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Volume XLIX	No. 01	June, 2017

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Message from the Chief Editor

Dear Friends

It has been seven months since I was given the privilege to serve as the Chief Editor of the Indian Journal of Accounting (IJA), an official publication of Indian Accounting Association (IAA). I am grateful to the Indian Accounting Association (IAA) for giving me this opportunity to shape the premiere publication forum in my field. The journal provides a forum for new advances in the field of accounting research and practices that spans a wide swath of topics. Over the past some years, the journal has not undergone major change. However, regular and timely publication is being ensured which is important for its continuing growth.

Now, we need to respond, as professionals, and to position our response appropriately. We will need to improve results from within and challenge the detractors from outside, to provide a positive response, meaningful dialogue, and self-reflection. The Journal will help to serve as the voice of our profession and provide a forum for open debate. Our main objective will be to strengthen the boundaries of the journal, the reviewer database, and to motivate potential authors to contribute to the journal. In parallel, we all should join hands in preventing plagiarism, duplicate articles and unreliable research.

We have taken an initiative in the direction of including the journal in the list of approved journals by the UGC, and it has been included at Serial No. 43333. We hope to be able to bring about gradual changes in the near future for a successful indexation and more importantly, for further progress of the journal. I invite the authors to submit original and first-hand articles, which will help to achieve our goal of obtaining higher Global Impact Factor for the journal to maintain the relevance of the quality in a highly competitive field.

Finally, I would like to thank Prof. (Dr.) Arvind Kumar, President IAA and his team, the editorial and advisory board, reviewers, technical team, authors and well wishers, who are promoting this journal. I would also like to express my gratitude to those who have supported me during the last seven months and to those who are going to be with me in the journey of the journal for a higher level. With these words, I conclude and promise that the standards will be maintained eventually.

Thanking you.

Prof. (Dr.) SS Modi
Chief Editor
Indian Journal of Accounting
A Journal of Indian Accounting Association

President's Message

Dear Fellow Delegates,

On behalf of the Indian Accounting Association, I cordially welcome you all on the occasion of 40th All India Accounting Conference and International Seminar at Mohanlal Sukhadia University, Udaipur, Rajasthan. The association has been continuously expanding, and now has forty seven branches all over the country, with around five thousand life members, who widely represent the academic and professional fraternity in the field of accounting. With the efficient, effective planning, and untiring efforts of the Conference Secretary, Prof. G. Soral, and his team, I believe the logistics shall be appreciable and the academic content of the conference shall be highly satisfactory for all the delegates.

I am extremely optimistic that the deliberation during several sessions shall bring forth multifarious, thought-provoking issues and solutions to some existing problems, and thereby create a conducive platform for deeper insights into the core issues pertaining to this conference.

I once again take this opportunity of extending a warm welcome to all the past and present members, delegates, academicians, and industry professionals at the 40th All India Accounting Conference at Udaipur.

With warm regards,

Prof. Arvind Kumar
President
All India Accounting Association

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INDIAN BANKING: CAN INDIA WITHSTAND THE TRANSFORMATION?

Prof. Arvind Kumar*
Prerna Tripathi **

ABSTRACT

The advent of the economic reforms in India that were introduced by the Indian Government in 1991 brought about some mammoth changes in almost each and every sector of the Indian economy and the banking sector was also not left untouched from it. The role of banking industry is of paramount significance as it is one of the most essential components of the service industry and this becomes even more important in the case of India because firstly, it has a huge population of greater than 1.34 billion[1] and secondly, the banking sector has a major share in the GDP of India. However, these economic reforms have also generated and paved way for novel players that include banks in the public sector, private sector and foreign banks. Our banking system, in the present scenario is, however, prone to many challenges which affect them from several spheres and these challenges, if not dealt promptly and adequately, may result into loss of opportunities and this could be easily done by making optimum use of innovative products and emerging technologies. It has implications for whole of the economy and this is due to the fact that a strong banking system is indispensable for the growth of nation's economy.

KEYWORDS: *Economic Reforms, GDP, Economic Development, Innovative Products, Emerging Technologies.*

Introduction

It has been well said and quoted by someone that development is not possible without challenges. If we wish and desire to be developed then we must also face and overcome the hindrances, obstacles and challenges which pave the way for success. This saying is true in the case of India as well. Indian banking industry has also underwent challenges in the past, there are challenges in the present as well as the future will also not be free from it. To begin with the banking scenario in India the foremost significant and prominent challenges is that of intense competition within and out of the industry. The persistent rise in the competition has also raised the expectation level among the customers. In India there are about 27 banks in the public sector, 21 banks in private sector and numerous foreign players. This is an evidence of the fact that there exists comparatively large number of banks with sub-optimal size and scale of operations. Another major issue would be inaccessibility of large part of our population towards banking facilities especially in rural areas where the locations are fragmented and scattered. People should be made aware by letting them know the benefits of using banking services to tap the potential market. Balance sheets of the banks should be strengthened so that they could offer some resilience to the global turmoil e.g. as had happened in 2008. On the top of it there is a serious issue of mounting NPAs that pose to be a threat and a matter of great concern for the Indian banks. This problem seems to be uncontrollable and the situation is even worse for public sector banks than other banks. The level of distress is not uniform across the bank groups and is more pronounced in respect of public sector banks. The Gross Total NPAs for both public and private sector banks as on June 2016 stood at around 6 lakhs crores[2].

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** *Research Scholar, Department of Commerce, University of Lucknow, Lucknow, U.P., India.*

1 As of June 2017
2 Source: The Hindu dated November 21st, 2016.

Parameters which Pose Challenges to the Indian Banking Industry

- **Capital Adequacy:** The banking system is capitalized adequately but there are challenges for some of the banks. For the system as a whole, the CRAR has been steadily declining and as at the end of March, 2015, it stood at 12.70% as against 13.01% as at the end of March 2014. Our concerns are larger in respect of the PSBs where the CRAR has declined further to 11.24% from 11.40% over the last year. The table below shows CARs of developing economies, Except for India and Russia, other emerging and developing economies, including Brazil, China and South Africa, demonstrated a decline in their capital adequacy ratios:

Countries\Years	2010	2011	2012	2013	2014	2015
Brazil	16.9	16.3	16.4	16.1	16.7	16.4
China	12.2	12.7	13.3	12.2	13.2	13.0
India	15.2	13.1	13.1	12.3	12.5	12.7
Russia	18.1	14.7	13.7	13.5	12.5	12.7
South Africa	14.9	15.1	15.9	15.6	14.8	14.2

Source: *FSI Tables, April 2016 Database, IMF*

Note: *Data available for India, China, Russia and Brazil is for year ended December and for South Africa, it pertains to the year ended January for the respective years.*

Compliance of Know Your Customer and Anti Money Laundering Norms

Spreading of financial literacy is a huge challenge for the banks and they cannot be absolved of their responsibilities in this regard. The deficiency in KYC compliance is a cause of concern for the banks. According to the definition, Money mulling1 is another common occurrence which highlights deficiencies in risk categorization of customers and monitoring of transactions. Banks have to take necessary and stringent measures along with the provision of appropriate penalties for the non-compliance of these norms.

Balance Sheet Management

If we have to solve any problem then we must also acknowledge its existence first. In order to add strength to the balance sheets, higher provisions need to be maintained. This not only leads to better control over tax and the dividend pay-outs, but also adds to the credibility of the financial statements of the banks. This in turn helps the banks in the long run because if the investors have positive opinion about the management then they would drive up the valuation of the stocks. The board or the top management should be proactive about what shape they would like the balance sheet to take in future.

Risk Management System:

Banks need to manage risk and return effectively. This balancing should focus upon the Risk-Return trade-off which means either 'maximizing return for a given risk' or 'minimizing risk for a given return'. Banks need to have differentiated risk based pricing of products and services since every capital has some cost to be borne. The utmost responsibility of the Board and the Top Management is to acquire the reliable data.

High Transaction Costs

This area also needs to be addressed sharply and control should be exercised over mounting non-performing assets.

Information Technology (IT) Revolution

Information Technology is both a boon and a bane for the developing economies. Therefore, emphasis should be on acquiring the right technology then deploying it optimally, and further leveraging it to the maximum extent. The efficiency standards should also be maintained. On the other hand, remaining cost-effective and delivering sustainable returns to the shareholders should also be the top prerogative of the banks. In order to achieve this, banks must also be proactive to adopt technology and then acquire significant competitive edge over others.

Timely Technological up Gradation

In the current context, in order to face competition it is necessary for the banks to first adopt the technology and then upgrade continually.

---

1 A money mule or sometimes referred to as a "smurfer" is a person who transfers money acquired illegally (e.g., stolen) in person, through a courier service, or electronically, on behalf of others. The mule is paid for their services, typically a small part of the money transferred.

Privacy and Safety

The top most priority of the banks must be the privacy of customer's information and safety of their savings. This in turn helps in influencing customers' behavior in the choice of payment methods. There are areas which pose perils of security in e-banking are credit risk, liquidity, market, interest rate and legal risk.

Global Banking, Employee Retention and Financial Inclusion

Now-a-days, banks have gone global so it must be the prerogative of the banks to retain its loyal employees.

HR Management

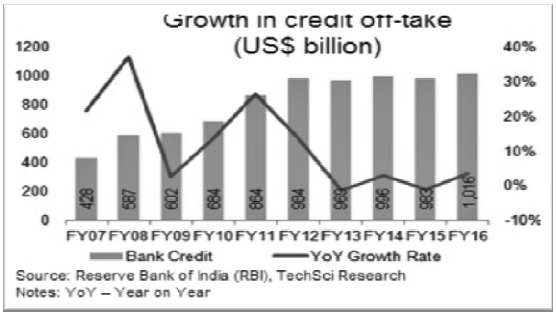
This is an area where most of our banks, especially the PSBs, are found lacking. In their eagerness to expand their core business they tend to forget the relevance of human expertise which drives their business in a sustainable manner. In order to have the requisite manpower with right amount of knowledge and expertise the banks have to pay attention and proper hiring policies have to be adopted.

Standardization and Capacity Build-up

Capacity build up is defined as the "process of developing and strengthening the skills, instincts, abilities, processes and resources of the organizations to survive, adapt, and thrive in the fast-changing world." Standardization and uniformity in transaction handling enables uniform customer experiences.

Growth of Banking

The technological progress is the prime reason for the sustained growth of the Indian banking industry. The competition has been increased with the advent of foreign banks that have also acted as technological innovators.



Social and Ethical Aspects

There are banks which proactively undertake the responsibility to bear the social and ethical aspects of banking. This is a challenge for commercial banks to consider these aspects in their working. Banks not only have the objective of profit maximization, but also have to support the organizations with social concerns and perform their social responsibilities.

Rural Market

Though Indian Banking is quite mature in terms of terms of quality of assets and capital adequacy, product range, supply and reach, tapping the potential of rural India still remains a challenge especially for the private and foreign banks. In, Indian banks are considered to have clean, strong and resilient balance sheets as compared to other banks in comparable economies.

Enhancing Corporate Governance

Banks have fiduciary duty towards their depositors as well as the shareholders. They also target at maximizing shareholder value. Therefore, good Corporate Governance of banks is not only desirable but mandatory. Furthermore, banks are important participants in the system of payment and settlement and thus corporate governance is highly relevant for them.

Knowledge Society

These are those societies that are well educated, and who therefore rely on the knowledge of their citizens to drive the innovation, entrepreneurship and dynamism of that society's economy. Knowledge and accumulation of novel ideas are required to keep the organizations ahead. Apart bridging the gap between rich and poor, the deprived and underprivileged class of the country should be focused in order to better their economic condition. In India, for example, RBI has initiated several measures to achieve greater financial inclusion.

Emerging Challenges

With the change in times there are some challenges that have emerged and should also be addressed adequately. These are highlighted as under:

- There is deceleration in the economic growth which in turn impacts the expansion of banking sector.
- Asset quality has to be maintained, non-performing assets have to be controlled and advances have to be restructured.
- Capital Augmentation and maintaining prudential capital is to be focused.
- Profitability has to be maintained.
- Financial inclusion & Direct Benefits Transfer in the respective accounts is the key.
- Implementation of Basel III effectively and efficiently.

Opportunities

These are those favorable conditions which once tapped may become the biggest strength. Therefore, banking sector has the following opportunities like entering into new businesses, developing innovative styles of working, improvement in the efficiency levels, delivering higher levels of customer satisfaction through service etc. Banking industry's opportunities includes:

- Growth in economy
- Deregulation in banking
- Enhancement in banks
- Low government-set credit rates and
- Larger customer checking account balances.

Conclusion

Banks are many but success will be crowned to those who will identify the scope in the opportunities and take unmistakable steps to leverage upon these opportunities. The latest example of this could be Prime Minister Jan Dhan Yojna Scheme which was a challenge turned into opportunities. Besides this, banks as the key players in the country's financial system who carry the responsibility of supporting economic growth.

Suggestions

On going through the text in detail the suggestions could be that the existence of the banks should be diverse so that the market share could be enhanced. Therefore, more and more of Indian nationalized and private sector banks must spread their wings towards global markets. There should also be rules to improve asset quality, liquidity, recovery and the balance sheets of banks. Encouragement has to be given to mergers, consolidations and entry of new players to bring competition, innovation and productivity in the industry. Benefits of economies of scale should be reaped. Bank licensing procedures should be simplified and focus should be on asset–liability management. Increased usage of technology in banking is the key here. Greater focus on financial inclusion will also be fruitful. In a nutshell, there should be steps which foster the transparency in removing the structural bottlenecks so that the Indian banking industry stands in competition with the bests in the world.

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IMPACT OF AGRICULTURAL CREDIT SCHEMES ON AGRICULTURE EXPORT

Prof. (Dr.) M.C. Sharma*
Jatin Yadav **

ABSTRACT

Agriculture credit schemes have become a necessity for most of the farmers. Government has introduced various credit schemes for them. Proper benefit of these schemes can only be given to the farmers by proper and efficient implementation. In this study, we find the impact of agricultural credit schemes on agriculture export. Data collected during this study reveals that there is a positive impact of agricultural credit schemes on agriculture export. Suggestions for better implementation of various agricultural credit schemes and removal of bottlenecks for improving impact on agriculture export are also given in research paper.

KEYWORDS: *Agriculture Credit Schemes, Agriculture Export, Agriculture Import.*

Introduction

Agricultural credit is considered as one of the basic input for conducting all the agricultural development programs. In India, there is an immense need of agricultural credit schemes for development and growth of agriculture. Many agencies like co-operative banks, commercial banks, rural banks, etc provide adequate credit to farmers, at a cheaper rate of interest.

Moreover, with growing modernization of agriculture the requirement of agricultural credit has increased further in the recent years. Growth of an economy is directly related to exports. If exports increase at a faster pace, as compared to imports, nothing can stop an economy from being a developed one. On the other hand, the instability in exports can adversely affects the process of economic development. Agriculture produces are one of the major constituents for India's exports and thus play an important role in trade deficit for the country.

Review of Literature

Agricultural credit has been a significant area of research for decades. There have been various measures taken to improve the availability of credit sources to farmers. Many studies have been conducted to evaluate the scope and execution of credit schemes for the farmers and their relationship with country's exports, some of them are:

- **Literature 1:** In the study, Direction of Exports of Commercial Agricultural Commodities, J K Sachdeva emphasized that the cash crops such as tea, coffee, spices, oilseeds, cotton, etc are traditional export items, which aggregate to 50% of the total agricultural exports by India. Thus, these agricultural commodities impact the exports directly.
- **Literature 2:** Sreeram (2007) in his analysis concluded that the increased supply and administered pricing of credit help in increasing the agricultural productivity. There can be multiple sources,

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formal and informal for borrowings in agricultural sector. He also stated that the diversity of cropping patterns, holding sizes, productivity, regional variations makes it problematic to establish connection for agriculture or rural sector as a whole, even with the availability of data. Lastly, he stated that increase in supply of credit alone is not going to resolve the issue of productivity, unless it is accompanied with investments in other support services.

- **Literature 3:** Binswanger and Khandker (1992) in their study explained that the output of the rural finance has been much smaller as compared to the nonfarm sector. Despite the fact that agricultural credit has significantly increased the use of fertilizer and private investment in machines and livestock, the impact on crop output has not been large. High impact on inputs and modest impact on output signifies that the additional capital investment has majorly contributed in substituting for agricultural labor than in increasing crop output.

Objectives of Study

- To analyze the impact of agricultural credit schemes on agriculture export.
- To give suggestions for improvement on impact of agricultural credit schemes on agriculture export.

Hypothesis

A hypothesis is an idea or explanation that can be tested through study and experimentation. It is a proposal intended to describe certain facts and observations.

