ISSN : 2348-2060

Manikya Lal Verma Shramjeevi College
A Constituent Unit of JRN Rajasthan Vidyapeeth (Deemed) University

Arthavati

An International Journal

ARTHAVATI
Department Of Economics,
Manikya Lal Verma Shramjeevi College
Near Town Hall, Udaipur
Web : www.jrnrvu.edu.in

Volume-3 I Issue-2 I July - December, 2016

Editorial

Grim countenance of world economy has warning for India

The world economy today has a grim countenance as the change of power in US has ushered in a new era of protectionist policy which goes against the very core of Globalization. The idea of a world with borderless economies is giving way to more nationalistic conservative economic order in which the national interests loom heavily on the interests of economic growth globally. America's new foreign policy initiatives forewarn of more strategic changes in world order with increasing investments in the sectors of internal as well as external security measures. Thus the humanitarian aid and assistance which India and other developing nations were expecting from the US might not materialize to the extent it was foreseen. Indian economy itself is getting jerks and jams. The second week of May, 2017 has seen the biggest ever stride in Sensex and Nifty. Richard Rekhy, CEO of KPMG in India has recently said, "The Economic Survey shows that although the economy is on the upswing, it faces downside risks from a muted global economy, impacting exports and inflow of investments, leading to challenges in job creation." It is more than clear now that the growth in Indian economy has been over the last few years a jobless growth. Jobs have decreased in traditional sectors and in sectors where there was a steep rise, the shift in the policy of US has threatened that it would nose - crash any day. The economic survey of 2015-16 has revealed an interesting finding in the field of employment generation. It shows a negative growth of -17 percent in leather and handloom industry, -6 percent in gems and jewellery and -12 percent in transport industry. Interestingly the transport industry has marked tremendous growth in the said period but employment generation in this industry has a negative growth. The largest growth in employment generation has been in IT/BPO which is 178 percent followed by textile industry which is 135 percent. These two sectors are now not in safe zone. The Trump Government has shown definite signs that the IT/BPO employment opportunities in US companies will be now for Americans. FDI in retail has opened new opportunities for MNCs and the craze for branded textiles among the youth in India might as well affect the prospects of Textile industry. The biggest sector of employment is agriculture. But in recent years this sector has been neglected. The economic survey projects a growth rate of 4.1 percent in agriculture as compared to 7.1 percent growth in GDP.

The uncertainties in agriculture have forced people engaged in agriculture to shift to other more stable sectors of economy. The peasants committing suicides are reported more even the affluent states like Punjab and Haryana. Recently peasants from Tamilnadu staged a month long Dharna at JantarMantar demanding relief from drought. Crises of Indian Economy are many and their needs to be a more responsive state at the centre to resolve the issues of peasants' across the country. The Government has succeeded with its majority in LokSabha, passing of GST Bill and will soon be able to implement new economic reforms. But they should not ignore the writing on the wall.

The editorial team does not own responsibility for the data presented in the individual research articles nor for the interference made. The responsibility of the entire information and thought in the articles rests with the authors. However, new ideas are always welcome to improve the quality, content and authenticity. We would welcome opinions, suggestions and corrections, if any by the readers.

Prof. Suman Pamecha

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Swot Analysis of Rajasthan's Economy

Prof. C.S. Barla*

Preamble

With a total geographical area of 3.42 lakh km^2, Rajasthan is the largest state in India. The state has 10.4 percent of total geographical area of India, while it has 5.67 percent of the country's total population.

It is interesting to note that only 1.1 percent of the total surface water is available in Rajasthan, while the proportion of ground water is just 1.2 percent. Further, around 61 percent to total geographical area is drought prone, and is frequently faces drought like conditions.

Yet, Rajasthan is rich in mineral deposits and claims monopoly in the production of several minerals. Stated differently, the State has good potential for development of minerals-based industries.

The objective of this note is to highlight the strengths of Rajasthan's economy while, at the same time, present some social, administrative and economic constraints that inhibit the optimum use of available physical and natural stock of resources.

Yet, there is some ray of hope which provides an opportunity for fastening the growth rate of State economy. In short, the present paper purports to analyse the strengths, weaknesses, opportunities and threats to the economy of Rajasthan.

Strengths of Rajasthan's Economy

As stated earlier, strengths of a given region lie in availability of physical/natural resources (such as minerals, soils, water, forests etc.) and administrative/political environment, and various policies formulated by the government to improve the status of agriculture, industry and infrastructure. Such strengths of our economy have been described below.

a) Vast Area

In 2011, the average density of population in Rajasthan was only 201 per km^2albeit the range of such density varied from 17 in Jaisalmer to 598 in Jaipur. Vast area, especially in western districts awaits availability of water, which would help develop these areas. Actually, soils in western districts pertain to sandy loam category are devoid of adequate moisture, with warrant an improved access to irrigation facility. There is a great potential of increasing agricultural production in this region, as has been demonstrated after the onslaught of Indira Gandhi canal water in the western districts such as Sri Ganganagar, Hanumangarh and partly in Barmer and Jaisalmer districts.

In short, there lies a good potential of agricultural development in western districts, albeit this would warrant access to irrigation facility.

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* *Retd. Prof. Rajasthan University, Jaipur, Raj.*

b) Museum of Minerals

Rajasthan is rich in several mineral deposits. In some minerals, the State's share ranges from 70 to 100 percent of the total production in India (Appendix-I). It needs to be made clear that Mineral policy of 2016 has been framed but not yet cleared by various departments.

Further, the State has dominant share in the production of stone used in flooring houses and construction of house roofs, and is available in Kota, Karauli, Jodhpur and Bundi districts.

Besides, the State has recently discovered crude oil in Barmer district, while Jalore has huge deposits of granite. These minerals have capacity of developing several industries across Rajasthan.

It is now evident that the cost of generating energy in Rajasthan is lowest in the country. However, it requires a clear vision and decisive support from the State Government.*

Rajasthan stands second in India in generating solar energy as shown below:

(Figures in MW)

1.	Tamil Nadu	1591
2.	Rajasthan	1318
3.	Gujarat	1159
4.	Andhra Pradesh	980
5.	Telangana	973

Note: Data pertain to 2016-17[2]

c) Tourism

Rajasthan happens to be known across the world for its forts, fortresses, folk dances, folk music, temples, paintings, sculpture etc. The annual intake of tourists in Rajasthan is around 20 million of whom nearly one third come from other countries. The State has been divided in ten circuits from the view point of tourists arrivals. The cultural heritage of this State is globally known. According to an estimate made by the Department of Tourism.(2001), every year more than Rs. 2000 crore is spent by tourists visiting Rajasthan. It is hoped that with little additional investment in the maintenance of tourist centres, such income may be doubled conveniently.

d) Handicrafts

Carpets, durries, terracotta jars, products made from brass, handmade paper, gold and silver ornaments and enamel work, precious and semi-precious stones are a few products made in Rajasthan are quite popular among domestic as well as International tourists visiting Rajasthan. They are also labour intensive products and yield income to lakhs of craftsmen across the State. As Appendix II shows, in almost all districts of Rajasthan, unique and extra-ordinary handicraft items are prepared which are popular in India and abroad.

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* Cost of generating solar power in different states of India: Rs./unit (Rajasthan 4.34; U.P. 8.04; M.P. 5.36; Punjab 5.65; Uttarakhand 5.76; Andhra Pradesh 4.63) Rajasthan Patrika, January 20, 2016.

** The Economic Times, 6th February, 2017.

e) Entrepreneurial spirit

Rajasthan entrepreneurs are widely acclaimed throughout India and abroad. Marwaris initiated industries in western parts of the country in the last quarter of 19th century. Scores of Marwaris migrated from Shekhawati area and set up industries, *albeit* some of them also became prominent traders in the Southern parts of India.

f) Working even in adverse conditions

People of Rajasthan are well accustomed to subsist even under hard conditions such as drought, when neither water nor food is available to them. Whenever they come across drought situation, large number of sheep breeders migrates to other parts of the country together with their herds, or cattle, and generally return with the onslaught of rains.

g) Comparative Advantage in production of herbal products

Herbal products such as aonla, ashwagandha, safed musli etc. have plenty of potential in Rajasthan. These products are widely used in preparation of Ayurvedic medicines.

h) Prominent Place in some agriculture crops

Crops like coriander, cumin seeds, (seed spices) chillies etc. are produced in almost all districts of Rajasthan. For coriander and cumin seed 45 percent of area and production are contributed by Rajasthan. Recent data show that in recent month's export of processed seed spices from India have increased. This may eventually benefit our farmers too.

i) Breeds of Cattle

Rathi and Tharparkar breeds are known as the best breeds of cows across the country, while Nagori bulls are widely acclaimed for their sturdy characteristics.

In brief, Rajasthan has a great potential for developing dairy industry. Already the State is a surplus region for milk, and contributes immensely to Mother Dairy in supply of milk.

Yet, there are numerous constraints to the optimum use of available strengths on account of which the pace of development in industry as well as agriculture in the State has been extremely low.

Weaknesses

The State of Rajasthan, notwithstanding the strengths endowed on it by nature, has some inherent weaknesses which do not allow the State to smoothly develop its economy

1. Drought Prone Areas

As stated above, almost 61 percent of the geographical area in Rajasthan is arid or semi-arid, where rainfall is scanty and irregular. Every year the State Exchequer is required to spend huge amount in the western districts on famine relief. It seems, efforts of the Government and the money spent so far on drought-proofing have not been effective.

2. Lack of Important Policies

Even though agriculture, animal husbandry and non-form rural businesses provide employment to about 62 percent of people in the State villages and contribute about 40 percent to the State NSDP, the Government of Rajasthan has not formulated any policy for addressing the problems of these sectors, not to mention any effective measure for their redressed.

There are policies relating to water as also minerals, but the same are not effective, because mineral wealth and ground water are extracted recklessly in different regions of Rajasthan. Likewise, in the Industrial Policy (latest in 2010) not much has been prescribed to redress the problem of Industrial sickness.

3. Unbalanced Industrial Growth

Strangely enough, out of 33 districts, **there is no industrial unit in 13 districts.** It seems the *State Government does not have any agenda for developing industries in the backward regions* of Rajasthan, even though adequate back-up in the form of minerals is available in such regions. Virtually no industries exist in districts like Karauli, Dholpur, Tonk, Sawai Madhopur, Sirohi, Baran, Nagaur, Bundi, Jalore, Barmer and Jaisalmer.

4. Lack if Investor Friendly Approach

Prospective investors in Rajasthan face numerous hurdles in getting the following linkages from State Government: (a) land (b) power (c) water (d) no objection certificates from departments like (i) commercial taxation (ii) State Pollution Control Board, etc.

According to Economic Survey (GOI) 2010-11, the minimum time taken in starting a business in Rajasthan is 6 months.

Even in the document released by the State Government entitled **"Approach Paper for Twelfth Five Year Plan" no mention was made for the measures which the State Government proposed to take during 2012-17 to accelerate the pace of industrial growth in Rajasthan over the five year of XII Plan.**

A report recently published in newspaper has revealed that over the past two years Rajasthan has lost numerous big investors due to *unfriendly environment and inertia prevailing here.* Some illustrations are noted below:

(Amount in Rs. Crores)

S.No.	Company	Area/Sector	Proposed Investment	Status in 2013
1.	Mark Globex	Energy	20,000	Pending
2.	Kalyan Steel	Steel	15,000	Shelved
3.	American Industrial Corp.	Petro Products	2,500	Shelved
4.	Monnet Ispat	Steel	8,000	Shelved
5.	Nandan Blonatrics	Thermal/ Renewable energy	7,500	Shelved
6.	NTPC-BHEL	Power	6,000	Shelved

Obviously, these proposals were withdrawn by the concerned stakeholders.

Thus, due to lack of interest among the decision makers of the State has failed to receive investment of Rs. 59,000 crores from Indian as also alien entrepreneurs, including NTPC and BHEL combine, because no clearance could be given to them for several months.

A study by Montek Singh Anluwalia revealed that during 2000-06 period, about Rs. 7,00,000 crores were invested in Indian industries, of which Rajasthan could receive only 2.5 percent while 13.5 percent went to Gujarat. The State Government must introspect as to why there is lack of expediency in giving approval for Industrial units.

Ironically, the contribution of Industrial sector to State's NSDP has remained around 22 percent for the part two and half decades. In a report released by the former Planning Commission the rank of Rajasthan in 'Industrial climate has been consistently static at 13th in the country.
Source- Government of Rajasthan, "Approach Paper for Twelfth Five Year Plan" (2012) pp 47-49.

5. T&D Losses in Power Sector

On the one hand, Rajasthan suffers from irregular and inadequate availability of power but at the same time, the State suffers from the problem of very high level of pilferage or T & D loss. In 1999, the proportion of pilferage was about 38 percent of power transmitted to different categories of power consumers, albeit it declined to 30 percent in December, 2016.

However, in the following districts, the present levels of Transmission and Distribution (T & D) loss have been causing a great concern among the policy makers of Rajasthan:

Table I
T & D Losses in selected Districts (%)

i.	Pratapgarh	47.3
ii.	Bharatpur	43.3
iii.	Dausa	33.1
iv.	Dholpur	47.8
v.	Karauli	44.3
vi.	Jodhpur	30.0

It is estimated that high level of T & D loss is responsible for causing an annual loss to the tune of Rs. 2000 crores to the Government of Rajasthan. Interestingly enough, such colossal loss to the State Government is likely to go up further *inspite of hike in power tariff.*

The Economic Survey (2009-10) clearly described that in the India (and also in Rajasthan) bureaucracy has become too cumbersome, and generally hesitates in using stern measures in this regard (p. 28). The Report distinctly mentions that out of 17 States, the rank of Rajasthan in permitting an entrepreneur to file documents to start business is 7th but in processing such documents it takes at least 31 days, while it takes 1033 days to enforce a contract. Further, the Economic Survey also mentions; *"Our economy is composed of numerous complexities, rules, regulations, numerous channels inherited from the British."* Actually, there is virtually no time frame in Rajasthan to permit a prospective industrialist to start his business.

6. Neglect of Agro-Processing

Dominance of Rajasthan in the production of seed species notwithstanding, about 80 percent of coriander and 75 percent of cumin seed produced in the state is exported to Gujarat. Thus, the entire value addition in there products is appropriated by Gujarati entrepreneurs. Likewise, the state has virtually no facility to process herbal products.

7. Environmental hazards

Flooring and roofing stones extracted in Dholpur, Kota, Rajsamand, Chittorgarh and Nagaur are responsible for accumulation of huge stocks of waste/slurry. Similarly the problem of fly ash around thermal power stations has assumed serious dimensions. Marble slurry accumulated around Dausa, Kishangarh, Rajsamand, Makrana and other areas is also causing environmental hazards. Further, the incidence of bronchial diseases around the stone mines is also increasing.

8. Low Value Addition in Industries

Against an average net value addition Rs. 4555 in industries, the corresponding value addition in Rajasthan is only Rs. 2587. In other states, the average value addition in industries has been extremely high as shown below:

States	Rs./ per worker
Himachal Pradesh	20,247
Gujarat	10,579
Maharashtra	10,365
Karnataka	7,364
Haryana	8,488
Punjab	4,696
Tamil Nadu	5,963
All India Average	4,555

Source: Government of Rajasthan: Economic Review 2015-16, Appendix 27.

Even the relatively backward states like West Bengal, Kerala, Orissa and U.P. have higher productivity levels in industries than in Rajasthan. Only Bihar and U.P. seem to have worse performance on this front than Rajasthan.

9. Poor Level of Infrastructure Development

Infrastructure, especially road, may be termed as the life line in the process of economic development. Even though in March, 2014, the total road length in Rajasthan was placed at 2.50 lakh km, the average of road per 100 km^2 of area in Rajasthan was only 52 km, as compared to 293 km in Assam, 127 km in Bihar, 526 km in Kerala and 236 km in West Bengal. Thus, on the road network front, Rajasthan has the lowest average in India; even worse than M.P. , Orissa and even some extremely backward states.

Second, 75 percent of roads are fair-weather roads while the average road length has wide inter-district variations. Taking infrastructure index of the country as 100, the corresponding level in Rajasthan is less than 76.*

10. Low Performance in the Demographic and Health Sectors

The decadal growth of population in India (2001-2011) had been 17.64 percent as against the corresponding increase of 21.64 percent for Rajasthan. However, the decadal increase of population in the border districts like Sri Ganganagar, Jaisalmer, Barmer and tribal districts like Dungarpur and Banswara has been significantly higher than the State average. Incidentally, these districts have also registered lower per capita increase. Thus, higher increase in population has been recorded in the regions having high incidence of economic inequalities.

Other demographic characteristics of Rajasthan *vis-a-vis* all India – levels are noted in Table II.

Table II

Demographic Features: Rajasthan and India

S.No.	Characteristic	Rajasthan	All-India
1.	IMR (2014)	47	40
2.	Life Expectancy at birth	N.A.	N.A.
3.	Crude Death Rate (per 1000) live births	6.5	7.0
4.	Crude Birth Rate (per 1000)	25.6	21.4
5.	Sex Ratio (6-11)	888	919
6.	Density of Population Per km^2 (2011)	201	382
7.	Maternal Mortality Rate (per lakh)	254	318
8.	Literacy Rate (2011) Total	66	73.0
(a)	Male	79.2	80.9
(b)	Female	52.1	64.6
9.	Urban Population (%)	24.9	31.2
10.	Compound Average Growth of Population (2001-11)	1.99	1.64
11.	TFR	3.0	2.9

Source- GOR, Economic Review 2014-15 Chapter 13.

On the front of health parameters also, according to National Family Health Survey-4 (NFHS-4) the State of Rajasthan presents a dismal scenario. The data presented there reveal that the rural health indicators are worse than the corresponding data available for urban areas.[1]

It reveals that in rural areas atrocities against women like beating, torture and sexual assaults are common practices. The Report also shows that marriages before attainment of legally prescribed age of 18 for women are a common phenomenon in villages of Rajasthan.

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* International Institute for Population Sciences, Mumbai (2012).

High Student enrolment across Rajasthan notwithstanding, the ASER Report on the Status of Education – (Annual Report for 2013) reveals that 60.4 percent children of class I are not capable of recognizing letters, not to mention of reading. However, the report mentions that private schools show a better performance that the government schools.

Further in the rural areas institutional deliveries are not conducted for 37 percent of pregnant women notwithstanding the proclamation of Janani Suraksha Yojna (JSY).

12. Water Crisis

As stated earlier, Rajasthan has around 1.2 percent of ground and surface eater available in the country. However, of the total water available, about 82 percent is used just for irrigation of crops. The technology used for irrigation has been age-old, and not much effort has been made to judiciously use the available water, nor a crash programme could start to grow low water-duty crops.

Out of 237 administrative blocks in Rajasthan, about 196 have turned into over-extracted of dark zones, (where 100 percent of ground water has been already used) whereas 20 blocks have turned as semi critical.*

As for as surface water is concerned, irrigation water is available only when neighbouring states like M.P. and the Punjab release adequate water in canals flowing through these states. Further, almost 6 lakh of irrigated areas in Rajasthan has so far become water-logged/saline.

13. Social Backwardness

Social customs like child marriage, discrimination against women, dowries etc. continue even today across the state. It seems ironical that the ratio of girls enrolled and retained in school is far lower in Rajasthan than that of boys.

14. Flaws in formulation of Plans and Implementation

Planning process in Rajasthan began somewhat late. *In fact first place*, planning at the block or even at the districts level, has remained a far cry mainly due to non-availability of the required data at these levels. *Secondly*, the State Government has thus far not done much to compute either the overall ICOR for the State economy, nor there are any sectoral coefficients due to which no estimates can be made "*a prior*" for growth rates. *Thirdly*, in the absence of inter- sectoral integration, optimum benefits from plan expenditure are not available. Ironically, no attempt is made by the Planning Department to study the financial, economic social or environmental impact assessment even with respect to mega projects. *Finally*, the funds received from the international agencies or even Planning Commission remain under-utilized, even though frequently Rajasthan suffers from lack of financial resources to meet the targets set forth in a given plan document.

15. Inter – Regional Economic Disparities

Largely, due to wide disparities in the distribution of physical/natural resources, but also due to administrative lapses, the economically advanced districts such as Jaipur, Jodhpur, Kota, Alwar have benefited in allocation of plan funds while the backward districts such as Karauli, Dholpur, Sawai Madhopur, Jalore, Jaisalmer, Dausa, Barmer, Dungarpur and Banswara have remained relatively laggards, in economic and human development, infrastructure, agriculture and industry. It is imperative that while allocating plan funds, these districts are

* International Institute for Population Sciences Mumbai (2010)

given priority so that inter-district disparities can be minimized. Such inter-state disparities in the State have perpetuated since 1951. It is interesting to note that backward districts are not only lag behind in industries, but also suffer from low yielding farming system.

16. Poor Forest Resources

Rajasthan has only 8 percent of the total area under forests. Only in districts like Karauli, Baran and Sirohi this proportion is over 30 percent, while the corresponding ratio in Udaipur is 28 percent. However, area under forests in Jodhpur and Churu is only 0.3 and 0.5 percent of the geographical area whereas in Jaisalmer, Nagaur and Barmer such ratio is around 1.0 percent.

17. Extremely Low Priority for Agriculture

Agriculture supports more than 50 percent of people in Rajasthan. Along with animal husbandry, agriculture contributes about one quarter of the NSDP, yet in the plan outlays, agriculture and animal husbandry do not have share, as shown below:

Table III
Share of Agriculture Outlay in Plans (% of total)

First Plan	6.6
Second Plan	11.0
Third Plan	11.3
Annual Plans	10.4
Fourth Plan	8.2
Fifth Plan	9.3
Sixth Plan	10.2
Seventh Plan	11.9
1990-91	13.6
1991-92	15.5
Eight Plan	15.9
Ninth Plan	14.7
Tenth Plan	13.3
Eleventh Plan	10.2
Twelfth Plan	8.6

Source: Govt. of India: Economic Survey 2015-16 pp. A23-24.

With such low level of outlay on such an important sector, one cannot hope to accelerate the growth of agriculture, especially when agriculture in the state in prone to vagaries of Nature and suffers from extremely low levels of productivity.

As a result of such apathetic treatment of agriculture, there has not been much change in the cropping pattern, for a long time nor barring a few crops like oilseeds and wheat, no remarkable increase in productivity of crops has taken place in Rajasthan.

It is thus evident that economic development of Rajasthan is inhibited largely due to numerous social, economic and political constraints. Actually, the potential of high growth created by physical and natural resources provided by Nature can be optimally used if only these constraints are removed, and a strategy to that effect is embedded in our plans.

Yet, one has a reason to ask: How would the State formulate its next Five Year Plan (2017-22) in the absence of any formal body like Planning Board? It really appears ironical to observe that notwithstanding the strengths of Rajasthan noted above, in terms of per capita NSDP at current prices, the State lags behind most other states of India.[1]

18. Sanitation

Lack of integrated planning is evident from the fact that usually there are announcements to open new schools or upgrade the existing ones, yet schools remain devoid of proper buildings, toilets, teaching aids etc. Even where toilets are available there is no water same is true for hospitals. Cities in Rajasthan present a scene of cumulative garbage, lack of sanitation/ sever lines, and poorly built streets.

However, in recent years, some new opportunities have emerged that may lead to an improvement in the state of Rajasthan's economy.

New Opportunities

The State of Rajasthan, notwithstanding the strengths endowed on it by nature, has some inherent weaknesses which do not allow the State to smoothly develop its economy

1. Tourism Development

Government of Rajasthan has lately recognized that there exists great opportunity for promoting cultural and medical tourism across the State. The government has short listed about a dozen fairs and festivals which have been popular in different parts of Rajasthan where domestic as well as international tourists participate from time to time. It is also ensured that havelis of Shekhawati and districts like Jaisalmer, as also in other parts of Rajasthan.

It is expected that these measures would gradually restore the interests of domestic as well as international tourists in Rajasthan. Further, tax exemptions and concessions are also provided to stake holders engaged in tourism sector.

2. Lignite Deposits

As was mentioned earlier, the large deposits of lignite in Barmer and Jaisalmer districts are supposed to be a major strength of Rajasthan. The total deposits of 100 crore tons, which have a capacity to generate between 20000 to 25000 MW of power annually which, in turn, could not only meet the demand originating in various sectors of the State economy (presently about 11,000 MW), but may also leave enough surplus to be shared with neighbouring states.

Yet, the fact remains; the State of Rajasthan has not so far formulated any meaningful policy to utilize the lignite deposits available here.

Government of India, Economic Survey 2015-16 Vol. II PP. A 23-24

The deposits near Girral in Barmer have been assigned to Rajasthan State. Mineral Development Corporation (RSMDC), while the remaining deposits have been assigned to Rajasthan State Mines and Minerals (RSMM). These two corporations are undertaking techno-feasibility studies, and may soon come out with positive results for the optimum use of lignite deposits across the western regions of Rajasthan.

3. Petroleum and Natural Gas

Reserves of oil and natural gas have been explored in Barmer district and crude oil extracted is being sent to refinery located in Gujarat. Prospects for setting up a refinery within Rajasthan are now quite bright, and a decision by the Central and State Governments to this effect needs to be taken shortly.

It is really surprising that the State Government has not been able to take any decision so far to start the long awaited refinery for oil reserves available here.

4. Gearing-up Policy for other Minerals

Policies related to granite, gypsum and other minerals are being prevamped by the State Government. Such attempts will give a new direction to the mineral based industries of the State.

However, the opportunities outlined above do not seem to be in conformity with the gravity of problems being faced by the State in various sectors. It actually requires a well thought out strategy to analyse the real issues and diagnose the aliment and reformulate our policies. At the same time, policy makers of state are supposed to carefully study the internal and external threats confronting the state.

Threats

There are numerous factors which appear to be threatening the growth process of State economy. Such threats are being outlined below:-

1. Depleting Water Table

Growth of agriculture warrants that the area under irrigation increases to facilitate adoption of cash and high-yielding crops. However, the absence of any change in irrigation technology in Rajasthan implies a virtual waste of water. It is feared that in large areas of Rajasthan, ground water may get exhausted, unless either farmers switch out to low water duty crops, and or economic use of water becomes their mainstay. *In fact, the state needs to adopt a judicious water use technology via a low water-duty cropping pattern.* According to a report published by Central Ground Water Board in 2015, except in 20 percent of the administrative blocks across the state, in rest of Rajasthan against recharge of ground water, the use of water is more than 110 percent. In Jaipur district such level is more than 200 percent. (Patrika, March 22, 2016).

