a sea of mediocrity'. There cannot be any worthwhile change with only a few 'showpieces of excellence'. There are Universities where you do not have adequate class rooms, the class rooms that are available are not properly cleaned, latrines adjacent to class rooms give stinking smell, libraries do not get up-to-date journals or recent books, some of the teachers hardly take their classes and even if they take, they never come prepared. In view of this, it can be safely said that such Universities will fail in their ability to keep pace with the demands of technology or social needs.

**4) Need for change in examination system.** Examinations have been be-all and end-all of University administration in India. In some cases examinations continue throughout the year. One of the criteria to evaluate the success of the Vice-Chancellor whether he can hold the examination and publish its results in time. Very often there are strikes by some of the students to postpone the examination and the administration has to submit to their demands to avoid troubles. The examination results do

not really judge the merit of students. Many examiners evaluate the examination papers only by counting points. Students therefore prepare for the examinations on the basis of rote learning and memorising. There is no scope for original thinking.

Some drastic changes should be taken to enable the students to acquire knowledge instead of only trying to get degrees by hook or crook. There will be no harm if degrees are abolished. Because different institutions in the job market are now making their separate evaluation to select candidates for jobs. Second, instead of having university examination at a centralised level which sometime leads to leakage of papers, fraud and indiscipline, the teacher concerned may evaluate their students in class rooms on the basis of internal assessment, class discussion and by giving assignment for presentation of papers in class rooms. A continuous process of evaluation will reduce the burden of the University, avoid malpractice and indiscipline and enable the students to acquire some knowledge instead of memorising only points which they forget just after the examination.

- 5) **Financing Higher Education:** Finally we may just indicate whether the state should have some responsibility in financing higher education. It is wrong to think that the state should not bother about higher education. The quality of higher education not only improves the status of the country but also provides plenty of scope for intellectual advancement. But this does not mean that the private agencies should not participate in providing financial support for higher education. Even in some of the capitalist states, there are State Universities, where the state plays important role in providing adequate funds. However, in view of the importance of primary and secondary education for which the state has a major responsibility of providing finance in India and there are resource constraints, an effective cooperation between the state and private agencies will go a long way in promoting the quality of higher education. Development of higher education is not only the responsibility of one agency, it is a societal responsibility for which all the beneficiaries should make effective contribution.

## REFERENCES

1. Gore, M.S. (1986) Universities and the Government. *University News*, Vol. 34, Jan, 1986.
2. Government of India (1986) Report of the Education Commission (1964-66) Education and National Development, GOI, New Delhi.
3. Government of India (1985) Challenge of Education: A Policy Perspective, GOI, New Delhi.
4. Government of India (1986). National Policy on Education. 1986 GOI, New Delhi.
5. Narain, Iqbal (1987). Administration of Higher Education in India published in *Education and the Process of Change*, edited by Ratna Ghosh and Mathew Zacharish, Sage Publications, 1987, New Delhi.
6. Power, K.B. (2002). Indian Higher Education, A Conglomerate of Concepts, Facts and Practices, Concept Publishing Company 2002, New Delhi.

2) **Financing Higher Education:** Finally we may just indicate whether the state should ○○○ some responsibility in financing higher education. It is wrong to think that the state should not bother about higher education. The quality of higher education not only improves the status of the country but also provides plenty of scope for intellectual advancement. But this does not mean that the private agencies should not participate in providing financial support for higher education. Even in some of the capitalist states, there are state universities, where the state plays important role in providing adequate funds. However, in view of the importance of primary and secondary education for which the state has a major responsibility of providing finance in India and there are resource constraints, an effective cooperation between the state and private agencies will go a long way in promoting the quality of higher education. Development of higher education is not only the responsibility of one agency, it is a societal responsibility for which all the beneficiaries should make effective contribution.

## **SECRETARY'S REPORT**

### **42nd Annual Conference—2010 Orissa Economics Association**

Esteemed President Prof. Nayak, Revered Chief Guest Prof. Baidyanath Misra, Guest of Honour Prof. Rath, Patron of the Conference and Vice-Chancellor of North Orissa University Prof. S.P. Rath, Convenor Prof. Lenka, Organising Secretary Dr. Dash, Respected Former Presidents of the Association, Members of the organising committee, Distinguished invitees, Members of the media, Fellow delegates, Ladies and Gentlemen.

It gives me great pleasure to welcome you all to the 42nd Annual Conference of the Orissa Economics Association. We feel uniquely privileged to have with us here our most respected teacher Prof. Baidyanath Misra to inaugurate the Conference. We are extremely grateful to you Sir, for your kind gesture. We are fortunate to have in our midst Prof. Binayak Rath, Vice-Chancellor of Utkal University as the Guest of Honour for this Conference. We are thankful to your Sir, for your august presence.

I deem it a rare privilege to present before the esteemed gathering a profile of the activities of our Association. Founded on 26 January, 1968 with the main objectives of promoting the study and improving the methods of teaching in Economics and stimulating research on economic issues of contemporary interest, the Orissa Economics Association enjoys the unique distinction of being one of the oldest and largest registered regional academic bodies in the country. The Association works with a Missionary zeal to attract new members and create an effervescence for the young budding teachers to pursue teaching and research with extraordinary zeal and zest by encouraging them to prepare research papers and present them in the state and National level Seminars and Conferences. The membership of the Association has increased considerably over the years from 40 in 1968, the year of its inception, to 413 at present which comprises 03 Institutional Life members, 388 Individual Life members and 22 Annual members including outstanding economists, professionals, executives, administrators,

teachers, researchers, statesmen and research organisations. The Association has acquired the status and dignity as a national level organisation because of the high class research output of its members and unalloyed links with the Indian Economic Association, and Economics Societies of Colleges in the State for collaborative conferences, seminars and workshops.

The Association endeavours to realise its objectives by organising Annual Conferences, Symposia and Workshops. It has the distinct honour of organising a two-day Annual Conference regularly since inception. It also upholds the tradition of discussing two issues of contemporary interest in the Annual Conference every year of which one relates to the Indian economy at large and the other to the state economy of Orissa. The two topics chosen for discussion in the 42nd Annual Conference this year are :

1. Global Financial Crisis and its Impact on the Indian Economy
2. Economics of Slums in Orissa

We are indeed singularly fortunate that Sri Jugal Kishore Mohapatra, I.A.S., Principal Secretary to Government in the Finance Department and Dr. Aurobinda Behera, I.A.S., Chairman, IDCOL have done great honour to the OEA with their august presence as well as for having kindly agreed to deliver key note addresses on the these two topics respectively.

Since last year we have been organising a lecture in honour of Prof. Baidyanath Misra, and illustrious teacher and researcher, a noted economist and a social thinker. Shri Deepak Mohanty, Executive Director, Reserve Bank of India, Mumbai has given his kind consent to deliver the second Prof. Baidyanath Misra Endowment Lecture this year on the theme "Monetary Policy Framework in India : Experience with Multi-indicators Approach". I express my sincere gratitude to Shri Mohanty for having agreed to deliver the talk.

The Association has been publishing its mouthpiece, the Orissa Economic Journal regularly since 1968. The Presidential address, the endowment lecture and the papers presented in the annual Conference are published in the journal. The Journal has reached new heights in its standard under the stewardship of its Editor, Prof. Baidyanath Misra and has the distinction of being the most esteemed journal in the state.

Efforts are being made to raise its standard at the national level by labelling an ISSN number and making it a referred journal.

More than four decades have passed since the formation of the Orissa Economics Association. It is now an important part of Orissa's academic journey. It contributes to Orissan thinking and represents the best of traditions in Orissan Academics. Yet we do not have a permanent office of our own in Bhubaneswar. We have been missing it.

With the passing of years as we gather more and more experience and when more and more people are interested in it, we feel inclined to expand our activities by organising more seminars on current economic topics which are of great interest to the states. But so far we have not been able to proceed in that direction on account of paucity of funds. The cost of organising the Annual Conference has gone up to Rs.2.5 lakh, printing charges of the Journal have risen to Rs.50,000 and hence it is becoming increasingly difficult to manage the activities of the Association.

The Association is solely depending upon membership fees and occasional grants-in-aid from NABARD and RBI. Friends, I am delighted to inform you that the Finance Department of Government of Orissa has released a grant of Rs. 1 lakh to the Association this year and for that matter we are grateful to the Hon'ble Finance Minister Sri Prafulla Chandra Ghadai and Shri Jugal Kishore Mohapatra, Principal Secretary to Government in the Finance Department and to our President Prof. Pulin Nayak and Prof. Baidyanath Misra without whose sincere efforts we would not have been able to receive the grant.

It is really a rare opportunity for me to focus on some of the bare requirements of the OEA. This conference provides a unique forum for us as we have the Principal Secretary to Government, Finance Department and Chairman, IDCOL in our midst. It is a happy and harmonious combination of distinguished dignitaries having prolonged association with economics. Therefore, I take the opportunity to place some of our humble requests before them and pray for their positive and active consideration.

Constraint in finance is the main impediment for the Association. The Association will be greatly indebted to the Government of Orissa if the Finance Department of the Government provides a recurring annual grant of Rs. 1 lakh. The Association finds it extremely difficult to store



and preserve the journals and other important papers and moves helter and skelter. It will be a gracious gesture on the part of the Government of Orissa if a quarters for the purpose is allotted at Bhubaneswar in favour of the Association to keep the papers. The dignitaries present here will appreciate our problems and predicament and we hope, they will do something positive.

I take this opportunity to express our deep sense of gratitude to our Chief Guest Professor Baidyanath Misra for having accepted our invitation and inaugurating the Conference. We are equally grateful to our Guest of Honour Prof. Binayak Rath for his kind presence in the Conference. We are greatly indebted to Prof. S.P.Rath, Vice-Chancellor, North Orissa University and patron for the Conference for his unstinted financial and infrastructural support and keen involvement in organising the Conference. We are thankful to the members of the Local organising committee and more particularly to Prof. Jagannath Lenka, Dr. L.N. Dash, Dr. M. Mallick and Dr. K. Sahu for the pains they have taken in organising the Conference in a colourful way.

I am extremely thankful to the members of the executive body of the Association, especially to our President Prof. Pulin B. Nayak for their kind co-operation. Our special thanks are due to Prof. Baidyanath Misra, for his active involvement in managing the activities of the Association and for editing the Orissa Economic Journal.

My greatest debt of gratitude is due to my esteemed teacher, Prof. Bhabani Prasad Dash for his precious guidance and supervision in the functioning of the Association. I owe a great deal to the dignitaries, invitees, guests, delegates and paper writers for their help in making this Conference a grand success and to you ladies and gentlemen and members of the media for having given me a patient hearing.

Thanking you all one again.

**Dr. Rabi N. Patra**

Secretary

Orissa Economics Association

○○○

## **PRESIDENTIAL ADDRESS**

# **Global Financial Crisis and the Indian Economy**

**Pulin B. Nayak**

President

Orissa Economics Association

## **I PRELIMINARIES**

It is a great honour and privilege for me to rise before you to deliver my address as the President of the Orissa Economics Association. This is an august body which had its inception some 42 years back. Most of the finest minds of our discipline in our state have been associated with it. The late Professor Sadasiv Misra was the first President at the meeting held at Ravenshaw College in the year 1968, followed by Prof. Devendra Chandra Misra, Prof. Bidyadhar Mishra, and Prof. Baidyanath Misra, in that order. I shall desist from giving a full listing of all the past Presidents but I must say that we are fortunate to have the benefit of the active participation and continuing guidance from Prof. Baidyanath Misra as well as Prof. Devendra Misra.

I must record here my gratitude to the members of the Orissa Economics Association for bestowing this honour on me. It is obvious that not having had my graduate and post graduate student career within Orissa and not having taught in a college or university in Orissa did not come in the way of your giving me this signal honour. Indeed I am not the first person to have had this privilege. There have been others. It goes to show that the members of the OEA embrace enough of the global perspective not to necessarily confine their office holders to economists working within Orissa.

Friends, Orissa is a rich state in terms of nature's bounty as well as its great cultural heritage in literature, dance, music and the fine arts, yet it is amongst the poorest of states of India. This is a truism that has been stated *ad nauseum* and it is possibly now a cliché. Yet I believe it needs to be restated once again. This is one of the biggest conundrums that confronts us all as members of the community of economists. I believe that it is our moral duty to creatively use our

knowledge of the subject for the betterment of the living conditions of the common masses of Orissa.

In the past two years the world has witnessed a major financial and economic turmoil, not seen since the Great Depression of the early 1930s. The present crisis had its origin in the subprime housing market in the US but its reach has been much wider, affecting other sectors of the US economy as well as the economies of Western Europe and Japan. Fortunately the economies of India and China, the only two economies with a billion plus populations, have been relatively unscathed, though their growth rates have experienced some dip. Indeed, India experienced a growth rate of nearly 8.5 to 9 percentage points during 2004-08, and the global financial turmoil did have severe adverse effects on India's exports as well as the level of outsourcing activities from the US and Western Europe into our IT sector. Both these factors have contributed in some measure to the dipping of the growth rate to somewhere around 6.5 to 7 percentage points. In the midst of a crisis that has had crippling consequences for the economies of the US and Western Europe ours is possibly not too bad a showing.

India's growth story presents a rather diverse regional picture, with some states performing substantially better than others. Interestingly Orissa has been one of the better performing states in the past five years, having achieved better than average growth rate with a good record of fiscal consolidation. Yet Orissa continues to be one of the poorest states in terms of per capita income as well as poverty ratios in both the rural and urban areas. In terms of health services Orissa has one of the poorest records. The economy of the state continues to be dependent on agriculture. Even though there is some evidence of growth of the IT sector in recent years, Orissa substantially lags behind in its industrial activity, particularly in comparison with better performing states like Maharashtra, Karnataka and Gujarat.

Unfortunately government policy in Orissa continues to give primacy to extractive mining activities with disastrous consequences on our ecology and livelihoods of the common village and tribal populations. No doubt there exists a great unholy nexus between the neta-babu-business nexus in the state that continues to bargain away the genuine needs of the common masses and the tribal communities of this state.

I must not cavil at openly acknowledging that we the community of economists and social scientists generally have failed our beloved state and cannot absolve ourselves altogether from receiving more than

our fair share of our blame. We have not been able to provide the right policy solutions and have not engaged in any serious way with our brethren and sisterhood in the state at large. Keynes had famously said in his General Theory: 'The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who voice in the air, are distilling their frenzy from some academic scribbler of a few years ago'.

## II THE HISTORICAL BACKDROP

Much has already been written on the causes and the nature of the global financial crisis that suddenly confronted the US financial system in September 2008 with the collapse of the Lehman Brothers, one of the premier investment banks of more than 150 years' standing. The crisis was very much in the making from about the early 1980s when during the heyday of the Thatcher-Reagan years, a strong intellectual opinion was built in favour of private activity and the role of the state was sought to be downplayed. It was indeed argued that best economic results are obtained when one gives the maximum free play to individual initiative. Both Margaret Thatcher and Ronald Reagan were ardent believers in the idea of the Adam Smithian *laissez faire*.

The context was one where the Western world had experienced nearly three decades of uninterrupted and unprecedented growth during the post Second World War years. The Wall Street Crash of October 1929 followed by the Great Depression of the early 1930s was still very much in public memory. It was in this setting that John Maynard Keynes had come up with his 'General Theory' in 1936 that offered a revolutionary break from the received classical mode of economic thought that was contained in the writings of Smith, Ricardo and Say.

One of the key underpinnings of the classical mode was the idea that markets are inherently self regulating. This premise was centred on the claim, for example, that, prices would automatically adjust if there is, say, an external shock that suddenly cuts down supply. There would be tendencies that would push prices up and equilibrium would be arrived at when demand would equal supply. This intrinsic idea was extended to the behaviour of the economy in the aggregate. It was believed therefore that if aggregate investment fell short of aggregate

saving, then the interest rate would drop, aggregate investment would get a fillip, savings would go down, and the process would continue till savings and investment are equilibrated.

The basic premise of course was that all markets must clear. This was formalized later in the foundational work on general equilibrium theory by the French economist Leon Walras. Yet what was observed in the early 1930s was that all markets were in fact not clearing. Specifically, labour was going unemployed. By 1933 the aggregate unemployment rate in the US had reached 25 per cent. In certain parts of the American mid West, the unemployment rate was as high as 60 to 70 per cent. Clearly the theory did not fit the facts.

One of the most acute and stunning results of the Keynesian formulation was to show that the economy could be in equilibrium at less than full employment level of income. This possibility could not simply arise in the Ricardo-Say world. But Keynes demonstrated that this was very much plausible. There is nothing inherently self regulating about the economy at large. For a variety of factors, the investment climate might be sluggish. This is something that is very much dictated by what he called the 'animal spirits' of the capitalists. If there was a general sense of gloom, it would feed on itself, expectations would be self fulfilling, and the system would grind down to a less than full employment level of equilibrium.

Keynes's antidote to this problem was government expenditure. In a situation of slump the government has to act by giving a 'stimulus' to the economy, even if it involved having to indulge in deficit financing. The government may even be advised to print currency notes to employ people to dig holes and then fill them up, so that the wages received would regenerate demand through the multiplier process and resuscitate economic activity.

Keynes was of course talking of the malaise immediately facing the advanced capitalist economies such as those of England, the US and Germany. Factories were all there, but were lying idle because of a slump in demand. It needed the active intervention of the visible hand of the government to put the economy back on the rails.

It must be mentioned here that well before Keynes, Malthus had foreseen the possibility of slumps and booms and openly differed with his good friend Ricardo. And it must not be forgotten that one of the central theses of Marx in his analysis of capitalism was the cyclical nature of business activity. Marx's contention was that there would be

internal contradictions within capitalism that would lead to its ultimate demise. Keynes's project was to save capitalism from the possibility, and indeed inevitability, of periodic slumps. Keynes was no socialist, but he showed that the only way the capitalist system can run on a smooth and self sustaining course would be to have the active visible hand of the government that would temper the invisible hand led consequences of the market place.

President Franklin Roosevelt in the US was the first convert to the Keynesian proposition. Keynes had a much harder time convincing the Oxbridge trained bureaucrats in the Treasury and the British political leaders of the day. But the World War II was already looming on the horizon and government activity was already beginning to be stepped up to a heightened level. The Keynesian prescription was being followed willy-nilly.

From the end of World War II in 1945 till about the mid 1970s there was a kind of sustained all round growth in the Western economies and Japan that had never been witnessed before. The intellectual basis for this was the counter cyclical prescription of Keynes. It worked admirably, leading Richard Nixon to famously say: 'We are all Keynesians now'.

### **III THE PRESENT FINANCIAL AND ECONOMIC CRISIS : THE ANTECEDENTS**

There were however problems brewing. The Arab-Israeli war of 1973 brought in its wake the oil crisis. The world, and in particular the advanced capitalist world, was suddenly confronted with hardening energy prices, and for the first time was alerted to the possibility of depleting oil reserves with a degree of stunning urgency that was never perceived before. Conditions for the common workers in Britain and continental Europe were again becoming harsh. In the mid 1970s there was a protracted miners' strike in England. There were all elements of a cost push inflation combined with stagnation, which began to be called stagflation. It is in this setting that Thatcher and Reagan came onto the scene in Britain and the US. They had a single plank: reduce government spending and allow private initiative to flourish so as to unleash the latent strength of the capitalist system.

Side by side the dominant intellectual traditions within economics and the social sciences were also undergoing transformation. Keynesianism had given way to free market fundamentalism and this reached its apogee in the Chicago school led by Milton Friedman, Gary Decker and Robert Lucas. The tide now turned in a direction where



'monetarism' and 'rational expectations' were the dominant prevailing notions. The 'efficient market hypothesis' advanced, among others, by Eugene Fama, was another major new mantra. The contention was that the prices of all financial instruments -stocks, shares, debts - represent the best possible estimates of the risks associated with these types of assets, taking into account all available information, both public and private. This implies that different financial instruments could give different-returns depending on their riskiness.

Most of the financial sector risk-management models are in some manner based on the efficient market theory. They establish a range of probabilities within which future events will occur. In essence, the spread of past returns gives us a range of uncertainty about future returns. The spread, or the uncertainty of outcomes, is measured by the standard deviation or the variance.

One of the central results of this analysis is that portfolio diversification reduces risk: when we hold many assets, the risks which are unique to each one cancel each other out, as they are assumed to be independent events. These models assume away the possibility of correlation or momentum in the movement of risks, as is typical in a boom or bust situation. Keynes's intrinsic insight was to precisely appreciate this which led him to propose a notion of inducement to invest as dictated by what he called 'animal spirits'. Keynes was therefore able to analytically demonstrate the possibility of a deep depression much more pointedly than the classical could ever do.

Along with this was the rise of the 'finance' experts who likened their work as some form of rocket science'. A lot of sophisticated mathematical and probabilistic modeling was employed to develop an elaborate theory around derivatives and it was contended that very limited amounts of equity can be employed to leverage large volumes of loans. It is essentially this which was at the heart of the sub-prime crisis in the US.

The US housing boom of the late 1990s and early 2000s was based on securitization wherein sub-prime mortgages entered the world banking system. Securitization is the process of bundling up individual mortgages and then slicing and dicing them into different securities that are tailored to the requirements of different investors, and are then sold on by the originating bank. By this the risks attached to lending money to sub-prime borrowers could be widely spread. Guaranteed by investment-grade credit ratings, and insured by credit default swaps,



these toxic assets were eagerly picked up by investors the world over who wanted a better yield than long dated government bonds.

In 1933 the US government had passed the Glass-Steagall Act the purpose of which was to forbid retail banks to engage in investment activities such as underwriting and selling securities. This was repealed by the US government in 1999. Under the Clinton administration it was decided not to regulate credit-default swaps. Finally the US Securities and Exchange Commission decided in 2004 to allow banks to increase their leverage ratios, i.e. the ratio of total liabilities to net worth, from 10:1 to 30:1. Side by side the definition of capital was expanded to include mortgage backed securities, thereby inflating the quantum of capital. Everything was fine till such time as house prices in the US were on a continuous rising trend. When the housing market started to fail, these paper securities became, in the words of Warren Buffet, 'financial weapons of mass destruction'.

It is therefore not difficult to see how all the elements of a financial collapse were very much in the making through these past two to three decades. The question then is: What is to be done? Clearly, the easy way for business was to run to the government to bail out the system. And so it happened. Troubled financial institutions and iconic industrial giants like General Motors made a beeline to the government for bail out packages. Before the damage could possibly spread too far the new Obama administration announced massive stimulus measures.

#### IV LESSONS FOR DEVELOPING COUNTRIES

That India and China have emerged relatively unscathed from the global crisis is a point that is well appreciated. In the Indian context the relatively conservative stance of our central bank, the Reserve Bank of India, stood us in good stead. Prime Minister Manmohan Singh is on record having instructed the RBI to work on a roadmap towards full capital account convertibility in March 2006. The government around that time invited Mr Raghuram Rajan of Chicago, who also did a brief stint at the IMF, to provide a blueprint for financial sector deregulation in India. Paradoxically the committee's recommendation for large scale freeing up of the financial markets was submitted just days before the collapse of Lehman Brothers. The chorus for capital account convertibility seems to have quietly died down. The past enthusiasts of full capital market convertibility sadly don't seem to be intellectually honest enough to openly admit their earlier misjudgements.

The more important question for us is: What is the lesson for India? With a savings rate in the region of about 37 per cent and with a broad approximation of the capital output ratio in the region of around 5, a 7 per cent growth rate seems to be assured in the foreseeable future. The key for India is to go heavily into rural infrastructure which has been neglected in recent years. The other two major areas are education and primary health. In recent years there has been a tendency on the part of the government to backtrack in these spheres and bring in more privatization in both these areas. The results have been nothing short of disastrous. Both these are merit goods and the common masses can rightfully expect these to be provided by the state. This is so especially in a country where some 37 per cent of the population is acknowledged to be below the poverty line.

In the weeks preceding the Union budget many captains of industry, as well as some influential economists, have advised the Finance Minister to not withdraw the stimulus packages. This essentially translates into more concessions and tax money to be put into sectors like IT, steel and automobiles.

The Keynesian prescription of government expenditure had a particular context. It was one where fixed plants were there but lying idle, and labour was unemployed. Government expenditure was intended to put labour back into the workforce and generate output instantaneously without any inflationary consequences. The Indian setting is considerably different. Government expenditure is required first of all for the provision of essential public and merit goods such as education and health and for alleviating poverty.

The present global financial and economic crisis again brings to the fore the very important issue of the relative roles of the state and the market. No one today would seriously choose a corner solution on this issue. There can be no rigid general solutions. The judicious mix of the government and the private sector would very much be conditioned by the specific historical, social and political context. Yet it must not ever be lost sight of that there are several core activities in areas particularly of the social sector and provisioning of infrastructure and public goods from which the government must not be allowed to wash off its hands.

**Professor Baidyanath Misra Endowment Lecture**

# **Monetary Policy Framework in India : Experience with Multiple-Indicators Approach\***

**Deepak Mohanty**

Executive Director

Reserve Bank of India, Mumbai

I am honoured to deliver the 2<sup>nd</sup> Professor Baidyanath Mishra Lecture. Prof. Mishra is a multi-faceted personality: an economist, an educationist and an institution-builder. Above all, he is a great teacher who inspired generations of students. I thank the Orissa Economic Association for giving me this opportunity.

2. I will set out how the framework of monetary policy has evolved over the last two and half decades. First, I will touch upon the objectives of monetary policy and then discuss briefly about how monetary framework has evolved globally before dwelling on the Indian experience. I will conclude with an overall assessment of the monetary policy regime in India.

## **I. OBJECTIVES OF MONETARY POLICY**

3. Central banks derive their objectives from their respective mandates. Monetary policy could have either a single objective of price stability or multiple objectives besides price stability. In the literature and in practice, price stability is considered as the dominant objective of monetary policy.
4. The preamble to the Reserve Bank of India Act, 1934 delineates the basic functions of the Bank as “to regulate the issue of Bank notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage”. The objectives of

\*Speech by Deepak Mohanty, Executive Director, Reserve Bank of India, delivered at the Conference of the Orissa Economic Association in Baripada, Orissa, on 21<sup>st</sup> February 2010. The assistance provided by Shri Binod B. Bhoi is acknowledged.

monetary policy evolved from this broad guideline as maintaining price stability and ensuring adequate flow of credit to the productive sectors of the economy. In practice, monetary policy endeavoured to maintain a judicious balance between economic growth and price stability.

5. The question is how do we define price stability? Price stability does not mean zero inflation. It is considered as a low and stable order of inflation. This is because both high inflation and deflation impose costs on the economy by way of loss of output and misallocation of resources. For advanced economies, an inflation rate of about 2 per cent is equated with price stability. For an emerging market economy (EME) like India, going through significant structural changes, a slightly higher rate of inflation which allows relative prices to adjust smoothly can be considered appropriate. The Chakravarty Committee (1985) had defined an inflation rate of 4 per cent per annum as tolerable for India.
6. India is a moderate inflation country with the long-term average inflation rate remaining in a single digit of about 7.5 per cent since 1970-71. Over this 40-year period, the average inflation rate, however, has decelerated to about 5.5 per cent in the decade of 2000s. The medium term objective of monetary policy is to bring down the average inflation rate to around 3.0 per cent consistent with India's integration with the global economy.<sup>1</sup>
7. While a low level of inflation is essential to sustain high levels of growth, it is not sufficient to maintain financial stability, as has been demonstrated by the recent global financial crisis. Consequently, besides price stability, ensuring orderly conditions in the financial markets has become a key policy concern. In this context, it may be indicated that financial stability had emerged as another important objective of monetary policy in India much before the crisis. Thus, monetary policy in India has evolved to have multiple objectives of price stability, financial stability and growth. These objectives are not inherently contradictory, rather mutually reinforcing. Price and financial stability are important for sustaining high levels of growth which is the ultimate objective of public policy.

<sup>1</sup>Reserve Bank of India(2010), *Third Quarter Review of Monetary Policy for the year 2009-10*, Reserve Bank of India, January 29, 2010.

## II. EVOLUTION OF MONETARY POLICY FRAMEWORK

8. In order to attain the objectives of policy it is necessary to have a consistent policy framework. At a theoretical level, the evolution of monetary framework could be traced to the desire to reduce inflationary bias in the economy through various refinements under the broader debate on 'rules' versus 'discretion' in policy making, and more recently, 'constrained discretion' which believes that the doctrines of 'rules' and 'discretion' are not mutually exclusive<sup>2</sup>. In practice, the nature of the framework is contingent upon two important considerations. First, the level of development of financial markets and institutions; and second, the degree of openness of the economy to trade and capital flows. In India, like most other countries, the monetary policy framework has evolved in response to and in consequence of financial developments and shifts in the underlying transmission mechanism.

*How did monetary policy framework evolve globally?*

9. In order to achieve the objectives of monetary policy which are not under the direct control of central banks, monetary authorities typically set 'intermediate targets', which bear a stable relationship with the overall objectives of monetary policy<sup>3</sup>. The selection of intermediate target is also conditional upon the channels of monetary transmission - the process through which monetary policy actions impact the ultimate objectives. Historically, although credit targets were prevalent, the concept of a formal intermediate target emerged with the monetarist emphasis on money targeting in an environment of worsening inflation in the 1970s and observed stable relationship among money, output and prices. A number of major central banks such as Switzerland, Germany, Japan, the UK, the USA, France, Australia and Canada adopted monetary targets in the mid-1970s. In the 1980s, financial market innovations reduced the need for financial intermediation by the banking system and in turn began to impart volatility to the behaviour of monetary aggregates.

<sup>2</sup>Bernanke, Ben S. "Constrained Discretion and Monetary Policy". Remarks before the Money Marketmakers of New York University, New York, February 3, 2003.

<sup>3</sup>Friedman, B. (1990), "Targets and Instruments of Monetary Policy". In B. Friedman and F. Hahn (eds.) *Handbook of Monetary Economics*, Amsterdam, North-Holland.

The consequent weakening of the stable relationship among money, output and prices made many advanced country central banks to move towards signaling monetary policy stance through setting of interest rates. Monetary targeting, however, continued in some form in many bank-based economies in continental Europe such as Germany, France and Switzerland where it was possible to establish money demand stability with redefinition of monetary aggregates.

10. Given the under-developed nature of financial markets coupled with the quantity-based credit channel of monetary transmission, money target was considered suitable in case of developing countries. In the 1980s, monetary targeting was adopted in many developing countries such as Brazil, China, Indonesia, Korea, Malaysia, Peru, Philippines, Russia and Venezuela. As financial innovations spread to developing countries and they became more open to external capital flows, monetary targeting proved less effective.
11. The weakening of monetary targeting framework, both in advanced and developing countries, triggered a search for alternate monetary frameworks. As it was also widely recognised that monetary policy can contribute to sustainable growth by maintaining price stability, beginning with New Zealand in 1989, a number of advanced and developing countries moved to 'inflation targeting'. Under this approach, central banks target the final objective, *i.e.*, inflation itself rather than targeting any intermediate variable. Among the major central banks, the Bank of England (BoE) formally adopted inflation targeting in 1992.
12. The US Federal Reserve (Fed) follows a more eclectic approach, which can be termed as risk management approach, in pursuit of its twin objectives of price stability and maximum employment. Under the risk management approach, the Fed takes a policy view on interest rate on consideration of balance of risks to inflation and growth. Although the European Central Bank (ECB) has a single mandate of price stability, it is not an inflation targeting central bank. Its policy decisions are based on a 'two pillars' strategy comprising of 'economic analysis' and 'monetary analysis'. Money supply continues to be an important variable in its analytical tool under the second pillar reflecting the



enduring influence of the German Bundesbank which was a major monetary targeting central bank. Notwithstanding the difference in approach among central banks, price stability is accepted as the predominant objective of monetary policy.

*How did monetary policy framework evolve in India?*

13. In India also, monetary policy framework has undergone significant transformation over time. In the 1960s, as inflation was considered to be structural and inflation volatility was mainly caused by agricultural failures, there was greater reliance on selective credit controls. The aim was to regulate bank advances to sensitive commodities to influence production outlays, on the one hand and to limit possibilities of speculation, on the other. In the 1970s, there was a surge in inflation on account of monetary expansion induced by expansionary fiscal policies besides the oil price shocks. By the early 1980s, there was a broad agreement on the primary causes of inflation. It was argued that while fluctuations in agricultural prices and oil price shocks did affect prices, sustained inflation since the early 1960s could not have occurred unless it was supported by the continuous excessive monetary expansion generated by the large-scale monetisation of the fiscal deficit<sup>4</sup>.

14. Against the backdrop, the Committee to Review the Working of the Monetary System (Chairman: Prof. Sukhamoy Chakravarty; 1985), set up by the Reserve Bank, recommended a monetary targeting framework to target an acceptable order of inflation in line with desired output growth. It also recommended for limiting monetary expansion through the process of monetisation of fiscal deficit by an agreement between the Reserve Bank and the Government.<sup>5</sup> With empirical evidence supporting reasonable stability in the demand function for money, broad money ( $M_3$ ) formally emerged as an intermediate target. Under

<sup>4</sup>Reserve Bank of India (2005), *Report on Currency and Finance 2003-04*, pp 53-79.

<sup>5</sup>But it took almost twelve years to fructify when automatic monetization through *ad hoc* Treasury Bills was abolished and a system of Ways and Means Advances (WMA) was introduced in 1997.

<sup>6</sup>Technically, in a simple form, if expected real GDP growth is 6 per cent, the income elasticity of demand for money is 1.5 and a tolerable level of inflation is 5 per cent, the broad money ( $M_3$ ) expansion target can be set at 14 per cent ( $M_3$  growth =  $1.5 \times 6 + 5 = 14\%$ ).



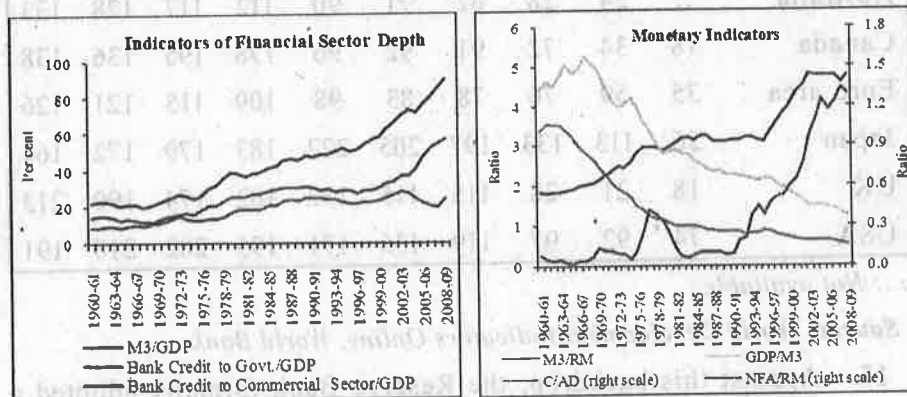
this approach, a monetary projection is made consistent with the expected real GDP growth and a tolerable level of inflation<sup>6</sup>. The framework was, however, a flexible one allowing for various feedback effects. Moreover, money supply target was relatively well understood by the public at large.<sup>7</sup>

15. With the pace of trade and financial liberalization gaining momentum following the initiation of structural reforms in the early 1990s, the efficacy of broad money as an intermediate target of monetary policy came under question. The Reserve Bank's Monetary and Credit Policy for the First Half of 1998-99 observed that financial innovations emerging in the economy provided some evidence that the dominant effect on the demand for money in the near future need not necessarily be real income, as in the past.

16. Since the mid-1990s, apart from dealing with the usual supply shocks, monetary policy had to increasingly contend with external shocks emanating from swings in capital flows, volatility in the exchange rate and global business cycles. Subsequently, increase in liquidity emanating from capital inflows raised the ratio of net foreign assets (NFA) to Reserve Money (Chart 1). This rendered the control of monetary aggregates more difficult. Consequently, there was also increasing evidence of changes in the underlying transmission mechanism of monetary policy with interest rate and the exchange rate gaining importance *vis-à-vis* quantity variables.<sup>8</sup> Bank credit to private sector as a per cent of GDP also started rising, though it still remains low as compared to advanced economies and many EMEs underscoring the potential for greater credit penetration (Table 1). These developments necessitated refinements in the conduct of monetary policy.

<sup>7</sup>Rangarajan, C. (1997), "Role of Monetary Policy", *Economic and Political Weekly*, December 27.

<sup>8</sup>Reserve Bank of India (1998), *The Working Group on Money Supply: Analytics and Methodology of Compilation* (Chairman: Dr. Y.V. Reddy).

**Chart 1: Financial Development and Money Multiplier****Table 1: Domestic Credit to Private Sector – Select Economies**  
(As % of GDP)

Country/Region	1960	1970	1980	1990	1995	2000	2005	2006	2007	2008
1	2	3	4	5	6	7	8	9	10	11
<b>Developing Economies</b>										
Brazil	20	31	43	42	46	33	31	40	49	56
Chile	22	8	47	51	62	74	80	82	89	85
China	..	..	53	87	85	112	114	113	111	108
India	8	13	24	25	23	29	41	45	47	50
Indonesia	..	..	9	48	54	20	26	25	26	27
Israel	14	30	71	58	64	78	90	88	90	91
Korea	12	40	51	63	61	87	95	95	100	109
Malaysia	7	21	61	69	165	171	122	108	105	101
Mexico	21	33	19	18	29	18	17	20	22	21
Philippines	16	29	42	22	45	44	30	30	29	..
Russia	..	..	..	..	9	13	26	33	39	42
South Africa	..	68	56	81	119	134	141	159	164	80
Thailand	10	19	41	83	140	108	106	99	118	118

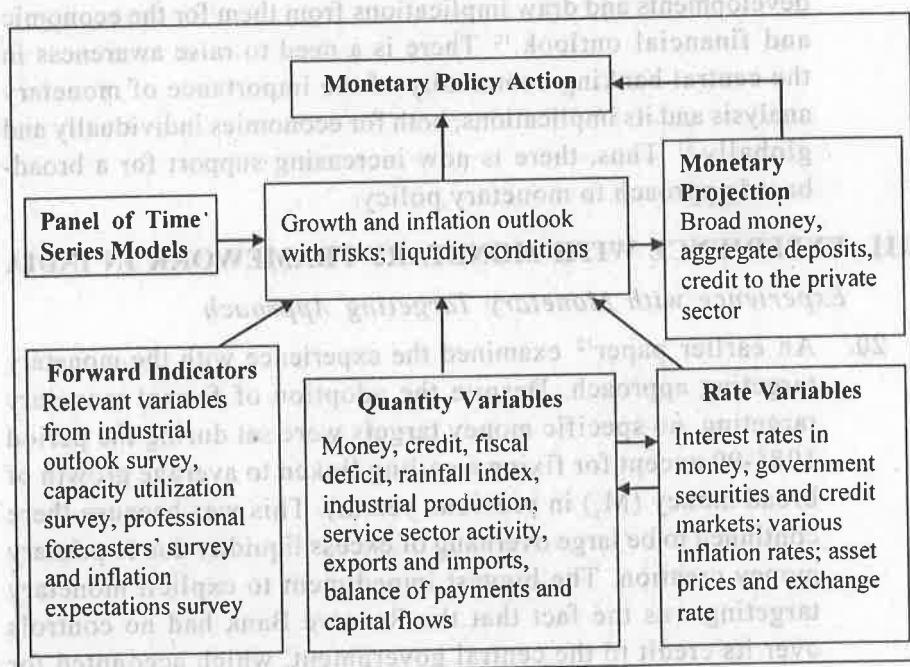
<b>Developed Economies</b>										
Australia	..	24	28	62	71	90	112	117	128	133
Canada	18	34	72	91	92	96	178	195	136	138
Euro area	35	59	76	78	83	98	109	115	121	126
Japan	56	113	133	197	205	222	183	179	172	164
UK	18	21	28	115	115	132	162	174	190	213
USA	74	92	97	119	135	171	195	202	210	191

...: Not available.

**Source:** World Development Indicators Online, World Bank.

17. Against this backdrop, the Reserve Bank formally adopted a 'multiple indicators approach' in April 1998 with a greater emphasis on rate channels for monetary policy formulation. As a part of this approach, information content from a host of quantity variables such as money, credit, output, trade, capital flows and fiscal position as well as from rate variables such as rates of return in different markets, inflation rate and exchange rate are analyzed for drawing monetary policy perspectives. The multiple-indicators approach, as conceptualised when Dr. Bimal Jalan was the Governor, continued to evolve and was augmented by forward looking indicators and a panel of parsimonious time series models. The forward looking indicators are drawn from the Reserve Bank's industrial outlook survey, capacity utilization survey, professional forecasters' survey and inflation expectations survey<sup>9</sup>. The assessment from these indicators and models feed into the projection of growth and inflation. Simultaneously, the Reserve Bank also gives the projection for broad money ( $M_3$ ), which serves as an important information variable, so as to make the resource balance in the economy consistent with the credit needs of the government and the private sector. Thus, the current framework of monetary policy can be termed as an augmented multiple indicators approach as illustrated below (Exhibit 1).

<sup>9</sup>Following the recommendations of the Reserve Bank's *Working Group on Surveys* (Chairman: Deepak Mohanty; 2009), the results of some of the surveys such as the Survey of Professional Forecasters and Industrial Outlook Survey are disseminated in the public domain ([www.rbi.org.in](http://www.rbi.org.in)).

**Exhibit 1: Augmented Multiple Indicators Approach**

18. This large panel of indicators is at times criticised as a 'check list' approach, as it does not provide for a clearly defined nominal anchor for monetary policy. However, given the level of financial market development, the evolving nature of monetary transmission and the need to maintain the resource balance between the government and the private sector, monetary policy assessment becomes inherently complex.

19. Globally, it is now recognised that the task of monetary management has become more challenging. In view of central banks operating in an environment of high uncertainty regarding the functioning of the economy as well as its prevailing state and future developments, a single model or a limited set of indicators may not be a sufficient guide for monetary policy. Instead, an encompassing and integrated set of data is required. This reinforces the usefulness of monitoring a number of macroeconomic indicators in the conduct of monetary policy.

In the context of the recent crisis, it is argued that monitoring money and credit may help policymakers interpret asset market developments and draw implications from them for the economic and financial outlook.<sup>10</sup> There is a need to raise awareness in the central banking community of the importance of monetary analysis and its implications, both for economies individually and globally.<sup>11</sup> Thus, there is now increasing support for a broad-based approach to monetary policy.

### III. EXPERIENCE WITH MONETARY FRAMEWORK IN INDIA

#### *Experience with Monetary Targeting Approach*

20. An earlier paper<sup>12</sup> examined the experience with the monetary targeting approach. Despite the adoption of formal monetary targeting, no specific money targets were set during the period 1985-90 except for fixing a ceiling linked to average growth of broad money ( $M_3$ ) in previous year(s). This was because there continued to be large overhang of excess liquidity due to primary money creation. The biggest impediment to explicit monetary targeting was the fact that the Reserve Bank had no controls over its credit to the central government, which accounted for the bulk of the creation of reserve money. The Reserve Bank could at best set limits on the secondary expansion of money through instruments such as cash reserve ratio (CRR), statutory liquidity ratio (SLR) and selective credit controls. As a result, CRR reached its prescribed ceiling of 15 per cent of net demand and time liabilities (NDTL) of banks in July 1989 and the SLR reached the peak of 38.5 per cent in September 1990. Despite these measures, however, money supply growth remained high, which contributed to inflation. The setting of monetary targets and actual achievements during the monetary targeting period is presented below in Table-2.

<sup>10</sup>Goodhart, C (2007) "Whatever Became of the Monetary Aggregate?" *LSE Financial Markets Group Special Paper* No. 172.

<sup>11</sup>Trichet, Jean-Claude (2010), Panelist Comments on "Fifty Years of Monetary Policy: What Have We Learned?" at the Symposium for the 50th anniversary of the Reserve Bank of Australia, Sydney, February 9.

<sup>12</sup>Mohanty and Mitra (1999), "Experience with Monetary Targeting in India", *Economic and Political Weekly*, January 16-23, pp 123-132.

**Table 2: Monetary Targeting – Target Versus Achievement**

Objective/Target				Actual (Per cent)		
Year	M <sub>3</sub>	GDP	Inflation	M <sub>3</sub>	GDP	Inflation
1	2	3	4	5	6	7
1985-86	Liquidity growth lower than that in 1984-85	Output growth of the same order as in 1984-85	Avoid resurgence of inflation	16.0	4.1	4.8
			Target achieved			
1986-87	M <sub>3</sub> growth to be contained below the high annual average level of the previous four years i.e. 17.5 per cent	Output growth somewhat higher than in 1985-86	The rate of inflation should continue to be kept under check	18.6	4.3	5.1
1987-88	M <sub>3</sub> growth well below the expansion in 1986-87 i.e., 18.6 per cent	5.0	Avoid re-emergence of inflationary pressures	16.0	4.3	10.7
			Target achieved			
1988-89	M <sub>3</sub> growth to be below the average for the previous three years i.e., 16.9 per cent	-	-	17.8	10.0	5.7
1989-90	M <sub>3</sub> growth to be contained at a level lower than the average of the last four years i.e., 17.1 per cent	4.5		19.4	6.9	9.1
1990-91	To bring about a sharp reduction of M <sub>3</sub> growth by about 4 percentage points over previous year i.e. 15.4 per cent	Around 5.0	15.1	Target achieved	5.4	12.1

1991-92 To contain $M_3$ (October) growth to 13.0 per cent	3.0	Max 9.0	19.3	0.8	13.6
1992-93 11.0 per cent Max) $M_3$ growth		8.0	15.7	5.3	7.0
1993-94 Around 12.0 per cent $M_3$ growth	5.0	Further moderation in inflation rate	18.4	6.2	10.8
1994-95 16.0 per cent (October) (Max) $M_3$ growth	5.5	Sharp reduction in inflation rate by about 4 percentage points	22.3	7.8	10.4
1995-96 15.5 per cent (Max) $M_3$ growth	5.5	Around 8.0	13.7	7.2	5.0
1996-97 15.5-16.0 per cent $M_3$ growth	6.0	6.0	16.2	7.5	6.9
1997-98 15.0-15.5 per cent $M_3$ growth	6.5-7.0	5.0-6.0	17.6	5.1	5.3

GDP: Gross domestic product at factor cost at 1980-81 prices. Inflation:  
Based on wholesale price index (WPI).

Source: Mohanty and Mitra (1999), "Experience with Monetary Targeting  
in India", Economic and Political Weekly, January 16-23.

### Experience with Multiple Indicators Approach

21. The process of financial liberalization and deregulation of interest rates introduced since the early 1990s enhanced the role of market forces in the determination of interest rates and the exchange rate. Accordingly, the Reserve Bank placed greater emphasis on the money market as the focal point for the conduct of monetary policy and for fostering its integration with other market segments. Following the Narsimham Committee (1998) recommendations, the Reserve Bank introduced the liquidity adjustment facility (LAF) in June 2000 to manage market liquidity



on a daily basis and also to transmit interest rate signals to the market. Collateralized borrowing and lending operations (CBLO) was introduced as a new money market instrument in January 2003. The call money market was transformed into a pure inter-bank market by August 2005 in a phased manner.

22. As a result, the money market developed significantly over the years as reflected in increased turnover in various market segments (Table 3). Along with developing money markets, the Reserve Bank has also undertaken various measures to develop the government securities and foreign exchange market, increasing the depth of the financial markets (Chart-2).

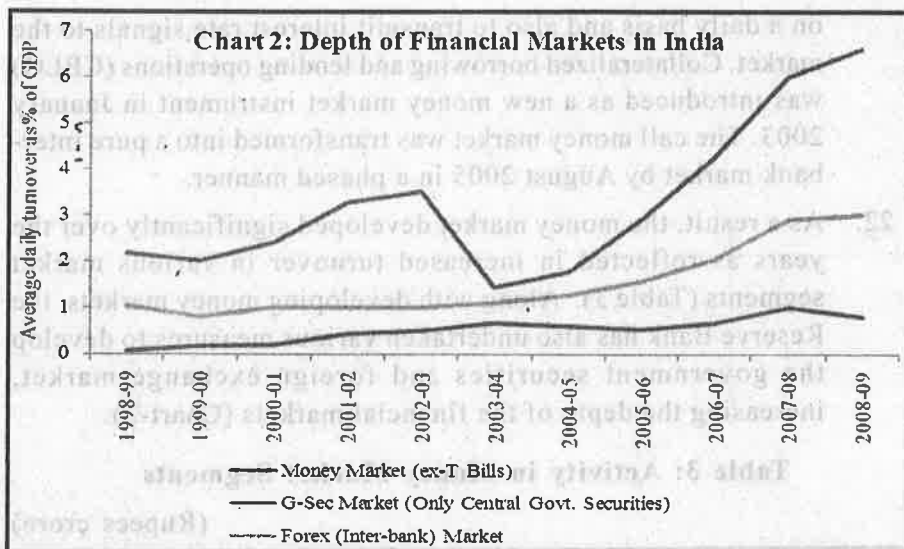
**Table 3: Activity in Money Market Segments**

(Rupees crore)

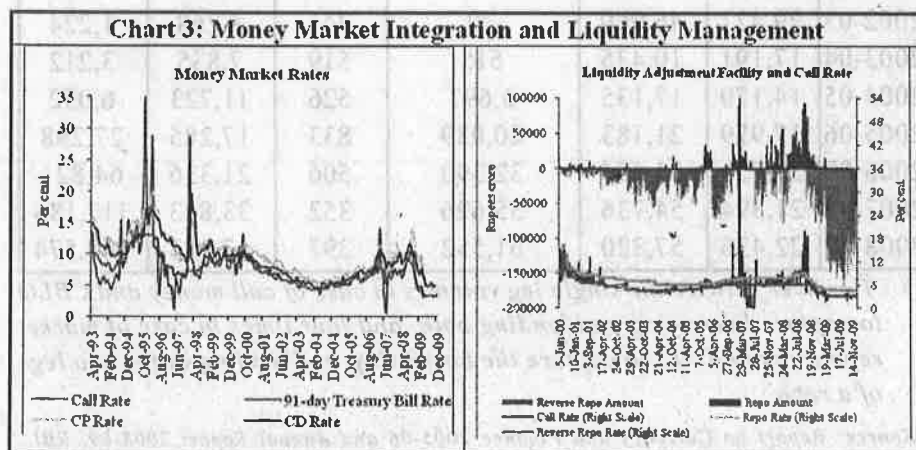
Average Daily Turnover#				Outstanding Amount		
Year	Call Money	Market Repo (Outside the LAF)	Collateralised Borrowing and Lending Obligation (CBLO)	Term Money	Commercial Paper	Certificates of Deposit
1	2	3	4	5	6	7
1997-98	22,709	-	-	-	2,806	9,349
1998-99	26,500	-	-	-	4,514	6,876
1999-00	23,161	6,895	-	-	7,014	1,908
2000-01	32,157	10,500	-	-	6,751	1,199
2001-02	35,144	30,161	-	195	7,927	949
2002-03	29,421	46,960	30	341	8,268	1,224
2003-04	17,191	10,435	515	519	7,835	3,212
2004-05	14,170	17,135	6,697	526	11,723	6,052
2005-06	17,979	21,183	20,039	833	17,285	27,298
2006-07	21,726	33,676	32,390	506	21,336	64,821
2007-08	21,394	54,736	55,626	352	33,813	117,186
2008-09	22,436	57,320	61,552	397	47,183	162,574

# : Turnover is twice the single leg volumes in case of call money and CBLO to capture borrowing and lending both, and four times in case of market repo (outside LAF) to capture the borrowing and lending in the two legs of a repo.