H_O : Agriculture Credit Schemes doesn't have any positive impact on agriculture export.

H_1 : Agriculture Credit Schemes have positive impact on agriculture export.

Data Collection

The proposed study is based on the secondary data related to agriculture import-export and agriculture credit schemes. These secondary data are collected from Annual Reports of Directorate General of Commercial Intelligence & Statistics, Ministry of Commerce & Industry, Department of Agriculture, NABARD and some web sites of various organizations related to agriculture.

Tools and Techniques

- Arithmetic mean
- Standard deviation
- Co-efficient of standard deviation
- Correlation
- T Test (SE of Two Sample Mean)
- T Test (Observed Correlation Co-efficient)
- F Test (Ratio of Variation)

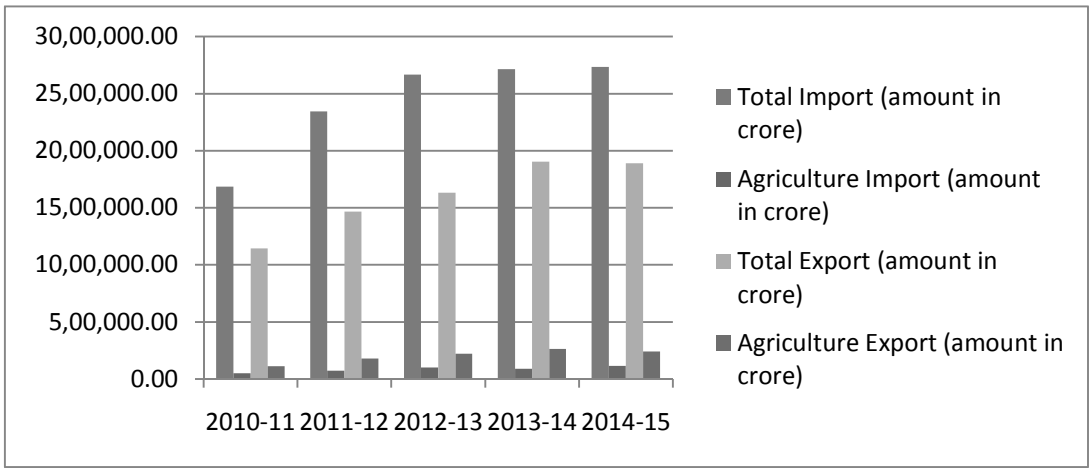
Data Analysis

The study is based on the share of agriculture import-export in total import-export and the impact of agricultural credit schemes on agriculture export for the years of 2010-11 to 2014-15. First, the analysis of agriculture import-export and then the analysis of agricultural credit scheme with its impact of agriculture export are given below:

Share of Agriculture Import-Export in Total Import-Export (Amount in Crores)

Year	Total Import	Agriculture Import	Agriculture Import as % of Total Import	Total Export	Agriculture Export	Agriculture Export as % of Total Export
2010-11	16,83,466.96	52,652.88	3.13	11,42,921.92	1,11,018.99	9.71
2011-12	23,45,463.24	74,284.58	3.17	14,65,959.39	1,80,528.60	12.31
2012-13	26,69,161.96	99,338.66	3.72	16,34,318.84	2,23,618.24	13.68
2013-14	27,15,433.91	87,465.66	3.22	19,05,011.09	2,62,778.96	13.79
2014-15	27,33,935.41	1,15,434.49	4.22	18,91,644.67	2,39,453.23	12.66

Source: Directorate General of Commercial Intelligence & Statistics, Ministry of Commerce& Industry.



Interpretation

Above data shows that the total import increased every year from year 2010-11 to 2014-15 while agriculture import increased from 2010-11 to 2012-13 and it decreased in the year 2013-14 and it again increased in year 2014-15. The share of agriculture import in total import is about 3% through these years. Total export as well as agriculture export increased every year from 2010-11 to 2013-14. But in the year 2014-15 total export and agriculture export had decreased slightly. The positive thing is that the agriculture export is more than agriculture import in terms of total amount as well as in percentage.

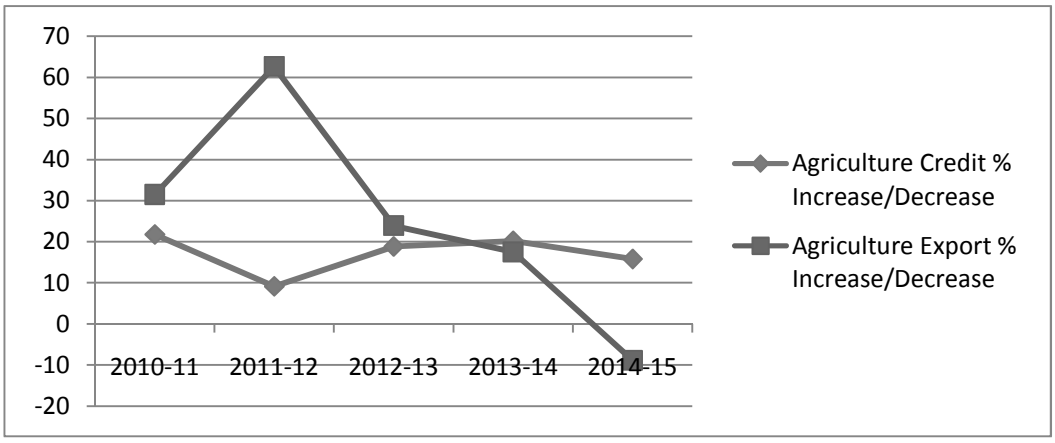
Impact of Agricultural Credit Schemes on Agriculture Export (Amount in Crores)

Year	Agriculture Credit	% Increase (Decrease)	Agriculture Export	% Increase (Decrease)
2010-11	4,68,291	21.79	1,11,018.99	31.47
2011-12	5,11,029	9.13	1,80,528.60	62.61
2012-13	6,07,375	18.85	2,23,618.24	23.87
2013-14	7,30,123	20.21	2,62,778.96	17.51
2014-15	8,45,328	15.78	2,39,453.23	(8.88)

Source: 1. Directorate General of Commercial Intelligence & Statistics, Ministry of Commerce & Industry
2. NABARD, based on data reported by banks and IBA

* Agriculture Credit in 2009-10 is 384507 Crores.

*Agriculture Export in 2009-10 is 84444.35 Crores.



Interpretation

In the year 2010-11 agriculture credit had increased by 21.79% and agriculture export had increased by 31.47% while in the year 2011-12, agriculture credit had increased only by 9.13% and agriculture export had increased by 62.61%. In year 2012-13 agriculture credit had increased by 18.85%

while agriculture exports increased by 23.87%. In year 2013-14 agriculture credit and agriculture export were increased by 20.21% and 17.51% respectively. In the year 2014-15 agriculture credit increased by 15.78% but agriculture export decreased by 8.88%.

Above analysis shows that the agriculture exports increased continuously with the increase in agriculture credit from year 2010-11 to 2013-14. It decreased in the year 2014-15 even after increase in agriculture credit.

Testing of Hypothesis

Statistical Analysis of Agriculture Credit and Agriculture Export

Values	Agriculture Credit (X) (amount in thousands crore)	Agriculture Export (Y) (amount in thousands crore)
Arithmetic Mean	632.4292	203.4796
Standard Deviation	139.41093	53.463619
Co-efficient of Standard Deviation	.2204	.2627
Correlation (r)	0.83	
PE under Correlation	0.0938 (r is significant).	
T Test (SE of Two Sample Mean)		
H_0	No significant difference between two sample mean.	
H_1	Significant difference between two sample mean.	
Significance Level	.05	
SE	5.75	
Table Value	2.306	
Compare	SE > Table Value, Ho Rejected, H1 Accepted.	
Conclusion	It is proved that there is significant difference between two sample mean.	
T Test (Observed Correlation Co-efficient)		
H_0	No significant difference in the co-efficient correlation between two samples.	
H_1	Significant difference in the co-efficient correlation between two samples.	
Significance Level	.05	
SE	2.58	
Table Value	3.18	
Compare	SE < Table Value, Ho Accepted, H1 Rejected.	
Conclusion	It is proved that there is no significant difference in the co-efficient correlation between two samples.	
F Test (Ratio of Variation)		
H_0	Both the samples have been taken for normal population having the same variance.	
H_1	Both the samples have been taken for normal population not having the same variance.	
Significance Level	.05	
SE	6.80	
Table value	6.39	
Compare	SE > Table Value, Ho Rejected, H1 Accepted.	
Conclusion	It is proved that both the samples have been taken for normal population not having the same variance.	

Above statistical analysis shows that the arithmetic mean of agriculture credit is 632.43 thousand crore while that of agriculture export is 203.48 thousand crore. Standard deviation of agriculture credit is 139.41 and that of agriculture export is 53.46. This shows that there is a positive variation in agriculture export in comparison to variation in agriculture credit. Coefficient of standard deviation shows that there is 22.04% variation in agriculture credit while it is 26.27% for agriculture export. Correlation between agriculture credit and agriculture export is 0.83 which is a high degree positive correlation. Probable error under correlation is 0.0938. Since value of correlation is greater than 6 times of probable error, it is significant. It is proved from T test (SE of two samples mean) that there is a significant difference between two sample mean. It is also proved by T test (Observed Correlation Co-efficient) that there is no significant difference in the co-efficient correlation between two samples. F test (ratio of variation) proves that both the samples have been taken for normal population not having the same variance.

"As per the above analysis correlation between agriculture credit and agriculture export is 0.83. Being greater than 6 times of probable error it is significant. Hence the hypothesis i.e. Agriculture Credit Schemes have positive impact on agriculture export is proved".

Suggestions & Recommendations

These are the following suggestions & recommendations for improvement in the agricultural export:

- Farmers should be given loan in the form of agriculture inputs like improved seeds and fertilizers, agriculture equipments, etc instead of cash payment. This will avoid misuse of loan amount by farmers.
- Extra productions is generally sold by the farmer in the local market at no cost or even at loss.To avoid this scenario and encourage export; Cold storage units must be set at each district level and their charges should also be set by Govt. so that they can be in the reach of farmers. Thus farmers will be able to export that excessive production at right time and at right cost.
- Export offices must be set by the Government at each district level to help the farmers in understanding the export process and facilitate them to export their production. These district level offices must be in the supervision of State level office to ensure proper working and solve any problems of the farmer with the district level offices.
- Central govt. must establish sound connections with other countries to encourage the export. Because of the firm bonding, other countries will give priority to our country in case of similar prices or even slightly higher prices.
- Better seeds, fertilizers, better irrigation facility and better cultivation techniques should be provided by the Govt. at low cost. It will ensure maximum utilization of the available resources and hence will increase the production. That excessive production can be used for the export purpose.
- Banks should reduce the documentation charges and processing fee for agricultural loans. Middlemen should be eliminated. Government should reduce stamp duty and service tax. By doing this the input cost of loans will get reduced and farmers will get more amount of cash which can be used for cultivating more area of land. By these measures agriculture output will be increased.

Conclusion

This study shows that the impact of agricultural credit schemes on agriculture export is highly positive. Present scenario of agriculture export is satisfactory but there is a massive opportunity to expand it beyond our imagination. Adoption of various suggestions given in this research paper can help in improving impact of agricultural credit on agriculture export.

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GST REVENUE NEUTRAL RATE: AN EXPLORATORY STUDY

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ABSTRACT

With the implementation of GST (Goods and Services Tax), the existing indirect tax structure of India will have biggest reform in its history. Simply, GST is a broad based and a single comprehensive tax levied on goods and services consumed in an economy. It is aimed to improve tax compliance through a more transparent and simple tax system by subsuming different indirect tax in it. The present study seeks to comprehend the indirect tax structure of country with respect to state's tax revenue on sales, trade etc., union excise and union service tax and to determine scientifically a revenue neutral rate for proposed tax reform. The study hypothesized no significant difference among different states regarding collection of tax revenue. It is also hypothesized no significant difference between actual revenue neutral rate determined on the basis of existing actual tax collected by government and estimated revenue neutral rate developed by authors. The study is based on secondary data. For tax revenue of union and states, four year data (from 2010-2011 to 2013-2014) is extracted from Comptroller and Auditor General's reports available on website. For finding out variability in tax collection, coefficient of variation (C.V.) is derived. ANOVA single factor test is administered for finding significant difference among different states regarding collection of tax revenue. Further, on the basis of total tax collection, assessable value is calculated and an average rate of four years is derived which is termed as actual RNR. A regression model is developed for determining estimated tax revenue for same years. The validity of regression model is tested with the help of t-test to use it for further analysis. For the year 2014-15 to 2017-2018 tax revenue is predicted using the developed regression model and a least square method is used to predict assessable value. On basis of estimated tax collection and assessable value, estimated RNR is derived. A t-test is administered to find out difference between actual RNR and estimated RNR. The study has revealed that in present tax structure; for union, variability in service tax is more in comparison to excise and for states variability in Sikkim is highest followed by Pondicherry and J&K; Vice versa variability is lowest in Goa followed by Arunachal and Himachal Pradesh as evident by Coefficient of Variation. ANOVA test result revealed that H01 is rejected because calculated value (53.93) of student t test is greater than the table value (1.59). It clearly indicates that the difference between revenue collections of different states is due to major reasons not due to any sampling fluctuations or chance. It is also revealed that for RNR, at 5% level of significance and 6 degree of freedom, calculated value of t (3.77) is greater than critical table value (2.45). Therefore H02 is rejected and RNR for GST is found to be 12.65%.

KEYWORDS: *GST, Indirect Tax, Revenue Neutral Rate, Service tax, Excise.*

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Introduction

India has been struggling for implementation of Goods and Service Tax (GST) since 1997, a biggest reform in taxation system. It is not a new tax, instead it is an initiative for improvement over the prevailing tax system at centre and state through subsume of different taxes into one, thereby marking a major milestone in country's tax system. Simply, GST is broad based single, comprehensive tax levied on goods and services at each point of sale of goods or provision of service, in which the seller or service provider may claim the input. In India, Article 246, Seventh schedule of constitution empowers both the Central Government and the State Governments to levy and collect indirect taxes on the basis of their taxable event. The taxable event varies from the point of manufacture or sale or provision of services or imports/exports. At present central excise duty, service tax and custom duty are levied and collected by central government. While VAT/Sales tax is being levied and collected by state government. Only central sales tax is being levied by central government but collected by state government.

In taxation, reforms had been made over the years, but there are significant lacunae both at centre and state levels. India's indirect taxation system had become jungle of taxes, having numbers of taxes and even tax on tax. The initiative to remove such shortcoming was taken by NDA government by setting an Empowered committee in 2000 under the chairmanship of Asim Das Gupta. In 2006, the then finance minister, P. Chidambaram, GST to be implemented from , April 1, 2010.Further in 2009, Empowered Committee(EC) released its first discussion paper. For constitutional amendment, 115th amendment bill was introduced in parliament on 23rd March 2011, but the same was lapsed with dissolution of 15thLokShabha. On 19th December 2014, 122nd constitutional amendment bill was introduced in parliament and same was passes in Lok Shabha on 6th May 2015. On 3rd August 2016, Rajya Sabha cleared the pending bill and it was approved with full majority.

In India, the proposed GST would replace the taxes currently levied and collected by the Centre and states. The taxes levied by centre which would be subsumed are, Central Excise duty, Excise Duty levied under the Medicinal and Toilet Preparations (Excise Duties) Act 1955, Additional Excise Duties, Additional Customs Duty (commonly known as Countervailing duties or CVD), Special Additional Duty of Customs (SAD), Service Tax, Cesses and surcharges in so far as they relate to the supply of goods and services, Taxes on the sale or purchase of newspapers and on advertisements published therein. State taxes that would be subsumed within the GST are State VAT/ Sales Tax, Central Sales Tax (levied by the Centre and collected by the States), Luxury Tax, Octroi, Entry Tax i.e., taxes on the entry of goods into a local area for consumption, use or sale therein. (other than those in lieu of octroi), Purchase Tax, Entertainment Tax which are not levied by the local bodies; i.e. panchayats, municipalities and District councils of autonomous districts can impose taxes on entertainment and amusements., Taxes on general advertisements, Taxes on lotteries, betting and gambling, State cesses and surcharges sofar as they relate to supply of goods or services.