2. Lack of competitive strength of producing units

Cost of production in export oriented products is significantly high, especially in apparels, gems & jewellery, carpets and such items *largely on account of their extremely small scale* as compared to rival producers like China, Hong Kong and such Asian countries. It may be noted that large number of gem and jewellery producers of Rajasthan have shifted their units to China, and the number is increasing. Indian and the U.S. markets of gem stones are flooded with synthetic gem stones made in China. At the same time, the edible oil industry of

Rajasthan is being threatened by extremely cheap palm oil being imported from Malaysia. In the field of handicrafts also, cheap synthetic carpets made in China are posing a major threat to carpet exporters of Rajasthan.

All this warrants that immediate steps must be taken to improve the efficiency of our export units, lest our exports would soon dwindle. Already, marble units of Rajasthan are being threatened by cheap marble being imported from European countries. They include Wonder Marble, Turkish Marble and Italian Marble which have better lustre and whiteness than our marble. Likewise cement units of Rajasthan are also facing a threat due to cheap cement coming from aboard.

3. Power Shortage

Shortage of power poses a major threat to agriculture as well as industry. Generally these units suffer not only from demand - supply mis-match, but also from irregular availability. Further, the State Government already over burdened with T & D losses in power, as also heavy subsidy on power generation is likely to raise power tariff, which would give a big jolt to farmers and industrialists of the State. It is, however, satisfy no note that in recent months, the State Government has taken a decision to provide subsidy on generation of solar power across the state. It is however, important to note that for ameliorating the power scenario, especially the condition of discoms, has launched UDAY.

4. Poor State of Exports

Total exports of Rajasthan were around Rs. 32,597 crores in 2014-15 of which 32.9 percent were attributed to agro and food products, 10.4 percent by textiles and 9.0 percent by gems and jewellery. Other exports included engineering products (8.2 percent), metals (9.8 percent) and marble (5.5 percent). It needs to be made clear that, as of now, *exports from Rajasthan seem to be a concern of trading community only* and no incentives are offered to native exporters by any official agency.

However, until few years ago, gems and jewellery, ready-made garments, handicrafts used to share a significant part of our exports. It is a matter of concerns that the share of these product groups has fallen.

NSSO Survey, 70th Round

Appendix III reveals that the average value of assets in Rajasthan is far lower than the average corresponding value in other states. The reference period for such 70th Round of NSSO Survey was 2012-13.

NSSO Survey, 71st Round

While the focus of NSSO 70th Round was on computations of asset value in urban and rural areas, the NSSO Survey 71st Round attempted to highlight the burden of debt on the two strata of households. It was pointed out that on the whole, rural households were *sceptical in borrowing for productive purposes in Rajasthan.* The average outstanding loan was Rs. 72,000 in rural areas while for urban areas the corresponding average was Rs. 82,000 at the time of such Survey.

Yet, the 71st Round of NSSO interestingly revealed that rural households in Rajasthan did not hesitate to take loans for social ceremonies like weddings. Obviously, this dichotomy warrants a comprehensive study of Rural-Urban Divide in Rajasthan.

Areas which Warrant Immediate Attention of the Government for a Balanced and Steady Growth of State Economy

In its recent report, the World Bank had assigned Sixth rank to Rajasthan for ease of doing business. It seems very unlikely to observe that entrepreneurs of the State face numerous problems in starting business within Rajasthan, especially when more than one hundred years ago, entrepreneurs from this State were successful in initiating business in the eastern and southern parts of India. If non-resident Rajasthanis (NRRs) could be persuaded to invest their capital within the State, their contribution to the industrial development may boost the economy of our State.

However, it would require a reversal in the approach of policy makers, bureaucrats and political leaders alike. Further, it also seems imperative to make our "Single Window Clearance Scheme" more meaningful and objective to the tune of prospective NRRs and other investors.

Secondly, probably the State has not successfully utilized optimally the potential that exists in tourism sector. What we really need is a clean, lapka-free and hospitable environment which is pre-requisites for attracting domestic as well as international tourists.

Third requisite for rapid economic development of State's economy is prevention of environmental degradation, especially in the areas which are being used for exploring and developing minerals, such as marble, stone, gypsum etc.

Agriculture supports nearly 50 percent of population and one quarter of our GSDP. It is, therefore, important to evolve a cropping pattern which fulfils the following conditions:-

(a) High value addition
(b) Judicious use of water resources
(c) Amicable marketing channels for the benefit of farmers.

It is also important to evolve an effective policy for agricultural processing in the State. Thus, the State Government must ensure that resources available to farmers (land, manpower and capital) are optimally used to provide higher income to farmers.

Fifth, a pro-active and effective policy needs to formulated in Rajasthan for development of industries across all the districts for achieving a balanced development.

Finally, handicrafts and associated exports need a pro-active and positive approach. It is important that a properly designed non-farm sector policy is promulgated in Rajasthan to help lakhs of craftsman working across all the districts of Rajasthan.

Appendix I

Share of Rajasthan in the Overall Production in India

S. No.	Name of the Mineral	Share of Rajasthan in India (%)
1.	Wollastonite	100
2.	Jasper	100
3.	Zinc	90
4.	Fluoride	90
5.	Gypsum	90
6.	Marble	90
7.	Asbestos	89
8.	Soapstone	87
9.	Lead	80
10.	Rock Phosphate	75
11.	Sandstone	70
12.	Feldspar	70
13.	Mica	70
14.	Calcite	50

Appendix II

District wise List of Important Handicrafts of Rajasthan

S. No.	Craft	District
1.	Marble Statues and Products	Jaipur, Ajmer, Rajsamand
2.	Ornaments used by tribals	Banswara, Baran, Sirohi, Udaipur
3.	Enamel work on silver	Rajsamand, Udaipur
4.	Embroidery Work	Jaipur, Barmer, Jaisalmer
5.	Artistic Furniture	Barmer
6.	Leather Shoes	Jaipur, Tonk
7.	Majari	Jodhpur, Jaipur
8.	Tie, Dye Sarees and Products	Jaipur, Jodhpur, Nagaur
9.	Sarees	Kota, Jodhpur
10.	Ivory Products	Jaipur
11.	Sandalwood Products	Jaipur
12.	Toys made of Lakh, bangles and toys	Sawai Madhopur, Karauli, Jaipur
13.	Terracotta products	Banswara, Dungarpur
14.	Gold Jewellery and Enamel wor, Kundan work	Bikaner, Jaipur and Udaipur
15.	Artistic Products made of Sandstone	Dausa, Dholpur

16.	Hand-made paper	Jaipur
17.	Block-printing	Jaipur, Nagaur
18.	Carpets and Namda	Jaipur, Tonk
19.	Artistic Durries	Dausa, Jaipur
20.	Artistic Products made of Camel Leather	Barmer, Jaipur

Appendix III
Average Value of H.H. Assets

State	Rural (Rs. Lakh)	Urban (Rs. Lakh)
Haryana	46.17	36.78
Punjab	42.25	26.38
Kerala	27.30	40.34
Gujarat	18.43	40.24
Maharashtra	11.23	43.70
Rajasthan	10.59	19.43
U.P.	10.42	19.38
M.P.	9.85	21.92
Karnataka	7.91	14.12
Chhatisgarh	7.23	24.82
Tamil Nadu	6.73	15.74
Telangana	6.38	18.43
Jharkhand	5.49	9.73
Bihar	5.48	14.35
Assam	5.03	28.48
Andhra	4.12	5.91
West Bengal	4.02	15.32
Odisha	2.81	7.87
All India mean	10.07	13.09

See The Economic Times, February, 2, 2016.

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Impact of Financial Sector Reforms on Indian Economic Development

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Introduction

Financial sector is the part of an overall economy that is primarily made up of money markets, banking institution and brokers. Financial sector reform means removing state regulation from the financial system and, usually in a subsequent phase of policy implementation, creating the legal framework and institution that will permit the sector to develop in the various dimensions.

This research paper summarizes the steps taken towards financial sector development and help to know about the reality of India's financial sector reforms.

The Indian financial system has changed considerably since 1990s, interest rates have been deregulated and new entrants are allowed in the banks and the securities business. The Indian equity market has become world class, new private banks have emerged that are more customer oriented than the other state owned banks. Meanwhile, the scale of saving within the economy has expanded considerably, much as East Asian economies during their high growth period. This adds to the need for further financial sector reforms. In particular, banks need much greater freedom in asset allocation, while public sector banks did appear sounder to the public during 2007-08 crisis due to implicit government banking. They ought to be privatized to improve their governance and minimize the recurrent need for recapitalization.

Financial Sector Reforms in India

The role of the financial system in India, until the early 1990s, was primarily restricted to the function of channelling resources from the surplus to deficit sectors. Whereas the financial system performed this role reasonably well, its operations came to be marked by some serious deficiencies over the years. The banking sector suffered from lack of competition, low capital base, low productivity and high intermediation cost. After the nationalization of large banks in 1969 and 1980, public ownership dominated the banking sector. The role of technology was minimal and the quality of service was not given adequate importance. Banks also did not follow proper risk management system and the prudential standards were weak. All these resulted in poor asset quality and low profitability

Among non-banking financial intermediaries, development finance institutions (DFIs) operated in an over-protected environment with most of the funding coming from assured sources at concessional terms. In the insurance sector, there was little competition.

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The mutual fund industry also suffered from lack of competition and was dominated for long by one institution, viz., the Unit Trust of India. Non-banking Financial Companies (NBFCs) grew rapidly, but there was no regulation of their asset side. Financial markets were characterized by control over pricing of financial assets, barriers to entry, high transaction costs and restrictions on movement of funds/participants between the market segments. Apart from inhibiting the development of the markets, this also affected their efficiency.

Against this backdrop, wide-ranging financial sector reforms in India were introduced as an integral part of the economic reforms initiated in the early 1990s. Financial sector reforms in India were grounded in the belief that competitive efficiency in the real sectors of the economy will not be realized to its full potential unless the financial sector was reformed as well.

Thus, the principal objective of financial sector reforms was to improve the allocative efficiency of resources and accelerate the growth process of the real sector by removing structural deficiencies affecting the performance of financial institutions and financial markets.

Financial sector is a backbone of any economy and it plays a critical role in the mobilization and allocation of resources. The constituents of the financial sector are banks, financial institutions, instruments and markets which mobilize the resources from the surplus sector and channelize the same to the different needy sectors in the economy. Consumer interacts directly with the financial sector every time. They apply for a credit card, deposit a pay check in a bank, or take out a home loan, take benefits of insurance schemes from insurance companies, invest their money to gain extra profit in investment firms and these actions occur on a much larger scale between institutions and companies.

So the study of financial sector reforms and its impact on Indian economy is required and it will be a big step in the India's economy. This paper is focused on financial sector reforms and its effects on Indian economy and presents an overview of financial sector reforms and its impacts on Indian economy.

First part of this paper clears the meaning of financial sector and second describes the financial sector reforms in India. Especially this paper will analyze the impact of reforms on Real GDP and Sector wise growth rates of GDP in India, Gross Domestic Saving and Capital Formation.

Period of the Study

The period of the study commences from 1971-72 to 2016-17. A study of forty six years is taken to analyze the impact of financial sector reforms on Indian Economy. All the data have been based on the base year 2004-05.

Scope of the Study

The study is based at India level and includes major sectors of Indian Economy. For analytical purpose the GDP growth rates has been divided into three sectors; (a) agricultural (b) industrial and (c) service sector. Some other aspects of economy like domestic sector saving and capital formation are also included in the study.

Objectives of the study

The major objective of the study is to assess the comparative analytical impact of reforms on the sector wise growth rate of GDP in the pre and post reform period. The specific objectives of the study are:

- To study the major reforms in the financial sector and analyze their implications on Indian Economy.
- To evaluate the relative changes in real GDP growth rates in the pre and post reform period.
- To make a comparative analysis of sector wise GDP growth rates in the wake of financial sector reforms.
- To analyze the Gross Domestic Saving as percentage to GDP.
- To examine the implication of financial sector reforms on economic development.

Hypothesis of the study

Following hypotheses are formulated:-

- The financial reforms have increased the Real GDP growth rate.
- Sector wise growth rate is improved.
- Saving and capital formation rate is positively increased due to financial reforms.
- There is positive impact of financial sector reforms in the economy.

Research Methodology

The study relies on the secondary data published by institutions and organizations concerned with different sectors. The publications of Reserve Bank of India- sector wise domestic saving and capital formation, RBI Bulletins, Handbook of statistics on Indian Economy, Annual Survey of govt. of India and other reports provided the data. Data published on websites of Government of India; data.gov.in and planningcommission.gov.in have also been adopted for the study.

For analysis of data mean (average), Standard Deviation etc statistical tools have been used.

Data Analysis and discussions

The impact of reforms on the Indian Economic Development has been examined on the basis of following parameters:

(a) Real GDP Growth Rates.

(b) Agriculture, Industry and services sector growth of India.

(c) Gross Domestic Savings and Capital Formation.

(a) Real GDP Growth Rates of India

Real Gross Domestic Product (GDP) an inflation-adjusted measure that reflects the value of all goods and services produced in a given year, expressed in base-year prices.

Real GDP growth rates are shown in table-1 and they are classified into two sections; Pre Reform Period and Post Reform Period Real GDP growth Rates. The base year is 2004-05.

Before 1991 the growth was rarely gone above 6 percent rate, but since the financial initiatives have been taken, the growth rates of Real GDP of India are always remaining more than 6 percent. As clarified by figure-1 that in 2006-07 it reaches up to its highest level at 9.6 percent, however the growth decelerated in 2008-09 following the global financial crisis. The economy recovered substantially to register higher growth rate in 2009-10 and 2010-11. However the second bout of global slowdown in 2011 due to sovereign debt in Europe coupled with domestic factors such as tight monetary policy and supply side bottlenecks resulted in deceleration of growth rate of Real GDP to 6.2 percent in 2011-12 and according to CMIE (Centre for Monitoring Indian Economy Pvt. Ltd.) report January 2017, it is expected to decline to 6 percent due to demonetization because the immediate impact of demonetization was a sharp reduction in private final consumption expenditure, a corresponding fall in retail prices of perishable commodities, a substantive distraction of labour and corresponding losses in wages and a breakdown of supply chains in many parts.

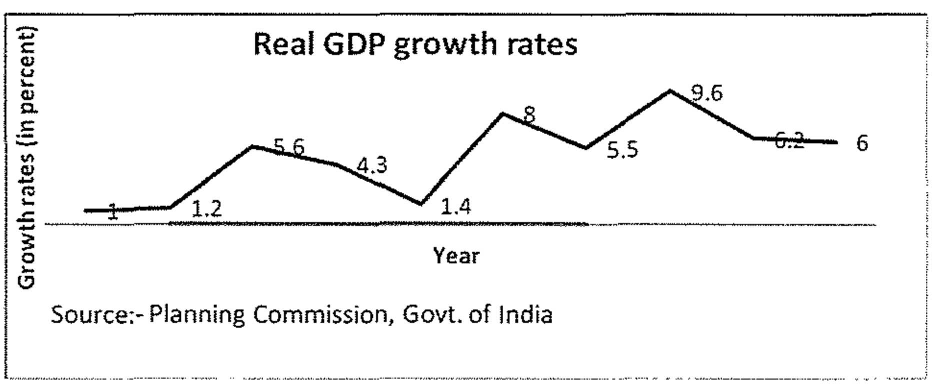
The average Real GDP Growth rate in pre reform period was just 2.7 percent (Mean (a)) and in post reform time it is 7.1 percent (Mean (b)) which shows sufficient increase in it. The variability of growth rates was also high before 1991 at 2.1, which slows down after the reforms at 1.7and indicate towards more stable Real GDP Growth rate in India.

Table-1
Real GDP Growth Rate (In percent)

Pre Reform Period	Real GDP growth rates (in %)
1971-72	1.0
1976-77	1.2
1981-82	5.6
1986-87	4.3
1991-92	1.4
Mean(a)	2.7
ST Dev	2.1
Post Reform Period	
1996-97	8.0
2001-02	5.5
2006-07	9.6
2011-12	6.2
2016-17(*)	6.0
Mean (b)	7.1
St Dev	1.7

Source:- Planning Commission, Govt. Of India

Figure-1 Real GDP Growth Rates



(b) Sector Wise Growth Rates of GDP

In India overall GDP is divided into three sectors, namely, Agriculture, Industry and Services sector GDP.

The table-2 shows that in pre reform period of year 1971-72, agricultural growth rate was very low at 1.69 percent, and the Industrial and Services sector growth rates were respectively 10.32 percent and 9.68 percent.

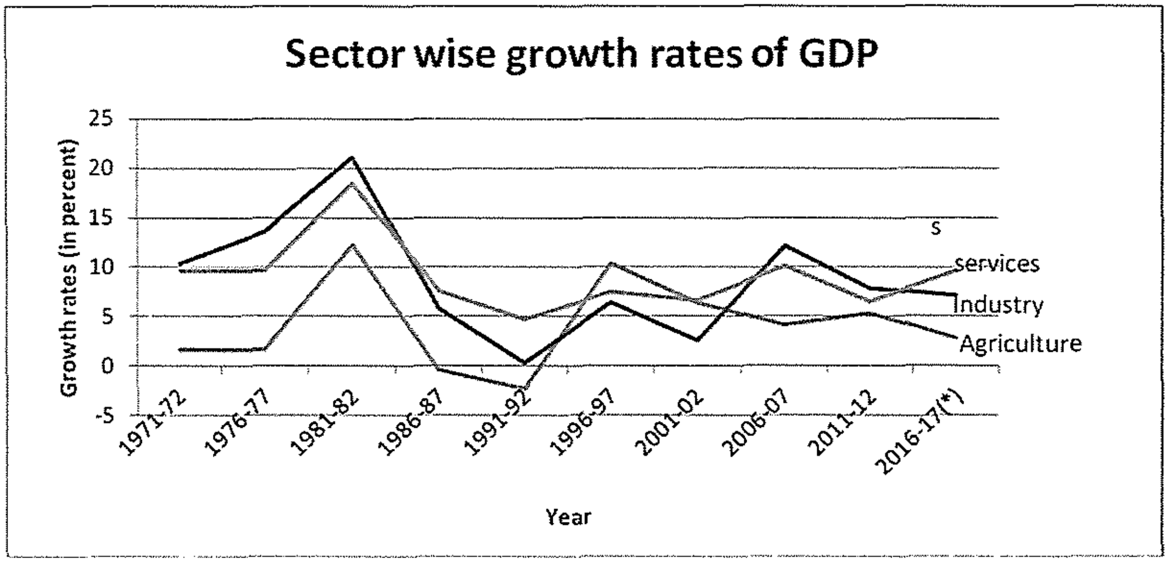
In 1981-82 agricultural, industrial and services sector GDP increases suddenly at 12.27 percent, 21.12 percent and 18.46 percent consequently. But in 1991-92 all of them were at deep decline, as agriculture growth rate was -2.31 percent(shown in figure-2), is was probably due to South Western Monsoon which was not quite active during first two months of the season, Crude oil production was declined, however industrial sector growth rate decelerated to 0.34 percent, Service sector growth rate were also 4.69 percent only. It can also see that in the post reform period in 1996-97 after five years the liberalization in financial sector, the growth rate of agriculture sector reached at level of 10.4 percent, which shows the positive impact of financial sector reforms on this sector. The Industrial and service sector growth rates also increases at 6.39 and 7.53 percent respectively in 1996-97.

Table-2
Sector Wise Growth Rates of GDP (In percent)

Pre Reform Period	Agriculture	Industry	Services
1971-72	1.69	10.32	9.68
1976-77	1.7	13.57	9.69
1981-82	12.27	21.12	18.46
1986-87	-0.39	5.76	7.59
1991-92	-2.31	0.34	4.69
Mean	2.592	10.222	10.022
St Dev	5.66	7.87	5.14
Post Reform Period			
1996-97	10.4	6.39	7.53
2001-02	6.46	2.61	6.61
2006-07	4.13	12.17	10.06
2011-12	5.34	7.81	6.57
2016-17(*)	2.8	7.1	9.6
Mean	5.826	7.216	8.074
St Dev	2.897	3.420	1.656

Source:- Planning Commission, Govt. of India

In 2006-07 agricultural, Industrial and Service sector growth rates were 4.13 percent, 12.17 percent and 10.06 percent respectively. In 2011-12 agricultural sector growth rate increased at 5.34 percent due to greater monsoon, but the growth rate of industrial sector declines to 7.81 percent. The slowdown in the industrial sector was mainly on account of decline in growth performance of 'mining and quarrying' and manufacturing sector. However service sector could not remain immune from the slowdown in the world economy and the rate declined at 6.57 percent in 2011-12. And in 2016-17 the growth rates are also estimated to be high in comparison of pre reform period. The average growth rate in pre reform period was only 2.59 percent, but it is increases in post reform period at 5.82 percent in agriculture sector. But in the industrial and services sector the average growth rates declines from 10.22 to 7.16 percent and 10.02 to 8.07 percent subsequently. Figure -2 Sector Wise Growth Rates of GDP



Source:- Planning Commission, Govt. of India

The variability in growth rates of agriculture sector in pre reform era is very high at 5.66 which shows instability in this sector as compared to the post reform period where variability is low at 2.89 only. In the same way the variability in industrial and services sector was high at 7.86 and 5.14 in comparison pre reform time to 3.42 and 1.65 in post reform period.

(c) Gross Domestic Savings and Capital Formation

Gross Domestic Saving is GDP minus final consumption expenditure. It has been expressed as a percentage of GDP. Gross domestic saving consists savings of household sector, private corporate sector and public sector.

Gross Fixed Capital Formation is a measure of gross net investment in fixed capital assets by enterprises, government and household within the domestic Economy, during an accounting year. The higher level of Domestic Savings and Capital Formation reflects greater level of National Income. The data of pre reform period signifies that Gross Domestic Saving and Capital Formation as percentage to GDP were continually increasing, but remained at lower rate as compared to post reform time. In post reform period the higher saving and Capital Formation ratios recorded in 2006-07 which are 34.6 and 31.3 percent subsequently. While both the saving and Investment rates have risen steadily during 2006-07 the economy witnessed a surplus in saving over investment, which can be attributed to more than proportionate growth in saving as compared to investment and the inability of the economy to absorb external capital inflows.

Table-3
Gross Domestic Saving and Capital Formation (as percent to GDP)

Pre Reform Period	Gross Domestic saving	Gross Domestic fixed Capital Formation
1971-72	15.1	14.7
1976-77	18.8	16.6
1981-82	17.5	18.6
1986-87	18.1	21.4
1991-92	21.3	22.6
Mean	18.2	18.8
St dev	2.3	3.3
Post Reform period		
1996-97	22.4	23.1
2001-02	24.9	25.1
2006-07	34.6	31.3
2011-12	30.8	30.6
2016-17(*)	32.0	31.0
Mean	29.0	28.2
St dev	5.08	3.82

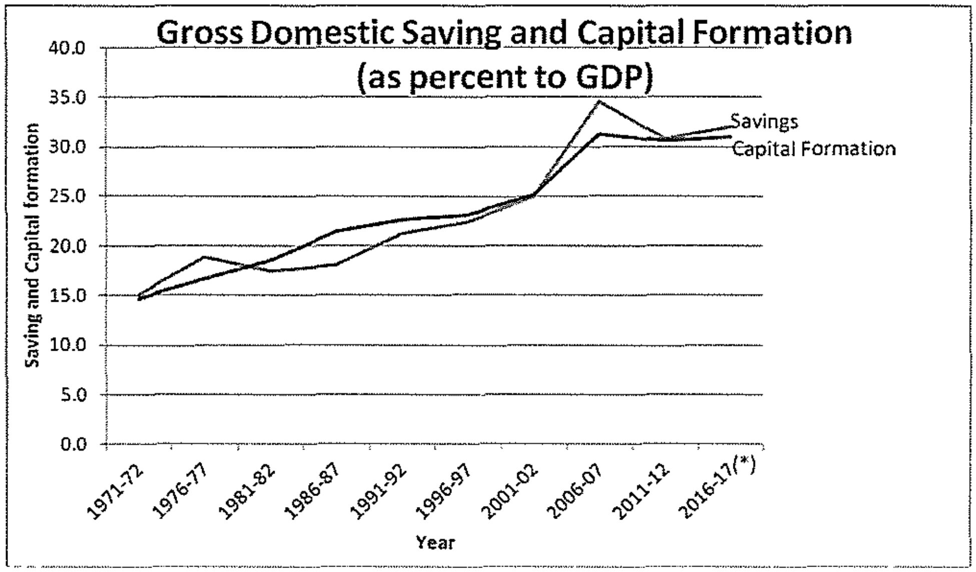
Source:- RBI

However during 2006-07, owing to the prevalence of positive growth sentiment in the economy, accompanied by gradual increment in lending rates, capital formation rate rose moderately to 31.3 percent from 25.1 percent five years ago in 2001-02, whereas the saving rate increased substantially to 34.6 percent to 24.9 percent during the same period (Figure-3).

The household sector continued to be major contributor to gross domestic saving. The increase in public saving has occurred mainly due to an increase in saving of non-departmental enterprises, small increase in saving of departmental enterprises and a significant reduction in dis-saving of government administration. The composition of Gross fixed capital formation between public and private sector shifted in favour of private capital formation, and particularly private corporate sector capital formation.

This is primarily a reflection of the impact of the reforms initiated in 1990s, which reduced restrictions on private investment and created a more favourable investment climate.

Figure-3 Gross domestic Saving and Capital Formation



Source:- RBI

Average proportion of gross domestic saving in pre reform time was 18.2 percent and capital formation was just same 18.8 percent. After reforms the saving and capital formation both increased at average 29 percent and 28.2 percent to GDP. The variability in these ratios in pre and post time is adversely affected by financial sector reforms as the above table shows (St Dev) the saving and capital formation more unstable in post reform period as compared to pre reform time.

Concluding Remarks

The paper attempted to analyze the impact of financial sector reforms on Indian Economy. Based on analysis and major findings, here a list of concluding observations:-

- The result indicates positive relationship between financial sector reforms and Indian economic development.
- The analysis reveals that financial sector reforms do have significant impact in increasing the real GDP growth rate.
- Sector wise growth rates have also been increased after the financial sector reforms.
- Gross domestic saving and gross domestic fixed capital formation is gradually increased after the particular reform majors.

There may be several reasons for the development of Indian economy, but it is certain that financial sector is a key sector to expand Indian Economic efficiency and plays a very crucial role towards its development.