Source: Report on Currency and Finance 2005-06 and Annual Report 2008-09, RBI.

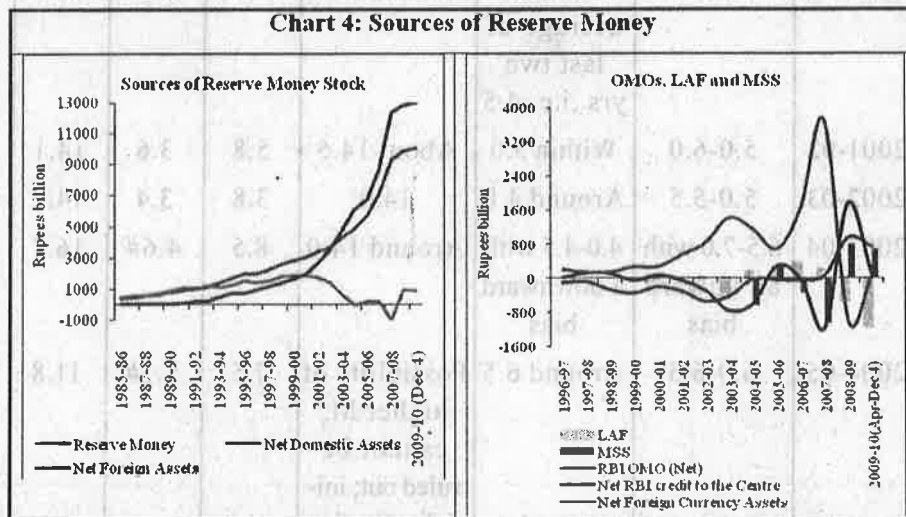


23. All these reforms have also led to improvements in liquidity management operations by the Reserve Bank as reflected in general containment of call rates within the LAF corridor except occasional volatility. Apart from imparting stability in call money rates, this has also resulted in greater market integration as reflected in close co-movement of rates in various segments of the money market (Chart 3). The rule-based fiscal policy pursued under the Financial Responsibility and Budget Management (FRBM) Act, by easing fiscal dominance, contributed to overall improvement in monetary management.



24. During the recent period, the issue of managing large and persistent capital inflows in excess of the absorptive capacity of the economy added another dimension to the liquidity management operations. Initially, the liquidity impact of large capital inflows were sterilised through open market operation (OMO) sales and LAF operations. Given the finite stock of government securities in the Reserve Bank's portfolio and the legal restrictions on issuance of its own paper, additional instruments other than LAF were needed to contain liquidity of a more enduring nature. This led to the introduction of the market stabilisation scheme (MSS) in April 2004. Under this scheme, short term government securities were issued but the amount remained impounded in the Reserve Bank's balance sheet for sterilisation purposes. Interestingly, in the face of reversal of capital flows during the recent crisis, unwinding of such sterilised liquidity under the MSS helped to ease liquidity conditions (Chart 4).

Chart 4: Sources of Reserve Money



25. The efficient conduct of monetary policy is judged ultimately in terms of its ability to stabilise real economic activity and inflation and also ensuring financial stability consistent with the policy objectives. An assessment of the multiple indicators approach for the period 1998-99 to 2008-09 reveals that actual outcome

of GDP growth has been generally higher than the projections indicated in the monetary policy statements, while it has generally been lower in case of inflation (Table 4).

**Table 4: Multiple Indicators Approach : Projections versus Achievements**

Year	Projections (Per cent)*			Actual (Per cent)		
	Real GDP	Inflation	M <sub>3</sub> GDP	Real	Inflation	M <sub>3</sub>
1	2	3	4	5	6	7
1998-99	In the region of 6.0	Should not exceed 5.0-6.0	15.0-15.5	6.7	5.9	19.4
1999-00	6.0-6.5	Lower than last year, i.e., 4.8	15.5-16.0	6.4	3.3	14.6
2000-01	6.0-6.5	Close to average of last two yrs., i.e., 4.5	Around 15.0	4.4	7.2	16.8
2001-02	5.0-6.0	Within 5.0	About 14.5	5.8	3.6	14.1
2002-03	5.0-5.5	Around 4.0	14.0	3.8	3.4	14.7
2003-04	6.5-7.0 with an upward bias	4.0-4.5 with a downward bias	Around 14.0	8.5	4.6#	16.7
2004-05	6.0-6.5	Around 6.5	Possibility of higher M <sub>3</sub> cannot be ruled out; initial projection was 14.0	7.5	5.1#	11.8
2005-06	7.5-8.0	5.0-5.5 as projected earlier	Significantly higher than 14.5	9.5	4.1#	16.9
2006-07	8.5-9.0	5.0-5.5	Somewhat	9.7	5.9#	21.7

			higher than 15.0			
2007-08	Around 8.5	Close to 5.0	Containing $M_3$ in the range of 17.0-17.5 per cent may warrant policy response	9.0	7.7#	21.4
2008-09	7.0	Below 3.0	19.0	6.7	0.8#	18.6
2009-10	7.5	8.5	16.5	7.2@	8.6 <sup>A</sup>	17.0 <sup>A</sup>

\*: As per the last revised projections for the year. #: Year-on-year basis.

<sup>A</sup>: January 2010.

GDP: Gross domestic product at factor cost at 1999-2000 prices. @: Advance Estimates with Base 2004-05.

Note: Inflation is based on headline wholesale price index (WPI).

#### IV. OVERALL ASSESSMENT

26. The monetary policy framework in India has undergone significant shifts from a monetary targeting regime to a multiple indicators regime. Such a transition was conditioned by the developments of financial markets, increasing integration of the Indian economy with the global economy and changing transmission of monetary policy. The multiple indicators approach, conceptualized in 1998, has since been augmented by forward looking indicators from surveys and a panel of time series models. Moreover, the multiple indicators approach continues to evolve. Though the multiple indicators approach is subject to criticism for the absence of a clearly defined anchor, in the wake of the recent global financial crisis there is recognition of the usefulness of a broad indicators-based assessment of monetary policy.

27. On the basis of the above assessment, I will give a comparison of the relative performance of the monetary regimes in terms of key macroeconomic variables over three periods: (i) the decade preceding the monetary targeting period (1976-85); (ii) monetary targeting period (1986-98) and (iii) multiple indicators period so far (1999-2009) (Table 5).

**Table 5: Key Macroeconomic Indicators under Different Monetary Regimes in India**

Indicator	GDP Growth (%)	Inflation (%)	Fiscal Deficit (% of GDP)	Broad Money Growth (%)	Call Rate (%)	Ex-change	Rate	Re-serves (US\$ billion)	Re-REER*
	WPI	CPI-IW					Rs US\$#		
1	2	3	4	5	6	7	8	9	10
<b>Average</b>									
1975-76 to 1984-85 (Pre-Monetary Targeting)	4.6	7.0	6.4	5.1	18.1	9.0	9.1	164.3	5.4
1985-86 to 1997-98 (Monetary Targeting)	5.5	8.1	9.1	6.6	17.4	11.7	23.9	117.1	13.5
1998-99 to 2008-09 (Multiple Indicators Approach)	7.1	5.3	5.7	4.9	17.0	6.7	44.9	98.9	128.2
<b>Volatility (i.e., SD)</b>									
1975-76 to 1984-85 (Pre-Monetary Targeting)	4.2	6.5	5.7	1.1	3.1	1.2	6.6	5.1	-
1985-86 to 1997-98 (Monetary Targeting)	2.2	3.0	2.1	1.2	2.4	4.0	7.8	6.3	-
1998-99 to 2008-09 (Multiple Indicators Approach)	2.0	1.6	3.0	1.3	3.1	1.5	7.1	5.0	-

SD: Standard Deviation. #: Average FEDAI Rate. \*: Trade-weighted 36 country indices of Real Effective Exchange Rate (REER) normalized to Base: 1993-94=100. CPI-IW: CPI for Industrial Workers.

Note: Volatility of exchange rate is calculated as the standard deviation of the appreciation/depreciation of the series.



28. From this overall assessment, the following broad conclusions can be drawn.

- First, real GDP growth, on an average, has improved successively from 4.6 per cent in the decade prior to the monetary targeting period to 5.5 per cent in the monetary targeting period and further to 7.1 per cent in the multiple indicators period. Not only growth has improved but it has become more stable under the multiple indicators approach.
- Second, headline WPI inflation, on an average, increased during the monetary targeting regime alongside significant increase in fiscal deficit, although there was a reduction in volatility in inflation<sup>13</sup>. Under the multiple indicators approach, both WPI and CPI inflation fell significantly. The fall in inflation was accompanied by substantial reduction in fiscal deficit. This underscores the importance of fiscal consolidation to sustain higher levels of growth with price stability,
- Third, while the volatility of WPI inflation reduced during the multiple indicators period, it increased for CPI inflation reflecting higher volatility in food prices. This underlines the importance of supply management and a greater focus on agricultural development to contain food price inflation.
- Fourth, money supply ( $M_3$ ) growth declined over the regimes though volatility of  $M_3$  increased slightly during the multiple indicators regime reflecting emerging importance of interest rate in monetary transmission. The shift in operating objective to stabilise overnight interest rate so that it transmits through the term structure is reflected in a discernible reduction in the overnight interest rate with lower volatility.
- Fifth, exchange rate, on an average, has depreciated successively both in nominal and real terms. However, it has become more stable during the multiple indicators approach than the monetary targeting regime. This could

<sup>13</sup>It may, however, be noted that in the pre-monetary targeting period, higher inflation volatility was also significantly contributed by the two major oil price shocks.

be partly attributed to accumulation of reserves and management of exchange rate to contain volatility.

- Sixth, the improved performance of monetary policy was facilitated by supportive fiscal policy – discontinuation of the practice of automatic monetisation and rule-based deficit reduction programme under the Fiscal Responsibility and Budget Management (FRBM) Act – which enhanced instrument independence of the Reserve Bank.
- Finally, the recent overall improvement in macroeconomic performance cannot be ascribed to monetary policy alone. Apart from a rule-based fiscal policy, productivity enhancing structural reforms, sharp increase in saving and investment, increasing integration with the global economy, a low global inflation environment and the unleashing of the entrepreneurial spirit of the private sector played an important role.



Third, while the volatility of WPI inflation reduced during the multiple indicators period, it increased for CPI inflation reflecting higher volatility in food prices. This underlines the importance of supply management and a greater focus on agricultural development to contain food price inflation.

Fourth, money supply (M) growth declined over the regimes though volatility of M increased slightly during the multiple indicators regime reflecting emerging importance of interest rate in monetary transmission. The shift in operating objective to stabilised overnight interest rate so that it transmits through the term structure is reflected in a discernible reduction in the overnight interest rate with lower volatility.

Fifth, exchange rate, on an average, has depreciated successively both in nominal and real terms. However, it has become more stable during the multiple indicators approach than the monetary targeting regime. This could

It may, however, be noted that in the pre-monetary targeting period, higher inflation volatility was also significantly contributed by the five major oil price shocks.

**GLOBAL FINANCIAL CRISIS  
AND  
ITS IMPACT  
ON THE INDIAN ECONOMY**

GLOBAL FINANCIAL CRISIS  
AND  
ITS IMPACT  
ON THE INDIAN ECONOMY

## **Impact of Global Meltdown on Indian Economy**

**Kishor C. Samal**

Development Research Institute

Bhubaneswar - 751005

The 2008 financial crisis (the burst on 14<sup>th</sup> September 2008) is not the sub-prime crisis only, as it is not for mortgage loan alone, but for (a) "securitization of debt", (b) large scale use of credit cards in USA, and (c) so-called war against terror, and US possession of Iraq and Afghanistan leading to long-fought war there. At the outset, it may be pointed out that the total corporate profits amounting to \$300 billion of the financial sector of the US economy in 2004, was about 40 per cent of all domestic corporate profits. But it was less than two per cent 40 years earlier. Thus there is growth of financialization in the US political economy (Tabb: 2008). Due to gaining leverage over the rest of the economy, the financial sector acquired the power to dictate priorities and could demand greater deregulation and liberalization, allowing it to grow still further.

### **ORIGIN:**

The origin of the global financial crisis goes beyond 14 September 2008 meltdown. Due to a crisis in profitability in the core economies in early 1970s, there was a beginning of a long decline in the real wages of US workers. In 1973, a crisis was caused by hike in oil price by Organisation of Petroleum Exporting Countries (OPEC). There was large-scale financial deregulation, rise of institutional investors like mutual funds, pension funds, etc. and permission to five largest investment banks by Securities and Exchange Commission (SEC) of USA to have more than double leverage in the 1980s. This created various crises (Kapadia and Jaydev: 2008). From 2005-06, the crisis began with the bursting of the US housing bubble and high default rates on "sub-prime" and adjustable rate mortgages (ARM).

### **MAJOR CAUSES:**

Major causes of the crisis are (i) reckless sub-prime lending, (ii) securitization of debts, (iii) speculative borrowing and investment, (iv)

not proper regulation and rating, (v) dilution of norms by commercial banks and investment banks, (vi) other causes such as proliferating credit derivatives market, scandalous corporate greed and callousness, government irresponsibility (Polychroniou: 2008), failure in supervision, in risk management in the private financial institutions, and in market discipline mechanism (IMF Survey: October, 2008), spending more than income by borrowing by US consumers creating huge unsustainable trade deficit, undervaluation of their currencies by OPEC countries to stimulate export and creating huge trade surplus with USA (Aiyar: 2008), policies of government and central bank (lowering interest rate) of USA, credit default swap, inflow of funds due to trade deficits, monetary policy, high personal and corporate debt levels and moral hazards. In short, excessive decontrol, deregulation and liberalization in USA economy, particularly in the financial sector, were responsible for the present financial crisis.

#### **IMPACT IN INDIA:**

India is not among the worst affected. Because, in spite of the efforts of neo-liberals in Government, the nationalized banking system still dominates, and greater degree of regulation exist, largely because of pressure from various quarters inside the country.

#### **Why not much worse in India?**

The impact of the global financial crisis on India would have been much worse and disastrous, if government at the centre were allowed to implement the so-called financial sector reforms such as denationalization of government-owned banks and insurance companies, opening up of banking sector to foreign banks, increasing the FDI cap in the insurance sector beyond 26 per cent, transferring the social security funds like pension and provident funds to the stock market and full capital account convertibility. Financial deregulation could be stalled to a considerable extent only because of staunch opposition by Left parties on which UPA-I government at the centre was depending. The role (i.e., stubbornness against pressure from powerful quarters) of the then Governor of RBI against full capital convertibility and withdrawal of all controls on foreign investment is praiseworthy (Ghosh: 2008).

Other factors which helped India to withstand the impact of US 2008 meltdown are: (i) Strong foundation of PSU banks, insurance and core sector, (ii) Majority of the people in India depend on agriculture,



(iii) There is operation of a parallel economy/underground economy (which accounts for around half of the economy), and existence of huge amount of black money, and informal credit market (on which large number of small entrepreneurs\*and traders mostly depend), (iv) Before the September 2008 crisis, some unintended steps taken by the Government of India such as (a) Rs 60,000 crore farm loan waiver, (b) huge investment on NREGP and other anti-poverty and rural development programmes, (c) implementation of 6<sup>th</sup> Pay Commission Report for government employees; and (d) after the crisis, the large expenditure on 2009 General Election for Lok Sabha, Rs 1300 crore by government and around Rs 20,000 crore by various political parties have helped to boost purchasing power of the people, which, in consequence, stalled the process of recession to a greater extent.

#### **Adverse Effects:**

In spite of these, India has been suffering which include : (i) fall in industrial production in October 2008, (ii) decelerating growth of infrastructure sector, (iii) slowing sales of automobiles, (iv) fall in growth rate of indirect tax collection, (v) fall in fuel sales as economy slowed down, (vi) fall in export particularly, of ready-made garments, leather goods, jewellery, IT services, automobile components, etc. (ET: 2-12-08), (vii) a general fall in the foreign exchange inflows for investment, (viii) decline in FDI flow, (ix) depreciation of Rupee and rise in import cost, (x) threat to short sellers, (xi) fall in business and employment in industries with a large global (particularly USA) market (eg., software, hotel, real estate, infrastructure, construction, banking, mutual fund), (ET: 15-10-08), (xii) abandonment of huge projects (world class new plants for which there was suddenly no demand) (xiii) Redemption of Rs.23 thousand crore by mutual fund investors in September 2008 (ET: 16-10-08), and (xiv) costlier Rupee options as premium jumped four times (E.T: 27-10-08). There have been some more visible changes in banking and stock market.

**Bank:** There was rise in fixed deposits in PSU banks and demand for gold. Investors dumped equity for FDs. It is interesting to note that State Bank of India was collecting Rs. 1000 crore per day in a fixed deposit scheme in India. It was also witnessing a huge inflow of money into its other schemes. In the time of meltdown, people had trust only on PSU banks, not on private sector banks whatever its size may be.

There has been dramatic rise of confidence of people including overseas Indians on public sector banks and insurance companies. Lured by higher returns, NRI had poured \$513 million in NRI deposits in September 2008, the highest since December 2006 (*ET*: 18-10-09). The collapse of a large number of banks in the West (even most venerable names in banking) has undermined the confidence of retail depositors in western banks. A large chunk of these money came to India particularly public sector banks (Aiyar: 2008).

**Equity Market:** The most dramatic, visible and significant impact was on Indian equity market. There was free fall in stock market. Immediate effect was large scale holding of FIIs on the stock exchanges was taken away. The FIIs, by 6th October 2008, collectively withdrew \$9.2 billion from Indian equity market since the sub-prime crisis broke out (*ET*: Ed. 6-10-08). There had been more pull out since then. During 2008-09, the FIIs withdrew huge amount of their investments, owing to general increase in risk aversion towards emerging market economies. Thus, there were swift reversals by FIIs in India from large net purchases during 2007-08 to large net sales during 2008-09. The equity market remained generally weak and volatile (of highest degree) in 2008-09. The BSE Sensex fell to a low of 8,160 on March 9, 2009, witnessing a decline of 60.9 per cent from the peak (i.e., 20,873) of January 8, 2008 (GOI: 2009; RBI: 2009).

The momentum of BSE Sensex reaching new peak of 20,873 on January 8, 2008 could not be sustained and the indices recorded significant downtrend in line with decline in all major international indices. The market sentiment remained bearish due to volatility in international financial market (in the wake of uncertainties about US sub-prime mortgage market and credit market exposure) and the consequent negative portfolio investment flows, and widening of trade deficit and depreciation of Rupee.

The impact of major international events (particularly in USA) on the Indian equity market was as follows: First, the turbulence in the global financial markets began to deepen in July 2008 when Fannie Mae and Freddie Mac reported a drastic fall in the fair value of their assets. The BSE Sensex fell to 12,576 on July 16, 2008, lowered by 39.8 per cent from January 8, 2008 peak level. Second, when Lehman Brothers filed for bankruptcy protection, Merrill Lynch was rescued by merging with Bank of America, and AIG had to be saved with the largest

ever support from Federal Reserve, there was sell-off pressure in equities from September 15, 2008. The BSE Sensex declined by 3.4 per cent over the previous trading day to 13,531 on the same day. The index was 35.2 per cent lower than January 8, 2008 peak; and the market capitalization fell by 13.5 per cent over March 2008. Third, the depressed conditions in the equity market continued as a global recession was visible and got aggravated with the news of Satyam scandal. The BSE Sensex declined by 60.9 per cent over January 8, 2008 peak to a new low on March 9, 2009 (RBI: 2009).

The capital outflow (around US\$ 15 billion in 2008-09) in the form of FIIs disinvestment adversely affected Indian equity market directly. This, in consequence, put pressure on India's Balance of Payments which was manifested in the form of depreciation of Rupee and loss of foreign exchange reserves. The market sentiments were further undermined due to deteriorating earnings prospects of listed companies on account of weakened confidence.

Thus, we observe that equity market is influenced more by FIIs investments than by economic growth. There are contrasting views regarding the relationship between equity market development and economic growth. There are various indicators of equity market development (Demirgüç-Kunt and Levine: 1996). However, to measure equity market development, an aggregate index called SINDEX is usually constructed to represent it (see for example, Samal: 1997, 1999). Thus:

$$\text{SINDEX} = \frac{M+V+T}{3}$$

Where,

M = Market Capitalization Ratio

=  $\frac{\text{Market capitalization of listed shares}}{\text{GDP}}$

V = Value Traded Ratio =  $\frac{\text{Value of all traded shares}}{\text{GDP}}$

$$T = \text{Turnover Ratio} = \frac{\text{Value of all traded shares}}{\text{Market capitalization of listed shares}}$$

Year	Market Capitalization of BSE (Rs cr.)	Gross Annual Turnover in BSE (Rs cr)	GDP at factor cost at current price (Rs cr)	SINDEX	Net FIIs Investment (Rs cr)	BSE Sensitive Index (Average)
2004-05	16,98,428	5,18,176	28,77,001	0.36	40,991	5741
2005-06	30,22,191	8,16,076	32,82,385	0.48	48,487	8280
2006-07	35,45,041	9,56,185	37,79,384	0.49	26,031	12277
2007-08	51,38,015	15,78,856	43,20,892	0.62	52,574	16569
2008-09	30,86,076	11,00,074	49,33,183	0.42	(-) 48,248	12336

Sources: (i) RBI: *RBI Annual Report 2008-09*

(ii) GOI: *Economic Survey 2008-09*

**Table- 2: Aggregate Index of Equity Market Development in India**

Year	M	V	T	SINDEX
2004-05	0.59	0.18	0.30	0.36
2005-06	0.92	0.25	0.27	0.48
2006-07	0.94	0.25	0.27	0.49
2007-08	1.19	0.37	0.31	0.62
2008-09	0.63	0.22	0.36	0.40

Note : (i) Constructed from Table-1

(ii) SINDEX is the average of M, V and T

SINDEX which represents equity market development in India is influenced more by net FIIs investment than Gross Domestic Product (GDP) in last five years. We have constructed a SINDEX which is the average of M, V, and T (Table-2). The FIIs investments greatly influence equity price movement and create volatility in equity market (Tables 1, 3 & Fig.1). When there was net out-flows of FIIs investment, BSE sensitive index declined. SINDEX fell from 0.62 to 0.42 when net FIIs investment declined from Rs 52,574 crore to (-) Rs 48,248 crore, though it was rising earlier.

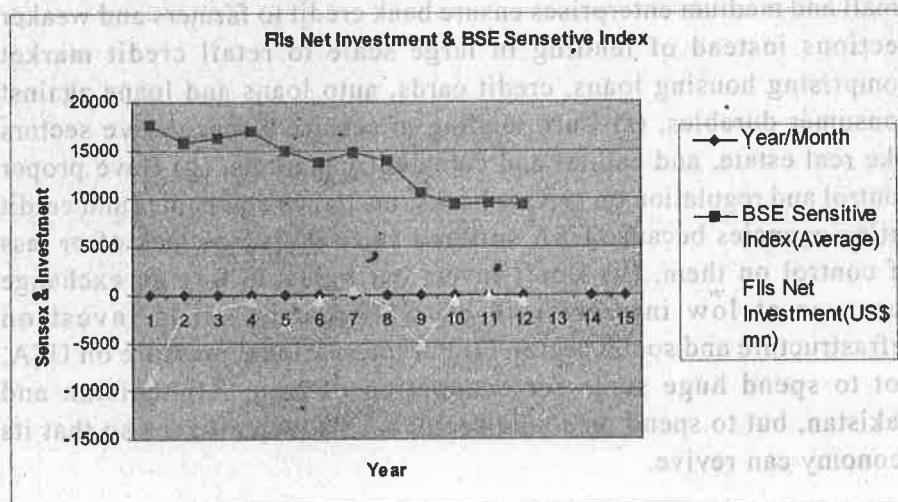
**Table-3: FIIs Investment and BSE Sensitive Index**

Year / Month	BSE Sensitive Index (Average)	FIIs Net Investment (US\$ mn)	Market Capitalization (Rs cr)
January 2008	19326	6490	57,96,079
February 08	17728	(-) 8991	58,87,847
March 08	15838	(-) 1643	51,38,015
April 08	16291	(-) 1432	57,94,293
May 08	16946	(-) 734	54,28,879
June 08	14997	(-) 3011	43,75,022
July 08	13717	(-) 499	47,32,544
August 08	14722	464	47,78,865
September 08	13943	(-) 1403	41,65,388
October 08	10550	(-) 5250	29,97,261
November 08	9454	(-) 574	28,18,965
December 08	9514	30	31,44,768
January 2009	9350	(-) 614	29,97,260
29 January 2010 (Friday)	16358	(-) 1334	—

Sources: (i) RBI Annual Report 2008-09

(ii) RBI Bulletin, November 2008, November 2009, and other issues

(iii) The Economic Times, Kolkata, January 30, 2010



**POLICY SUGGESTIONS :**

In India, *appropriate suggestions* are made from various economists and others: (i) Target to boost the buying power of the bottom 80 per cent of the population which accounts for 67 per cent of the total consumption, (ii) Need to attract more stable FDI (foreign direct investment), not speculative portfolio inflows by FIIs, not FDI for acquisition and mergers (iii) Ceiling on salary of CEO. And keep at least 30 per cent of profits in a separate Reserve Fund which can be utilized to keep the employees in the pay roll during recession. This is more applicable in case of the IT companies whose income is mainly due to human resources. It is to be mentioned that the chief executive of Indian companies helped themselves to a 27 per cent hike in salaries while handing over pink slips to their employees at time when their companies' net profit fell by almost a third compared with the previous year (ET: 1-6-09).

Other *policy suggestions* are: (a) Don't accept Tarapore Committee Report as well as Raghurajan Committee Report suggesting full convertibility of Rupee, (b) Prohibit Participatory Notes, the non-transparent derivative instruments used by FIIs to invest money in the Indian capital market on behalf of undisclosed entities and individuals (even of terrorists), (c) Halt pension reform (such as allowing pension funds to invest in the stock market), (d) Roll back banking and insurance sector deregulation and stop further liberalization and privatization, as USA had to nationalize 19 banks and to purchase shares of insolvent companies to check 2008 meltdown, (e) Provide uninterrupted credit to small and medium enterprises ensure bank credit to farmers and weaker sections instead of lending in large scale to retail credit market comprising housing loans, credit cards, auto loans and loans against consumer durables, (f) Curb lending to sensitive speculative sectors like real estate, and capital and commodity markets, (g) Have proper control and regulation on private banks, insurance companies and credit rating agencies because USA suffered since there was lack of or less of control on them, (h) Don't invest our valuable foreign exchange reserves at low interest rate on US Treasury Bills invest on infrastructure and social sector, (i) Put international pressure on USA, not to spend huge sums for occupation of Iraq, Afghanistan and Pakistan, but to spend on social sector for its own citizens so that its economy can revive.



**LESSON LEARNT:**

Thus, from the 2008 meltdown and packages to check it, we observe: (i) Boom and recession are the rules of free market economy. The crises are inevitable in a self-regulated financial system (Chandrasekhar: 2008). In India it is slumpflation, at present. (ii) The philosophy of "a country which saves develops" has been proved to be more robust compared to the popular philosophy in US, "a country which spends prospers"; US philosophy is bust now. (iii) Role of saving is proved to be very important in an economy. (iv) The dominant role of the government in the economic sphere is well recognized since the current meltdown is the result of excessive deregulation, decontrol and liberalization. (v) USA which preaches liberalization and privatization, has been taking steps similar to that of a socialist country to save it from the 2008 economic crisis. The bail-out implemented in the US and some of the West European countries clearly indicates that the governments have opted for state ownership and direct influence over decision-making. (vi) US and European financiers who lectured us during the Asian financial crisis on the virtues of western financial systems now stand exposed as headless trivial advisors. (vii) The old game of 'privatization of profits' and 'socialization of losses' is replayed in the name of bailout package in USA (Foster and Magdoff: 2008). (viii) Karl Marx's philosophy of scientific socialism is proved to be more robust after 2008 meltdown. Interestingly, in 2009, the Pope, the head of Roman Catholic Church in Vatican City has 'excused' Karl Marx (as excused Galileo earlier) for his comment, "Religion is the opium of people". *Capital* is one of the largest selling books in the world in 2008-09, read by many heads of the government (including the Pope) in Europe.

**REFERENCES:**

- Aiyar, Swaminathan S A (2008); "Who Murdered the Financial System", The Economic Times, Calcutta, 22-10-08.
- (2008) "Building Infrastructure is not Keynesian", ET, 19-10-08
- Business Standard; Kolkata, 7-7-09, and various other issues
- Chandrasekha, C P (2008); "Beyond Basel for Banking Regulation", Economic and Political Weekly, December, Vol. 43, No 50, pp. 8-9.
- Demingue-Kunt, Asli and Ross Levine (1996); "Stock Market Development and Financial Intermediation: Stylized Facts", The World Bank Economic Review, Vol. 10, No. 2, May, pp. 291-321.

Economic Times, The; 2-10-08, 5-10-08, 12-10-08, 15-10-08, 16.10.08, Editorial, "Welcome CRR Cut", 7-7-09, 18-10-08, and various other issues.

Economic and Political Weekly (2008); September 20, November 22, Editorial, "Where is the Rethinking".

—————(2008); October 2008, Vol. 43, No 41, Editorial, "As Between Democracy and Wall Street".

—————(2009); Vol XLIV, No. 13, March 28, a special issue on "Global Economic and Financial Crisis"

Foster, John Bellamy and Fred Magdoff (2008); "Financial Implosion and Stagnation: Back to Real Economy", Analytical Monthly Review, Vol. 6 No. 9, December, pp. 1-29.

Ghose, D N (2008); "Navigating the Future in the Mids of Global Uncertainty", EPW, Vol. XLIII, No 41, pp 15-16.

Gol (2009); Economic Survey, 2008-09, OUP, New Delhi.

IMF Survey, April 2008, October 2008, November 2008, and various other issues

Kapadia, Anush and Arjun Jaydev (2008); "The Credit Crisis Where it Came From, What Happened, and How it Might End", Economic and Political Weekly, Vol. 43 No 49, December 6, pp 33-41.

Polychroniou, Chronis (2008); "The 'Master of the Universe' Outsmart Themselves", Economic and Political Weekly, Vol.43 No 43, October 25, pp. 14-15.

RBI (2009); RBI Annual Report, 2008-09.

RBI (2009); RBI Bulletin, November 2009, and various other issues.

Samal, Kishor C (1997); "Emerging Equity Market in India: Role of Foreign Institutional Investors", Economic and Political Weekly, Vol.32, No. 42, October 18, pp. 2729- 32.

Samal, Kishor C (1999); "Do Emerging Stock Markets Affect Economic Growth Through Creation of Liquidity: The Case of India", The Asian Economic Review, Vol 41, No. 3, December, pp. 476-484.

Tabb, William K (2008); "Four Crises of the Contemporary World Capitalist System",

Analytical Monthly Review, Vol.6, No. 7, October 2008, pp. 41-55.

Zingales, Luigi (2008); "Save Capitalism from Finance Capital", The Economic Times, Kolkata, 6-10-08.

# **Impact of Global Financial Crisis on the Fiscal Reform Process in Orissa**

**Prof. Bhagabata Patro**

**Mrs. Madhuri Padhy**

Banking and Public Policy Cell

Department of Economics

Berhampur University

Berhampur-760007

## **A BRIEF REVIEW OF GLOBAL FINANCIAL CRISIS**

The current global financial crisis originated with a small upheaval created by the sub-prime crisis of 2007 in the World's largest and most significant financial markets i.e. United States of America. The sub-prime crisis arose due to careless lending to home loan seekers in that country. Investment bankers and financial institutions gave loans to the home loaners at minimal or zero down payment without proper credit verification. In the process, demand for house loans rose stressing the prices and as a result house prices began to rise. The interest cost in general started rising making the borrowing costly. With inadequate income and more emphasis on consumption expenditure many borrowers started defaulting the loan repayment. Default in loan repayment resulted in acquisition of property of the borrower by the banks in some cases. This resulted in a situation where the financial institutions were stuck with billions of dollars worth of security but zero liquidity. This situation caused not only uncertainty but also panic in the financial markets. In September, 2008, the collapse of the Lehman Brothers created world wide fears and exposed the vulnerability of the banking industry. Within no time, the crisis deepened and spread fast to different sectors of the economy. Economic activities in USA like housing, banking, finance, automobile, manufacturing and aviation declined and share prices of companies dealing with these items crashed. Goods were offered at reduced rates. Global operations of many transnational companies were affected. Spending in the economy declined. Liquidity in the economy shrank. Borrowing became difficult. Optimism in the market was lost. Investors lost their confidence. At this juncture, economic stimulus by

using fiscal policy by the government is advocated in almost all countries of the world to revive business confidence and arrest further decline in the production activities. Management of the crisis has become the top most priority of the governments of the world.

Since the crisis originated in the heart of the world economy, its dangerous effect spread very quickly, first to Europe and then to the rest of the world. By the end of 2008, it was seen that almost the entire world was affected by the crisis in one way or the other. The impact of this crisis on Indian economy is mixed. The real GDP growth of the economy has slowed down. The prime growth sector, that is the service sector is slowing. The construction, communication, trade, hotels and restaurant subsections are also showing signs of slow down. Industrial growth has also started declining. Current account deficit in international trade has widened and foreign exchange reserves has depleted in India. On the whole, the impact of global crisis has entered into the Indian economy through two channels. One is through capital flows and the other is through trade flows. In the capital flows channel, the crisis put a brake on foreign institutional investors and banks Indian markets thereby bringing a downfall in the stock market. So the capital flows to India have declined substantially. In the trade flows channel, the exports of goods and services have gone down. This decline in the export sector brings down the GDP growth rate from 9.0 percent in the financial year 2007-08 to 6.7 percent in the financial year 2008-09, which was even lower than the average growth of 8.8 percent per year during 2003-08. The crisis has created a panic situation in the equity market due to sudden pull out of funds by the foreign institutional investors. The heavy pull out of funds by FIIs has also led to a sharp depreciation of the rupee. In spite of the fall in the value of the rupee our exports growth have decreased. In the light of the above circumstances the present challenge is to keep the economy relatively free from the global meltdown and to adopt economic measures not only to minimise the loss but also to put the economy on the rapid and sustained growth path.

#### **FISCAL POLICY STRATEGIES AT THE NATIONAL LEVEL**

To counter the negative fallout of the global recession on the Indian economy the Reserve Bank of India took a number of monetary measures which aim at easing the liquidity position of the economy by

reduction in the cash reserve ratio, statutory liquidity ratio and other rates. The objective is to facilitate the flow of funds from the financial system to the manufacturing sector and to meet the production and inventory requirement of the economy.

The pace of slow down in the economy was so alarming that the government felt it appropriate to supplement monetary measures with fiscal measures to prevent recessionary tendencies in the country. Even in the budget of 2009-10 the government had to take some precautionary measures to prevent the likely impact of the global recessionary situation.

The government confirmed that the need of the hour is to implement stringent economy measures to further contain revenue expenditure so that more fiscal space is available for more developmental works.

### FISCAL PERFORMANCE OF ORISSA

Orissa has done very difficult home work to bring its fiscal situation back to normalcy in the first decade of the 21<sup>st</sup> century. Fiscal reform process in the state mercilessly curtailed the manpower of the state employed in the government sector. Gradually, the people of the state are now accepting private sector jobs which were not the situation 10 years ago. Improvement fiscal performance of the state can be very much visible from the figures presented in table-1.

**Table-1 :**

#### **Fiscal Performance of the State in the First Decade of Twenty-first Century**

Indicators	2000-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09 (RE)	09-10 (BE)
GSDP(at Current Prices)	43493	46946	50223	61422	71428	78953	93374	106466	122165	135603
RR	6902	7047	8439	9440	11850	14084	18032	21967	26809	26550
CR	8825	9922	11660	13165	5979	2442	2332	862	4288	4422
TR	15727	16970	20098	22605	17829	16527	20364	22829	31098	30973
RE	8834	9882	10015	10861	12372	13604	15772	17723	26049	28919
CE	7373	8704	10769	12165	4964	2143	3574	3121	5576	3878

TE	16207	18585	20784	23026	17336	15746	19346	22844	31625	32797
RD(-)	-1932	-2834	-1576	-1421	-522	+481	+2260	+4244	+760	-2369
RS(+)										
GFD	-3325	-3968	-2816	-3573	-1366	-276	823	1323	-2811	-6004
OR	2184	2467	2871	4396	5522	6534	8653	9510	10289	10442
EOS	3802	3627	3814	3902	3977	4264	4552	5244	8392	10688
EOP	832	100	1029	1158	1260	1339	1485	1801	2796	3991
IP	2287	2835	2885	2860	3332	3697	3188	3169	4312	4592
DR	743	921	1835	2279	225	1038	1850	1845	1758	1486

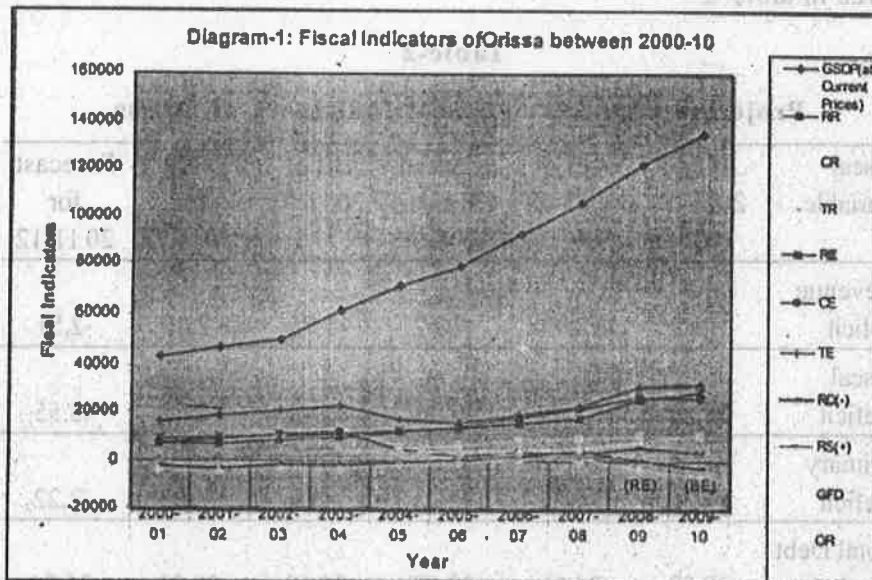
Source : Government of Orissa, Budget at a Glance, 209-10, Finance Department, Bhubaneswar.

Note: GSDP= Gross State Domestic Product, RR = Revenue Receipt, CR = Capital Receipt, TR = Total Receipt, RE = Revenue Expenditure, CE = Capital Expenditure, TE = Total Expenditure, RD = Revenue Deficit, FD = Fiscal Deficit, OR = Own Revenue, EOS = Expenditure on Salary, EOP = Expenditure on Pension, IP = Interest Payment, DR = Debt Repayment.

The table clearly reflects that the state has recovered from 'the fiscal crisis due to strict measures adopted in restricting the unproductive expenditure. Particularly, the salary and interest payment component has been controlled by abolishing few posts and going for debt swap scheme. The interest and debt repayment burden on the state exchequer has only doubled during the decade as compared to more than four-fold rise in the revenue receipt and revenue expenditure. Similarly, the growth of salary and pension liability of the government has been restricted at a manageable level due to curtail of man power and the emoluments.

Diagram-1 given below reflects that the situation of downward or stagnating trend between 2004-05 and 2007-08 is reversing in the fiscal year 2008-09 due to the impact of global recessionary- situation. If this trend continues for few more years then the benefit of tight fiscal policy is likely to be washed away very soon. The government has to take action so that the trend line will become again downward as promised in the medium term fiscal plan.





### MEDIUM TERM FISCAL PLAN PROJECTION

The state government is duty bound to present a medium Term Fiscal Plan in each financial year in the assembly as per the requirement of the sec-3 of FRBM Act, 2003. Under this, a three year rolling target of all fiscal indicators is prescribed for the fiscal operation of the state. The 2009-10 budget estimate projects the following situation of the fiscal variables for the state in the next 2 years. These are :

1. Keeping in view the recessionary trend, the GSDP of the state is likely to grow at 6 per cent in real terms and 11 per cent in nominal terms for the year 2009-10 and 8 and 9 per cent in nominal terms for the two subsequent years.
2. The growth rate of own tax revenue of the state is around 10 per cent for the three years under discussion.
3. The non-tax revenue will grow by 7 to 8 per cent during the same period.
4. The share from central taxes and grants-in-aid from the centre is assumed to grow at 10 per cent in 2009-10 and likely to maintain the same growth for the two subsequent years under the award of the 13th finance commission.



The years-wise projection of the fiscal indicators as targeted is given in table -2

Table-2

## Projected Forecast of Fiscal Indicators of Orissa.

Fiscal Variable	Actual 2006-07	Actual 2007-08	Revised Estimate 2008-09	BE of 2009-10	Forecast for 2010-11	Forecast for 2011-12
Revenue deficit	+2.42	+3.99	+0.62	-1.75	-2.42	-2.51
Fiscal Deficit	+0.88	+1.24	-2.30	-4.43	-5.42	-5.55
Primary Deficit	+4.30	+4.22	+1.23	-1.04	-2.05	-2.22
Total Debt Stock	39.89	34.11	32.08	31.10	34.21	36.94

(as % of GSDP)

Source : Govt. of Orissa, Budget at a Glance , 209-10, Finance Dept., Bhubaneswar

**CONCLUSION :**

The state's fiscal scenario at this moment appears to be very difficult due to the impact of the 6th pay commission. Salary and pension liability of the government has increased sharply since the fiscal year 2008-09 because of this. Further, as the government has faced an election in 2009, some soft policy measures like Rs. 2 a kilo rice scheme was introduced. Now with a stable government, the government has to again move towards a strict fiscal policy as was adopted in 2000-01. At this juncture the government has to emphasise on revenue generation measures without curtailing the development expenditures already initiated over the last two to three years. More particularly, the state government has to stress upon more collection from mining royalty, state excise duty and value added tax in which there is potential. The expenditure on general services which is unproductive in nature has to be restricted leaving the social and economic services untouched.

## REFERENCES :

1. Government of Orissa, Statistical Abstract of Orissa , 2008, Planning and Co-ordination Department. Bhubaneswar.
2. Government of Orissa, Statistical Abstract of Orissa , 2002, Planning and Co-ordination Department. Bhubaneswar.
3. Government of Orissa, Statistical Abstract of Orissa , 1995, Planning and Co-ordination Department. Bhubaneswar.
4. Government of Orissa, Economic Survey, 2008-09, Planning and Co-ordination Department. Bhubaneswar.
5. Government of Orissa, Eleventh Five Year Plan 2007-12, Planning and Co-ordination Department. Bhubaneswar.
6. Government of Orissa, Finance Department, Budget at a Glance, 2009-10, Bhubaneswar.
7. Government of Orissa, Planning and Co-ordination Department, Statistical Outline of Orissa 2003,1999,1997,1993. Bhubaneswar.

# **Global Meltdown and its impact on Capital market with respect to Automobile, FMCG, & Telecom Sectors in India**

**Umakanta Tripathy**

**Prabhat Kumar Sahoo**

ICFAI National College Rourkela

## **I GLOBAL FINANCIAL CRISIS:**

The world, today, is witnessing a global financial crisis. The same has impacted most of the world's advanced economies which is being reflected in the form of a considerable decline in growth. Declining economic activity is alarming the policy makers the world over. Falling stock markets, collapse of the investment banks, falling demand, reduced employment, closing down of the big firms are the leading indicators of the current crisis. Governments world over are trying to control the crisis by providing rescue packages. The current crisis has impacted the developed economies of the world. The developing economies, which have been seen as an engine for the world's economic growth will also not be spared from the crisis. In fact, the developing economies which are more exposed to the global financial markets would be more severely impacted by the global financial meltdown.

The global economy was booming in the last few years and the global Gross Domestic Product (GDP) touched an average of 5 per cent a year. The main driver of this growth was the emerging and the developing economies. This bullish trend has come to a grinding halt with the current financial crisis. The emerging and the developing economies of the world have not been able to decouple themselves from this downturn. The GDP and exports growth are showing signs of slowing down. The external sector of the developing economies has been impacted on two fronts namely widening of trade deficits and fall in the capital inflows.

## II INDIA AND THE GLOBAL CRISIS:

The Indian economy is now operating in a globalized environment. The policy of globalization has been in action since 1991. The process of globalization means sharing of opportunities and challenges globally. Hence any event happening in one part of the world would also be impacting the economies in the other parts of the world too. No doubt, India has strong macroeconomic fundamentals and the same has been reflected in the past few years' GDP performance of the economy but the ongoing global crisis has impacted the growth of the economy and the most affected is the external sector. The impact is being reflected in terms of slowdown of the Indian economy. This global crisis has impacted the exports as well as remittances from abroad. The same has resulted in putting the country's Balance of Payments (BOP) scenario in a concerning level. The consolidated impact of the same would be a lower prospect for the future economic growth.

### 2.1 Global meltdown & its impact on capital market:

The Indian stock market's performance peaked in January, 2008, when the Sensex was above 21,000 points and the Nifty was trading around the 6,000 level. A couple of months later, the subprime crisis that originated in the US began to take its toll of the economies worldwide. Currently, all the major markets in the world were down by more than 60%, compared to their peak levels during October-November, 2008. The Indian stock market has also been affected by this global turmoil and the markets have also lost almost 60% of their value, compared to that during their peak levels. Today, the Sensex and the Nifty are trading near around the 16,500 and 4,900 marks respectively.

Analysts are now busy studying the movement of the US stock market, i.e., Dow Jones, NASDAQ and S&P 500, and they are analyzing the impact of this on the Indian stock market performance. It has been observed that the Indian markets, at the beginning of the trading session, are reacting to the performance of the US markets. Later, during the mid-period of the trading session, when the European markets open, i.e., CAC 40, DAX and FTSE, the Indian markets are following the performance of the European markets. Thus, the performance of the Indian markets can be predicted by gauging the performance of the US and other markets.

## 2.2 Global Meltdown: Effect on the Automobile, FMCG, and Telecom Sectors in India:

Due to the global meltdown, the growth rate of the Indian economy which was around 9% in the last couple of years had to be revised to about 7% for 2008-2009. Some of the sectors which were performing well have been badly hit due to the meltdown.

### 2.2.1 Automobile Sector:

The Indian Automobile Sector felt the heat of global meltdown in the third quarter (October-December 2008) for the Financial Year 2008-2009. According to the United Nations Industrial Development Organizations (UNIDO) Year Book of Industrial Statistics 2008, India ranks 12<sup>th</sup> in the list of world's top 15 automakers. Also, India ranks 4<sup>th</sup> in the category of leading developing countries. The opportunities and challenges for the automobile sector in India are the following:

**Table 1: Performance of Automobile Sector -2008-09 (in Rs. cr)**

	Q1	Q2	Q3	Total no. of Companies
Income	27.4	13.9	14.7	11
Net Profit	-10.2	-25.7	-79.0	—

Source: *The Indian Express*, 09-02-2009

**Table 2: Auto Sector Sales (in lakh units)**

Segment	2007	2008	Change (%)
Passanger vehicles	11.90	11.40	-0.50
Two Wheelers	54.69	55.71	1.85
Three Wheelers	2.76	2.60	-5.86
Commercial Vehicles	3.41	2.88	-15.52
Grand Total	71.96	72.23	0.38

Source: *The Economic Times*, 13-01-09

### Opportunities

- High fuel costs and general recession are forcing overseas car makers to move away from big cars to small cars presenting huge business opportunities for companies, like Maruti, Hyundai, Tata Motors, General Motors, etc. Car makers in the markets of Latin America and Europe have decided to source small cars from Indian companies.
- Nissan Toyota have plans to manufacture compact cars in India, opening opportunities for auto designs and auto components manufacturers.
- Tata Motors is in talks with dealers to launch its Nano, the ultra low-cost car in the western markets.
- Car makers prefer sourcing cars from India compared to China, enabling low-cost production of components.
- With the expansion plans of major auto manufactures from India, there are great opportunities for growth for auto component manufacturers, like Bharat Forge, Sundaram Fasteners and many more.
- India has the opportunity to become a hub of auto designs as many large companies will look to off shoring designing activities to India due to the low-cost leverage.

### Challenges

- To overcome sluggish demand due to high interest rates. Finance plays pivotal roles in sales and about 80 to 90% of the cars are sold on loans.
- In order to face this challenge, Indian auto majors, like Bajaj Auto, Tata Motors and Mahindra & Mahindra, are extending loans to their customers through their own finance subsidiaries.
- The input costs of raw materials have gone up. The challenge is to maintain the bottom lines due to erosion in margins as the auto makers are unable to pass on the higher costs to their customers due to poor demand.
- Retention of existing manpower in spite of slowdown in demand and production.