The governments of India have been attempting to implement GST from 1997. But due to political reason and conflict of interest of state, no common consensus arrived regarding GST rate. Over the past couple of years, predictions on the proposed rate of goods and services tax have fluctuated between 11 percent and 27 per cent. This was not surprising since GST subsumed a lot of duties and taxes and a simple addition of these would have yielded a number in excess of 30%. Since GST is set to subsume a number of taxes, it is difficult to arrive at standard rate. The peak rate of VAT in many states is 14.5% and we have excise and service tax around the same levels. If we replace VAT with state GST and excise/service with central GST, we would get around 28% as the ideal GST rate. Since GST rate shall be applicable to bulk of goods and services hence congress party suggested GST rate should be 18% and Chief Economic advisor Arvind Subramanian proposed a Revenue Neutral Rate (RNR) of 15% and a standard rate of 17 to 18% for the proposed nationwide indirect tax. Again there is a common consensus is established about standard ideal rate of GST. If GST is pegged at 18%, states may renew their demand

for compensation. When central sales tax (CST) was reduced from 4% to 2%, state government demanded compensation. After a long negotiations settlement was reached in March 2015 to compensate the states Rs. 33,000 crore over three years 2010-11 to 2012-2013. Compensation is state specific.

If we look around the world, the GST rate fluctuate between 5% and 25%, but most of the countries having lower GST rate like Canada and Japan having 5%, Malaysia 6%, Singapore 7% . Few countries have higher GST tax rate like Denmark and Sweden 25%, France 19.6%, Germany 19%[1].Being a developing country, wide income gap, and increasing number of cases of tax evasion, it may be imagined that a GST rate lower than 18% would help out to achieve the objectives of having a simple and transparent tax system without being opposed by any stakeholder. If successfully implemented, it is expected that every stakeholder of Indian economy will gain from GST, as it will ease business through uniform tax across the country "One Country –One Tax". There will be no distinction between product and service for tax purpose thereby easing tax administration.

Further, there will be flawless tax credits across the value chain, which will result in lower tax burden and improved profit margin for businesses, further with the implementation of GST entry tax will be abolished will result in decreased logistic cost. As GST is to subsume different taxes, it will evade cascading effect of multiple tax system. It will reduce cases of tax evasion through dual monitoring by centre and states. It will also provide better compliance through real time matching of supplier and purchaser. With the introduction of GST, it is expected that, country's GDP will increase by 2%[2], investment opportunities will be enhanced, projects like Make in India will boost up and incremental revenue to the government with widened tax base. As proposed GST is to subsume different taxes in it, it is very difficult to come on a single rate of tax. Determination of appropriate tax rate is a challenging task for the government. Here a research problem is raised that what should be an ideal RNR. On one hand government does not want to continue existing exemptions on other hand it is proposed higher GST rate, it creates a research problem that GST rate should be lower than 18%. Currently, the number of exemptions at the central level stands at 292 (excise duty exemptions) while at the state level it is 90 (VAT related). Finance ministry is not in favour of continuing with exemptions. CBEC chairman Mr. Najib Shah Sian in a public conference on December 17, 2015 exemption in GST would be a "death Knell for GST".

The government should try to make the base of GST as broad as possible and make the exemption as few as possible. If it is done then definitely the tax rate will bring down. In the same direction, in this research paper a humble attempt has been made to assess RNR scientifically so that there should be no loss of revenue to anyone after implementation of GST. Although it is impractical to determine a single rate for all classes of goods due to different nature of goods, yet a single rate is attempted to be determined which can be imposed on majority of goods. In present paper, extreme situation have been ignored and here RNR is derived for majority of goods. Although it is impractical to determine a single rate for all classes of goods due to different nature of goods, yet a single is derived which can be imposed on majority of goods. In present research paper extreme situation have been ignored and here RNR is derived for majority of goods. Recently in different meeting of GST council common consensus have been arrived at four classes of rates.

Review of Literature

After extensively reviewing existing literature relating to determination of GST rate some scholarly work has been found. The details of these literature have been summarized in the following paragraphs.

- **Shankar J., and Agarwal R (2015)** in this research, authors compared current tax regime and GST. For the study, Excise and VAT were taken at 12.5% while GST was taken at 18% as recommended

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1 Gnvconsultancy.com. Accessed on September 5, 2016

2 ZEE News (August 22,2016.)*GST promises to boost GDP growth rate by up to 2%: President.*

by Chief Economic Advisory panel. From the comparison, researchers found that, if GST is levied at 18% the final price of consumer would come down owing to a lower tax incidence and the absence of tax on tax due to seamless flow of credit across the value chain.

- **Mukherjee S., Mukherjee R., and Shekhar S (2015)** attempted to analyse the impact of GST rate at 18% and 25%.Findings were that at 18% rate of GST there will be no incremental revenue for the government. Reason behind is that, it will have positive impact on goods as currently the effective rate on goods is 24% while it will hurt services as currently the service tax is 14%.But, at 25% rate of GST , the government's tax to GDP ratio will receive a 1 to 2% boost. But in both cases demand for services will suffer as both rated are more than 14%.
- **Chakraborty P., and Manay J (2011)**attempted to estimate the base of GST rate and found that there is a scope of trimming the number of commodities in lower rate category, which can give a higher base and correspondingly lower revenue neutral rate. It was also noted that the base of service sector estimated is the most conservative one as it does not have the full coverage of the base of services by the households and of those entities providing services but not registered in the stock market. If these sectors come into the GST net the actual taxable base of the service sector will be much higher than what is estimated and accordingly the revenue neutral rate will be lower.
- **Vasanthagopal R (2011)** stated that the replacement of the Central excise duty of the government of India by Central Value Added Tax (CENVAT) and sales tax system of the State governments by the VAT marked a major mile stone in the reform process of indirect taxes in India but both CENVAT and the State VAT have certain incompleteness. Author assessed how initiative of GST will have positive impacts on the various development areas viz. agriculture, manufacturing industry, housing, poverty reduction, employment, price level, EXIM trade, GDP, government revenue, etc.
- **Rao K., and Chakraborty P (2010)** discussed the proposed design of GST framed by the Empowered Committee's first discussion paper, attempted to estimate the base for the proposed GST on conservative assumptions to arrive at a more realistic estimate of the revenue neutral rates across states. Authors argued that some combination of smaller number of commodities at the 4% rate and an expansion in the coverage to cover both electricity duty and passenger and goods tax could actually leave the revenue neutral rate unchanged and yet result in a superior design of the tax.

Objective

- To examine existing indirect revenue structure of central and state government of India.
- To determine expected Revenue Neutral Rate for proposed GST in India.

Hypotheses

- $\mathbf{H_{01}}$: There is no significant difference among different states regarding collection of tax revenue.
- $\mathbf{H_{02}}$: There is no significant difference between actual revenue neutral rates determined on the basis of existing actual tax collected by government and estimated revenue neutral rate developed by authors.

Data Collection

For present study secondary data collection has been done from comptroller and Auditor General Reports available on the website. For union and states reports were retrieved separately and then assembled in form of table. Four years historical data from year 2010-2011 to 2013-2014 were used containing tax revenue of Union Excise, Union Service tax and state's collection of sales, trade etc.

Statistical Techniques and Tools

In order to analyze the basic characteristics of four years taxation relating data, descriptive statistics like mean, standard deviation and coefficient of variation (C.V.) have been used. ANOVA single factor test has been administered for finding significant difference among different states regarding

collection of tax revenue. Binomial expansion method of interpolation has been used to determine missing data of 2010-2011 and 2012-2013. Regression technique has been used to determine estimated tax revenue. Least square method has been administered for testing the hypothesis.

Research Methodology

First of all actual RNR is calculated on the basis of actual indirect tax collected by government and assessable value. Actual amount collected from State tax, Union Excise and Service tax are capitalized at rate of 12.5%,10.30% and 10.30% for the year 2010-11 and 2011-12 ; 12.5% , 12.36% and 12.36% for year 2012-13and 2013-2014 respectively to derive assessable value of each tax. All three assessable values are clubbed and single tax rate for each year is derived by dividing assessable value to total indirect tax collected. The four year rates are further averaged and a single rate is derived at 11.80% which is termed as actual RNR. (Calculation shown in appendix). For checking the validity of actual RNR as calculated, a regression model have been developed taking assessable value as independent variable and tax revenue as dependent variable for year 2010-11 to 2013-14. In order to estimate revenue for same years, regression statistical predicting techniques have been administered. For year 2014-15 to 2017-18, assessable value is predicted by using least square equation y= a+bx. Using developed regression model, tax revenue is predicted. A tax rate for each year is derived by division of assessable value and tax revenue. An average rate of four years rate is established at 12.64%. The data collected from the secondary sources analysed with the help of MS-excel.

Analysis and Discussion

Many states are worrying that due to implementation of GST their existing revenue shall not be protected. In order to check and see how valid and realistic these anxieties are, some preliminary analysis of existing tax revenue collection of states have been done. Tax revenue from excise duty, service tax and VAT etc. of the year 2010-11 to 2013-14 have been critically examined so that it can be found which states are generated highest and lowest revenue from indirect taxes. Indirect tax revenue of Delhi and J&K for 2010-11 and for Tamilnadu and Uttrakhand for 2013-14 have been interpolated through binomial expansion method because these data were not available. Total actual collection of indirect tax revenue of union and states have been compiled in the following table 2.

Table 2: Indirect tax revenue of Union and States (Rs. in crore)

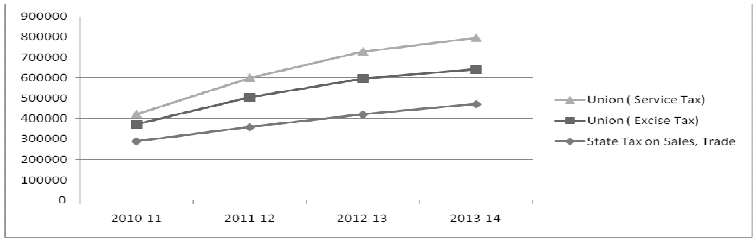
State	2010-11	2011-2012	2012-2013	2013-2014	Average	C.V.
Andhra Pradesh	29145	34910	40715	48737	38376.75	21.80
Arunachal	168.24	216.36	161.62	223.6	192.46	16.65
Assam	4319	5694	6223	6848	5771	18.66
Bihar	4557	7476	8671	8453	7289.25	25.99
Chhattisgarh	4840.79	6006.25	7310.2	8436	6648.31	23.48
Delhi	11767.49	13750.95	15803.69	17925.71	14811.96	17.89
Goa	1380	1653	1577	1708	1579.5	9.08
Gujarat	24893.45	31202.31	39464.67	40976.06	34134.12	22.00
Haryana	11082.01	13383.69	15376.48	16774.33	14154.13	17.49
Himachal	2101	2477	2728	3141	2611.75	16.73
J&K	2299.03	3414.01	4174	4579	3616.51	27.72
Jharkhand	4473	5522	6422	7305	5930.5	20.47
Karnataka	20234.69	25020.02	28414.44	33719.35	26847.13	21.15
Kerala	15833.11	18938.83	22511.09	24885.25	20542.07	19.37
M.P	10257	12517	14856	16650	13570	20.50
Maharashtra	42428	50596	60080	62530	53908.5	17.11
Manipur	227.57	296.92	258.52	395.74	294.69	24.80
Meghalaya	412.88	512.5	631.12	723.65	570.04	23.83

Mizoram	104.7	142.16	175.87	183.34	151.52	23.75
Nagaland	167.22	231.12	257.21	250.2	226.44	18.10
Orissa	6807	8197	10729	11817	9387.5	24.43
Pondicherry	595	750.15	1287.1	1256.71	972.24	36.20
Punjab	10017	11172	13218	14847	12313.5	17.43
Rajasthan	11901.24	14655.63	17214.34	19834.72	15901.48	21.40
Sikkim	142.74	124.19	227.08	286.33	195.09	38.72
Tamilnadu	28614	36289	44041	**51870**	40203.5	24.89
Tripura	444.93	666.32	763.07	837.09	677.85	25.12
U.P	24837	33107	34870	39645	33114.75	18.63
Uttrakhand	2940	3644	4289	**4875**	3937	21.17
West Bengal	13276	15888	18555	21931	17412.5	21.27
Union Revenue(Excise)	83013	144901	175845	169455	143303.5	29.55
Union Revenue(Service Tax)	49504	97509	132601	154780	108598.5	42.28
Average	13211.97	18776.98	22795.33	24871.22	19913.88	-
C.V	136.32	162.17	167.26	160.31	-	-

Source: www.cag.gov.in and own computation

On observation of above table no.2, it is found that the average collection of indirect tax revenue by Union and State is Rs. 19913.88 crore during the study period. Maharashtra state reported highest average collection of indirect tax revenue (Rs. 53908.5 crore), followed by Tamilnadu (Rs. 40203.5 crore) and Andhra Pradesh (Rs. 38376.75 crore). Mizoram reported the lowest average collection of indirect tax revenue (151.52) among all the states and union. Twenty two states reported the revenue below the average revenue collected by union and states. It happens due to abnormal collection of revenue from service tax by union. As far as variability of indirect tax revenue is concerned , central government (service tax) reported the highest inconsistency as evident from highest C.V.(42.28). In states Sikkim reported highest inconsistency in collection of indirect tax revenue over four years period as it is evident by highest C.V. (38.72).The lowest C.V. (9.08) is reported by Goa. It indicates that there is uniformity in collection of indirect tax revenue in these four years,as compared to other states of India. Further, year 2010-11 may be considered a consistent year in terms of collection of indirect tax revenue in comparison to other years as evident by lowest coefficient of variation(136.32). It means that there is uniformity in the collection of indirect taxation by different states and union in 2010-2011 as compared to other years. It may be concluded that union (service tax) and Sikkim are most sensitive towards collection of indirect tax revenue. Indirect tax collection of four years are depicted in the following graph.

Figure A: Indirect Tax Revenue Collection



Testing Variability in Revenue Collection of Different States

In order to check whether there is significant difference among different states regarding collection of tax revenue, Analysis of Variance technique has been administered. The results have derived by using MS-Excel 2007. The results are presented as follows:

Table 3: ANOVA Test Results

Source of Variation	SS	df	MS	F	F (critical Value)
Between Groups	24221697328.87	29	835230942.37	53.93007	1.593489
Within Groups	1393856593	90	15487295.48		
Total	25615553922	119			

Source: Own Computation

Null hypothesis is rejected because calculated value (53.93) of student t test is greater than the table value (1.59). It clearly indicates that the difference between revenue collections of different states is due to major reasons not due to any sampling fluctuations or chance. Therefore, for effective implementation of GST, proper compensation policy should be made for loss suffering states.

Determination of Actual Revenue Neutral Rate

The concept of Revenue Neutral Rate (RNR) implies that aggregate revenue is not expected to change, however the distribution of revenue may change and ultimately there is no loss of revenue to any government. In order to derive such single tax rate which is termed as Actual Revenue Neutral Rate (Actual RNR), actual indirect tax collected by the government during 2010-2011 to 2013-2014 has been considered. For determining Actual RNR, the revenues were summed up and assessable value is find as shown in appendix 1.For each year, an average tax rate is derived, a single rate which is derived by taking average of four years rate as shown in as shown in table.

Table 4: Calculation of Actual Revenue Neutral Rate

Particulars	2010-11	2011-12	2012-13	2013-14
Assessable Value (Independent variable Y)	3608701.54	5221122.43	5863553.8	6396413.16
Total Indirect Tax (Dependent variable X)	422783.1	600863.4	729450.5	795879.08
Average Tax Rate(%)(X/Y)	11.72	11.51	12.44	11.56
Overall Average Tax Rate (%)	11.80			

Source: Own Computation

The above table reveals overall average tax rate at 11.80%, which can also be termed as Actual Revenue Neutral Rate. It indicates presently government is collecting indirect tax revenue at the rate of 11.80%.

Determination of RNR for GST

In order to estimate RNR for GST, two variables are required - indirect tax revenue and assessable value for 2014-15 to 2017-18. The derivation of both variables is done by using different techniques as explained in next two paragraphs.

Estimation of Indirect Tax Revenue

As two variables are available for the study period, regression technique has been administered. A model is developed on the basis of assessable value (Y) as independent variable and indirect tax revenue as dependent variable (X). The resultant regression line is X= -74202.3+0.134937y, tax revenues were estimated for same years. Actual and Estimated revenues are shown in the table 4.

Table 5: Estimated Indirect Tax Revenue

Indirect Tax Revenue	2010-11	2011-2012	2012-2013	2013-2014
Actual Revenue	422783.09	600863.41	729450.5	795879.1
Estimated Revenue	412745.06	630320.30	717008.06	788910.5
	Calculated Student 't' value =1.69 Table value at 5% level of significance for 6 degree of freedom is 2.44			

Source: Own Computation

In order to check the validity of regression model, two mean't' test has been administered. The result of t-test reveals, the calculated value of t is 1.69 while critical value at 5% level of significance for 6 degree of freedom is 2.44. Since calculated value is less than critical value, null hypothesis is accepted. It indicates that there is no significant difference between estimated tax revenue and actual tax revenue.