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Evolving Deprivation Based Fund Devolution Method: A Study of Madhya Pradesh

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Abstract

This paper tries to develop an index of funds devolution based on the level of deprivation and concentration of population in the region using secondary data for 39 districts of Madhya Pradesh. In order to analyse the districts based on socio-demographic, economic and infrastructural dimensions, a composite index of overall development is also constructed, the inverse of which is used as measure of deprivation level among the districts. In conclusion, the study suggests that the index can be of great use to any State Government while allocating funds to different districts.

Keywords: Devolution, Deprivation, Development, Fund Allocation, Financial Decentralization.

Introduction

The Republic of India is one of the largest and most unique democracies around the world, accommodating around 16.9 percent of a very complex composition of world population in only 2.4 percent of the world surface area. On the top of it, great geographical, cultural and social diversities tend to worsen the situation of management of the economy with equity. Yet, the country is performing quite well on the path of economic growth since its independence, being the seventh largest economy (measured by nominal GDP) and the third largest by Purchasing Power Parity (PPP). The decadal average growth rate of the economy has been over 7 percent for the last two decades. But, this path has not been equal for all. It can be seen that spectacular growth attained by some regions and in some sectors in India, after independence, is in contrast to low levels of development still prevailing in many parts of the country. This unbalanced development creates much havoc and many serious problems in the country and also reflects the failure of planning mechanism adopted by different Governments. Government, most of the time tried to move on the concept of "*equal treatment for all*" leading to more inequality among different regions of the economy. Less developed regions should have been allotted more funds according to their need. Rationality in distribution of funds was interpreted politically in a much different way during this period. Madhya Pradesh in this case, is no exception.

Only a few districts in the state portray the status of development while the others aren't much developed in terms of socio-demographic, economic and infrastructural end. Thus, proper allocation of funds among various regions is needed to catalyse the development process with equity. This can only be achieved with proper government intervention in terms of fund allocation which can lead to balanced development across different regions of the economy. Following this scenario, the study intends to develop an index of funds devolution based on the level of deprivation and concentration of population in the region. This method of funds allocation is logical to create better opportunities among the districts by the State Government [of Madhya Pradesh].

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Theoretical Background

After independence, India chose to be a planned economy with healthy Centre-State quasi federal relations. But the first three quinquennial plans were criticized on the basis of the transfers being more or less *ad hoc* in nature, as described by Ramalingom and Kurup (1991) who further explain that the Forth Plan brought *a well laid out* method, named as the famous 'Gadgil Formula' which formed the base for Central assistance to States as approved by the National Development Council (NDC). The formula was then modified in the Sixth Plan and further revised as 'Gadgil-Mukherjee Formula' in 1990. This was reviewed once more in 2000 and finally after dismantling Planning Commission, the formula was discontinued. The Planning Commission during its tenure had only a partial success in dealing with the problem of regional disparity, thus continuing it seemed highly unnecessary by the newly formed Government of India (2014) and was then replaced by the NITI Aayog. After NITI Aayog took over, devolution has been increased from the divisible pool. Still, the problem seems to persist among different regions in India. Other attempts towards devolution were made in 2004 when the Ministry of Panchayat Raj (MoPR) appointed the National Council of Applied Economic Research (NCAER) to develop a Devolution Index (DI) to set an accountability framework for the States (Unnikrishnan, 2016). Meanwhile, a *Committee for Evolving a Composite Development Index of States* was constituted by the Government of India, chaired by Dr. Raghuram G Rajan (the then Chief Economic Advisor, Ministry of Finance) to develop a Development Index in order to address the issue of regional disparities and to attain a more balanced and inclusive growth(Rajan, Pandey, Jayal, Ramaswami, & Gupta, 2013). A loosely similar attempt was made by Bhanumurthy et.al. (2016) for examining the link between quality of governance, public expenditure and human development outcomes in the State of Madhya Pradesh. The team constructed a Governance Index (GI) using 22 indicators in five dimensions. This shows that over the years, Government has tried various methods for proper financial devolution to the States. However despite all such efforts, regional disparity is still a major problem that the Government has to deal with. This study attempts to contribute a method of funds allocation which can aid the government to properly deal with the problem of imbalanced regional growth.

Objectives

1. To develop the index of economic, socio-demographic and infrastructural development for Madhya Pradesh at district level
2. To study the association of various indicators of economic, socio-demographic and infrastructural development in the State
3. To develop a Funds Devolution Index of Madhya Pradesh

Methodology

Development in true sense should reflect overall economic, socio-demographic and infrastructural progress. Thus, it is important to develop a criteria based on which the State could allocate funds to its districts for their betterment. Grounded on such thoughts, the devolution index presented in this study is established on a concept that the allocation of funds should be associated with two factors viz. the level of deprivation and concentration of population in each district as major differences among the districts are present not only in the level of development but also in the density of population. Some districts have a high density of population along with higher rate of development (e.g. Indore, Bhopal) while there are many with lower population density with lower rate of development (e.g. Mandla, Sheopur). The cost of delivery of social sector on one hand depends on population while need of the fund depends on the degree of deprivation. We therefore have tried to assign appropriate weights to both deprivation and population in the devolution index.

The first task for developing such index is to identify different indicators which can capture the status of economic, social, demographic and infrastructural development in the region. We therefore have identified twenty indicators of socio-demographic development, economic development and infrastructural development (see table 1). To make the study more explainable, we then worked out the correlation of these indicators with Per Capita Income of the district which is also shown in the table as 'r'. It is quite indicative that some of the variables have high correlation while the others have poor correlation with Per Capita Income. The Per Capita Income can be taken up as the yard stick of economic development of the region. We therefore have selected only those indicators for this study which have correlation more than ± 0.400. The final selection of the variables for different categories is shown in table 2. From the list of indicators provided in table 1, thirteen are strongly correlated with Per Capita Income

Table 1
List of All Indicators along with correlation with PCI

No	Name	Unit	Code	R
	Socio-Demographic Index (SDI)			
1	Infant Mortality Rate	Deaths per 1,000 Births	IMRI	-0.612
2	Population Density	People per square Km	PDI	0.800
3	Sex Ratio	Females per 1000 Males	SRI	0.013
4	Literacy Rate	Percent	LRI	0.581
5	Literacy Difference	Percent	LDI	-0.472
6	Population – ST	Percent	STPI	-0.302
	Economic Index (ECOI)			
1	Electrified HH	Percent	EHHI	0.526
2	HH with Tap-Water Facility	Percent	HHTWFI	0.452
3	HH with Toilet Facility	Percent	HHTFI	0.870
4	Per Capita Income	INR	IPCI	1.000
5	Industrial Units	Per 100 sq. km.	IUI	0.684
6	Electricity Consumption	Per Capita KW	ECI	0.393
	Infrastructural Index (INFI)			
1	Number of Teachers	'000 Population	NTI	-0.348
2	Number of PHCs	'00000 Population	PHCsI	-0.134
3	Population Involved in Non-Agricultural Activities	Percent	NAAI	0.831
4	Population Under BPL	Percent	BPLI	-0.290
5	Net Irrigated Area	Percent	NIAI	0.413
6	Number of Pumps	Per 1000 Hectare	NPsI	0.545
7	Electrified Villages	Percentage	EVI	0.047
8	Commercial Banks	'00000 Population	CBI	0.412

Table 2
Final List of Indicators considered in SDI, ECOI and INFI

SDI	ECOI	INFI
Literacy Difference	Industrial Units	Pop. Involved in Non-Agri. Activities
Population Density	HH with Toilet Facility	Number of Pumps
Literacy Rate	Per Capita Income	Commercial Banks
Infant Mortality Rate	HH with Tap-Water Facility	Net Irrigated Area
	Electrified HH	

To make these indicators additive, we have converted them into standardized format using a distant function. The indicator value is thus normalized as,

$$X_i = \frac{X_i - MinX_i}{MaxX_i - MinX_i}$$

Where, X_i is the variables X for i^{th} district; $MinX_i$ is the minimum value of variable and $MaxX_i$ is its maximum value in the State.

After normalizing the variables, the three composite Indexes were calculated by averaging all the indicators for each category, i.e.

$$SDI = \frac{PDI + LRI + LDI + IMRI}{4}$$

$$ECOI = \frac{IUI + HHTFI + IPCI + HHTFI + EHHI}{5}$$

$$INFI = \frac{NAAI + NPsI + CBI + NIAI}{4}$$

Where the codes have their usual meaning.

Finally we developed the overall index of development of the district called as the *Composite Index of Overall Development* (CIOD), which shows the level of overall development of a district. The components of CIOD are calculated by converting the indicators into ratio scale and further normalizing them using the distant function method for construction of composite indexes which are then added up with equal weight as the formula demonstrates:

$$CIOD = \frac{SDI + ECOI + INFI}{3}$$

Where, SDI stands for Socio-Demographic Index of Development; ECOI is the Economic Index of Development and INFI indicates the Infrastructural Index of Development. To measure the level of deprivation, inverse value of CIOD is taken into account as the deprivation index. This implies that higher the level of development, lower should be the allocation of funds and therefore, more deprived districts would get more funds while keeping in mind their share of population in the State. This method seems logical as the level of deprivation of each district reflects their need for funds.

Mathematically,

Deprivation Index = 1 – Composite Index of Overall Development

Based on the level of deprivation (with 70 percent weight) and share of population (30 percent weight), the formula to calculate the devolution index forms to be:

Devolution Index = (0.7 * Deprivation Index) + (0.3 * Share of Population)

As can be seen, devolution Index is the weighted sum of the ratios of level of deprivation and share of population.

Out of 51, only 39 districts were included in this study due to limitation of data which is secondary in nature, collected from various government portals including Census of India (2011); Economic Survey of Madhya Pradesh (2014-15, 2015-16, and 2016-17); Compendium for Agricultural Statistics MP (2009-10); "*Madhya Pradesh ki Vividh Sankhyiki* (2014)" by Directorate of Economics and Statistics, Government of Madhya Pradesh.

Analysis

To examine the performance of districts on the basis of these dimensions, we have first calculated central value of each dimension using arithmetic mean and then used standard deviation as a measure of dispersion. Then, we used the formula $\text{limits} = \overline{X} \pm 0.5 * \sigma\, \overline{X}$, being mean of indicator and σ as its standard deviation, to set the upper and the lower limits of moderately developed districts. Districts having values higher than the upper limit are considered as most developed while districts having values lower than the lower limit are considered as less developed districts. Using this analysis enabled us to compare variability of districts based on the level of development. Table 3 provides ranks of districts based on different dimensions of CIOD. Ranks of CIOD are marked in the first column while ranks of SDI, ECOI and INFI are shown in brackets.

Table 3
District Ranking based on the SDI, ECOI, INFI and CIOD

Rank	District	CIOD	SDI (Rank)	ECOI (Rank)	INFI (Rank)
1	Indore	0.94438	0.9537 (01)	0.9378 (01)	0.9417 (01)
2	Bhopal	0.78287	0.9463 (02)	0.9336(02)	0.4687 (05)
3	Jabalpur	0.69825	0.7783 (03)	0.7678 (03)	0.5486 (03)
4	Ujjain	0.59470	0.4996 (09)	0.6416 (05)	0.6429 (02)
5	Gwalior	0.58799	0.6837 (04)	0.6654 (04)	0.4149 (08)
6	Dewas	0.49443	0.4433 (18)	0.5607 (06)	0.4792 (04)
7	Narsimhapur	0.47071	0.5227 (07)	0.4660 (09)	0.4235 (07)
8	Harda	0.46116	0.4780 (11)	0.5364 (07)	0.3691 (09)
9	Ratlam	0.40693	0.4191 (20)	0.5196 (08)	0.2821 (21)
10	Sagar	0.39795	0.5006 (08)	0.3480 (24)	0.3453 (13)
11	Chhindwara	0.39791	0.4743 (12)	0.4039 (16)	0.3155 (16)

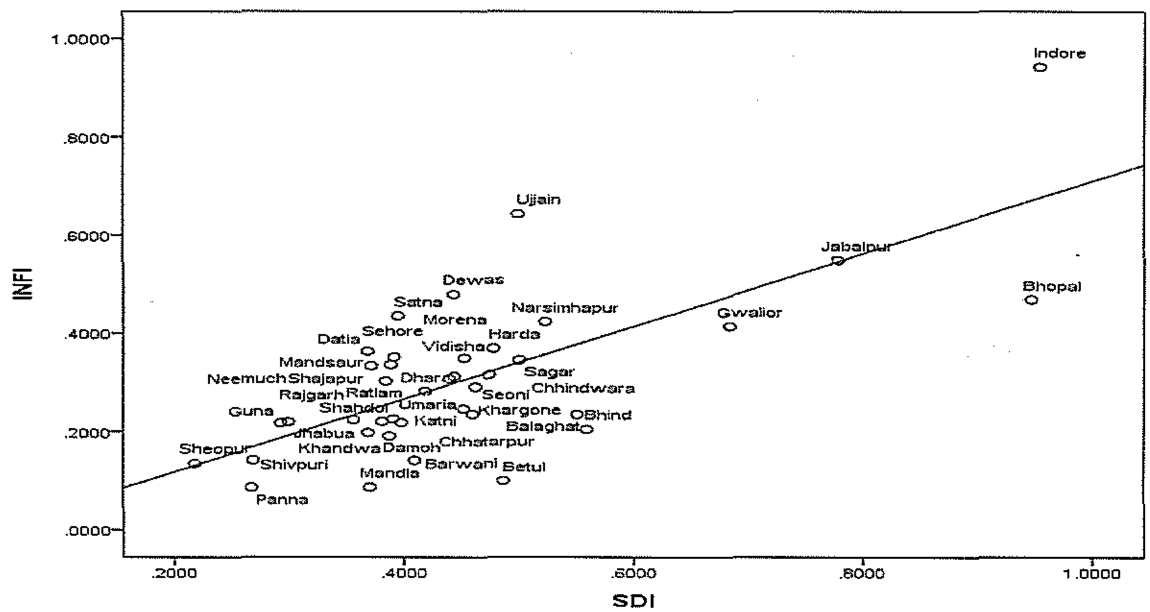
Rank	District	CIOD	SDI (Rank)	ECOI (Rank)	INFI (Rank)
12	Vidisha	0.39627	0.4529 (15)	0.3865 (19)	0.3494 (12)
13	Satna	0.38882	0.3947 (23)	0.3364 (26)	0.4354 (06)
14	Dhar	0.38778	0.4400 (19)	0.4161 (13)	0.3072 (18)
15	Shajapur	0.38548	0.3888 (26)	0.4314 (12)	0.3363 (14)
16	Datia	0.37881	0.3687 (33)	0.4043 (15)	0.3634 (10)
17	Morena	0.37880	0.4441 (17)	0.3799 (20)	0.3124 (17)
18	Neemuch	0.37351	0.3844 (28)	0.4336 (11)	0.3026 (19)
19	Sehore	0.37110	0.3916 (24)	0.3699 (22)	0.3518 (11)
20	Mandsaur	0.36769	0.3717 (30)	0.3974 (18)	0.3339 (15)
21	Khargone	0.36484	0.4601 (14)	0.3992 (17)	0.2353 (23)
22	Bhind	0.36272	0.5592 (05)	0.3248 (27)	0.2042 (31)
23	Balaghat	0.35564	0.5507 (06)	0.2817 (32)	0.2345 (24)
24	Katni	0.35507	0.4523 (16)	0.3670 (23)	0.2459 (22)
25	Seoni	0.35464	0.4627 (13)	0.3106 (28)	0.2907 (20)
26	Khandwa	0.34437	0.3875 (27)	0.4549 (10)	0.1907 (33)
27	Rajgarh	0.32915	0.3561 (34)	0.4072 (14)	0.2241 (26)
28	Betul	0.30974	0.4869 (10)	0.3428 (25)	0.0996 (37)
29	Guna	0.29345	0.2929 (36)	0.3705 (21)	0.2170 (30)
30	Barwani	0.28617	0.4097 (21)	0.3074 (30)	0.1414 (35)
31	Damoh	0.27062	0.3691 (32)	0.2451 (34)	0.1977 (32)
32	Jhabua	0.26920	0.2995 (35)	0.2888 (31)	0.2193 (28)
33	Shahdol	0.25426	0.3812 (29)	0.1613 (36)	0.2203 (27)
34	Umaria	0.24504	0.3908 (25)	0.1184 (37)	0.2259 (25)
35	Chhatarpur	0.23912	0.3979 (22)	0.1012 (39)	0.2183 (29)
36	Shivpuri	0.22957	0.2687 (37)	0.2786 (33)	0.1414 (34)
37	Mandla	0.22253	0.3708 (31)	0.2103 (35)	0.0866 (38)
38	Sheopur	0.22048	0.2177 (39)	0.3094 (29)	0.1344 (36)
39	Panna	0.15275	0.2672 (38)	0.1054 (38)	0.0857 (39)
	Arithmetic Mean	0.3878	0.4543	0.4031	0.3061
	Standard Deviation	0.1544	0.1545	0.1870	0.1606
	Upper Limit for Moderate	0.4650	0.5316	0.4966	0.3864
	Lower Limit for moderate	0.3106	0.3770	0.3096	0.2257

A careful look through the table articulates that Indore is topping all the charts while Bhopal, the second most developed district (based on CIOD) in Madhya Pradesh has performed well on the economic and socio-demographic fronts, but is far behind Indore when it comes to infrastructure. This depicts the level of regional disparity in development among socio-demographic, economic and infrastructural ends in the State. Further examples can be districts like Bhind and Balaghat who are among the leading districts at socio-demographic end but are performing very poorly in economic development and infrastructural development. Another example of Harda shows that it is performing excellent in economic development but is poor in socio-demographic development and moderate in infrastructural development. But this regional imbalance cannot be solely justified using such descriptive tools. So to look deeper into the problem, considering associations among the three dimensions in the districts is also necessary. For this purpose, we have used scatter plots which determine association of districts among the three dimensions of overall development index.

Social Development and Infrastructural Development

Figure 1 shows the association between infrastructural index and socio-demographic index. It can be seen that districts like Panna, Mandla, Bhind, Betul etc. are more developed on socio-economic front than their infrastructural end, while Ujjain, Dewas, Neemuch etc. are more developed in infrastructural facilities.

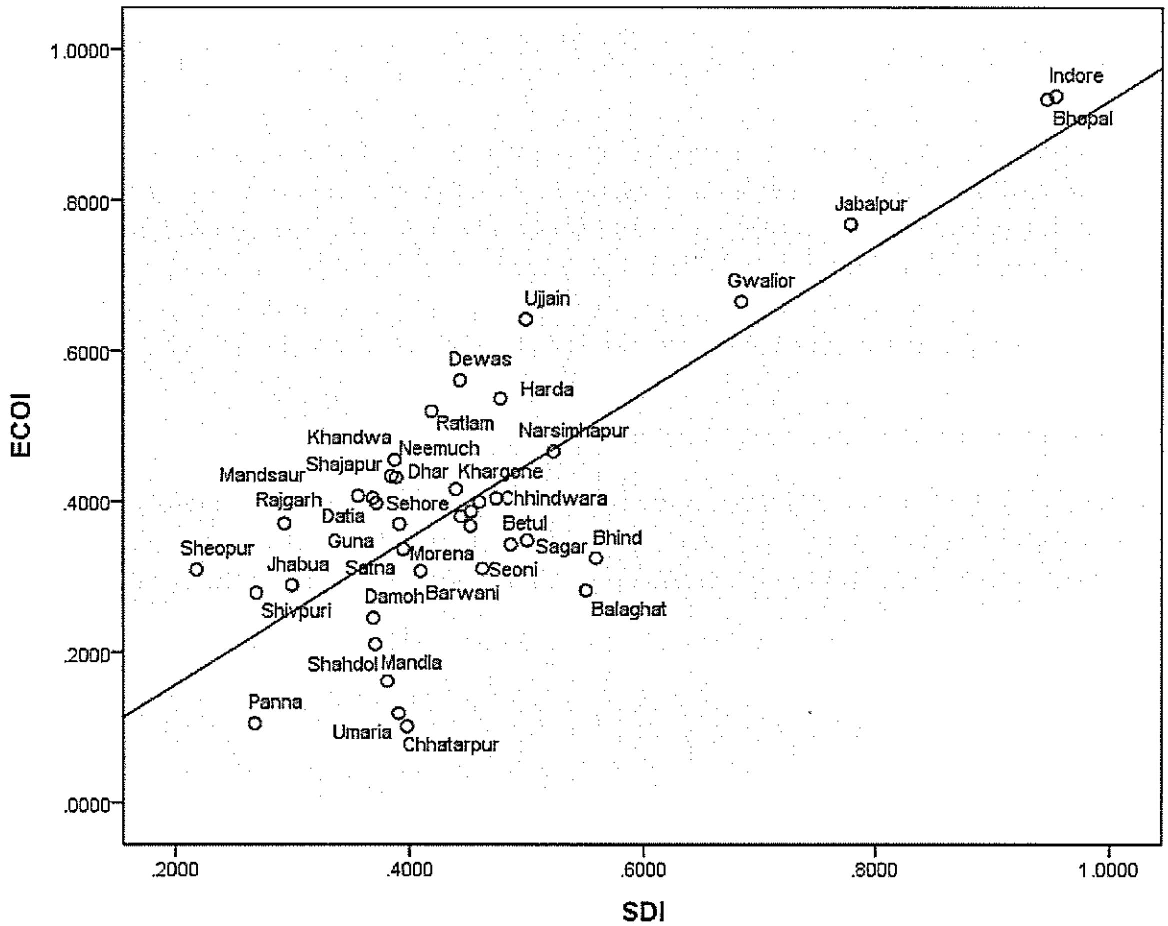
Figure 1: District Scatter Plot between Infrastructural and Socio-Demographic Indices



Economic Development and Social Development

Similarly, Figure 2 (showing association between economic and socio-demographic indices) directs some districts to be better in economic development, e.g. Harda, Sehore, Rajgarh etc. while the others to be more socio-demographically developed e.g. Umaria, Chhatarpur, Panna and Balaghat etc.

Figure 2: District Scatter Plot between Economic and Socio-Demographic Indices

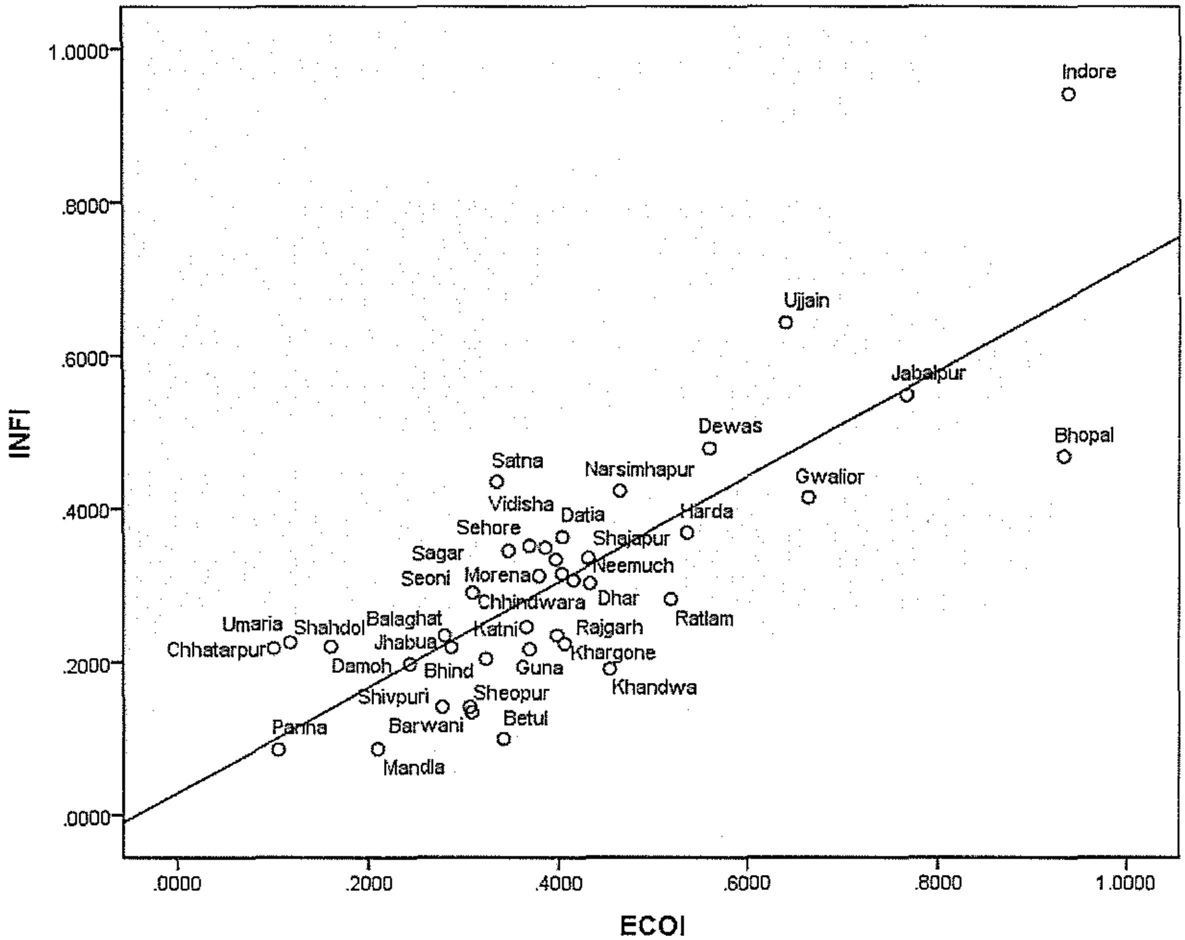


Infrastructural Development and Economic Development

Further, Figure 3 (showing association between economic and socio-demographic indices) illustrates that some of the districts are performing well in infrastructural development (e.g. Satna, Ujjain, Seoni, Narsimhapur etc.) while other districts have a higher economic index (e.g. Gwalior, Bhopal, Mandla, Khandwa etc.).

This suggests that the regional imbalance is not only present but is much higher between the three dimensions of composite index of overall development (CIOD). This statement can be verified by taking a closer look at the graphs along with table 3. As explained, there is a high level of variability among the districts at social, demographic, economic and infrastructural ends.