- To persuade vendors for timely supplies in spite of abnormal delays in payments due to liquidity crunch.

### 2.2.2 FMCG Sector :

In spite of the overall slowdown in other sectors due to the global meltdown, the FMCG sector has been relatively immune to the downturn.

In Q3 (October-December 2008), majority of FMCG companies including Hindustan Unilever, Godrej Consumer Products, Jyothi Laboratories, Emami, Tata Tea and Nirma saw a decline in profits, whereas ITC, Dabur, Marico, Colgate-Palmolive, GSK Consumer Healthcare, Britannia and Procter & Gamble reported year-on-year profit growth. The opportunities and challenges in this sector are as follows:

**Table-3 : Percentage Change in Sales (October 2008 over October 2007) for FMCG Products**

Consumer Non-durables	Change(%)
Cholocate and Sugar Confectionery	2.7
Hair Oil / Ayurvedic Hair Oil	5.5
Tea	11.0
IMFL	11.1
Toothpaste	12.1
Soap	13.5
Beer	16.6
Soft Drinks Soda	16.9
Coffee	23.5
Biscuits	25.8
Groundnut Oil	27.1
Sugar	30.1

### Opportunities

**Catering to Rural Markets:** According to the Federation of Indian Chamber of Commerce and Industry (FICCI), the number of rural households using FMCG products has grown from 136 million in 2004 to 143 million in 2007, a clear indication that rural consumers



are shifting from locally produced commodities to branded products. Mass products like soaps, detergents, hair oil, dairy, whitener, mineral water and biscuits have shown good sales which is looked as a tremendous growth opportunity by all FMCG players like Godrej, Nestle and Coca-Cola.

**Paan shops:** Meeting the demand of roadside paan shops, which are transforming themselves in to mini stores, are emerging as big business opportunities and increasingly prominent retail channels for FMCG companies. Industry officials say small paan shops are currently contributing 18-20 per cent of the total sales across various categories, including beverages, chips, biscuits, chocolates, confectionery, noodles, shampoos, soaps and batteries. Modern retail formats contribute only about 6 per cent to Indian retail sales.

In this challenging economic scenario, companies have taken note of the contribution of this often ignored sales channel. Typically, companies sell inventories to large dealers who buy in bulk at discounted rates. Small paan shop owners in big cities and rural markets then buy stocks in small quantities according to their requirements. Presently, Pepsi, Coke, Parle Biscuits, Colgate and Cadbury among major FMCG players have started serving those outlets directly in metros. The paan shops cater to consumer on-the-go and the urban poor. Small packs contribute a sizeable chunk of sales from these outlets. Sanjay Purohit, Executive Director (Marketing) of Cadbury's said that the company ensured that these outlets are serviced directly and indirectly and it is a very important channel for Cadbury's.

### Challenges

- To boost urban consumer demand which has slowed down due to the recession.
- Meeting the rural demand considering the poor infrastructure, which may be one of the reasons for low penetration levels.
- In the past, sales in FMCG sector have been driven largely by towns and FMCG companies carried out their product development and tailored their product promotional campaigns in urban markets. The challenge is to carry out product development and special promotional campaigns for rural markets as well.

- FMCG sector is highly price-sensitive. The challenge is to maintain market shares considering many local and regional players who can offer FMCG products at very low prices in the market.

### 2.2.3 Telecom Sector

The economic gloom and global meltdown has had no effect on this sector which has registered its sharpest monthly growth ever in terms of the number of subscriptions added in January 2009. 15.26 million additional subscribers in January 2009 represent a quantum jump over the 10.66 million added in December 2008. This is a global record for any telecom market. The total number of telephone connections in India crossed the 400 million mark by end January 2009. The subscriptions pertaining to the telecom sector are given in Table-4.

**Table 4: Ringing India (Subscribers in Million)**

Wireless	Wireline	Total
149.62	+40.3, As on January 31, 2007	189.92
233.63	+39.25, As on Decemer 31, 2007	2.72.88
346.89	+37.90, As on December 31, 2008	384.79
362.30	+37.75, As on January 31, 2009	400.05

Source: The Times of India, 21/02/2009

**Table 5: Ringing Out Load**

Operator	Additions in January 2009 (mn)	Total - User Base (mn)
Bharati Airtel	2.7	88.3
Vodafone Essar	2.5	63.3
Idea - Spice	2.0	40.0
Reliance Comm	5.0	66.2
Tata Teleservices	1.0	32.7
BSNL	1.3	47.5

Source: TRAI

The details of additions in mobile subscriptions for various companies in January 2009 are given in Table-5. [The facts prove that the world's fastest growing telecom sector market has remained untouched by the economic slowdown. The opportunities and challenges for this sector are the following.]

### **Opportunities**

**Mobile Advertising:** Initially mobile advertising was used more in finance and travel industries but in 2008 other sectors, like life-style, apparel and FMCG, also joined the bandwagon.

**Advertising Budgets:** They come under intense scrutiny in a depressed market. After the global meltdown the traditional advertising agencies have started convincing their clients to increase spending on the on-line and mobile platform. Compared to television, print, radio and even out of-home advertising, internet and mobile-based communication is more easily measurable and interactive with a small budget. The 360 million mobile users population too make mobile marketing a lucrative communication channel for brands. According to Pinstorm, the digital marketing and mobile advertising industry, including WAP and SMS, has grown from Rs. 20 cr in 2006-07 to Rs. 50 cr in 2008-09. According to the company's Director, Marketing for South-West Asia, YY Kim, on-line advertising works very well for technology-based products, like MP3 players, notebook PCs, Mobile Phones, LCD and Plasma TVs. Around 70-80 per cent of a brand's audience can be reached on the internet. Hence, it is an opportunity for advertisers, agencies and publishers to churn out innovative ways to address the users effectively.

**M-commerce:** It is a big opportunity for mobile phone-based utility applications, which facilitates transactions, such as bill payments, buying tickets and information search. This presents a big opportunity for the application providers. Even if a small percentage of India's 360 million mobile user base avails this facility, it is big business opportunity for service providers in these recessionary trends after the global meltdown.

These applications mark a transition of GPRS enabled mobile phones from mere voice devices to point of sale entities, allowing users to search for information and perform financial transactions, all through mobile phone. With this facility, users can buy air and rail tickets; pay

utility bills and buy movie tickets at the press of a few buttons without standing in long serpentine queues.

Only 8 per cent of GPRS enabled phones are using these facilities on a regular basis. Therefore, for service providers, it presents tremendous opportunities.

**Rural Markets:** The rural market penetration in the telecom sector is low in India. With more than 70 per cent of the population living in rural areas, it presents a huge business opportunity for the telecom operators.

### Challenges

- There are concerns on health hazards due to excessive usage of mobile phones. It would be a challenge for mobile manufacturers to convince the users if these health hazards are established in future.
- For usage of M-commerce, it will be a big challenge to break the psychological barriers of non-metro users of these applications, and convince them to make monetary transactions through mobile phones.
- With the increasing cases of cyber crimes, users are reluctant to carry out online transactions.
- With the increase in online traffic, there is congestion and at times, better connectivity becomes the main issue for users.
- Poor infrastructure and connectivity in rural areas will be a big challenge to cover rural market.
- The telecom sector will have to reduce the number of telecom consumer grievances. The most common complaints regarding mobile services are frequent unwanted calls, details of bills not given, bills not provided, call drops, bills are not received on time and also rental plans.

### III CONCLUSION :

Proponents of the decoupling theory have argued that the Indian economy is insulated from the developments in the US economy.



# **The Global Financial Turmoil and its Impact and Challenges on the Indian Economy**

**Dr. Surendra Nath Behera**

Professor of Economics

Khallikote Autonomous College

Berhampur

The global economic crisis, an offshoot of US financial meltdown, has taken into its grip almost all the economies of the world. The biggest financial pandemic since the Great Depression is roaring through America and many parts of the world. The first 'Great Recession' of the new millennium was triggered by the US housing bubble that burst during the mid of 2007-2008. The housing burst in the US has led to a sequence and chain of economic repercussions in the US and then has got transmitted to many developed and emerging economies. The shock originated from the housing sector affected the financial sector severely as many of the insurance and investment companies dealing with the real assets and debt suffered financial losses on account of falling housing prices and loan defaults. The losses dragged them to go bankrupt and closure of the business.

Global meltdown is a period of economic activity when there is a general decline in economic activity in all parts of the world. There is a considerable reduction in the production of goods and services, employment, income and demand. The general decline in economic activity leads to fall in bank deposits. The credit expansion is adversely affected because of business pessimism. Bank rates fall considerably. Thus recession or meltdown is characterized by a downward trend in the business, mass unemployment, and general fall in prices, profit, wages, interest rate, consumption, expenditure, investment, bank deposits and loans. All types of capital goods industries come to a standstill. These forces are cumulative and self-reinforcing.

The origin of the global financial crisis is a direct result of the collapse of global housing bubble which had its roots in US. It is not only in USA but in almost all the western countries that there is a system of housing loan against the mortgage of the house in the banks. But

what happened in USA since the second quarter of 2007 has been the massive non-repayment of loan instalments by the people taking the house loans from the banks. In fact, by that time a large volume of house loan was issued by the banking system at a very low rate of interest even to the not-credit-worthy people in view of releasing the large volume of accumulated reserve with the banking system. With the gradual accumulation of the loan defaulters and its substantial volume, the confiscation process of mortgage started at a rapid speed thereby leading to creation of a shaky mortgage market and the plummeting of prices of houses in USA. Consequently, the credit markets based on this shaky mortgage structure gradually got shocked by severe jolt with a strong devastating effect. Its effect continued to pervade amongst the mortgage based financial institutions like banks, insurance corporations and other investment banks and thereby leading to their bankruptcy, the most important of which are Lehman Brothers, City Bank etc. This is actually termed as "Sub-prime" crisis. It is the practice of making loans to borrowers who do not have credit worthiness and to prove their income. Lehman Brothers and Merrill Lynch, the storied symbols of America's money might and the Career Crown jewels that draw the best and brightest from India faced the crisis. Lehman, the 158 years old investment bank is filing for bankruptcy, Merrill Lynch the premier brokerage and Wall Street's third largest bank has agreed to be subsumed into Bank of America. The American Investors Group (AIG), one of the world's largest insurance companies accumulated \$ 18.5 bn. losses upto September 2008 required \$75 bn. capital to compensate the loss. The financial crisis is a situation of money borrowed in excess and used badly.

The worst fallout of globalization has been that it spreads economic meltdowns and recessions from one nation or continent to an other. Business and trade between nations work like a network; if the chain is broken, it adversely impacts the whole world. In the globalized world, nation's economies swim or sink together. Things to day move so fast that adverse happenings in one part of the world have immediate and the definite impact on the other parts. The bursting of housing bubbles in America in October 2008 has snowballed into global financial crisis leading to large layoffs, reduction in exports, erosion of margins and profits, shrinking of demands and severe credit crunch. The situation would not have reached such epic proportions but for globalization. The global recession has strengthened protectionism in developed

country markets, drastically reduced developing country exports and choked credit and capital flows to the third world. With the benefits and burdens of globalization so unfairly distributed it will be even harder for our economy to cope with the crisis. The economic and financial crisis is of such magnitude that it now grips the whole world.

## **IMPACT ON THE INDIAN ECONOMY**

### **1. Impact on Foreign Trade :**

Indian foreign trade sector is badly hit by the global financial meltdown. For the first time in the last five years India's export growth turned negative in October 2008, when export contracted by 15 per cent. India's exports declined a record of 33.3 per cent in March 2009 as the continued global economic recession affected demand for good shipped from India. Exports contracted for the sixth consecutive month to US \$ 11.5 bn. in March 2009. The dip in exports was to be expected as advanced economies like US and Europe which account for more than 35 per cent of India's exports are experiencing a slump in demand. A deceleration in export growth has implication for India because it has direct bearing on the GDP growth rate which declined from 9.0 per cent in 2007-08 to 6.7 per cent in 2008-09. The flow of foreign direct investment and foreign institutional investment has abruptly cut off. As a result, our stock of foreign exchange reserves came down from \$ 320 bn. US to \$ 245 bn.

### **2. Impact on Capital Market :**

Indian capital market felt the pinch of global financial crisis in a big way. Indian stock market crashed from the high of 21000 in January 2008 to a low of 8509.54 in October 2008. The immediate fallout of US financial crisis was steep fall in the stock prices with a bearish trend in almost all the leading stock markets of the world. The Indian equity market weakened considerably during September 2008 and March 2009, following sharp decline in stock market across the globe and perceptible change in investors' preferences. There was convulsion after collapse in the capital market due to global meltdown. Lehman Brothers has been dumping stocks in several Indian companies including NIIT, Fedders Lloyd and Cranes Software.

### **3. Impact on Fiscal Sector :**

Government Finance came under renewed pressure in 2008-09 on account of higher expenditure due to higher international crude oil prices,



higher fertilizer subsidy, Sixth Pay Commission award and debt waiver scheme. On revenue side, tax cut in the form of stimulus packages has put further stress on the fiscal deficit. Reflecting these factors the Central Government's fiscal deficits more than doubled from 2.7 per cent of (GDP) in 2007-08 to 6.0 per cent in 2008-09.

#### **4. Slump in Real Estate Demand :**

The global crisis has adversely affected the Foreign Institutional Investors (FIIs) who held investment in real estate and related firms. With the withdrawal of (FIIs) from the Indian reality sector, the real estate developers are in shaky position. All fund flows in this sector are being constrained. The RBI has put the restriction on Indian banks to finance real estate companies. The real estate developers have switched over to the market promotion strategies like giving away a free flat one per one, offering a luxury car on home purchase etc. Many developers have started offering commission to brokers who promote their properties.

#### **5. Fall in the Growth Rate :**

The over all growth of the GDP achieved in 2008-09 was 6.7 per cent representing deceleration from high growth of 9.7 per cent in 2006-07 and 9 per cent in 2007-08. This deceleration of growth in 2008-09 spread across all sectors except mining and quarrying and community, social and personal services. The growth rate of agriculture and allied activities declined from 4.9 per cent in 2007-08 to 1.6 per cent in 2008-09. In the manufacturing, the growth rate declined at Factor Cost (at 1999 to 2000 prices) from 8.2 per cent to 2.4 per cent, electricity, gas and water supply from 5.3 per cent to 3.4 per cent, finance, insurance, real estate and business services from 11.7 per cent to 7.8 per cent and in construction from 10.1 per cent to 7.2 per cent.

#### **6. Job cuts :**

The financial doom is affecting Indian industries across all sectors. While sectors like IT and export are directly affected, the banks and the auto sectors have seen a slow down in demand. It has brought a threat to employment of the technocrats and the corporate managers. As firms reduced production and sellout accumulated stock there was decline in the profit margin because costs became more than prices. The Indian corporate sector met a shrinkage which led to contraction of employment and large number of retrenchment and salary cuts. There has been investment cut down, production slowdown and job cuts and layoffs.

### 7. Impact on the Banking Sector :

It is estimated that the global majors like City Bank, Merrill Lynch, and Deutsche Bank have lost over \$ 180 bn. due to sub-prime crisis. India's largest private bank ICICI faced a loss of Rs. 10.56 billion till January 2008. However, Indian banking sector has been less affected by the ongoing crisis than banking system in US and Europe. Bank credit growth declined from 22.3 per cent in 2007-08 to 17.3 per cent. The sub-prime crisis led to a rise in the global interest rates which in turn caused a decline in the value of securities leaving ICICI with the task of making of the difference from its profit.

The global crisis revealed that the economy experienced greater volatility in terms of fluctuations in the stock market prices, exchange rates and inflation levels during short duration. The deepening of global crisis led to slackening of growth momentum.

In order to reduce the severity of the crisis, the Government of India has taken a number of measures like (a) tax relief and increase in expenditure, (b) improvement of both physical and social infrastructure, (c) integrated monetary management, (d) strengthening domestic financial sector, (e) management of foreign exchange, (f) control of inflation and (g) fiscal package for inclusive growth. All these measures have helped to control the severity of crisis.

### REFERENCES :

1. Avinash, D. Persaud 'The Crash of 2007-08, *Economic and Political Weekly* 25<sup>th</sup> Aug 2007.
2. Felton A. & C. Reinhard (Ed) 2008, *The first Global Financial Crisis of 21<sup>st</sup> Century*.
3. *The Telegraph* Sept 18, 2008.
4. *The Times of India* Sept 18, 2008.
5. Rakshit, M: *The Sub-prime crises ! A primer, money and finance*.
6. Sugat Marjit, "Global Recession and Indian Economy with the reality." *Economic and political weekly* Feb 28, 2009.
7. Govt. of India Report of Impact of Economic slowdown on employment in India 2009.
8. Datt Ruddar Global meltdown and it impact on the Indian economy, "Main stream 5015 Vol. XLVII, 2009.

# Global Meltdown and Human Resource Strategies of Software Industry in India

**Dr. R.K. Panda**

Faculty in ECO & QM

ICFAI National College

Berhampur, Orissa

## 1 BACKGROUND

The last half of the year 2008 and the first half of the year 2009 experienced a worst form of recession at global level. Realizing the gravity of such recession, analysts found that the recession had some close resemblance with the Great Depression of the 1930s. To differentiate the latest depression from the depression of the 1930s, analysts used the phrase as Global Economic Meltdown. Depression is a phase of business cycle when the actual GDP of a nation falls sort of the normal GDP. Theoretically speaking, business cycle, price cycle and employment cycle are pro cyclical in nature. This implies that in the event of depression, the dip in the growth rate of the economy is accompanied by falling price level and level of employment. A Given business environment is always and everywhere a part of the overall macro economic environment. Recent Global Meltdown had its consequences on the macro economic environment in India. The fall in the price level and employment takes place in response to the turn around situation of most of the business houses experiencing declining profitability and market share (Kumar and Kujar 2008).

In the background of falling revenues, the companies prefer to go for cost minimization programme as a part of their turn around strategies. Because costs incurred for employing labour in the production process is a significant variable cost, at the back drop of recession, companies had been obviously interested to regulate the employment of labor in the production process. The specific guidelines for making disciplines on matters relating to management of human resources are called Human Resources (HR) policy. An organization provides policies for dealing with external factors or for undertaking internal processes. HR policies provide guidelines for a variety of employment relationships in the form of recruitment, selection, development, promotion,

compensation, motivation and integration of human resources. Drucker (1973) conceptualizes the objectives of HR policy as "the management must gear its policies and objectives in such a fashion that the employees perform their work and do their assigned tasks". In the backdrop of a dynamic business environment, the Human Resource strategies of the companies are found to be changing. In the wake of it, prevailing HR strategies are replaced by some alternative HR strategies, particularly, during the last quarter of the Financial Year 2008-09, i.e. during the period of Jan-march, 2009. It was very frequently noticed that companies had been massively adopting Cost Cutting Measures (CCMs) to rescue from the state of depression and to sustain in the upcoming market situation. CCMs are adopted in terms of freezing recruitment, increase in the work hour, no pay hike, substituting high cost employee by low cost employees, slashing of the variable pays etc. For example, Nissan Motor Company had announced 20,000 job cuts in December 2008 (Business India, December 2008). Sony had declared for 8000 job cuts in its Electronic sector and shutting 10 per cent of its 57 manufacturing sites. Similarly, cell phone maker Nokia went for production cuts in its 'Salo' plant in Finland as demand for cell phone had dropped due to consumers' reluctance to spend on new gadgets in the midst of recession. Similarly many other companies have resorted to CCMs in one way or the other.

In the above context, human resource strategy in response to turn around strategy plays a crucial role during economic down slide. The present paper is a modest attempt to understand the HR strategies of Software industry in India.

### 1.1 NEED AND OBJECTIVES OF THE STUDY

In recent years, India has become a major exporter of software and software services. Software exports, which grew by 30 per cent in 2003, now constitute 32 per cent of India's total exports. Information technology has helped India's economy grow by roughly 6 per cent a year since 1990. The software industry in India is very much exposed towards the problems of global meltdown, because this industry had been enjoying considerable export links with USA and other major European countries. Due to heightened pessimism, the revenue and profit earning potential of this sector are severely dwindled. With a view to prohibiting bankruptcy and imminent adverse business environment,

these companies are vigorously pursuing CCMs and alternative HR strategies. In the present paper an attempt has been made to focus the changed HR Strategies of some selected Indians software companies.

## 1.2 STUDY APPROACH AND METHODOLOGY

After conceptualizing and setting the objectives of the study in section-1, dimension of Indian software company is shown in section-2. The impact of meltdown on Indian software industry is analyzed in section-3. By analyzing the HR strategy of 5 selected software companies out of top 10 performing software companies, the study arrives at the changed HR strategy of the Indian software companies, which is shown in section-4 of this paper. The software companies which are selected for the purpose of analyzing the changed HR Strategy include Tata Consultancy Services (TCS), WIPRO Ltd., INFOSYS Technologies Ltd., Satyam Computer Services Ltd. and HCL Ltd.

## 2 INDIAN SOFTWARE INDUSTRY

Companies engaged in software development such as production and maintenance of software, services such as training, consulting and maintenance of software are called software companies. These companies offer a range of services including consulting, business process outsourcing (BPO), and customized solutions in IT domain. India has been enjoying a formidable position in the global software business because of its comparative advantage with respect to high quality software human resources leading to increasing software exports. A list of top 10 software companies in India by the end of March 2007 is shown in following Table-1.

**Table-1: Top 10 Software companies in India**

<u>Rank</u>	<u>Software Companies</u>
1	Tata Consultancy Services
2	Wipro
3	Infosys Technologies Ltd
4	Satyam Computer Services
5	HCL Technologies
6	Tech Mahindra

- 7 Patni Computer Systems
- 8 i-flex Solutions
- 9 MphasiS
- 10 L&T Infotech

Source: <http://bayrozgar.com/blog/category/software-companies-in-india>

### 3. GLOBAL MELTDOWN AND INDIAN SOFTWARE INDUSTRY

Many Indian IT companies have relied purely on software export to the USA and from this region only they derive 50 per cent of their revenue. The resultant fall out of the global meltdown has bewn less IT related spending of the US companies, forcing Indian companies to offer greater discounts and repricing the existing contracts at lower rates. As per World Bank forecast, the world economy is set to grow at a modest 0.9 per cent rate in 2009, wherein the US, Euro region, and Japan are said to contract by 0.5 per cent, 0.6 per cent and 0.1 per cent respectively. This indicates a tough business outlook for Indian IT companies, which derive 85-90 per cent business from these three regions. As per Forrester Research, the global IT purchases in currency adjusted terms would grow at 3 per cent per annum in 2009 compared to 8 per cent in 2006. The Central and West European zones and the US are said to grow at 1 per cent and 2 per cent respectively compared to 7 per cent in 2006. It is reported that most of the clients of Indian IT companies are busy in restructuring and pursuing activities like acquisitions to combat slow down. This is having a negative impact on the big four Indian IT companies, which get 90 per cent of their business from the existing clients. Chelluri (2008) also indicates that the number of new clients for the Indian IT companies dropped between 10-37 percent years on year basis in Q3 FY 09 for the top 10 IT companies. Finally rupee depreciation against the dollar during the last two Quarters has partially affected the revenue and profit structure of the IT firms. The subprime crisis and the subsequent freezing of purchase decisions in the US have brought home to the Indian software companies the folly of depending almost entirely on that one market. India's top five software companies -TCS, Infosys, Wipro, Satyam and HCL Tech collectively lost over Rs. 2,50,000 crore in market value in 2007-08. Operating profits were also down, with margins for the companies decreasing by 6 to 15 percent this year (Krishnakumar, 2008).



#### **4 HR SERATEGIES OF SOFTWARE INDUSTRY**

##### **4.1 HR Strategy of Tata Consultancy Service (TCS)**

TCS, a venture of Tata Group is one of India's foremost global information technology organizations, offering technology-led business solutions in varied industries such as banking & financial services , insurance , manufacturing, telecommunications, retail, transportation, media & entertainment, healthcare and life sciences, energy and utilities, and E-governance. Starting its operations in 1968, TCS is the pioneer in the offshore delivery model for IT services. Headquartered at Mumbai, it has offices in 14 cities of India and overseas offices in 33 countries. TCS's innovative and end-to-end technology solutions are based on in-depth research and market analysis. Its area of expertise includes IT services, IT Infrastructure. Asset-Based Solutions. Engineering & Industrial Services, and Business Process Outsourcing. The slow down led HR strategies of TCS are as follows.

- TCS Plans to review the variable component of employees' salaries in an attempt to cut costs. Variable pay accounts for 25 to 35 per cent of TCS employees' gross salary. Around 54 per cent of the revenue incurred by TCS is spent on employees' salaries.
- Increasing the employee working hours from 40 hours a week to 45 hours a week with effect from 1<sup>st</sup> April 2009. According to analysts, a 10 per cent increase in working hours could add half a million billable hours for TCS, given that over 55 per cent of the company's contracts are Time and Material variety.
- The company is planning to defer absorbing nearly 24,500 campus recruits scheduled to join in June 2009.
- The company has laid off 100 employees in its UK office on the ground of their bad performance levels.
- For its overseas operations, the company has frozen lateral hiring.

##### **4.2 HR Strategy of INFOSIS Technologies Ltd.**

**Infosys Technologies Limited** (BSE: 500209, NASDAQ: INFY) is a multinational information technology services company headquartered in Bangalore, India. It is one of India's largest IT companies with over 100,000 professionals (including subsidiaries) as of Sep 30, 2008. It has nine development centers in India and over 50 offices worldwide. Its annual revenues for the fiscal year 2007 - 2008



exceeded US\$4 billion with a market capitalization of over US\$14 billion (<http://en.wikipedia.org/wiki/Infosys>). In the backdrop of global melt down, its Changed HR policy are as follows.

- In the quarter ended September 30, 2008, Infosys has issued letters to its employees stating they could opt for one year sabbatical to engage themselves in philanthropic activities. They would continue to draw 50 percent of their salary during the period. This move coincides with the global financial turmoil and slowing growth rates of IT firms.
- The company plans to freeze fresh recruitment after meeting this financial year's target of recruiting 25000 people.
- In the event of slowdown, the CEO and Managing Director S. Gopalakrishnan emphasizes on training and education. A lot of training programmes for its employees are being organized so that the employees would become multi skilled.
- Infosys has a variable pay structure that has been created to link individual employee compensation to the company's performance. This variable pay structure is dependent on company, unit and individual performance. Anticipating weakening demand from the US market, coupled with policy and margin pressures in the last quarter of the current financial year the company is planning for slashing variable pay to its employees.
- The company has put its lower ranking workforce under scanner while trying to reduce the bench employee numbers.
- The company has followed a limited tolerance policy for non-performers. Accordingly the company has launched a performance management system in which people are categorized into various groups based on their performance.
- For the non performers, the company has introduced a personal development plan to improve their performance in a stipulated period of time. If the employees don't improve even after being the part of the plan, the company would try to lay off.
- Around 5 per cent of its global workforce is under scanner. This process is likely to affect over 5000 employees. The company told its senior managers to give the lowest performance rating (4 on a scale of 1-4) to the underperforming 5 per cent as a part of the company's consolidated relative ranking (CRR).

The CRR is decided based on employees' appraisal which is done twice in a year.

- For the first time CRR has been made mandatory.
- The company has decided to implement a six month monitoring programme for the affected employees. As a part of this programme, each affected employee will be asked to work under the supervision of a mentor who is a senior executive of the company.
- In a bid to control costs and rationalize manpower, the company has made around 75 senior roles redundant. These roles are generally delivery managers who handle multiple projects. This process has increased the ratio of managers to other staff. This implies that the utilization per manager would increase.
- The company has asked 40-50 percent of the pre sale executives engaged in the company's USA office to quit their jobs.

#### 4.3 HR strategy of WIPRO Limited

Wipro Limited is the first PCMM Level 5 and SEI CMM Level 5 certified IT services company globally. Wipro provides comprehensive IT solutions and services, including systems integration, information systems outsourcing, package implementation, software application development and maintenance, and research and development services to corporations globally (<http://www.wiprocorporate.com>). On the top of the current economic turmoil, the company has introduced 30 cost cutting measures.

- The company has already laid off 1,000 employees, and another 2,000 employees have been put on scanner. The company is reviewing the performance of 60,000 global IT services employees from the senior leadership team down to the person with one-year experience.
- Wipro has introduced a performance rating exercise which is generally done twice a year. According to this, employees who have been given a below expectation rating in more than a couple of appraisals are vulnerable to lay off.
- Wipro evaluates its employees as good performers, average performers and poor performers. The last on the first are always to leave. Their salaries are not high and they get the messages that they need to improve themselves. This type of system is being pursued more aggressively this year.

- The down rated performers are given counselling to improve their performance.

- Wipro plans to increase productivity through quality management, more investment in training and improving the pace of innovation.

#### 4.4 HR Strategy of Satyam Computer Services

Satyam is a leading global business and information technology services company which delivers consulting, systems integration, and outsourcing solutions to clients in 20 industries in more than 65 countries. Satyam leverages deep industry and functional expertise, leading technology practices, and an advanced, global delivery model to help clients transform their highest-value business processes and improve their business performance. The company's 52,865 associates excel in engineering and product development, supply chain management, client relationship management, business process quality, business intelligence, enterprise integration, and infrastructure management, among other key capabilities ([http://www.satyam.com/about/about\\_us.asp](http://www.satyam.com/about/about_us.asp)). Meltdown led HR strategies of the company are as follows.

- Satyam Computer Services is in a mood to scrap the variable pay policy and introduce a revenue linked allowance for the associates working in approved billable rolls and those who are all allocated approved billable projects.
- Satyam has had variable pay as a part of the salary since July 2006. It depends on the business performance. Variable pay varies between 10 per cent and 30 per cent of an individual's total package offshore and between 5 per cent and 15 per cent on site.
- The company has deferred the joining date of 7500 graduates it had recruited from various college campuses this year.
- Satyam Computer is reported to downsize its workforce by a whopping 4,500 employees. This translates to a little less than 9 per cent of the 51,000 employees that the company employs.
- Company sources reveal that 1,500 employees have been put under the performance improvement plan (PIP), euphemism for employees put on watch list and asked to shape up or ship out.
- Apart from this, 3,000 others have not been given any increment in the last appraisal cycle, thereby indicating that their services are dispensable.

#### 4.5 HR Strategy of HCL Technologies

Founded in 1976, HCL is one of 'India's original IT garage start ups'. The HCL team comprises 53,000 professionals of diverse nationalities, operating across 18 countries. At a time when India had a total of 250 computers, Shiv Nadar led a young team which passionately believed in the growth of the IT industry. The company has reported consolidated revenue of Rs 3017.5 crore (Rs 30.17 billion) during the quarter ended March 31, 2008(<http://bayrozgar.com/blog/category/software-companies-in-india/>).

- The company views that the current meltdown was an opportunity for the Indian BPO sector to add value to its services. Taking an optimistic view of the current slowdown, Anand Pillai, the company spokesperson said that a positive response and attitude would help shorten the recession cycle.
- For this, it was important that workplaces should engender learning, preparing employees for the turnaround, when it happens.
- Citing the example of his company, HCL Technologies Ltd, Pillai said that "the core asset in any IT industry was its staff and cost-cutting through retrenchments was not the right policy to follow.
- The savings resulting from such job cuts are minuscule when compared to the damage they cause in terms of employee satisfaction and service delivery."

#### 5.0 CONCLUDING REMARKS

Analysis of the global meltdown led HR strategy of the Indian software companies indicates that for cutting costs, the software companies have resorted to cost cutting measures in terms of slashing the variable pay of the employees, deferring and freezing recruitments and downsizing the employee strength. Performance based appraisal is strictly followed. Non performing employees are noticed to leave the industry. In few of the companies like TCS, work hour is increased. Various companies have put their employees under scanner. All these indicate that the IT firms are just opportunists and escapists. Perhaps such type of HR policy of the software firms is hampering the employee morals and eroding overall optimism within the economy. Erosion of

optimism means prolongation of the current state of depression. The present study recommends that there should be government's intervention to protect jobs in software industry. Concerned state governments should also specify the employment norms and policies.

#### REFERENCES:

1. Bhalla Surjit S (2009): "Getting back to Hindu Growth", *Business Standard*, March 3, 2009, P 8.
2. Drucker Peter (1973): "Management, Tasks, Responsibilities, and Politics", Harper and Row, New York.
3. Kumar Harish and Kujar C(2008): "Can HR turn the situation Around", *Strategy: the journal for management Development*, Dec 2008, Vol XII.
4. Rammohan T T (2008): "From the sub prime to the Ridiculous", *EPW*, November 8.
5. Krishnakumar Dhanya(2008): "IT Reboots", *Cover Story, Business World*, 15 September, PP 28-33.
6. Chelluri Sarath (2009): "Tough Times Ahead", *The smart Investor, Business Standard*. March 9, P 2.
7. *Business Standard* (2009): "Job and biz outlook at all time low: Report", 29 January, P4.
8. *Business Standard* (2009): "TCS mulls cutting variable pay: employees to work more". 27 February, P 1.
9. *Business Standard* (2009): "Infosys likely to slash variable pay". 2 February, P 4.
10. *Business Standard* (2009): "Infy puts over 5000 employees under scanner", 28 January, P 1.
11. *Business Standard* (2009): "Infosys exhorts employees to go on 1-year sabbatical", work for NGOs. 14 November, P1.
12. *Business Standard* (2009): 'Infosys sees IT Industry growth at 15%, to freeze new hiring', 5 December, P 6.
13. *Business Standard* (2009): "Satyam to bring in revenue-linked allowances", 4 March, P 3.
14. Shinde Shivani(2009): "Infy aims to get more from less", *Business Standard*, 14 March , P 4.

# **Financial Crisis and The Policy Response of The Indian Economy**

**Reenati Mishra**

KIIT School of Management

KIIT University

Bhubaneswar

## **1 INTRODUCTION**

India along with other emerging economies has been the victim of relentless globalization and the economic crisis. Started with the US sub-prime mortgage market crisis in August 2007, it spread to other markets on the globe by September 2008. Economies like China and India played a major role in moderating the global downturn.

The signs of the economy losing the steam were observed long before the outbreak of the crisis and became more apparent during the course of the crisis. Monetary and fiscal policy responses of the Government have produced desired effects and need to stay for some more time.

## **2 PRE-CRISIS SCENARIO**

India's gross domestic product growth had started decelerating in the first quarter of 2007-08, nearly six months before the crisis. During 2007-08, GDP growth registered 0.5 per cent fall (to 9.2 per cent) from the earlier year.

The economic slowdown occurred despite a significant increase in agricultural GDP growth from 3.8 per cent in 2006-07 to 5.1 per cent in 2007-08. But the decline in growth rates in the secondary and tertiary sectors were from 10.6 per cent and 11.2 per cent in 2006-07 to 7.5 per cent and 11.1 per cent respectively in 2007-08.

One of the major sources of deceleration was the declining trend in capital formation. After prolonged slump from the mid 1990s to 2001-02, investment recovered and reached an average growth of nearly 9 per cent over the four-year period 2002-06. Private investment, accounting for 75-80 per cent of aggregate capital formation, grew at an average rate of nearly 20 per cent compared with the 9.4 per cent growth recorded by public investment. The average growth in the



aggregate investment has been decelerating since 2005-06 and during 2006-09 it has fallen by about 8 per cent age points (to 12.5 per cent) from that in the preceding period.

One of the most important demand-reducing factors was the sharp fall in exports. As per the Central Statistical Organization (CSO) data, during 2007-08 export growth reduced to 7.5 per cent from 18.9 per cent registered in the earlier.

### 3 CRISIS SCENARIO

A much sharper deceleration of investment and private consumption and a steep downturn of export growth from the third quarter of 2008-09 led the economy enter into the maelstrom of the global crisis.

As pointed out by Reserve Bank of India Governor D Subbarao (2009), the impact of the financial crisis on the Indian economy arises from three channels; the trade channel, the financial channel and the confidence channel.

The impact on India through the trade channel is assumed to be bearable as exports accounted for less than 15 per cent of the gross domestic product. It can set back growth by 1 per cent to 1.5 per cent only. In the financial channel, a higher level of financial integration impacted on the economy by reducing the Indian companies' access to overseas finance, lowering domestic liquidity and causing stock prices to fall. The ratio of total external transactions to the GDP had more than doubled from 46.8 per cent in 1997-98 to 117.4 per cent in 2007-08.

Adverse global conditions have limited Indian firms' access to global finance in various forms. Fresh international borrowings/external commercial borrowings have become difficult and existing ones are not easily being rolled over. Long-term finance for international acquisitions made earlier through bridge finance is not available. Buyer's credit has become scarce for international transactions. The Indian banks overseas branches and subsidiaries are unable to access funds in the wholesale market and have had to be provided with dollar funds by their parent firms from outside.

In a time of global crisis, consumers and investors are both bound to cut back spending because of the general setback to confidence of "animal spirits". Job losses accentuate the impact on consumer spending. Not the least, there is pronounced risk aversion among banks. Banks



are either averse to lending altogether (especially to risky areas such as real estate) and would like to hoard capital or will lend only at a steep price. All these effects have been in evidence in recent months in the Indian economy. Impact of the global downturn was magnified by the structural and managerial failures of the policy framework.

#### 4 INDIA CREDIT MARKET AND THE CRISIS

India's banking sector was less affected by the crisis. Government policy towards capital account convertibility, stringent norms for bank exposure, strict scrutinisation, prudential limits on inter-banking borrowing and regulation of NBFCs contributed to this.

Looking into the effect on the credit market, it is clearly visible that the bank deposit and lending rates that hardened up to October 2008 started easing from November 2008. With a view to containing the spill over of the financial crisis on the domestic credit market, measures of the RBI led to interest rates offered by PSBs on the deposits of all the maturities ease moderately between March 2008 to March 2009. The actual lending rates, other than export credit on demand and term loans for the SCBs, increased between March 2008 and December 2008. Since early October 2008 significant rigidity has been witnessed in banks' deposits and lending rates. The interest rate on small savings continues to be administered and a reduction in interest rates on bank deposits could lead to some deceleration of growth in bank deposits as was witnessed in the past.

While the interest rates on the incremental time deposits are coming down, the average cost of deposits still remains high. This in turn constrains an immediate substantial reduction in lending rates. Increase in risk aversion lending rates tend to be high even during periods of falling credit demand. In 2009-10 the reduction in the deposit and lending rates was more pronounced as the liquidity conditions remained easy and risks seemed to have abated and the impact of policy easing appeared to have worked through. The weighted average lending rate increased from 11.9 per cent in 2006-07 to 11.1 per cent by March 2009. The effective lending rate is expected to have declined further in 2009-10.

The credit market in general and rural credit market in particular were least affected or not affected at all in a state like Orissa, as shown in the table given below.

**Priority sector lending in Orissa**

Year	March (in Rs Crore)		September (in Rs Crores)	
	Target	Achievement	Target	Achievement
2008	460	395	255	168
2009	506	437	325	359

Source : State focus paper NABARD

The debt waiver and debt relief scheme has helped a lot to protect the economy by pumping more than Rs. 75,000 crore to the rural sector. It has helped to make the non reliable and non bankable rural poor bankable by allowing fresh loans and reducing the load of NPAs with the banks. As per the views of the bankers, demand for and volume of credit delivery has increased despite the financial crisis.

**5 POLICY RESPONSE TO THE CRISIS IN INDIA**

Turning now to the policy response, both fiscal and monetary policy have responded to the worsening environment. India did not appear significantly affected until after the Lehman episode. Hence the fiscal and monetary responses have come primarily after September 2008. The focus of fiscal policy has changed from fiscal stabilization to providing a growth stimulus.

Prior to that, in the sphere of monetary policy, the RBI had focused on fighting inflation and had adopted monetary tightening measures. The sharp depreciation of rupee with respect to dollar called for RBI intervention to demonetize dollar sales, which impacted negatively on rupee liquidity. The principal monetary responses since October 2008 include :

- Reduction in the repo rate from 9 per cent to 5.5 per cent and in the reverse repo rate from 6 per cent to 4 per cent.
- Reduction in the statutory liquidity ratio from 25 per cent to 24 per cent.

This was supplemented by variety of measures to support liquidity to non-banking financial companies and mutual funds. The RBI estimates that its initiatives have helped augment liquidity to the extent of Rs. 3,88,000 crore or nearly 75 per cent of additional commercial credit growth over the year up to 2 January 2009 (RBI 2009).

Looking to the policy response we can expect the following in the year ahead.

- A deceleration in commercial credit growth of 15-20 percent, although the RBI has revised its target to 24 per cent.
- Decline in the net interest margin.
- An increase in the level of non performing assets.

However, the Indian banking system can withstand these adverse conditions because of the reforms and five years of buoyant economic conditions.

- Capital adequacy averages 13 percent.
- The level of non performing assets to net advances has been brought down to 1 per cent and return on assets is 1 per cent which constitutes a benchmark for performance of banks worldwide.

The deceleration of GDP and industrial output driven by the slowdown in the private investment and exports was contributed by the structural policy of the government.

The sharp downturn in private sector capital formation since 2004-05 attests to a serious deficiency in the policy structure for stimulating private investment. The slowdown in export growth in the pre-crisis period also seems to be largely policy related. Large-scale liberalization of FIIs, apart from inflating the stock market bubble, led to a significant strengthening of the rupee and posed a serious hurdle to the country's export growth.

To count the failure of macro management even after the six months of the outbreak of the financial crisis (February 2008), nearly six months after the outbreak of the global crisis, the union and the state government in their budgets for 2008-09 proposed to reduce revenue deficit by 0.4 and fiscal deficit by 0.7 percentage points. The proposals were in observance of the time schedule set under the Fiscal Responsibility and Budget Management Act and reflected the then entrenched orthodoxy regarding the superiority of monetary and fiscal policies for controlling cycles.

From January 2007 to as late as 10 October 2008, the RBI's policy was persistently concretary; over this period, the repo rate and the cash reserve ratio were raised to 9.0 per cent from 7.5 per cent and 5.5 per cent respectively.

## 6 Conclusion

India will not escape unscathed in the present crisis because her economy has become more integrated with the rest of the world over the past decade. Overseas finance has become increasingly important. Impact arising from tighter liquidity conditions and a decline in stock prices cannot be ignored. India's authorities have responded to the crisis with both fiscal and monetary stimuli, although the scope for the former appears somewhat limited given India's fiscal position. Of course, the banking sector is well placed as it is not directly exposed to the financial crisis. To make the system less susceptible to the crisis, anti-cyclical monetary policy need to be reversed. To deal with the immediate crisis, restructuring of the financial sector is in order.

## REFERENCES

1. Bhaduri Amit (2009) Understanding the Financial Crisis EPW, Vol. XLIV No. 13, pp 123-125
2. IMF (2008). World Economic Outlook : Update, 6 November
3. IMF (2009). World Economic Outlook : Update, 28 January
4. Lucas Bernard and Semmler Willi (2009). Banking, Complex Securities and the Credit Crisis. EPW, Vol. XLIV No. 13, pp 137-143
5. Mohan T.T. Ram (2009): The Impact of the Crisis on the Indian Economy. EPW, Vol. XLIV No. 13, pp 107-113
6. Rakshit Mihir (2008). "The sub prime crisis : A Primer", Money and Finance 3 (3), 75-124
7. Rakshit Mihir (2009). India amidst the Global crisis, EPW, Vol. XLIV No. 13, pp 94-106
8. RBI Annual Report 2007-08 and 2008-09
9. State Focus Paper, NABARD 2008-09 & 2009-10
10. Economic Survey 2007-08 and 2008-09, Govt. of India.
11. Wade Robert (2009). Steering out of the crisis, EPW Vol. XLIV No. 13, pp 39-46.



# Global Financial Crisis

**Sri Surendra Swain**

Department of Economics

K.K.S. Women's College

Balasore - 756 003

## 1 INTRODUCTION

A recession is defined as 'negative growth of economy over two successive quarters'. This has occurred in December, 2007 in the U.S.A. and many countries of Europe. It has all been a result of America's great faith in free market economy and unbridled capitalism. Several reasons have been advanced for the failure of the western capitalist model.

- 1) It was mainly owing to sub-prime lending, new houses were sold to house owners with mortgage loans far beyond their capacity to repay. It is a situation what we in India used to call Non-Performing Assets (NPA) in banks.
- 2) The banks tried to transfer their risk due to non-recovery by securitising their loans with investment banks. Non-repayment of loans by the borrowers adversely affected the investment banks. Five leading US investment bankers- Lehman Brothers, Merrill Lynch, Bear Stearns, J.P. Morgan and Goldman Sachs went bankrupt or were in red. The largest US insurance company, AIG and two large mortgage guarantee companies, Fannie Mae and Freddie Mac, also were in deep waters.
- 3) The above situation is only a precursor of the much bigger credit card crisis that is looming ahead. An individual depositor is in possession of 30 to 40 credit cards, which he is using to borrow for all types of expenditure. The figures of global credit card loans run into trillions. When lenders are unable to recover their money, they are unable to lend to others, who supplement their savings with loans to buy shares in the market. With savings as collaterals vanishing in defaulted loans and with no further lending in sight, funds for purchase of shares also diminish fast.

## 2 IMPACT IN THE USA

Americans are at present not able to get their daily food. They are taking food in different food distribution centers. US Government is

helping to the unemployed people from the unemployment fund, but twice the fund has been exhausted. Thousands of workers were laid off in the USA. More than 26 lakh Americans were retrenched only in 2008 and in January 2009, about 9000 jobs were lost per day. The unemployed had no income to purchase necessary consumer goods. Unemployment relief of the government increased many times.

### 3 END OF RECESSION ?

While there are some who are sceptical that the downturn has ended, many hold the opposite view. Ben Bernanke, Chief of the Federal Reserve says that the recession has very likely ended.

- 1) The stock market has turned bullish. The Standard and Poor's 500 stock index is now up 58 per cent from its March 9, 2009 low. Recession can be said to have come to an end at the end of August, 2009.
- 2) Claims for unemployment relief peaked in March 28, 2009 and started declining from August, 2009.
- 3) Production in manufacturing sector, automobiles and steel industries rose sharply from May, 2009.
- 4) Gasoline deliveries have risen.
- 5) Demand for freight transportation is rising and freight index for output of trucks, railroads, inland waterways, pipelines and air transportable, rose by 1.6 per cent in July, 2009, for the first time since February, 2009.

### 4 IMPACT ON THE INDIAN ECONOMY

The initial impact of the crisis on India was muted. GDP growth slowed from 9 per cent in 2007-08 to 7.8 per cent in April-September 2008, still a very high rate. But after Wall Street collapsed in September, 2008 India's growth plummeted to 5.8 per cent, 5.8 per cent and 6.1 per cent in the next three quarters. This was a come down, but higher than the World Bank's forecast of 4 per cent growth in 2009.

More than 5,00,000 jobs were lost in India in the last quarter of 2008. India registered its first decline in exports of 15 per cent in October, 2008, after a growth of 35 per cent in the preceding five months. But India suffered less in comparison to the large economies of the West. Many factors account for this.



1. Indian banks and financial institutions had avoided buying mortgage-backed securities and credit default swaps that turned toxic and failed Western financial institutions.
2. India's merchandise exports declined by around 30%, but service exports like computer software and BPO exports held up well.
3. Remittances from overseas Indians continued unabated, hitting a record \$46.4 billion in 2008-09, up from \$43.5 billion in the previous year.
4. Foreign direct investment remained high at \$27.3 billion in 2008-09 despite the global financial crisis. Foreign investors were rushing to India and FDI inflows were up over 40 per cent in August, 2009.
5. Monetary policy, was more accommodative in 2008. The RBI did not tighten money to save rupee, which was allowed to fall from Rs.40 to Rs.52 per dollar. Instead, the RBI lowered interest rates for expansion of credit. The repo has been reduced from its peak of 9 per cent in October, 2008 to 5 per cent while the reverse repo has been brought down from 6 per cent to 3.5 per cent.
6. Agriculture accounts for 14.6 per cent of the country's GDP, but close to 60 per cent of labour force is in farming. About three among five Indians still depend on agriculture for his or her livelihood. Most Indians remained in the outreach of the global crisis.
7. A massive hike in pay for government employees and the stimulus packages announced late last year, have helped the domestic economy not slide much.

The country's economy has been looking up since mid-year 2009. Rural demand did not dip significantly while the effects of the slowdown were more visible in urban demand with more layoffs. But the signs of recovery have already started in the country. Employment by Indian Incorporation has increased, auto sales are in fast track, demand for air-travel has picked up and inflows of funds by FIIs is easing out.

## 5 SUGGESTIONS & CONCLUSION

- 1) The world's leading financial powers, namely, the United States, United Kingdom, France and Germany should jointly announce



national plans for recapitalisation of banks. With restructuring of debt and equity mixture, the banks can weather any major financial crisis.

- 2) The countries should announce temporary blanket guarantee for bank deposits and debts. This will, in effect, raise depositors' confidence and prevent large outflows of funds.
- 3) The monetary authorities of the countries need to lower interest rates substantially. Europe, Canada and the United States recently announced a coordinated 0.5 per cent reduction in interest rates. But more reduction will be needed. Because of credit crunch commodity prices will continue to fall and demand will remain weak. This can be offset by bringing down interest rate further.
- 4) The monetary authorities also need to remain committed to pumping liquidity into the financial system as long as credit markets and interbank lending remain weak.
- 5) All industrialized countries and leading emerging markets should commit to a sizable fiscal expansion (at least 1 per cent of GDP), to offset the large decline in global demand.

The crisis is to be addressed globally through concerted efforts of the countries. Partial and piecemeal actions will no longer work. Actions by a few countries and in current pattern of small steps, are not enough to change the tide. Markets need to be jolted out of the panic.