The visible difference between both is due to sampling fluctuation, not due to any major reason.It clearly indicates that either regression model or actual tax revenue can be used for further analysis.

Estimation of Revenue Neutral Rate for GST

Further, using the same regression model, tax revenue is estimated for next four years. Since the validity of regression model has been established through t test, hence it can be used in further analysis. The developed model is based on assessable value as independent variable and total tax collected as dependent variable. Now for calculating RNR, estimated tax to be collected in next four years is divided by estimated assessable value. Hence both the figures have to be derived. In order to estimation of assessable value for incoming years (2014-15 to 2017-18), trend is calculated through least square method of time series analysis. Trend analysis, which is one of the most common and largely used methods, involves a simple extrapolation of past trends. Usually the trend is estimated by a least-squares fit of past data. The major advantage of this method is its simplicity. The disadvantage is that there is no attempt to explain why certain trends were established in the past, so statements on future structural changes are essentially ad- hoc. The assumption that past trends would persist in the future is, in some cases, a limiting assumption. If same trend is maintained then estimated assessable for next five years are given in table number- 2 in appendix. Table 5 shows, Estimated Assessable Value (determined through LSM), Estimated Tax (through regression model) and Estimated Rate. The estimated rate is derived by division of Estimated Tax and Estimated Assessable Value.

Table 6: Estimated RNR for GST

Particulars	2014-15	2015-2016	2016-2017	2017-2018
Estimated A.V.	7523839	8424396	9324952.54	10225509.16
Estimated Tax	941042	1062560	1184078.82	1305597.23
Estimated Rate (%)	12.51	12.61	12.70	12.77
Average Rate (%)	12.65			

Source: Own Computation

Table 5 shows estimated tax rates for next four years developed on the basis of regression model. The average of incoming four years (12.65%) may be considered as Estimated Revenue Neutral Rate for GST.

Validity Testing of RNR

In order to check validity of calculated RNR, t test has been administered. The results have been derived by using MS-Excel 2007. The results are presented as follows:

Table 6: T-test Results

Particulars	Actual RNR	Estimated RNR
Mean	11.80	12.65
Variance	0.187344	0.012692
Observations	4	4
Df	6	
t Stat	-3.76762	
t Critical two-tail	2.446912	

Source: Own computation

Null hypothesis is rejected because calculated value (3.77) of student t test is greater than the table value at 5% level of significance (2.45). It clearly indicates that the difference between actual RNR and estimated RNR is significant. The visible difference is due to major reasons not due to any sampling fluctuations or chance. In this way RNR (12.65%) estimated by authors own developed regression model can be considered as RNR for GST.

Conclusion

Currently different types of taxes are levied by Central and State government. The present paper analysed state sales tax, union excise and union service tax for year 2010-2011 to 2013-2014. The research

concluded that during the study period the average rate of indirect tax revenue is 11.80% and average collection is Rs. 19913.88 crore. Among all states, Maharashtra is highest revenue generating state while Mizoram is lowest as evident by their average collection of Rs. 53908.5 crore and Rs. 152.52 crore respectively. As far as variability is concerned service tax reported highest inconsistency as evident from C.V. i.e. 42. 28%. In states, Sikkim reported highest inconsistency while Goa lowest as evident by C.V. i.e. (38.72%) and (9.08%) respectively. It may also be concluded that year 2010-2011 had uniformity in collection of indirect tax revenue in comparison to other years as evident by C.V. (136.32).Further as there is huge variation among different states in collection of revenue as depicted by ANOVA results. Therefore for effective implementation of GST, proper compensation policy should be made for high revenue generating states. Over the past couple of years, predictions on the proposed rate of goods and services tax have fluctuated between 11 percent and 27 per cent. The present research paper suggests 12.65% as standard GST rate. Although it is much lesser than estimation made by various agencies yet it is suggested because government is keen interested in abolishing existing available exemptions in excise duty, custom duty and VAT. It comes around 382 exemptions. Due to removal of exemptions tax base would be widen so government will not lose revenue and it will lead to maintain inflation rate in India. The present research study suggest 12.65% as proposed tax rate for entire nation.

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APPENDIX

Assessable Value for Year 2010-11 to 2013-14

In order to find out assessable value each year state tax, Union Excise and Union Service Tax are divided by their respective tax rates and summed up as shown in table. In below table, state tax is nominated as 1, Union Excise as 2, and Union Service tax as 3 in table 6.

Table 1: Assessable Value for Year 2010-11 to 2013-14

Particulars	2010-11			2011-12			2012-13			2013-14		
Rate of Tax (in %)	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
	12.5	**10.30**		**12.5**	**10.30**		**12.5**	**12.36**		**12.5**	**12.36**	
State Tax	2322128.2			2867627.28			3368036			3773152.64		
Union Excise	805951.456			1406805.83			1422694.2			1370995.15		
Union Service Tax	480621.359			946689.32			1072823.6			1252265.37		
Assessable Value	3608701.54			5221122.43			5863553.8			6396413.16		

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POPULARITY OF ACCOUNTING AS INTER-DISCIPLINARY SUBJECT
AMONG BA, B. Sc. STUDENTS IN SELECT AUTONOMOUS COLLEGES: A STUDY

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M.V. Karunasree**

ABSTRACT

Accounting is a language of business which is required to record the financial transactions in a systematic manner. It is a technical subject. To acquaint the knowledge of accounting the students should follow a set of rules, principles, concepts and conventions of accounting. As per UGC guidelines all universities in India are implementing Choice Based Credit System (CBCS) for Undergraduate courses from this academic year which is mandatory. Under CBCS the commerce department in autonomous colleges at Hyderabad (i.e., UCW, AMS, RBVRR colleges) is offering to non-commerce students (like BA and B.Sc) accounting as inter-disciplinary subject. Many students have chosen accounting as their ID paper which shows a demand for accounting education. This paper makes an attempt to study the popularity of accounting as ID subject among BA and B.Sc students in autonomous colleges. The required data for the study is collected through the primary source by administering a questionnaire and data is analyzed with appropriate statistical tools.

KEYWORDS: *Accounting Education, Inter-Disciplinary Subject, CBCS, Popularity of Accounting.*

Introduction

In India, the government has initiated a New Education Policy to bring out reforms in education system through an apex body i.e. University Grants Commission (UGC). The UGC has initiated several steps to bring equity, efficiency and academic excellence in National Higher Education System, which includes innovation and improvement in course curricula, introduction of paradigm shift in learning and teaching pedagogy, examination and education system. The education plays an important role in building of a nation. According to the UGC, 40,760 colleges/educational institutions in 766 universities are engaged in imparting education in our country. During the academic year 2014-15, 265.85 lakhs (provisional) students enrolled in various courses at all levels in universities/colleges and other institutions of higher education as compared to the unrevised figure of 237.65 lakhs in the previous year, registering an increase of 11.87 per cent. Out of the total enrollment of students (265.85 lakhs), 37.41% students had been in the faculty of Arts, followed by 17.59% in Science and 16.39% in Commerce/ Management. In Telangana State the enrollment of students in 20 universities is about 11, 89,647 students. All of them have entered recently into the semester system to match with the international educational pattern. However, the present

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education system is conventional which does not suit to our young minds in developing confidence, values, skills and knowledge. The present situation necessitates redesigning of the education system, not only by introducing innovations but developing "learner-centric approach in the entire education and evaluation system. In India, higher education institutions have been following marks or percentage based evaluation system, which obstructs the flexibility for the students to study the subjects/courses of their choice and their mobility to different institutions. There is need to have the flexibility in education system, so that students depending upon their interests and aims can choose interdisciplinary, intra-disciplinary and skill-based courses. This can become possible when the choice based credit system (CBCS), an internationally acknowledged system, is adopted. The choice based credit system offers opportunities and avenues to learn core subjects and also exploring additional avenues of learning beyond the core subjects for holistic development of an individual. The CBCS will facilitate the student a bench mark of the courses with best international academic practices which will shift the focus from the teacher-centric to student-centric education. The student may undertake as many credits as they can cope up with or without repeating all courses in a given semester if they fail in one/more courses. CBCS allows students to choose inter-disciplinary, intra-disciplinary courses, skill oriented papers even from other disciplines according to their learning needs, interests and aptitude. CBCS makes education broad-based and on par with global standards. One can take credits by combining unique combinations. For example, Physics with Economics, Microbiology with Chemistry or Environment Science etc. CBCS offers flexibility for students to study at different times and at different institutions to complete one course. Credits earned at one institution can be transferred to other institution. The UGC under CBCS gave a list of interdisciplinary subjects to be opted by the non commerce students to enhance their skills. A few generic elective are listed below; Mathematical Aptitude and Reasoning, Report and Review Writing, Disaster Management, Fundamentals of Food and Nutrition, Basics of Computer Application, Communication Skills & Soft Skills, History & Culture, Environmental Science, Human Values & Ethics and Practical Accountancy. The practical accountancy is offered by the Department of Commerce to those students who are from Non –Commerce background as their ID Subject. (UGC CBCS guidelines).

Accounting is a language of business which is required to record the financial transactions in a systematic manner. It is a technical subject. To acquaint the knowledge of accounting the students should follow a set of rules, principles, concepts and conventions of accounting. Under CBCS the commerce department in autonomous colleges at Hyderabad (i.e., UCW, Nizam, and AMS colleges) are offering to non-commerce students (like BA and B. Sc) accounting as an inter-disciplinary subject. Many students have chosen accounting as their ID paper which shows a demand for accounting education. Accounting education, to be purposeful, must be coordinated at all levels of graduates to equip the students to meet the requirements of the professional demands at the society.

Review of the Literature

- **A** research paper by **Dimitrios V. Siskos (2015)** presents a literature review addressing the various aspects of the accounting profession and accounting education in Greece during the global financial crisis.
- **Okolie Onyeisi Romanus1 and Amos Arowoshegbe (2014)** discussed on the development of accounting education in Nigeria and the challenges confronting it. They critically examined the state of the profession and the dynamics that will help to build implicit confidence in the Accountant, mold his character and develop an analytical mindset which will assist him to provide high standard of professional services.
- **Kabiru Isa Dandago and** Nor **Azlina Binti Shaari (2013),** examined the impact of focus of research in accounting on the quality of accounting education in Malaysian Universities. They

recommended that academic accounting researches aimed at improving the quality of accounting knowledge to be imparted to the students, and for satisfying the needs of the economy.

- **Mahmoud Nassar, Husam Al-Khadash and Osama Mahmoud (2013)** identified the problems that are obstructing the development of accounting education and the accounting profession in Jordan. They suggested that the accounting educational system in Jordanian universities should emphasize on how to better serve students and ensure that they will be competitive in the future work force.
- **LI Lin and SHENG Xin (2012)** emphasized **i**n their study on the theoretical relationship between undergraduate accounting education and ability cultivation of professional accountants. Secondly, they explored on the professional roles and demands of professional competences of undergraduates major in accounting.
- **Ahmet GOKGOZ and Sema ULKU (2012),** aimed to evaluate the accounting education provided in vocational high schools in Turkey from the perspective of students. For the purposes of the study, a questionnaire was prepared and applied to 267 second year students receiving education, as of the fall semester of the 2012-2013 academic years in the accounting and taxation departments of vocational high schools in the provinces of Bolu, Düzce, Yalova, Kocaeli, and Sakarya, within the boundaries of the Eastern Marmara region in Turkey. The data obtained in the questionnaire form were subject to frequency and factor analyses.
- **Mohammed Naim Chaker and Tengku Akbar Tengku Abdullah (2011)** assessed in their paper the accountancy skills acquired by the graduates of KIMEP accounting during their study at the college. The findings of the study were discussed under three categories namely technical and functional skills, interpersonal and communication skills, and organizational and business management skills. This study found that KIMEP accounting graduates equipped with professional ethics (organizational and business management skills), interpersonal and communication skills, auditing skills and information development and distribution skills (technical and functional skills).
- **Mark Molloy (2009)**, in his study explored several issues which have been linked with influencing a student's attitude toward the accounting profession. These issues include the factors that influence their choice of career, their decision to pursue a career in accounting, perceptions of the accounting profession and the timing of the career decision.
- **Richard French. G and Richard E. Coppage (2008)**, in their article discussed (1) the need for change in education (2) a model for accounting education, and (3) examples of how to improve accounting education. Accounting programs that adopt significant changes provide students with the necessary skills will thrive in the future and continue to supply the profession with a sufficient supply of qualified graduates.

Research Gap

The above review of the literature reveals that most of the studies are on commerce graduates whose knowledge is to be improved in accounting education. Necessary accounting skills are improved and they are made accounting professionals. But there is no study on non commerce students who are opting accounting as an interdisciplinary paper under CBCS. It is very much necessary to understand the motivational factors which drive non Commerce students towards Commerce subjects. Therefore, in this paper an attempt to study on the Popularity of Accounting as an Interdisciplinary Subject among BA, B. Sc Students in select Autonomous Colleges.

Objectives of the Study

The present study is empirical in nature and makes an attempt to study the Popularity of Accounting as an Interdisciplinary Subject among BA, B. Sc Students in select Autonomous Colleges and also examine the principal factors for opting accounting as their Interdisciplinary paper.

Research Methodology

The study adopts a survey method. The required information is collected from primary and secondary sources. The primary data is collected from the BA, B.Sc students who are studying in select autonomous colleges in Hyderabad (University College for Women, Nizam College and Andhra Mahila Saba College). A questionnaire was prepared and administered to a sample of 300 students on a convenience basis. A questionnaire is administered to the BA, B.Sc students who have selected the accounting as inter-disciplinary paper in this academic year under CBCS. The questionnaire is consisting of questions like course in which the student is studying, their group at intermediate, whether ID subject has helped them in fulfilling their desire to learn accounting, the reasons for opting accounting and so on. Do they prefer accounting related jobs, what is their choice in particular accounting job and their perceptions relating to the factors which makes accounting as more popular are analyzed. Likert Scale on five points (i.e., Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree) is used to analyze the factors which make accounting popular among the non Commerce students. The secondary data is also collected from the UGC website and journals. The data are analyzed with the help of percentages. Factor analysis is also used to identify the principal factors which enthuse the non Commerce students to opt for accounting as their ID paper. Factor analysis is used to reduce the variables into different components. In the present study the variables which motivate the non Commerce students to opt for ID are identified and factor analysis is used to reduce them into meaningful components. The validity of Likert Scale used in the questionnaire is cent percent of the data tested using Cronbach's Alpha. The reliability of the data is .754 whereas the Cronbach's alpha based on standardized items is .761 as per SPSS package.

Scale: Cronbach's Alpha

Case Processing Summary

		N	%
Cases	Valid	295	100.0
	Total	295	100.0

a. List wise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items/Factors
.754	.761	14

Results and Discussion

A sample of 300 students of autonomous colleges of University College for Women, Nizam College and Andhra Mahila Saba College was given the questionnaire and 295 have responded to it. The students belong to BA, B.Sc who has exercised their choice under CBCS to select accounting as an interdisciplinary subject from the given list of subjects. All 295 students have responded to the questions relating to their present pursuing course, course opted at intermediate and perceptions of accounting as their ID subject.

Table 1: Sample Details

Description	Number of Respondents	Percentages
Under Graduation		
B A	95	32
B Sc	200	68
Total	295	100
Intermediate		
MPC	147	50
MEC	40	14
Bi PC	73	25
CEC	28	9
HEC	7	2
Total	295	100

ID Subject helped in fulfilling the desire of learning accounting		
Yes	194	66
No	101	34
Total	295	100

Source: Primary Data

Table 1 reveals that 68percent of students are from B.Sc and 32 percent are from BA. The majority of the students who have opted accounting as their ID subject are from science background i.e., 50 percent from MPC group and 25 percent from Bi PC this shows the interest of non commerce students with a science background in accounting subject. The 66 percent of students are satisfied with the ID paper which helped them in fulfilling the desire of learning accounting.