Figure 3: District Scatter Plot between Infrastructural and Economic Indices



Overall Development and Devolution Index

Moving towards the overall development, we found that Indore, Bhopal, Jabalpur, Ujjain, Gwalior, Dewas and Narsimhapur are the most developed districts in the State whereas Harda, Ratlam, Sagar, Chhindwara, Vidisha, Satna, Dhar, Shajapur, Datia, Morena, Neemuch, Sehore, Mandsaur, Khargone, Bhind, Balaghat, Katni, Seoni, Khandwa and Rajgarh are moderately developed districts. Panna, Shivpuri, Mandla, Sheopur, and Umaria are the least five developed districts in the State. This regional imbalance of growth suggests development of a strong method of fund devolution through which needs of the districts could be reviewed and a balanced growth could be achieved in whole State.

Along with annexure I, table 4 shows the ranks and figures of districts attained from excel calculations of the devolution Index. The Index, as explained in methodology, is the weighted sum of the ratios of level of deprivation and share of population, making it a ratio scale variable. The ratio, when multiplied by 100, becomes the percent share of each district in the total funds available. To explain it numerically, a separate column is defined in Table 4 named *Fund Allocation* which shows distribution of a hypothetical figure of INR 10,000,000 among districts of the State based on the devolution index. A careful look at the table shows that Indore, being the most developed district in Madhya Pradesh, is entitled to only 1.7981 percent of the total allocation which comes out to be INR 179,808.22 from the hypothetical fund. At this point, it is interesting to note that Jabalpur, being the third most developed district in the State is entitled to get more share than Harda, which holds eighth rank on the composite index of overall development. The reason of a more deprived district (like Harda) bagging less funds than a less deprived district (like Jabalpur) is the share of population as it holds 30 percent weight in the index of devolution.

Table 4
Ranking of Districts based on Devolution Index

Rank	District	Devolution Index	Percent Allocation	Fund Allocation (INR)
1	Shivpuri	0.0312	3.1201	312,010.15
2	Chhatarpur	0.0311	3.1102	311,023.44
3	Panna	0.0299	2.9913	299,130.76
4	Sagar	0.0295	2.9520	295,197.54
5	Satna	0.0290	2.9041	290,412.80
6	Dhar	0.0289	2.8856	288,564.36
7	Betul	0.0281	2.8099	280,986.07
8	Chhindwara	0.0281	2.8086	280,862.09
9	Mandla	0.0281	2.8059	280,586.28
10	Morena	0.0280	2.8023	280,230.71
11	Khargone	0.0280	2.7969	279,685.82
12	Barwani	0.0278	2.7844	278,441.87
13	Damoh	0.0275	2.7543	275,434.66
14	Balaghat	0.0274	2.7383	273,833.49
15	Rajgarh	0.0274	2.7382	273,822.12
16	Shahdol	0.0272	2.7184	271,841.07
17	Bhind	0.0272	2.7182	271,822.94
18	Guna	0.0269	2.6911	269,105.78
19	Jhabua	0.0265	2.6541	265,411.82
20	Sheopur	0.0263	2.6287	262,871.37
21	Seoni	0.0258	2.5803	258,029.46
22	Khandwa	0.0258	2.5759	257,594.01
23	Shajapur	0.0256	2.5565	255,652.12
24	Katni	0.0254	2.5356	253,557.97
25	Umaria	0.0254	2.5352	253,521.36
26	Mandsaur	0.0252	2.5227	252,273.40
27	Sehore	0.0250	2.4982	249,822.19
28	Vidisha	0.0250	2.4980	249,803.77
29	Ratlam	0.0246	2.4649	246,489.13
30	Dewas	0.0226	2.2625	226,254.48
31	Neemuch	0.0225	2.2490	224,902.25

32	Gwalior	0.0222	2.2219	222,191.48
33	Datia	0.0221	2.2139	221,385.12
34	Ujjain	0.0218	2.1797	217,970.77
35	Jabalpur	0.0211	2.1138	211,383.38
36	Narsimhapur	0.0210	2.0966	209,664.77
37	Harda	0.0186	1.8645	186,448.56
38	Bhopal	0.0182	1.8197	181,972.45
39	Indore	0.0180	1.7981	179,808.22

Note that the concentration of population in Jabalpur is 0.0410 while Harda has the lowest share of population (0.0095) in the State. This implies that Jabalpur, being way more developed than Harda needs more funds as it has more population to be looked after. Another dimension of this fact is that if more funds are given to Harda, having a less share of population, it will only increase the per capita cost of delivery of social sector. Thus, it is evident that a deprived district with lesser population must be entitled to lesser amount of funds. Similar scenario can be seen in many other districts like Panna, the most deprived district in the State entitled to less funds than many districts. With many more examples at hand, like Umaria, Sagar, Khandwa, Satna, Sheopur etc. it can be stated that this index gives every district a chance to undergo a path of development that will be inclusive of their needs.

Conclusion

Primary findings of the study highlight that regional diversity is present to a large extent in Madhya Pradesh. There are many districts which are far more behind in terms of development (e.g. Chhatarpur, Mandla, Shivpuri, Sheopur, and Panna) than a few which are at the top (Indore, Bhopal). Further, disparity among different dimensions of overall development, namely socio-demographic development, economic development and infrastructural development, were also found among the districts. This method highlights that though Panna is the least developed district but gets small chunk of the funds than Shivpuri and Chhatarpur mainly because of low population density. This is because its share of population is relatively less than other districts having a higher deprivation index. According to our calculations, Shivpuri is entitled to receive highest share of funds followed by Chhatarpur, Dhar, Morena, Panna and others. On the other hand districts like Harda, Bhopal, Narsimhapur, Ujjain etc. are entitled to lesser share of funds in the State. The study thus suggests that this fund devolution method can be of great use for the devolution of any fund from State to districts as it not only includes the level of deprivation but also the concentration of population while computing the share of funds for each district.

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Annexure I

Ranking of Districts based on Deprivation Index and Population Ratio

District	Deprivation Index	Rank	District	Proportion of Population
Panna	0.8473	1	Indore	0.0545
Sheopur	0.7795	2	Jabalpur	0.0410
Mandla	0.7775	3	Sagar	0.0396
Shivpuri	0.7704	4	Bhopal	0.0394
Chhatarpur	0.7609	5	Satna	0.0371
Umaria	0.7550	6	Dhar	0.0364
Shahdol	0.7457	7	Chhindwara	0.0348
Jhabua	0.7308	8	Gwalior	0.0338
Damoh	0.7294	9	Ujjain	0.0330
Barwani	0.7138	10	Morena	0.0327
Guna	0.7066	11	Khargone	0.0312
Betul	0.6903	12	Chhatarpur	0.0293
Rajgarh	0.6709	13	Shivpuri	0.0287
Khandwa	0.6556	14	Bhind	0.0283
Seoni	0.6454	15	Balaghat	0.0283
Katni	0.6449	16	Betul	0.0262
Balaghat	0.6444	17	Dewas	0.0260
Bhind	0.6373	18	Rajgarh	0.0257
Khargone	0.6352	19	Shajapur	0.0252
Mandsaur	0.6323	20	Vidisha	0.0243
Sehore	0.6289	21	Ratlam	0.0242
Neemuch	0.6265	22	Barwani	0.0231
Morena	0.6212	23	Seoni	0.0229
Datia	0.6212	24	Mandsaur	0.0223
Shajapur	0.6145	25	Sehore	0.0218
Dhar	0.6122	26	Khandwa	0.0218
Satna	0.6112	27	Katni	0.0215
Vidisha	0.6037	28	Guna	0.0206
Chhindwara	0.6021	29	Damoh	0.0205
Sagar	0.6021	30	Narsimhapur	0.0182
Ratlam	0.5931	31	Shahdol	0.0177
Harda	0.5388	32	Mandla	0.0175
Narsimhapur	0.5293	33	Jhabua	0.0170
Dewas	0.5056	34	Panna	0.0169
Gwalior	0.4120	35	Neemuch	0.0137
Ujjain	0.4053	36	Datia	0.0131
Jabalpur	0.3017	37	Sheopur	0.0114
Bhopal	0.2171	38	Umaria	0.0107
Indore	0.0556	39	Harda	0.0095

Financial Issues & Economic Reforms

Dr. Satish K Batra*

Considering the fact that the economic reforms initiated in July 1991 marked a radical departure from the earlier economic philosophy it seems appropriate to elucidate the reforms first, followed by a discussion on financial issues in the second part of the address. The concluding part focuses on the rejuvenation and reorientation of economic reforms. I begin with the background so as to appreciate the historical context of the theme.

The year 1991 is rightly regarded as a watershed year in the economic history of India. Because although some baby and/or hesitant steps were taken towards unshackling of the economy in the beginning of the 1980's, it is the economic reforms initiated in July 1991 that marked a real paradigm shift in the sense that the predominantly socialistic-oriented licence-permit-quota (LPQ) strategy was gradually, sequentially and incrementally replaced by conspicuous market-oriented liberalization, privatization and globalization strategy (LPG).

The main reasons behind this shift was the acute financial-fiscal crisis for one thing and "thrust upon" 10-point Washington Consensus[1] (encapsulated by John Williamson and sponsored by World Bank and IMF etc.) for another. In fine, the 1991 economic reforms were at best crisis-led and imposed-on.

The following preface of the budget presented on 24 July 1991 makes it more than clear that the economic reforms undertook in 1991 were essentially financial in nature. This preface was reproduced in the Economic Survey, 1991-92, published for the first (and so far last) time in two parts: Part I, General Review and Part II Sectoral Developments. The regular budget for 1991-92,

"Initiated a major effort towards correcting the fiscal imbalance. It envisaged a reduction in the fiscal deficit.... aimed at containing the government expenditure and augmenting revenues; reversing the downward trend in the share of direct taxes in total tax revenue; curbing conspicuous consumption, encouraging indigenous industry and improving competitiveness of the industrial sector particularly export industries."[2]

In defence of LPQ strategy

Understandably, every policy usually tries to respond to the exigencies and needs of the then situations. Therefore, it would be too naïve to condemn and castigate the LPQ policy as In

Fact, under the circumstances, on the eve of independence and prevailing environment, the options were extremely limited.

The Washington Consensus was later refined as Santiago Consensus in 1998.

Government of India, Economic Survey, 1991-92, Part II, p2.

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The main elements of LPQ strategy

The five broad features of the LPQ strategy were:

- Public monopoly over heavy industry in preference to the light and labour-intensive industry as well as agriculture;
- Provision of strict investment licensing for private industries;
- Enforcement of reservation for small sector enterprises;
- Espousing growth-led export policy for self-sufficiency; and
- A policy regime marked by difficult entry, more difficult exists and most difficult punitive action against the sinecures, in government sector in particular.

All in all, the 'welfarian' state was assigned fivefold stupendous tasks as a protector, producer, controller, provider and facilitator.[1]

The implications of LPQ strategy

The five main implications resulting from almost four decades of the LPQ strategy can be briefly enumerated as follows:

- Imbalanced and stunted economic growth derisively termed as the Hindu growth rate (HGR) by late Prof Raj Krishna, leading to fiscal woes;
- Shortages and prevalence of sellers' market at the cost of consumers sovereignty;
- Proliferation of monopolistic and oligopolistic regime and bloated government sector at the cost of competitive efficiency;
- Politicisation and bureaucratisation of business environment at the cost of professionalism;
- Aggravation of the three core evils, viz. absolute poverty, serious inequality and widespread unemployment in sharp contrast to the famous, Tryst with Destiny dream of the prime minister Jawaharlal Nehru (15 Aug. 1947).

To reiterate, all was not wrong with the LPQ strategy considering the context and the circumstances in which it was adopted. But, unfortunately, it was carried too far and for too long despite bereft of its logic and relevance as also its detrimental consequences. As a result production, productivity and, therefore, growth plummeted, socio-economic scourges exacerbated and socialist dreams shattered.

Arvind Virmani, using a comparator has drawn a conclusion that the welfare per capita GDP of the average Indian as a percent of the average world citizen decreased from 29 to 20 during this era of LPQ, i.e. 1950-79. He also adds that average per capita GDP growth per annum of the world increased at 2.7 percent whereas that of India inched at 1.1% only (less than 1.6% of the world average) during the above period.[2]

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1. Arvind Panagariya, "Freeing the old economy," *The Economic Times*, 31 Jan 2001.
2. Arvind Virmani, "The God That Failed", The Times of India, 21 Nov 2013

I Eeconomic Reforms

According to *Economic Survey*, 1991-92, economic reforms, "included short-term measures aimed at crisis management as well as longer-term measures of structural reform aimed at improving efficiency and productivity and putting the economy back on the path of sustainable growth with equity and social justice."[2]

Same objectives were echoed by Montek Singh Ahluwalia during the first Raj Krishna Memorial Lecture organized by the Department of Economics, University of Rajasthan in 1995. He pointed out, "There was an immediate objective of managing BOP crisis and restoring viability in external payments and there was also a medium-term objective of setting the economy on the path of rapid and sustainable growth.[3]

The rationale behind economic reforms

As already said, financial crisis was the core reason behind initiating economic reforms programme spanning LPG strategy. The raison d'tre of reforms revolved around five main points, viz. fiscal consolidation, unleashing of competitive strength, prominence to market forces, rightsizing and right working of government and public-private-partnership.

Sectoral reforms

The reforms policy initiatives were announced for seven sectors as follows:

1. Fiscal policy

It was emphasized that the fiscal policy would aim at improving fiscal balance for eliminating inflationary pressure. This required controlling public debt, reduction in subsidies and redirecting government expenditure from less productive and non-developmental activities to strategic investment in infrastructure and human development.

2. Trade policy

The trade policy envisaged gradual relaxation of import controls, opening up the economy to foreign competition to permit the full exploitation of the country's dynamic competitive advantage.

3. Industrial policy

Creating steady and continuous competitive pressure by dismantling restraints on internal competition along with stable and moderately protective tariff structure was to be the focus of industrial policy. At the same time, it was resolved to protect the interests of workers through a proper safety net.

4. Financial policy

The Economic Survey admitted, "The financial sector is at the centre of economic activity; its health affects the entire economy." Over-controls, therefore, would be replaced by judicious regulation to strengthen banks and other financial institutions, including financial instruments to finance faster as well as equitable development.

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2. Government of India, *op.cit.* Part I, p1.
3. Department of Economics, University of Rajasthan, First Raj Krishna Memorial Lecture, "Economic Reforms for the Nineties," 1995.

5. Agricultural policy

The ingredients of agricultural policy reforms included constant improvement in the technology of production, storage, marketing, extension, dry land farming, R&D and a credible system of food security, etc. In fact, the reforms took note of the fact that with the emergence of green revolution, the nature of agricultural problem had changed drastically.

6. Poverty alleviation policy

The government vowed to "target the poverty alleviation programmes towards the worst affected sections of the people to make them more responsive to felt needs and to improve their efficiency".[1] After all, meeting the peoples' basic needs and preventing distress has been the top priority of the government since the Tryst with Destiny,[2] espoused in 1947.

7. Human resource policy

The Survey maintained that the, "People must be helped to enhance their own capabilities through "better access to education & training ....Social and economic uplift of women must be given special emphasis to tap their potential as well as to moderate population growth."

The Repercussions

If all was not well with the LPQ strategy, all has gone well with the economic reforms strategy of LPG also, mainly because it lacked indigenous rooting, right sequencing, vigorous continuity, requisite rigour, etc. It is sometimes feared that we may be back to square one, i.e. 1991. Utterly untenable of course. In short, the cherished dream of rapid growth with stability, equity and sustainability has remained a chimera.

Repercussions have been very many as well as variegated. But as per the theme of the conference, let me confine to only financial issues.

II Financial Issues

I begin with the trinity of financial issues forming a vicious loop, viz. inflation, fiscal deficit and foreign exchange devaluation; the main concerns of monetary, fiscal and commercial policies respectively.

1. Inflation

However defined or measured – WPI or CPI, headline, food or core, whatever the cause and the kind–demand-pull or cost-push, structural or political, expectational or international, moderate or hyper, a high stubborn inflation continues to constitute a major financial problem for quite long.

Ruchir Sharma of Breakout Nations (2012) fame believes that consumer inflation has stuck a high of near 5% over the last five years, while Gurcharan Das estimates it at 10% [3]. In a recent press conference on 3 Jan 2014, Prime Minister Manmohan Singh candidly admitted about the government's failure to contain inflation. Meanwhile, an RBI panel headed by Urjit Patel has suggested that CPI inflation should be brought down to 8% in 12 months and to 6% over 24 months before adopting a target of 4%.[4]

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1. Government of India, *op.cit.* Part I, p.26.
2. Ibid.
3. The Times of India, 19 Jan 2014.
4. *Ibid*, 23 Jan 2014.

2. Fiscal deficit

The fiscal deficit number remains worrisome despite FRBM Act, 2003 and adoption of Kelkar Committee road map for fiscal consolidation as also government's resolve to observe frugality. In 2012-13 fiscal deficit at 4.9% of GDP did beat the target of 5.3%; the target for the present fiscal is 4.8%. Notably, in absolute amount the fiscal deficit has increased from Rs.8299 crorer in 1980-81 to Rs.5, 20,925 crores in 2012-13 (RE) and is projected at Rs.5, 42,499 crores in current fiscal.[1]

There is a genuine apprehension that to realize this cherished target the FM may prune the developmental and/or welfarian expenditure. Obviously, such measures do more harm than good to economy.

Apart from other reasons, time– and cost overruns pertaining to investment proposals and projects due to government's indefensible dithering aggravate fiscal fragility. Agreeably, however, fiscal deficit is not largely structural and, therefore, fixable through appropriate and timely policy measures.

3. Devaluation, current-account deficit and balance of payments perplexities

Fiscal deficit and inflation precipitate devaluation of currency which we suffered some time back. In turn, foreign exchange devaluation via expensive inelastic imports and budget deficits feed inflation.

It may be emphasized that despite devaluation if imports are sticky and exports sluggish, as in our case, it would create and aggravate current account deficit fuelling balance of payments crisis. Thus devaluation, CAD and BOP problems are intertwined. Mainly due to these triangular troubles, capital account convertibility has been forced to hold fire.

In our country, gold and oil imports together accounting for roughly (35% + 11%) 46% of total imports are alleged to be the main culprits behind CAD.[2] The CAD was 4.5% of GDP in 2012-13 quite high, though not vexatious. The target of CAD for fiscal 2014 is 3.7%, a bit optimistic.

In the opinion of Raghuram Rajan, as of now, our financial fundamentals are quite balanced. For example, public debt-GDP ratio is down from 73.7% in 2006-07 to 66% in 2012-13, central government's debt-GDP ratio was 46%, short-term external debt was 5.2% of GDP and FOREX reserves at $ 278 b was 15% of GDP, enough to finance the entire CAD for several years.[3]

4. Subsidies

Subsidies are usually advocated and resorted to as a welfarian measures for financial inclusion and inclusive growth. As a result, subsidies in the form of input, output, hidden and cross, etc. have been proliferating.

Lately, therefore, they are being increasingly targeted as a drain on the exchequer at a high ratio of 14% of GDP – 10% direct and 4% indirect.[1] Amartya Sen, however, in his keynote address in the recent Jaipur Literature Festival has strongly defended the current food subsidy at 1.4% of GDP.[2]

The main arguments of opposition to huge amount of subsidies are: they are largely misconceived, poorly targeted, and ill-administered and there are leakages. Moreover, a big chunk comprises non-merit subsidy (Sen also implicitly hinted at it). The Kelkar Committee (2012) recommended for a drastic cut in subsidies so that resultant savings could be channelized towards social development and employment generation. Therefore, it is the right time to curtail them judiciously.

1. *Rajasthan Patrika*, 20 Jan 14.
2. Chandrajit Bannerjee, CII, *The Times of India*, 03 Jan 2014.
3. Harvard Business School, 15 Oct 2013.

5. Low investment

Over the last few years both the foreign investment in the form of FDI as well as FII and domestic investment have remained quite low, thanks mainly to the so-called PPP (perpetual policy paralysis) syndrome as evidently reflected by Ease of Doing Business (134/185), Corruption Perception Index (94/117) and Starting a Business (179/185) findings.

It is due to this depressive environment that India's GDP growth plummeted to 5% during fiscal 2013, lowest in the decade (incidentally, China at 7.7% may register lowest growth in 14 years); the World Bank's forecast lowers our GDP further to 4.8% in the present fiscal, 2014 before it revives to 6.2% in the fiscal 2015[3]. Moody's Analytics however paint an optimistic picture for 2014.[4]

Advisably, the newly constituted Cabinet Committee on Investment and the Project Monitoring Group must become truly proactive as also responsive.

6. Disinvestment

One of the messages of economic reforms has been that it is no business of government to be in business. Hence, along with less of government what is, imperative is disinvestment of government stake in public sector enterprises. Additionally, disinvestment is not only a handy potential source of revenue generation, but also superior to the other available modes of finance such as debt and deficit financing.

In fact, NDA set up a Disinvestment Commission in 1998 to undertake a massive disinvestment programme in the non- core areas of central public undertakings (CPU) in particular (later it was dismantled and, instead, Investment Commission of India was instituted in 2004). Success, however, has remained limited mainly due to lukewarm efforts and poor market response. Nevertheless, lackadaisical approach has continued.

It may be noted that the target of disinvestment of rupees 30,000 crores for 2012-13 was not realized. Moreover there is hardly any possibility of achieving the present fiscal's (2014) ambitious target of rupees 40,000 crores. So far the government has not inched towards it.

7. Pathetic penetration of banking

Despite two doses of nationalization in 1969 and 1980 and several other peace meal measures such as lead bank scheme, regional rural banks, new private sector banks, business correspondents/business facilitators, hybrid banking, Bharatiya Mahila Bank (2013), no-frills accounts as also the "last mile approach," the latest avatar micro finance and its main purveyor, SHG-bank linkage and what have you, majority of population is still unbanked as well as under-banked.

According to one estimate 41% of adult population in general and 61% of population in rural areas do not have bank accounts. Resultantly, indigenous banking rules the roost and financial inclusion remains an illusion.

Historically, the Indian financial system has been a bank dominated phenomenon and the gradual process of disintermediation through 'public markets' has been of relatively recent origin. For example, banking institutions account for nearly 70% of the total assets of all the financial institutions. Obviously, the challenge is to increase penetration of banking system and to ensure access of financial services to the large numbers excluded from the system.

1. *Dainik Bhaskar*, 5 Jan 2014.
2. Jaipur Literature Festival, 17 Jan 2014.
3. *The Economic Times*, 16 Jan 2014.
4. *The Times of India*, 23 Jan 2014.

Fortunately, we could escape the 1997 Asian banking crisis and taper American as well as PIIGS catastrophe of 2008-09 due to well-carved-out navigational effort of RBI. But RBI is also largely criticized for throttling competition and stagnant banking for one thing[1] and for preponderant inflation- targeting approach for another.[2]

It is also felt that India's monetary policy remains hawkish as the RBI fights the lone battle to get the economy back on the track whereas the government fails to walk the talk (the twin fiscal and CAD deficits). Other challenges include, growing bad loans, NPAs, shadow banking, stringent regulatory framework, changes in customer loyalty, etc.

8. Inadequate insurance coverage

Research reveals that there is a high positive correlation between insurance sector development and economic growth. Importantly, the World Economic Forum has praised India as one of the top-ranked countries in regard to life insurance density. Yet, let us not ignore the reality that according to a survey only 0.2% of total population is covered by health insurance and only 2.5% have general insurance cover. Actually, only 35% of cars and 70% of two-wheelers on the road are covered by insurance.[3]

Insurance penetration in urban areas is reported to be 65%, while in the banked segment of rural areas it is about 40% only. Misselling, over-and under-insurance are some of the other ailments besetting the insurance sector.

Since a healthy insurance sector is a critical element in a well-functioning financial market and since population in India is vast in size and has been growing fast in numbers, it is urgent as well as important that this sector gets its timely due. Of course, IRDA (1998) has an ardours task to perform.

9. Below-optimal contribution of money and capital markets

Indeed, money and capital markets both primary and secondary can play a crucial role in mobilizing and allocating financial resources since as already remarked, our system is so far bank predominant. There is, therefore, a lot of scope for capital market to contribute.

The recent fiasco of National Stock Exchange Ltd (NSEL) has a big lesson for SEBI to be more vigitant as well as active in promoting financial literacy, investor awareness and broker education on the one hand and effectively checking financial frauds, insider trading, ponzi scheme, low participation in the capital market etc, on the other.

10. Under-regulated non-banking segment

The ongoing Sahara episode and the approximate Rs. 5600 crore fraud concerning NSEL are a clear pointer to the existing dismal financial scene in the non-banking sector as also on the kind of corrective and proactive action that is immediately called for. Imperatively, multilevel marketing companies, chit fund organizations, housing finance entities, stock broking companies, merchant banking institutions etc. must be subjected to regular and appropriate supervision to not only to safeguard the interests of savers and investors but also to instil confidence in them for parking their saving in such entities.

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1. Ajay Shah, NIPFP, *The Economic Times*, 9 Jan 2014.
2. Bimal Jalan and Y V Reddy, *The Economic Times*, 15 Jan 2014.
3. G.Srinivasan, New India Insurance.

11. Low Tax/GDP Ratio

The tax-revenue GDP ratio has been quite low in India constraining financial resources of the government which in turn adversely impact government expenditure and investment. Presently, gross tax revenue is 10.7% (direct tax 5.6% and indirect tax 5.0%) of GDP.[1]

There was a time when a very high marginal rate of income tax was considered responsible for tax evasion and its low contribution to government revenue. But, following Laffer principle, in spite of moderate rates since long the situation has not improved as expected and desired.

In fact, the tax-base is inadequate, the laws are archaic, the administration is lousy and the conscience does not prick. In brief, the celebrated canons of taxation, viz, simplicity, justice, efficiency and sufficiency (of revenue) are largely flouted. Desirable, therefore, is that long due reforms concerning GST and DTC must take shape, the earlier the better.

12. Financial exclusion

In the present circumstances inclusive growth or its subset financial inclusion looks to be a distant dream. The high incidence of absolute poverty at 21.2% in 2011-12 (planning commission) growing inequalities during last two decades (OECD) and jobless growth in the present regime (NSSO), are enough evidence of the fact that the objective of the inclusive growth of the 11th plan and more inclusive growth of the 12th plan would end up as fairy stories.

The committee on financial inclusion headed by C Rangarajan (2008) has suggested comprehensive steps for financial inclusion. Important is their timely implementation.

13. Corruption

Corruption and, in a sense, its close accomplice black income (estimated at rupees 55 lakh crores or 50% of GDP by Arun Kumar, Professor, JNU)[2] are the most talked about but the least acted upon subjects. Really speaking charity fails to begin from home, for it has become "homeless." Precisely, it is because of this one big and many other reasons that despite Prevention of Money Laundering Act, 1992, several stringent measures, well-meaning warnings, score of voluntary disclosure schemes, the solution is not in sight. The recent political development in Delhi has kindled some hope. But it will be too early to be highly optimistic and that too so early.