## **Global Financial Crisis : Some Preventive Measures**

**Ritanjali Dash**

Reader in Economics

Regional Institute of Education,

Bhubaneswar

### **RECENT HOUSING BUBBLE IN USA**

The recent crisis of the United States housing bubble peaked in approximately 2005-2006. High default rates on “sub-prime” and adjustable rate mortgages (ARM) began to increase quickly thereafter. An increase in loan incentives such as easy initial terms and a long-term trend of rising housing prices encouraged borrowers to assume difficult mortgages in the belief that they would be able to quickly refinance at more favorable terms. However, once interest rates began to rise and housing prices started to drop moderately in 2006-2007 in many parts of the U.S., refinancing became more difficult. Defaults and foreclosure activity increased dramatically as easy initial terms expired, home prices failed to go up as anticipated and ARM interest rates reset higher. Falling prices also resulted in homes worth less than the mortgage loan, providing a financial incentive to enter foreclosure. The ongoing foreclosure epidemic that began in late 2006 in the U.S. continues to be a key factor in the global economic crisis, because it drains wealth from consumers and erodes the financial strength of banking institutions.

In the years leading up to the crisis, significant amounts of foreign money flowed into the U.S. from fast-growing economies in Asia and oil-producing countries. This inflow of funds combined with low U.S. interest rates from 2002 to 2004 contributed to easy credit condition, which fueled both housing and credit bubbles. Loans of various types (e.g., mortgage, credit card, and auto) were easy to obtain and consumers assumed an unprecedented debt load. As part of the housing and credit booms, the amount of financial agreements called mortgage-backed securities (MBS), which derive their value from mortgage payments and housing prices, greatly increased. Such financial innovation enabled

institutions and investors around the world to invest in the U.S. housing market. As house prices declined, major global financial institutions that had borrowed and invested heavily in sub prime MBS reported significant losses. Defaults and losses on other loan types also increased significantly as the crisis expanded from the housing market to other parts of the economy. Total losses are estimated in the trillions of U.S. dollars globally.

### **FINANCIAL MARKET IMPACTS**

The crisis began to affect the financial sector in February 2007, when HSBC, the world's largest (2008) bank, wrote down its holdings of subprime related MBS by \$ 10.5 billion, the first major subprime related loss to be reported. During 2007, at least 100 mortgage companies either shut down, suspended operation or were sold. Top management has not escaped unscathed, as the CEOs of Merrill Lynch and Citigroup resigned within a week of each other in late 2007. As the crisis deepened, more and more financial firms either merged, or announced that they were negotiating seeking merger partners.

During 2007, the crisis caused panic in financial markets and encouraged investors to take their money out of risky mortgage bonds and shaky equities and put it into commodities as "store of value". Financial speculation in commodity futures following the collapse of the financial derivatives markets has contributed to the world food price crisis and oil price increases due to a "Commodities super-cycle". Financial speculators seeking quick returns have removed trillions of dollars from equities and mortgage bonds, some of which have been invested in food and raw materials.

### **FINANCIAL MARKET IMPACTS AROUND THE GLOBE**

As of August 2008, financial firms around the globe have written down their holdings of subprime related securities by US\$501 billion. The IMF estimates that financial institutions around the globe will eventually have to write off \$1.5 trillion of their holdings of subprime MBSs. About \$750 billion in such losses had been recognized as of November 2008. These losses have wiped out much of the capital of the world banking system. Banks headquartered in nations that have signed the Basel Accords must have so many cents of capital for every

dollar of credit extended to consumers and businesses. Thus the massive reduction in bank capital just described has reduced the credit available to businesses and households. When Lehman Brothers and other important financial institutions failed in September 2008, the crisis hit a key point. During a two day period in September 2008, \$150 billion were withdrawn from USA money funds. The average two day outflow had been \$5 billion. In effect, the money market was subject to a bank run. The money market had been a key source of credit for banks and nonfinancial firms (commercial paper). The TED spread, a measure of the risk of interbank lending, quadrupled shortly after the Lehman failure. This credit freeze brought the global financial system to the brink of collapse. The response of the USA Federal Reserve, the European Central Bank, and other central banks was immediate and dramatic. During the last quarter of 2008, these central banks purchased US\$ 2.5 trillion of government debt and troubled private assets from banks. This was the largest liquidity injection into the credit market and the largest monetary policy action in world history. The governments of European nations and the USA also raised the capital of their national banking systems by \$1.5 trillion by purchasing newly issued preferred stock in their major banks. However, some economists state that Third World economies, such as the Brazilian, Indian and Chinese ones, have not suffered as much as those from more developed countries.

#### MEASURES TO PREVENT THE FINANCIAL CRISIS

The above analysis and response of great thinkers to global economic crisis remind us of the basic principle of equilibrium of an economy. Our consumption can never exceed our savings unless it is financed by borrowing or printing of money. But unfortunately that happened. Consumption much exceeded the level of savings. Garret Hardin said "An unmanaged commons in a world of limited material wealth and unlimited desires inevitably ends in ruin. When Adam Smith, the father of Economics advocated for free market economy he wished that the market should behave rationally. He had stated that "individuals acting in their own rational self-interest in a free-market economy lead to economic well-being". But unfortunately the market did not behave rationally and the consequence became fatal. Former Federal Reserve head Alan Greenspan called the stock market and real estate market

euphoria of the late nineties and early 2000s “irrational exuberance.” Yale professor Robert Shiller repeated the phrase in his book. It caused people to pay ridiculously high prices for stocks and real-estate. During the dot-com boom, people were accepting ridiculous price/earnings ratios and even price/sales ratios (in the case of corporations that had never made a dim of profit) for stocks they bought. So why this Financial Meltdown; is it due to fraud, greed or stupidity?

It is clear that economic disaster arising out of financial crises is man made which can be prevented unlike natural calamities. Few steps may be planned in advance to prevent disaster happening anywhere in the globe. These are mentioned below.

Trust in financial institutions gets lost during a financial disaster of this magnitude. Regulation alone cannot restore trust. It is necessary for the private sector to act to restore its important role in the financial system. The remedy must originate with the boards and managers in charge of financial institutions. A financial system dominated and controlled by the state is not a solution; it brings its own deficiencies. The market, over the long term, if appropriately regulated, has been found to be the most efficient system for wealth creation; savings must continue to be allocated to their best use.

Institutional investors play a significant role now as they hold about 60 per cent of all U.S. stocks and their significant share in other countries has been rising steadily. As a result, corporate governance and capital markets’ vitality have become a matter of general interest and corporate crises are even more likely to have detrimental effects on society as a whole. Risk-taking behavior of financial institutions coupled with lapses in good corporate governance must be regulated.

Another striking new feature of today’s capital markets is the constant proliferation of different types of share owners within the “institutional” category with increasingly heterogeneous objectives and tactics. Institutional investors were once presumed to share a common goal when exerting pressure on boards to monitor management and effectively guide firm strategy. That assumed homogeneity now seems long gone, and heterogeneity is ever on the rise. This diversity of share owners has brought a whole host of agendas, strategies, and values to the table. Some of these owners have limited investment horizons and

are only interested in realizing a short-term profit and others may have hedged or shorted their positions and consequently have a financial interest in the failure of the enterprise.

With this new array of owners, came a group of new financial instruments, which are complex and often incomprehensible, even to the most financially literate; deregulated markets stimulated such innovation. The emergence of new financial instruments and new owners was mutually reinforcing. Hedge funds were one of the main buyers and users of complex financial instruments, which were also used to finance the private-equity boom between 2005 and 2007. The new financial instruments, such as credit default swaps, other derivatives, differ from conventional public stock and debt, as the latter are not subject to similar regulatory requirements. In recent years, large traditional financial institutions followed the risk-taking example of hedge funds and private equity in pursuit of their double-digit returns. They hired mathematicians and scientists who dominated the innovation function and developed esoteric market strategies and financial instruments. These developments are to be regulated.

Significant cultural change occurs in the most established institutions and with it overall commitment to good management practices and service to constituents and society is gradually diminishing. There was a new attitude of profit seeking for the institution's own benefit, rather than serving clients or constituents. Boards must reestablish and enforce the standard that risks are to be undertaken for the benefit of their constituents, not for the personal gain of management.

Other factors also contribute to and reinforce the deterioration of sound management and governance practices in financial institutions. The first is the contravention of the check-and-balance role of lawyers, accountants, and rating agencies which is disappearing now a days. Care must be taken about it.

Deficiencies in regulatory oversight also contributed to this dysfunctional condition in financial institutions. Regrettably, large investment banks chose to avoid supervision by the Federal Reserve through use of specialized charters, off balance-sheet activities, holding companies and other means. The Securities and Exchange Commission remained the primary investment bank regulator, but failed to create



credible competencies or carry out supervisory activities at this level to any meaningful degree. This enormous gap in regulatory oversight allowed excesses in risk-taking to occur in these two sectors. The extravagant incentive and compensation policies in financial institutions rewarded short term profit at any cost and completed this disastrous picture. Greed prevailed throughout the entire financial "industry" without proper oversight and was allowed to flourish. Plain criminal fraud was going on in USA for years without regulation. Such regulatory gaps must be avoided.

The implementation of strong corporate governance practices is essential to the long-term success of corporations. Strong corporate governance practices are here understood as an effective system of checks and balances inside each corporation (management accountability to boards and board accountability to shareholders and stakeholders), clarification of the rights and responsibilities of all constituents of the corporate enterprise, and a clear understanding that the role of the corporation in society is to benefit shareholders and stakeholders. The first priority should be to focus from profit for the benefit of themselves and management to a renewed commitment to managing society's saving for the benefit of the shareholder and stakeholders. Boards must reestablish and enforce the standard that risks are to be undertaken for the benefit of their constituents, not for the personal gain of management. Second, directors need to be far more competent and engaged, have the courage and expertise to validate and oversee the strategy and risk profile of the enterprise as beneficial to all stakeholders. Third, shareholders must exercise their responsibility to elect directors who are qualified to discharge these responsibilities. Governments which become shareholders have the same obligation.

Corporate system need to be redesigned to moderate rewards, penalize poor performance and unethical conduct, encourage effective service to stakeholders and society, and deemphasize short-term profit in favour of long-term corporate value.

Fully transparent and comprehensive internal and external reporting must be made, which implies no "conduits", other of balance sheet vehicles or risks, and no illicit "parking activity." Full disclosure of risk-management processes in filings, annual reports, and analyst



presentations is also essential. Regular reviews by the board audit committee, internal control officers and external auditors, rating agencies, and regulators of the risk-management system for adequacy, compliance with policy, and appropriate disclosure must also be made.

A dose of 'Socialism to Forestall Disaster' is essentially required for this. All kinds of investments, not just stock market investments, should be strictly guided by three motives a) liquidity, b) profitability and c) safety. A compromise with any one may be fatal. A sudden rise or fall in value of securities of any firm has to be closely monitored by the regulatory authorities. Panic buying and selling of securities due to anticipation of gain or risk must be restricted as it is detrimental for the liquidity position of the economy. Innovation of new products is good but these are to be tested before being accepted by the public widely. Banking community has to be quite vigilant while lending money. In any case lending of the banks must not exceed the deposits mobilized by banks as a whole. While lending money, net worth of individuals and institutions must be taken into consideration strictly. Consumption expenditure in any case should not be financed through printing of money or borrowing. Creation of money must be backed by parallel growth of the real sector which is possible by growth of investments, not solely by consumption. Regular 'Bubble watch' and 'wealth watch' must be made by the regulatory authorities.



# **Impact of Global Financial Crisis on the Poor of the Poor Countries: Focus on India**

**Sanjukta Das**

Reader in Economics  
Sambalpur University  
Orissa

**Bichitranand Seth**

Research Scholar,  
Dept. of Economics  
Sambalpur University, Orissa

India's performance was very impressive in the last five years ending 2007-08— the GDP growth rate was above 8.5 per cent on an average, inflation was more or less stable and foreign capital inflows were very high but manageable. FIIs were injecting huge amount of funds into the stock market resulting in high SENSEX (21000 levels in Feb, 2008). Poverty ratio and the number of poor in the country— were declining. As per 61st NSSO survey, 3017.20 lakh people were found as poor who constituted 27.5 per cent. It was expected that, the globalization process initiated in 1991 has brought immense benefit to India. It did not consider the small effect which India had experienced during the East Asian Crisis. In those days, Indian economy was regulated, particularly the capital account of its BOP. The government and the monetary authority are now inclined towards the recommendation of Tarapore Committee constituted in 1997 on Full capital account convertibility. The capital account has been opening up gradually. The recent global financial recession (mainly revealed in September 2008), however, changed this perception. It has been realized that due to the increase in the openness of the economy, India is now more vulnerable to external shocks. Keynes' 'animal spirit' may come into play that can make investors susceptible to herd behavior and speculative bubbles that can turn out to be self-fulfilling (Pami Dua and Arunima Sinha, 2007). In many ways the recent global financial recession can bring hardship for the poor in India. The channels may be export, remittances, foreign aid, foreign exchange rate and the growth rate of GDP. The present paper tries to investigate these.

The paper has been divided into the following sections. In section I, a brief discussion of the causes of global recession has been given. In section II a detailed discussion of the channels through which

transmission of global recession can enter the economy of India is done. The next section analyses how people, especially the poor, find the difficulties arising from this crisis. The conclusion and policy implications are contained in section IV.

### SECTION-I

The first hint of the subprime crisis came from the collapse of two Bear Stearns hedge funds in the early 2007. Subsequently a number of other banks and financial institutions also began to show signs of distress. Matters became worse in September 2008 with the bankruptcy of Lehman Brothers, a big investment bank. The reasons for the crisis are varied and complex. Some of them include public policy partnership of 'affordable housing' through 'creative financing techniques', speculation, high-risk mortgage loans and lending practices, securitization practices, inaccurate credit ratings and poor regulation. These reasons are explained briefly below :

1. **Policy of affordable Housing :** After the collapse of the real estate market in the late 1980s and insolvency of the housing Government sponsored entities (GSEs) an odious public policy partnership— the National Home ownership Strategy— was spawned comprising hundreds of companies, banks, associations and government agencies to provide affordable housing to the people. Community Reinvestment Act (CRA) encouraged the banking industry to provide cheap finance for housing. These CRA loans were subprime loans and had 100 per cent loss rates. But creative financing (like mortgages) was evolved for the purpose. Banks pooled these loan documents, used them as mortgage and got finance against them. Collateralized debt obligations (CDOs) were thus created and marketed all over. Cheap housing loan encouraged borrowing resulting in the housing boom. This demand fuelled housing prices and increased consumer spending. Some house owners used the increased property value experienced in housing bubble to refinance their homes with lower interest rates and take second mortgages against the added value to use the funds for consumer spending. Increase in house purchases during the boom period eventually led to the surplus inventory of houses, causing house prices to decline, beginning in the summer of 2006. Once housing prices started declining moderately in many parts of the U.S.,

refinancing became difficult. Some house owners were unable to refinance their loans reset to higher interest rates. Excess supply of houses put significant downward pressure on housing prices. As prices declined, more house owners were at the risk of default and foreclosure.

**2. Speculation:** Speculation in real estate was a contributing factor. It was speculated that house price would continue to rise in future. This encouraged the house purchase. During 2006, 22 per cent of houses purchased (1.65 million units) were for investment purposes with an additional 14 per cent (1.07 million units) purchased as vacation homes. These further fuelled the housing boom.

**3. High- Risk Mortgage Loans and Lending Practices:** A variety of factors caused lenders to offer higher-risk loans to higher-risk borrowers. These loans are known as subprime loans. In addition to considering high-risk borrowers, lenders have offered increasingly high-risk loan options and incentives. These high-risk loans included "No Income, No Job and No Assets (NINJA) loans." Default possibility and thus interest rates in such loans were very high.

**4. Securitization Practices :** Securitization of housing subprime loans was also a reason behind the current global credit crisis. Securitization is a structured finance in which assets, receivables or financial instruments are acquired, pooled together as collateral for the third party investments (Investment Banks). Due to securitization, investors' appetite for mortgage backed Securities (MBS), and the tendency of rating agencies to assign investment-grade ratings to MBS, loans with a high risk of default could be originated, packaged and the risk can readily be transferred to others.

**5. Inaccurate Credit Ratings:** Risk rating agencies were unable to give proper ratings to complex instrument. High ratings given by credit rating agencies encouraged the flow of investors' funds into the MBS. This helped financing the housing boom. It is criticized that mortgage underwriting practices including the automated loan approvals were not subjected to the appropriate review and documentation.

**6. Poor Regulation :** The problem occurred during an extremely accelerated process of financial innovation in the market which was poorly or ambiguously regulated. The fall of the financial institutions is a reflection of the laxity in internal controls and the ineffectiveness to regulatory oversight in the context of a large volume of non-transparent assets. During the past two decades there was proliferation of over the counter (OTC) traded derivatives, encouraged by the Congress, the Federal Reserve Board Staff in Washington and other regulators. These derivatives are unregistered securities having very risk component, but were packaged well and sold. Moreover, structured investment vehicles (SIVs) were created and used by the banks and other financial institutions for funding which introduced a new element of volatility. It is indeed amazing that there were simply no checks and balances in the financial system to prevent such a crisis. Earlier, in USA legal strictures and market guidelines required virtually all financial instruments to be traded on exchanges, with price discovery and counter-party credit risk issues exposed to the full light of public scrutiny.

## SECTION-II

The subprime crisis, originated in U.S., spread to other developed and developing countries through contagion effects. The contagion was immediately reflected in the sharp fall in the stock market indices of these countries. The spillovers of the crisis to other economics including India can take place through the financial sector, fall in export and the pressure on the exchange rate. A detailed analysis of the transmission of the crisis to the Indian economy is given below.

**Financial Sector :** Reforms in the financial sector and its opening up increased its vulnerability to external shock. The subprime crisis accordingly has affected the financial sector of India through the reductions in remittances, capital inflow, and aids. The effect of the crisis on India's banking sector was almost negligible because of its sound prudential norms, capital adequacy ratio and less opening up. However, the inflow of external finance has reduced— a detailed description of which is given below. This crisis has also reduced the export earning and put pressure on the exchange rate — which has affected the real sector of the economy.

**Remittances :** Workers' remittances have been a major source of balance of payments support in many emerging economies. The flows also help in poverty alleviation. A significant part of the remittances are in the nature of transfers for family maintenance. According to World Bank estimates, remittances to developing countries were of the order of US\$ 305 billion in 2008, which far exceed the flow of official assistance. India has been a top recipient of private transfers in recent years. It grew at the rate of 27 per cent during 2005-06 to 2007-08 in India, This constituted around 3 per cent of GDP during the same period. During 2008-09 (April-December) such transfers were US\$ 36.9 billion. In the third quarter of 2008-09 (October-December) it witnessed a marginal fall to US\$ 10.5 billion as against US\$ 10.9 billion in the corresponding quarter of 2007-08. This fall is due to global financial crisis. However, the decline in nominal dollar terms would be smaller relative to the projected fall in private capital flows or official aid.

**Capital Inflow:** Economic slowdown in the developed countries has affected the foreign investment, particularly portfolio investment. This was reflected from the fall in stock market index resulting from the FIIs' withdrawal of money from the Indian stock market to replace their fall in investment in their own countries due to the financial crisis. External commercial borrowings from the banks of the developed countries are also declining. This creates problems for trade finance and medium term investment. However, the FDI showed increment during this period for its known stable nature.

#### Foreign Aid

#### EXTERNAL ASSISTANCE TO INDIA (IN US \$ MILLION)

Year	2003-04	2004-05	2005-06	2006-07	2007-08 (PR)	2008-09 (PR)
Total	3826.6	5915.9	4250.4	6982.8	8246.2	4711
Loan	3300.8	5212.2	3912.2	6209.8	7182.2	4606
Grants	525.9	703.7	368.1	773	1064	304.8
Grants as % of total	13.75	11.90	9.60	11.07	12.90	2.23

Source:

Note: PR- Partially revised, P- provisional



The external assistance comprising grants and loans was in an increasing trend up to 2007-08 but it declined for the period 2008-09 (see the above table). The reason may be that the developed countries that provide major part of external assistance were unable to or not wanted to provide it due to the economic downturn. Grants were fluctuating over years but the amount in 2008-09 was lower than its previous five years. Also a notable feature relating to external assistance is that grants as a per centage of total external assistance was very low i.e. 2.23 per cent in 2008-09 compared to the previous year (12.90 per cent).

**Exports :** India's share in world merchandise exports increased from 0.7 per cent in 2000 to 1.0 per cent in 2006; it remained 1.1 per cent in 2007 and 2008. Though the share is very less, it contributes to the growth of Indian economy significantly. Goods export rose from 11 per cent of GDP in 2003-04 to 14.1 per cent in 2007-08 and 15.2 per cent during 2008-09 (April-December). Since the import content of our export is low, the multiplier effect of any change in export on domestic income and employment is very important. The improvement in export performance (during 2000-2006) was, probably due to integration of the Indian economy with rest of the world. However, the present global recession has reduced the growth rate of export. It is found that exports of India in US\$ have grown at around 25.9 per cent on an average during 2003-4 to 2007-08 But the increase in export earning was 17.5 per cent higher in April-December 2008 from that in 2007-08. Any disturbance in the world economy has affected the world trade. The recent global recession has resulted in an unprecedented contraction of world growth to 3.2 per cent and trade growth to 3.3 per cent. The advanced economies experienced the same to 0.9 per cent and 0.4 per cent respectively. According to World Trade Organization (WTO) statistics, world merchandise trade grew at 2 per cent in real terms in 2008 which was lower than the 6 per cent growth experienced in 2007. Growth of world demand for export decelerated from 8.5 per cent (in 2006) to 6 per cent (in 2007), and further to 2 per cent (in 2008).

The fall in the GDP growth rate of USA from 2.8 (in 2006) to 2 per cent (in 2007) and the consequent fall in its import growth had started affecting India's export to the US in 2007. The matter of worry for India is that USA is the major export destination for India. It accounted for 12.0 per cent of India's total exports in 2008-09 (April-February), followed by UAE. The slowdown of USA has resulted in



the fall in the growth rate of India's export to USA in 2007-08 and 2008-09 compared to the earlier year. Same thing is also found for other developed countries. Fall in export growth could have reduced the multiple rise in employment and income.

**Exchange rate :** India faced problem of excess demand for foreign currencies during this time. This is because of the following reasons. In spite of the growth of export of goods and services, India experiences continuous deficit in its current account. In this recession period capital outflow could not make good this deficit. Decline in the possibility of external commercial borrowing put pressure on foreign exchange reserve of the country and the exchange rate, resulting in exchange rate depreciation. Depreciation encourages export and discourages import; but the net effect on trade balance depends on the demand and supply elasticity of export and import. Moreover, depreciation increases the cost of old external debt.

### SECTION III

The global economic meltdown has reduced the growth rate of most of the countries including India. Different estimates indicate the fall of the growth rate of India for 2008-09 and 2009-2010. Indian Council for Research on International Economic Relations (ICRIER) has estimated the growth rate as 6.3 in 2008-09. The Economic Advisory Council to the Prime Minister has also brought down its estimate for 2008-09 to 6.5 to 7 per cent and not 7.1 per cent as given by CSO in its advanced estimates and used for budget formation by the finance ministry. The GDP growth is likely to further decline to between 4.8 to 5.5 per cent in 2009-10. Other agencies like the IMF, the World Bank and the ADB have also estimated Indian GDP growth in 2009-10 at similar levels in their forecasts released in March 2009. The fall in growth rate would result in the fall in poverty reduction and additional employment generation. These will ultimately affect the people, especially the poor.

**Poverty Reduction :** Studies reveal positive impact of economic growth on poverty reduction (Barro and Sala-i-Martin, 2004). Using the NSS data for the period 1993-2004, UNDP (2008) has estimated the poverty elasticity of economic growth in India to be 0.59. This implies that if economic growth is one per cent, poverty would fall by 0.59 per cent. Taking the IMF projections (made in April, 2008) of GDP growth rate of 5.4 per cent in 2009 and 6.2 per cent in 2010, it has estimated

the poverty ratio to be 22.3 per cent and 21.5 per cent in 2009 and 2010 respectively. The number of poor would be 268 million in 2009 and 262 million in 2010. However, in April 2009, the IMF revised downwards its GDP growth projections for the country to three per cent for 2009 and 4.1 per cent for 2010. The immediate implication is that the rate of poverty reduction would be slower, which in turn means that there would be a higher number of people below the poverty line than projected in April 2008. The revised forecast indicates that the poverty rate would be 22.7 per cent and 22.1 per cent, respectively, for 2009 and 2010 and the number of people below the poverty line would be higher at 273 million in 2009 and 270 million in 2010. This means that 13 million more people (five million more in 2009 and eight million more in 2010) than that projected by IMF in April 2008 would continue to be poor (Poverty calculations by UNDP, Regional Centre, Colombo).

In addition, there is the possibility that some proportion of the near poor (with one to 1.25 times the consumption expenditure of the poor) whose numbers have been estimated to be around 200 million at the all-India level in 2004-05 by the National Commission for Enterprises in the Unorganised Sector (NCEUS) might slip into poverty temporarily on account of loss of livelihoods due to the financial crisis. This group depends mainly on informal casual employment. The informal sector is being hit badly by the financial crisis.

A third factor aggravating the slide into poverty is higher food and fuel prices. The rise in prices has been the sharpest for cereals which is the main item of consumption of the poor. For example, the retail price of rice was 60 per cent higher in January 2009 as compared to the level two years earlier. Given that expenditure on food constituted over 62 per cent of the total consumption expenditure of the bottom 20 per cent in 2006-08, the soaring cost of cereals led to 24.7 per cent increase in food cost for the poor. This, in-turn, meant that their purchasing power declined by 14.3 per cent due to higher food prices alone (UNDP, 2008).

**Employment and Job Losses :** Reduction of economic growth is likely to affect the additional employment generation adversely. C.Rangarajan has estimated the overall employment elasticity in India for 1999-2000 to 2004-2005 as 0.48. As a very rough indicator of employment effects of the slowdown, one can make some rough calculations, contrasting Q2 of 2008-09 (before the external shock hit)

with Q3 of 2008-09. Even before the external shock, GDP growth had slowed because of the monetary tightening. Q2 of 2008-09 registered growth of 7.6 per cent and at the aggregate level, this would have meant a creation of 12.7 million jobs. A decline in growth to 5.3 percent means a creation of 12.7 million jobs. As a counter-factual, 5.5 million jobs that would otherwise have been created, will now no longer be created. By the same token, the employment decline in agriculture (with employment elasticity of 1.52) in Q3 is marginal. Growth rate in manufacturing sector declined by 2.2 per cent in Q3, contrasted with an increase of five per cent in Q2. With employment elasticity of 0.34, additional employment of 800,000 million in Q2 and 400,000 million in Q3 can be estimated (Debroy, 2009).

Official sources suggest that there has already been a sharp fall in employment in the export-oriented sectors like textiles and garments and gems and jewellery, and even in industries catering more to the domestic market like metal products, automobiles and construction. Not just in the sectors mentioned above but in labour-intensive services, such as cleaning, maintenance, private security, driving and related services also fall in employment is being noticed. These were not simply informal activities; many of them catered to the requirements of the expanding corporate sector, and in effect subsidised it by providing a cheap and flexible external labour force. Such workers are now forced either to stay in precarious conditions in the urban areas, or go back to their places of origin - villages or smaller towns. Overall, the job losses are more pronounced in the unorganized sector. It can be noted that somewhere between 40 and 45 per cent of India's exports originates in the small-scale sector, which effectively means the unorganized or informal sector. And even when an enterprise is in the organized sector, it may well have informal sector workers, i.e., workers who possess no formal contracts, since employment is often done through contractors. Initially, downsizing adversely affects those who are employed in unorganized enterprises and those who are employed in organized enterprises, but whose employment contracts are informal.

A key characteristic of informal sector employment is lack of protective labour legislation, including that on social security such as unemployment insurance, old-age pensions, medical cover, etc. Of the present work-force of around 500 million, not more than 40 million are covered by social security, whatever definition one uses. There are

estimates of more than 15 million women workers in the unorganized sector, and more than half of them are women involved in home based work for different types of industry, dominantly on a piece-rate basis. This includes *zari*, *charkha* or other handloom work; *bindi*, labels, stitching; food processing; and also potentially hazardous work involving acids and chemicals. They are therefore obviously excluded from any security of contract, and this means that any downswing is directly reflected in both declining orders or contracts and falling rates of remuneration. Very recent evidence suggests that as export-based industries such as garments face heightened competitive pressure, they pass this pressure on to home-based women workers by reducing the effective rates for piece-rate work. Thus, even nominal piece rate wages have fallen in many such activities, even as prices of necessities such as food have continued to increase.

As of now, beyond social security provided by the community or the family, workers who have lost jobs because of the growth downturn have no access to any social security. In this context, what needs to be highlighted is that most workers who have lost their jobs are migrants from other States. Inter-State migration occurs notably from Bihar, UP, West Bengal and Orissa to states such as Karnataka, Andhra Pradesh, Tamil Nadu, Maharashtra and Gujarat, and encompasses the semi-skilled and unskilled labour in the export sector. The job losers consequently change from becoming providers of remittance incomes to their households to becoming dependents of these households. Other than the obvious negative effect on remittances and consumption expenditure, the loss of export-related jobs means a return flow of migrants to their home States. Many of these migrant workers, for obvious reasons, come from the most depressed and backward regions of the country, where there is currently little potential for productive income generation. These are often also the regions of dry land agriculture, where remittance incomes play a vital role in sheer survival. Unsurprisingly, they are also the regions in which extremist Maoist activity is widely prevalent, because of the anger bred by persistent backwardness and rising inequalities. If the growth slowdown continues for a couple of years, this reverse migration might also extend to construction, trade, hotels and transport (though to date there is no evidence of this occurring). However, the only form of social security that exists so far to protect men in their own homeland is through the National Rural Employment

Guarantee Scheme (NREGS), as the more comprehensive social security scheme for unorganized sector workers has not yet got off the ground. Also, returning migrants are not always classified as rural workers— a prerequisite for NREGS - and, in addition, there can be administrative delays in issuing the required NREGS job cards.

The impact of the global economic downturn is beginning to be pervasive. However, its impact for the lower income segments of the population seems to be the largest for those employed in export-oriented sectors like diamond polishing, garments, carpets and hosiery. There have been large scale job losses and mass unemployment in many such clusters like Surat, Bangalore, Bhadoi and Tirupur. In the middle are those who are employed in the sectors which had witnessed a high growth due to derived demand — such as construction, retail trade, transport, personal services, etc. Here the demand has gone down and so have jobs but there are no mass closures or layoffs. The situation in the *roti kapda aur makaan* producing sectors has remained stable, with little job loss (Mahajan, 2009).

#### SECTION - IV

Global financial crisis appeared in the initial year of twenty first century has adversely affected the economy of India and its people, though with a lower intensity compared to many developed countries and some developing countries. The workers engaged in export sector are the sufferers. In India within the Export sector, labourers working on contract or as casual labourers are experiencing loss of income. Similarly, the workers producing for export but working in the informal sector are found to have less earning and loss of livelihood (even sometimes temporary) is expected to increase poverty which would further bring decline in income and employment in the economy. To arrest this Government intervention is extremely required. Reserve Bank of India immediately took monetary measures like reduction of CRR, SLR, repo and reverse repo rates to inject more liquidity into the economy. Similarly, Government of India adopted some fiscal measures like reduction in some indirect taxes, loan waiving of the farmers, subsidy for fertilizers and electricity to agriculture expecting that they would raise the domestic demand.

Slow down of economic growth and the adverse effects on the poor can halt the progress towards MDGs. Steps are urgently required

to check it. To reduce the vulnerability of the poor working in informal sector, the existing social security measures need to be implemented seriously, new measures may be taken. Similarly, to have the progress in health and education, liberal Government finance may be provided and problems of accountability failure should be taken care of.

## BIBLIOGRAPHY

Dua, Pami and Arunima Sinha (2007). "East Asian Crisis and Currency Pressure: The case of India"

Working Paper No. 158, Centre for Development Economics.

Kumar Rajiv et al. (2009), "Global Financial and Economic Crisis: Impact on India and Policy Response", in *Global Financial Crisis, impact on India's poor*, UNDP, India

Debroy. Bibek. "Growth Downturn and its Effects" in *Global Financial Crisis: impact on India's poor*, UNDP, India

Mahajan, Vijay, 'Impact of the Economic Downturn on Non-farm Sector Workers' in *Global Financial Crisis, impact on India's poor*, UNDP, India

Barro R, Sala-i-Martin X. *Economic Growth*, Second Ed. 2004. New Delhi, Prentice Hall of India.

Prasad, A and C. Panduranga Reddy (2009), *Global Financial Crisis and its impact on India*, *Journal Soc Sci*, 21(1).

Government of India, (2009) *Report on Effect of Economic Slowdown on Employment in India*, Ministry of Labour & Employment, LABOUR Bureau, Chandigarh, Velde, Dirk Willem te (2008), "The Global Financial Crisis and Developing Countries", Background Note, Overseas Development Institutes.

Gano, Patricia Alonso et al (2009), *Economic Survey 2008-09*, Oxford University Press, New Delhi.

Rajiv Kumar, et al, 'The Outlook of Indian Economy', ICRIER Working Paper No. 235.

Swaminathan, Madhura, 2008, 'Programmes to Protect the Hungry: Lessons from India', UNDESA Working Paper, No. 70

Morgan, Lindsay, 2009, 'The Financial Crisis and Global Health, Centre for Global Development (<http://www.cgdev.org/content/opinion/detail/14210000V>)



# **Global Financial Crisis and its impact on the Indian Economy- need for an effective and comprehensive action**

**Kartik Prasad Jena**

Lecturer (S.S.) in Economics

Bhadrak Autonomous College, Bhadrak

## **1 INTRODUCTION**

The current global financial meltdown developed into a financial crisis and affected almost all the countries during mid-2007. This global financial crisis originated in the United States of America (USA). By the end of 2008, it was observed that almost the entire world was reeling under the grips of economic recession. The present global financial crisis, which is in its third year, has been viewed by many as the worst financial crisis of the century.

## **2 CAUSES**

The current global financial crisis has not occurred all of a sudden in one throw, but has slowly developed into a crisis. The following primary structural factors have contributed to the building up of the crisis :

### **2.1 Cumulative Causes**

- i) Prevalence of large and persistent global macro-economic heterogeneity and imbalance across major economic powers;
- ii) USA's trade deficit running over two decades and reaching a peak of 6.1 per cent of its GDP in 2006;
- iii) Large-scale use of credit cards in U.S.A. and
- iv) Large current account surpluses of some of the Asian Economies.

The USA's sub-prime mortgage loans default is the immediate cause of the global economic recession. Varied and complex factors were also responsible for this global economic crisis. According to some Alan Greenspan, Bill Clinton, George Bush, the banks, the system of fair



value accounting and the credit rating agencies such as Moodys and Standard and Poor played obnoxious role in aggravating this situation. The immediate causes of crisis are explained below :

## **2.2 Immediate Causes**

### ***2.2.1 Easy loan and housing boom in the U.S.A.***

Former Chairman of the USA Federal Reserve, Alan Greenspan, followed a liberal monetary policy, and initiated reduction of interest rates to 1 per cent (lowest level in 50 years) in response to the collapse of new economy “bubble” and the then post 9/11 recession of 2001. US Federal Reserve continued it up to 2004 before increasing it to 5.25 per cent in 2006. The combination of rising propriety and low interest rates led to sharp increase in demand for housing loans. The low rate of interest encouraged excessive risk taking possible, thus giving rise to the sub-prime crisis. Because of low interest rate, money went into bonds, stocks, shares and real estate market where return is likely to be higher. Alan Greenspan admitted his mistake in being negligent of regulation and supervision in his 2008 testimony to the USA Congress.

Former President Bill Clinton of USA, instructed Banks to deviate from commercial considerations in housing loan disbursement and rewrote the rules of Fannie and Freddie. Higher risk lending practices were encouraged by government policies. Banks advanced loans of billions of dollars to the poor households without adhering to commercial rules like documentation and repaying capacity of the borrowers. The third character in the play is George Bush, who instead of changing the direction and recognizing the mistakes, followed the earlier path during his eight years of presidency. However, once interest rates began to rise and housing prices started to drop in many parts of the USA in 2006-07, refinancing became more difficult. Defaults and foreclosures became common phenomena once housing prices started falling.

### ***2.2.2 Sub-prime loan default by customers of poor repaying capacity***

Sub-prime loans refer to loans extended to borrowers with some sort of credit impairment due to missing instalment payment on debt or the lack of credit history. Sub-prime mortgages could have fixed or adjustable interest rates. The banks and mortgage-lenders who had securitised their loans by issuing mortgage backed securities, based on

underlying mortgage payments, suddenly found the value of these securities falling rapidly as defaults rose. The situation worsened, major banks and financial institutions, both in the USA and in many other countries, that had borrowed and invested hugely in such securities had to bear huge losses. Lenders had offered loans to high risk borrowers including illegal immigrants. The sub-prime mortgages amounted to \$ 35 billions in 1994, \$ 160 billions in 1999 and \$ 600 billion in 2006. Forty per cent of all sub-prime loans were generated by automated underwriting in 2007. The mortgage brokers earned profits from a home loan, but did not examine whether borrowers had ability to repay back loan.

### **2.2.3 Bad loans**

The prevalence of bad loans in Mid-West America also led to the global financial crisis. If a borrower is unable to repay a loan, then the bank has to provide for this bad loan. If a bank fails in this action, it is the duty of a bank inspector to identify this failure and set right the failure. Both the bank and bank inspector were lax. All the loans taken from the banks also told the same story, leading to global crisis.

Besides, many investment banks issued large amount of debt bonds during 2004-07 and invested the proceeds in mortgage backed securities (MBS) with the expectation that house prices would continue to rise and that households would continue to make their mortgage payments.

Borrowing at a lower interest rate and investing the proceeds at a higher interest rate is a form of financial leverage. This strategy proved profitable during housing boom, but resulted in large losses when house prices began to decline and mortgages began to default.

### **2.2.4 Speculation in residential real estate**

Speculation in residential real estate also contributed to the crisis. A record level of nearly 40 per cent of home purchases were not intended as primary residences, rather for reinvestment purposes. Speculators left the market, as market was not showing optimism. It led to decline in investment sales much faster than the primary market.

### **2.2.5 Financial deregulation**

The financial crisis was the result of both government action and inaction. Lack of proper control by the regulatory authorities in the

government contributed to the crisis. The Securities and Exchange Commission (SEC) had admitted that lack of self regulation by investment banks was another cause for the crisis. The mortgage policies of Department of Housing and Urban Development encouraged the trend towards issuing risky loans.

Other three characters in the play of global crisis are : (a) Government sponsored enterprises (GSEs) and the investment bankers in search of structural financial assets; (b) the accountant and (c) the credit rater.

### **3 IMPACT ON THE DEVELOPED COUNTRIES**

Large financial institutions of USA such as the popular housing mortgage financiers and guarantors' companies viz. the Freddie Mac and Fannie Mae; the sick insurance giant, American International Group (AIG); the oldest investment banking institution, Lehman Brothers and largest bank like the City Bank and the financial institution, Merrill Lynch reeled under the grips of this economic crisis. Lehman Brothers Holding could not sustain the market pressure and ultimately collapsed. The two mega giants AIG and Merrill Lynch were also on the brink of falling.

The other effects were collapse of share prices and freezing of credit markets with investors rushing to invest in safe instruments like bonds and gold. There was rapid increase in defaults and foreclosure activities, as easy initial terms expired, home prices failed to go up as anticipated and Adjustable Rate Mortgages (ARM) interest rates were reset higher. Foreclosures accelerated in the USA in late 2006 and triggered a global financial crisis throughout 2007 and 2008. Between August 2007 and October 2008, around 9.4 lakh USA residences completed foreclosures.

### **4 IMPACT ON THE INDIAN ECONOMY**

In a globalised world, India cannot stay insulated from the ongoing financial crisis in the developed economies despite her regulations and dominance of nationalised banks. Of course, India is not among the worst affected economies. The impact of the economic crisis in India is detailed below.

#### 4.1 Impact on the GDP growth rate

**Table-1 : Rate of growth at factor cost at 1999-2000 prices (Per cent)**

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Agriculture, forestry & fishing	10.0	0.0	5.8	4.0	4.9	1.6
Mining & quarrying	3.1	8.2	4.9	8.8	3.3	3.6
Manufacturing	6.6	8.7	9.1	11.8	8.2	2.4
Electricity, gas & water supply	4.8	7.9	5.1	5.3	3.4	
Construction	12.0	16.1	16.2	11.8	10.1	7.2
Trade, hotels & restaurants	10.1	7.7	10.3	10.4	10.1	
Transport, storage & communication	15.3	15.6	14.9	16.3	15.5	
Financing, insurance, real estate & business services	5.6	8.7	11.4	13.8	11.7	7.8
Community, social & personal services	5.4	6.8	7.1	5.7	6.8	13.1
Total GDP at factor cost	80.5	7.5	9.5	9.7	9.0	6.7

Source : Central Statistical Organization.

The global financial crisis has adversely affected the GDP growth rate in India. The deceleration of growth in 2008-09 spread across all except mining and quarrying and community, social and personal services. Both decline in exports and fall in domestic demand resulted in slowdown in manufacturing.

#### 4.2 Impact on the Financial Sector

The Impact of global financial crisis on the Indian financial sector was experienced in the capital account as evident from Table-2. Foreign capital inflow in 2008-09 was less than that in 2007-08.

**Table-2 : Trend in Capital Flows**

Component	Period	2007-08	2008-09
Foreign Direct Invt. to India	April	8.5	16.7
FIIS (net) @	April-Sept.26	15.5	-6.4
Ext.Comm.Borrowings (net)	April-June	7.0	1.6
Short Term Trade Credit (net)	April-June	1.8	2.2
Memo			
ECB Approvals	April-Aug.	13.4	8.1
Foreign Exc. Reserves (Variation)	April-Sept.26	48.5	-17.9
Foreign Exc. Reserves (end period)	Sept.26, 2008	247.8	291.8

*Note : Data on FIIS presented in this table represent inflows into the country and, thus, may differ from data relating to net investment in stock exchange by FIIS.*

### 4.3 Impact on the Capital Market/Stock Market

Indian Capital market felt the brunt of global financial meltdown in a big way. The stock market in India crashed from the high of 21000 in January-2008 to a low of 8509.54 in October-2008. The movement in equity prices in Indian Capital market was in tandem with trends in major international equity markets.

### 4.4 Negligible impact on the Indian Banking System

The Indian Banking system did not experience any impact of global recession unlike its counterparts in the rest of Asia. This is because except one bank, i.e. ICICI bank, none of the Indian Banks or the foreign banks had any direct exposure to the sub-prime markets in USA or other countries. There was a rise in fixed deposits in PSU banks and demand for gold. Investors dumped equity for FDs.

### 4.5 Impact on Foreign Trade

India's foreign trade had badly felt the blow of the global financial meltdown as it is well integrated with the global economy. For the first time in the last five years, India's export as well as import growth declined in October-2008.

### **i) Impact on Export Sector**

A slowdown in export growth also has other implications for the economy. Nearly about 50 per cent of India's exports of textiles, ready-made garments, gems and jewelry, leather goods, IT services, automobile components and so on come from the labour intensive small and medium enterprises. A sharp fall in export from these sectors has resulted in job loss or unemployment of a higher degree. The import sector like export sector has also experienced a negative growth. The trade deficit rose from US \$88.5 billion in 2007-08 to US\$119.1 billion in 2008-09.

### **ii) Impact on Employment**

The global economic recession has a major set back on employment in India leading to job cuts, lay-offs and significant upheavals on the labour markets. Total estimated employment in all the sectors went down from 16.2 million during September-2008 to 15.7 million during December-2008 resulting in job loss of about half a million. It is further seen that the employment decreased every month during this period due to fall in export orders in garments and jewellery industries.

**Table-3 : Trends in Average Employment**

Period	Average Employment (in Millions)	Percentage Change
September-2008	16.2	—
October-2008	16.0	-1.21
November-2008	15.9	-0.74
December-2008	15.7	-1.12
Average Monthly Change		-1.01

Source : Ministry of Labour & Employment, Labour Bureau, Govt. of India, January-2009.

## **5 STEPS TAKEN BY THE GOVERNMENT OF INDIA**

To save the Indian economy from the global economic recession, the government adopted fiscal and monetary measures. In its first package, the government announced a fiscal package of Rs. 35,000 crore in 2008. In the second package of 2009, the Government of India and RBI acted in tandem to provide easier credit to borrowers. The RBI cut CRR and repo rates and the central government increased the



spending powers of the states. In the same year, the government announced Rs. 30,000 crore stimulus package, the third in the row to boost demand. To be specific, the following are the major stimulus packages of the government and the Reserve Banks of India.

- 1) A refinance facility of Rs. 4000 crore was provided to the National Housing Bank.
- 2) To boost infrastructure, the Indian Infrastructure Finance Company Ltd. (IIFCL) has been authorized to raise Rs. 14,000 crore through tax free bonds.
- 3) The RBI provided Rs. 7000 crore to Small Industries Development Bank of India (SIDBI) for direct lending to employment-intensive micro and small enterprises (MSE). Excise duty on cars, steel, cement and a host of other products were reduced by 4 per cent. The ad valorem tax on cement was reduced from 12 per cent to 8 per cent.
- 4) The textile sector has been seriously affected due to declining order from the world's largest market, the United States. An allocation of Rs. 1400 crore has been made to clear the entire backlog in the Technology Up-gradation Fund (TUF) Scheme.
- 5) The government of India has provided Rs. 1450 crore to export sector and withdrawn export duty on iron ore fines. There has been a 4 per cent reduction in excise duty. The Reserve Bank of India has also extended the period of pre-shipment and post-shipment credit for export.
- 6) In addition to the above, the RBI has cut the repo rate from 6.5 per cent to 5.5 per cent and reduced Cash Reserve Ratio (CRR) from 5.5 per cent to 5 per cent in order to revive growth.
- 7) Export-Import Bank has got Rs. 5000 crore as credit from RBI to revive exports.
- 8) Public sector India Infrastructure Finance Company (IIFC) has been allowed to borrow Rs. 30,000 crore from the market by issuing tax-free bonds.
- 9) Depreciation benefit on commercial vehicles has been increased from 15 per cent to 50 per cent on purchase in order to stimulate the commercial vehicles sector.



- 10) Ceiling on Foreign Institutional Investments (FIIs) in corporate bonds has been increased to \$ 15 billion from \$ 6 billion to seek much bigger FIIs.

## 6 CONCLUSION AND POLICY SUGGESTIONS

From the above analysis it is concluded that Indian economy has experienced the brunt of the global financial meltdown resulting in the deceleration of growth in 2008-09 which has spread across all sectors except mining, quarrying, banking, social and personal services. The growth in agriculture and allied activities fell from 4.9 per cent in 2007-09 to 1.6 per cent in 2008-09. The manufacturing, electricity and construction sectors declined to 2.4 per cent, 3.4 per cent and 7.2 per cent respectively during 2008-09 from 8.2 per cent, 5.3 per cent and 10.11 per cent respectively in 2007-08. India cannot insulate itself from the adverse development in International Financial Markets as its economy is well integrated with the rest of the world due to its economic reform measures. The future growth of Indian economy depends on the emphasis of the government on inclusive growth. In the line of Keynesian prescription government intervention through fiscal as well as monetary policy we have to expand our infrastructural potentiality through proper implementation of various public works programmes.

The crisis has affected India, but its severity was not uniform across sectors. There was fall in production & trade and huge job losses in all sectors except mining, quarrying, banking, social and personal services. Government of India announced heavy bail out packages amounting to Rs.10,00,000 crore in 2009-10. The need of the hour is to strike a balance between short term compulsion and medium term sustainability. Keeping the above in view, the following policy measures have been suggested.

Some kind of regulatory mechanism at the international level should be evolved to control and regulate the functioning of international financial institutions and to control the volume, flow and mobilization of international credit.

The governments of developed countries in the west should control and regulate the financial institutions functioning within their geographical jurisdiction.

For achieving 'inclusive growth', the government of India should allocate more funds for building up of basic infrastructural facilities to better the lives of weaker and deprived sections in the society.

## REFERENCES

1. P. B. Nayak (2009) 'Anatomy of the Financial crisis : Between Keynesian and Schumpeter'— *Economic and Political Weekly* : March 28-April 3, P.158.
2. Arun Kumar (2009) 'Tackling the Current Global Economic and Financial Crisis : Beyond Demand Management'— *Economic and Political Weekly*, March 28, P.151-152.
3. Dutt Ruddar (2009) 'Global Meltdown and Impact on the Indian Economy'— *Mainstream*, April 2, 2009.
4. Government of India (2009) *Economic Survey 2008-09*.
5. *Economic and Political Weekly* (2008); September 29, November 22, Editorial (2008), "where is the Rethinking".

# **Impact of global financial crisis on Indian Economy : An expository analysis**

**Dr. Sudhakar Patra**

Reader in Economics

Ravenshaw University, Cuttack, Orissa

Id : sudhakarpatra65@gmail.com

## **1 INTRODUCTION**

A global recession is a period of global economic slowdown. According to the IMF, it is a situation when global economic growth is 3 point or less. The global nature of the current crisis has been unprecedented as it affected several advanced countries simultaneously. These countries witnessed decline in house as well as equity prices and faced difficulty in their credit markets. The current crisis is accompanied by severe credit crunches resulting in output losses and decline in consumption, investment and employment. International trade is contracting and growth of merchandise trade decelerated in 2009 (B.P.Mathur, 2009). So, global economic recession has directly affected the financial sector and indirectly the real sector of many countries.

A national recession is identified by two quarters of a decline in production, but global recession is more difficult to define. A global recession seems to occur over a cycle of 8 to 10 years. The world economy facing a major downturn after the 1930s.

The crisis in India is largely an imported one, primarily via the trade and investment routes (Subarao, 2009). The present crisis is the result of an uneven and unsustainable global growth pattern emerging since 2000. Strong consumer demand, easy credit, high rate of investment demand and strong export growth of many countries led to such unbalanced growth pattern. Increasing financial deregulation, flurry of new financial instruments, mortgage backed securities, collateral debt obligations, credit default swap encouraged massive accumulation of financial assets slowly which led to financial crisis. Failure of the regulatory system caused the crisis.