Table 2: Reasons for Opting Accounting as ID subject

Description	Number of Respondents	Percentages
Reasons for opting Accounting as ID Subject		
Teachers	57	19
Parents	152	52
Friends	43	15
Relatives	13	5
Seniors	30	10
Total	295	100
Would like to do Accounting Job in Future		
Yes	205	69
No	90	31
Total	295	100
Preferable Accounting Job		
Chartered Accountant	57	19
Company Secretary	30	10
ICMA	3	1
Bank Jobs	120	41
Insurance Jobs	5	2
Corporate Jobs	30	10
Other Own Business	50	17
Total	295	100

Source: Primary Data

It is observed from the Table 2 that 52 percent of students have opted accounting as their ID subject because their parents have influenced them to select the same and followed by 19 percent influenced by teachers. The 69 percent of students have an idea to pursue an accounting job after they complete their graduation and remaining 31 percent of students would like to choose other jobs. 41 percent of students preferred bank jobs as their future career, followed by 19 percent who prefer to be chartered accountants, 17 percent would like to have their own business and 10 percent each prefer to go for company secretary and corporate jobs.

The factors which make accounting popular as an ID subject are analyzed by using the Likert Scale which was mentioned earlier. The factors are identified as accounting subject is very interesting, accounting knowledge is essential, accounting is useful for business venture, accounting is useful for competitive exams, learning numbers and statements is enthusiastic, it is a new area to be explored, useful in investing in shares/debentures etc, helps in entrepreneurship, opted to fulfill CBCS criteria, helpful in finding job/profession, learning accounting in limited hours is possible , accounting helps in day to day life, content of the subject is challenging and location of Commerce Department decided the ID subject.

Table 3: Factors on Popularity of Accounting

Factors	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Accounting subject is very Interesting	102	104	66	13	9
Accounting knowledge is Essential	75	140	48	22	10
A/c is useful for Business Venture	85	140	53	13	4
A/c is useful for Competitive Exams	121	121	36	7	8
Learning Numbers and Statements is enthusiastic	69	117	80	21	8
It is a New area to be explored	70	131	69	15	10
Useful in investing Shares/Debentures etc	124	96	48	17	10
Helps in Entrepreneurship	110	118	39	20	4
Opted to fulfill CBCS Criteria	40	120	82	37	11
Helpful in finding Job/ Profession	59	124	84	20	5
Learning Accounting in limited hours is possible	54	74	74	82	11
Accounting helps in day to day life	73	127	62	17	10
Content of the subject is challenging	61	120	83	23	5
Location of Commerce Department decided the ID subject	58	61	46	90	40

Source: Primary data

Factor Analysis

The KMO (Kaiser-Meyer-Olkin) test was performed in order to determine the suitability of the expressions that were formed to know the popularity of accounting as an ID subject among BA, B.Sc in select autonomous colleges at Hyderabad. As can be seen in Table 4, the KMO value was determined as 0.778, above the critical value of 0.700.In addition, the Bartlett test determined that all of the factors were significant (p: 0.000). Thus, the reliability of the factors increased, as a result of the factor analysis, the factor expression regarding the popularity of accounting among BA, B.Sc in select autonomous colleges at Hyderabad.

Factor Analysis Results generated from SPSS

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.778
Bartlett's Test of Sphericity	Approx. Chi-Square	679.212
	d.f	91
	Sig.	.000

Table 5: Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**3.491**	**24.935**	**24.935**	**3.491**	**24.935**	**24.935**	**2.404**	**17.170**	**17.170**
2	**1.464**	**10.454**	**35.390**	**1.464**	**10.454**	**35.390**	**1.858**	**13.271**	**30.442**
3	**1.271**	**9.080**	**44.470**	**1.271**	**9.080**	**44.470**	**1.527**	**10.908**	**41.350**
4	**1.076**	**7.684**	**52.154**	**1.076**	**7.684**	**52.154**	**1.513**	**10.804**	**52.154**
5	.990	7.072	59.226						
6	.813	5.805	65.031						
7	.767	5.476	70.507						

8	.749	5.351	75.858						
9	.694	4.957	80.815						
10	.644	4.599	85.414						
11	.577	4.124	89.538						
12	.552	3.940	93.478						
13	.499	3.561	97.039						
14	.415	2.961	100.000						

Extraction Method: Principal Component Analysis.

The factor load and the Eigen values obtained for the all components as a result of the factor analysis are provided in Table 5 .As it can be seen in Table 5, the values for all of the factor loads and reliability values are considerably higher, and it is possible to say that the factors are very reliable and valid. The table 6 shows the component matrix based on four principal component factors which have a significant role in opting accounting as ID Paper.

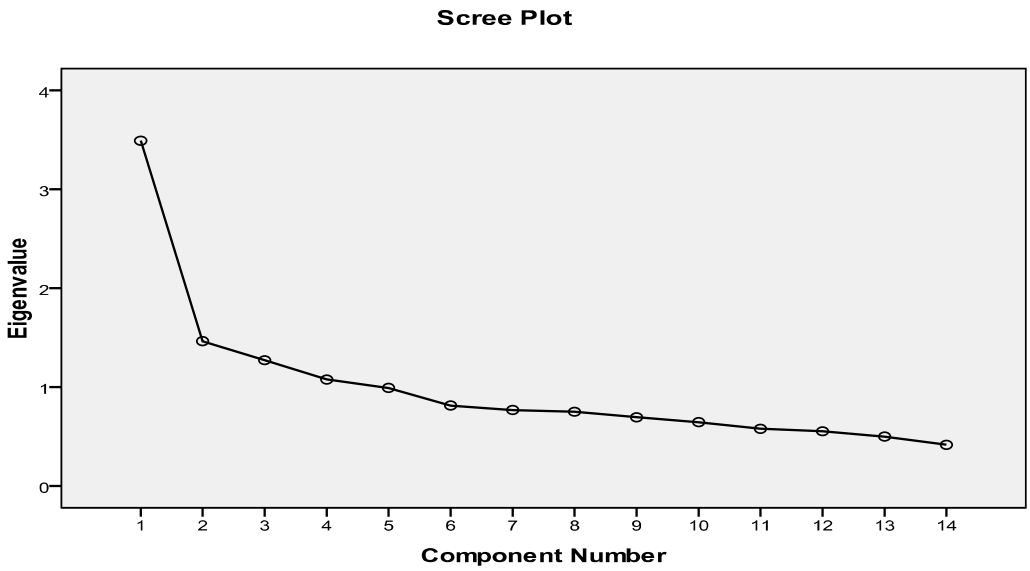
Table 6: Component Matrix

	Component			
	1	**2**	**3**	**4**
Accounting subject is very Interesting	.510	.163		-.357
Accounting knowledge is Essential	.590	-.286	-.336	.135
A/c is useful for Business Venture	.584	-.251	-.129	-.316
A/c is useful for Competitive Exams	.480	-.330	-.147	.340
Learning Numbers and Statements is enthusiastic	.680	-.122		-.194
It is a New area to be explored	.497	-.295	-.392	
Useful in investing Shares/Debentures etc.	.480	-.263	.542	.179
Helps in Entrepreneurship	.534		.310	
Opted to fulfill CBCS Criteria	.338	.543	-.140	.468
Helpful in finding Job/ Profession	.465	.303	.211	.409
Learning Accounting in limited hours is possible	.343	.569		-.484
Accounting helps in day to day life	.482		.550	
Content of the subject is challenging	.513		-.224	
Location of Commerce Department decided the ID subject	.377	.548	-.382	
Extraction Method: Principal Component Analysis.				

a. 4 components extracted.

Table 6 contains component loadings, which are the correlations between the variable and the component. The Columns 1, 2, 3 and 4 are the principal components that have been extracted (the four components that had an Eigen value greater than 1. From the Table it is evident that factor, namely accounting is helpful in finding jobs/profession has high loadings of.465, .303, .211 and .409 on four factors. It is useful in investing in shares/debentures has high loadings of .480, .542 and .179 on three factors. Further the factor that the students who are opting to fulfill CBCS criteria have a high loadings of.338, .543 and .468. Whereas the students feel that accounting subject is interesting has shown through the loadings of .510 and .163. They also express that the accounting knowledge is essential has seen through the loadings of .590 and .135. The non Commerce students felt that the accounting subject is

useful for competitive exams have seen through loadings .480 and .340. Accounting education will help them in Entrepreneurship has loadings of.534 and .310. Learning accounting is possible in limited hours has loadings of .343 and.569. Accounting knowledge helps them in day to day life is.482 and .550. Location of Commerce Department decides the ID subject is .377 and .548 on two factors (Factor loading helps to identifying which variables are associated with the particular factors).



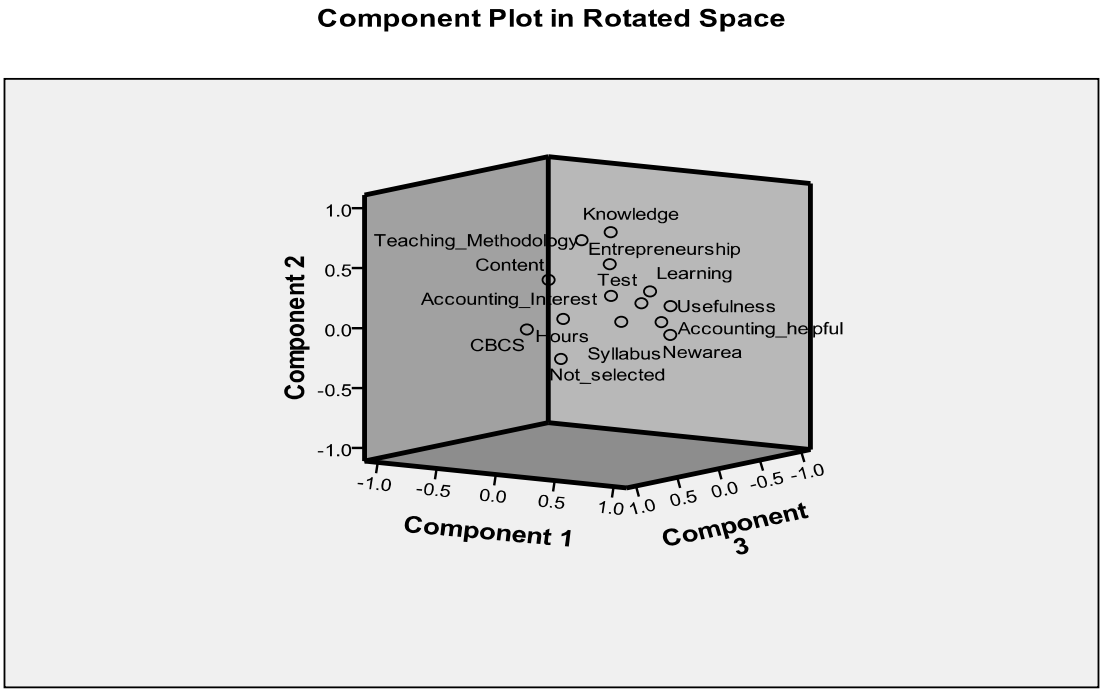


Table 7: Rotated Component Matrix

	Component			
	1	**2**	**3**	**4**
Accounting subject is very Interesting	.230	.251		**.553**
Accounting Knowledge is Essential	**.728**		.144	
A/c is useful for Business Venture	**.599**	.175	-.149	.330
A/c is useful for Competitive Exam	**.571**	.240	.163	-.258
Learning Numbers and Statements is Enthusiastic	**.546**	.317		.341
It is a New area to be explored	**.697**			
Useful in investing shares/ Debentures etc	.175	**.766**		
Helps in Entrepreneurship	.217	**.514**		.278
Opted to fulfill CBCS Criteria			**.800**	
Helpful in Future Job / Profession		.442	**.566**	
learning accounting in limited hours is possible			.202	**.795**
Accounting helps in day to day life		**.704**	.106	.180
Content of the Subject is Challenging	**.471**		.262	.139
Location of Commerce Department decides the ID Subject	.202	-.197	**.610**	.372
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				

a. Rotation converged in 6 iterations.

From the Table 7, it can be noted that the component -1 is named as the dynamics of the subject which comprises of six variables. They are: accounting knowledge is essential, accounting useful in a business venture, accounting is useful in competitive exams, learning numbers is enthusiastic, accounting is a new area to be explored and content of the subject is challenging. The component -2 defined as general value of the subject because the students felt that three variables play a key role in their decision to opt the accounting paper for its value. Accounting is useful in investing in shares/ debentures which helps in entrepreneurship and it also helps in day to day life. The component-3 is stated as convenience of the students, which comprises of three variables. The students opt the accounting paper to fulfill the CBCS criteria; it helps them in finding jobs and professions along with the location of the commerce department which holds the key to decide the ID paper. The component -4 defined as conviction about the subject comprises two variables which are; accounting subject is very interesting and learning accounting is possible in limited hours.

Conclusions

The Govt. of India and apex body of education, i.e. UGC has initiated a national education policy to bring the reforms in the present education system by introducing the CBCS system. CBCS allows students to choose interdisciplinary, intra-disciplinary courses, skill oriented papers even from other disciplines according to their learning needs, interests and aptitude. It makes education broad-based and on par with global standards. This CBCS will enhance the skills of the student who can cope-up with all necessary requirements of the market. From the study it is clear that the subject Accounting has more popularity among the non commerce students. The Commerce Department needs to conduct, an awareness program to BA BSc classes, so that they can prefer to take accounting subject as an ID paper with full knowledge. It is necessary to see that accounting education need to be developed to fulfill the

job requirement of non commerce students. The accounting knowledge can be put into niche areas to attract the non-Commerce students such as Bio-Accounting, Chemical Accounting, Political Accounting, Environmental Accounting and Social Accounting etc. The common man requires the accounting knowledge in their day to day life to know about the cash book, budgets, pass book, vouching, computerized accounting, and annual reports information etc. The accounting knowledge should be made as part of their curriculum for non commerce students, so that they are induced to invest their amount into shares/debentures/ bonds etc. If such programmes are developed and awareness is created among the non Commerce students about accounting subject then it will become more popular among the non Commerce students as ID paper. Once they start appreciating the accounting subject they may be oriented to choose professional accounting as their career.

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SYMMETRY OF DISCLOSURE OF ACCOUNTING POLICIES WITH ACCOUNTING STANDARDS: A STUDY OF TWO INDIAN CEMENT COMPANIES

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ABSTRACT

The Cement Companies are one of the oldest sectors in Indian industries. The infrastructure development of the country in the recent years is the demand deriver for the cement industry. India's cement industry is a vital part of its economy, providing employment to more than a million people, directly or indirectly. The investors are always want to know about their own interest in the cement companies. The view presented in the financial statements of an enterprise of its state of affairs and of the profit or loss can be significantly affected by the accounting policies followed in the preparation and presentation of the financial statements. Accounting Standards are designed to apply to the general purpose financial statements and other financial reporting. Responsibility for the preparation of financial statements and for adequate disclosure is that of the management of the enterprise. The true and fair view is expected to be presented in financial statements of any enterprises.

The paper aims at studying symmetry of the Disclosure of Accounting Policies with accounting standards. The researchers have selected Top Two listed Cement Companies in India, which are listed with and a part of the Nifty index at National Stock Exchange. For the purpose of analysis we have collected data for ten years (2001-02 to 2014-15). The researchers have made an attempt work on the index indicating the disclosure of accounting policies

KEYWORDS: *Disclosure, Accounting Policies, Accounting Standards, Cement Companies, India.*

Introduction

India is the second largest producer of cement in the world. The Indian cement companies have played vital role in economy, providing employment to more than a million people, directly or indirectly. India ranks second in the production of dement in the world. Ever since it was deregulated in 1982, the Indian cement industry has attracted huge investments, both from Indian as well as foreign investors. India has a lot of potential for development in the infrastructure and construction sector and the cement sector is expected to largely benefit from it. Here the stakeholders of companies should have assurance of accounting information symmetric with accounting standards.

Accounting information is broadly used by various stakeholders for decision-making either for internal or external matters. The true and fair view is expected to be presented in financial statements of any enterprises. This paper aims at analysing conformity of Disclosure of accounting policies with

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accounting standard. 'The objectives of choosing accounting policies are determined by the need to provide a clear image on the financial position and performance' (Ţenovici, 2012: p.721). The disclosure of accounting information has been widely discussed by scholars in the discipline of accounting; however the very few researchers have been attracted towards this issue.

The view presented in the financial statements can be significantly affected by the accounting policies followed in the preparation and presentation of the financial statements. 'Accounting Standard (AS) 1 Disclosure of Accounting Policies' was issued 1979 in India. Recently, 'Indian Accounting Standard (Ind. AS) 1 Presentation of Financial Statements' has been issued to guide for proper presentation of financial statements. The disclosure of accounting policies is to promote better understanding of financial statements to all user at all possible extent.