Sometime back someone came out with a simple equation for public sector corruption, viz C=M+D-A meaning monopoly windfall, discretionary decision making and accountability. Simply, power minus accountability is the root cause of corruption.

Nobel laureate, Amartya Sen, in the above-mentioned keynote address at JLF remarked that rooting out corruption would "require many administrative reforms." A question is: should we draw solace from the other Nobel laureate viz. Joseph Stiglitz for the observation that "the US financial system was rife with corruption" and that the "US (is a) good competitor to India in corruption"[3].

1. Government of India, op.cit., 2012-13, p.61.
2. Arun Kumar, "Look within than Abroad," *The Economic Times*, 26 Jan – 01 Feb 2014, p.8
3. *The Times of India*, 11 Jan 2014

III. Relevance, Rejuvenation and Reorientation of Economic Reforms

The economic reforms of 1991 despite some defects and errors in design and despite certain follies and failures in implementation did generate spectacular economic growth rate at the macro level. Factually speaking the so-called derisive Hindu growth rate was transformed into higher (new Hindu) growth rate. At the same time of course the reforms did fail to answer many questions pertaining to inequality, unemployment, stability, sustainability, inclusiveness housing and sanitation, hunger and nutrition, etc. Yet, all credit to LPQ strategy for freeing the economy from arrested economic growth.

It is due to this achievement as well as euphoria that O' Neill of Goldman Sachs in 2001 coined the acronym BRIC (later BRICS), i.e. Brazil, Russia, India and China (South Africa) – the economies which were projected to grow faster and become wealthier than the most of traditional economies. It was also mooted that E7 (emerging 7) BRICs plus Indonesia, Malaysia and Thailand would dethrone the traditional developed countries G7, i.e. USA, UK, Germany, France, Japan, Italy and Canada by 2050 (later projection, 2035).

In a recent survey, 83% of acknowledge respondents opined that the economic reforms have been derailed causing the growth to slide.[1] In fact the Indian economy grew at an impressive rate of 8-10% during 2003-08. The prime minister, Manmohan Singh in the press conference on 3 January 2014, referred to earlier also, claimed that the growth rate of 9% during 9-year from 2004 to 2013 was highest for any 9-year period.

But it seems that heady days of growth have been taken over by gloomy rate of 4.5-5.5% growth. There is a growing apprehension that 'I' of BRICS that is India would be replaced by another 'I' that is Indonesia. In view of the ongoing bloom and gloom facing the economy in general and financial woes in particular, the relevant economic reforms must be implemented urgently as well as effectively. The reforms of 1991 were sometimes called as the first generation reforms concentrating on goods market to be followed by the second generation reforms to focus on factor market. But whereas the promised second generation reforms did not take off, the ongoing reforms got degenerated.

It is also important to take note of the fact that while, as already mentioned, economic reforms of 1991 were crises-oriented and thrust upon about which, therefore, we had a very little choice, now we have an opportunity to implement well-thought-out home-spun reforms, with well-conceived action plan and well-timed schedule. Though we are already late yet let us not become too late.

Hence, right now, more than anything else what we need is, in the words of Nobel laureate Joseph Stiglitz, "globalization of politics and mindsets",[2] hard decisions and tough actions.

Conclusion

In a seminar on financial issues let me not be too taxing on you and, therefore, quickly end by rephrasing the wisdom of Reghuram Rajan imparted at the Harvard Business School, already mentioned earlier, on 15 Oct 2013.

We are committed to developing our financial system. Carefully expanding access to finance as also carrying out judicious economic reforms can be source of not only tremendous but also stable, equitable and sustainable growth.

1. *The Economic Times*, 27 Oct-2 Nov. 2013.
2. Joseph Stiglitz, *The Economic Times*, 29 September 2006).

India can do better much better by internalizing the fact that there are no short cuts and we have miles to go. Financial Stability and Development Council (2010) Financial Action Task Force, Financial Reforms Law Committee, Financial Sector Legislative Reforms Commission (2011) etc have done a lot of homework for a sound agenda of action. Let their efforts, as it were, not go waste. Equally important is to break five major myths: (i) financial markets are self-equilibrating and hence self-correcting (ii) all financial innovations are useful and desirable (iii) key parameters for market efficiency are turnover and liquidity (iv) financial risk can be accurately measured and managed, and finally (v) India will remain a sleeping elephant and caged tiger or a roaring lion with a speed of tortoise.

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Women Entrepreneurship and Gender Inequality in India

Dr. Davinder Kumar Madaan*
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Introduction

Gender Inequality measures inequality in achievement between women and men in reproductive health, empowerment and the labour market. There is no country with perfect gender equality. An equitable allocation of resources between men and women increases the involvement of all people including women into the growth process of the country. India's average annual GDP growth rate was 6.75 per cent during post reforms period from 1991-92 to 2015-16. However, the country witnessed the adverse effects of economic reforms on gender inequality, as a large section of the population was excluded from the benefits of development. The Global Wealth Report 2016 pointed out that the top 10 per cent Indians own 80.7 per cent of country's wealth, while the remaining 90 per cent shares only 19.3 per cent wealth. Further, the share of the top 1 per cent has increased in the total India's wealth to 58.4 per cent in 2016 -- higher than the global figure of about 50 per cent (Credit Suisse.2016). In fact, more money in the hands of poor women promote development at higher rate than if it is put at the disposal of rich men,

Women entrepreneurship has been recognized as an important source of economic growth. Women entrepreneurs create new jobs for themselves. They enter the business world later on in life, around 40–60 years old. Most women-owned businesses are in wholesale, retail trade, and manufacturing. Women's entrepreneurship can make a particularly strong contribution to the economic well-being of the family and communities. Governments across the world as well as various developmental organizations are actively undertaking promotion of women entrepreneurs through various schemes, incentives and promotional measures. Federation of Indian Women Entrepreneurs, a National-level organization, founded in 1993 is one of India's Premier Institution for Women thoroughly devoted towards Entrepreneurship Development in the country (FIEW, 2015). Its main objective is to promote Entrepreneurship among Women and thereby empower them to join the economic mainstream. This paper is an attempt to discuss women entrepreneurship and inclusive growth in India with focus on its current position. It also deliberates on the problem of gender discrimination and thereby suggest measures for strengthening women entrepreneurship in India.

Women Entrepreneurship in India

Women entrepreneurs consisted of 7.36 per cent of the total number of entrepreneurs in India as per the latest Fourth All India Census of Micro, Small, and Medium Enterprises (MSMEs) conducted with reference year 2006-07, wherein the data were collected till 2009 and results published in 2011-12. However, this share in the unregistered entrepreneurs was 9.09 per cent. Women employment accounted for 15 per cent in MSMEs. Leading States in women employment were Tamil Nadu (7.77 Lacs), West Bengal (7.72 lacs), Kerala (6.24 lacs), and Odisha (4.58 lacs).

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The Office of Development Commissioner (MSME) is an apex body for formulating and supervising implementation of the policies for the development of MSMEs in India. The Ministry has set up three national level Entrepreneurship Development Institutes viz;

1. The National Institute for Entrepreneurship and Small Business Development (NIESBUD) (1983) at Noida (Uttar Pradesh),
2. National Institute for Micro, Small and Medium Enterprises (NI-MSME) (1960) at Hyderabad, and
3. Indian Institute of Entrepreneurship (IIE) (1993) at Guwahati,

as autonomous societies. These institutes are involved in developing training modules; undertaking research & training; and providing consultancy services for entrepreneurship development. The primary responsibility of promotion and development of MSMEs is of the State Governments. However, the Government of India help the State Governments through various initiatives. The entire non-agricultural sector of economy was brought under the coverage of MSME Sector. The policies of the Government have emphasized on promotion of women entrepreneurship particularly among first generation women through various training and support services. NIESBUD, Noida provided various trainings to 25% women of the total participants till December 2014. NSIC and IIE, Guwahati also provided training to women from rural areas and covered all kinds of entrepreneurial development programmes. There are several schemes, wherein women are provided extra benefits. However, the Ministry of MSME is executing two specific schemes for women:

1. Trade Related Entrepreneurship Assistance and Development (TREAD) Scheme, a
2. Mahila Coir Yojana.

The TREAD scheme visualizes economic empowerment of women through the development of their entrepreneurial skills in non-agricultural activities. Government grants upto 30% of the Loan/credit sanctioned by banks to the Non-Government Organisations (NGOs) for promoting entrepreneurship among women. Government also grant upto Rs.1 lakh per programme to training institutions/NGOs for imparting training to the women entrepreneurs subject to such institutions/NGOs contribute their share to extent of minimum 25 % of the GoI grant and 10 % in case of NER. Need-based Government's grants upto Rs.5 lakh to National Entrepreneurship Development Institutions and any other institutions of repute for undertaking field surveys, research studies, evaluation studies, designing of training modules etc.

The Mahila Coir Yojana executed by the Coir Board is a woman oriented self-employment programme launched in 1994. Under this programme women are provided training for carrying out spinning activity and increasing their earnings. Under Prime Minister's Employment Generation Programme (PMEGP) launched in 2008-09, relaxation is provided to women by giving subsidy on margin money at the rate of 25% of the project cost in urban areas and 35% for the women in rural areas. Further, bank finance in the form of loan is 95 per cent of the project cost in case of women.

Female Entrepreneurship Index

India ranks a low 70 among 77 countries covered in the 2015- Female Entrepreneurship Index – measures the development of high potential female entrepreneurship worldwide - brought out by the Washington-based Global Entrepreneurship and Development Institute (GEDI). The index is based on innovative, market expanding, and export oriented. The reasons for poor score are lack of labour force equality and access to finance. The USA, Australia and the UK have been named the top three countries for high-potential female entrepreneurs. Bangladesh ranked 75 and Pakistan occupied lowest rank at 77. Increasing access to bank accounts, financial training programs and improving gender diversity across sectors were key areas for improvement.

Top Women Entrepreneurs and Leaders

Angela Merkel, Chancellor, Germany is the world's 100 most powerful women in the Forbe's list 2016. Liliane Bettencourt of France is richest woman in the world with net worth of US$ 36.1 billion. She is also the 11th richest person on the Forbes list 2016. Her fortune of L'Oreal fell last year. The Indian women are also enjoying the impact of globalization and making an influence not only on domestic, but also on international sphere. Indra Nooyi, CEO, Pepsi Co., has been ranked 14th in 100 most powerful women in the world 2016 carried out by Forbes. She grew up in Chennai. She did her Master's Degree in Finance and Marketing from IIM, Calcutta. Indian Ms Savitri Jindal is the richest women in the world with her net worth of US$ 3.5 billion. She is at the 453th rank among India's richest people as per the Forbes ranking 2016. She is the chairperson of the OP Jindal Group. Ms Indu Jain (549th rank), the Chairman of the Times Group; Dr. Kiran Mazumdar-Shaw, Anu Aga, etc are the other richest women in India. SBI Chief Ms Arundhati Bhattacharya has been ranked top Indian and 25th among the world's 100 most powerful women in the Forbes' 2016 list. She controls 2.2 lac staff members in 16,000 branches and services 22.5 crore customers with offices spread over 36 countries. ICICI bank head Chanda Kochhar ranked 40th in this Forbes' list.

Gender Discrimination and Women Entrepreneurship

Development alone cannot bring peace and prosperity unless social justice and gender equality are ensured. Women are still placed outside the domain of economic empowerment. They often face gender-based obstacles to start and operate their businesses. They still represent a minority of all entrepreneurs. In 2014, only 27.5 per cent of women had bank accounts in India. Gender discrimination in India continues in most spheres such as access to education and employment. It starts from the womb with sex determination tests and abortion of the female foetuses, discrimination in terms of nutrition, period of schooling, lack of access to higher education, discrimination in employment and wages paid, and unequal share in property.

Companies with 30 per cent women executives can achieve up to 6 per cent more in profits, according to a study by Washington, DC-based think tank, The Peterson Institute for International Economics, conducted on 22,000 publicly-traded companies in 91 countries and the reported in February 2016. It indicates that the presence of women in corporate leadership positions can boost a firm's performance. However, most of the countries in the world are still far below the 30 per cent threshold of women executives. The study highlights the importance of creating inclusive work environments, so that both men and women can have equal access to leadership positions.

Women do more than 67 per cent of the hours of work done in the world, but they earn only 10 per cent of the world income, and own only 1 per cent of the properties. They shoulder 75 percent of the unpaid workload in households. They are paid 30-40 per cent less than men on an average. Women also earn 24 percent less than men globally. 70 per cent of the world 120 crore people under poverty are women. 67 per cent of the illiterate adults in the world are women. Economic costs of gender discrimination in the labour market are too much. A 10 per cent increase in female to male ratio of managers and workers increases per capita GDP by 2 per cent and 8 per cent, respectively (Panda, 2016). It has been well accepted that various development programs have bypassed women who constituted 48.5 per cent of the total population of country in 2011. Therefore, removing gender inequality can assure economic development.

Table 1
Gender Development Index of India & other World during 2014

Indicator		India	World	Developing Countries	Developed OECD Countries
Gender Development Index Value		0.795	0.924	0.899	0.973
Human Development Index Value	Female	0.525	0.670	0.617	0.862
	Male	0.660	0.725	0.686	0.887
Life Expectancy at Birth (Years)	Female	69.5	73.7	71.7	82.7
	Male	66.6	69.5	68.0	77.5
Mean Years of Schooling	Female	3.6	6.2	5.4	11.0
	Male	7.2	7.9	7.3	11.5
Expected Years of Schooling	Female	11.3	12.2	11.6	16.0
	Male	11.8	12.4	11.9	15.5
Per Capita Gross National Income (2011 PPP $)	Female	2116	10296	5926	28430.0
	Male	8656	18373	12178	47269

Notes:

OECD countries: 34 members of Organization for Economic Cooperation and Development.

Gender Development Index: Ratio of Female to Male Human Development Index values of Life Expectancy At birth, Mean & Expected Years of Schooling, and Per Capita GNI PPP terms.

Mean years of schooling: Average number of years of education received by people ages 25.

PPP: Purchasing Power Parity; an international dollar has the same purchasing power as a US dollar in USA.

Source: UNDP. 2015: *Human Development Report 2015*, December.

The Gender Development Index (GDI) measures gender gaps in three basic dimensions of human development – health, knowledge, and living standards using the same component indicators as in the Human Development Index (HDI). The GDI is the ratio of the HDIs calculated separately for females and males using the same methodology as in the HDI. GDI of India is generally less than its corresponding HDI which suggests that women are not equitably placed. During 2014, India ranked 165 in terms of GDI and 130 in terms of HDI among the 188 countries (UNDP, 2015). Table 1 compares the GDI of India with world, developing countries and the developed countries during 2014. It can be seen from the table that India's GDI is less by 13 per cent with the world. In case of female HDI, it is less by about 15 per cent. Average number of years of education received by female ages 25 is 3.6 as compared to 6.2 of the world and 11 of the developed countries. Further, per capita GNI of female in India is $ 2116 as compared to $ 10296 of the world and $ 28430 of the developed countries. It means the standard of living of women in India is very much less than the other parts of the world.

Gender Inequality Index (GII) measures inequality in achievement between women and men in reproductive health, empowerment and the labour market. The GII ranges between 0 and 1 and higher GII values indicate higher levels of inequalities. It can help governments and others to understand the gaps in achievements between women and men, and highlights the need of critical policy intervention. It is constrained by the need for international comparability. But it could be readily changed for use at the national level. Slovenia, Switzerland, Germany, Denmark and Australia were the top five countries in the GII of world during 2014.

Table 2 depicts GII of India and world including developing and the developed countries. The GII of India is more than 11 per cent with world and 33 per cent with the developed countries. India has 12.2 women seats in Parliament during 2014 as compared to 21.8 per cent in the world and 26.9 per cent in the developed countries. The population with some secondary education ages 25 and older was 27 per cent as compared to 82.9 per cent in the developed countries and 54.5 per cent in the world. Labour force participation rate of women was 27 per cent as compared to 50.9 per cent of the developed countries and 50.3 per cent of the world. Even the reproductive health of Indian women is also not good. There were 190 deaths per lakh live births as compared to only 21 in the developed countries. Adolescent birth rate per thousane women was 32.8 in India as compared to 25.4 in the developed countries.

Table 2
Gender Inequality Index of India & other World during 2014

Indicator		India	World	Developing Countries	Developed OECD Countries
Gender Inequality Index Value		0.563	0.449	0.478	0.231
Share of Seats in Parliament (%)	Female	12.2	21.8	20.2	26.9
Population with some Secondary Education (% ages 25 and older)	Female	27	54.5	44.2	82.9
	Male	56.6	65.4	58.4	86.3
Labour Force Participation Rate (2013, 15 Years and older)	Female	27.0	50.3	49.5	50.9
	Male	79.9	76.7	78.7	68.9
Maternal Mortality Ratio (2013, Deaths per lakh live births)	Female	190	210	225	21
Adolescent Birth Rate (Birth per thousand women ages 15-19)	Female	32.8	47.4	51.5	25.4

Notes:

OECD countries: 34 members of Organization for Economic Cooperation and Development.

Gender Inequality Index: A composite measure of inequality in achievement between women and men in reproductive health, empowerment and the labour market.

Source: UNDP. 2015: Human Development Report 2014.

Education and employment emerge as two critical drivers for women's empowerment in the public and the private domains. Efforts towards those twin objectives –improving educational attainments and workforce participation have not fully yielded the desired social transformation towards gender equality.

Education and Employment

The development of education is one of the most important key factors in promoting inclusive growth in India. It is very important to assess the male-female literacy gap during the post economic reforms period.

Table 3 depicts this picture during 1991-2011. It can be noted from this table that though male-female literacy rate in India increased substantially from 64.1 per cent and 39.3 per cent in 1991 to 82.1 per cent and 65.5 per cent in 2011, respectively, but the male-female literacy gap among the largest gap states was highly reduced in case of Uttarakhand, followed by Uttar Pradesh, Chhattisgarh, Bihar, Jharkhand and Rajasthan during this period. Similarly, among the smallest male-female literacy gap states, this gap was highly reduced in Nagaland, followed by Meghalaya, Kerala and Mizoram. In 2011, male-female literacy gap was still high in case of Rajasthan, Jharkhand, Chhattisgarh and Bihar. However, this gap was minimum in Meghalaya, followed by Kerala during this period.

Unemployment situation in the India is so severe that about 12 crore people did not have jobs as per Census 2011. There are less employment opportunities in the non-agricultural sector. As per ILO report, unemployment in the world will increase from 20.1 crore in 2015 to 21.2 crore in 2017. Computer will take over about 73% jobs in the world by 2025. Therefore, it is not easy to create more jobs

Table 3
Male-Female Literacy Rate Gap in some Indian States during 1991-2011

(Per cent)

State	1991			2011			Variations
	Male	Female	Gap	Male	Female	Gap	in Gaps
Largest Gap States							
Rajasthan	55.0	20.4	34.6	80.5	52.7	27.8	6.8
Uttarakhand	72.8	41.6	31.2	88.3	70.7	17.6	13.6
Chhattisgarh	58.1	27.5	30.6	81.5	60.6	20.9	9.7
Uttar Pradesh	54.8	24.4	30.4	79.2	59.3	19.9	10.5
Jharkhand	55.8	25.5	30.3	78.5	56.2	22.3	8.0
Bihar	51.4	22.0	29.4	73.5	53.3	20.2	9.2
Smallest Gap States							
Mizoram	85.6	78.6	7.0	93.7	89.4	4.3	2.7
Kerala	93.6	86.2	7.4	96.0	92.0	4.0	3.4
Meghalaya	53.1	44.9	8.2	77.2	73.8	3.4	4.8
Nagaland	67.6	54.8	12.8	83.3	76.7	6.6	6.2
INDIA	64.1	39.3	24.8	82.1	65.5	16.6	8.2

Source: Census of India 1991 and 2011.

Conclusions

Women encounter greater barriers when accessing finance as entrepreneurs; legal restrictions and discriminatory practices regarding property rights and assets. A pregnancy, on average, costs a female employee two years in terms of career progress, and breaks in earnings impact their financial future through lost pension contributions. Gender imbalances in paid and unpaid work partly explain why countries have not been more successful in achieving gender equality. Preparing women with relevant education and training is serious for the transition to a reasonable world of work. Globalization, digital technologies and new ways of working are also ushering in new notions of work, and puts a high quality on workers with skills knowledge. Women remain much underrepresented in these technical subjects. Thus, addressing this gap with education and employment to women could bring high economic growth in the economy. Empowerment of women has emerged as an important issue in recent times. It is of paramount importance to political thinkers, social scientists and reformers. In the meantime, it is necessary for the government to start such programs which will address to attitudinal changes, training, supportive services, etc. for the development of women entrepreneurship. However, there is a long way to go for the empowerment of women in India.

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Cashless Economy – Pros and Cons

Dr. Ekta Jha*

ABSTRACT

In the present scenario of changing economy digital i.e. cashless transactions plays an important role in developing a society which is empowered with tools helping in stopping frauds, usage of black money and development of parallel economy. This piece of work gives an overview of benefits and limitations of an idea of cashless economy.

Introduction

Central Government has announced on 8th November, 2016 that notes of Rs. 500 and Rs. 1000 will no longer be a legal tender i.e. demonetized them. The basic aim of this step was to restrict black money, corruption and counterfeit notes. Before this demonetization has also taken place in 1948 and 1978 but its effect on that time was not much on economy because the notes which were demonetized at that time are of high value and available with very few peoples. But in present scenario it has affected our economy to the major extent because the note which were demonetized were available to every financial class of person and are also of more than 85% part of total currency. Due to demonetization currency availability was decreased and as a result it forced peoples for electronic payments.

Benefits of Cashless Economy

1. Easy way of payment: We can easily make payments in business, retail purchasing and also for materials of daily household usage.

2. Restriction on Black money and corruption: Mostly business persons not shows their real income, but due to demonetization now they were not be able to do that as there will be many records of the payments.

3. Helpful in Banking Sector: A digital economy will help banking sector in starting and once peoples gets used to of electronic payments than the risk of payment and keeping large amount of cash will get reduced..

4. Transparency and Monitoring: Government can easily monitor all payments and receiving of any person at any time and chances of any kind of fraud gets reduced.

5. Reduction in expenditure on printing of currency: Government has spent large amount of money in replacing and reprinting of old and tempered notes e.g. in year 2015 RBI has spent 27 billion rupees to print new currency. If we move forward to cashless society then we reduce this kind of expenditures.

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Government Plans to Promote Cashless Economy

1. Rebate in transaction service tax: Credit/debit card transactions up to Rs 2,000 will be exempt from service tax.

2. Rupay Kisan Cards: Government will support RRBs and Cooperative Banks through NABARD to issue "Rupay Kisan Cards" to 4.32 crore Kisan Credit Card holders.

3. Accident insurance: Online booking of railway tickets will get Rs 10-lakh accident insurance.

4. Swipe machines: 1 lakh villages with population less than 10,000 will get 2 PoS machines (swipe machines) each, free of cost supported through financial inclusion fund.

5. Lucky Grahak Yojna: The main aim of this Yojna is to promote digital transactions. Only those transactions were included in these yojnas which were made through Rupay Card, USSD, UPI or Aadhar enabled system.

6. BHIM (Bharat Interface for Money): This application works when the bank account is connected with the Aadhar gateway, then the payment can be made by the payee by just their thumb scanning. This application also enables financial week persons and small businessmen to make even small payments easily.

7. Aadhar Bhugtan App: This application was starter by the government on 25th December, 2016. This app connects bank account of any person with Aadhar Card. Important feature of this app is that it can be used without mobile phone.

Disadvantages of Cashless Money

1. Cyber Fraud: If there will be any breach in the cyber security in our country the money can be theft by the cyber hackers and this risk will always exist.

2. Lack of Technology: Presently India is at 114th position in world as the internet speed is considered. The lowest internet speed in India is 2.8 Mbps whereas in Japan it is 17.0 Mbps so, in the present scenario of lack of technology the possibility of digital India is low.

3. Poor and illiterate citizens: Approximately less than one fourth of the Indian population has smart phones and also how the illiterate person will be able to use these apps, so, these also are basic hurdles in the path of cashless economy in India.

4. No Bank account: Many poor people do not even have bank accounts. Although the Jan Dhan Scheme launched by the government succeeded in bringing million into the banking system, the process is not complete and many of the accounts are non-functional. The government has to rectify this problem and bring the entire poor and the marginalized section into the banking system.

5. Small Retailers: The small retailers in India deal only in cash and have not been able to invest in the digital infrastructure.

Conclusion

To achieve complete cashless economy is next to impossible but we can start a society in which less amount of cash is used and cashless transactions are promoted. By this transactions in cash decreases and maximum transactions becomes digital. This approach decreases the rate of theft and use of black money also comes to an end which develops a balance economy.

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Role of Womens in Indian Economy

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Abstract

Women play a dominant role in the Indian economy, undertaking a wide range of economic activities including farm operations and powering a high savings rate. However, changes in the employment scenario, rising inflation, social conditions and neglect by policy-makers have impacted adversely on women. In the era of globalization, the role of Indian women at home and work has taken a multifaceted dimension. India being one of the fastest growing economies, the contribution of women is growing at a steady pace. Most Indian women by and large undertake "productive work" only under the economic compulsion. Most of the women are found to be employed in agricultural activities and in the unorganized sector, the employment of women is high in certain works such as part time helper in households, construction centres, tanneries, match box, beedi industries etc.

Key words- Indian economy, role of women

Introduction

Swami Vivekananda –One of the greatest sons of India quote that "There is no chance for the welfare of the world unless the condition of women is improved. It is not possible for a bird to fly on only one wing ".Women make up little over half the world population but their contribution to measured economic activity growth and well being is for below .Its potential with serious macroeconomic conservancies.

As per Census 2011, workers constituted 39.79 per cent of total population whereas the Employment of Women Workers in Public and Private Sectors: Employment of women workers in public sector and private sector were reported to be 3170.64 thousand and 2783.47 thousand respectively during the year 2011 Due to the changing scenario of the nation, the picture of the economy is changing. Women workers have tremendously increased not only in the rural sector but also in the urban sector. As per the report of Directorate General of Employment and Training the percentage of Educated Women Job-seekers to total Women on Live Register was 85.3. In spite of such a high contribution of female workers in Indian-economy, women are not being paid according to their contribution Women in India are struggling hard with many constraints in the employment.