## **2. ORIGIN**

The crisis was triggered by the sub-prime housing mortgage. The mortgagor failed to repay the loan. Lehman Brothers with whom

mortgaged loans were securitised filed for bankruptcy after the Federal Reserve Bank declined its request for financial support. There was extreme instability in global stock markets with dramatic drops in market values of shares. American International Group (AIG) suffered liquidity crisis and became insolvent.

There was contraction of liquidity in global credit markets and investment banks and other financial institutions were threatened with insolvency. The stock market crash and rise in reverse balances from banks in the federal reserve system of USA created a financial panic around the world. This financial crisis percolated to other countries and also to India through financial channels. The Indian stock market suffered high instability of equity prices. The failure of large financial institutions of USA rapidly evolved into a global economic crisis resulting in a number of European bank failures and decline in stock prices. Europe's largest economy of Germany contracted by 0.5 per cent in 2008. Growing deficits of USA were financed by increasing trade surpluses by China, Japan and other countries which had accumulated large foreign exchange reserves in 2009.

Due to global financial crisis, there has been a return to Keynesianism even in the capitalist countries with the state taking an active role in stimulating economic activity and boosting demand. Marx's prediction of periodic booms and bust in capitalist economies appears to be true to the present global financial crisis.

### 3 IMPACT ON DEVELOPING COUNTRIES

The global down turn in the financial system did not affect the banking system of developing countries directly but through other channels. The international investors pooled back resources from the developing countries as a part of deleveraging process of financial institutions. It caused volatility in foreign exchange market. The growth rate of many developing countries declined against 7 per cent for the last several years due to weakening of export demand, lower commodity prices and decline in investment flow into the region. The rise in prices of foodgrains in international market caused untold sufferings in developing countries which are dependent on food imports. The tightening of credit and weaker growth cut into public revenues and investment in education, health and other social sectors declined. The global financial crisis is hitting developing countries of South Asia when

they are already reeling from the adverse effects of declining terms of trade. These economies suffer from slowdown of growth, worsening in macroeconomic balances, huge inflationary pressures, contraction in export, home remittances and domestic investment.

#### 4 IMPACT ON THE INDIAN ECONOMY

Indian economy was growing at 8 to 9 per cent before 2008 and the growth rate declined to less than 6 per cent in 2009. The stock market in India has lost 50 per cent of its value and the rupee has lost 20 per cent of its value in terms of dollar. There has been huge job losses in all the sectors of the economy, particularly in export oriented industries like textiles, diamond cutting and polishing. Even in high profile IT sector, fresh recruitment and job creation has stopped after the global crisis. The Government of India adopted several stimulus packages to maintain the tempo of development in the economy.

The Indian economy has been less hit by the crisis because its banking system has had no direct exposure to the sub prime mortgage assets of failed institutions. Due to very limited off-balance sheet activities, Indian banks continue to remain safe and healthy. Secondly, India's growth has been driven predominantly by domestic consumption and investment. External demand accounts for less than 15 per cent of our GDP.

Still then, the effects of global crisis on the country's economy has been affected by the crisis for the following reasons.

- (i) The financial integration of India with the world is very deep along with trade globalization. The ratio of total external transaction to GDP has more than doubled from 46.8 per cent in 1997-98 to 117.4 per cent in 2007-08 (D. Subarao, 2009)
- (ii) India's integration with the world economy in post-reform period has been rapid and her trade as proportion of GDP increased from 21.2 per cent in 1997-98 to 37.4 per cent in 2007-08.
- (iii) The share of investment in GDP increased by 11 per cent during 2003-08. The foreign investors were willing to take risk and provide funds at lower costs due to India's growth potential.

Country's money, credit and equity markets came under pressure due to shifting of credit demand by the Indian banks and corporates to the domestic banking sector. Global crisis adversely affected domestic

output and employment through external shocks and domestic vulnerabilities. Effects on financial sector, real sector and macro economic balances are stated below.

#### **(i) Financial Sector Effects**

The effects of global crisis on financial sector depends on macroeconomic performances, health of banking system and exposure to foreign capital markets. As a result, domestic money and credit markets in India were pressurized. India is relatively more exposed to the contagion effects of global financial markets through adverse effects on capital flows and direct foreign investment. There has been significant losses in the stock markets and reduction in the flow of foreign capital.

#### **(ii) The real sector effects**

The real sector effects of the global crisis work through decline in export, import, remittances and investment. The crisis has lowered the export prospects of India because of slowdown in demand, particularly in service sector. Export of textile and garment sectors is worst affected. Imports, especially of food and fuel, fell and remittances from OECD countries shrank substantially. Foreign direct investment and domestic investment slowed down due to risk and uncertainties.

#### **(iii) Effects on Macroeconomic balances**

The adverse terms of trade and falling commodity prices resulted in lower demand and macroeconomic imbalances. Inflation rate was high due to rising food prices. Banks have become cautious in their lending activities to avoid risk, thus causing a crisis of confidence.

### **5 POLITY MEASURES**

Both the Government of India and Reserve Bank of India responded to the crisis in close coordination and consultation. Fiscal stimulus and monetary accommodation helped face the challenges. The important policies are as follows.

- (i) The Reserve Bank of India tried to keep the domestic money and credit markets to function normally without any liquidity stress. The RBI maintained comfortable rupee liquidity position, augmented foreign exchange and aggressively continued credit delivery by reducing interest rate.



- (ii) The Government of India extended fiscal stimulus in the form of additional public spending, particularly capital expenditure, government guaranteed funds for infrastructure, reduction in indirect taxes and additional support to exporters.
- (iii) The loan waiver package for farmers and salary increases for government employees stimulated domestic demand.

## 6. CONCLUSION

Originating from the U.S.A., global financial meltdown affected different countries differently. In the developed countries, the crisis spread from the financial sector to the real sector, but in the developing countries, the transmission has been from the real sector to the financial sector. The service sector slow down in India was mainly in construction, transport, communication and trade. Exports declined in absolute terms after seven years of continuous growth, industrial production showed negative growth during 2008-09 and demand for bank credit was in downswing in spite of comfortable liquidity position. However, the adverse impact of global crisis has been less in India due to sound and well-regulated banking system of our country. The comfortable reserve position of the Indian banks aroused confidence of foreign investors. Institutional credit for agriculture remained unaffected and loan waiver policy helped the farmers. The poor and vulnerable groups were protected by extensive programmes and spending in the social sectors.

The policy makers all over the world including India are trying to find out a sustainable solution to the cement crisis and are looking for the best economic model to build a stable world economy. Fiscal stimulus from Government of India is necessary to boost domestic consumption and expansion of social sectors like, health, education and welfare. Government investment in infrastructure, acceleration of financial sector reforms and reforms in public enterprises can help address the crisis. It is high time for policy makers to act swiftly and decisively at both national and global levels to meet the challenges of the crisis.

## REFERENCES

- Claessens S., Kose M.A and Terrones M.E. (2008) *Global financial crisis; How long ? How deep ?* <http://www.voxue.org/index.php>
- Islam M.S. (2008) : *South Asia's inflation challenges, ISAS insights, No-26, Singapore, 28 March.*



Lahiri, A. (2009) : *Indian Financial Reforms : National Priorities Amidst An International Crisis. Sir Purushotamadas Thakurdas Memorial Lecture, Mumbai.*

Mathur, B.P. (2009) : *Global Economic Crisis : Lessons for India, Mainstream, Volume- XLVII, No-25.*

Nachane, D.M. (2007) : *Liberalization of the Capital Account : Perils and Possible Safeguards. Economic and Political Weekly, Vol, No. 36, Sept. 8-14. PP. 3633-3643.*

National Commission for Enterprises in the Unorganized Sector (NCEUS) (Nov, 2008) : *The Global Economic Crisis and the Informal Economy in India, Govt. of India.*

Planning Commission, Govt. of India (2008) : *Eleventh Five Year Plan. Vol-III*

Rediff.com, news (2008) : *How the global financial crisis affect India.*

Subarao, D. (2009) : *The Global Economic Crisis and Challenges for the Asian Economy in a changing World, Speech delivered at the Symposium Tokyo 18-February.*

Sung hoon Cho (2007) : *Financial Institutions and Markets, Korea's Economic, Vol-23.*

The Economist (2008) : *The Decoupling Debate, 6<sup>th</sup> March.*

United Nations (2009) : *World Economic situation and prospects, New York.*

World Bank (2008) : *Global Financial Crisis- Implications for South Asian Regions, 21<sup>st</sup> October.*



## REFERENCES

- Chatterjee S. K. (2008) *Global financial crisis: How long? How deep?* <http://www.orissa.org/india.php>
- Islam M.S. (2008) : *South Asian's economic challenges, ISAS insights, No-36, Singapore, 28 March.*

# Global Financial Crisis and Its Impact on Indian Economy

**Prasanna Kumar Mohapatra**

Lecturer in Economics

A. Mahavidyalaya, Swampatna

The issue of global financial crisis originated from U.S.A. during the last quarter of 2007. The current global financial crisis began with the US sub-prime mortgage problem. Since it is a problem of market based economy, its contagion effect spread very quickly first to Europe and then to rest of the world. This is the second economic recession in U.S.A after the Great Depression of 1929-1933.

Economic recession enunciates declining GDP growth for more than two quarters consecutively, associated with decreasing demand, decreasing production and rise in unemployment. It is a situation where consumers lose confidence in the growth process and spend less.

## CAUSES OF GLOBAL CRISIS

Several factors have contributed to the building up of the crisis. The emergence of the **US sub-prime crisis** became the immediate cause of the global economic crisis. Availability of easy loan at low interest rates led to a housing boom in the U.S. with soaring property prices, banks were happy to provide sub-prime loans to customers of doubtful repaying capacity assuming that mortgaged property could anyway be sold to recover the loan. The housing bubble burst eventually. The structured financial market spread the contagion to Europe.

## Features of sub prime loans :

- i) The borrower has poor credit history with low income and without any collateral.
- ii) The borrower and the asset do not meet the mandatory criteria for loan. So he has to pay additional interest to make up for low credit score.
- iii) Borrower's debt income ratio may exceed 35 per cent. These borrowers have a much higher default rate than prime mortgage loans.

- iv) If the sub-prime borrower defaults which is very likely to happen then the asset for which loan is taken is foreclosed.

Sub prime crisis in the U.S. housing mortgage sector has turned into global banking crisis, global financial crisis and now a global economic crisis. Losses from sub prime mortgage have created a liquidity crisis or credit crunch, which in turn have triggered a global slowdown or global financial meltdown. US trade deficit running over two decades reached a peak of 6.1 per cent of gross domestic product (GDP) in 2006. On the other hand, some of the Asian economies had large current accounts surpluses. U.S. spent more than its income while China invested much less compared to its savings rate which varied between 40 per cent - 50 per cent of its GDP. Thus U.S citizens consumed too much and saved very little.

At a fundamental level however the crisis could be ascribed to the persistence of large global imbalances which in turn were the outcome of long periods of excessively loose monetary policy in the major advanced economies during the early part of this decade. Global imbalances have been manifested through a substantial increase in the current account deficits of the U.S mirrored by the substantial surplus in Asia particularly in China and in oil exporting countries in the Middle East and Russia. These imbalances are often seen as the consequences of the relative inflexibility of the currency regimes in China and some other middle East countries. This saving investment imbalances and consequent huge cross border financial flows put great stress on the financial intermediation process. The global imbalances interacted with the flaws in instruments to generate specific feature of the crisis.

#### **GLOBAL FINANCIAL CRISIS & G.C.C.**

About 264000 people from South Asia have lost jobs in West Asia on account of the global meltdown. The impact of global crisis on the Gulf Cooperation Council (GCC) economies has been analyzed in terms of sectors affected and changes in GDP growth and employment of expatriate labourers. It found that global crisis affected the GCC economies by impacting oil prices, depressing property and equity prices, lowering investor confidence and reversing of capital flows. The phenomenal growth in employment over the past five or six years has come to a halt and about 40% of the workers have been affected. There were salary cuts, freezing of increments, and scraping of benefits and perks.

## INDIAN ECONOMY PRIOR TO THE CRISIS

India was getting considerably integrated with the global economy in the decade prior to the crisis. It was creating a congenial economic environment for development. The share of exports of goods and services in GDP increased substantially from 11.07 per cent in 1999-2000 to 22.1 per cent in 2006-07. Imports too rose from 13.6 per cent to 25.1 per cent during the same period. The share of current account transactions in GDP currently at above 45 per cent is comparable to other large countries. With a long term average GDP growth rate close to 7 per cent per annum (6.8 per cent over a 16 year period 1992-2008) India was seen to be among the fastest growing economies in the world.

## IMPACT OF GLOBAL CRISIS ON INDIAN ECONOMY

The global financial crisis is seen in Indian economy from September 2008 onwards. It was believed that the impact on Indian economy would be only marginal. The impact varied from country to country. The real sector effects on India are primarily felt through the exports channel due to the slackening of global demand for Indian products. Financial sector has also been affected. Indian banks had limited exposure to structured financial market involving sub prime loans. Only one of the larger banks, ICICI was partly affected but managed to thwart a crisis because of its strong balance sheet and timely action by the government which virtually guaranteed its deposits.

### Economic Growth

The overall impact may be judged in terms of the fall in GDP growth to 6.7 per cent in 2008-09 from 9 per cent in the previous year. It looked as if the crisis put the Indian economy back on the pre - 2003 growth trajectory. However, the whole of the fall of 2.3 percentage points should not be attributed to the global crisis. Agricultural income grew by only 1.6 per cent in 2008-09 as against 4.9 per cent in 2007-08 as given in the following figure. This sharp fall, not related to the global crisis, might have contributed to about 0.8 percentage point fall in GDP. Given the current share of agriculture in GDP, direct effect of 3.3 per cent fall in agricultural income on GDP would be 0.6 per cent point and the rest indirect.

The effect of global crisis on the Indian economy basically operated through the balance of payments channel affecting both current and capital accounts. Contraction of trade flows in turn affected the exchange rate and the stock market prices.

### Trade flows

Merchandise exports fell sharply to 3.3 per cent in 2008-09 as a result of demand contraction due to global recession. Sectors most affected in India are gems and jewelry, textiles and garments, leather products and handicrafts. Contraction in output growth was accompanied by large scale job losses in these employment intensive sectors. Imports growth too fell to 14.3 per cent in 2008-09. Though oil price rose in the first of FY 08-09 had an impact on raising the import bill, the effects were very severe from the third quarters of 08-09 onwards. On a monthly basis exports and imports growth rates became negative from October 08 and November 08 respectively and remain so till at last October 09. Service exports which maintain a sustained rapid growth of about 30 per cent for several years moderated to 16 per cent during April-December 08.

### Decline in Export of Textiles

India's textiles and clothing export to the U.S. has indicated a growth over 3.82 per cent in Indian rupee terms and a decline of 8.19 per cent in U.S. dollar terms during April-February 08-09 over the corresponding periods of previous year.

### Capital flows

Foreign Institutional Investment (FII) was increasing in India up to January 2008. As the crisis in U.S. and EU grew, the flows reduced and considerably reversed later to meet cash commitments and cover losses in their home countries. During the year 08-09 as a whole, there was net outflow of \$14 billion as against a peak inflow of \$29 billion in the previous year. This had strong impact on the stock market index which witnessed sharp fluctuations and fell sharply from about 21000 in January 2008 to about 9000 by March 2008. Stock market certainly went through turbulence and settled for some orderly behavior at low level of the index. In recent months, FIIs has returned back to India with positive inflows.

### POLICY RESPONSE

To recover from the slowdown process public expenditure should be increased directing towards expansion of the employment guarantee scheme within rural areas and extension to urban areas. NREGS should be more creative and effective in the urban areas to enable productive use of the tremendous wealth of labor resources available, especially women workers, more resources provided to state governments to

enable them to meet basic development and social expenditures and a package for agriculturists to protect them from volatile crop prices and to deal with the burden of debt.

Any further increase in fiscal deficit to GDP ratio could invite a sharp downgrading of India's credit rating and a loss of business confidence. With inflation down at less than one per cent and likely to remain below five per cent in the coming months, there is room for bringing down the repo rate further. However, the more important issue is to try and induce commercial banks to bring down lending rates as these currently remain at around 10 per cent even for their prime borrowers.

Private Finance companies like Tata Finance, Mahindra Finance, HDFC Finance, Sri Ram Finance, Magma Finance etc. should not advance loan at low rate of interest to private parties not having repaying capacity. Companies must be well satisfied regarding the immovable property or collateral securities of the debtor.

## CONCLUSION

I think Indian Economy has already been affected with the disease of global financial crisis originated from sub prime crisis spread from U.S. Still, it is far better that this lesson is learnt when growth declines from 8.5 to 5.5 per cent rather than from 8.5 to zero per cent. At present, the U.S. economy is recovering and the growth rate of U.S. and India is increasing.

## REFERENCES

- Rakshit, Mihir (2009): "India amidst the Global Crisis" *Economic and Political Weekly*, march 28.
- Reddy, Y.V. (2009a) : *India and the Global Financial Crisis : Managing Money and Financial*, Orient Blackswar.
- Reddy, Y.V. (2009b): "Global Financial Crisis and Asia" *justice konda Madhava Reddy memorial Lecture*, "The Statesman" 23.12.09
- Panda, Manoj (2010) "Impact of Economic Recession on Union and State Finances" *memorial Lecture at SU*
- Rao, Sudarsan(2010) *Impact of Economic Recession on Union and State Finances* Kumar, Rajiv (2010) "Global Financial and economic Crisis: Impact on India and policy response".
- Ghosh, Jayati (2010) "Global crisis and the Indian Economy" JNU, New Delhi. *The Industry & Mines*(Observer) July 16-31, 2009, "Decline in Export of Textiles" IMF report-2010



# **Global Financial Crisis and Its Impact on Indian Economy**

**Dr. Rajan Kumar Sahoo**

B.S. College;

Nayahat, Jajpur

## **INTRODUCTION**

The financial turmoil which started in the U. S. economic system during the year 2007 - 08 as a result of defaults of sub-prime mortgage loans has blown into different countries of the world as an unprecedented financial crisis. It has affected the international money, credit, equity and foreign exchange markets. This global financial crisis has significant adverse impact on the Indian economy

## **OBJECTIVES OF THE STUDY**

Considering the adverse situation the world faces to - day and its deteriorating consequences on the Indian economy the study was planned with the following objectives:

- To study the impact of global financial crisis on Indian Economy.
- To suggest measures to overcome the financial crisis and revive the economy.

## **BACKGROUND OF THE STUDY**

U.S. households used to save six per cent of their disposable income. But in recent years they went on borrowing and spending spree and the household savings dropped to nearly zero. Corporations and financiers also were having debts to buy houses, stocks and commodities. This created bubbles which exploded in 2008. The global situation deteriorated massively after mid-September, 2008 following the collapse of Lehman Brothers, one of the top five investment banks in the U.S. There has been a massive choking of credit since then and global crash in stock markets. The slow down that was expected in the global economy became much worse with the U. S., Europe and Japan moving in to recession.

The financial crisis originated in the U.S. transmitted to other countries through three principal channels.



- It has directly affected the financial institutions all over the world due to investments in mortgage backed securities and their derivatives, which turned toxic following large scale defaults in the U.S. housing markets.

- The financial crisis has created a liquidity problem. The U. S. firms which needed liquid resources withdraw their funds from stocks and bonds in other countries. Decline in the prices of stocks and bonds had impact on local investors who pulled back from the market. This led to choking of credit all over the world.

- The financial crisis led to recession in the U.S. This led to decline in demand of goods from other countries in the U.S. As the contagion spread and job losses rose in the advanced industrial economies, confidence was eroded further and general consumer demand in both the U.S. and other developed nations dropped as a result of which, emerging economies saw export markets contract. This has affected the exports and business confidence in developing countries.

#### **IMPACT ON INDIAN ECONOMY:**

The global crisis is the result of shift of society from need to greed and it has adverse impact on different sectors of the economy which have been described as follows.

##### **(a) Impact on trade, foreign exchange & liquidity**

Global financial crisis has indirectly affected Indian economy through capital flows, financial markets and trade (real sector). The foreign exchange reserves have declined in India and created a liquidity problem due to global crisis as well as tightening of monetary policy earlier. The exports from India would also be affected.

##### **(b) Impact on growth of GDP**

The growth rate of GDP in India is expected to decline to around seven per cent in 2008-09 as compared to nine per cent in 2007-08. The Economic Advisory Council indicated that growth could be around 7 to 7.5 per cent, in 2009-10. But other forecasts and international organizations showed that growth could be around six per cent in 2009 - 10. Low growth may affect the employment prospects. It may have an adverse impact on social sector expenditures as tax / GDP ratio may go down with lower growth.

**(c) Impact on Manufacturing Sector, Export & Employment**

The Indian manufacturing sector is affected most due to global financial crisis. The credit crisis and decline in demand have adverse impact on several industries. Flow of funds to the corporate sector has declined by nearly Rs.94,000 crore in the current financial year as well as foreign sources of funding dried up. Despite expansion in bank credit, there has been a perception of non - availability. The RBI attributes this to reduced flow of funds from non - banking sources, mainly the stock market and external commercial borrowings. The external commercial borrowing (ECB) and short term credit from abroad which met more than 20 per cent of India INC's credit needs in 2007 - 08 have contributed only 8.2 per cent of the financial needs. Increase in bank credit has not been enough to plug the gap left by other sources.

The Banks are not able to deliver credit because of two reasons. First one is that credit demand is low. Second one is that the banks are also averse to lend at a time when economic growth is definitely slackening. The chances of even existing loans, leave alone new ones, turning bad are perceived to be high. Industrial activity decelerated during April - November 2008 - 09, with the year to year expansion in Index of Industrial Production (IIP) being 3.9 per cent as against 9.2 per cent during the corresponding period of the previous year reflecting slowdown in all the constituent sectors. The slowdown in manufacturing sector was largely on account of food, textiles and metals. The IIP output growth in October was reported to be ( - ) 1.2 per cent from which it recovered slightly to a positive 2.4 per cent in November, 2008. The sectors adversely affected are exports, real estate, housing and automobiles. A survey by the Labour Ministry indicates that already five lakh jobs are lost. In the export sector most of the items, particularly gems and jewellery, textiles would be affected adversely. The slowdown in exports may have impact on two million workers.

**(d) Impact on growth of services**

The slowdown in industry would affect the growth of services. The remittances from abroad will go down including services in IT sector. The financial crisis would have impact on small and medium enterprises (SMEs). SMEs with investment less than Rs. five lakhs employ 100 million people. They contribute 31 per cent GDP and to spread over leather, coal, apparel, food processing and handicrafts. But they get only two per cent of net bank credit.

**(e) Impact on the Agricultural Sector & Food Security**

The impact of financial crisis is likely to have negative effects on agricultural sector and food security. In the last three years preceding 2008-09, the average growth in agriculture was 4.7 per cent per annum. The growth rate in 2008-09 is also three to four per cent. However, the good performance may not last, if proper steps are not taken. The slowing down of economic growth would affect demand for agricultural commodities. Prevailing uncertainty and consequent negative market expectations could further dampen demand. The falling demand may put forward downward pressure on agricultural commodity markets. Lower food prices may be good for consumers but it is bad for the producers. It reduces the incentives for producers to make the necessary investments, which would aggravate the problem of food insecurity in future. However, decline in food prices would not be sufficient to compensate the consumers from this reduction in household incomes due to recession, fall in employment and remittances from abroad.

On the supply side, while there is reduction of agricultural prices, input prices can be sticky and may result cut back in agricultural production. The financial crisis is likely to have negative impact on agricultural credit which is widely regarded as a major constraint to agriculture in developing countries. Farmers who took advantage of rising agricultural prices to invest in raising production may find themselves unable to pay off their debts because of falling output prices. As banks cut lending because of financial crisis, it would be difficult for small farmers to make new investments. The financial crisis may reduce agricultural investment at macro level.

The combination of falling agricultural prices, and reduction in agricultural investment and access to credit may have negative effect on agricultural production. It would have serious implications for food security and poverty reduction efforts may be stalled because of low employment and volatility in food prices. The negative impact on household income would affect well being of women and children.

**MEASURES TO REVIVE THE INDIAN ECONOMY**

The Government of India should be more vibrant through proactive economic policies rather than being reactive. To revive its economy from the adverse effect of global financial crisis five measures have been undertaken by the Government. The measures are as follows:

- (a) Continuation of Monetary & Fiscal Measures
- (b) Sectoral interventions in manufacturing
- (c) Improving agricultural sector
- (d) Focus on unorganized sector
- (e) Better implementation of safety nets and
- (f) Inclusive growth

All these measures have greatly helped to reduce the severity of economic crisis in India.

### CONCLUSION

The global financial crisis has significant adverse impact on the Indian Economy. Monetary and fiscal policies are important but not enough. In order to improve demand and raise livelihoods, we have to focus on agriculture and unorganized sector also. Government also has to focus on inclusive growth by bridging the divides such as social inequalities, rural -urban - regional and gender disparities.

### REFERENCES

- (1) Dev S. Mahendra (2009); *Global Financial Crisis & Indian Economy*  
Convocations Address at the Seventeenth Convocation of Dr. B. R. Ambedkar Open. University Hyderabad.
- (2) Dhillon Sharanjit Singh (2009); *Address on Global Financial Melt down - Its Impact on Indian Economy.*
- (3) Singh Karamjit (2009), *Suggestions for Global Financial Meltdown - Its Impact on Indian Economy.*
- (4) Singh Jaspal (2009), *Meaning of Global Meltdown.*

○○○

### MEASURES TO REVIVE THE INDIAN ECONOMY

The Government of India should be more vibrant through proactive economic policies rather than being reactive. To revive the economy from the adverse effect of global financial crisis five measures have been undertaken by the Government. The measures are as follows:

# Current Financial Crisis and Its Impact on Indian Economy

**Dr. R.C. Mishra**

H.O.D. Economics

K.K.S. Govt. Women's College

Balasore-756001

**K.C. Mishra**

Lecturer in Economics

M.P.C. Jr. Govt. College

Baripada - 757001

## INTRODUCTION

Since globalization is pervasive, most of the countries of the world are wedded to the philosophy of market economy. Despite a number of advantages, cyclical fluctuation is one of the shortcomings in such an economy. The free play of market forces results in the movement of the economy in a cyclical path such as, prosperity, peak, recession, depression, trough and recovery. Economic recession that takes the form of severe depression had already started in the whole world. The origin of the current recession can be traced back to the mid 2007 in America, but it became severe in 2008. The crisis which was originated in America was transmitted to the rest of the countries of the world. As a result, there was world wide recession. However, the paper makes a humble attempt to focus on the following points.

- i. To explain the causes of recession
- ii. To study the impact of recession on the Indian economy

## GENESIS OF CRISIS

There are several causes of the current recession.

First, undue rise in the prices of petrol and diesel is one of the causes of the current financial crisis. In view of the high rate of growth in most of the countries of the world along with America during the last decade, the demand for petrol and diesel went up significantly. Due to the outbreak of Iraq war, there was a decline in the production of petrol and diesel. It is worthwhile to mention that American economy consumes 24 per cent of the total crude oil of the world. In view of the increasing necessity of petrol and diesel in America and declining production of the same, market prices of crude oil went up sharply in America. As a result, Americans started using small cars instead of big cars requiring more petrol/diesel. Those who used to attend their offices from a distant

place by car disposed of their houses and settled near their office so as to attend to their office either on foot or by public bus. Thus, all big companies in America and Japan producing cars using more petrol/ diesel closed down the production of such motor cars and thereby thousands of workers engaged in these industries were thrown out of employment. Moreover, the prices of petroleum products like plastic, chemical products & cosmetic products went up unduly and thus the demand for these products and its production were adversely affected. Added to it, cost of transportation increased due to the rise in price of petrol/ diesel which adversely affected most of the necessary goods, normal trade and balance of payments of the American economy. Thus, financial crisis began in the American economy.

Secondly, the crisis was intensified to assume its severe form by the indiscriminate supply of home loan in America. Despite rapid growth in American economy during the nineties and the current decade, two numbers of recession of smaller magnitude occurred in America for a short while. With a view to providing more incentives to capital investment and economic growth, the Federal Reserve Bank of America resorted to cheap money policy and reduced the rate of interest continuously. It is worth mentioning that huge capital was invested in the construction of houses. It is a fact that Americans during their marriage and nurturing their children prefer to have a house of their own. Ordinarily they do not depend on their past savings for buying a house for them. Instead, they borrow from banks to purchase/ construct a house. Normally, they borrow 80 per cent to 90 per cent of the cost of house as loans from banks for 20 to 30 years. The house so purchased or constructed is kept mortgaged with the bank until the loan amount is repaid. The borrowers have to decide whether they will borrow loan either at fixed rate of interest or floating rate of interest.

In view of the high rate of economic growth, the interest for constructing a house among the Americans increased and the banks supplied loans to them. The local commercial banks rather than the national level banks supplied this type of loan. But it is a matter of regret that the local commercial banks supplied loans not only to the people with permanent job and regular income but also to the people who do not have regular income and permanent job during this period. Indeed these banks supplied 100 per cent cost of house as loans to the people for constructing their houses. This type of loan is termed as sub-prime loan. Thus, sub-prime loan refers to a



loan given to a borrower who does not qualify for a regular home loan due to a poor credit record, low income and no job security. Such home loans were almost supplied at floating rate of interest.

Since the Federal Reserve Bank had been reducing the rate of interest continuously, it was expected that the interest rate would be reduced still further in subsequent years. Thus, there was an unexpected rise in the demand for house. Further, there was a growing interest among the Americans for speculative buying and selling of houses. One of the reasons for increasing the speculative buying and selling of houses was that in 1997 capital gains tax was repealed. Many people constructed houses through bank loans and after some years sold the houses at higher prices. So these houses became highly valuable and profitable for the borrowers. The sale proceeds were used to purchase various articles for maintaining their standard of living rather than to repay the loan with interest in right time. Hence it had become an important trend of the financial (mis)management of the American family.

Truly speaking, the personal savings of American families were zero or negative, since the expenditure was met by loan to some extent. In this circumstance, the Federal Reserve Bank, in order to control the symptoms of inflation, started increasing the rate of interest in 2007. As a result, it had become a Herculean task for the lower income group to deposit the premium at a higher rate. Finding no other solution, they surrendered their mortgaged houses to the banks and resided in small rented houses. These houses were placed at the disposal of banks. On the other hand, banks were not able to sell these houses to get back the amount because they could not find buyers of houses in the market economic system when there was a continuous increase in the rate of interest. Consequently, when houses were lying at the disposal of banks, their values started declining.

This had resulted in a number of adverse effects. The Americans started managing their families according to the principle of 'cut your coat according to your cloth'. Each one felt the need of saving and consumption expenditure was reduced. Consequently, the demand for goods required for the construction of houses was reduced at first and thus, various shops dealing in those goods were closed leading to problem of unemployment. In view of the growing unemployment, the demand for other consumer goods was reduced and thus a number of shops selling those goods and a number of firms producing those goods were closed, leading to the aggravation of the problem of unemployment.



in America. On the other hand, banks which resorted to such sub-prime loan fell in a critical situation. They borrowed huge loan from the big banks against the mortgaged papers as securities to deal with their transactions. The big banks considered these mortgaged papers very much risky. The small banks were asked to repay the loans but were not in a position to repay the same. The non-repayment of loan by the small banks had created dangerous situation for the big banks and other big financial institutions like Lehman Brothers. The economic analysts of big banks had packaged these loans to really complicated financial instruments called CDOs (Collateralised Debt Obligation) which were said to be derivatives. Different financial institutions of Europe, Japan, Korea, China and America had invested huge amount of money in these derivatives. The ICICI bank of India had invested in these derivatives.

The economic analysts thought that the risks of derivatives would be distributed thinly and widely and the rating agencies rated most of these derivatives AAA, i.e. the securities are highly secured. But their expectation and calculation did not come true when small banks were unable to repay the loan. They might be good statisticians rather than good market analysts. As a result, the whole derivative market collapsed and thereafter one after another big bank and financial institution closed, vanished or merged with other banks which are not related to sub-prime loans.

Another cause of the crisis was the prevalence of credit card system in America. We know that an ordinary American is a regular customer of credit card system. They can spend huge money in shops and hotels even if they do not have funds in their accounts. This is an indication of negative saving culture of the American society. There was a fear that the consumers were unable to deposit the fund drawn from the banks. Thus, the quantum of NPA (Non-Performing Assets) was increased tremendously and resulted in the collapse of the banking system. So, merger and bankruptcy among banks were seen and accordingly the Government of America provided huge financial help to the banks. What is true for American financial institutions is also true for those of Europe and Asia. Some of them collapsed and some of them are waiting for consequences.

### **IMPACT OF THE CRISIS ON THE INDIAN ECONOMY**

The current financial crisis which originated in America got transmitted to the rest of the countries of the world and thereby crisis

became worldwide. The current financial crisis has influenced a number of countries including India.

First, when several financial institutions have started collapsing in America, many Americans and financial institutions who had invested in our bonds and securities started selling and withdrawing the funds to meet the crisis. The value of bonds, shares and stocks in Indian stock exchange market reduced sharply. As a result, the income and property of various people dealing with stock exchange market were reduced drastically. Due to this, the consumption expenditure of this section of people was reduced to some extent.

Secondly, the greatest impact is the reduction of export in India. Due to the reduction of demand for various consumers goods in America and other countries, the export of these goods was reduced in India. Cotton industry in India was worst affected. As a result, various garment units and cotton industries were closed leading to unemployment of thousands of people in India. Due to the reduction of demand for iron and steel in America, China, Japan and Korea, the demand for iron-ore and its value have been reduced in India. Unemployment in mines has been increasing in India. Likewise the export of other minerals has been adversely affected in India.

Thirdly, there has been a decline in software maintenance services industry and Business Processing Office (BPO) in India due to the downward movement of American industries. They are highly lucrative industries. In view of the financial crisis some of the employees in these fields lost their jobs; the salary of the employees was reduced and fresh appointment opportunity was reduced in India.

Fourthly, motor car industries and motor car equipments construction industries which exported substantial products reduced their production in India in view of the crisis. Consequently, employment opportunity in these fields was reduced; shift of work was reduced in India. The demand for two wheelers and motor cars have been reduced leading to the aggravation of the problem of unemployment in India.

Fifthly, limited employment opportunity and growing unemployment in India reduced the demand for houses. A number of Indian and foreign companies which opened their offices in big cities and towns changed their decisions. As a result, the value of landed property and house in towns got reduced drastically.

Sixthly, the demand for various goods and services has been reduced due to the reduction in income of the employees. The production and employment in the field of iron and steel, cement and transportation have been reduced. A number of small steel industry and sponge iron industry in India have already been closed and large scale industries have already reduced their production in India.

On the contrary, while the financial institution of America, Europe, Korea, Japan and China have been worst affected due to the financial crisis, the financial institutions in India remained less affected. These institutions are regulated by Government. Moreover our financial institutions had not invested in the American derivatives. Further, the Reserve Bank of India as compared to the Federal Reserve Bank of America is more influential and active in regulating the activities of our banks and other financial institutions. Loans sanctioned to small and medium industries have mostly increased NPA. Due to the shortage of cash and fear of non-repayment, banks reduced the lending of term loan and working capital in India. At the same time, since the export sector and private sector in India have relatively less contributions in the aggregate economic activity, the rate of growth was reduced slightly. Unlike America, the rate of growth was not negative in India.

### SUGGESTIONS AND CONCLUSIONS

Since the current financial crisis has affected the Indian economy, it is imperative to take necessary steps to bring recovery to the economy. However, the RBI has already taken steps in reducing the C.R.R. and the repo rate and reverse repo rate to effect recovery to the economy so that the rate of growth will be enhanced. But there is no guarantee that such a step would encourage the borrowers to increase investments. This measure would help create more credit, but it is desirable to have large demand for loan for the recovery of economic activities in India. This will not be possible automatically.

During the period of depression, producers and investors cannot think of the possibility of the recovery of demand and in such uncertainties, banks do not prefer to invest their funds. It is, therefore, necessary that like other countries, the Government of India should come up for spending more to expand various economic activities which would obviously enhance the demand in the economy. It is suggested that Government of India should increase expenditure in the field of infrastructure such as national highway, rural roads, railway line, port,

hospitals etc. Such expenditure cannot be financed out of tax revenue, since revenue from taxation is at a low level during recession and additional tax will adversely affect demand. Therefore, it is suggested to meet the expenditure through market borrowing and borrowing from RBI.

A pertinent question arises whether this kind of market borrowing at a huge scale will be inflationary. Initially, it does not look like so. Because industries are operating below their optimum capacities and small and medium industries would come up quickly by which supply of product will be maintained adequately. Therefore, the appropriate role of the govt is to see that the funds sanctioned for the projects are utilized in those projects without pilferage.

To sum up, while the recovery of the Indian economy depends, to some extent, on the recovery of the world recession, our domestic capital formation will help us to recover from recession to a great extent. In the present context, what is required is that there should be massive investment in infrastructure without pilferage. If we fail in this direction, it will create havoc in the economy. It is seen that the current year's budget 2009-10 of the present government proposes massive investment on infrastructure so as to initiate the recovery of the Indian economy. Therefore, we are hopeful that the Indian economy will recover from the recession within a short span of time.

#### REFERENCES :

1. Barua Abheek (2008), 'Anatomy of a Crisis'; *The Times of India*, October, 12.
2. Chandrasekhar, C.P. and Jayati Ghose (2008), 'India and the Global Financial Crisis', *Business Line*, October, 15.
3. Dua, Ajay (2008); *The impact of Slowdown on India*, *The Times of India*, November, 21.
4. *Economic Survey 2008-09*, Govt. of India.
5. Kumar, N. Kiran (2009), 'Economic Recession in US and its impact on India', *Southern Economist*, Vol 48, No.1, pp 31-32.
6. Madhavi, N.R. and S.T. Gadade (2009); 'The impact of financial crisis on India', *Southern Economist*, Vol 48, No.1, pp 27-29.
7. Satyanarayan, G. and Y. Keshav Reddy (2009); 'Global Financial Crisis and Indian Economy'; *Southern Economist*, Vol 48, No.6, pp 31-32.
8. Selvaraj, Anitha (2009); 'Global Financial Crisis : Its impact on Indian Economy'; *Southern Economist*, Vol 48, No.2, pp 5-8.

# **A critical analysis of financial market crisis and its impact on developing countries**

**Dr. Gitanjali Panda**

Lecturer in Economics  
Dept. of Social Science  
F.M. University

**Mr. Ashok Mishra**

Asst. Prof. IMIS,  
Bhubaneswar

## **1 INTRODUCTION**

The global financial crisis 2007-2009 has been designated as one of the worst financial crisis since the one related to the great depression of the 1930s. It contributed to the failure of key businesses, decline in consumer wealth estimated at trillions of U.S. dollars, substantial financial commitments by governments and a significant decline in economic activity.

The impact of the global financial crisis on the growth of developing countries was severe due to fundamental problems associated with a neoliberal agenda imposed virtually on the entire world. The global crisis affected various developing countries through different channels and some countries faced greater risk. The grand failure of many financial institutions & in the US, the rising oil prices and food shortages have broken the back of neoliberal triumphalism. It is high time to address alternatives to this greed driven and excess, unregulated system.

## **2 ORIGIN OF THE CRISIS**

The origin of the crisis can be traced way back in 1996, four years before the technology/internet imploded bubble. Then Chairman of Federal Reserve Board, Alan Greenspan warned in a public speech about "irrational exuberance" and the role it played in "escalated asset values". In 1997 the Asian financial crisis was followed a year later by the Russian debt default and the ruble devaluation. This series of events led to the collapse of the giant hedge fund Long Term Capital Management (LTCM) in late 1998. "Greenspan Put" became popular trading strategy involving purchase of protective put options as an insurance policy (or hedge) against unexpected market risk. If the market or index falls in value, put options soar in price so that some- if

not all— of losses are offset with option profits. These put options are issued only by the Fed and are made available to a select club of Wall Street insiders.

Bubble builds on as in 1998, when the Fed rode to Wall Street's rescue by cutting rates swiftly. During the LTCM crisis, Greenspan was essentially giving big banks and brokerage firms a free put option as insurance against their own "irrational speculative exuberance". The Fed jacked up rates in 1999 and early 2000, which finally burst the Internet bubble. Once again, the Greenspan Fed issued put options in massive quantities from 2001 to 2003 to bail out Wall Street. The banks and brokers out did themselves in creativity with asset backed securities and derivatives.

### **3 CREDIT BOOM, MORTGAGE INDUSTRY & HOUSING BUBBLE**

Free and easy money flowed into the housing bubble this time. In 2001, following a massive stock market and capital spending bubble, Federal Reserve Chairman Alan Greenspan worried that the U.S. faced a severe recession. He began cutting interest rates down to 1 per cent and kept them at that level until 2004, raising them slowly only by 0.25 per cent at a time thereafter. From 2000 to 2005, the median sales price of existing homes increased year over year and speculative investment in properties skyrocketed. "Flipping" or buying a house, doing some quick renovation or repair, then selling it for a handsome profit, became sort of a national pastime.

With interest rates so low, the financial services industry sensed a lot of money could be made and went all in on real estate, seemingly unaware that low interest rates were masking large risks. Meanwhile, Americans had been anticipating a nasty downturn after the bubble burst. But, they soon realized that money lost in the stock market was more than offset by rising home prices. So, Americans continued to spend freely. As Americans spent freely, the U.S. went further into debt with the rest of the world. Foreigners used their dollar IOUs from these debts to start their own bubbles too.

There appears to be widespread agreement that periods of rapid credit growth tended to be accompanied by loosening lending standards. Due to fierce competition in the unregulated financial markets, banking and other financial institutions led to unsustainable levels of lending for



the sake of short-term gains. The class and racial inequality embedded in American capitalism is closely linked with the rise in sub-prime mortgages. The financing of big multinational corporate business has been moving in the direction of less reliance on banks and more on complex financial instruments such as bonds and derivatives. This forced the banks to a greater reliance on home mortgage lending to expand their businesses. Faced with the unbridled competition in this saturated mortgage market, the bank started resorting to aggressive lending to financially secure poor and, most often black and migrant households. These households could not meet their repayment obligations once the initial fixed low interest rate period was over and they were faced with the subsequent high variable interest rate, repossessions (called foreclosures in USA) followed leading to tightening of credit availability.

#### **4 SECURITIZATION, SUB PRIME CRISIS AND CREDIT CRUNCH**

Speculative capital also played its role in aggravating the financial crisis. The subprime crisis came about in large part because of financial instruments such as securitization where banks would pool their various loans into saleable assets, thus off-loading risky loans onto others. (For banks, millions can be made in money-earning loans, but they are tied up for decades. So they were turned into securities. The security buyer gets regular payments from all those mortgages; the banker off loads the risk. Securitization was seen as perhaps the greatest financial innovation in the 20th century. Securitizations allowed banks to remove risks from the balance sheet and to avoid onerous capital requirements. It turned the banks into underwriters where banks originate the loans and sell them off.

The process of securitization took off in a disproportionate shape, fuelling off the sub-prime crisis through these phases.

- Banks borrowed even more money to lend out so that they could create more securitization. Some banks didn't need to rely on savers as much then, as long as they could borrow from other banks and sell those loans on as securities; bad loans would be the problem of whoever bought the securities.
- Some investment banks like Lehman Brothers got into mortgages, buying them in order to securitize them and then sell them on.



- Some banks loaned even more to have an excuse to securitize those loans.
- Running out of who to loan to, banks turned to the poor; the subprime, the riskier loans. Rising house prices led lenders to think it wasn't too risky; bad loans meant repossessing high-valued property. Sub-prime and "self-certified" loans (sometimes dubbed "liar's loans") became popular, especially in the US.
- Some banks even started to buy securities from others.
- Collateralized Debt Obligations, or CDOs, (even more complex forms of securitization) spread the risk but were very complicated and often hid the bad loans. While things were good, noone wanted bad news.

Shadow banking activities which were conducted off the bank's balance sheet were highly unregulated, Banks establish hedge funds, private equity funds, venture funds through equity investing and/or lending. Speculative capital played its role in aggravating financial crisis because there can not be higher return without higher risks and risks were underestimated.

##### **5 ANATOMY OF THE STORM : THE PHASES OF THE CRISIS**

- Things started to unravel in 2006 those that could least afford to purchase homes— so called subprime borrowers— started to default in the U.S., prices having run well out of their range of affordability. This led to the rising USA sub-prime mortgage arrears.
- The large mortgage arrears led to the losses and downgrades on related asset backed securities (ABS) and other structured instruments.
- People lost confidence in the value of mortgage-backed and other asset-backed securities.
- Risks flew back to bank's balance sheet.
- Banks sensed high risk in credit markets.
- Money markets got tightened as liquidity is hoarded. Companies with excellent credit ratings found themselves unable to get a loan. Even some banks found themselves unable to borrow money from other banks !

The sub-prime mortgage crisis that manifested itself in the credit crunch crisis in America had its fallouts in Europe too, due to the close integration of financial institutions in Europe and America.

## **6 IMPACT OF FINANCIAL CRISIS ON DEVELOPING COUNTRIES**

For the developing world the rise in food prices as well as the knock-on effects from the financial instability and uncertainty in industrialized nations had a compounding effect. High fuel costs, soaring commodity prices together with fears of global recession created worry among many developing country analysts. The current financial crisis affected developing countries in two possible ways.

First, there occurred financial contagion and spill overs for stock markets in emerging economies. The Russian stock market had to stop trading twice; the India stock market dropped by 8 per cent in one day at the same time as stock markets in the USA and Brazil plunged. Stock markets across the world— developed and developing— have all dropped substantially since May 2008. We have seen share prices tumbling between 12 and 19 per cent in the USA, UK and Japan in just one week, while the MSCI emerging market index falling by 23 per cent.

Second, the economic downturn in developed countries had significant impact on developing countries. The channels of impact on developing countries include :

- Trade and trade prices have been impacted Growth in China has increased imports and pushed up the demand for copper, oil and other natural resources, which have led to greater exports and higher prices, including from African countries. Eventually, growth in China and India has slowed down, having adverse effects on other poorer countries.
- Remittances to developing countries have declined. There will be fewer economic migrants coming to developed countries when they are in a recession and there will be fewer remittances and also probably lower volumes of remittances per migrant.
- Foreign direct investment (FDI) and equity investment have come under pressure. While 2007 was a record year for FDI to developing countries, equity finance is under pressure and corporate and project finance is already weakening.

- Commercial lending Banks under pressure in developed countries have had-been able to lend as much as they had done in the past. Investors are, increasingly, factoring in the risk of some emerging market countries defaulting on their debt, following the financial collapse of Iceland. This had limited investment in such countries as Argentina, Iceland, Pakistan and Ukraine.
- Aid budgets are under pressure because of debt problems and weak fiscal positions, e.g. in the UK and other European countries and in the USA. While the promises of increased aid at the Gleneagles Summit in 2005 were already off track just three years later, aid budgets are now likely to be under increased pressure.
- Other official flows have been affected too Capital adequacy ratios of development finance institutions are under pressure. However, these have been relatively high recently, so there is scope for taking on more risks.

Each of these channels needs to be monitored, as changes in these variables have direct consequences for growth and development. Those countries that have done well by participating in the global economy may also lose out most, depending on policy responses, and this is not the time to reject globalisation but to better understand how to regulate and manage the globalisation processes for the benefit of developing countries. The impact on developing countries will vary. It will depend on the response in developed countries to the financial crisis and the slowdown, and the economic characteristics and policy responses, in developing countries.

Which countries are at risk and how ?

The list of channels above suggests that the following types of countries are most likely to be at risk (this is a selection of indicators) :

- Countries with significant exports to crisis affected countries such as the USA and EU countries (either directly or indirectly). Mexico is a good example.
- Countries exporting products whose prices are affected or products with high income elasticities. Zambia would eventually be hit by lower copper prices, and the tourism sector in Caribbean and African countries will be hit.

- Countries dependent on remittances. With fewer bonuses, Indian workers in the city of London, for example, will have less to remit. There will be fewer migrants coming onto the UK and other developed countries, where attitudes might harden and job opportunities become more scarce.
- Countries heavily dependent on FDI, portfolio and DFI finance to address their current account problems (e.g. South Africa cannot afford to reduce its interest rate, and it has already missed some important FDI deals).
- Countries with sophisticated stock markets and banking sectors with weakly regulated markets for securities.
- Countries with high current account deficit with pressures on exchange rates and inflation rates. South Africa cannot afford to reduce interest rates as it needs to attract investment to address its current account deficit. India has seen a devaluation as well as high inflation. Import values in other countries have already weakened the current account.
- Countries with high government deficits. For example, India has a weak fiscal position which means that they cannot put schemes in place.
- Countries dependent on aid.

While the effects will vary from country to country, the economic impacts could include :

- Weaker export revenues;
- Further pressures on current accounts and balance of payment;
- Lower investment and growth rates;
- Lost employment.

There could also be social effects :

- Lower growth translating into higher poverty;
- More crime, weaker health systems and even more difficulties in meeting the Millennium Development Goals.

## CONCLUSION

The financial crisis resulting out of unregulated financial market structure which needed a high level of state intervention is a stark

admission of the failure of ideology of deregulation of markets, which has been the cornerstone of the neoliberal economic doctrine. It is time to address alternatives to this greed driven, unregulated and excess-motivated system. We should avoid mispricing the regulatory system. The developing countries should take conservative approach while exposing themselves to the risks of international financial markets. Banks should go for better risk modeling through proper estimation of risks and by improving credit rating models of probability of default and loss given default. Developing countries will also need to manage the implications of the current economic slowdown— after a period of strong and continued growth in developing countries, which has promoted interest in structural factors of growth, international macro economic management will now move up the policy agenda. Developing countries need to understand the social outcomes and provide appropriate social protection schemes.