Review of Literature

In India, Accounting Standard (AS) 1 describes about disclosure of accounting policies. The accounting policies refer to the specific accounting principles and the methods of applying those principles adopted by the enterprise in the preparation and presentation of financial statements. The following are examples of the areas in which different accounting policies may be adopted by different enterprises: (a) Methods of depreciation, depletion and amortization, (b) Treatment of expenditure during construction, (c) Conversion or translation of foreign currency items, (d) Valuation of inventories, (e) Treatment of goodwill, (f) Valuation of investments, (g) Treatment of retirement benefits, (h) Recognition of profit on long-term contracts, (i) Valuation of fixed assets and (j) Treatment of contingent liabilities (ICAI, 1979). According to AS-1 every enterprise should make the following disclosures:

- All significant accounting policies adopted in the preparation and presentation of financial statements,
- The disclosure of the significant accounting policies as such should form part of the financial statements and Disclosure at one place,
- Any change in an accounting policy which has a material effect.

Few researchers have made attempts to measure the disclosure (A K M Waresul Karin, 2005; Abdel-Azim, 2007; Andrew Alford, 1993; Angkarat, 1992). The empirical studies on disclosure of accounting policies are also observed in few cases. Annuar (2010) has examined the impact of juristic views on the operations of Malaysian takaful companies. In this study the differences are serious enough who warrant interventions from regulations in the form of mandatory disclosure in the annual reports. 'The accounting policies represent the science, practice and art of lending an entity in order to attain a goal (fair presentation) and respectively the tactics, the ability used (by technical and economic specialist) to quantify, Know, manage and control the assets, liabilities and equity as well as the results of that entity' (Cenar,2012).With considering the views and empirical analysis made by earlier researches the objectives and hypotheses have been formulated as follows:

Objectives

- To study the symmetry of the Disclosure of Accounting Policies with accounting standards.
- To verify the conformity of accounting policies adopted by selected cement companies, with fundamental accounting assumptions.

Hypotheses

- The actual disclosure of accounting policies and the expected disclosure of the accounting policies according to accounting standards are equal.
- Accounting Policies adopted by selected companies are according to Fundamental Accounting Assumptions.

Research Methodology

The researchers have selected Top Two Listed Cement Companies working in India, which are considered for Nifty index of National Stock Exchange (See Table 1). The periodical scope of the study is

confined to the period of Ten Years (2001-02 to 2014-15). The topical scope of the study is limited to five Accounting Policies which are: (a) Methods of Depreciation, Depletion and Amortization (b) Valuation of Inventories (c) Valuation of Investments (d) Valuation of Fixed Assets and (e) Treatment of Contingent Liabilities. The present researchers have identified the variables as base for measuring the disclosure of accounting policies (See Table 2). The factors influencing disclosure of accounting policies have been identified according to the respective accounting standard (See Table 3 to 7).

The present researchers have made an attempt to visualize the nature and extent of disclosure of accounting policies. For this purpose, the researchers have developed index called 'Total Accounting Policies Disclosure Index'. The measurement of disclosure of each accounting policy has been made by using the measurement of Accounting Policy Disclosure (APD) systematically. It has been administered as whether the company discloses an item of information in the annual report. If the Cement Companies discloses an item of information in its annual report, then it scores '1' and if not then it scores '0'. For every factor influencing accounting policy, this method of measurement has been applied. Total Accounting Policies Disclosure Index (TAPD) isthe summation of APD of all five accounting policies selected.

APD = Accounting Policy Disclosure

d = Accounting policy for Depreciation, Depletion and Amortization

i = Accounting policy for Valuation of Inventories

in = Accounting policy for Valuation of Investment

fa = Accounting Policy for Fixed Assets

cl = Accounting Policy for Contingent Liabilities

$$TAPD = \sum_{i=0}^{n} di$$

d = 1 if the item di is disclosed

d = 0 if the item di is not disclosed

$$\sum di - APDd + APDi + APDin + APDfa + APDcl$$

$$\text{Disclosure Index} - \frac{\text{Actual Disclosure index}}{\text{Total Possible disclosure}}$$

The conformity of disclosure of accounting policy with accounting standards have been assessed by comparing actual disclosure for selected accounting policies. The researchers have selected Top Two listed Cement Companies in India, which are considered for Nifty index listed in National Stock Exchange. For the purpose of analysis we have collected data from annual reports for Ten Years (2001-02 to 2014-15).

Table 1: Selected Sample

S. No.	Code	Cement Sectors
1	ACCL	ACC Ltd. Cement products
2	ACL	Ambuja Cement Limited

Table 2: Variables used in the Study

Variable	Explanation
APD	Accounting Policies Disclosure- Measuring the comprehensiveness of disclosure in the annual reports related to accounting policies.
DDA	Depreciation, Depletion, Amortization.
VOIT	Valuation of Investment
VOFA	Valuation of Fixed Assets
TCL	Treatment of Contingent Liabilities
DI	Disclosure Index

Table 3: Factors Considered AS-6 Depreciation Accounting

Factors	Depreciation, Depletion, Amortization
Factor-1	Total cost of each class of assets-historical cost and revalued cost
Factor-2	Total depreciation for the period of each class of assets
Factor-3	Accumulated depreciation of each class of assets
Factor-4	Depreciation method used
Factor-5	Depreciation rates or the useful live of the asset, if they are different than the rates specified in governing statute.
Factor-6	A change in method of depreciation is treated as a change in accounting policy and is disclosed separately.
Factor-7	Revalued amount depreciable
Factor-8	Effect of the revaluation of the fixed assets on the amount of depreciation.

Table 4: Factors Considered AS-2 Valuation of Inventories

Factors	Valuation of Inventories
Factor-9	Accounting policy adopted in measuring inventories
Factor-10	Cost formula used
Factor-11	Classification of Inventories like- Raw Material, Work- in - Progress, Finished goods, Spare parts and Its carrying amount

Table 5: Factors Considered AS-13 Accounting for Investment

Factors	Valuation of Investment
Factor-12	Accounting policies followed for valuation of investment
Factor-13	Classification of investment into current and long term in addition to classification
Factor-14	Aggregate amount of quoted and unquoted securities separately
Factor-15	Minimum holding period of sale / disposal
Factor-16	Utilization of sale proceeds or non-remittance of sale proceeds of investment held outside India.

Table 6: Factors considered AS-10 Accounting for Fixed Assets

Factors	Valuation of Fixed Assets
Factor-17	Gross and Net book values of fixed assets at the beginning and at the end of accounting period showing additions, disposal, acquisition and other movements.
Factor-18	Expenditure incurred on account of fixed assets in the course of construction or acquisition.
Factor-19	Revaluation amount substituted for historical cost of fixed assets.
Factor-20	Method adopted to compute the revalued amount
Factor-21	Whether an external valuer has valued the fixed assets, in case where fixed assets are stated at revalued amount.

Table 7: Factors considered AS-29 Provision, Contingent Liabilities and Contingent Assets

Factors	Treatment of Contingent Liabilities
Factor-22	Opening balance
Factor-23	Addition to and use of the provision
Factor-24	Unused amount written back
Factor-25	Closing balance of the provision
Factor-26	A brief description of provision
Factor-27	Major assumption about future events made while measuring the provision and indication of uncertain items.
Factor-28	The expected reimbursement recognized as an assets.

Data Analysis and Interpretation

The data have been analysed in the light of objectives and hypothesis of the study by employing disclosure index. Conformity of accounting policies has been made with considering the expected

number of items and actual number of items in respect of five selected accounting policies and their respective attributes. The comparison and verification have been done between actual accounting policies adopted and fundamental accounting assumptions for expected disclosure.

Table 8: Disclosure of Accounting Policies by Cement Companies

Year	ACCL		ACL	
	APD	TAPDI	APD	TAPDI
2001-02	20	0.71	22	0.79
2002-03	20	0.71	24	0.86
2003-04	22	0.79	24	0.86
2004-05	21	0.75	24	0.86
2005-06	26	0.93	24	0.86
2006-07	23	0.82	24	0.86
2007-08	24	0.86	24	0.86
2008-09	24	0.86	24	0.86
2009-10	23	0.82	24	0.86
2010-11	23	0.82	24	0.86
2011-12	24	0.86	24	0.86
2012-13	24	0.86	24	0.86
2013-14	23	0.82	25	0.89
2014-15	23	0.82	25	0.89
Average	23	0.80	24	0.90

Source: Computed by the researchers on the basis of data collected from annual reports of sample companies (2001-02 to 2014-15)

Note: ACL= Ambuja Cements Ltd. ACCL= Associated Cement Companies Ltd.

Table 8 deals with Accounting Policies Disclosure and Total Accounting Policies Disclosure Index related to cement companies during the period 2001-02 to 2014-15. Ambuja Cement Ltd. has highest score of accounting policies disclosure as compared to ACC Ltd. It is observed that in the year 2005-06 both the companies have disclosed maximum score of accounting policies disclosure. The selected cement companies have reported lowest Disclosure Index score in the year 2001-02. In case of ACL's disclosed information score is similarly.

Table 9: Average Value of Disclosure of Accounting Policies, in Relation to Accounting Assumptions and Considerations ACC Ltd.

Accounting Policies	Accounting Assumptions			Considerations		
	Going Concern	Consistency	Accrual	Prudence	Substance over form	Materiality
DDA	0.57	0.43	0.00	0.00	0.90	0.90
VOIR	0.00	0.29	0.71	1.00	0.00	0.00
VOIT	0.07	0.71	0.21	1.00	0.00	0.30
VOFA	0.07	0.21	0.71	0.50	0.60	0.70
TCL	1.00	0.00	0.00	1.00	0.60	0.00

Source: Computed by the researchers on the basis of data collected from annual reports of sample companies (2001-02 to 2014-15)

The disclosure of Five (DDA, VOIR, VOIT, VOFA and TCL) accounting policies has been analyzed in Table 9 in terms of fundamental accounting assumptions and considerations with which policies are disclosed. Among fundamental accounting assumptions, 'consistency' is major assumption and all three considerations are significant.

Table 10: Average Value of Disclosure of Accounting Policies, in Relation to Accounting Assumptions and Considerations (Ambuja Cement Ltd.)

Accounting Policies	Accounting Assumptions			Considerations		
	Going Concern	Consistency	Accrual	Prudence	Substance over form	Materiality
DDA	0.00	0.00	1.00	0.71	0.93	0.93
VOIR	0.20	0.40	0.40	1.00	0.00	0.00
VOIT	0.60	0.10	0.30	1.00	0.00	0.64
VOFA	0.00	0.00	1.00	0.57	1.00	0.50
TCL	1.00	0.00	0.00	1.00	0.93	0.00

Source: Computed by the Researchers on the basis of data collected from Annual reports of sample companies (2001-02 to 2014-15)

The disclosure of Five (DDA, VOIR, VOIT, VOFA and TCL) accounting policies has been analyzed in Table 10 in terms of fundamental accounting assumptions and considerations with which policies are disclosed. Among fundamental accounting assumptions, 'accrual' is major assumption whereas the 'prudence' and 'materiality' are significant considerations.

Hypothesis Testing

- The first hypothesis set is that "The actual Disclosure of accounting policies and the expected disclosure the accounting policies according to accounting standards, are equal". For the purpose of testing of hypothesis the same has been presented in the testable form as follows:
  - **H_0** : There is no significant difference between the actual disclosure of accounting policies and expected disclosure of accounting policies according to accounting standards.
  - **H_1** : There is significant difference between the actual disclosure of accounting policies and expected disclosure of accounting policies according to accounting standards.

  The basic data from Table 8 has been used for testing of this hypothesis.

Table 11: Analysis of One Sample t-test

Cement Companies	Mean	S.D.	df	Sig. (2-tailed)	Result
ACCL	0.8070	0.06961	9	0.000	H_0 accepted
ACL	0.8530	0.02214	9	0.000	H_0 accepted

Form the year 2001-02 to 2014-15 the one sample t-test has been used. The above table mean value and standard deviation is given, degree of freedom = 9 and confidence level = 0.95. Calculated value 0.000 is less than 0.05. Therefore, the null hypothesis is accepted and alternative hypothesis is rejected there was a statistically significant difference between mean. It means the cement companies have disclosed accounting policies are made according to accounting standard.

- The second hypothesis set is that "Accounting Policies adopted by selected companies are according to Fundamental Accounting Assumptions".
  - **H_0** : There is no significant difference between the accounting policies adopted by selected Indian companies is according to fundamental accounting assumptions.
  - **H_1** : There is significant difference between the accounting policies adopted by selected Indian companies is according to fundamental accounting assumptions.

Table 12: Summary Results of Chi-square test Analysis

Parameter	χ^2 Value	Critical Value	df	Confidence Level	Result
Accounting Assumptions	6.714	0.711	4	0.95	H0 Rejected

df = degree of freedom

As Chi-square value (6.714) is larger than the critical value (0.711) at degree of freedom = 4 and confidence level 0.95. Hence, Null hypothesis is rejected. The alternative hypothesis is accepted. It means accounting policies adopted by selected companies are according to fundamental accounting assumptions.

Recommendations

- The ACC Ltd. should disclose 'effect of the revaluation of the fixed assets on the amount of depreciation' in Depreciation, Depletion and Amortization policy. They should disclose the point the 'to compute the method of amount revalued of fixed assets' and also required to mention 'the expected reimbursement recognized as an asset' under Treatment of Contingent Liability accounting policy.
- The Ambuja Cement Ltd. should disclose 'minimum holding period of sales and disposal' under Valuation of Investment policy. They should adopt Valuation of Fixed Assets accounting policy 'to compute the method of amount revalued of fixed assets' and also required to state the 'expected reimbursement recognized as an asset' under Treatment of Contingent Liability accounting policy.

Conclusion

Disclosure of accounting policies has vital role in practice of Indian accounting standards. In the present study an attempt has been made for studying four aspects i.e. Disclosure of Accounting Policies, Disclosure of Accounting Policies through Disclosure Index, and conformity on the basis of considerations. The present study is not restricted to Disclosure of Accounting Policies but it has also covered Disclosure expected by other accounting standards such as Accounting Standard-2, Accounting Standard-6, Accounting Standard-10, Accounting Standard-13,and Accounting Standard-29.These five accounting policies have been analysed considering 'Accounting Policies Disclosure Index'. This disclosure information will be useful to shareholder and other users like foreigner for taking investment decision for maximization of wealth. The companies have to take steps to improve the disclosure mechanism by considering the result of this study.

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Annexure

Table 1: Analysis of Disclosure of Accounting Policies in terms of Accounting Assumptions and Considerations regard to ACC Ltd.