Objectives of the Study

1. To study to role of women in the economic development of India.
2. To study the challenges faced by the women.
3. To height light the contribution of women's in Indian economy.
4. To draw conclusions and suggestions.

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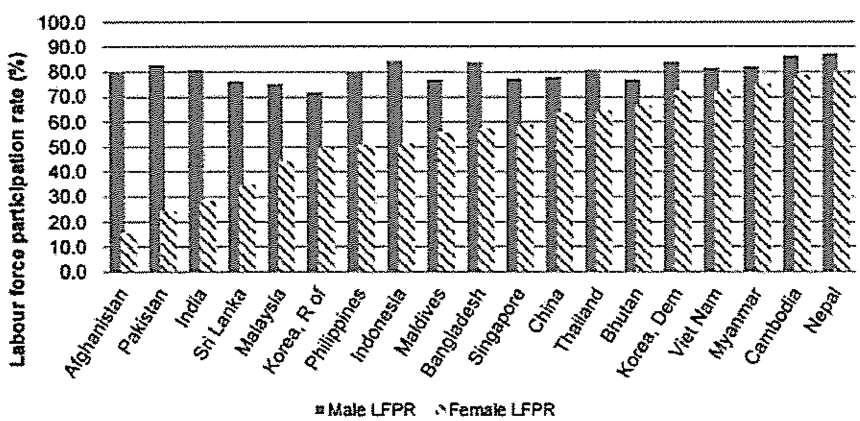
Methodology

This paper is prepared secondary sources like published research papers, web site, ference books ,journals, newspapers etc.

Data from India's National Sample Survey Office's (NSSO) surveys indicates that women's labour-force participation is significantly lower than that of men in both urban and rural areas. Based on data for the population aged 15 and over, India's female labour-force participation rate is just 21 percent in urban areas and 36 percent in rural areas compared with 76 percent and 81 percent, respectively, in the case of men. State-level female labour-force participation rates range from 63 percent in Himachal Pradesh to as low as 9 percent in Bihar.

More women in India tend to work in low-productivity jobs than men. Seventy-five percent of female employment in rural areas is in agriculture compared with 59 percent for men. Drawing on NSSO data, mckinsey global institute also identified a gender gap in leadership among Indian women. Only 7 percent of tertiary-educated women have jobs as senior officials compared with 14 percent of men. Similarly, women account for only 38 percent of all professional technical jobs. Survey data from the World Economic Forum in 2014 reveals a widespread perception that women are paid lower wages compared with men for the same work. Analyzing NSSO's wage data by occupation for India appears to support this trend; irrespective of the professional level, women on average get paid 30 percent less than their male counterparts. India's women engage much more in unpaid work than men. As we have noted, women in India do almost ten times the amount of unpaid care work that men do. Three-quarters of unpaid work is routine household chores exacerbated by poor access to basic services such as sanitation, clean water, and clean sources of cooking fuel. In China and Bangladesh—to consider two other Asian countries for comparative purposes—women do about three and four times, respectively, the amount of unpaid care work as men.The New York Times has analyzed the data to link it with age old gender norms in India; in a male dominated society, women are rarely encouraged to seek jobs outside their homes. There are also biases against certain jobs which lead to poor participation of women in the labour force.

Gender disparities in labout force participation rates in selected Asia and Pacific countries, 2012



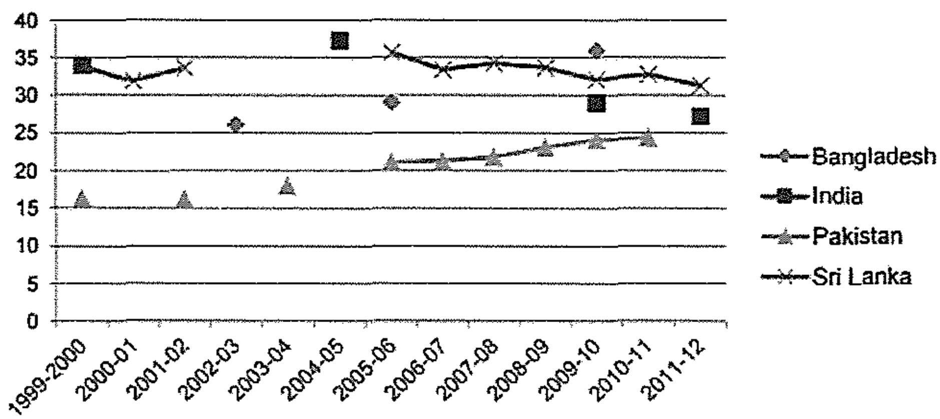
Note: LFPR = labour force participation rate.
Source: ILO, 2014.

services, Indian women lead the charge. While only one in 10 private banks in India. Indian companies are led by women, more than half of them are in the financial sector. Today, women head both the top public and But in certain sector like financial

Another example is India's aviation sector, 11.7 percent of India's 5,100 pilots are women, versus 3 percent worldwide. But these successes only represent a small section of women in the country.

India does poorly in comparison to its neighbors despite a more robust economic growth. In comparison to India, women in Bangladesh have increased their participation in the labour market, which is due to the growth of the ready-made garment sector and a push to rural female employment. In 2015, women comprised of 43% of the labour force in Bangladesh. The rate has also increased in Pakistan, albeit from a very low starting point, while participation has remained relatively stable in Sri Lanka. Myanmar with 79% and Malaysia with 49% are also way ahead of India.

Trends in female labour force participation rates South Asia (%)



Note: Sri Lanka: 10+, excluding Northern and Eastern provinces.
Source: Based on data from national statistical offices.

Research done by ILO shows that there has been a some increase of women employment in urban areas, rural India shows the exact opposite trend since 2004. ILO attributes this to three factors: increasing educational enrolment, improvement in earnings of male workers that discourages women's economic participation, and the certain levels of skills and qualifications discouraging women to seek work.

But no study on Indian women is complete without considering their contribution to opportunities at lack of employment household work which goes without any national accounting.

Conclusion

Women workers face serious problems and constraints related to work such as lack of continuity, insecurity, wage discrimination, unhealthy job relationship, absence of medical and accident care etc. The exploitation of female labourers in rural regions happens both horizontally and vertically. There is a severe need to recognize their work and give a safe environment to women workers. The most important determining factor to such in access and denial primarily evolves out of poor literacy and lack of awareness resulting in self-exclusion from the mainstream opportunities. Increasing women's social and economic wellbeing is a means of enhancing the whole society. Most importantly, it is important to remember that a strong will on the part of the government and the society as a whole to give proper place, respect, and rights to its women. Women are the reflex ion of society and its progress. If India needs to be a developed nation, it has to take care of the rights and provide an environment to live life with dignity to its Women. Our women entrepreneurs, social welfare workers, scientists, politicians and economists are leading the way for a brighter future. Women in urban and rural areas should be given access to good opportunities so that they can bring about positive social change and contribute to the growth of the country.

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Empirical Study on Demonetization

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Introduction

On 8th November 2016, an astonishing decision came from the Government of India. At 20:15 hours (IST), the Prime Minister Narendra Modi declared that our country is going to see demonetization of currency worth Rs.500 and Rs.1000. The government ceased the usage of these banknotes of the Mahatma Gandhi series as a form of legal tender in India from 9th November 2016. The Prime Minister announced the issuance of new Rs.500 and Rs.2000 banknotes in the exchange of old currency.

Demonetization is the act of ceasing the specified currency from economy as legal tender of money. It is a process of eliminating currency from general usage and circulation in country. It is important in the case of injection of new currency in market.

Was Demonetization Necessary?

This step of government was aimed towards eliminating the black money from circulation of economy, reducing corruption, drug menace and smuggling. It is hypothetically accepted that excess currency is from the parallel economy and increasing the terrorist activities, corruption and hindering economic growth. In addition there is a lot of fake currency in economy. This parallel currency is affecting the inflation rate adversely and perforce Reserve Bank of India to collateralized excess gold in reserve. Moreover, it was said that parallel currency harnessing people's faith in government and RBI for money they carry.

Impacts of Demonetization

Effect on demand:- This sudden announcement caused shortage of cash for the next 1 month which reduced the demand as people were cash-less. It affected demand of consumer goods, gold and luxury goods, real estate and property and automobiles.

Effect on Prices:- It adversely affected the sales, as demand was reduced thus for short period price fall was experienced.

Effect on banking sector:- It increased the deposits in banks because money with people is exchanged or deposited in accounts. It increases the liquidity in banks which is going to be channelled in economy through more lending. Thus, velocity of money creation might be greater in future.

Effect on E-commerce:- Since people were cash-less until they got new currency, this decision made the blossoming situation for online market, and wallets. The frequency of online trading increased during the month of November & December. E- wallets came as the handy option for payments.

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Effect on GDP:- It created unavoidable disruption throughout the economy, affected all economic activities and reduction in economic output. It is found that Gross Domestic Product for this year would be less than previous year. Since the money re-entered in market is not equivalent with previous level and caused demand reduction which eventually reduced the market size.

Effect on Economic Entities:- The share market (BSE & Nifty 50 indices) showed the 6 percent fall on the next day of announcement. There were lengthy queues of people in front of bank offices till next month of announcement.

Effect on Black money:- Since the black money holders had not declared their income by the month of September 2016, this move forced them to take out their cash holding as it would be invalid afterwards. Hence that income got declared during this time. Moreover, this move discouraged corruption motives of people.

Lacunae of Move

Initially this move was supported from several bankers and international speakers. But it was highly criticized by the economists, members of opposition parties. The issuance of Rs. 2000 note might result in increment of corruption, it is always seen that economists believe that currency should flow in small denomination as its impact on inflation will be lesser compared to high denomination currency. Several economists criticized this move because it slowed down the GDP growth and discouraged the business motives. People's faith in currency/ cash is reduced.

This move was poorly planned, badly executed and unfair for all. The incidence of prior leakage of information to some corporate and few members of party came in the news. It triggered the protests, strikes, litigation against the government. Several deaths are linked with this incident due to the rush to exchange cash. The ATMs were not properly supportive for the new banknotes as they are small in size compared to old currency.

Demonetization Before 2016

This sort of event (demonetization) was not new concept for Indian economy. Such decisions were taken by different government in different time period. In Jan. 1946, banknotes of worth Rs. 1000 and Rs. 10,000 were withdrawn from circulation and new notes of Rs. 1000, Rs.5000 and Rs.10, 000 entered the market in 1954. In 1946, the pre-independence government aim was to combat black money and penalize those Indian businesses that were supplying allies in World War II.

Again in 1978, the Janata Party coalition government had withdrawn 1000, 5000 and 10,000 rupee notes from economy and aimed to curb counterfeit money and black money.

In 2012, the Central Board of Direct Taxes had suggested that demonetization would not be good measure to tackle black money problem. According to data from income tax probes, only 6% or less of total wealth is in cash form with black money holders. Thus, targeting that cash - at the cost of economy disturbance, would not be successful strategy.

Demonetization in Other Countries

Demonetization of currency is global concept. Many countries had used this move for various purposes. Earlier this concept was used as coinage act, in which countries' replaced usage of coins from paper currency (or from new coins). According to Sinha & Rai (2016), from 1982 onwards, countries from different continents implemented it and had various impacts on their economy.

Serial No.	Country	Year	Effect on Economy Successful/unsuccessful	Reason for failure
1.	Ghana	1982	Made economy weak unsuccessful	People support for black market and investment in physical assets.
2.	Nigeria	1984	Economy collapsed unsuccessful	Debt-ridden and inflation did not take change well.
3.	Myanmar	1987	Unsuccessful	Led to mass protest resulting in killing of many people.
4.	Soviet Union	1991	unsuccessful	People did not take change positively due to poor harvest.
5.	Australia	1996	No side effects	As the purpose was only to replace paper with plastic.
6.	North Korea	2010	Weak unsuccessful	People left with no food and shelter
7.	Zimbabwe	2015	Weak unsuccessful	Face value one hundred trillion dollars dropped to $0.5 dollar.
8.	Pakistan	Dec 2016	Cannot be predicted	As the people have ample time to get their note exchanged.

From above table it is quite observable, that demonetization hadn't yield fruitful results in most cases. It affected citizens adversely and caused economic disturbance.

Money in Circulation

On 28th October 2016, the total currency in circulation in India amounted to 17.77 lakh crore (US$260 billion). As per Reserve Bank of India (RBI) annual report of 31st March 2016, money in circulation valued to 16.42 lakh crore (US$240 billion) out of which 86% (around 14.18 lakh core (US$210 billion)) was constituted by Rs. 500 and Rs. 1000 banknotes. The report stated that in terms of volume 24% (around 2203 crore) of the total 9,026.6 crore banknotes were in circulation.

The total demonetized money was Rs. 15.4 trillion out of which 97% was deposited into banks. The worth of that 97% was Rs. 14.98 trillion ($220 billion) as on Dec. 30, 2016. Earlier the government had estimated that 3 trillion of demonetized currency would not be received but the facts are against it.

Whereas, as on 10 Jan., 2017, the new currency that is being re-circulated currently, amount to Rs. 9.2 trillion i.e. in the form of Rs. 500 and Rs. 2000 notes.

Limits for Transactions

To execute this step earlier 50 days (till 30th Dec. 2016) relaxation was given to people to exchange their old currency with the new one from Bank. The accountholders are allowed to deposit up to Rs. 2, 50,000 in their bank account till 30th Dec 2016. However, there was no limit for current accountholders.

These limits changed several times over the days.

1. For exchange

- From 8th to 13th Nov., Rs. 2000 per person.
- From 14th to 17th Nov., Rs. 4500 per person.
- From 18th Nov., limit reduced to Rs. 2000 per person.
- From 25th Nov., all exchange was stopped (only deposit was allowed).

2. For withdraw

- Cash withdrawals from account restricted to Rs. 10,000 per day and Rs. 20, 000 per week from 10th to 13th Nov.
- This limit increased to Rs. 24, 000 per week from 14 Nov.
- A daily limit from ATMs was Rs. 2000 per day till 14th Nov. and Rs. 2500 per day till 31 Dec.
- From 1 Jan., 2017, the limit increased to Rs. 4500 per day and again to Rs. 10,000 from Jan. 16, 2017.

This step of regulating cash usage was aimed to encourage people to use cashless transactions and promote banking digitalization.

Current Limits

The banks are charging Rs.150+ service tax for every cash withdrawals from branches after three to four transactions (differ from bank to bank, such as HDFC- 3 transactions, Axis Bank- 4 transactions.) However, State Bank of India is charging Rs. 50+ service tax after two cash withdrawals from branches.

Similarly, limits are defined for the cash deposits as well. The charges depend on the amount of deposit and no. of cash deposit from saving or salary account. In general, three cash deposits are free from any charges.

The restrictions are put on the internet banking/ electronic payments as well. Such as, SBI allows only 40 free internet transaction using a debit card in a month.

These limits are hampering consumption capabilities of people and thus reducing effective demand in economy.

Review of Literature

Prof. Kaur S. (2016) has concluded that, "This decision of govt. will definitely fetch results in the long term. From an equity market perspective, this move would be positive for sectors like Banking and Infrastructure in the medium to long term. This could be negative for sectors like Consumer Durables, Luxury items, Gems and Jewellers, Real Estate and allied sectors."

Singh P. & Singh V. (2016) has concluded that, "experiences from different countries shows that the move was one of the series that failed to fix a debt-burdened and inflation-ridden economy."

K. Veerakumar (2017) has concluded that, "Alternative payment methods, such as e-wallets, online transactions using e-banking, debit and credit card usage have been increased and this will shift an efficient cashless infrastructure."

Mali V. (2016) concluded that, "Demonetization will have positive impact in controlling black money and fake money."

Sinha A. & Rai D. (2016), concluded that, "Without adequate and proper planning; the demonetization-driven cash crunch has rendered Indian economy paralyzed for short duration as the informal sector which comprises of 40 percent share in GDP has become unviable."

Jaitely A. (2016) said, "Demonetization would clean the complete economic system, increase the size of economy and revenue base." He added with upcoming Goods and Services Tax (GST) "demonetization is an attempt to change the spending habit and lifestyle."

CARE Report (2016) commented that, "in spite of the initial hiccups and disruptions in the system, eventually this change will be well assimilated and will prove positive for the economy in the long run."

The Independent (2016) wrote, "Modi does a Lee Kuan Yew to stamp out corruption in India. From making up his mind to rolling it out, a new Lee Kuan Yew is born in India. It will be reflected in the legacy of this Prime Minister."

Das S. (2016) said, "It is bold move. Counterfeit currencies are being used for financing terrorism. Our security measures have not been breached. This is a powerful measure to combat terrorism. Fake currencies corrode economy."

Kant A. (2016) said, "Bold, dynamic & brilliant move to end the black money menace. Beginning of the cashless, paperless economy in India."

Lekhi M. (2014) said, "The idea of demonetization is unexplainable as to why this has happened.... The measure is strongly anti-poor.

Jain N. (2016) said, "It is very powerful measure to curb black money. It will have deflationary impact in general and more specifically on real estate prices and makes homes affordable and is indirectly a boon to honest tax payers."

Kochhar C. (2016) said, "It is perhaps the most significant move ever taken to curtail the parallel economy. This move will give a sharp boost to all formal channels of payment which will help formal economy to grow."

Patnaik Dr. P (2016), said, "the move as 'witless' and 'anti-people' , it would have little effect in eliminating black money, while causing much hardship to common people."

Objective

1. To ascertain the requisition of demonetization in India.
2. To study the effect of demonetization on consumable goods' sales.
3. To generalize what other problems faced by consumers, sellers.
4. To find suitability of cashless mode in current scenario.

Research Methodology

The study was conducted in Southern parts of Indore City. This study is based on primary information collected by survey from the southern part of the city, 100 grocery shopkeeper and vegetables vendors were selected by convenient sampling method. To assess the impact of demonetization of worth Rs. 500, Rs. 1000 notes on people, and 200 people were selected by convenient sampling method. 10 Bankers' views were also recorded to understand their opinion on this monetary step and cashless convenience.

Empirics

As per reported facts, the following inferences have been derived:-

Shopkeepers and Vendors

1. 43% sellers reported their sales fall to half and more for next 1 month due to cash-less customers.
2. But 27% sellers benefitted by this policy as they were able to accept old currency and circulate it in market through cash payment channel.
3. 70% and above sellers are satisfied with savings and withdrawals limit and out of the total respondents 40% of sellers started immediately to accept payments through cards, online wallets.
4. But out of them 20% stopped using cashless payment because of increment in surcharge, 10% sellers because of customer's reluctance for cashless payment.
5. 60% sellers find Rs.2000 notes inconvenient for daily business and cause for loss of 20-40% daily sales.
6. Only 28% sellers find cashless convenient and easy to use whereas, 43% do not.
7. 43% of them support cashless system and hope from government and bankers guidance for use of it.
8. Only 28% of them were satisfied with this step and its execution.
9. 95% sellers do employees' payment through cash as it is easy mode and their employees are not aware of cashless.

Consumers

1. 45% respondents opted for using government agencies and hospitals for currency exchange.
2. 30% people need to borrow money from others as they were cash-less for next 3 days to fulfil their basic needs.
3. Only 40% respondents were satisfied with savings limits.
4. 72% respondents found withdrawal limit was not enough, as it made them money- less after saving for emergency.
5. Most of the respondents find Rs.2000 currency inconvenient for daily transactions.
6. It is observed that there is no change in behaviour of 15% consumers cashless usage, their monthly cashless transactions is similar to previous.
7. 10% respondents are still not using cashless method for payment as they are unaware of usage and don't find it secure.
8. 5% people reduced their cashless transactions after decision because of higher charges.

9. 5% people started using cashless payment opinion after this decision but their monthly transaction ranges from 2-5.
10. 40% respondents' cashless transactions increased by twice.
11. 77% respondents find cashless to be secure method for payment as it enables them to have proof of payment.
12. Only 55% people find cashless convenient.
13. 66% people are unaware of surcharge amount imposed on every bill.
14. Only 54% household are in support of cashless economy in current scenario.
15. Only 28% household, were happy with demonetization.
16. Overall, 66% consumers were not satisfied with its sudden execution.
17. It is observed that 18% respondents who don't find cashless secure and convenient and are unaware of surcharge or virtual money concept but still support cashless system. It might be because of political party influence and people expectations that government efforts are for country's betterment.

Bankers

1. 67% bankers find demonetization policy as a good step.
2. 50% bankers are not satisfied with its execution
3. This policy increased on floor customers three times within couple of days for next 1 month.
4. 50% banks were not ready to entertain such crowd and didn't have enough work-force.
5. Moreover, 50% banks were suffered from insufficient cash supply and technological inefficiency delayed the procedure.
6. 83% banks do not agree with government approach to adopt such frequent decisions which created confusion.
7. 90% bankers support cashless system for India and have provision to train customers regarding it, but only half of them provide timely guidance when asked by customers.
8. On average, 30% deposit increment is observed.
9. It caused 20% increment of demand for cashless payment modes by customers on average.
10. It is observed that bankers are not ready to share information related to percentage of surcharge.
11. Conclusion and Policy Implications
    - Seller's expectations are to make them aware of technology and reduce charges, as this would only encourage cashless business motive in market.
    - It could be possible that government made some effort to provide training during holidays or through campaigns of using electronic cards, internet banking. It would make people tech-savvy and bring awareness about positivity and security related issues of cashless system.
    - Since Rs. 2000 note is not appreciated by most of respondents, either smaller denomination currency should be issued in market or share of existing smaller denomination should be increased overtime. Thus, general and informal market would be less affected in long run.
    - Increased charges on electronic/cash transactions are discouraging to reducing demand in economy. It is also not accompanying with government other schemes, such as *Digitalization*. The charges should be reduced, so more effective demand would lead to better economic growth.

The sudden announcement of demonetization led to cash-crunched situation which majorly affected the informal sector. Even the motives behind the move were good, but inadequate planning and mismanaged execution created the chaos within people and made loopholes for culprits. The situation got worse because of frequent decision change regarding limits and usage of online payments mode. It is obvious that GDP will be affected by this move and growth rate would face speed breaker because of demonetization. The experiences of other countries are making us cold feet to speculate success of policy.

In spite of all it is highly expected that this rigid decision would yield better results in long run and reduce corruption from country which is the major reason.. The country is looking forward of utilizing accumulated excess funds in social welfare schemes and bringing equality among the people.

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Impact of Forest on Economic Condition of Tribal People
(With Special Reference to Udaipur District)

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Abstract

It is a well known fact that tribal people lives in hilly rural areas where employment opportunities are in scanty. People are doing agriculture on the hills without the use of modern agricultural inputs. They have no alternate livelihood besides agriculture. But due to decreasing returns in agriculture, it cannot provide sufficient income to the people to sustain a good living standard.

In these hilly areas, literacy is not well spread which caused low awareness about the governments schemes of socio-economic development. People cannot take full benefits of the schemes therefore, their economic condition remains bad. Due to the lack of agricultural diversification, people migrate in other areas in search of livelihood. Women do all the works of household so the health of women and children's are very poor.

Present study is an attempt to find out the impact of forest on economic condition of tribal people.

Introduction

It is a well known fact that tribal people lives in hilly rural areas where employment opportunities are in scanty. People are doing agriculture on the hills without the use of modern agricultural inputs. They have no alternate livelihood besides agriculture. But due to decreasing returns in agriculture, it cannot provide sufficient income to the people to sustain a good living standard.

In these hilly areas, literacy is not well spread which caused low awareness about the governments schemes of socio-economic development. People cannot take full benefits of the schemes therefore, their economic condition remains bad. Due to the lack of agricultural diversification, people migrate in other areas in search of livelihood. Women do all the works of household so the health of women and children's are very poor.

It is a well known fact that tribal people lives in the hilly areas which is endowed with the forests. These forests have different kinds of trees, flowers, fruits, medicines and many wild birds and animals. Tribal people live in these forests and their economy depends on the forests. Forest provides different forest products like honey, wood, medicines, flowers, etc. Tribal people collect these forest products and earn revenue. If the government efforts diverted towards the strengthening of these tribal people then their income can be raised.

Present study is an attempt to find out the impact of forest on economic condition of tribal people.

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Review of Literature

Present research has been supported by various studies conducted by Prem Choudhary[1], Fernadis[2], Bairagi[3], Gayakwad[4] and many more. Findings of these studies shows that tribal society solely depends on the forests as there is no alternate source of livelihood in the hilly areas where agriculture is the only source of employment. There is a need to defend the ownership on the forest resources. If we preserve the forest and tribal then their culture can also be preserved as forest and tribal are the two sides of a coin. There is a need to preserve the forests as if the forests are destroyed in the same speed than the existence of tribal also affected. Forests save the soil and conserve it. The sentiments of tribal are related with the forests therefore, there is an urgent need to preserve the forests.

Objectives of the Study

Main objective of the study is as follows:

1. To find out the impact of forest on the economic condition of tribal people.
2. To find out the determinants of economic condition of tribal people.

Research Methodology

Following research methodology has been adopted in the study:

(i) Selection of the study area

Rajasthan is a state of unequal physiographic and weather. About 2/3 part of the state is desert where rain is scanty. There is a great problem of livelihood among the people and they migrate in search of employment. State is divided into seven divisions namely Udaipur, Jaipur, Bharatpur, Kota, Ajmer, Jodhpur and Bikaner. Present study considers Udaipur division into account. There are six districts in Udaipur division, namely Udaipur, Dungarpur, Banswara, Pratapgarh, Chittorgarh and Rajsamand. We have taken Udaipur purposively for the study. A large part of the population of Udaipur is tribal and it accounts for the highest forest area in the state therefore, we have selected Udaipur District for the study.

(ii) Sample design

There are 11 Panchayat Samiti in Udaipur district, out of these we have selected 2 Panchayat Samiti randomly. These are Gogunda and Sarada. Out of these two Panchayat Samiti's, we have selected five villages from each Panchayat Samiti and from each selected village ten respondents were selected randomly. Thus the sample size consists of 100 beneficiaries who were taking benefit from forests.

(iii) Use of statistical tools in the study

Present study is based on the primary data collected through a pre- structured schedule which is filled by the researcher himself. Various statistical tools have been used in the study like average, percentage, correlation, regression, etc.