## REFERENCES

1. Giovanni Dell' Ariccia, Deniz Igan and Luc Laevn, (2008), "The relationship between the recent boom and the current delinquencies in subprime mortgages", IMF & CEPR Discussion paper DP 6683
2. Dirk Willem Velde, (2008) "The global financial crisis and developing countries which countries are at risk and what can be done?" Overseas Background note
3. Singh, Pritam, "Contemporary Global capitalism : Multi-pronged crises" (2008) *Economic and Political Weekly*
4. Reddy, Y.V. (2009), *India and the Global Financial crisis. Managing money and finance*, Orient Black Swan.
5. Stiglitz, Joseph E. (2008), "Capital Market Liberalisation, Globalisation, and the IMF", in *Capital Market Liberalisation and Development, The initiative for Policy Dialogue Series*, Joseph E. Stiglitz and Jose Antonio Ocampo (eds), New York : Oxford University Press.



# Global Financial Crisis and Its Impact on Indian Economy

Ritanjali Jena

Research Scholar,

North Orissa University

## I. INTRODUCTION

The financial crisis was erupted in a comprehensive manner on Wall Street; there was premature triumph among Indian policy-makers and media persons. It has been argued that India would be relatively immune to this crisis, because of the "strong fundamentals" of the economy and the supposedly well-regulated banking system. These effects have been most marked among those developing countries where the foreign ownership of banks has been already well advanced, and US-style financial sectors with the merging of banking and investment functions have been created. The recent crash in the Sensex was not simply an indicator of the impact of international contagion. There have been warning signals and signs of fragility in Indian finance for some time now and these are likely to be compounded by trends in the real economy

## II. GENESIS OF THE MELT DOWN

It is not yet clear whether we stand at the start of a long financial crisis or one that will pass relatively quickly, like most other post-World War II recessions. The full extent will only become obvious in the years to come. But if we want to avoid future deep financial meltdowns of this or even greater magnitude, we must address the root causes.

Profligate lending all by itself would not likely have produced the financial crisis. It took a toxic connection with excessive land-use regulation. In some metropolitan markets, land use restrictions, such as urban growth boundaries, building moratoria and large areas made off limits to development propelled house prices to unprecedented levels leading to severely higher mortgage exposures. On the other hand, where land regulation was not so severe, in the traditionally regulated markets, such as in Texas, Georgia and much of the US Midwest and South there were only modest increases in relative house prices. If the increase in mortgage exposures around the country had been on the order of



those sustained in traditionally regulated markets, the financial losses would have been far less. Here is a primer on the process

1. **The International Financial Crisis started with Losses in the US Housing Market :** There is general agreement that the US housing bubble was the proximate cause for the most severe financial crisis (in the US) since the Great Depression. This crisis has spread to other parts of the world if for no other reason than the huge size of the American economy.
2. **Profligate Lending Led to Losses:** Profligate lending, a macro-economic factor, occurred throughout all markets in the United States. The greater availability of mortgage funding predictably led to greater demand for housing, as people who could not have previously qualified for credit, received loans ('subprime' borrowers) and others qualified for loans far larger than they could have secured in the past ('prime' borrowers). When overstretched, subprime and prime borrowers were unable to make their mortgage payments. The delinquency and foreclosure rates could not be absorbed by the lenders (and those which held or bought the "toxic" paper). This undermined the mortgage market leading to the failures of firms like Bear Stearns and Lehman Brothers and the virtual failures of Fannie Mae and Freddie Mac. In this era of interconnected markets, this unprecedented reversal reverberated around the world.
3. **Excessive Land Use Regulation Exacerbated Losses:** Profligate lending increased the demand for housing. This demand, however, produced far different results in different metropolitan areas, depending in large part upon the micro-economic factor of land use regulation. In some metropolitan markets, land use restrictions propelled prices and led to severely higher mortgage exposures. On the other hand, where land regulation was not so severe, in the traditionally regulated markets, there were only modest increases in relative house prices. If the increase in mortgage exposures around the country had been on the order of those sustained in traditionally regulated markets, the financial losses would have been far less. This "two-Americas" nature of the housing bubble was noted by Nobel Laureate Paul Krugman more than three years ago. Krugman noted that the US housing bubble was concentrated in areas

with stronger land use regulation. Indeed, the housing bubble is by no means pervasive. Krugman and others have identified the single identifiable difference. The bubble - the largest relative housing price increases - occurred in metropolitan markets that have strong restrictions on land use (called 'smart growth,' 'urban consolidation,' or 'compact city' policy). Metropolitan markets that have the more liberal and traditional land use regulation experienced little relative increase in housing prices. Unlike the more strongly regulated markets, the traditionally regulated markets permitted a normal supply response to the higher market demand created by the profligate lending. This disparate price performance is evidence of a well established principle of economies in operation-that shortages and rationing lead to higher prices.

Among the 50 metropolitan areas with more than 1,000,000 population, 25 have significant land use restrictions and 25 are more liberally regulated. The markets with liberal land use regulation were generally able to absorb from the excess of profligate lending at historic price norms (Median Multiple, or median house price divided by median household income, of 3.0 or less), while those with restrictive land use regulation were not.

Moreover, the demand was greater in the more liberal markets, not the restrictive markets. Since 2000, population growth has been at least four times as high in the traditional metropolitan markets as in the more regulated markets. The ultimate examples are liberally regulated Atlanta, Dallas-Fort Worth and Houston, the fastest growing metropolitan areas in the developed world with more than 5,000,000 population, where prices have remained within historic norms. Indeed, the more restrictive markets have seen a huge outflow of residents to the markets with traditional land use regulation.

4. **Toxic Mortgages are Concentrated Where there is Excessive Land Use Regulation:** The overwhelming share of the excess increase in US house prices and mortgage exposures relative to incomes has occurred in the restrictive land use markets. Our analysis of Federal Reserve and US Bureau of the Census data shows that these over-regulated markets accounted for upwards of 80 per cent of "overhang" of an estimated \$5.3 billion in overinflated mortgages.

**5. Without Smart Growth, World Financial Losses Would Have Been Far Less:** If supply markets had not been constrained by excessive land use regulation, the financial crisis would have been far less severe. Instead of a more than \$5 trillion housing bubble, a more likely scenario would have been at most a \$0.5 trillion housing bubble. Mortgage losses would have been at least that much less, something now defunct investors and the market probably could have handled.

While the current financial crisis would not have occurred without the profligate lending that became pervasive in the United States, land use rationing policies of smart growth clearly intensified the problem and turned what may have been a relatively minor downturn into a global financial meltdown.

### III. IMPACT OF GLOBAL MELT DOWN

So far the global financial crisis has had three major impacts on the Indian economy (i) Economic Downturn, (ii) Exposure of banks and (iii) Domestic policy.

#### Economic Downturn

After a long spell of growth, the Indian economy was experiencing a downturn. Industrial growth has been faltering, inflation remains at double-digit levels, the current account deficit is widening, foreign exchange reserves are depleting and the rupee is depreciating. The last two features can also be directly related to the current international crisis. The most immediate effect of that crisis on India has been an outflow of foreign institutional investment from the equity market. Foreign institutional investors, who need to retrench assets in order to cover losses in their home countries and were seeking havens of safety in an uncertain environment, have become major sellers in Indian markets.

In 2007-08, net FII inflows into India amounted to \$20.3 billion. As compared with this, they pulled out \$11.1 billion during the first nine-and-a-half months of calendar year 2008, of which \$8.3 billion occurred over the first six-and-a-half months of financial year 2008-09 (April 1 to October 16). This has had two effects in the stock market and in the currency market.

Given the importance of FII investment in driving Indian stock markets and the fact that cumulative investments by FIIs stood at \$66.5

billion at the beginning of the calendar year 2008, the pullout triggered a collapse in stock prices. As a result, the Sensex fell from its closing peak of 20,873 on January 8, 2008, to less than 10,000 by October 17, 2008.

In addition, this withdrawal by the FIIs led to a sharp depreciation of the rupee. Between January 1 and October 16, 2008, the RBI reference rate for the rupee fell by nearly 25 per cent, even relative to a weak currency like the dollar from Rs.39.20 to Rs.48.86. This was despite the sale of dollars by the RBI, which was reflected in a decline of \$25.8 billion in its foreign currency assets between the end of March 2008 and October 3, 2008.

It could be argued that the \$275 billion the RBI still has in its kitty is adequate to stall and reverse any further depreciation if needed. But given the sudden exit by the FIIs, the RBI is clearly not keen to deplete its reserves too fast and risk a foreign exchange crisis. The result has been the observed sharp depreciation of the rupee. While this depreciation may be good for India's exports that are adversely affected by the slowdown in global markets, it is not so good for those who have accumulated foreign exchange payment commitments. Nor does it assist the Government's effort to rein in inflation.

### **Exposure of Banks**

A second route through which the global financial crisis could affect India is through the exposure of Indian banks or banks operating in India to the impaired assets resulting from the sub-prime crisis. Unfortunately, there were no clear estimates of the extent of that exposure giving room for rumour in determining market trends. Thus, ICICI Bank was found to be the victim of a run for a short period because of rumours that sub-prime exposure had badly damaged its balance sheet, although these rumours have been strongly denied by the bank.

So far the RBI has claimed that the exposure of Indian banks to assets impaired by the financial crisis was small. According to reports, the RBI had estimated that as a result of exposure to collateralized debt obligations and credit default swaps, the combined mark-to-market (MTM) losses of Indian banks at the end of July was around \$450 million

Given the aggressive strategies adopted by the private sector banks, the MTM losses incurred by public sector banks were estimated at \$90 million, while that for private banks was around \$360 million. As yet

these losses are on paper, but the RBI believes that even if they are to be provided for, these banks are well capitalized and can easily take the hit.

Such assurances have neither reduced fears of those exposed to these banks or to investors holding shares in these banks. These fears were compounded by those of the minority in metropolitan areas dealing with foreign banks that have expanded their presence in India, whose global exposure to toxic assets must be substantial.

A third indirect fallout of the global crisis and its ripples in India is in the form of the losses sustained by non-bank financial institutions (especially mutual funds) and corporate, as a result of their exposure to domestic stock and currency markets. Such losses were expected to be large, as signalled by the decision of the RBI to allow banks to provide loans to mutual funds against certificates of deposit (CDs) or buy-back their own CDs before maturity. These losses are bound to render some institutions fragile, with implications that would become clear only in the coming months.

A fourth effect is that, in this uncertain environment, banks and financial institutions concerned about their balance sheets, have been cutting back on credit, especially the huge volume of housing, automobile and retail credit provided to individuals. According to RBI figures, the rate of growth of auto loans fell from close to 30 per cent over the year ending June 30, 2008, to as low as 1.2 per cent. Loans to finance consumer durable purchases fell from around Rs.6,000 crore in June 2007 to a little over Rs.4,000 crore up to June 2008. Direct housing loans, which had increased by 25 per cent during 2006-07, decelerated to 11 per cent growth in 2007-08 and 12 per cent over the year ending June 2008.

It is only in an area like credit-card receivables, where banks are unable to control the growth of credit that expansion was, at 43 per cent, quite high over the year ending June 2008, even though it was lower than the 50 per cent mark recorded over the previous year. It is known that credit-financed housing investment and credit-financed consumption have been important drivers of growth in recent years and underpin the 9 per cent growth trajectory India has been experiencing.

The reticence of lenders to increase their exposure in markets to which they are already overexposed and the fears of increasing payment

commitments in an uncertain economic environment on the part of potential borrowers are bound to curtail debt-financed consumption and investment. This could slow growth significantly.

Finally, the recession generated by the financial crisis in the advanced economies as a group and the US in particular, will adversely affect India's exports, especially its exports of software and IT-enabled services, more than 60 per cent of which are directed to the US. International banks and financial institutions in the US and EU are important sources of demand for such services and the difficulties they face will result in some curtailment of their demand. Further, the nationalization of many of these banks is likely to increase the pressure to reduce outsourcing in order to keep jobs in the developed countries. And the slowing of growth outside of the financial sector too will have implications for both merchandise and services exports. The net result would be a smaller export stimulus and a widening trade deficit.

### **Domestic Policy**

While these trends are still in process, their effects were already being felt. They were not the only causes for the downturn the economy was experiencing, but they were found to be important contributory factors. Yet, this does not justify the argument that India's difficulties are all imported. They have been induced by domestic policy as well.

The extent of imported difficulties would have been far less if the Government had not increased the vulnerability of the country to external shocks by drastically opening up the real and financial sectors. It is disconcerting, therefore, that when faced with this crisis the Government is not rethinking its own liberalization strategy, despite the backlash against neo-liberalism worldwide.

By deciding to relax conditions that apply to FII investments in the vain hope of attracting them back and by focusing on pumping liquidity into the system rather than using public expenditure and investment to stall a recession, it is indicating that it hopes that more of what created the problem would help solve it.

### **Impact on IT Industry of India**

Ever since McKinsey and AT Kearney introduced India as a value based destination for services, global corporations have invested in setting up their back offices and home grown companies have risen to



service these requirements. The Indian Big 3 of outsourcing (TCS Infosys and Wipro) have been rated as being equal to or direct competitors of the Global Big 3 (IBM, HP and Accenture). TCS' takeover of Citibank's BPO e-Serve and Wipro's takeover of Citigroup's IT arm CITOS is a harbinger of things to come. However, in recent times the sheen of the outsourcing industry has come under a cloud as a result of the Satyam scandal. But the financial crisis being a reality, momentary caution in the wake of the scandal will give way to business pragmatism.

For Indian companies to seize the opportunity that is being offered on a silver platter, they have to look beyond mere off-shoring or near-shoring. The key will be to create a reasonable presence in the buyer's market which will not only enable them to capitalize on proximity to the client but will also allow them to create local employment, earn incentives from the national, state and local governments, market their services for government contracts and most of all, shed the 'India only' tag to become true global services players.

Indian companies need to expand their areas of expertise either through organic or inorganic means after identifying underlying synergies to drive their business strategies. Most importantly, they have to explore possibilities for strategic arrangements with local players who have strong niches. Indian companies need to adopt a consulting oriented client acquisition approach so that they will be able to adequately manage expectation gaps in the contract life cycle.

Indian companies will have to identify new trends in the outsourcing space and become pioneers as opposed to becoming adopters of patented processes and technologies. This will have to be driven by the company's long term strategy and will have to focus on value co-creation with their clients through the management of their business processes as an approach to building process and technology IP.

Finally, Indian companies need to adopt new technologies and practice an innovation based delivery process which enables their clients to realize substantial savings while at the same time retaining a competitive advantage in their respective market.

#### IV. CONCLUSION

The Indian economy is globalized rapidly during the past few years. The growth of financial integration has been even more rapid. Three

different channels of the impact of the global financial crisis on India can be identified: i) The financial channel, i.e., the growing integration of India's financial markets with global financial markets; ii) The growing trade links between India and the rest of the world indicate that exports would decline quite sharply, and; iii) A final avenue is the confidence channel. The tightened global liquidity situation following from the failure of Lehman Brothers in September 2008 increased the risk-aversion of several banks and other lending institutions. There is a slowdown in India's growth performance— but not a collapse. The short-run outlook for the Indian economy is unclear. Real GDP growth and major sectors have shown strong signs of slipping. Both the stimulus packages announced by the government and the RBI have had their desired effect.

Assuming that the global economy starts picking up in 2009-10, of which there are some signs, and provided developed countries do not resort to widespread protectionism, an assumption that may be proved wrong, the Indian economy should be in a good position to register a strong comeback. Indian outsourcing companies have a definite opportunity before them to become leaders in the segment. To achieve this, companies are going to identify new markets and service areas which will enable them to scale up both their geographical presence as well as revenues. The key to achieving preferred vendor status is going to rest upon their ability to create technology and process IPs through collaboration and co-creation with their clients. Finally, to fully enable themselves to compete with companies like IBM and Accenture, Indian companies will have to manage an image makeover which will enable them to transition into global companies headquartered in India. If they are able to achieve these objectives within the next 3-5 years by taking advantage of the current economic conditions, an Indian IT company(s) might become the inheritor to the mantle that is currently being alternated between IBM and HP.

#### IV. CONCLUSION

## Economic meltdown and Hotel industry in India

**Kshitish Kumar Khuntia** **Dr. Jnana Ranjan Mohanty**

Dept. of Economics,

Dept. of Economics,

CIT, Jatani, Khurda

DRIEMS, Tangi, Cuttack

Global economic meltdown has affected directly or indirectly all developed and developing economy. Indian hotel industry which contributes a sizable amount to the national income of the country has been hit hard by the ongoing global economic slowdown. Entering the current downcycle on the back of an exceptional year (2007-08), most Indian hotel companies, especially those with stronger capital structures, had appeared well prepared for the lean phase ahead. However, the downturn has proved unique, both in its rapidity and pervasiveness. While in general the global hotel industry has suffered owing to the meltdown, the Indian hotels industry has had to cope with significant contraction because of events like the 26/11 terrorist attacks and the spread of the H1N1 virus, which only added to the impact of the downturn. Being a cash-rich business, hotels normally exhibit high profitability and are able to maintain a comfortable liquidity position during an industry up-cycle. However, in a downcycle as volumes contract, the capital-intensive nature of the business with its high fixed operating costs weighs heavily on profitability. The hotel industry is normally among the first to be affected by an economic slowdown as travel is one of the main cost-heads to fall under the corporate axe during a downturn. Moreover, the industry is also among the slowest to recover because of the relatively discretionary nature of travel spending. The global hotels industry has experienced RevPAR (Revenue Per Room) growth for periods of five to eight years followed by one to two years of decline in RevPAR. Globally, demand has rarely kept declining for sustained periods. The long-term fundamentals of the hotels industry are interplay between hotel demand and supply, with the global economic scenario as the backdrop.

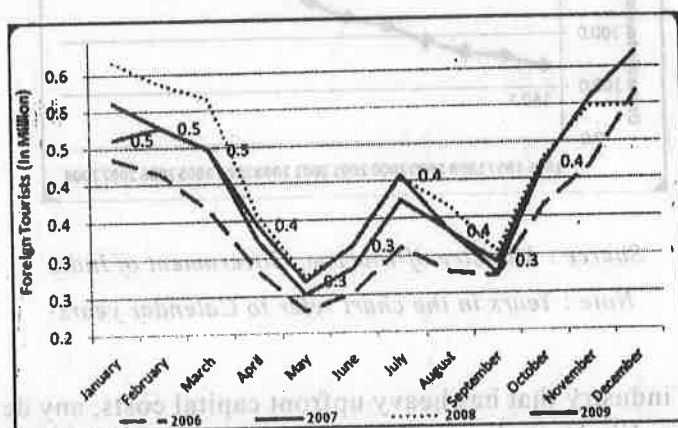
While the positive trend of the previous few years was maintained in the first half (H1) of 2008-09, the domestic hotels industry went into a downward spiral in H2, 2008-09. For the whole of 2008-09 however, the industry was able to sustain its average room rates (ARRs) albeit at the cost of occupancy, which fell by over 10 per cent. In the first quarter Q1 of 2009-10, there was again a marked drop in ARRAs as well as occupancies, which had a significant impact on the industry's Revenue per Room. Continuing into the lean season, Q2, 2009-10 has also been a weak quarter for the industry. Attempts to shore up occupancies have had the effect of lowering ARRAs further over the Q1, 2009-10 levels in some markets, although RevPAR has shown a marginal q-o-q increase. However, with the start of the annual season in Q3, 2009-10, some revival is expected in the industry, especially with demand increasing from domestic businesses and leisure travellers. Besides, the decline in foreign tourist arrivals (FTAs) also appears to have moderated (going by the October 2009 data) while advance bookings for banquet facilities are showing signs of pick-up. Overall, the past four quarters (H2, 2008-09 to H1, 2009-10) have seen significant erosion in the industry's profitability and cash flow constraints have been universal. The impact of this downcycle has been greater on smaller companies (with a limited portfolio and high geographical concentration) and for those with weaker capital structures and large expansion plans. While a number of companies have deferred capital expenditure, those with projects in the construction phase have had to continue investing till launch. Additionally, despite adverse market conditions, several companies saw opportunity in the low valuations to invest in new assets, which in certain cases brought further strain onto their capital structures.

Following more than a decade of increasing domestic tourist visitors and three years of continued increase in FTAs (Foreign Tourist Arrivals), foreign tourist volumes contracted sharply in calendar 2009. In H2, 2008-09, there was a sharp deterioration in the profitability, cash flows, and the capital structure of the Indian hotels industry. Further, Q1 of The current fiscal (2009- 10) again saw industry-wide RevPAR contractions.

Current travel statistics remain weak, with domestic airline passenger traffic and FTAs in India falling by 2.7 per cent and 7.9 per cent respectively, in the period from January 2009 to September 2009 over the corresponding previous year. However, the decline appears to

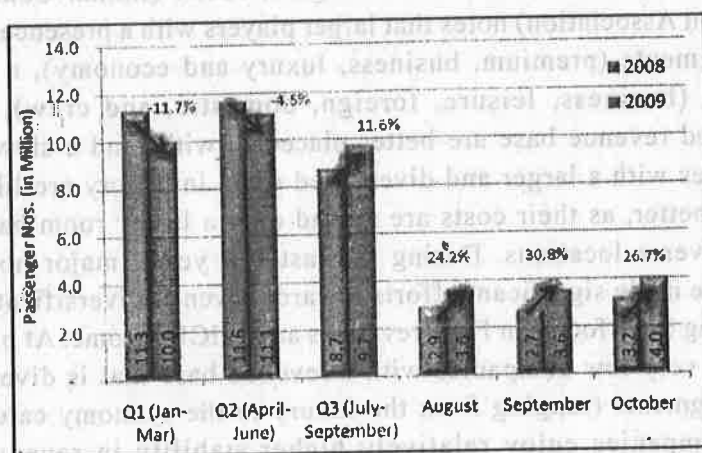
have moderated somewhat, with the y-o-y monthly decline in FTAs at 1.1 per cent in October 2009 versus 4.2 per cent in September 2009. Domestic air traffic volumes have exhibited a positive growth over the past three months.

**Figure 2 : FTA in India over the past four years**

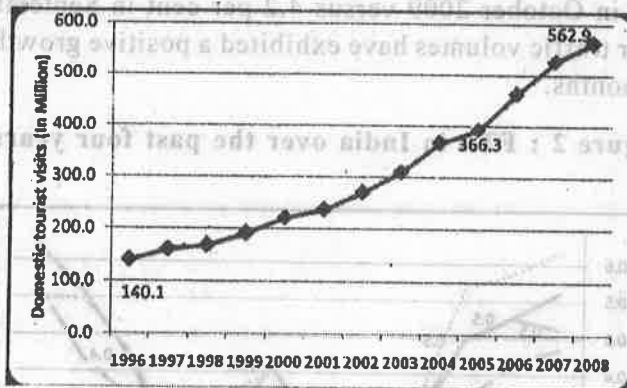


Source : Ministry of Tourism, Government of India

**Figure 3 : Passangers carried by domestic airlines**



Source : Ministry of Civil Aviation, Government of India



Source : Ministry of Tourism, Government of India

Note : Years in the chart refer to Calendar years

In an industry that has heavy upfront capital costs, any decline in RevPAR is likely to have an exponentially negative impact on profitability. Under conditions of controlled costs, any increase in RevPAR should at minimum match inflation, for sustained profitability.

In the current scenario of reduced demand and shrinking traffic, accentuated by high price-sensitivity, it is critical for the industry to manage heavy fixed costs. In this regard, ICRA (Indian Council of Restaurant Association) notes that larger players with a presence across price segments (premium, business, luxury and economy), a mixed clientele (business, leisure, foreign, domestic, and crew), and a diversified revenue base are better placed to withstand a slowdown. Companies with a larger and diversified room inventory are likely to perform better, as their costs are spread over a larger room base and across diverse locations. During the last few years, major hotels in India have made significant efforts towards revenue diversification by sharpening their focus on F&B revenues and MICE income. At present, there are very few companies with a revenue base that is diversified across segments (ranging from the luxury to the economy category). These companies enjoy relatively higher stability in revenue and profitability. While the overall RevPAR trends in all the hotel segments move in tandem, volatility in the lower price segments is lower. Budget and economy hotels are more resilient to impact of cyclicalities, as their



dependence on foreign tourists is low and as they also benefit from down-trending traffic. Smaller hotel companies, with a portfolio of one to three properties, are exposed to the risk of high concentration on a single market, which further increases their vulnerability to cyclical trends. With low brand visibility and limited funding flexibility, these companies are particularly vulnerable to an industry down-cycle. On the other hand, companies with comfortable cash accruals and sound capital structures are better equipped to withstand a down-cycle.

Overall, considering the present market conditions, ICRA expects 2009-10 to remain challenging for the Indian hotels industry. Although H2, 2009-10 is likely to post an improvement over the corresponding previous, partly because of the low base effect (H2, 2008-09 had been weak), increase in ARR in the current season (H2, 2009-10 is the annual peak season for the industry) are likely to be muted as hotels attempt to revive occupancies. Further, as part of the proposed supply comes on-stream in various markets over the next year, the revival in the industry is likely to be subdued. The narrowing of the demand-supply gap would also prevent industry wide ARRs from shooting up as had happened in 2007-08. However, over the longer run this is likely to bring in a greater alignment between tariffs and the value provided.

Despite the current trends in the industry, ICRA continues to have a positive view on the long-term fundamentals of the Indian hotels industry.

The long-term performance of the Indian hotels industry is linked to macroeconomic factors related to the general health of the economy and to micro market-specific, supply-demand gaps, ICRA expects demand in the long term to be driven by increasing travel volumes (low-cost airlines play an important role in boosting domestic travel); globalisation of trade and increase in tourist travel (India and Malaysia are set to emerge as key tourist destinations); and rising affluence and improving life-styles of the travelling population (which drive demand for branded rooms and quality F&B). Notwithstanding the long-term favourable outlook, the Indian hotels industry would remain exposed to exogenous shocks like terrorist attacks or health concerns, as evident from the aftermath of the 26/11 attack in India. Another point of concern is the lack of services and supporting infrastructure in India that would warrant the high prices Indian deluxe hotels currently command. These high prices, which are often comparable with those of premium

international hotels, have led to the diversion of a significant number of MICE and leisure travellers to neighbouring value-for-money destinations like Thailand and Malaysia.

While the current global crisis is significantly impacting the economy and the demand for hotel rooms, the vast gap between the demand for and the supply of rooms in India persists. As against the hotel industry in developed markets which appears to have reached a point of saturation as far as demand and supply is concerned, the Indian hotels industry continues to evolve. The country currently has an estimated inventory of 125,000 branded rooms, which is well short of the requirement of almost twice the number in the next five years. In the short-to-medium term, the Indian hotels industry is likely to face several challenges ranging from the aftermath of this current down-cycle to more inherent problems like availability of low priced credit, government clearances, a plethora of taxes and economically viable land to build inventory. In the longer term, the growth potential is significant as evident from the continued global interest in the Indian hospitality industry. The industry has announced a pipeline inventory of over 90,000 new rooms (across categories) to be launched in the next five years, a significant number of which is coming from international hotel majors.



The long-term performance of the Indian hotels industry is linked to macroeconomic factors related to the general health of the economy and to micro market-specific supply-demand gaps. ICRA expects demand in the long term to be driven by increasing travel volumes (low-cost airlines play an important role in boosting domestic travel); globalisation of trade and increase in tourist travel (India and Malaysia are set to emerge as key tourist destinations); and rising affluence and improving life-styles of the travelling population (which drive demand for branded rooms and quality F&B). Notwithstanding the long-term favourable outlook, the Indian hotels industry would remain exposed to exogenous shocks like terrorist attacks or health concerns, as evident from the aftermath of the 2011 attack in India. Another point of concern is the lack of services and supporting infrastructure in India that would warrant the high prices Indian deluxe hotels currently command. These high prices, which are often comparable with those of premium

## **Global Meltdown and Its Impact on Indian Economy**

**Dr. B. Eswar Rao Patnaik**

Reader in Economics,

S.B.R. Govt. Women's College,

Berhampur

**Mr. Simanchal Mishra**

Lecturer in Economics,

Kesinga Mahavidyalaya,

Kesinga

**Dr. Sudhansu Sekhar Nayak**

Lecturer in Commerce,

R.N. College, Dura,

Berhampur

### **ABSTRACT**

The global economic crisis has affected Indian economy less harshly than world economies, thanks to effective management of the economy. As credit flow dried up, there was closure of business and industrial houses, loss of jobs and deferring of investment plans. The global meltdown has hit hard the I.T. sector and scaled down the country's exports of textiles, carpets, leather, gems and jewelleryes and our export market in U.S. has shrunk.

### **Indian Cultivators :**

In the wake of financial liberalization, there has been slowdown in the flow of bank credit, particularly of commercial banks to priority sector. Bank credit flow to agriculture fell from 22.3 per cent in 2007-08 to 17.3 per cent in 2008-09 (Economic Survey, 2008-09). The agrarian crisis is related to decline in the access of peasant farmers to institutional credit. In the liberalized world, peasant producers of the country had to face volatility of crop prices and volatile global environment. The impact of volatile crop prices has created compulsions on farmers to change the cropping pattern and buy new varieties of seeds supplied by MNCs. The policy initiative of the government that has reduced credit availability to farmers has created problems for cultivators in finding working capital for new seeds and other inputs. It has rendered farming a less viable enterprise.

### Employment Situation :

A survey of 402 exporting units by Department of Commerce has estimated job losses to the tune of 109,513 between August 2008 to June 2009. Wage rates declined for daily wage earners and migrant workers. Employment squeeze in organized sector get transmitted to unorganized sector. The National Commission for Enterprises in the unorganized sector showed that global meltdown has produced severe repercussions on unorganized poor in sectors like construction, handloom textiles, apparel, leather products, gems and jewellery, oil mills, carpets, handicrafts and marine products, and other labour intensive activities.

### Policy Options :

The government should adopt cheap money policy to inject more credit to develop infrastructure, real estate, corporate sector and small scale sector. There is need for providing micro credit for marginal and small farmers to invest in agriculture. Investment may be made in projects which have short gestation periods and have positive impact on output, employment and income. Till date, dependence of sizeable population on agriculture persists and industrialization process should receive focused attention, considering backward and forward linkages of industrialization. Gains in growth rate of the economy are driven by performance of the service sector. Informal sector, which holds the key for massive employment of the economy should receive more credit from banks.

○○○

# Global Financial Crisis and Its Impact on the Indian Economy

G. Dash

Dept. of Economics

Kendrapara Autonomous College

## ABSTRACT

The ongoing global financial crisis is characterized by contraction in liquidity in global credit markets and banking system. It was triggered by the failure of mortgage companies, investment firms and Govt. sponsored enterprisers which had invested heavily in sub prime mortgages. The crisis had its roots in the closing years of the 20th century, but has become more apparent in 2007-08.

The strict regulation and clear cut policy adopted by the R.B.I. have insulated the banks in India from the travails of their western counterparts. Our banks are well capitalized with a low level of Non Performing Assets (NPAs). The RBI has initiated a series of steps to ease the liquidity problem. It has cut reserve ratio to 5.5 per cent and the repo rate at which the central bank pumps liquidity into the system to 7.5 per cent. It has also reduced the SLR to 24 per cent down from 25 per cent earlier. Banking system has been considerably less affected by the crisis.

The global employment report of the ILO for January 2009 gives a very dismal picture of employment projects an expansion in world unemployment. Even through separate figures are not presented for India, on the basis of the relative distribution of the work force in South Asia, one could estimate job losses in India to be between 1.3 million and 6 million over this period from 2007 to 2009.

In 2008-09, the merchandise exports recorded a growth rate of 3.4 percent. Export growth was robust till August 2008, but became

low in September and negative from October 2008 to March 2009. The rupee depreciated by 21.2 per cent against US dollar during 2008-09.

The highest recorded fall in the history of sensex since 1968 occurred in 2008. The market remained bearish in spite of intermittent corrections in the stock market, due to the rising domestic inflation, rising oil prices, volatility in International Financial Markets and negative portfolio investment flows. But, the stock prices went on declining since September, 2008.

India's export have declined from \$14.8 billion to \$12.8 billion during October 2007 to October 2008 i.e. a fall of 13.5 per cent. There is 60 per cent trade deficit in 2008 compared to 2007 due to reduction in exports. Fall in exports is due to the recessionary trends in the developed markets. Indian financial services registered a robust growth of 45.7 per cent and software services went up at 26 per cent. However, business services grew at a lower rate of 3.9 per cent.

#### **Conclusion :**

It is considered to be the severest crisis of the century. It originated first in USA, spread to Europe and slowly swept the whole world including Asia. Government should continue the monetary and fiscal stimulus packages to recover from the morass of global recession.

ooo

The global employment report of the ILO for January 2009 gives a very dismal picture of employment prospects an expansion in world unemployment. Even though separate figures are not presented for India, on the basis of the relative distribution of the work force in South Asia, one could estimate job losses in India to be between 1-3 million and 6 million over this period from 2007 to 2009.

In 2008-09, the merchandise exports recorded a growth rate of 3.4 percent. Export growth was robust till August 2008, but became



## **Global Financial Crisis And Its Impact On Indian Economy**

**Sk. Kalimulaha**

Lecturer in Economics

Sudarsan Mahavidyalaya

42 Mouza, Cuttack

### **ABSTRACT**

The global financial crisis of 2008-09 emerged in September, 2008 with the failure of several major US based financial firms and spread around the globe. The main factors behind this crisis are relaxed monetary policy, sub-prime lending and higher leverage. The crisis has its impact on the Indian economy in terms of decelerated GDP growth, slow growth in industrial production and service sector, growing unemployment etc. Due to the stimulation packages implemented by the government of India, the economy is returning to its path of high growth. The credit market is working normally and there is no shortage of liquidity in the economy. The index of industrial production is showing signs of revival and the stock market is in order. To further the recovery and expedite growth, there is need for higher public investment in infrastructure, social sector, agriculture and rural development; continuing incentives for boosting private investment; and developing BPO and IT markets.

○○○

## Global Slowdown and Indian Agriculture

Dr. Kabita Kumari Sahu

Lecturer in Economics

North Orissa University, Baripada

Dr. Kabita Kumari Sahu  
Lecturer in Economics  
North Orissa University, Baripada

### ABSTRACT

### ABSTRACT

Global financial crisis which started in the third quarter of 2007 has transmitted to the Indian economy through the financial, trade and real sector channels. Indian agriculture was affected due to this global crisis. Agricultural growth rate is declining after global recession. India has proved to be a conservative player in agricultural trade. Agri-exports has been adversely affected after the global slowdown. Gross capital formation in agriculture as percentage of gross domestic product from agriculture remains very low. The Indian farmers should be organised through a federation of self help groups with greater involvement of government, banks, civil society and other stake holders to mitigate the adverse effects of global financial crisis.

signs of revival and the stock market is showing signs of recovery. In order to further the recovery and economic growth, there is need for higher public investment in infrastructure, social sector, agriculture and rural development. Continuing incentives for boosting private investment and developing BPO and IT markets.

○○○

**ECONOMICS OF SLUMS  
IN  
ORISSA**

ECONOMICS OF SLUMS  
IN  
ORISSA

# **Working of Public Distribution System in Slums of Orissa— A Case study of Pattapola Area in Cuttack City**

**Dr. Jnana Ranjan Mohanty**

Asst..Prof, Dept. of H.S.S.

DRIEMS, Cuttack.

Ensuring basic essentials of life to the citizens has been in the agenda of all developing countries as they are suffering from the problems like high degree of income inequality, wide spread poverty and problem of malnutrition along with price rise. Therefore, Public Distribution System (PDS) has been recognized as a permanent feature of the Indian economy for the supply and distribution of essential commodities at reasonable prices to the needy people.

The origin of Public Distribution System in India could be traced back to the Second World War. Based on the guideline of "Food Grains Policy Committee", Madras Government introduced a scheme of rice distribution in the year 1943. Since then PDS is continuing as a permanent feature in the national policy. With an objective to make it more effective Government of India has been making several modifications since its inception. In the year 1992 Revamped Public Distribution System (RPDS) was introduced to provide essential items to the people living in tribal, arid, and hilly remote areas. In the next phase of evolution, Targeted Public Distribution System (TPDS) was introduced in the year 1997 where dual pricing system was adopted. Antodaya Anna Yojana was started in the year 2000 to provide food security to the poorest of the poor families and Annapurna Yojana was also introduced in the same year to provide basic essentials to the senior citizens who are eligible for old age pension but are not getting the same.

Through its targeted approach PDS is supposed to be a covering umbrella for the households living below poverty line, because a small increase in price of foodgrains is taking them to the level of starvation. In India, a sizable population (27.5 per cent) is found in poorer section of the society and of about 558 lakh of households in urban areas 82

lakhs are living in urban slums. Even if Public Distribution System is operating in India since last six decades, still it is a matter of debate because PDS is found to be far away from the poorer section of the society in general and urban slums in particular.

In Orissa, 15 number of towns have reported slums which provide shelter to 1,31,677 number of households consisting of 6,2,999 population who are also covered under the national food security network of Public Distribution System. In tune with the changes taking place in PDS at the national level, beneficiary households of slums in Orissa are supposed to get its benefit. But different study reports show that PDS are pro-rich, pro-urban and supply made through the fair price shops is inadequate. Again it is found that a sizable urban population is living in slums who are not able to avail of the services of PDS. Even if they are geographically closer to the urban inhabitants, they are far away from getting the benefits of PDS, and continue to suffer from the problems like poverty, malnutrition, starvation and unequal income distribution, and are prone to the problems created by price fluctuations.

Realizing the poor standard of living of slum households, their income-consumption pattern and share of consumption expenditure to their income, along with the importance of PDS to the slum dwellers in Orissa, the present study is planned with the following objectives :

- \* To study the quantities of off-take of different commodities from fair price shops (FPS) and their adequacy among beneficiary households in slum area.
- \* To workout the cost of obtaining different commodities from FPS along with their components in slum area.
- \* To suggest measures to improve the working of PDS in slums.

#### **Data and Methodology**

Both primary and secondary data are collected for the present study and a multistage random sampling is used. At first stage, slums of Cuttack city were selected. Of all the slums of Cuttack city, Patapola Slum was selected at random. Having selected the Pattapola slum, the total number of FPS operating in the area are listed. From among the FPSs operating in the Pattapola slum, 50% of them are selected for the study. In the next stage all beneficiary households of sample FPSs were listed and classified in to four categories– Above Poverty Line (APL),



Below Poverty Line (BPL), Antodoya (AAY) and Annapurna (ANN) households. Ten per cent of beneficiary households from each category were selected for the study. Accordingly 18, 42, 31 and 10 beneficiary households were selected from APL, BPL, AAY and ANN categories respectively. Thus, in aggregate 101 beneficiary households were selected for the purpose.

The official records of FPSs and ration cards of beneficiary households were taken into account to collect information regarding the working of PDS. A structured pre-tested schedule was developed for the study to collect information from the beneficiary households. Items such as kerosene, rice and sugar which were distributed through PDS during the study period were taken into consideration.

During the study period an APL beneficiary household was entitled to receive 3 Ltrs of Kerosene per month at an issue price of Rs. 9.60/- per Ltr. Each BPL beneficiary household receives 3 Ltrs of Kerosene at Rs 9.60/- per Ltr, 25 Kg. of rice at Rs 2/- per Kg. and 2 Kgs of sugar at Rs. 13.40 per Kg. in a month. Similarly an Antodoya beneficiary household receives 3 Ltrs of Kerosene at Rs. 9.60/- per Ltr, 35 Kgs or rice at the rate of Rs. 2.00/- per Kg. and 2 Kgs of sugar at Rs. 13.40 per Kg. in a month. And an Annapurna beneficiary household receives 3 Ltrs of kerosene at Rs. 9.60/- per Ltr and 10 Kgs of rice free per month.

#### **Average monthly requirement, allotment and off-take of Kerosene, Rice and Sugar by beneficiary households from FPS**

In this part of the study a comparison is being made among average monthly requirement, allotment and off-take of different commodities by beneficiary households from FPS. Quantities of commodities supplied through FPS vary according to the categories of beneficiaries. For calculating the quantities of different commodities allotted we have taken the data from official records of Civil Supply Department. For finding out the quantities of different items received by the beneficiary households, the entries made in the ration card of the beneficiary are used. So far as monthly requirement of different items by beneficiary households is concerned, it is calculated from the data collected from the study area. Data relating to average monthly requirement, allotment and off-take of different items from FPS by different categories of beneficiary households are presented in Table 1.

It is revealed from the table that the average monthly requirement of Kerosene of APL, BPL, Antodaya and Annapurna beneficiary households in the study area is found to be 5.24 Ltrs, 6.86 Ltrs, 0.01 Ltrs and 4.04 Ltrs respectively, whereas the allotment of Kerosene to each beneficiary household is 3 Ltrs per month. Thus, it is found that PDS allotment of Kerosene covers only 57.25, 43.73, 49.92 and 74.25 per cent of the monthly requirement of APL, BPL, Antodaya and Annapurna beneficiary households. So far as the off-take of Kerosene from FPS by beneficiary households is concerned, it is revealed that APL, BPL, Antodaya and Annapurna beneficiary households receive 2.01 Ltrs, 1.91 Ltrs, 1.98 Ltrs and 1.9 Ltrs respectively which constitute per cent only 67, 63.66, 66 and 63.34 per cent of their allotment in their respective categories. But off-take of kerosene by beneficiary households in relation to their requirement is found to be 38.35, 27.84, 32.94 and 47.03 per cent in case of APL, BPL, Antodaya and Annapurna respectively.

Monthly requirement of rice by BPL, Antodaya, Annapurna beneficiary household is found to be 108 Kgs, 112 Kgs and 18 Kgs respectively, whereas the allotment to the respective beneficiary household is 25 Kgs, 35 Kgs and 10 Kgs. And actual off-takes by beneficiary households are 19.3 Kgs, 28.88 Kgs and 8.27 Kgs respectively. Thus, it is found that the allotment of rice covers only 23.14, 31.25 and 55.56 per cent of the rice requirement of BPL, Antodaya, Annapurna beneficiary households respectively. But off-take of rice from fair price shop by BPL, Antodaya and Annapurna beneficiary household is found to be 77.02, 82.51 and 82.7 per cent of the allotment indicating that off-take of rice from FPS, satisfies only 17.87, 25.78 and 45.95 per cent of the requirement of BPL, Antodaya, Annapurna beneficiary households respectively.

With regard to sugar supplied by FPS, it is revealed from the table that BPL households requires 5.31 Kgs and Antodaya household requires 5.27 Kgs of sugar per month whereas the allotment is only 2 kgs per month. Thus allotment of sugar through PDS covers only 33.66% of requirement of BPL household and 38.24% of Antodaya household. But off-take of sugar by BPL and Antodaya beneficiary household from FPS is found to be 19.5 and 20.5 per cent respectively suggesting that off-take of sugar from FPS satisfies only 7.34 per cent of the requirement of BPL household and 7.83 per cent of Antodaya household.

TABLE-1

**Average monthly requirement, allotment & off-take of different items by beneficiary households**

Item	Beneficiary Household	Requirement (ltrs/kgs)	Allotment (ltrs/kgs)	Off-take (ltrs/kgs)	Allotment as % of requirement	Off-take as % of allotment	Off-take as % of requirement
Kerosene	APL	5.24	3	2.01	57.25	67	38.35
	BPL	6.86	3	1.91	43.73	63.66	27.84
	AAY	6.01	3	1.98	49.92	66	32.94
	ANN	4.01	3	1.9	74.25	63.34	47.03
	POOLED	5.53	3	1.95	54.25	65	35.26
Rice	BPL	108	25	19.3	23.14	77.02	17.87
	AAY	112	35	28.88	31.25	82.51	25.78
	ANN	18	10	8.27	55.56	82.7	45.95
	POOLED	79.34	23.34	18.81	28.99	80.59	23.7
Sugar	BPL	5.31	2	.39	37.66	19.5	7.34
	AAY	5.23	2	.41	38.24	20.5	7.83
	POOLED	5.27	2	.40	37.95	20	7.59

#### Cost of receiving items from Fair Price Shop (FPS)

There is often debate among economists that the cost involved in fetching commodities from FPS is too high. Various costs are involved in obtaining the commodities from FPS, so there is not much difference between price of the commodities obtained from FPS and their market price. In this study an attempt is made to find out the actual price of different commodities received from FPS and their different components. While calculating the cost of purchasing different items from FPS the issue price per quota is added to it. Here actual price per quota is calculated by adding issue price with the money value of extra time spent for fetching the commodities and the cost of underweight/wastages per quota. Issue price of different commodities sold at FPS is determined by the government. For calculating the time spent in getting the commodities from FPS, time spent in visiting the shop over and above once is taken into account. Accordingly the total time spent for getting

the commodities is multiplied with prevailing wage rate in the area in order to arrive at the money value of the time spent for getting the commodities. So far as underweight/wastages are concerned, each beneficiary is asked regarding the extent of underweight/wastages for each item obtained from FPS and such quantities are multiplied with prevailing market price to arrive at the cost relating to underweight/wastages of each item. The details of cost along with its components of different items are worked out and presented in the Table-2.

TABLE-2

## Cost components of receiving items from Fair Price Shops

Item	Beneficiary Household	Issue Price Per Quota (Rs.)	Cost Incurred for Extra Time Spent Per Quota (Rs.)	Cost Incurred for Underweight/Wastages Per Quota (Rs.)	Actual Cost Per Quota (Rs.)
Kerosene	APL	28.80 (69.76)	9.20 (22.29)	3.28 (7.95)	41.28 (100)
	BPL	28.80 (70.29)	8.79 (21.45)	3.38 (8.25)	40.97 (100)
	AAY	28.80 (68.19)	9.98 (23.64)	3.45 (8.17)	42.23 (100)
	ANN	28.80 (62.25)	9.38 (22.55)	3.41 (8.2)	41.59 (100)
	POOLED	28.80 (69.38)	9.33 (22.47)	3.38 (8.15)	41.51 (100)
Rice	BPL	50 (54.8)	12.32 (13.5)	28.93 (31.7)	91.25 (100)
	AAY	70 (59.18)	11.84 (10.02)	36.44 (30.8)	118.28 (100)
	ANN	00 (00)	9.87 (37.26)	20.72 (67.74)	30.59 (100)
	POOLED	40 (49.98)	11.34 (14.16)	28.7 (35.86)	80.04 (100)
Sugar	BPL	26.80 (61.23)	13.03 (29.77)	3.94 (9)	43.77 (100)
	AAY	26.80 (61.74)	12.84 (29.57)	3.77 (8.69)	43.41 (100)
	POOLED	26.80 (61.49)	12.93 (29.67)	3.85 (8.84)	43.59 (100)

(Figures in parentheses show percentages)

*Cost per Quota = Issue Price per Quota + Cost Incurred for extra time spent per quota + Cost due to under-weight/wastages per quota.*

It is revealed from the table that cost of obtaining 3 ltrs of kerosene from FPS in slum worked out to be Rs.41.51 out of which Rs.28.80 (69.38 per cent) is towards issue price, Rs.9.33 (22.47 per cent) towards cost of extra time spent in getting kerosene from FPS and Rs.3.38 (8.15

per cent) towards the cost of underweight/wastages. Among the beneficiary households of slum area the cost of obtaining kerosene from FPS is the highest in case of Antodoya beneficiary households followed by Annapurna, APL and BPL households.

In case of Antodoya beneficiary household issue price constitutes 68.19 per cent, cost of extra time spent shares 23.64 per cent and cost of underweight and wastages 8.17 per cent of the actual cost of obtaining kerosene from FPS. The corresponding figure for Annapurna beneficiary households is worked out as 62.25, 22.55 and 8.2 per cent respectively. In case of APL households the issue price covers 69.76 per cent of the actual cost of obtaining it from FPS, cost incurred for extra time spent shares 22.29 and underweight/wastages is 7.95 per cent of the actual cost at FPS.

Similarly, in case of rice it is found that the cost per quota for BPL (25 kgs), Antodoya (35 kgs), Annapurna households (10 kgs) is Rs. 91.25, Rs. 118.28 and Rs. 30.59 respectively. So far as the BPL beneficiary households are concerned it is revealed that issue price per quota of rice constitutes 54.8 per cent cost of extra time spent covers 13.5 per cent and cost of underweight/wastages shares 31.7 per cent of the actual cost per quota received from FPS. Corresponding figures for Antodoya beneficiary households are 59.18, 10.02 and 30.8 per cent respectively. Again in case of Annapurna beneficiary households issue price shares nothing out of actual cost because rice is supplied to them free, cost incurred for extra time spent for getting it from FPS covers 32.26 per cent and cost of underweight/wastages shares rest 67.74 per cent.

In case of sugar it is found that cost per quota (2 kgs) received from FPS is worked out at Rs.43.77 for BPL beneficiary households and Rs. 43.41 for Antodoya beneficiary households. So far as the BPL beneficiaries are concerned it is revealed that issue price, cost incurred for extra time spent and cost of underweight/wastages constitute 61.23, 29.77 and 9 per cent of the actual cost respectively. Corresponding figure for Antodoya beneficiary household is 61.74, 29.57 and 8.69 per cent respectively.

Thus, it is found that cost incurred for extra time spent and underweight/wastages increases the actual cost of receiving different items from FPS.

### Comparison between issue price and actual cost of commodities received from FPS.

With the objective to find out the share of additional cost of extra time and cost of under weight/wastages) in actual cost of receiving different items from FPS, issue price per ltr/kg, actual cost of receiving it from FPS per ltr/kg, additional cost over and above issue price as a percentage of it have been computed and presented in Table 3. It is revealed from the table that additional cost (cost of extra time and cost of under weight/wastages) constitutes 43.44 per cent of actual cost of kerosene in case of APL beneficiary household. Corresponding figure for BPL, Antodaya and Annapurna beneficiary household are worked out as 42.18, 46.56 and 44.37 per cent respectively. In case of rice it is found that the share of additional cost in actual cost for BPL, Antodaya and Annapurna beneficiary household is 82.50, 68.50 and 100 per cent respectively. So far as the share of additional cost in actual cost of sugar is concerned it is worked out as 63.28 and 61.94 per cent for BPL and Antodaya beneficiary households respectively.