Accounting Policies	Accounting Assumptions DDA			Accounting Assumptions VOIR		
	Going Concern	Consistency	Accrual	Going Concern	Consistency	Accrual
2001-02	1	0	0	0	0	1
2002-03	1	0	0	0	0	1
2003-04	1	0	0	0	0	1
2004-05	0	1	0	0	1	0
2005-06	1	0	0	0	1	0
2006-07	1	0	0	0	0	1
2007-08	0	1	0	0	0	1
2008-09	0	1	0	0	0	1
2009-10	0	1	0	0	0	1
2010-11	1	0	0	0	0	1
2011-12	1	0	0	0	1	0
2012-13	1	0	0	0	1	0
2013-14	0	1	0	0	0	1
2014-15	0	1	0	0	0	1
Average	**0.57**	**0.43**	**0.00**	**0.00**	**0.29**	**0.71**

Source: Computed by the researcher on the basis of data collected from Annual reports of sample companies (2001-02 to 2014-15)

Table 2

Accounting Policies	Accounting Assumptions VOIT			Accounting Assumptions VOFA		
	Going Concern	Consistency	Accrual	Going Concern	Consistency	Accr1ual
2001-02	0	1	0	0	0	1
2002-03	0	1	0	0	0	1
2003-04	0	1	0	0	0	1
2004-05	0	1	0	0	0	1
2005-06	0	0	1	0	0	1
2006-07	1	0	0	0	0	1
2007-08	0	1	0	1	0	0
2008-09	0	1	0	0	1	0
2009-10	0	1	0	0	0	1
2010-11	0	1	0	0	0	1
2011-12	0	0	1	0	0	1
2012-13	0	0	1	0	0	1
2013-14	0	1	0	0	1	0
2014-15	0	1	0	0	1	0
Average	**0.07**	**0.71**	**0.21**	**0.07**	**0.21**	**0.71**

Table 3

Accounting Policies	Accounting Assumptions TCL		
	Going Concern	Consistency	Accrual
2001-02	1	0	0
2002-03	1	0	0
2003-04	1	0	0
2004-05	1	0	0
2005-06	1	0	0
2006-07	1	0	0
2007-08	1	0	0
2008-09	1	0	0
2009-10	1	0	0
2010-11	1	0	0
2011-12	1	0	0
2012-13	1	0	0
2013-14	1	0	0
2014-15	1	0	0
Average	**1.00**	**0.00**	**0.00**

Table 4

Accounting Policies	Considerations DDA			Considerations VOIR		
	Prudence	Substance over form	Materiality	Prudence	Substance over form	Materiality
2001-02	0	1	1	1	0	0
2002-03	0	1	1	1	0	0
2003-04	0	1	1	1	0	0
2004-05	0	1	1	1	0	0
2005-06	0	1	1	1	0	0
2006-07	0	1	1	1	0	0
2007-08	0	1	1	1	0	0
2008-09	0	1	0	1	0	0
2009-10	0	1	0	1	0	0
2010-11	0	1	1	1	0	0
2011-12	0	1	1	1	0	0
2012-13	0	1	1	1	0	0
2013-14	0	0	1	1	0	0
2014-15	0	1	1	1	0	0
Average	**0.00**	**0.90**	**0.90**	**1.00**	**0.00**	**0.00**

Source: Computed by the researcher on the basis of data collected from Annual reports of sample companies (2001-02 to 2014-15)

Table 5

Accounting Policies	Considerations VOIT			Considerations VOFA		
	Prudence	Substance over form	Materiality	Prudence	Substance over form	Materiality
2001-02	1	0	0	0	1	1
2002-03	1	0	0	0	1	1
2003-04	1	0	0	0	1	1
2004-05	1	0	0	0	1	1
2005-06	1	0	0	1	1	0
2006-07	1	0	1	0	1	0
2007-08	1	0	0	1	0	0
2008-09	1	0	0	1	1	0
2009-10	1	0	0	1	0	1
2010-11	1	0	0	1	0	1
2011-12	1	0	0	1	0	1
2012-13	1	0	1	1	0	1
2013-14	1	0	1	0	1	1
2014-15	1	0	1	0	1	1
Average	**1.00**	**0.00**	**0.30**	**0.50**	**0.60**	**0.70**

Table 6

Accounting Policies	Considerations TCL		
	Prudence	Substance over form	Materiality
2001-02	1	1	0
2002-03	1	1	0
2003-04	1	1	0
2004-05	1	1	0
2005-06	1	1	0
2006-07	1	0	0
2007-08	1	0	0
2008-09	1	0	0
2009-10	1	0	0
2010-11	1	0	0
2011-12	1	0	0
2012-13	1	1	0
2013-14	1	1	0
2014-15	1	1	0
Average	**1.00**	**0.60**	**0.00**

Table 7 : Analysis of Disclosure of Accounting Policies, in terms of Accounting Assumptions and Considerations Ambuja Cement Ltd.

Accounting Policies	Accounting Assumptions DDA			Accounting Assumptions VOIR		
	Going Concern	Consistency	Accrual	Going Concern	Consistency	Accrual
2001-02	0	0	1	0	1	0
2002-03	0	0	1	0	1	0
2003-04	0	0	1	0	1	0
2004-05	0	0	1	0	1	0
2005-06	0	0	1	0	1	0
2006-07	0	0	1	0	0	1
2007-08	0	0	1	0	0	1
2008-09	0	0	1	0	0	1
2009-10	0	0	1	1	0	0
2010-11	0	0	1	0	0	1
2011-12	0	0	1	0	0	1
2012-13	0	0	1	0	0	1
2013-14	0	0	1	1	0	0
2014-15	0	0	1	1	0	0
Average	**0.00**	**0.00**	**1**	**0.21**	**0.36**	**0.43**

Source: Computed by the researcher on the basis of data collected from Annual reports of sample companies (2001-02 to 2014-15)

Table 8

Accounting Policies	Accounting Assumptions VOIT			Accounting Assumptions VOFA		
	Going Concern	Consistency	Accrual	Going Concern	Consistency	Accr1ual
2001-02	0	1	0	0	0	1
2002-03	0	0	1	0	0	1
2003-04	1	0	0	0	0	1
2004-05	1	0	0	0	0	1
2005-06	0	1	0	0	0	1

2006-07	1	0	0	0	0	1
2007-08	1	0	0	0	0	1
2008-09	1	0	0	0	0	1
2009-10	0	0	1	0	0	1
2010-11	0	0	1	0	0	1
2011-12	0	0	1	0	0	1
2012-13	1	0	0	0	0	1
2013-14	1	0	0	0	0	1
2014-15	1	0	0	0	0	1
Average	**0.57**	**0.14**	**0.29**	**0.00**	**0.00**	**1.00**

Table 9

Accounting Policies	Accounting Assumptions TCL		
	Going Concern	Consistency	Accrual
2001-02	1	0	0
2002-03	1	0	0
2003-04	1	0	0
2004-05	1	0	0
2005-06	1	0	0
2006-07	1	0	0
2007-08	1	0	0
2008-09	1	0	0
2009-10	1	0	0
2010-11	1	0	0
2011-12	1	0	0
2012-13	1	0	0
2013-14	1	0	0
2014-15	1	0	0
Average	**1**	**0**	**0**

Table 10

Accounting Policies	Considerations DDA			Considerations VOIR		
	Prudence	Substance over form	Materiality	Prudence	Substance over form	Materiality
2001-02	0	1	1	1	0	0
2002-03	0	1	1	1	0	0
2003-04	1	1	1	1	0	0
2004-05	1	1	1	1	0	0
2005-06	1	1	1	1	0	0
2006-07	1	1	1	1	0	0
2007-08	1	1	1	1	0	0
2008-09	1	1	1	1	0	0
2009-10	1	1	1	1	0	0
2010-11	1	1	1	1	0	0
2011-12	1	0	0	1	0	0
2012-13	1	1	1	1	0	0
2013-14	0	1	1	1	0	0
2014-15	0	1	1	1	0	0
Average	**0.71**	**0.93**	**0.93**	**1**	**0**	**0**

Source: Computed by the researcher on the basis of data collected from Annual reports of sample companies (2001-02 to 2014-15)

Table 11

Accounting Policies	Considerations VOIT			Considerations VOFA		
	Prudence	Substance over form	Materiality	Prudence	Substance over form	Materiality
2001-02	1	0	0	0	1	1
2002-03	1	0	0	0	1	1
2003-04	1	0	0	0	1	1
2004-05	1	0	0	1	1	0
2005-06	1	0	1	1	1	0
2006-07	1	0	1	1	1	0
2007-08	1	0	0	1	1	0
2008-09	1	0	1	1	1	0
2009-10	1	0	1	1	1	0
2010-11	1	0	1	1	1	0
2011-12	1	0	1	1	1	1
2012-13	1	0	1	0	1	1
2013-14	1	0	1	0	1	1
2014-15	1	0	1	0	1	1
Average	**1**	**0**	**0.64**	**0.57**	**1**	**0.50**

Table 12

Accounting Policies	Considerations TCL		
	Prudence	Substance over form	Materiality
2001-02	1	1	0
2002-03	1	1	0
2003-04	1	1	0
2004-05	1	0	0
2005-06	1	1	0
2006-07	1	1	0
2007-08	1	1	0
2008-09	1	1	0
2009-10	1	1	0
2010-11	1	1	0
2011-12	1	1	0
2012-13	1	1	0
2013-14	1	1	0
2014-15	1	1	0
Average	**1**	**0.93**	**0**

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A STUDY ON LENDING CONCENTRATION OF INDIAN PUBLIC SECTOR BANKS TO THE SENSITIVE SECTORS

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Saswata Choudhury**

ABSTRACT

Commercial banks with its number of branches and subsidiaries work as the backbone of the economy of a country. The activity today, of the commercial banks are not only confined to the traditional kind of banking like accepting deposit, lending credit, creating credit etc. Globally, banks now stretched their activities towards various intermediary and advisory services to the clients. Indian banks are also working on the same way. With its increasing sphere of activities, the risks for the commercial banks are also increasing. One of the major risks in the banking business is the concentration risk. The concentration risk arises due to concentration of credit extended by banks in a single entity or group of entities carrying on same line of business. In India there are certain regulatory measures, issued by the Reserve Bank of India (RBI), for better asset management and safeguarding the banks from the concentration risks. In this study an attempt has been made to study the different risks associated with the banking business as well as the nature of financing by banks to the sensitive sectors in India. And it has also been tried in this study to examine the relationship between banks' performance and lending concentration. For the purpose of the study we have selected 27 public sector banks operating in India and data have been collected for eight years from 2007 to 2014, since the new exposure norm has come into effect from 2007. The result of this study reveals that the lending concentration has significant relation with the banks' performance and it also has significant impact on banks' performance.

KEYWORDS: *Central Banking, Commercial Banks, Risks, Diversification.*
JEL Classification: E58, G21, G11

Introduction

Commercial banks are the financial institutions which provide financial services like accepting deposits, lending money and creating credit etc. But today, apart from its basic and traditional activities, commercial banks stretched its operation towards various financial and advisory services for its clients. In recent years several commercial banks have to suffer severe financial turmoil due to the corporate failures seen globally or on Indian context. The basic reason behind such crisis of those commercial banks was the concentration of credits towards those corporate entities. The concentration of credit also increased the concentration of risks for those commercial banks. The failures of those corporate entities leaded the bank either to fail or to suffer huge losses. To safeguard the Indian banks from the risks arising out of such credit concentration and for the better asset management, the Reserve Bank of India has identified three sectors, namely real estate, capital market and commodity market, as the sensitive

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sectors for the financing and also issued some measures for financing towards these sectors. These sectors are sensitive because the volatility in these sectors can largely affect the asset quality of the banks. In this study, the discussions are made relating to the risks associated with the banking business, the nature of financing to the sensitive sectors and whether there is any relation between the performance of the Public Sector Banks (PSBs) in India and their lending concentration towards two largest sensitive sectors, real estate and capital market.

Risks in Banking

Risk may be defined as the probability of not getting according to the expectation. Every financial institution has to face several types of risks namely credit default risk, financial risk, liquidity risk, maturity risk, interest rate risk, currency risk, operational risk etc. As a financial institution banks also have to face these kinds of risks. The "Principles for Effective Risk Data Aggregation and Risk Reporting (January, 2013)" published by the Basel Committee of Banking Supervision, categorized risks of the banks into but not limited to three major classes; counterparty credit risk, liquidity risk and operational risk. The Office of the Comptroller of Currency (OCC), US Department of Treasury defines the counterparty credit risk as "the risk arising from the possibility that the counterparty may default the amounts owned on a derivative transaction". Simply it can be said that, the risk arises out of the possibility of not getting any return from the borrower, may be in terms of interest or principal, according to the terms and condition of the agreement can be called the counterparty credit risk. This risk is also known as the credit risk. The liquidity risk arises due to lack of marketability of the security or assets. It can be expressed as the probability of incurring losses for inadequate liquid resources for clearing certain payment obligation within a certain time horizon. The operational risk arises due to failure in the internal operational activity/ system or from some external inevitable events. The Basel Committee of Banking Supervision defines the operational risk as "the risk of direct or indirect loss resulting from inadequate or failed internal process, people and system or from external events".

The credit risk can be classified into three namely credit default risk, concentration risk and country risk. Credit default risk arises when the borrower is either not making payment according to the terms of the contract or delaying the payment unreasonably. The concentration risk arises when the lending or advancing of the banks are heavily concentrated to a single entity or group of entity belonging to the same industry or carrying on same line of business. The country risk arises from the possible changes in the business scenario of a country which affects the foreign currency inflows and outflows. This study is focused on the concentration risk; hence the entire discussion will be concentrated on this kind of risk.

Evidence from Industry

The Indian banking industry as well as the international banking had suffered from this risk concentration. There are number of evidences of the bank sufferings. In international context, the failures of the large borrowers like Enron, Parmalat and World Com causes considerable losses to its lenders. Enron was the US energy, commodity and service company based on Houston, Texas. J.P. Morgan Chase and the Citigroup suffered worst for the failure of Enron. The Citigroup again and the Merrill Lynch were the worst sufferer in the scam of multinational Italian dairy and food corporation Parmalat. US's second largest telecom company WorldCom's failure leaded to suffer the Citigroup again.

In Indian context, the failure of Kingfisher Airlines added recent evidence of financial turmoil of banks. The major sufferers in this case were the major banks in India namely State Bank of India, Bank of Baroda, Punjab National Bank, IDBI Bank, Central Bank of India, Bank of India and Corporation Bank etc. But the worst evidence of bank failure in India quite possibly the failure of the Global Trust Bank in early '00s. GTB was one of the fastest growing banks in India in those days. It was failed due to its advances were heavily concentrated in the capital market. Later this bank was merged with the Oriental Bank of Commerce.

The Exposure Norm

Exposure means financing, in the banking terminology. This financing is related to the sensitive sectors. Sensitive sectors are those sectors, in which volatility causes the severe change in the asset quality of the banks. RBI had identified three sectors as the sensitive sectors, namely real estate, capital market and commodity market. May be from the evidence of the GTB, Reserve Bank of India had

introduced the Exposure Norm for all Scheduled Commercial Banks (excluding the Regional Rural Banks) in India in the Mid-Term Policy Review on August 20, 2002. The present norm had been come into force by the Master Circular – Exposure Norms, DBOD No. Dir. BC. 11/13.03.00/ 2007-08 dated July 2, 2007, effecting from April 1, 2007. Exposure comprises with the credit exposure and the investment exposure. Credit exposure comprises:

- All types of funded credit – where actual transfer of fund takes place
- All types of non funded credit – where actual transfer of fund does not takes place
- Facilities extended by way of equipment leasing, hire purchase finance and factoring services etc.

Investment exposure comprises the followings:

- Investment in Shares and Debentures of companies
- Investment in PSU Bonds
- Investment in Commercial Papers (CPs)
- Investment in Debentures, Bonds, Security Receipts and Pass-Through Certificates (PTCs) issued as compensation by a Securitization company or a Reconstruction Company
- Investment in Bonds and Debentures of the Corporates which are guaranteed by the Public Finance Institutions

The limit of exposure would be 15% of capital funds of the respective bank in case of single borrower or 40% of capital funds of the respective bank for the group of borrowers. For the purpose of calculation, Capital funds comprise of Tier I and Tier II capital as specified in the capital adequacy standard, of the previous year. However this ceiling can be relaxed under certain circumstances. If the credit extended towards infrastructure project, additional exposure of 5% of capital fund is permissible to the single borrower and additional 10% is permissible to the group of borrowers. Additional 5% of capital fund can be allowed further for single or group borrower in exceptional conditions, along with proper disclosure in annual reports. The exposure limit to the single borrower can be increased to 25% of the capital fund only in case of oil companies who have issued oil bonds.

Review of Literature

- **Abiola, I. & Olausi, A. S. (2014)** investigated the impact of credit risk management on performance of commercial banks in Nigeria. Panel regression model had been applied on the model prepared from financial data on Seven (7) commercial banks for Seven (7) years. It was found that the credit risk management has significant impact on the profitability.
- **Acharya, V. V., Hasan, I. & Saunders, A. (2002)** studied the effect of specialization and diversification on the return and the risk of Italian banks. The data has been obtained on 105 Italian banks over the period 1993-1999. The result did not guarantee that the diversification of banks' assets should produce superior performance.
- **Afriyie, H. O. & Akotey, J. O. (2013)** examined the impact of credit risk management on profitability of rural and community banks in the Brong Ahafo Region of Ghana. Data had been collected from Ten (10) rural banks for the period of Five (5) years from 2006 to 2010. The findings revealed that there was a significant positive relationship between credit risk management and the profitability of banks. It was also found that the rural banks do not have the sound and effective credit risk management practice.
- **Ahmed, M. M. (Undated)** examined the effects of market concentration, bank-specific and macroeconomic determinants of profitability of Indian banking industry for period of Eight (8) years from 2004 to 2011. It was found that the market concentration has positive impact on performance of Indian banks.
- **Beatrice, N. (2012)** studied credit risk management process and the performance of Centenary Rural Development Bank of Kampala. Primary data were collected by way of questionnaires. It was found that there was a strong positive relation between the credit risk management and the performance of the bank.
- **Behr, A., Kamp, A., Memmel, C. & Pfingsten, A. (2007)** studied whether the benefits of risk sharing outweigh the risk of specialization of the German banks. The study was conducted on all the German banks for the period of 1993-2003. The study revealed that the specialized banks have slightly higher return than the diversified banks.