Results and Discussion

The results have been presented in following sections:

i. Impact of forests on the income of the tribal people

We have collected the data of income of the tribal people before taking the benefits from forests and after taking the benefit. It is shown in following table 1:

Table: 1
Monthly income of the tribal people

Village	Average income before taking the benefits from forests (in thousands)	Average income after taking the benefits from forests (in thousands)	Difference	S	t value	P. Value
I	3	7	4	9.26	3.61	0.0002
II	2	8	6			
III	4	10	6			
IV	5	12	7			
V	4	10	6			
VI	3	8	5			
VII	2	10	8			
VIII	3	8	5			
IX	3	12	9			
X	3	10	7			

Source: Computed

H_0= There is no significant increase in the income of people after taking benefits from forest.

H_a = There is significant increase in the income of people after taking benefits from forest.

Here $\overline{D} = 6.3$

$S = 9.26$

$$t = \frac{\overline{D}}{S}\sqrt{n}$$

$$= \frac{6.3}{9.26}\sqrt{10}$$

$$\Rightarrow \quad \frac{19.92}{9.26} = 2.15$$

(D. F.) = n -1 = 10- 1 = 9

Conclusions: The value of paired 't' test is 2.15 while the table value at 19 degree of freedom and at 5 percent level of significant is 1.83. Since the calculated value is high therefore, our null hypothesis is rejected and it can be concluded that there is significant increase in the income of the respondents after taking the benefit from forests.

ii. Regression model

Here we have used the multiple regressions to find out the functional relationship between the economic condition of the tribal people and its determinants. Following model has been used here:

$$y_i = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + U_i$$

y_i = Economic condition of people

X_1 = Age

X_2 = Education

X_3 = Income

X_4 = Availability of land

X_5 = Knowledge of forest products

X_6 = Infrastructure

Following specification has been made here:

Variable	Expected sign	Description
X_1	+	Positive relationship has been setup in age and income
X_2	+	High education gives higher income
X_3	+	High income leads to high economic status
X_4	+	Positive relationship has been used in land availability and economic status
X_5	+	Knowledge of forest products increases the income of the tribal people
X_6	+	Developed infrastructure leads to higher income and high economic status of the tribal people

Following model has been estimated here:

Table 2
Results of Regression model

Variable	Sign	β	t value	F value	P. value	R^2	Adj.R^2
X_1	+	.20	0.21	14.24	0.0016	.74	.72
X_2	+	.71	1.98*				
X_3	+	.89	3.46*				
X_4	+	.46	0.49				
X_5	+	.87	2.01*				
X_6	+	.72	1.98*				

Source: Computed

Our regression model is found to be best fitted as the value of R^2 and adj. R^2 is quite high. 74 percent variations of economic conditions of the tribal people can be explained by the explanatory variables. F (variance ratio) is also quite high which shows that model is best fitted. Same results can be obtained by P. value which is less than the level of significance (0.05). It shows that explanatory variables are significantly affecting the economic conditions of tribal people.

Suggestions

1. The people should be aware about the government policies and schemes which will ultimately enhance their socio-economic condition.
2. There is a need to acquaint the people about the forest and its products which yield a high income. If people engaged in these activities than their quality of life will enrich.
3. Government should provide the collection centers for the forest products; it ensures the fair prices to them.
4. There is a lack of infrastructural facilities in the rural tribal areas. So there is a need of spreading these facilities in these areas which will ultimately upgrade the economic condition of tribal people.

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Customer Satisfaction for E-Banking Service

(With respect to Sagar City)

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Abstract

Financial liberalization and technology revolution have allowed the developments of new and more efficient delivery and processing channels as well as more innovative products and services in banking industry. Banking institutions are facing competition not only from each other but also from non-bank financial intermediaries as well as from alternative sources of financing. Another strategic challenge facing banking institutions today is the growing and changing needs and expectations of consumers in tandem with increased education levels and growing wealth. Consumers are becoming increasingly discerning and have become more involved in their financial decisions. For many consumers, electronic banking means 24-hour access to cash through an automated teller machine (ATM) or Direct Deposit of pay cheques into savings accounts. But electronic banking involves many different types of transactions. The customer is clear on one thing that he wants e-banking to be simple and the banking sector is matching its steps to the march of technology. Slowly but steadily, the Indian customer is moving towards the internet banking.

Introduction

E-banking (Internet banking) means any user with a personal computer and a browser can get connected to his bank's website to perform any of the virtual banking functions. The term electronic banking covers both computer and telephone banking. In other words it is said that it is updated 'on-line, real time'. The system is updated immediately after every transaction automatically. Today we are in the era of globalization. Multinational organizations worldwide have adopted localization as their first strategic choice. Advancement in technology has facilitated globalization too. There has been a marked improvement particularly in the area of maintenance, storage, availability and transfer of data. The world has literally shrunk to become a "global village". Banks have transformed themselves and are offering services through internet. From computerization to networking to ATMs and now E-Banking, banks have moved up the value chain. Internet banking refers to the use of internet as a remote delivery channel for banking services. The number of visits to the bank can be minimized effectively by operating from the internet account. Thus the number of contacts required to perform a transaction and solve a problem has been reduced through online banking. The usual branches of banks have culminated into PC networks, whereby the consumer can draw all the benefits and services of the bank at a single click of the mouse. Once the branch offices of bank are interconnected through terrestrial or satellite links, there would be no physical identity for any branch. It would a borderless entity permitting anytime, anywhere and anyhow banking. A customer can log on banks website and access his account.

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Technology is the key to move towards providing integrated banking services to respondents. Indian banks have been late starter in the adoption of technology for automation of processes and the integrated banking services. But with the global adoption of technology, Indian banking is also at the threshold of paradigm shift due to the latest changes. There are various factors which have played vital role in the Indian banking sector for adoption of this technology.

Firstly, the economic reforms introduced by the government almost fifteen years back which resulted in opening up of new vistas for banks outside the world. Government relaxed rules and regulations, and simplified the processes for the FII to make investment in the banking and various sectors. This resulted in inflow of large funds in the economy thereby improving the economy as a whole and banking sector in particular. Due to this reason, banks need to provide such services, which satisfy the urge of foreign investors.

Secondly, as a part of reforms Indian banking was opened for private sector by which old and new private sector came into limelight. They gave a big boost to technology and created a platform to use it for backside and front-side operations. When they started adopting it, this put a tremendous pressure on the Nationalized and public sector banks. With the result of such healthy and competitive environment, overall banking system became more work prone, efficient and technological.

Thirdly, for the economic development of a country, infrastructure plays a vital role. In the last few years, with the development of telecom sector, communication infrastructure, BPOs, the entire country became a single hub of transmitting the information and the major cities got connected with one another, which helped in the reduction of total cost. This had directly helped banks.

Fourthly, Indian software industry has also impacted the Indian banking sector. To provide excellent services to the respondents, banks need to have web based portals, wide area network (WAN), local area network, internet, etc. and all these services are provided by the software industry to Indian banking at reasonable prices and at the right time.

Fifthly, most of the banks in public as well as private sector have technology thrust from RBI to adopt the changes in order to improve the operational efficiencies, security measures, risk reduction and quality up gradation. After liberalization RBI made several changes in the basic structure of banking sector and laid down numerous guidelines on electronic banking, fund transfer, core banking solution, payment system, clearing services, and internet banking. So, it becomes necessary for the banks to adapt sweeping changes in technology.

Further, Indian Banking Association (IBA) has helped banks to create a forum to discuss various issues on computerization and automation of processes which further resolve the problem of adaptation.

Now banks can reach their respondents anywhere, anytime; and respondents are able to get instant access to their accounts from any corner of the globe anytime. With increasing competition the respondents are also becoming more demanding. To meet respondents' expectations banks will have to offer wide range of services like ATM's, telephone banking, mobile banking etc. by upgrading their branches. The key to attract and retain the respondents lies in efficient customer service including customized and value added products to meet various needs of individual respondents as well as to meet the diverse needs of respondents

Evolution of Technology in Indian Banking

The technological development in banking can be traced as follows:-

1960 - Mechanized banking introduced.
1970 - Introduction of computer based banking industry.
1980 - Introduction of computer-linked communication based banking.

Advent of computer technology has created a major impact on working of banks. The computerization and subsequent development in history of Indian banks can be traced back to 1966 when Indian Bankers Association (IBA) along with exchange banks association signed first wage settlement with the unions, which accounted for the use of IBM or ICT accounting machines for inter-branch reconciliation etc. A committee on computerization and mechanization was appointed by RBI in 1983 under chairmanship of Dr. C. Rangrajan recommended that computerization and installation of Advanced Ledger Posting Machines (ALPM) at branch, regional and head offices of banks will bring around a new era in banking. Narsimhan Committee in 1991 paved way for reform phase in banking. Saraf Committee was constituted by RBI in 1994 that recommended the use of Electronic Fund Transfer System (EFT), introduction of electronic clearing services and extension of Magnetic Ink Character Recognition (MICR) beyond metropolitan cities and branches.

The rate of adoption of IT by foreign and private sector bank in the country has been significant over the last five years, which can be attributed to fierce competition and the internet phenomena worldwide. The arrival of private and multinational banks with their superior state of the art technology based services pushed the Indian banks to follow the suit by going in for the latest technologies to meet the threat of competitors and retain their customer base. "The last four years have seen dramatic changes, making respondents' convenience critical aspect of banking". Indian metros are surging ahead in online banking usage. Today the delivery channel of banks include direct dial up connections, private networks, public networks etc. and the devices include telephone, Personal Computers including Automated Teller Machines, etc.

Electronic Banking Products and Services

E-banking has provided immense opportunities in offering goods and services to the respondents. These products are totally changing the outlook of banking sector. Now the industry is shifting towards cashless society, where physical cash, notes and coins have become a thing of the past, and digital cash and electronic purse have taken their place. There are many non-cash payment methods which are in use. These are as follows:

- Automated Teller Machine

ATM is a cash rending teller machine. This is a machine which is frequently seen at banks and other locations, such as shopping centres and building societies. Respondents can withdraw any sum up to a limited amount, can view the status of his account and order a new cheque book. There is a number called Personal Identification Number (PIN), which is a key for carrying the desired transactions. On the other hand, we can say that it's a machine which replaces the human aspect of providing the cash and standing in a long queue. ATMs can be installed on the bank's premises (onsite ATMs) for which no license is required from RBI. However, for ATMs to be installed at public places (offsite ATMs), banks have to obtain a license. These offsite ATMs are mainly installed at airports, railway stations, market places, petrol pumps, etc.

- Mobile Banking

The traditional brick and mortar is done from fixed branch premises, where the customer has to go personally for carrying out business transactions. Through mobile banking the customer can conduct a host of banking transactions and inquiries through the mobile. Mobile banking can also be carried through a mobile van with or without computerized banking system. The mobile van moves from place to place on designated routes at designated hours and the respondents can transact their banking business, such as deposit, withdrawal, cheque collection draft issuance, pass book updates, etc. Mobile banking helps the customer to do his account management, electronically which was earlier possible through internet banking. Mobile banking service is divided into two categories:

(i) **SMS Based:** This service can be availed from any mobile having SMS based service. The customer types the required keywords and PIN number and send the message to the predefined number.

(ii) **Menu Based:** The customer downloads and installs the application on the mobile. Whenever the customer wants any sort of information, he selects the application, selects the request from menu and sends the request to the designated number. This request is internally sent as SMS text. The central computer at bank sends back the result to him.

- Phone Banking

Phone banking or tele-banking refers to the authorized respondents to use special telephone number of the bank. This facility is available with the help of a voice response system (VRS). This system basically accepts only TONE dialled input and suitable voice response message/ information to the caller. Tele-banking is of two kinds:

(i) **Public Enquiry:** General information about banking services can be obtained by respondents and non-respondents like dialling a special enquiry number of the bank (call centre) and desired information can be obtained.

(ii) **Private Enquiry:** This relates to account specific information and can be accessed only by accountholder by disclosing personal identification number (PIN) and customer ID.

- E-commerce's

Ccommerce refers as the transaction between the buyer and seller without exchanging any papers or any meeting between two persons and largely using the internet. Electronic commerce allows efficient transactions among respondents, suppliers and partners for cutting the transaction time and reducing the costs of doing business. The Ministry of Commerce is supporting "Electronic Commerce (EC) / Electronic Data Interchange (EDI) for Trade" project for facilitating international trade. The community partners of this project are various trade regulatory and facilitating agencies like the Customs Department, the Directorate General of Foreign Trade (DGFT), Airports, the Reserve Bank of India (RBI), Export Promotion Organizations (EPOs), Exporters, Importers, Agents, Container Corporation of India (CONCOR) and banks.

- Electronic Data Interchange (EDI)

EDI is the exchange of documents in the standardized electronic form, between organizations, in automated manners, directly from a computer application in one organization to an application in another. EDI can be compared and contrasted with electronic mail. Email enables free-format textual messages to be electronically transmitted from one person to another. EDI, on the other hand, supports structured business messages (those which are expressed in hard copy, pre-printed forms or business documents) and transmits them electronically between computer applications rather than between people

- Internet Banking

As the banking industry has been constantly innovating and with the advent of technological development particularly in the area of telecommunication and information technology, one such innovation is internet banking. Internet banking is defined as an internet portal through which the respondents can use different kinds of banking services from bill payments to making investment. All the banks using internet as an additional channel or banks using internet only as delivery channel are now on the equal footing to offer their banking services on the internet and to compete for respondents around the world Internet banking is useful for both the bankers and the respondents. The present age of integrated technology consisting of computers and communication facility, distances need no longer be constraint in providing customer service. EFT system hosted and operated by the RBI, permits transfer of funds, from any account to any other account at any branch of any member bank in any other city (Jain, 2006). In other words, electronic fund transfer facilitates the quick movement of deposit money from one bank account of one customer to the bank account of another customer. In this system, the sender and the receiver may be located at different cities.

- E-Purse

E-commerce has been marked as a steady trend towards growth of electronic mode of payments against paper based instruments. European Central Bank (ECB) defined, "E-Money as electronic store of monetary value on a technical device and used to making payments other than the issuer without the involvement of bank accounts in the transaction but acting as a prepaid bearing instrument"

Services through E-banking

- Bill payment service

It facilitates payment of electricity and telephone bills, mobile phone, credit card and insurance premium bills as each bank has tie-ups with various utility companies, service providers and insurance companies, across the country. To pay our bills, all we need to do is complete a simple one-time registration for each biller. We can also set up standing instructions online to pay our recurring bills, automatically. The bank does not charge respondents for online bill payment.

- Fund transfer

We can transfer any amount from one account to another of the same or any another bank. Once we login to your account, we need to mention the payees' account number, his bank and the branch. The transfer will take place in a day or so, whereas in a traditional method, it takes about three working days. ICICI Bank says that online bill payment service and fund transfer facility have been their most popular online services.

- Credit card respondents

With Internet banking, respondents can not only pay their credit card bills online but also get a loan on their cards. If we lose our credit card, we can report lost card online.

- Railway pass

Indian Railways has tied up with ICICI bank and we can now make our railway pass for local trains online. The pass will be delivered to us at our doorstep. But the facility is limited to Mumbai, Thane, Nasik, Surat and Pune.

- Investing through Internet banking

We can now open an FD online through funds transfer. Now investors with interlinked demat account and bank account can easily trade in the stock market and the amount will be automatically debited from their respective bank accounts and the shares will be credited in their demat account. Moreover, some banks even give us the facility to purchase mutual funds directly from the online banking system.

- Recharging prepaid phone

Now we just top-up our prepaid mobile cards by logging in to Internet banking. By just selecting our operator's name, entering our mobile number and the amount for recharge, our phone is again back in action within few minutes.

- Shopping

With a range of all kind of products, we can shop online and the payment is also made conveniently through our account. We can also buy railway and air tickets through Internet banking.

Rational of the Study

E-BANKING is very popular in this global world. Now generally all banks provide e-banking services in all cities. But the utility of the e-banking is dependent on the awareness of e-banking services and information about the e-banking services. Sagar is a city of Madhya Pradesh where many respondents know about e-banking services and they are also using e-banking services and some respondents are aware about e-banking services but they avoid for using e-banking services. Generally respondents has theoretical knowledge of e-banking services, but all respondents are not using that theoretical knowledge in practical way, so this paper has done for analysing whether respondents are aware about e-banking services or not and why they are not using e-banking services,

Review of Literature

Dannenberg and Kellner (1998), in their study, overviewed the opportunities for effective utilization of the Internet with regard to the banking industry. The authors evaluated that appropriate application of today's cutting edge technology could ensure the success of banks in the competitive market.

Daniel (1999), in his research paper, described e-banking as the newest delivery Channel offered by the retail banks in many developing countries. The objective of the study was to analyze the current provision of electronic services of major retail banking organizations in the UK.

Yakhlef (2001) evaluated the services provided through internet and website. The researcher explored the major services of Swedish banks provided via internet. The objective of the study was to see whether internet banking services were compliment or competitive to brick and mortar bank branches.

Harris and Spence (2002), in their paper, explored the ethics of business to business electronic commerce with focus on banking sector. The researchers had chosen a case study of online foreign exchange developments at an investment bank.

Durkin and Howcroft (2003) evaluated that the banker-customer relationship was improved through mobile, phone and internet banking. The authors found that new technology has made the banks very competitive and profitable and internet has played a key role in it

Lee, Jihyun (2003), examined that to identify whether customer intention affecting to use online financial services. The effects of attitude toward behaviour, subjective norm were examined. Demographic variables were included as control variables. Banking organisations. Many banks experienced consolidation through merger acquisitions (M&A).

Mishra (2005), in his paper explained the advantages and the security concerns about internet banking. According to him, improved customer access, offering of more services, increased customer loyalty, attracting new respondents are the primary drivers of internet banking. But in a survey conducted by the online banking association, member institutions rated security as the most important concern of online banking.

Abou-Robich, Moutaz (2005), studied how to analyse comfort levels and attitude of users towards online banking facilities. The findings resulted that there is a correlation between attitude towards e-banking and feeling of security with regard to their demographic variables.

Huang, Haibo (2005), reveals that the successful introduction electronic money and e-banking services depends mainly on people acceptance. The major finding is that although e-banking respondents more or less have some common characteristics, they differ across different types of e-banking services.

Heng Michael et al. (2006) analysed the impact of e-banking on brick and mortar banks through innovation model. The researchers' analysed 8 core capabilities to assist the banks migrated to e-banking environment.

Reynolds, John (2007), said that 2006 e-banking technology services industry customer loyalty survey data results in order to improve marketing resource allocation for corporate e banking products and services.

Taft, Jeanette (2007), pointed out that Technology Acceptance Model (TAM) as applied to a specific type of technology: e-banking. They suggested that e-banking prior training, perceived ease of use of e-banking technology.

Isern, Jennifer (2008), pointed out that a positive relationship between the level of financial infrastructure and the level of competition and a negative relationship between the degrees of state ownership in banking sector and the level of competition.

Kautish (2008)described the paradigm shift of banking sector from traditional Banking to online banking. The objective of the paper was to discuss the derivation of value added tool of online banking system which was used to attract new respondents and retain the existing ones.

Nyangosietal.(2009), collected respondents' opinions regarding the importance of e-banking and the adoption levels of different e banking technologies in India and Kenya.

Jeon, Kiyong (2014), have said that consumer prefer larger banks in U.S.Because they has to reduce their transportation cost by way of larger banks have multiple ATM centre's across the country.

Objectives

1. To evaluate the e-banking awareness in Sagar city.
2. To understand the reasons behind underutilization of e-banking services.
3. To understand whether age, education, income and expensiveness are related to usage of e-banking.
4. To measure the customer satisfaction in e-banking services.
5. To know the cause why respondents are not using e-banking services.

Research Methedology

Research methodology is a way to systematically solve the research problem .It comprises of the various steps adopted by researcher along with the logic behind it.

Research Design

The study undertaken is descriptive in nature, which aims at gathering the preliminary data to throw light on real nature of the research problem.

Sampling type

This study is non-probabilistic in nature.

Sample size

Data was collected from 100 respondents.

Sampling area

Respondents from Sagar city has been taken for the study.

Method used for Data Collection

Primary data being the source for which Survey research has been conducted and systematic collection of data is done from respondents by the way of structured questionnaire.

Method used for Data Analysis

The data collected through questionnaire is analyzed and the irrelevant data is ignored. For fulfillment of the objectives Percentage, Mean, chi square test, Pie charts, and bar graph are used with the help of SPSS.

Data Analysis

Table 1
Gender wise distribution of respondent

Sex	Frequency	Percentage
Male	43	43.0
Female	57	57.0
Total	100	100.0

As research contained 100 respondents out of which there were 43% males and 57% females.

Table 2
Age wise distribution of respondents

Age	Frequency	Percentage
18 – 25	60	60.0
26 – 35	18	18.0
36 – 50	15	15.0
ABOVE 50	7	7.0
Total	100	100.0

Above table shows that 17% respondent come in age category 18 to 25 years, 49% in age group 26-35, 19% respondents come in age group 36-50 and remaining 15% in age group above to 50.

Table 3
Occupation wise distribution of respondents:

Occupation	Frequency	Percentage
Self-business	14	14.0
Service	28	28.0
Student	58	58.0
Other	11	11.0
Total	100	100.0

As above table represent that the respondents belong to different occupations out of which 58% respondents are students, 15% are engaged in service sector, 11% shows both the respondents, have their own business and involving in other occupations, 3% are doing cultivation and reaming 2% are doing their family occupation

Table 4
Education wise distribution of respondents:

Education	Frequency	Percentage
Higher secondary and below	21	21.0
Graduate	35	35.0
Post graduate	40	40.0
Professional	4	4.0
Total	100	100.0

As above table denotes that there are 21% respondents belongs to Higher secondary and below it, there are 35% respondents are graduate,38% are post graduate ,4% are professional and 2% of respondents belongs to other category.

Table 5

Income wise distribution of respondents:

Family Income level	Frequency	Percentage
Below 3 lakh	62	62.0
3-5 lakh	15	15.0
5-7 lakh	14	14.0
Above 7 lakh	9	9.0

There are 62% respondents whose family income level (annually) is below than 1 lakh because 58% respondents are students and they generally depend on their parents for fulfilment of their needs and their pocket money is considered as their income, 15% respondents have their annual family income between 1-3lakh, 14%belongs to family income level between 3-5 lakh and remaining 9% comes under the category of above 5 lakh.

Relation between age and usage of E-banking services

Chi square test is used for analysing relationship between age and usage of e-banking services for which following hypothesis has been formulated.

H_0_There is no significant relation between age and usage of e-banking.

H_1_There is a significant relation between age and usage of e-banking.

	Usage of e-Banking Services		
Age	YES	NO	TOTAL
18 – 25	47	13	60
26 – 35	14	4	18
36 – 50	11	4	15
ABOVE 50	4	3	7
Total	76	24	100

	Value	Df	Asymp.sig
Pearson chi- square	1.633	3	.651

The above table shows that Chi square test is used for analysing whether usage of e-banking is having any relationship with age or not and it is found that usage of e-banking and age having a significant relationship, because the Pearson chi square statistic X^2 =.651, with degree of freedom 3. P >0.05 so the null hypothesis is accepted (H_0) and alternative hypothesis is rejected (H_1), *this* mean age and usage of e-banking having no significant relationship.

Relation between age and perception of respondents about expensiveness of e- banking services:

Hypothesis

H_0_there is no significant relation between age and e-banking expensiveness.

H_1_there is significant relation between age and e-banking expensiveness

Chi square test is used for analysing relation between age and expensiveness of e-banking services

	E-banking services are expensive		
Age	YES	NO	TOTAL
18 – 25	14	46	60
26 – 35	3	15	18
36 – 50	3	12	15
ABOVE 50	3	4	7
Total	23	77	100

	Value	Df	Asymp.sig.
Pearson chi- square	2.046	3	.562

Chi square test is used for analysing whether age and e-banking expensiveness have any relationship or not. It is found that age and e-banking expensiveness are not related to each other because the null hypothesis (H_0) is accepted since Pearson chi square X^2=.562 with degree of freedom 3 and P >0.05 which show that alternative hypothesis is rejected.

As above table shows 23 respondents consider that e-banking is expensive and remaining 77 respondents do not consider that e-banking services are expensive.

Relations between age and satisfaction level of respondents:

Hypothesis

H_0_there is no significant relation between age and e-banking satisfaction.

H_1_there is significant relation between age and e-banking satisfaction.

Chi square test is used for analysing relation between age and respondents satisfaction with E-banking services.

	Satisfaction with e-banking services		
Age	YES	NO	TOTAL
18 – 25	49	11	60
26 – 35	16	2	18
36 – 50	2	13	15
ABOVE 50	4	3	7
Total	71	29	100

	Value	df	Asymp.sig.
Pearson chi- square	30.990	3	.000

For analysing relationship between age and satisfaction level of e-banking, chi square test is used and it is found that age and satisfaction level of e-banking services are associated with each other because the Pearson chi square value is 30.990 with 3 degree of freedom. $P < 0.05$ which means that the null hypothesis is rejected and alternative hypothesis is accepted.

Table is showing that the maximum satisfaction is in the age group of 21-35 year there are total 49% of respondents belongs to this category out of which 40% respondents are satisfied with e-banking services and lowest satisfaction is found in age group above 51 year there are 15% respondents belong to this category out of which only 2% are satisfied with e-banking services.

Relationship between qualification and usage of E- banking services

Hypothesis

H_0_There is no significant relation between education and usage of e-banking services.

H_1_there is significant relation between education and usage of e-banking services

EDUCATION	DO YOU USE E-BANKING SERVICES		
Education	YES	NO	TOTAL
Higher secondary and below	11	10	21
Graduate	27	8	35
Post graduate	34	6	40
Professional	4	0	4
Total	76	24	100

	Value	Df	Asymp.sig.
Pearson chi- square	9.487	3	.023

Chi square test is used for analysing relation between education and usage of e-banking services and it is noticed that the null hypothesis is rejected because the Pearson chi square value is .023 with degree of freedom 5, $P < .05$. This means that education affects the usage of e-banking. Above table shows that most of the e-banking services are used by post graduate respondents 27%, and graduate used 27% while the percentage of professional and other is comparatively low.

Relation between annual family income and usage of e-banking services.

Hypothesis

H_0_There is no significant relation between annual income and usage of e-banking services.

H_1_There is significant relation between annual income and usage of e-banking services.

	DO YOU USE E-BANKING SERVICES		
Total annual family income	Yes	No	Total
BELOW 3 LAKH	47	15	62
3-5 LAKH	9	6	15
5-7 LAKH	11	3	14
ABOVE 7 LAKH	9	0	9
Total	76	24	100

	Value	Df	Asymp.sig.
Pearson chi- square	4.999	3	.172

For analysing whether annual income and number of users of e-banking is related to each other or not I used chi square test and it is noticed that the null hypothesis is accepted or we can say that family income level does not affect the number of users of e-banking because Pearson chi square statistic value is being calculated .172 with degree of freedom 3. P >.05 means the null hypothesis is being accepted.