TABLE-3

### Comparison between issue price and actual cost of commodities received from FPS.

Item	Beneficiary Household	Issue price per ltr/kg (Rs.)	Actual cost per ltr./kg in FPS (Rs.)	Additional cost above issue price per kg/ltr in FPS (Rs.)	Additional cost as % of issue price
Kerosene	APL				
	APL	9.60	13.76	4.16	43.34
	BPL	9.60	13.65	4.06	42.18
	AAY	9.60	14.07	4.47	46.56
	ANN	9.60	13.86	4.06	44.37
	POOLED	9.60	13.83	4.23	44.06
Rice	BPL	2.00	3.65	1.65	82.50
	AAY	2.00	3.37	1.35	68.50
	ANN	00	3.05	3.05	100
	POOLED		1.77	.43	32



Sugar	BPL	13.40	21.88	8.48	63.28
	AAY	13.40	21.70	8.30	61.94
	POOLED	13.40	21.79	8.39	62.61

*Actual Cost = Issue Price + Cost Incurred for extra time spent + Cost incurred for under-weight/wastages.*

Thus, it is concluded from the above study that the quantities of different commodities issued through FPS are found to be short in supply to the household requirement of almost all categories of beneficiary households. Again what is being issued is not reaching the beneficiary households and off-take of commodities from FPS is too less in comparison to their requirement. So far as actual cost of obtaining different commodities from FPS is concerned it is concluded that cost of rice is less because of reduced issue price but cost of extra time spent and underweight/wastages constitute a sizable amount of its actual cost. In regard to kerosene and sugar the actual cost is found closer to its market price because of other additional costs.

### Policy Implications

- As the quantities of commodities supplied through FPS fall-short of requirement of beneficiaries in slum area, necessary measures may be taken to enhance the availability of different commodities to respective beneficiaries. A demand survey may be conducted to work out the quantum of commodities required by different beneficiary households and quantity of commodities may be supplied considering the number of members in a household.
- Since the actual cost of obtaining sugar and kerosene is becoming relatively higher and also found closer to marker price, steps may be taken to reduce cost of extra time spent in fetching commodities from FPS and to control underweight and wastages. In this context steps must be taken to regulate the opening time of the FPS and proper mechanism may be adopted to reduce underweight & wastages.
- Steps may be taken to increase the awareness regarding different schemes of PDS among slum beneficiaries and a vigilance committee may be used for the purpose.



## **Slum Culture: A Necessary Evil of Indian Urbanisation The case of Sambalpur Municipality in Orissa**

**Dr. Dillip Kumar Panda**

Reader in Economics,  
G.M. Autonomous College,  
Sambalpur

**Dr. Narendra Kumar Behera**

Lecturer in Commerce,  
Larambha College,  
Larambha, Bargarh

### **INTRODUCTION**

The word slum sounds negative in all directions to everybody's mind. Its presence in the towns, cities and metropolis shows a poor and ugly scenario of socio-economic culture. But it has become an inevitable consequence of increasing urbanization and economic development in most of the Asian and African countries. The tall sky scraper and multi billionaires' buildings are always trying to kiss the sky and slums covered with old asbestos, plastic sheet or hand made tiles have become symbols of coexistence in Indian urban centres. Economic development and urbanization have a positive correlation with the migration of rural population to urban centres until a balance between rural and urban population is reached. Number of pull and push factors operate for the rural exodus to determine destinations of urban centers. "The studies on rural-to-urban migration in Orissa confirmed the close link between urban informal sector and rural-to-urban migration; and found push factors, in general, as more important determinants than pull factors in the process of rural-to urban migration. However, pull factors are predominant in emerging industrial centers for informal entrepreneurs and in coal mine regions for most of the informal sector workers" (Samal : 2008, p.179). There exists a correlation between the level of economic development, per capita income and growth of urban areas in the country. The urban centers may either be new ones or an expansion of the existing urban areas in course of economic development. "In India the coefficient of correlation between the proportion of urban population to total population and the level of per capita income is estimated at 0.5 which is no doubt significant" (Dhar : 2009, p.180). "The pace of urbanization

in the next few decades is likely to be rapid only in the less urbanized and less developed countries. The relatively developed and larger countries in the continent would limit migration in order to have more orderly urbanization and well governed cities, reflecting "elite capture" of the process of urbanization. This would be in sharp contrast with the experience of the Latin American countries." (Kundu, 2009, p.57)

The unabated growth of slums is added with another significant problem of homeless people or street dwellers, in the urban centers of the country. Adequate data are not available for this category of people although they might be living in the cities as homeless for decades together. It is estimated that there are as many as 7 crore of homeless people in India. In Delhi alone the homeless population is 1.5 lakh and as many as 3000 of them die every year. The rate of exploitation of the slum dwellers and homeless people is very high in the capital city of Delhi itself. The plan of home for the homeless made by government and NGOs in Delhi is able to provide shelter for only 2000-3000 in normal seasons and in winter 7000-8000 people are accommodated to save lives from the chilled winter, which is far below the need of homeless people. Is it not a sorry state for the poor in the cities?

It has become impossible to find slum free cities in the near future as they meet the economic needs of the urban dwellers who act as the vital parts of urban economy. By this we must not conclude that there is no slum in the rural/semi urban areas. But in general the problems of urban slums always attract the attention of the researchers, policy makers and activists. The cause of urban slum has become the centre of politics in the cities of the country. The slum dwellers form a sizable force of the urban population and usually live below poverty line (BPL). There prevails illiteracy, absence of good education, health and sanitation. These slum dwellers always look for government assistance in the form of relief, loan, free lunch, medicine and many others. While the nation has grown by 50 per cent and the cities by 100 per cent the squatters have increased by more than 1100 per cent (Srinivas: 1996). In Mumbai, out of 9 million population the slum dwellers constitute 4.5 million or half of its population. There is a great migration of people in to the city. The Oscar winner film, Slum Dog Millionaire presents a naked picture of the slum world in general and the conditions of slum dwellers of Mumbai in particular. No solution is seen in the near future for the miseries of these slum dwellers.

The UN estimates that the number of people living in slums passed 1 billion in 2007 and could reach 1.39 billion in 2020, although there are large variations among the regions. In Asia and the Pacific, two out of five urban dwellers live in slums, compared with three out of five in Africa. In percentage terms, sub-Saharan Africa has about 72 per cent of city dwellers living in slums. In Asia by far the highest number of city dwellers are living in slums - the problem is the worst in South Asia, where half of the urban population constitute slum dwellers. In 2001, Afghanistan had as much as 99 per cent of urban population living in slums while Nepal and Bangladesh also had high proportions of 92 per cent and 85 per cent respectively, although they have had some success in containing the problem since 1990. The growing urbanization leads to increase in the level of per capita income due to development of infrastructure, housing, social sectors, trade, commerce, banking etc. These growths of urban facilities create huge density in the urban population thereby paving the way for the growth of slums, traffic problem, pollution, housing, sanitation, health care, unemployment, terrorism, drug and human trafficking, rape, murder, theft, robberies, prostitutions and many more. The World grows fast because of the creation of economic opportunities and avenues of employment. Wages in cities are higher in comparison to their counterpart of the rural areas, which form the source of attraction.

However the modern formal sector based on capital intensive large scale industries has failed to generate equitable employment and income opportunities for the growing urban and rural population. "As a result, the surplus labour including most of the rural pushed migrants, unable to get absorbed in the formal sector, has been forced to find its own source of employment and livelihood in a variety of productive activities in the urban centers which contributes, what is now designated as 'informal sector'" (Samal : 2008, p.1). In Dharavi, one of Asia's largest slums in Mumbai, covering 220 hectares (530 acres) near airport, some 100,000 people produce goods worth over \$500m a year. Their activities range from begging, rag picking to manufacturing of plastic goods, collections of goat and buffalo skin, roadside vending of fruits and vegetables, selling of food items, engagement in the service provision such as barber, tailor, washermen, cobblers, rickshaw pullers and mechanics of various sorts. The problem of child labour is largely common in slums with the objective to supplement family income. Thus

the slum dwellers of towns and cities perform such petty jobs which have become necessary for the other classified dwellers. But they live in filthy and unhygienic conditions with a low level of living. There is yet any economic system to be evolved that keeps the privileged and powerful group from passing much benefits to the down trodden class of people. There is ample evidence of discriminations and special provisions made by the state itself at various points of time do serve the purpose of vested groups at the helm of affairs.

When the question of expansion or beautification of the city comes to the picture the axe usually falls on the slum or the informal dwellers, on the ground of encroachment of public property or lack of legal status, causing public nuisance. "The statement "slums are illegal" and reference to slums as "illegal encroachments" gained widespread circulation only after the Supreme Courts's equation of slums with nuisance. Since 2000, the pace of slum demolition in Delhi has increased considerably. The combined number of slum or jhuggi jhompri (j.j) clusters demolished by the Municipal Corporation of Delhi (MCD) and Delhi Development Authority (DDA) for the five years leading up to 2000 increased more than ten fold. This increase is the direct outcome of the judiciary's expanded role in demanding slum clearance [Ghertner, 2008]. This has an implication for all the slum dwellers in the country.

Provision of housing with minimum infrastructure has become a challenging task before the state. There is provision of Indira Awas Yojana (IAY) for the economically and socially weaker sections people of the rural area. In line with IAY, recently the government of India has launched the Rajiv Gandhi Awas Yojana (RGAY) for the urban people living below the poverty line. These schemes are not adequate enough to meet the growing hunger for shelter in the urban centers. The shortage of adequate planned shelter is the reason behind the growth of slums in urban centers.

### **THE SAMBALPUR MUNICIPALITY**

The name Sambalpur has been given after Goddess Samaleswari, whose temple is situated on the bank of the river Mahanadi, the Ganga of Orissa. The present study covers the Sambalpur Municipality and tries to throw some light on the problem of slums which this urban center of western Orissa is also not free from. The data presented in the study are of primary and secondary in nature. The Sambalpur

Municipality is one of the oldest municipalities in the country. It has been declared as 'A' grade municipality vide Government of Orissa Order No. 30209/UD of 11<sup>th</sup> September 1968. At present there are 29 wards (S.C. 05, S.T. 02, O.B.C. 09 and General 13) having a total population of 1, 53, 643, with 79683 and 73960 of male and female population respectively (2001 Census). The Scheduled Castes and Scheduled Tribes comprise 18, 918 and 13, 655 people respectively. Out of this total population, the slum population is 73, 005 dwelling in 88 recorded and 16 unrecorded slum areas, a total of 104 slum areas spreading over an area of 33.65 square kilometers. In recorded slums the population is 42, 491 with 9, 725 households and in the unrecorded slums the population is 30, 514 with 7, 113 households. The growth of such a large number of slum areas in this town has taken place in a gradual manner. It is spreading from one end to the other, from north to south and from east to west. During the last ten years about 20 slum areas have been added to the existing slum areas with the occupants occupying government lands, graveyards, unused railway track, bottom of the hills and any place wherever they find some scope to occupy. This type of slum settlement has been coined as informal settlement, low income settlement, semi permanent settlement, shanty town settlement, spontaneous settlement, unauthorized settlement, unplanned settlement, uncontrolled settlement, and so on. Whatever may be the term used, it reflects a poor and sorry state of living conditions within the glittering township. It does not mean that only slum dwellers do occupy such places, even the so called civilized and educated people spare no opportunity to occupy land in the township to satisfy the hunger for land whose price is ever escalating with growing urbanization. Encroachment of public land is a very usual scene in urban areas. The growth of these slum areas are never planned and till date no attempt has been made to have a planned resettlement of the slum dwellers. A number of reasons like lack of planning, lack of political will for a clean city, resource crunch, illiteracy, increased migrants and failure of government machinery to control such growth may be attributed to the growth of slums. A sincere effort at the governmental level and public awareness are needed to counter the problem of growing slums in the township.

### Source of municipality fund

The municipality has the following important sources of funding to undertake various activities. These are grants from central and state governments, holding tax, market toll tax, parking fee, shop rent and compensation grant due to abolition of octroi duty since 1999. The main source of fund for the development of urban areas is the central and state government. It is a common concern of the municipality that inadequate resources bind its hands to undertake any developmental activities.

### Programme for Slum Development

The growing area of slums in the urban centers is largely inhabited by people below poverty line (BPL). From time to time various provisions have been undertaken to ameliorate their economic conditions. Presently the Swarn Jayanti Sahari Rozgar Yojana (SJSRY) is a flagship programme for the BPL slum dwellers of the country. The SJSRY programme has been launched since 1<sup>st</sup> February 1997 with the merger of three programmes i.e. Nehru Rozgar Yojana, Urban Basic Services for Poor, and P.M. Integrated Urban Poverty Eradication Programme (PMUPEP). The SJSRY has five components namely, Urban Self Employment Programme (USEP), Urban Women Self Help Programme (UWSHP), Skill Training for Employment Promotion among Urban Poor (SETUP), Urban Wage Employment Programme (UWEP) and Urban Community Development Network (UCDN). The SJSRY is funded by the central and stage governments on 75:25 ratios.

### Expenditure under SJSRY programme in the Sambalpur Municipality during 2002-08

Expenditure	Year	Amount (Rs)
Drain and Road	2002-03 to 07-08	25,45,269.00
Community Center	-Do-	2,12,223.00
Electricity	2006-07	1,00,000.00
Water supply	2006-07 & 07-08	2,10,000.00
<b>Total</b>		<b>29,67,492.00</b>

Source : Various records of the Sambalpur Municipality



The above table shows that a sum of Rs.26,67,492 have been spent during 2002-08 on various infrastructural development programmes such as drains, roads, community centers, electricity and water supply in the slum area. The slum dwellers report that the expenditure for infrastructure development has not been made properly and the quality of work is far below the satisfactory level and not going to last beyond one year. This type of constructions is nothing but waste of public money. There may be spill over of expenditure from other developed area to the slum area. As for example roads or drains are passing through two slum areas while connecting two civic areas. These types of expenditure are not relevant under slum development programme.

It is for the first time that a project has been taken up for the development of slum housing in the town under Integrated Housing for Slum Development Programme (IHSDP). In the first phase (2008-09) 613 slum houses along with its infrastructure have been sanctioned marked. The area of such house will be 25 square meter or 625 square feet. This programme is funded by central and state governments on 80:20 share basis. A household survey programme has been undertaken to know the livelihood status of slum dwellers. In addition to this, there is the provision of community sauchalaya. In the ring road area such type of provision has been made at three different places. Besides this, there are a number of garbage bins on the road sides for disposal of domestic waste and ravages. But the current programmes for the development of slums seems to be inadequate.

Sambalpur Municipality is one of the oldest municipalities in the state, but not the ideal one. The streets are littered with garbage, drains are silted and there is overflow of dirty water at various places due to poor and ill maintained drainage. The ring road has become the garbage field and a safe place for open defecations. This is due to lack of sanitation awareness particularly amongst the slum dwellers. To create awareness among these squatters, the then R.D.C. late Jagadananda Panda, personally ventured to clean the ring road with a group of volunteers on several occasions. But all his efforts went vain after a few days. The unplanned growth of the township along with these slum areas spreading across the town has destroyed the sanitation and beauty of this old own. Although, the growing slum areas have become the need of the expanding urban population in the city little care has been taken to make it a clean and beautiful urban center. Due to political



interferences some times the administration faces challenges to carry out slum clearance operations. The case of Ramgarh pada, at the foot hill of Budharaja can be well cited as the failure of administration on slum clearance during 2003-04. It is a matter of surprise and pity that, the illegal occupants demand water, electricity at the cost of legal habitants who pay holding tax to the municipality. Without a strong political will and conscious view of citizens such growth of slums in the urban areas cannot be controlled.

## CONCLUSION

The expansion of urban areas with the influx of people from various parts of the country slum dwellers have become a necessity of economic assistance in view of their service to the people of the urban centers. They have gathered here and there, to seek their livelihood by engaging themselves in various activities. Of course, the unregulated expansion has created a number of problems for the civil society in the form of criminal and antisocial activities to certain extent. There is the need for a proper settlement of these slum dwellers by means of public funding measures such as low cost housing and low rented house. A proper administrative measure should be taken for the prevention of such unwarranted slums. At the out side of the township, there should be provision of low cost housing for the settlement of legal slum dwellers and illegal occupants must be penalised. No unauthorized constructions should be allowed to grow in the town. The migration of rural people need to be checked, not only through the distribution of rice at Rs.2 and implementation of NREGA but also through measures for agricultural development and rural infrastructure facilities in line with the urban areas. Provision of urban facilities to the rural India along with some improvement of their economic condition can prevent rural migration and causing slums in urban areas.



## **Problems of Urban Slums : An Empirical study of Patharbandh Slum of Bhubaneswar.**

**Dr. Kabita Kumari Sahu**

Lecturer in Economics

North Orissa University,

Baripada, Orissa

**Sibananda Nayak**

Research Scholar

North Orissa University

Baripada, Orissa

Rapid urbanization and need for labourers for various construction activities in cities have resulted in development of slums which are the settlement of lower income groups. Slums are important characteristic feature of most cities and towns in the developing countries. They develop as a consequence of lower order urbanization and the functional behaviour or rural hinterland surrounding the city. The quantum of slum dwellers varies from 5 to 10 per cent in small towns to more than 50 per cent in big cities and metropolis. The intensity of problems of slums varies from city to city depending on the level of economic status of the country and size of the city. The management of urban slums is very difficult due to multiple problems. In this context the objective of this paper is to analyse the problems of Patharbandh slum which is an important slum situated near Utkal University of Bhubaneswar.

### **CONCEPT AND DEFINITION OF SLUMS:**

There are plethora of studies available on the problems of slums and squatters all over the world. The concept and definition of slums commonly accepted by researchers is as follows.

1. Physically it represents a group of houses in dilapidated condition with inadequate service facilities, overcrowding and congestion, hygienically unsuitable for human habitation.
2. Sociologically it is a way of life with a set of established norms and values which is reflected in poor sanitation and health, deviant behaviour, apathy, high mobility and social isolation.
3. Economically it is a place for the concentration of urban poor and daily wage earners or urban homeless. In a real sense, it is the place of living for the lower order service class population.

4. It is that part of urban environment which is physically, socially and economically degraded and unsuitable for peaceful and healthy human habitation.

With this conception in mind, the present study is conducted in Bhubaneswar capital city which is growing at a rapid rate along with spurious expansion of slums.

### **Distribution & Demography of Slums in Bhubaneswar**

The distribution of slums inside Bhubaneswar city is very much specific location bound. The distribution pattern can be arranged in the following groups.

1. Over the vacant government land.
2. Along both sides of the main drain and in many cases over the narrow feeder drains covering with bamboo and wooden planks.
3. On both sides of the railway lines within the city limits;
4. On the inner side of the natural levees;
5. Inside the institutional campuses such as hospital and colleges.

The geographical distribution has got a strong bearing on the factors controlling the location of slums in the city.

According to a survey of Bhubaneswar Municipal Corporation (BMC) there are 377 slums with 60, 000 households and 3.08 lakh slum dwellers in Bhubaneswar city. Most of the slums are developed either in encroached government land or in private lands. These slums lack access to basic municipal services which affect the health of slum dwellers and of those living in close proximity. Two thirds of the slum dwellers use hand pumps or tube-wells for water whereas only one third of the total slum dwellers get pipe water through public stand posts. Less than 20 per cent of slums have access to household toilets and 10 per cent have access to community toilets in Bhubaneswar. Hence the water and sanitation is a serious problem in Urban slums of Bhubaneswar. Hence the water and sanitation is a serious problem in Urban slums of Bhubaneswar. The present study is based on primary data on the problems of slum dwellers in Patharbandh slum which is a very large community located near the Satsang Vihar, besides the Income Tax colony and Utkal University. It has four different Sahis such as Majhi Sahi, Rickshaw Sahi, Behera Sahi and Santal Sahi, The population

of this Patharbandh slum is approximately 10, 200 and their distribution is given in table-1.

TABLE - 1

## Distribution of Slum Dwellers of Patharbandh Slum

Sahi	Household	Population	Male	Female
Majhi	750	3000	1620	1380
Rickshaw Sahi	1000	4000	2280	1750
Behera Sahi	350	1400	760	690
Santal Sahi	450	1800	980	820
Total	2550	10200	5610	4590

Rickshaw Sahi has maximum population followed by Majhi Sahi, Santal Sahi and Behera Sahi. The proportion of male slum dwellers is 56% whereas it is 44% for females. Since male workers migrate more to urban slums it is a common feature in all the slums of Bhubaneswar that proportion of male population is more in slums than females.

**Socio-Economic overview**

The socio-economic features of the slum is very adverse with regard to income, consumption, housing, occupation, education, drainage, water, sanitation and health services. The houses of slum dwellers of Patharbandh are very small whose roofs are very short to enter inside. More than 60 per cent slum dwellers have semi pucca houses & or asbestos houses and remaining have kacha houses made of mud. The houses are not properly built and they lack sufficient doors and windows, and also drainage facility. There is no proper lighting in the houses and many of them use kerosene lamps.

The main occupation of Patharbandh slum dwellers is daily wage work and some of them work as rickshaw pullers. The approximate income of the slum dwellers is between Rs.120 and Rs.200 per day except for a few small businessmen staying inside it. The economic condition of Behera sahi is better in comparison to Rickshaw and Santal Sahis because many people of Behera Sahi have cow shed and milk business which is their secondary source of income. There is a small

temple inside the slum but people living inside the slum belong to different castes and creeds. Conflict among the slum dwellers is a common feature due to poverty and low incomes.

There is a big drain inside this slum which adversely affects this area making unhygienic situation for Patharbandh slum dwellers. In rainy season the condition is worse when the drain is full with water. There are 10 tube wells and 29 wells in this slum but people suffer from lack of safe drinking water because wells are used only for bathing and washing purposes. In Santal Sahi and Rickshaw Sahi there is only one Anganwadi Centre but children do not take interest to go there by crossing the drain. The education standard is very low in this slum. There are six youth clubs such as Tiger Youth Club, Kalinga Jyoti Club, Marshall Badi Youth Club, Atal Youth and Ganapati Committee. There are 12 self help groups formed in Patharbandh slum out of which 9 are actively operating through micro credit, saving and bank linkage. Even if Patharbandh slum is located at the central place behind Utkal University, Bhubaneswar Municipal Corporation has not made adequate provisions for water and sanitation in this slum.

#### **Water and Sanitation Problems of Patharbandh Slum**

Lack of safe drinking water and proper sanitation results in a number of water borne and skin diseases for the slum dwellers. The tube wells are not deep enough for which the water contains iron and other metallic substances. There is pipe water supply at different stands but people do not have patience to stand in a long queue to collect drinking water. The bleaching powder is supplied mainly during rainy seasons but many people do not prefer to use bleaching powder due to its bad smell. During the survey, the slum dwellers revealed that they spend 30 to 40 minutes in collecting water for them. Many slum dwellers are found to have no knowledge about the water borne diseases and they do not use water filters due to poor financial conditions. The survey revealed that 60 per cent of slum dwellers collect drinking water from tube wells, 28 per cent from pipes and 12 per cent from open wells. Since they have to stand in a long queue, 46 per cent collect water for household purpose from tube wells but 30 per cent from open wells. The details are given in table-2.

cities. The growth and development of slums have become a phenomenon for a sufficient number of years. These are patronized by the local political organizations which strengthen their existence. Since they have been consolidated as social and political units, the development of slums can be monitored, regulated and finally directed to identified places to avoid future problems. The growth and development of slums are spontaneous and natural. In Bhubaneswar, these slums multiplied since urbanization took place as a capital city. But slum cleanness programme has created a negative reaction and mass discontentment. Proper rehabilitation of slum dwellers at Bhubaneswar is a serious problem. The Patharbandh slum has many problems due to encroachment of land, non availability of drainage, drinking water and health care facilities. So the Government and Bhubaneswar Municipal Corporation should recognise these problems and take measures to improve the economic & social life of the slum dwellers.

#### REFERENCE:

1. Govt. of Orissa, *Economic Survey, various years.*
2. Mishra V.M. (1972): *Communication and Modernization in Urban Slums.* Asia Publishing House, New York.
3. Raghupati U.P. (2009) : *Sustaining Urban Infrastructure, Yojana, July, Vol. 53, pp-28-30.*
4. Rangotra P (2009) : *Urban infrastructure development in India. Yojana, Vol 53, August, PP-53-56*
5. Routray J.K. and Pradhan A.K. (1989) : *Slums and development Programmes in Eastern India, Habitat International, Vol. 13, No 4, pp-99-108.*
6. Sahay A.K. and Patra K.C. (2007): *Urban Legends : Shift of population to cities due to pull factors, Kurukshetra, Vol. 56, No. 1, PP - 19-20.*
7. Sethy P.G.S., Bulliyya G, Mallick G, Swain B.K. and Kar S.K. (2007) *Iodine deficiency in Urban Slums of Bhubaneswar, Indian Journal of Pediatrics, Vol. 74, pp - 917-928.*





## Role of Cooperatives in Slum Improvement

Santanu Kumar Nayak

H.O.D. in Economics

Regional College, Rambag, Jajpur

Now a days slum problem is a serious problem. It is increasing in all cities and towns in developed as well as developing countries. The word slum which first appeared in Veux's Flash Dictionary in 1812 was derived from slumber which means a sleepy unknown back alley. Slum meant 'wet mire' where working class housing was built during British Industrial Revolution near the factories. These were uncontrolled settlements and lacked basic services and only poor people lived there.

The 19th and 20th century saw enormous growth of urban population and cities were not able to sustain the pressure of increased population and could not provide good environment and basic services to new entrants as they were unable to afford reasonable shelter within their means. They were therefore forced to live in slums.

According to an Expert Group of the United Nations, a slum is an area that combines to various extents the following characteristics namely, (i) inadequate access to safe water, (ii) inadequate access to sanitation and other infrastructure, (iii) poor structural quality of housing, (iv) overcrowding and (v) insecure residential status. In India almost all urban settlements face the unpleasant scenario of 'Slum'. Often, this has remained a vaguely defined phenomenon. Various institutions and documents have attempted to define 'Slums' largely as a measure of deficiency of basic habitat services and amenities or the absence of livable environment consisting of adequate housing and infrastructure facilities.

In the Census of India 2001, areas which satisfy the conditions such as the following have been counted as slums.

- |       |  |
|-------|--|
| (i)   | Towns and cities with population of 50, 000 and above as per 1991 Census;  |
| (ii)  | Areas notified as slums by the State or Local Body; or   |
| (iii) | A compact area of at least 300 persons or 60-70 households living in poorly built congested tenements in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities. |



The Census of India 2001, has found that 607 towns spread among 26 states and Union Territories are reporting slum population in their areas. Their total slum population is 40.3 million comprising 21.5 million males and 18.8 million females. Maharashtra topped with over 10 million slum dwellers, Andhra Pradesh has about 5 million, Uttar Pradesh and West Bengal's towns hold slum population of 4 million each. An information of grave concern is that the slum population of 40 million also includes over 5.5 million infants and children in the age group 0-6 years. Indeed, it is unfortunate that such large number of children are also doomed to suffer the social deprivations of slums. More than 41 per cent of Kolkata's slum households have lived in slums for more than 30 years.

Our country, therefore, can ill-afford to neglect the welfare of such large number of People. Catering to their socio-economic development needs should engage our immediate attention in larger interest of national development and national integration.

#### SLUMS IN ORISSA

Orissa is the poorest among poor states in India. Slums are increasing rapidly in small and big cities. According to 2001 Census 22.54 per cent of slum population live in cities and towns in Orissa. Generally we find slums largely in 15 cities and towns in Orissa. Among them highest slum people live in Cuttack Municipal Corporation and lowest in Jajpur Municipality. The total number of people living in slums is 635150 among them 332634 are males and 302616 are females. The slum population of four major cities of Orissa are given in table-1.

**TABLE - 1**

**Slum population of four major cities in Orissa.**

Name of the cities	Total Population	Number of Slum Population	Percentage of slum Population to Total
Bhubaneswar	647302	65988	10.19
Cuttack	535189	91368	17.7
Berhampur	289427	70509	24.34
Sambalpur	154164	45345	29.41

*Source - Directorate of Economics and statistics, Orissa, Bhubaneswar.*

### LIVING CONDITIONS IN SLUMS

- (a) Almost all the houses in slums are in bad, and sometimes dilapidated, conditions. The houses are usually inadequately ventilated. The designs are such as to afford bare shelter, leading to acute congestion. In squatter settlements, houses are constructed using materials like mud, un-burnt bricks, tin-sheets, asbestos sheets, bamboo, gunny bags, plastic sheets etc. and are usually single room units with inadequate space.
- (b) Private toilets do not exist in a majority of slum areas and even common toilets are available only in a few. Where there are no toilets, people defecate in the open which, besides being an environmental nuisance, poses hardships especially for women. Community latrines, even where available, generally remain filthy and insanitary and are virtually a menace to the areas in which they exist.
- (c) The houses in slum areas do not have adequate water supply. In some slum areas, public taps do exist. Many slums, especially in the outskirts of the cities, have open wells as their only source of water for drinking, bathing and cleaning. These wells are generally insanitary. No attention is paid to the maintenance of wells or even of public taps. A considerable number of slum dwellers have to fetch water from outside the slum areas.
- (d) The drainage system in almost all the slums is very poor. With the exception of pucca building in old city areas, slum settlements generally do not have any drainage. Furthermore, a majority of unauthorized colonies and squatter settlements are located on low-lying lands. As a result drainage water cannot flow away. The situation becomes particularly worse during the rainy season.
- (e) Puddles and slushes are common-place after every rain shower. The facility of roads and street lights is generally inadequate. This adversely affects the safety and security of residents and is generally believed to be largely responsible for high rates of night-time crimes.
- (f) There is a complex relationship between environment and health. A number of studies have shown that the unhygienic slum environments makes slum dwellers more susceptible to certain types of diseases like respiratory disease, gastro-intestinal

disorders, skin diseases, malarial fever, tuberculosis, etc. Unfortunately, the economic circumstances of the slum dwellers are such as they do not allow them to improve their living conditions. A majority of the slum dwellers are employed in the unorganized or informal sector. A large proportion of them work on a daily wage basis and, therefore, have little or no job security. A significant proportion is employed in construction work. Due to low income, their standard of living is also low and they are left with little surplus income for housing after meeting their families' basic needs of food and clothing. The slum dwellers face insecurity of tenure, lack of basic services, especially water and sanitation, unsafe building structure, overcrowding, and limited access to credit and formal job markets.

#### **ROLE OF COOPERATIVES IN SLUM IMPROVEMENT**

The essence of cooperation is that individuals come together to achieve something collectively what they cannot achieve as individuals. The means in general, and access to land, finance and other resources for housing in particular are even more limited in the case of slum dwellers than in other sections of the society. Housing cooperatives have a substantial role in the attainment of the shelter goals of slum dwellers.

Another major advantage of slum cooperatives is that they provide fresh migrants the much needed emotional security in the unfamiliar urban environment. In furtherance of their aim of fostering a new community life for slum dwellers, slum cooperatives can undertake various educational, cultural and social activities.

Slum cooperatives can also help in income upgradation endeavors, if, for instance, cooperative household industries in slum areas are encouraged with a view to raising incomes, and thereby affordability towards housing and related services, including capability for repayment.

An important aspect of slum improvement and upgradation is to motivate the public to maintain the assets created. Cooperatives of slum dwellers have a major advantage in that they can secure the much needed maintenance of assets created which local authorities can ill-afford as a responsibility. Cooperatives not only provide a forum for community

action in respect of maintenance initiatives, but they also help in educating slum dwellers on the need for maintenance and thereby secure, in the long term, individual responsibility and participation.

The importance of cooperatives and cooperative like organizations has been acknowledged by the United Nations Human Settlements programme (HABITAT). Paragraph 56 of HABITAT Agenda recognizes cooperatives as stakeholders at local level that complement and supplement the governmental efforts in meeting the housing needs of the people.

The Agenda makes specific recommendations in respect of housing cooperatives. It particularly focuses on cooperatives' role in mobilizing financial resources for providing housing for the poor. Paragraph 82 of the Agenda states as under.

- (a) Harness the potential of non-traditional financial arrangements by encouraging communities to form housing and multi-purpose community development cooperatives, specially for the provision of low-cost housing;
- (b) Review and strengthen the legal and regulatory framework and institutional base for mobilizing non-traditional lenders;
- (c) Encourage, in particular, by removing legal and administrative obstacles, the expansion of savings and credit cooperatives, credit unions, cooperative banks, cooperative insurance enterprises and other non-bank financial institutions and establish savings mechanisms in the informal sector, particularly for women;
- (d) Support partnerships between such cooperative institutions and public and other financing institutions as an effective means of mobilizing local capital and applying it to local entrepreneurial and community activity for housing and infrastructure development;
- (e) Facilitate the efforts of trade unions, farmers, women and consumer organizations, organization of people with disabilities and other associations of populations concerned to setup their own cooperatively organized or local financial institutions and mechanism;
- (f) Promote the exchange of information on innovations in housing finance;

- (g) Support non-government organizations and their capacity to foster the development, where appropriate, of small savings cooperatives.

### **GOVERNMENT INTERVENTION AND SLUM PROBLEMS**

The Government of India has taken certain initiatives for the development of infrastructure as well as improvement of environment in urban settlements with a view to improving the quality of life. In this context, the Ministry of Urban Development and Poverty Alleviation are monitoring the implementation of a few Centrally Sponsored Schemes for which, besides policy guidelines, State Governments and their development agencies are given financial support in the form of grants and loans.

Some such schemes related to the development of infrastructure in Mega Cities where infrastructure projects related to water supply and sewerage, roads, bridges, city transport, solid waste management etc. are implemented on sustainable basis with appropriate direct and indirect cost recovery measures. The National Slum Development Programme is another scheme launched in 1996 where additional central assistance is granted for the development of urban slums.

The Valmiki Ambedkar Awas Yojana (VAMBAY) is a Central Government scheme having the primary objective to facilitate the construction and upgradation of the dwelling units for the slum dwellers and to provide health and enabling urban environment through community toilets under Nirmal Bharat Abhiyan, a component of the scheme. This is the first scheme of its kind meant exclusively for slum dwellers with a Government of India subsidy of 50 per cent. The balance 50 per cent is to be arranged by State Government with ceiling costs prescribed both for dwelling units and community toilets. During the financial year 2002-03, Central subsidy to the extent of Rs.218.35 crore for the construction of 110388 dwelling units covering 20 states and Union Territories have been sanctioned under VAMBAY.

### **ROLE OF NGOS**

The emerging scenario of the complex socioeconomic problems of slum dwellers and the somewhat isolated, piecemeal action plans and programmes drawn up so far by the Governments have not effectively hit the target. Thus while on the one hand the slum population is growing

and the slum conditions are worsening, on the other hand, the slum programmes usually remain only partly accomplished.

What is needed is people's participation, both in policy formulation and implementation of programmes. In this regard Non-Governmental Organisations (NGOs) with their local knowledge, skill and practical experience can play very effective role in programmes for improving living and economic conditions of slum dwellers. Various Five Year Plan documents have explicitly recognized the importance of involving NGOs in the planning and implementation of anti-poverty and minimum needs programme, which includes environmental improvement of slum areas only.

### CONCLUSION AND SUGGESTIONS

In the United Nations Millennium Declaration, World leaders pledged to tackle immense challenge posed by mushrooming growth of slums worldwide thereby setting the specific goal of achieving 'significant improvement in the lives of at least 100 million slum dwellers by the year 2020'. This means addressing not only the needs of slum dwellers for shelter but also the broader problem of urban poverty, especially unemployment, low incomes and lack of access to basic urban services.

### REFERENCES

1. Kandiah Paramasuaran (2006): Slums of cities: Globalization and its impact on poverty, Housing, Slums and Sanitation page-21-22. N.C. H F Bulletin Vol X No. 4.
2. Statistical Abstract of Orissa, (2008): Directorate of Economics and statistics, Orissa, BBSR.
3. Khurana M.L., (2003) : Cooperatives for improving living Conditions in slums, Vol - XVI.No.6
4. Orissa Economy Survey 2006-07.

○○○



## **Socio-Economic Profile of Slum Dwellers in Bhubaneswar**

**Dr. Sheshadev Mohapatra**

Faculty of Economics,

D.A.V. Public School,

Chandrasekharpur, Bhubaneswar

The faster growth of population leading to migration of a large number of distressed and low skilled population from the countryside who are seeking out their living in the low income generating informal sector economy of the towns and urban agglomerations have led to proliferation of slums and squatter settlements. Bhubaneswar the beautiful modern well planned new capital of Orissa has always held an important place in India's history. However there are 204 slum pockets in Bhubaneswar (B.M.C. & B.D.A Survey, 2004) which are divided into three categories.

- I. Identified slum over own land (37 nos.) i.e., Sthitiban, private land called Established slums,
- II. Identified slum over Encroached land (164 nos.) i.e., on government land called Encroached Slums.
- III. Slum Resettlement colony (3 nos.) i.e., Rehabilitated by government called Rehabilitated slums.

The major objectives of the study are following:

- 1) To study the socio-economic conditions of slum dwellers in Bhubaneswar.
- 2) To examine whether the slum dwellers are really poor.
- 3) To analyse the relationship of slum dwellers of Bhubaneswar to the inhabitants of the capital city.

The objectives are based on the study of 10 slums and 500 samples, selected at random interviewing by administering structured questionnaire mainly to cover a cross section of people with varied life experiences.

### **MAJOR FINDINGS**

Bhubaneswar witnessed a massive increase in slum population (35-40 per cent) particularly before 1980, 41 per cent during 1981-91 and



35 per cent during 1991-2001. The slums of Bhubaneswar have many upper caste households and they almost comprise two-fifths of the total slum dweller households in the city. The survey of 500 slum dweller households in 10 slum localities has revealed that majority of them live in nuclear family setup. As expected, the general literacy level of slum dwelling population as well as their educational level is lower than the average educational level of population residing in the city. Almost one-fourth (24.17 per cent) of the population in slums are illiterates.

More than half (53 per cent) of the sample households report wage work as their principal means of livelihood in the city. The average days of wage employment of a regular wage worker varies between 20 to 22 days during a month and during rainy season, it comes down to 15 days in a month. The average monthly income of the sample slum households is only Rs. 2704. As the earning of the principal earner of the households residing in slums is mostly inadequate to meet the family subsistence in majority of the cases both the husband and wife do wage work notwithstanding nuclear set up of the households. The work participation rate among the sample households is found to be 36.21 per cent which is much higher than the average work participation rate of population in the BMC area. The slum dwelling population on the whole not only earns less than the average per capita state income, but also many among them live in acute poverty.

The average consumption expenditure of the sample households on food and non-food related items is 77.91 per cent and 22.09 per cent respectively. It has been found that the majority of the slum dwelling households in the surveyed locations are perpetuating in heavy debt incurred from both formal and informal sources. Such debts are incurred mostly to meet basic subsistence needs of the households and unforeseen immediate needs.

It is found that people living in slums invariably borrow from informal sources as many of them suffer from employment insecurity problem coupled with inadequate level of earning. The average amount of debt incurred by the sample households for various purposes is found to be Rs. 11,643. The enquiry with the respondents further revealed that such loans were mostly obtained from informal sources as it was difficult for majority of them to meet formal paper needs and collateral security obligations insisted by the formal public lending institutions like banks and co-operative societies.

Our analysis of survey data clearly show that the majority (85.40 per cent) of the slum dwelling households have migrated to Bhubaneswar either due to unsecured livelihood and poverty or due to lack of employment opportunity in their native villages. Hardly less than one-tenths of the sample households have mentioned that they migrated to Bhubaneswar in order to earn more in the city or for better work environment and secured job status. It is evidently clear from the analysis of socio-economic profile of slum dwellers in a city like Bhubaneswar that they need special development intervention measures not only for the sake of improvement of their living conditions and livelihood security but also for the sake of environmental improvement of city's living surroundings and peaceful living of all categories of population by maintaining social, cultural and ecological harmony.

#### POLICY IMPLICATIONS

On the presumption that the migrant workers from rural areas create slums, and therefore suffer from urban congestion and environmental hazards in the towns the policy makers should try to check the flow of rural migrants to urban centres through public intervention aimed at reducing rural poverty. No doubt, there is need to reduce rural poverty. But the existing policy in this respect is not fully successful due to uncoordinated management, corruption, and leakages. There is a need for policy alternatives. So, rural non-farm sector is seen as a promising sector for creation of sustainable employment and as a solution to the problem of poverty in rural areas since agricultural sector is oversaturated.



**LIST OF MEMBERS****INSTITUTIONAL MEMBERS**

1. Council of Analytical Tribal Studies,  
Pujariput Road, Koraput - 764 020
2. Directorate of Economics & Statistics,  
Govt. of Orissa, Heads of Deptt. Buildings,  
Bhubaneswar - 751 001.
3. Gopabandhu Academy of Administration,  
Chandrasekharapur, Bhubaneswar - 751 013

**LIFE MEMBERS****A**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Dr. Adwait Kumar Mohanty<br/>N3/21, IRC Village,<br/>Nayapalli,<br/>Bhubaneswar - 751015.</li> <li>2. Dr. Akhay Ku. Mohanty<br/>At : Matiapada,<br/>P.O.: Puri, Dist.: Puri.</li> <li>3. Smt. Anajali Das<br/>Plot No.: 77-S<br/>Behind Jagannath Ashram,<br/>P.O.: Brahmeswar,<br/>Dist.: Bhubaneswar - 751018.</li> <li>4. Aparajita Biswal<br/>Deptt. of A &amp; A Economics<br/>Utkal University,<br/>Vani Vihar, Bhubaneswar.</li> <li>5. Dr. Ajeya Kumar Mohapatra<br/>C/o K.K. Parija, Arunodaya<br/>Nagar,<br/>Badambadi, Cuttack-12</li> <li>6. Major A.K. Roy<br/>Dy. Director<br/>H.E. (Retd.), Orissa.</li> <li>7. Dr. (Smt.) Amita Choudhury<br/>Deptt. of Economics,<br/>Berhampur University<br/>Bhanja Vihar, Berhampur-7,<br/>Dist : Ganjam.</li> </ol> | <ol style="list-style-type: none"> <li>8. Sri Anirudha Behera<br/>Deptt. of Economics<br/>F.M. Junior College,<br/>Balasore.</li> <li>9. Sri Ajit Kishore Parija<br/>Deptt. of Economics,<br/>A.B. College, ANGLO,<br/>Dist.: Jajpur - 755035</li> <li>10. Miss Asima Sahoo<br/>C/O Sri R.N. Sahoo,<br/>Madhuban Baruni Road,<br/>Baripada,<br/>Dist.: Mayurbhanj.</li> <li>11. Sri Askhaya Kumar Panda<br/>457, Laxmi Bai Nagar,<br/>New Delhi - 110023.</li> <li>12. Smt. Anuradha Mohapatra<br/>Deptt. of Economics,<br/>P.N. College,<br/>Khurda</li> <li>13. Dr. Akrura Chand<br/>Deptt. of Economics,<br/>Sambalpur University,<br/>Burla,<br/>Dist : Sambalpur.</li> <li>14. Miss Annapoorna Satapathy<br/>At : Ganeshipur,<br/>P.O.: Chandol,<br/>Dist.: Kendrapara.</li> </ol> |
|--|---|

- B**
15. Dr. Abhay Kumar Nayak  
Registrar, NISER,  
Institute of Physics Campus,  
P.O.: Sainik School,  
Dist.: Bhubaneswar - 751005
  16. Dr. Aditya Kumar Patra  
Deptt. of Economics,  
Kalinga Mahavidyalaya,  
G.Udayagiri,  
Phulbani.
  17. Dr. Arabinda Mishra  
Associate Professor,  
Deptt. of Natural Resources,  
TERI School of Advanced  
Studies,  
Darbari Seth Block,  
IHC Complex,  
New Delhi-110003.
  18. Sri Aurobindo Bej  
At.: Chandmaripadia  
P.O.: Sahadebkunta  
Dist.: Balasore - 756001
  19. Sri Alok Ranjan Behera  
Deptt. of A. & A. Economics  
Utkal University, Vanivihar  
Bhubaneswar - 751004
  20. Smt. Asha Dugal  
Deptt. of Economics,  
Banki College, Banki  
Dist.: Cuttack.
  21. Sri Amulyanidhi Pradhan  
Deptt. of Economics,  
Govt. Evening College,  
Rourkela.
  22. Mrs. Arati Nanda  
Research Scholar, ARDCOS  
115, Basundhara Apartments,  
Rasulgarh, Bhubaneswar-10.
  23. Sri Artatrana Tripathy  
Lect. in Economics  
Narsinghpur College,  
Narsinghpur, Dist.: Cuttack.
  24. Dr. B. Eswar Rao Patnaik  
SBR Govt. Women's Junior  
College,  
Berhampur, Dist.: Ganjam.
  25. Sri Bhabani Prasad Dash  
Madhapur,  
Gandhi Chhak, Jagatsingpur.
  26. Smt. Banabasini Mohapatra  
Deptt. of Economics,  
S.K.D.A.V. College, Rourkela.
  27. Dr. Binayak Rath  
Vice Chancellor,  
Utkal University,  
Vani Vihar, Bhubaneswar.
  28. Dr. Bidyadhar Nayak  
Plot. No.- 932,  
Mahanadi Vihar, Cuttack.
  29. Sri Basanta Kumar Das  
Co-ordinator,  
Fakir Mohan University,  
Vyasavihar, Balasore.
  30. Sri Benudhar Mishra  
Qrs. No.- IV B/37/2,  
Unit-3, Bhubaneswar -1
  31. Sri Bimal Kumar Dash  
Deptt. of Economics,  
Govt. Women's College,  
Dhenkanal.
  32. Smt. Babylata Shroff  
Deptt. of Economics,  
D.A.V. College, Titilagarh,  
Dist.: Bolangir.
  33. Smt. Binodini Dalei  
Deptt. of Economics,  
V. Deb College,  
Jeypore, Koraput.
  34. Sri Bhabani K. Patnaik  
Deptt. of Economics,  
R.C.M. Science College,  
Khallikote, Dist.: Ganjam.

35. Sri Bibhudendu Mishra, I.R.S.  
Director General,  
Investigation, Income Tax,  
Calcutta.
36. Sri Bijay Kumar Bose  
SIDBI,  
IPICOL House, Bhubaneswar.
37. Dr. Bhimasen Prusty  
Deptt. of Economics,  
Charampa College,  
Charampa, Dist.: Bhadrak
38. Dr. Bimal K. Mohanty  
Deptt. of Economics,  
G.M. College,  
Sambalpur.
39. Dr. Basudeb Sahoo  
Retd. Prof. of Economics,  
A/M-39, Kapila Prasad,  
Bhubaneswar-2.
40. Dr. Bhagaban Swain  
Dy. Director, Gopabandhu  
Academy of Administration  
Near XIB  
Dist.: Bhubaneswar
41. Dr. Bhagabat Patro  
Deptt. of Economics,  
Berhampur University,  
Berhampur-7, Dist : Ganjam.
42. Sri B.K. Sahoo  
Principal,  
Chikiti College, Chikiti,  
Dist : Ganjam.
43. Dr. B.K. Panda  
Deptt. of Economics,  
Berhampur University,  
Bhanja Vihar, Berhampur-7,  
Dist : Ganjam.
44. Dr. Baijayanti Rout  
Deptt. of Economics,  
B.J.B. College,  
Bhubaneswar.
45. Dr. Bholeswar Sahu  
Deptt. of Economics,  
Attabira College, Attabira,  
Dist.: Bargarh - 768027.
46. Sri Biranchi Narayan  
Mohapatra  
Deptt. of Economics,  
Sarala Mahavidyalay,  
Rahama, Dist.: Jagatsinghpur.
47. Sri Binayak Das  
Deptt. of Economics,  
KSUB College,  
Bhanjanagar,  
Dist : Ganjam.
48. Sri B. Samantray  
Deptt. of Economics,  
R.C.M. College,  
Khalikote,  
Dist : Ganjam.
49. Smt. Basanti Das  
Deptt. of Economics,  
Rayagada Women's College,  
PO./Dist.: Rayagada.
50. Sri B.K. Mohanty  
Deptt. of Economics,  
Malyagiri College,  
Pallahara, Angul.
51. Dr. Bijayalaxmi Rout  
Deptt. of Economics,  
Ravenshaw College,  
Cuttack.
52. Major Bramhanda Sahoo  
Plot No.- 1215/1423  
Khandagiri,  
Bhubaneswar.
53. Dr. Benudhar Nayak  
HSS Dept. NERIST,  
Nirjuli,  
Arunachal Pradesh.
54. Prof. Baidyanath Misra  
17, Sahid Nagar,  
Bhubaneswar.

55. Dr. Bedabati Mohanty  
N-3/314, IRC Village,  
Nayapalli,  
Bhubaneswar - 751015.
56. Dr. Benudhar Bhuyan  
Sai Jyoti, N - 1/7,  
Ekamra Kanan Road,  
IRC Village, Nayapalli,  
Bhubaneswar - 751015.
57. Dr. Balaram Mishra  
Deptt. of Economics,  
F.M. College,  
Balasore.
58. Sri Bhikari Behera  
Deptt. of Economics,  
Godavarisha Mahavidyalaya,  
Banpur, Dist - Khurda.
59. Sri Basanta Kumar Mohanty  
Deptt. of Economics,  
Malyagiri College, Malyagiri,  
Pallahara, Angul - 759118.
60. Sri Biswambhar Jena  
Deptt. of Economics,  
D.K. College, Jaleswar,  
At/P.O.: Dhansimulia,  
Balasore - 756084.
61. Dr. Bishnupriya Mishra  
Deptt. of Economics  
B.J.B. College,  
Bhubaneswar.
62. Dr. Bandana Pathak  
Deptt. of Economics,  
J.K.B.K. Govt. College,  
O.M.P. Square, Cuttack - 3.
63. Sri Bharat Bhusan Mohanty  
Deptt. of Economics,  
S.A. College,  
Balipatna, Khurda.
64. Dr. Bidyadhar Parida  
Deptt. of Economics  
Sukinda College,  
Sukinda, Dist : Jajpur.
65. Sri Binod Bihari Nayak  
Deptt. of Economics,  
Bamra T.F. College,  
Bamra, Sambalpur.
66. Sri Bidyadhar Praharaj  
Deptt. of Economics,  
Vyasagar College,  
Jajpur Road,  
Dist : Jajpur.
67. Dr. Bhabesh Sen  
Deptt. of A & A Economics,  
Utkal University,  
Vani Vihar,  
Bhubaneswar.
68. Sri Biswabhas Patra  
NCDS,  
Chandrasekharapur  
Bhubaneswar - 13.
69. Sri Bidyadhar Mahanta  
Matru Nilaya,  
Keonjhar.
70. Sri Bhaskar Chandra Jena  
At : Kaptipada,  
P.O.: Kaptipada,  
Dist.: Mayurbhanj.
71. Miss Bharati Das  
Deptt. of Economics,  
Brahmanjharilo Mahavidyalay,  
P.O.: Raipur,  
Dist : Cuttack.
72. Sri Bibekananda Mishra  
Deptt. of Economics,  
Bhagabati Mahavidyalay,  
Konark, Puri.
73. Dr. Biswaswarup Mishra  
Assistant Professor of  
Economics,  
Xavier Institute of  
Management,  
Bhubaneswar.

74. Sri Bijoy Kumar Dash  
Deptt. of Economics,  
P.P. Mahavidyalay,  
Tigiria, Cuttack - 754030

75. Dr. Bijoy Kumar Dey  
Deptt. of Economics,  
LN College, Jamsuli,  
Dist.: Balasore.

76. Sri Bikash Ranjan Mishra  
Deptt. of Economics,  
Ravenshaw University,  
Cuttack - 753003

### C

77. Sri Chittaranjan Das  
Deptt. of Economics,  
Padmapur College,  
Padmapur, Bargarh.

78. Dr. Chitta Ranjan Nayak  
Deptt. of Economics,  
Ravenshaw University, Cuttack

79. Sri Chitrasen Pasayat  
152, Vijay Vihar  
Nuagaon Road  
P.O.: Sishupalgad  
Bhubaneswar - 751002

80. Sri Chittaranjan Das  
NCDS, Chandrasekharpur,  
Bhubaneswar-13.

81. Sri Chintamani Satapathy  
Deptt. of Economics,  
Karanjia College, Karanjia,  
Mayurbhanj.

82. Sri Chandrakanta Das  
Deptt. of Economics,  
Bhadrak College,  
Bhadrak.

83. Sri Chandramani Das  
Plot No.- 454,  
Mahanadi Vihar,  
Cuttack.

84. Dr. Chandradwaj Panda  
Deptt. of Economics  
Gunupur College,  
Gunupur, Dist.: Rayagada.

### D

85. Sri Dayanidhi Pal  
College Road,  
Salipur, Cuttack.

86. Dr. Debendra Kumar Biswal  
Deptt. of Economics,  
Mangala Mahavidyalaya,  
Kakatpur, Dist.: Puri.

87. Sri Dayanidhi Samantaray  
Narayana Mishra Lane,  
Behind Grand Cinema,  
Cuttack.

88. Dr. D. Chaudhury  
Deptt. of Economics,  
Dalmia College,  
Rajgangpur.

89. Dr. D.C. Mishra  
Badambadi, Cuttack

90. Smt. Ditpti Panda  
Deptt. of Economics,  
S.C.S. College, Puri.

91. Sri Dipak Ranjan Das  
Deptt. of Economics,  
Aeronautics College,  
Sunabeda, Dist : Koraput.

92. Dr. Durgasankar Sarangi  
Deptt. of Economics,  
F.M. College, Balasore.

93. Dr. Dilip Ray  
Deputy Directorate of Statistics  
& Economics,  
Heads of Departments Building  
Bhubaneswar

94. Sri D. Mishra  
Deptt. of Economics,  
Godavarisha Mahavidyalaya,  
Banpur, Khurda.



95. Dr. Damodar Mohapatra  
Deptt. of Economics,  
U.N.S. Mahavidyalay,  
Khairabad,  
Mugapal, Kuakhia, Jajpur.
96. Sri Debendra Nath Bhoi  
Deptt. of Economics,  
N.C. College, Jajpur.
97. Sri Dolagobinda Sethi  
Deptt. of Economics,  
N.C. Junior College, Jajpur.
98. Sri Digamber Chand  
Deptt. of Economics,  
Bamra T.F. College,  
Bamra, Sambalpur.
99. Sri Dhananjay Patnaik  
Deptt. of Economics,  
Seva Mahavidyalaya,  
Bidanasi, Cuttack-8.
100. Sri Damodar Jena  
Tatadhan Academy  
Boys' Town Campus,  
Tulloth Post, Madurai-16,  
Tamilnadu.
111. Sri Dharmabrata Mohapatra  
Deptt. of Economics,  
Ravenshaw University,  
Cuttack - 753003
- G**
112. Smt. Gopa Das  
Deptt. of Economics,  
Municipal College,  
Rourkela-2.
113. Sri Gobind Chandra Das  
Deptt. of Economics,  
Govt. Womens' College,  
Keonjhar.
114. Dr. Golak Bihari Nath  
Deptt. of Economics,  
L.N.College,  
Jharsuguda.
115. Sri Gangadhar Behera  
Deptt. of Economics,  
Seemanta College,  
Jharpokharia,  
Dist : Mayurbhanj.
116. Sri Gopinath Kar  
Deptt. of Economics,  
Mangala Mahavidyalaya,  
Kakatpur, Puri.
117. Sri Gouranga Panda  
Deptt. of Economics,  
Nilamani Mahavidyalay,  
Rupsa, Balasore.
118. Dr. Gayadhar Giri  
Deptt. of Economics,  
Nilgiri College, Nilgiri,  
Dist.: Balasore.
119. Prof. Ghanshyma Das  
Retd. Director, H.E., Orissa,  
699, Sahid Nagar,  
Bhubaneswar.
120. Dr. Gyan Chandra Kar  
Siddheswar Sahi,  
Tulsipur,  
Cuttack - 8
121. Dr. Gayatri Panda  
Deptt. of Economics,  
Dr. J.N. College,  
Rasalpur, Dist.: Balasore.
122. Professor Gajendra Nath Das  
Golgunda,  
Jagriti Vihar,  
Sambalpur - 768020
123. Sri Gobind Chandra Padhi  
Reader in Economics,  
Upper Block Colony,  
Hinjilicut, Ganjam.
124. Sri Golak Bihari Prusty  
Deptt. of Economics,  
Kamakhyanagar College,  
Kamakhyanagar,  
Dist : Dhenkanal.

125. Dr. (Smt.) Gitanjali Panda  
Deptt. of Social Science,  
F.M. University, Vyasa Vihar,  
Balesore.

126. Sri Ghanashyam Jena  
Deptt. of Economics,  
Kharasrōta Mahavidyalay,  
Singpur, Dist - Jajpur.

127. Sri Gopabandhu Mohapatra  
Deptt. of Economics,  
Khaira College, Khaira,  
Dist.: Balasore.

### H

128. Dr. Hemant Kumar Pradhan  
Institute of Financial Manage-  
ment  
30, Kothari Road,  
Nungambakkam,  
Chennai - 600034.

129. Dr. Harapriya Patnaik  
Lecturer  
C/O.: Sri L.N. Patnaik,  
Govinda Vihar, Lochapada,  
Berhampur, Ganjam.

130. Sri Harekrushna Nayak  
Deptt. of Economics,  
Bhadra College, Bhadrak.

### I

131. Sri I. Gopal Rao  
Deptt. of Economics,  
Gunpur College, Gunupur,  
Dist : Koraput.

132. Smt. Indira Udgata  
Deptt. of Economics,  
Govt. Women's College, Puri.

133. Smt. Indulekha Das Bhatta  
Mishra  
Deptt. of Economics,  
Govt. College,  
Rourkela.

134. Miss Ifat Nawaz  
Deptt. of Economics,  
S.A. College, Balipatna,  
Dist : Khurda.

### J

135. Smt. Jharana Roy  
C/o.: Sri Dinesh Saha,  
Advocate,  
Bangali Sahi, Cuttack.

136. Dr. Jayanta Kumar Parida  
Upara Sahi,  
Near Kamana Mandir  
P.O./Dist : Khurda

137. Smt. Jyotsna Udagta  
Deptt. of Economics,  
P.N. College,  
Khurda.

138. Dr. J.S. Mahaprasastha  
Deptt. of Economics,  
Christ College,  
Cuttack.

139. Dr. Jagannath Lenka  
Deptt. of Economics,  
North Orissa University,  
P.O.: Takatpur, Baripada,  
Dist.: Mayurbhanj

140. Dr. Jagabandhu Samal  
COATS  
Pujariput Road, Koraput.

141. Smt. Janaki Pradhan  
Deptt. of Economics,  
M.S. College, Baramba,  
Dist.: Cuttack.

142. Dr. Jnana Ranjan Mohanty  
Brahmanbhog, Harianta  
Choudwar, Cuttack.

143. Sri Jayabandan Jena  
Deptt. of Economics,  
Meghasan College,  
Nudadiha, Mayurbhanj.

144. Dr. Jyotirmayee Kar  
Sidhi - 24/732  
Shree Vihar  
Bhubaneswar-751031
145. Dr. Jyoti Prakash Patnaik  
Professor of Economics,  
Sambalpur University,  
Jyoti Vihar, Burla, Sambalpur.
146. Dr. Jitaram Dey  
Deptt. of Economics,  
U.N. College, Nalagaja,  
Dist.: Mayurbhanj.
147. Sri Janmejaya Senapati  
Lecturer in Economics,  
Seemanta Engineering College,  
Jharpokharia, Mayurbhanj.
148. Sri Kartik Ch. Rath  
Bana Bagicha  
Sheikh Bazar  
Cuttack - 753008
149. Smt. Kanak Manjari Mishra  
C/O.: N.K. Mishra,  
N-1/256, Nayapalli,  
IRC Village, Bhubaneswar-  
751015.
150. Dr. Kumarbar Das  
Deptt. of A & A Economics,  
Utkal University, Vani Vihar,  
Bhubaneswar-4.
151. Sri Kamalakanta Acharya  
At/P.O.: Sunhat  
Dist.: Balasore - 756002
152. Sri Kushadhar Panda  
Deptt. of Economics,  
Madhupur College, KALAN,  
Dist.: Jajpur.
153. Sri Kailash Chandra Mishra  
Deptt. of Economics,  
M.P.C. Junior College,  
Baripada, Mayurbhanj.
154. Dr. Kartik Chandra Dash  
Deptt. of Economics,  
B.J.B. College,  
Bhubaneswar.
155. Dr. K.N. Mohapatra  
Shree Towers, BJB Nagar,  
Bhubaneswar - 751014
156. Sri Srinivasan, I.A.S.  
Retd. Commissioner of  
Agriculture,  
Govt. of Orissa,  
Bhubaneswar.
157. Dr. K. Nana Buchi  
Baikuntha Nagar,  
Berhampur,  
Dist : Ganjam-760001.
158. Dr. Kishore Chandra Samal  
34, Laxmi Vihar  
Near Sainik School  
Bhubaneswar - 751005.
159. Sri K C. Maharana  
Deptt. of Economics,  
Khalikote College,  
Berhampur, Dist.: Ganjam.
160. Sri Kartik Prasad Jena  
Deptt. of Economics,  
Bhadrak College, Bhadrak.
161. Smt. Kanaka Manjari Mohanty  
Deptt. of Economics,  
S.B.Women's College,  
Cuttack-1.
162. Sri K.C. Nayak  
Suryasikha,  
At/P.O.: Shymsunderpur  
Via : Raj Nilgiri,  
Dist.: Balasore.
163. Mrs. Kasturi Panda  
Deptt. of Economics  
Govt. Women's College, Puri.
164. Sri Kali Charan Nayak  
MIG-10, BDA Colony,  
Laxmi Sagar, Bhubaneswar.

165. Dr. Kabita Kumari Sahu  
Deptt. of Economics,  
North Orissa University,  
Takhatpur, Baripada,  
Mayurbhanj.
166. Dr. Khetra Mohan Mohapatra  
Asstt. Professor of Economics,  
HSS Department, HBTI,  
Nawabganj,  
Kanpur - 208002.
167. Sri Khitish Kumar Kuntia  
Deptt. of Economics,  
CIT, Jatani, Khurda
168. Dr. Kartik Kumar Das  
Deptt. of Economics,  
Surajmal Saha College  
Bagha Akheda Lane  
Badasankha, Puri-2
169. Miss Krushnapriya Behera  
Deptt. of Economics,  
Emarti Devi Women's College,  
Naya Sarak, Cuttack-2.
170. Sri Kishore Chandra Pattnaik  
Deptt. of Economics,  
Berhampur City College,  
P.O.: Berhampur,  
Dist.: Ganjam.
171. Sri Kishorehari Badatya  
Deptt. of Economics,  
Govt. College,  
Phulbani.
172. Dr. Kasturi Sahoo  
Deptt. of Economics,  
K.B.D.A.V. College,  
Nirakarpur, Dist.: Khurda.
176. Sk. Kalimullah  
Deptt. of Economics,  
Sudarsan Mahavidyalaya,  
42 Mouza, Dist.: Cuttack.
177. Sri Kamal Kumar Tripathy  
Deputy Director,  
Ministry of Food Processing  
Industries,  
Panchasheela Bhawan,  
August Krantimarg,  
New Delhi - 110049.
178. Sri Kalyan Sankar Ray  
Asian School of Business  
Management  
Sikhya Vihar, Bhola  
Barang, Khurda Road,  
Chanda, Bhubaneswar.
179. Dr. Krupasindhu Pradhan  
Plot No.- 1045/6,  
Gadasahi, Nayapalli,  
Bhubaneswar - 751012.
180. Dr. L.N. Dash  
Deptt. of Economics,  
North Orissa University,  
Takhatpur,  
Baripada, Dist.: Mayurbhanj.
181. Sri L.N. Panigrahi  
Deptt. of Economics,  
Aska Science College,  
Aska, Dist.: Ganjam.
182. Ms. Lipika Das  
Deptt. of Economics,  
Balikuda College, Balikuda,  
Dist.: Jagatsinghpur.
183. Sri Lalit Mohan Sahoo  
VIM - 518  
Sailashree Vihar  
Bhubaneswar - 751021
184. Ms. Lila Subudhi  
Deptt. of Economics,  
Niranjan Govt. Women's  
College,  
Aska, Ganjam.

185. Ms. Lipika Das  
Deptt. of Economics,  
K.B.D.A.V. College,  
Nirakarpur, Dist.: Khurda.
186. Sri Lalit Kumar Dash  
Remuli College,  
Remuli, Dist.: Keonjhar.
187. Sri Lalit Kumar Mahanta  
Deptt. of Economics,  
P.S. College,  
Jhumpura, Keonjhar.
188. Dr. L.K. Choudhury  
Reader in Economics,  
Govt. College, Angul.
189. Mrs. Lipsa Mishra  
Deptt. of Economics,  
R.D. Women's College,  
Bhubaneswar-7.
190. Dr. Lopamudra Mishra  
C/O.: Professor Gajendranath  
Das  
Golgunda, Jagriti Vihar,  
Sambalpur - 768020.
191. Dr. Manoranjan Das  
2C/187, Sector - 9, CDA  
Cuttack - 753014
192. Sri Manoj Kumar Hui  
Deptt. of Economics,  
D.S. College, Bahalada,  
Mayurbhanj.
193. Dr. Madhusudan Panigrahi  
Director, Tariff  
Orissa Electricity Regulatory  
Commision  
Bhubaneswar - 751012
194. Sri Manmohan Das  
At : Gopalbag,  
(Near Satyasai Vihar),  
Baripada.
195. Dr. Mamata Swain  
C-202, Nirupama Apartments,  
Near Kalinga Stadium,  
P.O.- Nayapalli, Bhubaneswar.
196. Smt. Minati Mishra  
Deptt. of Economics  
Govt. College, Bhawanipatna,  
Dist.: Kalahandi.
197. Smt. Manorama Mohapatra  
The Samaj,  
Gopabandhu Bhavan,  
Buxi Bazar, Cuttack-1.
198. Dr. Mihir Kumar Mohapatra  
Goa Institute of Management,  
Ribandar, Goa,  
Pin - 403006.
199. Sri Mukhtikanta Satapathy  
Deptt. of Economics,  
Khaira College, Khaira,  
Balasore.
200. Dr. Minati Mallick  
Deptt. of Economics,  
North Orissa University,  
Takhatpur, Baripada,  
Mayurbhanj.
201. Dr. Manmath Ku. Mohanty  
S-3 Madhuban, Sishu Vihar,  
Infocity Road, P.O.: KIIT,  
Bhubaneswar - 751024.
202. Dr. Mohit Kumar Sarangi  
Near Convént School,  
Prafulla Nagar, Baripada.
203. Sri Manmohan Biswal  
Kampur Anchalik  
Mahavidyalay,  
At/P.O.: Kampur,  
Dist.: Cuttack.
204. Dr. (Smt.) Mitali Chinara  
Deptt. of A. & A. Economics,  
Utkal University, Vani Vihar  
Bhubaneswar - 751004

205. Dr. Malyabanta Routray  
Deptt. of Economics,  
A.P. College, Sujanpur,  
Dist.: Jajpur
  206. Shri Muralidhar Sahoo  
Deptt. of Economics,  
F.M. College,  
Balasore.
  207. Smt. Meghamala Behera  
C/O.: Surendra Nath Behera,  
Ward No.- 21, Bhanjpur,  
Baripada, Mayurbhanj.
  208. Sri Mahendra Prasad Agasty  
Lecturer in Economics,  
Silicon Institute of Technology,  
Silicon Hills, Patia,  
Bhubaneswar.
  209. Dr. Manoj Kumar Panda  
Director, Centre for Economic  
and Social Studies  
Nizamiah observatory Campus  
Begumpet  
Hyderabad,  
Pin - 50016
  210. Sri Mrutyunjay Adhikari  
Deptt. of Economics,  
S.R. College, Baliapal,  
P.O.: Baliapal,  
Dist.: Balasore.
  211. Sri Mahiranjana Dash  
Retired Principal  
H1/48, BDA Colony,  
Kapilaprasad,  
Bhubaneswar.
  212. Sri Manoj Kumar Dora  
Deptt. of Economics  
North Orissa University,  
Takhatpur, Baripada,  
Mayurbhanj.
  213. Smt. M.K. Devi  
Deptt. of Economics,  
P.N. College,  
Khurda.
  214. Dr. Manaranjan Behera  
NCDS, Chandrasekharpur,  
Bhubaneswar-751 013.
  215. Smt. Manaswini Sahoo  
Deptt. of Economics  
Govt. Women's College,  
Dhenkanal.
  216. Sri Manoj Kumar Das  
Dept. of Economics  
Ravenshaw University  
Cuttack - 753003
  217. Mrs. Mousumi Das  
Deptt. of Economics  
Rajendra College  
Bolangir - 767002
  218. Sri Mrutyunjay Dash  
Senior Lecturer in Economics,  
Asian School of Business  
Management,  
Sikhya Vihar, Bhola,  
Barang-Khurda Road, Chanda,  
Bhubaneswar.
- N
219. Dr. Nagen Chandra Mohanty  
Lower Police Colony  
Tulsipur, Cuttack-8.
  220. Dr. Narendra Kumar Behera  
Deptt. of Economics,  
Larambha College, Larambha,  
Dist.: Bargarh.
  221. Sri Natabar Rout  
Plot No. 568,  
Jagannath Lane,  
Mahanadi Vihar,  
P.O.: Nayabazar,  
Cuttack - 753004

222. Sri Nabaghan Nanda  
Lecturer in Economics,  
Women's College, Japakud,  
Jagatsinghpur.
  223. Dr. Nilendree Panda  
Deptt. of Economics,  
G.M.College, Sambalpur.
  224. Sri Niranjana Rana  
Deptt. of Economics,  
Rajdhani College,  
Bhubaneswar.
  225. Dr. Niranjana Pathy  
Lecturer in Economics,  
Meghasan College, Nudadiha  
Dist.: Mayurbhanj
  226. Dr. Niranjana Acharya  
Lecture in Economics  
Rajadhani College,  
Bhubaneswar.
  227. Smt. N.Pravat Kusum  
Deptt. of Economics,  
R.C.M.College,  
Khallikote,  
Dist.: Ganjam.
  228. Dr. N.C. Sahoo  
5th Line, Gandhi Nagar,  
Berhampur, Dist.: Ganjam,  
Pin - 760001.
  229. Sri Nalinikanta Mohapatra  
Deptt. of Economics,  
S.V.M. College,  
Jagatsinghpur.
  230. Namita Pattanaik  
Lect. in Economics,  
Maharshi College of Natural  
Law,  
Sahid Nagar, Bhubaneswar.
  231. Sri Narasingh Charan Acharya  
*Principal*  
Choudwar College,  
Choudwar,  
Dist.: Cuttack.
  232. Prof. Nilakanth Rath  
Retd. Prof. of Economics,  
Gokhale Institute of Politics  
and Economics, Pune.
  233. Sri N.C. Ray  
Deptt. of Economics,  
KBDAV College,  
Nirakarpur, Dist.: Khurda.
  234. Sri Narottam Nanda  
Near Parade Padia,  
Baripada,  
Dist.: Mayurbhanj.
  235. Dr. N.B. Pradhan  
C/O.: Vima Rao,  
Rangeilunda,  
Berhampur, Ganjam.
- P**
236. Dr. P.C. Mohapatra  
Director C.O.A.T.S.  
Pujariput Road,  
P.O./Dist.: Koraput.
  237. Sri Pramod Kumar Sahoo  
Lecturer in Economics,  
P.S. College, Saintala,  
Dist.: Bolangir.
  238. Sri Prakash Dash  
Baghra Road, Ward No - 16,  
Near Pratibha Nursing Home,  
Baripada - 1, Dist.: Mayurbhanj
  239. Dr. Pratap Keshari Nayak  
Dept. of Economics,  
Govt. Women's College,  
Dhenkanal.
  240. Dr. Prahallad Panda  
Prof. of Economics,  
Berhampur University,  
Bhanja Vihar, Berhampur-7.
  241. Dr. Padmaja Mishra  
Deptt. of Economics,  
Utkal University,  
Vani Vihar,  
Bhubaneswar-4



242. Smt. Pratima Sarangi  
Deptt. of Economics,  
Sulabhala Women's College,  
Cuttack.
243. Smt. P.K. Singh  
Deptt. of Economics,  
V. Dev College, Jeyapore,  
Dist.: Koraput.
244. Prof. Pravat Kumar Patnaik,  
CESP, SSS,  
Jawaharlal Nehru University,  
New Delhi-110067.
245. Sri Pradosh Kumar Jenani  
Deptt. of Economics,  
N.C. Junior College,  
P.O./Dist.: Jajpur.
246. Sri P.K. Mohapatra  
Deptt. of Economics,  
Khemundi College,  
Digapahandi,  
Dist.: Ganjam.
247. Sri Prasanna Kumar Das  
Lecturer in Economics,  
Krupajal Engineering College,  
Purba Sasan,  
Kausalyaganj,  
Bhubaneswar.
248. Sri Prabhat Kumar Mohapatra  
Deputy Director,  
Gopabandhu Academy of  
Administration,  
XIM Square,  
Bhubaneswar.
249. Sri Purna Chandra Minj  
Deptt. of Economics,  
Rajdhani College,  
CRP Squire,  
Bhubaneswar.
250. Sri Purna Chandra Patra  
Deptt. of Economics,  
Khallikote Junior College,  
Berhampur, Ganjam.
251. Dr. Prasanta Chandra Panda  
Lecturer in Economics,  
KIIT School of Management,  
KIIT Deemed University,  
Bhubaneswar-751024.
252. Dr. P.C. Dhal  
Deptt. of Economics,  
Kharasota Mahavidyalaya,  
Singpur, Dist. Jajpur.
253. Sri Prafulla Kumar Mansingh  
Deptt. of Economics,  
S.C.S. College, Puri.
254. Dr. Pragati Mohanty  
L/82 Phase-I,  
Basanti Colony,  
Rourkela,  
Dist.: Sundargarh.
255. Miss Pragyan Pal  
Deptt. of Economics,  
Ravenshaw Junior College,  
Cuttack.
256. Sri Pravakar Sahoo  
Deptt. of Economics,  
Balikuda College,  
Balikuda,  
Dist.: Jagatsinghpur.
257. Sri Pratap Chandra Mohanty  
Deptt. of Economics,  
Bramhanajharilo  
Mahavidyalaya,  
Bramhanajharilo,  
P.O.: Rajpur,  
Dist.: Cuttack.
258. Dr. Purusottam Sahu  
Deptt. of Economics,  
Gopalpur College,  
Gopalpur, Dist.: Ganjam.
259. Dr. Parsuram Samal  
Senior Scientist,  
Division of Social Sciences,  
CRRI, Cuttack, 753006.

260. Sri Pradip Kumar Patnaik  
Deptt. of Economics,  
K.D. Science College,  
Pochilima,  
Dist.: Ganjam.
261. Sri Priyabrata Mishra  
Deptt. of Economics,  
Chitrada College, Chitrada,  
Dist.: Mayurbhanj
262. Pranayini Mishra  
Deptt. of Economics,  
P.N. College, Bolgarh,  
Dist.: Khurda
263. Sri Prasanna Kumar Das  
Deptt. of Economics,  
Karanjia College, Karanjia,  
Dist : Mayurbhanj.
264. Smt. Priyambada Bhainsha  
Deptt. of Economics,  
V.S.S. College,  
Jujumara, Sambalpur.
265. Smt. Pratima Mohapatra  
Deptt. of Economics,  
Nimapara College,  
Nimapara, Dist.: Puri.
266. Sri P.K. Bisoi  
Deptt. of Economics,  
T.T.Mahavidyalaya,  
Ghatagaon, Dist.: Keonjhar.
267. Smt. Prajna Samantaray  
Deptt. of Economics,  
Christ College,  
Cuttack-8.
268. Sri Patitapabana Sahoo  
Deptt. of Economics,  
Panchayat College,  
Bargarh.
269. Ms. Puspa Das  
Deptt. of Economics,  
Kamala Nehru Mahavidyalaya,  
Unit-IV, Bhubaneswar.
270. Sri Prabodh Kumar Samal  
Deptt. of Economics,  
G.C. College, Ramachnadrapur,  
Dist.: Jajpur.
271. Sri Prasant kumar Chhotray  
Deptt. of Economics,  
Ekamra College,  
Bhubaneswar.
272. Mrs. Prativa Kumari Dei  
Deptt. of Economics,  
S.K.C.G. College,  
Paralakhemundi,  
Dist.: Gajapati.
273. Dr. Prasanna Kumar Mohapatra  
Anchalika Mahavidyalaya,  
Swampatna,  
Dist.: Keonjhar.
274. Dr. Pitambar Dash  
Swarnamayee Nagar,  
Berhampur,  
Dist.: Ganjam.
275. Prof. Pulin B. Nayak  
11-Mandakini Enclave  
Alaknanda, New Delhi- 110019.
276. Puspanjali Patnaik  
Savitri Women's College,  
Bhanjanagar, Dist.: Ganjam.
277. Dr. Prabir Kumar Pattnaik  
Dept. of Economics,  
Srimaa Mahila Mahavidyalay,  
Baripada, Mayurbhanj.

**R**

278. Sri Rabindra Kumar Mishra  
335A, Acharya Vihar,  
P.O.: R.R.L.,  
Bhubaneswar.
279. Sri Rajkishore Mishra  
Vice-Principal,  
BJB College,  
Bhubaneswar.

280. Sri Rabi Narayan Kar  
Asst. Director (EI & S),  
House No.-605, Block-E,  
MS Apartments and Hostel,  
Kasturba Gandhi Marg,  
New Delhi-110001.
281. Dr. R.P. Choudhuri  
Professor of Commerce,  
G.M.College, Sambalpur.
282. Sri Rasbihari Samal  
Principal,  
Women's College, Angul.
283. Dr. R.N. Mohapatra  
D-74, Koel Nagar,  
Rourkela-14.
284. Sri Rabi Narayan Patnaik  
M-66, Baramunda,  
Housing Board Colony,  
Bhubaneswar-751003.
285. Sri Ramesh Chandra Sarangi  
Deptt. of Economics,  
N.C. College, Jajpur.
286. Sri Ramakanta Sahoo  
Principal,  
Biraja Women's College,  
P.O./Dist.: Jajpur.
287. Smt. Rabeya Parveen  
Deptt. of Economics,  
S.C.S. Junior College, Puri.
288. Sri Ratnakar Jena  
Sundar Pokhari,  
Tuloti, Korai, Dist.: Jajpur.
289. Dr. Ranjita Kumari Mohanty  
Deptt. of Economics,  
Govt. Women's College,  
Keonjhar.
290. Dr. Rabindra Kumar Nayak  
Deptt. of Economics,  
Rama Devi Women's Junior  
College,  
Bhubaneswar.
291. Dr. R.K. Panda  
B/L 115, VSS Nagar,  
Bhubaneswar - 751007
292. Sri R.P. Behera  
Deptt. of Economics,  
Rajendra College, Bolangir,  
Dist.: Bolangir.
293. Dr. Ramchandra Mishra  
Deptt. of Economics,  
Govt. Women's College,  
P.O./Dist.: Puri.
294. Dr. Ramesh Chandra Mishra  
Deptt. of Economics,  
KKS Women's College,  
Balasore.
295. Dr. Rajan Kumar Sahoo  
Deptt. of Economics,  
B.S. College, Nayahat, Jajpur.
296. Sri Rabindra Nath Ray  
IG. Women's College,  
Shelter Chhak, Dist.: Cuttack
297. Dr. Radha Mohan Mallick  
783 E, Jayadev Tower Complex,  
Jayadev Vihar,  
P.O.: R.R.L.,  
Bhubaneswar-751013.
298. Prof. R. Padhy Sharma  
Director,  
Institute of Economic Studies,  
Manasi Mansion,  
Jayprakash Nagar,  
Berhampur-10, Ganjam.
299. Dr. Rabi N. Patra  
Deptt. of Economics,  
Ravenshaw University, Cuttack.
300. Sri Ratikanta Kumbhar  
Lecturer in Economics  
Deptt. of Social Science,  
F.M. University, Balasore.

301. Dr. R.K. Sahoo  
Principal,  
Nimapara College,  
Nimapara, Dist.: Puri.
302. Sri Ramesh Chandra Panda  
Deptt. of Economics,  
Swarnachud College,  
Mitrapur,  
Dist.: Balasore.
303. Sri Ratnakar Mohapatra  
Deptt. of Economics,  
Khaira College, Khaira,  
Dist.: Balasore.
304. Sri Rabindra Kumar Mishra  
Deptt. of Economics,  
Nilamadhab College,  
Kantilo, Dist.: Nayagarh.
305. Sri Raghunath Dalei  
Co-operative Colony No.-2,  
Berhampur, Ganjam.  
Pin - 760004.
306. Sri Ramakanta Prusty  
B.P.College of Business Admin-  
istration,  
Gh-6, Sector-23,  
Gandhinagar,  
Ahmedabad.
307. Dr. R.N. Tripathy  
243, Saheed Nagar,  
Bhubaneswar.
308. Reenati Mishra  
Lect./In Economics,  
KIIT School of management  
KIIT Deemed University  
Bhubaneswar - 7519024
309. Sri Ranjit Kumar Das  
Jt. Director,  
BIRD Sector-H, LDA Colony,  
Kanpur Road,  
Lucknow-226012
310. Dr. Rasananda Panda  
D-1, Lake View Apartments,  
Vastrapur,  
Ahmedabad-380015.
311. Miss Ritanjali Das  
Regional Institute of  
Education,  
Bhubaneswar.
312. Smt. Sashikala Patnaik,  
N-2/121, Nayapalli,  
Bhubaneswar.
314. Sri Saroj Kumar Panda  
HIG-17, Dharma Vihar  
Bhubaneswar-751030
315. Smt. Susama Dash  
Deptt. of Economics,  
Rayagada Womens' College,  
At/P.O./Dist.: Rayagada.
316. Dr. Sarba Narayan Mishra  
Asst. Professor of Economics,  
D/20, Kalpana Flats,  
Bhubaneswar - 751014.
317. Dr. Satoj K. Rajguru  
Deptt. of Economics,  
Govt. Science College,  
Chhatrapur,  
Dist.: Ganjam.
318. Sri S.N. Panigrahi  
Deptt. of Economics,  
Khulkoore College,  
Berhampur,  
Dist.: Ganjam.
309. Miss Ritanjali Jena  
C/o. : Geetanjali Jena  
Near Kali Mandir, Takatpur  
Baripada, Mayurbhanj

319. Smt. Sutapa Gopangana  
Assistant Director,  
Directorate of Fisheries,  
Jobra, Cuttack.
320. Dr. Surendra Nath Behera  
Deptt. of Economics,  
Khallikote College,  
Berhampur, Dist.: Ganjam.
321. Dr. Subhransu Sekhar  
Mohapatra  
Deptt. of Economics,  
Khaira College, Khaira,  
Dist.: Balasore.
322. Sri Sunil Kumar Rath  
Deptt. of Economics,  
Paramanand College, Bolgada,  
Dist.: Khurda - 752066.
323. Dr. Salik Ram  
Scientist, C.R.R.I.,  
Bidyadharpur, Cuttack.
324. Mrs. Shova Das  
Plot No. - 71,  
Krishnayana, Satyanagar,  
Bhubaneswar - 751007.
325. Sri S. Mishra  
Deptt. of Economics,  
K.B.D.A.V. College,  
Nirakarpur, Khurda.
326. Sri Surendra Swain  
Deptt. of Economics,  
KKS Women's College,  
Balasore.
327. Dr. Srijit Mishra  
IGIDR, Gen. Vaidya Marg,  
Goregaon (E), Mumbai-400065.
328. Sri Sarbananda Sahu  
Principal, Kushagra Institute of  
Management and Information  
Science,  
P.O.: Pirabazar, Gopalpur  
Dist.: Cuttack
329. Dr. Sakti Padhi  
Near Ad Hospital and Jalaram  
Sweets  
Kitab Mahal Road, Cuttack - 3.
330. Sri Subrat Kumar Rana  
Deptt. of Economics,  
K.K.S. Junior College,  
Balasore.
331. Dr. Shanti Das  
Backside of Sangam Talkies,  
Mahatab Road,  
Cuttack.
332. Sri Sarat Kumar Nayak  
Deptt. of Economics,  
Ravenshaw College,  
Cuttack.
333. Smt. Sita Sahoo  
Badambadi,  
Cuttack.
334. Dr. Sailabala Debi  
C/o.: Sri N.R. Mishra (CA),  
Hospital Square, Puri-2.
335. Sri S.C. Mohapatra  
Deptt. of Economics,  
S.K.C.G. College,  
Paralakhemundi.
336. Sri Srinath Sahoo  
Vill : Kendal,  
P.O.: Madhusudanpur Sasan,  
Dist.: Jagatsinghpur-754103.
337. Sri Siben Kumar Bose  
Old College Lane, Cuttack-2.
338. Smt. Surangini Mishra  
Deptt. of Economics,  
B.J.B. Morning College,  
Bhubaneswar.
339. Smt. Sipra Sarkar  
C/o.: Dr. Benudhar Nayak,  
HSS Deptt. NERIST,  
Nirijuli,  
Arunchal Pradesh.

340. Dr. Sanjit Mohapatra  
Deptt. of Economics,  
S.C.S. Junior College, Puri.
341. Sri Sarbeswar Mohanty  
Asst. Professor of Economics,  
KIIT University,  
Bhubaneswar - 751024
342. Dr. S.N. Tripathy,  
*Professor*  
Gokhale Institute of Politics and  
Economics,  
Deccan Gymkhanna  
PUNE, Maharashtra.
343. Sri Suresh Chandra Rout  
Deptt. of Economics,  
Anandpur College, Anandpur,  
Dist.: Keonjhar.
344. Dr. Sailaja Nandini Jena  
Deptt. of Economics,  
Ravenshaw College, Cuttack.
345. Dr. Sudhakar Patra  
Deptt. of Economics,  
Ravenshaw University,  
Cuttack-753003
346. Dr. Sukanta Kumar Sahoo  
S.I.S.I., Vikash Sadan,  
P.O.: College Square,  
Dist.: Cuttack 753003.
347. Smt. Sadhana Satapathy  
Deptt. of Economics,  
Dhenkanal Women's College,  
Dhenkanal.
348. Sri Simanchal Mishra  
Deptt. of Economics,  
Kesinga Mahavidyalaya,  
Kesinga, Dist : Kalahandi.
349. Dr. Susanta Kumar Das  
Dept. of Economics  
JKBK Govt. College,  
OMP Square, Cuttack.
350. Dr. Susanta K. Mallick  
Deptt. of Economics,  
University of Warwick,  
Conventry, CV-47 AL, U.K.
351. Dr. Sanjukta Dash  
Deptt. of Economics,  
Sambalpur University,  
Jyoti Vihar, Dist.: Sambalpur.
352. Dr. Satyabrata Mishra  
Sripadganj, Ward No-13,  
Station Bazar, Baripada,  
Dist.: Mayurbhanj.
353. Smt. Sakuntala Behera  
Lecturer in Economics,  
Baripada College,  
Baripada, Dist.: Mayurbhanj.
354. Dr. S.K. Das  
Deptt. of Economics,  
M.P.C. Junior College,  
Baripada, Mayurbhanj.
355. Sri Sachindra Nath Mohanty,  
Niliabag,  
P.O./Dist.: Balasore.
356. Sri Siba Charan Behera  
Deptt. of Economics,  
Anchalika Mahavidyalaya,  
Swampatna, Dist : Keonjhar.
357. Sri Satrughna Nath Das  
Deptt. of Economics,  
Govt. Women's College,  
Dist.: Puri.
358. Dr. Saroj Kumar Kanungo  
*Principal*  
IMIT, Jobra, Cuttack.
359. Dr. Satyakam Mishra  
Annapurna Apartments,  
Shelter Chhak, cuttak.
360. Dr. Sarita Supakar  
Flat No.- 302,  
Krishnakunj Apartment,  
Road No.- 8, Unit-IX,  
Bhubaneswar-7

361. Dr. S.C. Koomar  
781, Madhusudan Nagar,  
Unit-IV, Bhubaneswar.
362. Smt. Sujata Mohanty  
Deptt. of Economics,  
R.D. Women's College,  
Bhubaneswar.
363. Dr. Sridhar Behera  
• Registrar F.M. University  
Balasore
364. Dr. Sangram Kumar Mohapatra  
Deptt. of Economics,  
U.N. College, Soro  
Dist.: Balasore-756045
365. Smt. Sanjukta Patnaik  
Deptt. of Economics,  
S.M.College, Rengali,  
Dist.: Sambalpur.
366. Sri Sanjay Kumar Mishra  
• Lecturer in Economics,  
M.K. Gandhi College,  
At/P.O.: Sadangi,  
Dist.: Keonjhar.
367. Dr. Satyananda Sahoo  
Deptt. of Economic Analysis &  
Policy,  
Post Box-1036  
Reserve Bank of India, Central  
office Building  
Mumbai-400001
368. Smt. Saudamini Rout  
Deptt. of Economics,  
Bhadrak College, Bhadrak.
369. Dr. S.M. Ali  
Deptt. of Economics,  
Kendrapara College,  
Kendrapara.
370. Dr. Surendra Nath Das  
Deptt. of Economics,  
M.P. Mahavidyalaya,  
Erakana, P.O.: Podamarai,  
Dist.: Cuttack.
371. Prof. Surendra Nath Mishra  
Shyamakali Lane, 3rd Line,  
In Front of Loka Seva  
Pharmacy Factory, Puri.
372. Ms. Sunanda Patnaik  
Deptt. of Economics,  
Niranjan Govt. Women's  
College,  
Aska, Ganjam.
373. Dr. Subhranshubala Mohanty  
C/o.: Dr. P.K. Mohanty,  
Qrs.No. (F-5),  
Utkal University Campus,  
Vani Vihar,  
Bhubaneswar-751004.
374. Sri Sukanta Chandra Swain  
Deptt. of Economics,  
Godavarish Mahavidyalaya,  
Banapur,  
Dist : Khurda.
375. Ms. Sailabala Patnaik  
Deptt. of Economics,  
Govt. Women's College,  
Berhampur,  
Dist.: Ganjam.
376. Dr. Srikanta Chandra Patra  
Deptt. of Economics,  
U.N. College, Nalgaja,  
Dist.: Mayurbhanj.
377. Sri Sanjib Kumar Majhi  
Lecturer in Economics,  
Deptt. of Social Science,  
F.M. University,  
Balasore.
378. Sri Soumendra Dash  
The ICFAI Business School,  
Vastrapur, Near GNFC info  
Towers  
Sarkhej G' Nagar High way,  
Bodak Dev,  
Ahmedabad-380054.



379. Sri Santanu Kumar Nayak  
Deptt. of Economics,  
Regional College, Rambag,  
Dist. Jajpur
380. Dr. Siblal Mohanty  
N.K. Choudhury Centre for  
Development Studies,  
Chandrasekharpur,  
Bhubaneswar
381. Dr. Shuvada Mohanty  
Deptt. of Economics,  
Ravenshaw College,  
Cuttack
382. Siba Prasad Samal  
Deptt. of Economics,  
Bishnu Samantray College,  
Nuahat, Dist. Jajpur
383. Sri Srimanta Upadhyaya  
Deptt. of Economics,  
Nirakarapur College,  
Nirakarapur, Dist. Khurda
384. Sri Sanyasi Sahoo  
Plot No. 10, Govt. Women's  
Co-operative Housing Colony,  
P.O.: KIIT University,  
Bhubaneswar-751024
385. Sri Srikrishna Jena  
Deptt. of Economics,  
Gopaljew Mahavidyalaya,  
Benamunda,  
P.O.: Kaliahata,  
Dist. Keonjhar
386. Sri Santosh Kumar Mohapatra  
At : Divine Nagar,  
Near Saar Sahi, Chauligani,  
Dist. Cuttack
387. Dr. Sandhyarani Das  
Delhi Scholl of Professional  
Studies and Research, Institutional  
Area, sector-23,  
Rohini, Delhi-110085
388. Dr. Sujata Pati  
1477A (Panchayat) Village,  
Nayapali, Bhubaneswar,  
Pin-751015
389. Sri Sanjay K. Lenka  
Deptt. of Economics,  
Aeronautics College,  
Sunabeda, Dist. Koraput
390. Prof. Satya P. Das  
Professor of Economics,  
Indian Statistical Institute,  
Sansalwal Marg,  
Qutab Institutional Area,  
New Delhi.
391. Dr. Sanjibani Patnaik  
Dipt. of Economics,  
S.G. Women's College  
Sector-2, Rourkela-6.
392. Sri S.C. Bhuyan  
Dept. of Economics,  
SSJ Mahavidyalay,  
Krushanachandrapur, Erasama,  
Dist.: Jagatsinghpur
393. Sri Santosh Kumar Gini  
Dept. of Economics  
Gopalpur College, Gopalpur,  
Dist. Balasore
394. Mrs. Sikta Singh  
Dept. of A & A Economics,  
Utkal University, Vanivihar,  
Bhubaneswar.
395. Sonalee Suchismita  
Plot No. 811, Kachinoo City,  
OFF. LBS Marg, Kamani Junc-  
tion, Kurla, Mumbai.
396. Dr. Sheshadev Mohapatra  
Lecturer in Economics,  
DAV Public School,  
Chandrasekharpur,  
Bhubaneswar.

397. Prof. Sudhakar Panda  
N-3-126, IRC Village, Nayapali,  
Bhubaneswar-751015

## T

398. Dr. Trilochan Mohanty  
Shraddha, Plot No. H/B-44,  
Sector-10, CDA, Cuttack-14.

399. Sri Trilochan Kanungo  
Sheikh Bazar, New Colony,  
Cuttack - 753001.

400. Sri Tanuj Kumar Hui  
At.: Santia,  
P.O.: Jaleswar,  
Dist.: Balasore-756032.

401. Dr. Tarun Kumar Ojha  
Deptt. of Economics,  
Seemanta Mahavidyalaya,  
Jharpokharja,  
Dist : Mayurbhanj

402. Trupti Mohanty  
C/O.: Er. R.P. Das,  
Deula Sahi, Tulasipur,  
Dist.: Cuttack-753008.

403. Dr. Tusharkanti Das  
C/O.: Professor Gajendra Nath  
Das,  
Golgunda, Jagriti Vihar,  
Sambalpur - 768020.

## U

404. Dr. Uttam Charan Nayak  
Plot No. D-1067,  
Sector-6, CDA,  
Cuttack - 14.

405. Usha Satapathy  
Deptt. of Economics,  
Chitrada College,  
Chitrada, Mayurbhanj.

406. Sri U.C. Panigrahi  
Deptt. of Economics,  
Gopalpur College,  
Gopalpur on Sea,  
Dist : Ganjam.

407. Dr. Umesh Chandra Pati  
Deptt. of Economics,  
Nayagarh College,  
Nayagarh, Orissa.

408. Smt. Usharani Pujari,  
Kedargouri Apartments,  
C2/005, Lewis Road,  
Bhubaneswar-2.

409. Dr. Upendra Pathy,  
Deptt. of Economics,  
Kalinga Mahavidyalaya,  
G. Udayagiri, Phulbani.

410. Sri U.C. Hota  
Qrs. No.- 3,  
Municipality Colony,  
Near Women's College,  
Jharsuguda.

411. Sri Uma Charan Pati  
Deptt. of Economics,  
Govt. Women's College,  
Bolangir.

412. Sri U. C. Pradhan  
Lect.in Economics,  
L.N. College, Jamsuli,  
Dist.: Balasore.

## ANNUAL MEMBERS

2010-11

1. Sri Bichitrananda Seth  
At : Mahulpali  
Po : Baduapali  
Dist. : Sambalpur - 768113
2. Miss Indumati Dash  
Dept. of Economics  
B.B. Mahavidyalaya  
Chandikhole,  
Dist. : Jajpur
3. Sri Prasant P. Mohapatra  
Economic Correspondent  
The Sambad  
Bhubaneswar
4. Sri Pramod Ku. Mishra  
Dept of Economics  
Jashipur College, Jashipur  
Dist. : Mayurbhanj
5. Miss Sabita Soren  
At : Handa,  
Po. : Bangiripusi  
Dist. : Mayurbhanj
6. Prof. Sanatan Mohanty  
At : Januganj  
Po./Dist. : Bhadrak
7. Dr. Sudhansu S. Nayak  
Dept. of Commerce  
R.N. College, Dura  
Berhampur,  
Ganjam
8. Sri Umakanta Tripathy  
Faculty, ICFAI National  
College,  
Rourkela

**LIST OF PRESIDENTS**

<u>Year</u>	<u>Host</u>	<u>Venue</u>	<u>President</u>
1968	Ravenshaw College	Cuttack	Prof. Sadasiv Misra
1969	Dhenkanal College	Dhenkanal	Prof. Devendra Ch. Misra
1970	Khallikote College	Berhampur	Prof. Bidyadhar Mishra
1971	Utkal University	Vani Vihar	Prof. Baidyanath Misra
1972	Bhadrak College	Bhadrak	Dr. Chakradhar Mishra
1973	Parichayat College	Bargarh	Prof. R.C. Patnaik
1974	O.U.A.T.	Bhubaneswar	Prof. S.P. Gupta
1975	Kendrapara College	Kendrapara	Prof. H.K. Mishra
1976	S.C.S. College	Puri	Prof. Devendra Ch. Misra
1977	Nimapada College	Konark	Dr. S. Tripathy
1978	Berhampur University	Bhaja Vihar	Prof. Nilakanth Rath
1979	Utkal University	Vani Vihar	Prof. Kisan Kanugo
1980	G.M. College	Sambalpur	Prof. Pravat Ku. Patnaik
1981	O.U.A.T.	Bhubaneswar	Prof. Dayanidhi Mohapatra
1982	Munioipal College	Rourkela	Prof. Bibekanada Das
1983	Ravenshaw College	Cuttack	Prof. Ghanashyam Das
1984	Berhampur University	Bhanja Vihar	Prof. Basudeb Sahoo
1985	Vikram Deb College	Jeypore	Prof. Sanatan Mohanty
1986	Banki College	Banki	Prof. B.C. Parida
1987	Kendrapara College	Kendrapara	Prof. Benudhar Bhuyan
1988	S.C.S. College	Puri	Prof. Gyana Chandra Kar
1989	M.P.C. College	Baripada	Prof. N.P. Patro
1990	Not Held	-	-
1991	Utkal University	Vani Vihar	Prof. Khetra Mohan Patnaik
1992	Sambalpur University	Jyoti Vihar	Prof. Trilochan Satpathy

<u>Year</u>	<u>Host</u>	<u>Venue</u>	<u>President</u>
1993	Ravenshaw College	Cuttack	Prof. Surendra Nath Mishra
1994	B.B.Mahavidyalay	Chandikhole	Prof. Adwait Ku. Mohanty
1995	P.N.College	Khurda	Prof. Benudhar Mishra
1996	Paradip College	Paradip	Prof. Gajendra Nath Das
1997	Municipal College	Rourkela	Prof. Jyoti Prakash Patnaik
1998	Govt. Women's College	Keonjhar	Prof. Ajit Ku. Mitra
1999	Talcher College	Talcher	Prof. Binayak Rath
2000	Govt. Women's College	Sambalpur	Prof. Satya P.Das
2001	D.A.V.College	Koraput	Prof. Kumar B.Das
2002	Bhadrak College	Bhadrak	Prof. Bhabani P.Dash
2003	S.V.M. College	Jagatsinghpur	Prof. R.P.Sarma
2004	NCDS	Bhubaneswar	Prof. S.N.Mishra
2005	Christ College	Cuttack	Prof. N.B. Pradhan
2006	F.M. College	Balasore	Prof. R.M. Mallick
2007	U.N.S. Mahavidyalay	Mugapal	Prof. Bedabati Mohanty
2008	Kendrapara College	Kendrapara	Prof. Kishore C. Samal
2009	Utkal University	Vani Vihar	Prof. R.K. Panda
2010	North Orissa University	Baripada	Prof. Rulin B. Nayak
2011	U.N. College of Science & Technology	Adaspur	Prof. Sudhakar Panda