The table is showing that total 62% respondents are belong to that category whose income level is below than 3 lakh out of which 47% respondents are using e-banking services, 15% respondents belong to category 3-5 lack out of which 9% respondents use e-banking, 14% respondents belongs to that category whose annual income is between5-7 lakh out of which all 11% respondents are using e-banking services.

Services used by respondents through E-BANKING

Statements	No. Of respondents	Percentage
Online bill payment	43	43
Fund Transfer	29	29
Account information and balance enquiry	20	20
Online shopping	41	41
Summary report of transactions	12	12
Recharging	23	23
Investment through e-banking	4	4
None	29	29
Other	0	0

The table is showing that there are 43% respondents use e-banking for bill payment, 41% for online shopping, 29% for fund transfer, 23% for recharging,20% for account information and valance enquiry, 12% for summary repost of truncation ,only 4% of respondents use e-banking for investment and there are 29%of respondents who do not use any service.

Following e-banking services rated by respondents:

Statement	Excellent	Good	Neutral	Poor	Very poor	Mean
Bill payment	27	41	19	12	1	2.19
E-alert	15	42	29	14	-	2.42
Fund transfer	20	36	25	18	1	2.44
Account information and balance enquiry	29	37	23	11	-	2.16
ATM services	51	40	7	2	-	1.4
Investment through E-banking	14	25	44	14	3	2.67

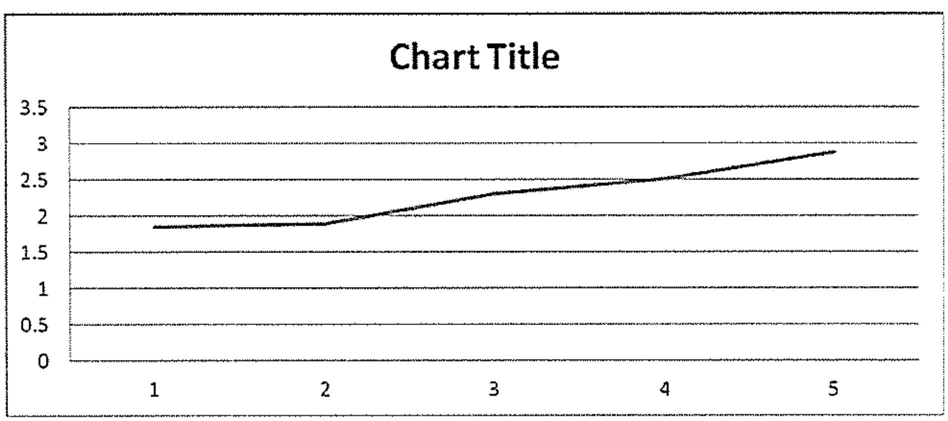
(Given data is in Percentage)

Above table is showing the mean value of respondents for analyzing which services are more preferred or liked by respondents and this is analyzed that customer rate excellent for ATM services, good for account information, balance enquiry, E-alerts, and fund transfer but they are neutral about investment trough E-banking (because its mean value is coming 2.67 which is near about to 3). We found that customer rank excellent for ATM services this is because now they are aware about how to use the different facilities of ATM provided by the banks and now they has become too much familiar with usage of ATM services.

What do you think that, why it is important to adopt e-banking? Because...

Statements	SA	A	N	D	SDA	Mean
E-banking system is faster than traditional banking system.	42	39	11	8	-	1.85
E-banking services have no time limit.	44	30	18	8	-	1.90
There is a high degree convenience in accessing e-banking	24	34	30	12	-	2.30
E-banking services are easier to use than traditional banking channels	20	31	29	18	2	2.51
E-banking services cheaper than traditional banking system	8	29	34	25	4	2.88

(Given data in percentage)

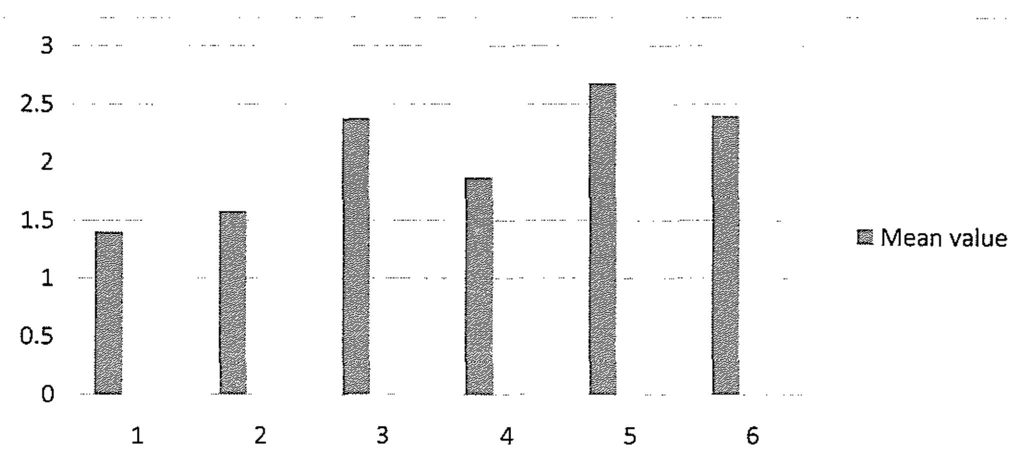


The table is showing the perception of the respondents why it is important to adopt e-banking services, the mean value is calculated and it is found that they are agreed with e-banking services are faster than traditional banking, e-banking have no time limit they can use all these services at any time of the day and there is a high degree convenience in accessing e-banking services but they are enable to judge whether e-banking channels are easier to use than traditional banking channels and whether e-banking services are cheaper than traditional banking system or not.

Possible reasons why e-banking services have not been adopted by respondents:

Statements	SA	A	N	DA	SDA	Mean
Security concerns is the most discouraging factor in using e-banking services	48	45	3	3	1	1.4
Respondents are not aware about e-banking services provided by banks.	49	44	7	-	-	1.58
E-banking services do not have privacy of customer's information	29	26	25	18	2	2.38
Most of the customer prefers traditional banking system.	36	44	18	1	1	1.87
Few banks yet not provide e-banking services.	11	27	47	13	2	2.68
Bank charge high fees on using e-banking services.	22	35	26	15	2	2.40

(Given Percentage is in percentage)



Here It is tried to find out the possible reasons that why the respondents do not adopt the e-banking and it is found that respondents are strongly agrees with security concern , respondents do not feel secure while using e-banking services so they do not adopt e-banking. Secondly customer are agree with following reasons they are, 1.respondents feel that they do not have the privacy of their information, 2. Still most of the respondents believe on traditional banking system rather than e-banking system3.they think that banks charge high fees on using e-banking service 4.They think that there is lack of e-banking awareness in the respondents. They were unable to say anything about whether some bank yet provides e-banking services or not.

What should banks do for encouraging respondents to use E-BANKING SERVICES?

Statements	Frequency	Percentage
Reducing charges and fees(additional charge)	50	50
Incentives to e-banking users	32	32
Advertisement	23	23
giving them guarantee of security and privacy	77	77
Giving them technological knowledge through seminar	27	27

The table show that according to the 77% respondents banks should give the guarantee of privacy and security to their respondents for encouraging the respondents to use e-banking services , 50% respondents said that banks should reduce their additional charges on using e-banking services,32%respondent consider that banks should give incentive to e-banking users, 27%respondents think that banks should provide technological knowledge through seminar for their respondents and 23% respondents think that bank should advertise about the e-banking to encourage the respondents to use e-banking services.

Limitation

1. The sample size is limited to 100 e-banking users hence the result of the study cannot be taken as universal.
2. Findings of the survey are based on the assumption that the respondents have given the correct information.
3. Since the respondents had to fill the questionnaire while busy with their hectic schedule, many people were reluctant to answer.
4. The project relied mainly on the primary data.

Findings

Following are the facts that are found during project work

- This project is based on the 100 respondent out of which 76% respondents use e-banking service and 24% respondents do not use e-banking services, it is also found that younger generation were using-banking services more as compared to older generation because of innovation in information ,technology and their adopting level is high in e-banking. There were 66% respondents belongs to age group 10to 35 year out of which 58% use e-banking services and only 8% do not use e-banking on the other hand above 51 age category were using e-banking services are lesser to others.
- 40% respondents came to know about e-banking services through their relative, 31% through their friends, 21%through and 12%through bankers and only14%coustomers came to know about e-banking services through their colleagues and neighbours.
- 51% of the respondents use e-banking services for the purpose of time saving and 24% for their convenience ,this reflect that respondents consider that e-banking services are faster than traditional

banking system and are available easily. 17%responenteds used e-banking survives because they can access their account 24 hours and there were only 2% respondents who have other reasons for using e-banking.

- 43% respondents use e-banking services for online bill payment,41% for online shopping, 29% for fund transfer, 23% use for recharging their prepaid phone,20% for account information and balance enquiry, 4% of respondents use e-banking for investment through e-banking and 29%of respondent use none services.

- In research this is found that 73% respondents consider that e-banking services help in doing bank transaction easily and 27% do not consider it. It is observed that those respondent who agreed with that e-banking is helpful in doing e-banking transaction easily belong to younger generation and older generation respondents consider that e-banking do not do so.

- 14% of Category 10-20 year respondents thinks that e-banking services are not expensive, In 21-35age 36% , In 36 to 50 year age group 14% and 3% respondents belong to category above 51 year do not think that e-banking services are expensive. It is also found that age and e-banking expensiveness has a significant relationship.

- It is being noticed that age impact the e-banking satisfaction level, the maximum satisfaction is in the age group of 21-35 year there are total 49% of respondents belongs to this category out of which 40% respondents are satisfied with e-banking services and lowest satisfaction is found in age group above 51 year there are 15% respondents belong to this category out of which only 2% are satisfied with e-banking services.

- Most of the e-banking services are used by post graduate 32%, and graduate 26% while the percentage of professional and other is comparatively low. For analyzing whether different level of education is related to users of e-banking or not, I used chi square test and this is concluded that users of e-banking and different level of education is not related to each other or we can say that different level of education does not make any impact on number of uses of e-banking.

- It is found that income level of respondents does not make any impact on the number of e-banking users. There are total 62% respondents belong to that category whose income level is below than 1 lakh out of which 47% respondents are using e-banking services, 15% respondents belong to category 1-3 lack out of which 9% respondents use e-banking, 14% respondents belongs to that category whose annual income is above to 5 lakh out of which all 9% respondents are using e-banking services.

- There are 76% respondents who use e-banking services and there are 64% respondents who are satisfied with e-banking services this shows that (76%-64%) 12% of respondent are using e-banking but they are not satisfied with the services of e-banking. There are total 36% respondents who are not satisfied with e-banking services.

- Respondents consider ATM services as excellent and consider good for account information, balance enquiry, E-alerts, and fund transfer but they are neutral about investment trough e-banking.it is also found that respondents was not in condition to say anything about investment through e-banking.

- Respondent think that e-banking is not adopted by the costumers because they do not feel secure with e-banking, there is lack of privacy and some think that there is lack of e-banking awareness.

- According to respondents they think that banks must focus on 'guarantee of security and privacy of customs and they should reduce the addition charges on using of e-banking services.' For encouraging respondents to use e-banking services

Conclusion

It is found from this study that younger generation were using e- banking services more as compared to older generation because of new innovation in information technology and their adopting level is high in e-banking. Above 51 age category were using e-banking service are lesser than others. The main two reasons why the customer do not adopt e-banking services are, security concern they do not feel secure while using e-banking and customer think that e-banking services do not have privacy of respondents information and there are some other reason, some of them are also consider that e-banking services are expensive and traditional banking system is better than e- banking system.

E-banking has become a powerful tool for improving customer's satisfaction regarding to banks but all banks should keep in mind that still the satisfaction level is not found too much high there is need of improvement in e-banking system. The e-banking system must be as easy as any age category's customer can adopt it easily and if he gets any problem related to e-banking, the bankers must give them appropriate solution for their problems.

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Rationale of Inflation Targeting as an Anchor of Monetary Policy

Dr. Sunil Kumar Dalal*

Abstract

The multi indicator approach of monetary policy framework in India came under attack as it failed to control inflation and sustain the growth of the economy. This necessitated suitable changes in the policy. On recommendation of the Urjit Patel committee, RBI in consultation with Government of India decided in favour of inflation targeting to be nominal anchor of the monetary policy. Inflation targeting approach is advocated on the ground that it would bring in transparency and predictability in monetary policy. A low and stable inflation will ultimately result into higher growth prospects. This approach is based on existence and shape of the Phillips curve, i.e. relation between inflation and unemployment and how effectively policy rate changes are transmitted to interest rate. In this paper efforts have been made to look into the theoretical basis of the approach and suitability of this policy in Indian context as in India causes of inflation are different from advanced countries.

Introduction

The existence of high inflation and sluggish growth generated a considerable debate around the monetary policy framework in India. There has been a constant tussle between the finance ministry and the RBI over how high interest rates or how tight monetary environment should be. An expert committee, headed by the then Deputy Governor of the RBI, was constituted by the Reserve bank of India in September,2013 to recommend what needs to be done to revise and strengthen the (current) monetary policy framework with a view to make it more transparent and predictable .The committee, in response to the challenges and opportunities thrown by the structural changes brought out and financial liberalization realized through a series of measures under economic reforms since 1991, felt that conduct of monetary policy had undergone fundamental changes. Therefore, the committee recommended 'Flexible Inflation Targeting' as an anchor of the monetary policy framework in India. The new monetary policy framework, as suggested by the committee, is justified on the ground that previous framework failed to control inflation for some years. It is further said that inflation targeting as a macroeconomic tool would give central bank an explicit mandate to pursue price stability as the primary monetary objective and a high degree of operational autonomy. Accordingly, necessary amendments were made In the Reserve Bank of India Act, 1935, to implement the same.

Inflation targeting approach of the monetary policy was first adopted by New Zealand in march,1990 and later on adopted by many countries of the world, namely, Canada, Australia, U.K., Sweden,

Brazil, Mexico and many more from Asia and Africa. This paper aims to look into the theoretical arguments for making flexible inflation targeting as a sole objective of the monetary policy in Indian context and try to find an answer for the question: whether inflation targeting is a suitable policy option for the emerging economy like India?

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Conceptual Framework of Inflation Targeting

The inflation targeting framework of monetary policy is based on the assumption of a stable link between inflation rate and policy rates. It considers Friedman's view that there is no long term trade-off between inflation and growth, i.e., the two are independent in the long run and therefore, central bank should focus on controlling inflation. Inflation targeting binds central bank to commit to a low and stable inflation target acceptable to the public. The new framework recognizes the inconsistency in the pursuit of the multiple goals of inflation and unemployment with the single tool of interest rate. Growth and inflation are important only to the extent that medium term inflation targeting remains a creditable commitment.

New Keynesians argue that the Phillips curve, in the plane of inflation and output, is upward slopping in the short run. This happens due to increasing cost as output grows. The short term trade-off between inflation and output was justified on the ground that with a decrease in unemployment, bargaining power of workers increases. Since prices can be assumed as a mark up over cost, they move in tandem with the wage cost. Therefore, inflation varies inversely with unemployment and hence positively with output. This understanding remained central to Keynesian demand management through the devices of monetary and fiscal policy. Moreover, it was argued that there is a permanent trade-off between the two and therefore policy does not only matter in the short run but also in the long run.

Friedman criticized Keynesian framework by arguing that with inflation, the expectation of workers cannot remain stagnant. Instead, they follow the movements of the rate of inflation. Any attempt to decrease unemployment would lead accelerating inflation and opposite would happen if it stays above that level.

Lucas and Sargent (1978, 1981) argued that Friedman's expectation function was unreasonable. According to them, economic agents do not extrapolate the past into future, instead they have rationale expectations. This change in the expectation function ensures that there is no trade-off in the absence of external shocks even in the short run. This was a major shift in the economic discourse in favour of pre Keynesian ideas against active policy intervention.

New Keynesian questioned the assumption on which these conclusions were reached. The new Keynesian argument is that in the presence of imperfect competition, asymmetric information, labour market rigidities, the externalities, the economy might not settle at non accelerating inflation rate of unemployment(NAIRU) level of output in the short run even agents' expectation remain rationale. Hence, there is a need for active policies in the short run to propel the economy towards its potential growth path.

Assumption of a trade-off between inflation and output in short run implies that to bring down inflation one needs to reduce the level of output and thereby level of employment too gets affected. Hike in interest rate to control inflation would affect private investment and consumption financed by credit. Chandrashekhar (2014) mentions a serious flaw in the above policy prescription, particularly in a situation where underlying assumption of a trade-off between inflation and output turn out to be incorrect. For a developing country like India where large force of labour remain unemployed, assumption of rise in the bargaining power of the workers with rise in employment is not real. Therefore, any policy to control inflation by targeting lower output will be counterproductive and may creates fears of recession which could further fuel pessimistic expectations.

On the contrary, Freedman and Laxton (2009 a) argued that inflation targeting would help to maintain inflation within a reasonable range and hence reduce the cost of inflation. According to them, cost of high and volatile inflation is very high as it affects long term decisions of savers and investors, leads to distortions in relative prices of commodities and taxation and also contributes to output and unemployment variability.

Coechetti and Kim (2004) emphasized that inflation targeting would create an environment to get rid of a vicious cycle of higher prices to higher wages and yet to higher prices since anchoring long term inflation expectations would contain increase in wages.

Isard et.al. (2001) argued that transparency resulting from inflation targeting accounts for the effectiveness of monetary policy by facilitating behaviour of participants in financial market. When financial markets understand and anticipate the action of the central bank, the transmission mechanism between policy actions and inflation and economic activity work more smoothly.

It is clear from the above discussion that inflation targeting approach is based on existence of relation between inflation and unemployment and expectations of people about inflation and policy rates. The predictability and transparency in monetary policy will spur confidence in savers and investors.

Historical Perspective of India's Monetary Policy

The monetary policy framework in India has greatly been influenced by financial development and openness and shift in underlying transmission mechanism. Mohanty (2013) identified following distinctive phases in evolution of monetary policy in India-Formative Years (1935-1950) – In this phase monetary policy aimed to regulate the supply of and demand for credit in the economy through quantitative measures like bank rate, reserve requirements and open market operations.

Developmental phase (1951-1970) - During this period monetary policy was used as a tool to support plan financing. This objective was realized through several quantitative measures to contain consequent inflationary pressures. Care has been taken to ensure credit to preferred sectors. Bank rate was often used as a monetary policy instrument.

Phase of Credit planning (1971-1990) - In this phase, the focus of monetary policy was on credit planning. Both statutory liquidity ratio and cash reserve ratio were used to strike a balance between government financing and the attendant inflationary pressure.

Post reform period (1990 onwards)- Implementation of the structural reforms and financial liberalization policy in the 1990s witnessed a paradigm shift in government and commercial financing with increasingly market determined interest rates and exchange rates. The RBI was able to move away from direct instruments of credit control to indirect market based instruments, termed as liquidity adjustment facility and operated through overnight fixed rates, namely, repo and reverse repo rates. This process helped to develop interest as an instrument of monetary transmission.

Urjit Patel committee report also mentioned some important changes brought out in monetary policy framework since independence. In the initial years of independence, exchange rate was the nominal anchor of the monetary policy set by the proportional reserve system where at least 40% of the total note issue was to be backed by gold bullion and Sterling reserves. This system was replaced by minimum reserve system in 1957 where only Rs. 2 billion reserves in terms of gold and foreign exchange were required to maintain against note issue. Credit aggregates were made as a nominal anchor of the monetary policy. Chakraverty committee (1985) to review the working of monetary system recommended a monetary framework based on monetary targeting.

Accordingly, broad money became the intermediate target and reserve money became the main operating instrument for achieving control on broad money growth. This framework could not yield desired results because of the lack of control over RBI's credit to central government which accounted for the bulk of reserve money creation. Even with CRR and SLR raised, close to their statutory ceilings, money supply growth remained high and fuelled inflation. In April 1998, RBI adopted a multiple indicator approach that used to take into account a number of quantity and rate variables, such as, credit, output, inflation rate, exchange rate, interest rate etc., for monetary policy decisions. It could be summarized that RBI, keeping in view the developments experienced and challenges faced by the Indian economy, has been continuously revising monetary policy to achieve target set for the economy.

Inflation Targeting in Indian context

As stated in the beginning that on the recommendation of the Urjit Patel committee report multi indicator approach of the monetary policy has recently been replaced with the Inflation targeting as a sole objective of the policy. The co existence of high inflation with weakening growth attracted censure of the public as regard to efficacy of the multi indicator approach. This approach has also been criticized on the ground that it failed to clearly define nominal anchor of the monetary policy. The policy of flexible inflation targeting is designed around giving critical importance to price stability for sustainable growth in medium term. Government of India in consultation with RBI has set nominal inflation target of 4%, measured in terms of CPI, for monetary policy. The head line inflation, measured in terms of CPI, is favoured over core inflation because holding down inflation requires dampening inflation expectation that contribute to the inflationary trend. As regard to policy rates, Urjit patel committee recommended a simple rule of thumb which states that when the inflation rate is above the nominal anchor, the repo rate should be positive and the degree to which it is in positive territory shall be determined by taking into account the output gap or the level of output growth as compared to trend or potential. Under this new monetary framework, it has been hypothesized that adjustments in the policy rates would affect short term market rates which than transmit to the fuller spectrum of interest in financial system, including deposit and lending rates, that in turn affect consumption, saving and investment decisions of economic agents and eventually aggregate demand, output and inflation.

Earlier to this, Narsimham (2000) and Rajan (2007) committees recommended the implementation of inflation targeting assuming that low and stable inflation would result into a stable GDP growth. Rajan (2007) argued that inflation targeting would provide more room for policy makers to respond to large shocks because the market would better understand the objective of monetary policy. He further suggested carrying out financial reforms to improve transmission mechanism for the successful implementation of monetary policy. This view was supported by Mohan (2007a) who said that efficient market operations and absence of distortions in interest rates could make monetary transmission mechanism efficient.

The sanctity of inflation targeting in emerging economies has always been a matter of debate because the source of inflation is usually different from that in mature advanced economies .In the emerging economy like India, inflation is mostly driven by cyclical shift in demand. Indian economy, since 1991, has experienced structural transformation and has been facing periodic supply shocks. In such a case, raising question on broader inflation objective of the RBI, Shetty (2013) argued that it is impossible to achieve a low level of inflation with the help of monetary measures. Supply factors have a dominant role to play in inflation control. When strong monetary measures are deployed to achieve such a low level of inflation, growth gets adversely affected and that has its adverse consequences on employment generation and other aspects of inclusive growth. In a vast developing society, with a vast scope for structural changes, some degree of higher prices serves as an incentive for some sectors of the economy. Jha (2008), Mohan (2007a) and Subbarao (2011) also reached to same conclusion that monetary policy can stabilize inflation caused due to demand shocks and it is ineffective against supply shocks. Subbarao(2011) argued that inflation targeting in not feasible in India and therefore is not advisable. The most important reason for not targeting inflation is that nature of inflation in India is structural with sources of inflationary pressure being food and fuel prices and targeting inflation through monetary policy will achieve very little.

The persistence of high inflation in India for the past few years can be understood on the basis of explanation given by Kalecki. Kalecki had proposed that while prices of industrial commodities are cost determined, those of primary commodities are demand determined. So it is obvious that inflation which has entered the system with rise in prices of agriculture commodities cannot be controlled by bringing down the production of industrial commodities. Moreover, inflation because of a rise in prices of critical inputs like oil cannot be controlled by reducing production and employment. Prices of primary commodities rise mainly because of inadequate and volatile production, speculative hoarding and commodity future. In such a case government needs to attack on these real sources of inflation rather than resorting to monetary policy instruments. These measures include counter cyclical taxation of oil and related items, improvement and investment in storage capacities across the country, controlling future markets and cracking down on commodity hoarders.

Azad and Das (2013) were of the view that inflation targeting in a developing economy, where the Phillips curve is more likely to be horizontal than upward slopping, is not only ineffective but also imposes hardship on working people of the country. Since the source of inflation is generally cost push caused by supply shocks in either external market or the primary goods in the domestic economy, it would signal the central bank to increase interest rate till inflation gap narrows down. But if the demand curve is horizontal for the entire range of output ahead of full capacity, this process can never come to stop through policy. That is, despite steep demand deflation, inflation would not come under control till the supply shocks themselves ease out.

Conclusion

Persistently high inflation has always been a major cause of concern for the policy makers because it depresses savings as real interest rates turns negative, weakens external value of the currency, undermines competitiveness, adversely affects balance sheet of firms that have borrowed in foreign currency, adversely affects investment climate and growth and also worsen income distribution. It is a very tough and challenging task for policy makers to design a policy that can achieve high growth with price stability. High inflation with the sluggish growth of the Indian economy for a few years has raised serious doubts about the effectiveness of the multi indicator approach of the monetary policy in achieving the stated objectives. In this context, Urjit Patel committee was constituted to review the prevailing monetary framework and to suggest measures to strengthen the monetary policy framework that can take care of challenges posed by structural changes brought out and financial liberalization made in the Indian economy.

The committee recommended Inflation targeting as an anchor of the monetary policy. After accepting the recommendation, government of India made necessary amendments in the RBI Act to give RBI statutory powers to make inflation targeting as a nominal anchor for the monetary policy arguing that a low and stable inflation over the medium term will rein in inflation expectation and will bring in transparency and predictability in RBI's monetary policy moves. This in turn will improve business environment and help in achieving high growth target.

The conceptual framework of inflation targeting rests upon the assumptions about the trade of between inflation and growth in short as well as long run, rational expectations of the people about inflation and its trend and transmission mechanism of the policy. These very assumptions provide the ground for raising doubts as regard to efficacy of this policy in emerging economies like India. Further opponents of this approach argue that causes of inflation in emerging economies are different from that of advanced economies. In India, Inflation is mostly caused by supply shocks and containing inflation through interest rate would not yield desired results rather it would adversely affect growth. Maintaining low and stable inflation and attaining a reasonably fair growth in medium term shall determine the success of this approach. Moreover, Success of the policy requires institutional autonomy to the central bank, a healthy and well developed financial market for effective transmission mechanism, a fully deregulated price mechanism, absence of fiscal dominance and a well developed technical infrastructure for forecasting, modelling and data availability.

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