- **Berger, A. N., Hasan, I., Korhonen, I. & Zhou, M. (2010)** evaluated the empirical relationship between diversification strategies and risk return trade off in banking. Data have been collected on Russian banks during the period 1999-2006. They found that the banks' performance is inconsistently responding to their diversification strategies.
- **Haan, J. D. & Poghosyan, T. (2011)** studied whether the banks earning volatility depends upon the bank size and degree of concentration. The study was performed on all commercial, savings and cooperative banks in US for the period Q1 2004 to Q4 2009. It was found that the bank size reduces the return volatility. But this negative impact of the bank size on earning volatility reduces with market concentration.
- **Hosna, A., Manjura, B. & Juanjuan, S. (2009)** studied the relationship of the credit risk management and profitability of Four (4) commercial banks in Sweden for Nine (9) years. It was found that credit risk management explains profitability to an important extent.
- **Li, F. & Zou, Y. (2014)** investigated the relationship between credit risk management and profitability of commercial banks in Europe. Data had been collected from Forty Seven (47) commercial banks in Europe for Six (6) from 2007 to 2012. The findings showed that the credit risk management has positive effect on the profitability.
- **Turkmen, S. Y. & Yigit, I. (2012)** examined the effect of sectoral and geographical diversification on the performance of Turkish banks for the period of 2007 and 2011. Sample has obtained from 50 Turkish banks. The result revealed that sectoral diversification has negative effect on banks' performance.

Objective of the Study

In this study an attempt has been to study the nature of financing to the sensitive sectors as well as different types of risks associated with the banking business. It has also been tried in this study to examine whether there is any relationship between banks' performance and lending concentration and the impact of lending concentration on the banks' performance.

Research Methodology

- **Sample Design:** For the purpose of this study we have selected all Public Sector Banks in India, working as on 31st March, 2014. The numbers of PSBs are working as on that date is 27.
- **Study Period:** Study period is Eight (8) years from end March 2007 to end March 2014 for this study. This is because the new exposure norm has come into effective from April 1, 2007 and the data available as per the new exposure norm from end March 2007.
- **Data Source:** Data have been collected from three sources. Firstly, it is the Annual Reports of the respective bank. Secondly from the Statistical Tables Relating to Banks, various issues, as issued by RBI annually. And thirdly from the data package "AceEquity", developed and maintained by Accord.
- **Variables Used**: In this study, two dependent variables have been used, in form of Return on Asset (ROA) and Return on Equity (ROE), as the measures of performance of the public sector banks. According to the Reserve Bank of India Glossary, ROA is the profitability ratio which indicates net profit generated on total assets. It can be calculated as follows:

$$\text{ROA} = \frac{\text{Profit After Tax}}{\text{Average Total Assets}} \times 100$$

Where,

$$\text{Average Total Assets} = \frac{\text{Total Assets of Previous Year} + \text{Total Assets of Current Year}}{2}$$

ROE is another performance measure of the commercial banks. This is the ratio of net profit to the shareholders equity. It can be calculated as follows:

$$\text{ROE} = \frac{\text{Profit After Tax}}{\text{Average Shareholders' Equity}} \times 100$$

Where,

$$\text{Average Shareholders' Equity} = \frac{\text{Shareholders' Equity of previous year} + \text{Shareholders' Equity of current year}}{2}$$

In this study, two sectors both real estate and capital markets have been selected. Herfindahl-Hirschman Index (HHI) has been used as the measure of concentration. It is used as the opposite of Diversification Index (DI). HHI is the sum square of exposures as a fraction of total exposure under a given classification. It is calculated as under

$$HHI = 1 - DI = \sum_{i-1}^{N} \left(\frac{X_i}{Q}\right)^2$$

Where, i = Sub-sectors under exposure X
X = Sector of lending under total exposure
Q = Total exposure under given classification
The value of HHI runs within 0 to 1. Higher value of HHI indicates higher level of concentration.

Hence, two HHIs have been used. Firstly, HHI_RE has been used as a measure of lending concentration in real estate market. And secondly, HHI_CM has been used as a measure of lending concentration in capital market. The calculations are as below

$$HHI\_RE = \left(\frac{\text{Exposure to Real Estate Market}}{\text{Total Exposure to Sensitive Sectors}}\right)^2, \text{ and}$$

$$HHI\_CM = \left(\frac{\text{Exposure to Capital Market}}{\text{Total Exposure to Sensitive Sectors}}\right)^2$$

- **Hypothesis to be tested**

H_{01} : There is no relationship between banks' performance and Lending Concentration to the sensitive sectors (i.e., Real Estate and Capital Market).

H_{A1} : There is a relationship between banks' performance and Lending Concentration to the sensitive sectors.

H_{02} : Lending Concentration to the sensitive sectors does not affect the banks' performance.

H_{A2} : Lending Concentration to the sensitive sectors affects the banks' performance.

- **Tools and Techniques Used:** To find out the relationship between the variables, lending concentration and bank's performance Pearson's Correlation Analysis has been done. And later to find out the impact of lending concentration, we have conducted Regression Analysis.

Analysis & Findings

To study the relationship between lending concentration and banks' performance, we have used Pair-wise Pearson's Correlation and Regression Analysis. At first, Pair-wise Pearson's Correlation Analysis has been performed to find out whether there is any statistically significant relation within the variables ROA, ROE, HHI_RE and HHI_CM. The Table 1 below displays the result of the Pearson's Correlation analysis.

Table 1: Pearson's Correlation Analysis

	roa	roe	hhi_re	hhi_cm
roa	1.0000			
roe	0.9936* 0.0000	1.0000		
hhi_re	-0.8276* 0.0112	-0.8396* 0.0091	1.0000	
hhi_cm	0.7930* 0.0189	0.8014* 0.0168	-0.9959* 0.0000	1.0000

Source: Authors' own calculation

The Table 1 above shows the correlation matrix, which reveals that all the correlations between the variables are statistically significant. Lending concentration, both to real estate and capital market, has significant correlation with the ROA and ROE. HHI_RE has negative and significant correlation with both ROA (i.e. -0.8276) and ROE (i.e. -0.8396). It indicates that if banks increase their lending to the real

estate, then both ROA and ROE will decrease. On the other hand, HHI_CM has positive significant correlation with both ROA (i.e. 0.7930) and ROE (i.e. 0.8014). It shows that if banks increase their lending towards capital market then both ROA and ROE will increase. Hence from the outcomes of the correlation analysis, hypothesis H01 that there is no relationship between banks' performance and Lending Concentration to the sensitive sectors is rejected and it can be said that there is a significant relationship between the lending concentration and the performance of the banks. The level of significance is considered 5% for this purpose.

To find out whether the lending concentration affects the banks performance, two sets of Regression Analysis have been done, separately considering ROA and ROE as dependent variables. Table 2 below displays regression results considering ROA as the dependent variable and HHI_RE and HHI_CM are considered as independent variables.

Table 2: Regression Analysis (Dependent Variable: ROA)

Variables	Model 1 (t value)	Model 2 (t value)	Model 3 (t value)
Intercept	4.459 (4.49)	0.551* (5.04)	22.332 (2.15)
HHI_RE	-4.232* (-3.61)	-	-23.514 (-2.10)
HHI_CM	-	49.255* (3.19)	-235.142 (-1.73)
R Square	0.684	0.628	0.802
F	13.04*	10.17*	10.17*
Prob>F	0.0112	0.0189	0.0173
*Statistically significant at 5% level			

Source: Authors' own calculation

Table 2 reveals the regression analysis considering ROA as dependent variable. HHI_RE solely can explain about 68% of ROA. The value of F statistics is 13.04 and the p-value of F statistics is 0.0112 which is less than 0.05. It indicates that the Model-1is fit for the study. The result shows that HHI_RE has significant negative impact on ROA (i.e. -4.232).

On the other hand, individually HHI_CM can explain about 62% of ROA. The value of F statistics is 10.17 and the p-value of F statistics is 0.0189 which is less than 0.05. It indicates that the Model-2 is fit for the study. The result shows that HHI_CM has significant positive impact on ROA (i.e. 49.255).

Both HHI_RE and HHI_CM jointly can explain about 80% of ROA. The value of F statistics is 10.17and the p-value of F statistics is 0.0173. It indicates the Model 3 is also fit for the study. The result reveals that jointly both HHI_RE and HHI_CM have negative effect on ROA (-23.514 and -235.142 respectively).

Table 3 below shows the regression results considering ROE as the dependent variable and HHI_RE and HHI_CM are considered as independent variables.

Table 3: Regression Analysis (Dependent variable: ROE)

Variables	Model-4 (t value)	Model- 5 (t value)	Model-6 (t value)
Intercept	82.979* (4.64)	9.186* (4.59)	454.101* (2.71)
HHI_RE	-79.952* (-3.79)	-	-480.319* (-2.65)
HHI_CM	-	926.877* (3.28)	-4882.464 (-2.22)
R Square	0.704	0.642	0.851
F	14.33*	10.77*	14.32*
Prob>F	0.0091	0.0168	0.0085
*Statistically significant at 5% level			

Source: Authors' own calculation

Table 3 reveals that HHI_RE individually explains about 70% of ROE. The value of F statistics is 14.33 and the p-value of F statistics is 0.0091 which is below 0.05. It indicates the Model-4 is fit for the study. It reveals that HHI_RE has negative and significant impact on ROE (-79.952). On the other hand, HHI_CM explains about 64% of ROE. The value of F statistics is 10.77 in this model and the p-value of F statistics is 0.0168 which is below 0.05. It indicates that the Model-5 is fit for the study. This Model indicates that HHI_CM has significant positive impact on ROE (926.877). Moreover, jointly HHI_RE and HHI_CM can explain about 85% of ROE. The Model-6 is also fit because the value of F statistics is 14.32 and the p-value of the F statistics is 0.0085 which is less than 0.05. And jointly both HHI_RE and HHI_CM have significant negative impact on ROE (-480.319 and -4882.464 respectively).

Hence from the results of both Table 2 and Table 3, the null hypothesis H02 that lending concentration to the sensitive sectors does not affect the banks' performance is rejected and it can be said that the lending concentration to the sensitive sectors affects the bank' performance.

Conclusion

This paper examined the relationship of lending concentration to the real estate and capital market, on performance of the Public Sector Banks in India. We have found that lending to the capital market has positive significant correlation with both ROA and ROE. The coefficients are 0.7930 and 0.8014 respectively. It can be concluded that if banks increase their lending towards capital market then both ROA and ROE will increase. But, lending to the real estate has significantly negative correlation with both ROA and ROE. The coefficients are -0.8276 and -0.8396 respectively. It indicates that if banks increase their lending to the real estate, then both ROA and ROE will decrease. So it is suggested that banks should be more careful to manage their financing towards the real estate. Hence, the results indicate that there is a relationship between banks' performance and Lending Concentration to the capital market and real estate.

In this paper it is also examined the impact of lending concentration to the real estate and capital market on banks' performance. We have found that lending concentration to real estate has significantly negative impact on both ROA and ROE. It can be concluded that lending concentration to the real estate has adverse impact on banks' performance. On the other hand, we have also found that lending concentration to the capital market has significantly positive impact on both ROA and ROE. Alternatively, it can be said that lending concentration to the capital market has favourable impact on ROA and ROE. But interestingly, the joint effect of lending concentration to both real estate and capital market is negative on both ROA and ROE. This may be because of the negative effect of lending concentration to real estate is outweighing the positive effect of lending concentration to the capital market. However, the results of the regression analysis clearly indicate that the lending concentration to real estate as well as capital market has effect on banks' performance. Results may differ for the other commercial banks which are designated as Private Sector Banks in India and it is also matter of further studies. Further study may also be conducted on credit diversification to food credit, non food credit, priority sector lending etc. of the commercial banks in India as well as on the other banks under global economy.

Limitations

This study also has certain limitations. This study has been conducted on 27 commercial banks in India with 8 years data. The findings and conclusion may be different if the study is conducted for all the banks working in India. The result may also be different if the study period is increased. Apart from that the result may be different if the tools and techniques have their own limitations.

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DOMESTIC ACCOUNTING SYSTEM:
AN EMPIRICAL STUDY OF JODHPUR DISTRICT

Dr. Ritu Soni*

ABSTRACT

An individual or household entity also needs to make rational and economic decisions related to domestic finance. The planning and controlling of domestic finance can be only possible through a reliable information system. Accounting can provide the information related to income and expenses of an individual through recording, summarizing and finalizing the domestic economic transaction. The basic objective of domestic accounting system is to develop an accounting information system as a tool for measuring the domestic income and expenses for rational decision making about use of scarce resources vis-à-vis maintenance of quality of life and the ultimate aim is to develop accounting system for better life. The main objectives of this research is to know about accounting awareness among individuals, to underscore the significance of accounting information related to domestic income and expenditure for decision making and to develop domestic accounting system and formats for an individual or a family to facilitate the recording of domestic transactions.

KEYWORDS: *Domestic Accounting System, Personal Accounting, MSS, ACS, Domestic Economic Transaction.*

Introduction

Accounting is as old as the civilization itself. The historians have also proved that both recording and writing evolved in response to the need to account. Thus, the early accounting served as an aid to human memory and the age-old business prudence. It implies that keeping the record of the transactions was essential to minimize the loss suffered and because of short term memory/ forgetfulness in human beings and human vulnerable ness. In addition to this, accounting would facilitate periodic computation of income and assessment of the activities of the business entities to ensure the future plans thereof. There are four main basic pillars of business organization – assets, liability, income and expenses. Accounting helps to represent all of them in such a form that these become useful in analysing the economic and financial position of a business.

Similarly, there are two most important aspects of human life. First, to earn the income and the second, to spend it for himself and his family. Thus income and expenditure help him create some assets and liabilities and improve his standard of living. This is possible only when a person measures, collects and analyses both these aspects systematically and scientifically. Accounting can play a great role in such human efforts. This thought has become the basis of this research.

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Review of Literature

- In an article **"Household Finance" by John Y. Campbell**, reveals that the study of household finance is challenging because household behaviour is difficult to measure, and households face constraints not captured by textbook models. This study argues that although many households find adequate solutions to the complex investment problems they face, some households make serious investment mistakes.
- The **John M. Passmore** in his book **"Accounting for a Better Life"** tell us that using an accounting system, a person always can know in detail about the increases and decreases of their personal finances. The purpose of that book is primarily, to tell that how to gain control the personal finances with a bookkeeping and accounting, based on domestic well-being.
- The focus of the paper **"Household Accounting as an Interface Activity: The Home, The Economy and Gender" by Sue Liewellyn, Stephen P. and Walker,** is on accounting and accountabilities at home, through exploring their impact on the interfaces between gender, the home and the economy. This exploration is conducted through an analysis of instructional texts on financial management in the home.
- The study "**Household Finance: An Emerging Field" by Luigi Guiso and Paolo Sodini,** reveals that household finance- the normative and positive study of how households use financial markets to achieve their objectives- has gained a lot of attention over the past decade and has become a field with its own identity, style and agenda. This paper reviews its evolution and most recent development.
- **Robert E. Hall, Frederic S. Mishkin** in the paper **"The Sensitivity of Consumption to Transitory Income: Estimates from Panel Data on Household"** investigate the stochastic relation between income and consumption (specifically, consumption of food) within a panel of about 200 household. The major findings are: consumption responds much more strongly to permanent than to transitory movements of income and the response to transitory income is nonetheless clearly positive. Families respond differently to different sources of income variations.
- In the paper **"Family Cash- Flow Budgeting" by Ivan F. Beutler and Jerald W. Mason**, the distribution for a formalized budget variable is reported for a representative sample of lowa families. The distribution is skewed with a disproportional large group of household reporting little, if any, formalized planning.

Objectives of the Study

Research can never be thought of without specifying its objectives. Objectives provide the route and direction to a study to achieve its ultimate goal. This research is also not an exception. Following are the objectives of this study:

- To know about accounting awareness among individuals and families.
- To underscore the significance of accounting information related to domestic income and expenditure for decision making.
- To develop domestic accounting system and formats for an individual or a family to facilitate the recording the domestic transactions.

Methodology of the Study

Scope of the Study

In order to know that do a person record the domestic income and expenditure and if yes then how, it is essential to know what are the basic elements of domestic expenditures, what are the different means by which a person earns his income and what are the different heads on which a person spends his income. This information about their income and expenditure has been collected from the families of Jodhpur city for the purpose.

Sample Profile

In order to achieve the predetermined objectives of the study, it was decided to select a sample of 500 respondents. These respondents were selected at random. A gradual watch was applied to see whether the randomly selected respondents satisfy the representation of the several "Strata". The obtained field in question schedules, which completely in all respect were finally selected to be included for study represented the following profile:

Table 1: Sample Profile

Total Respondents	500
Nature of the Family	
Nuclear Families	309
Semi-Joint Families	151
Joint Families	40
Income of the Family	
Below 1 lakh	53
1-3 lakhs	244
3-5 lakhs	163
5 lakhs and above	40
Occupation of the Family Head	
Businessman	95
Professional	33
Employee	332
Others	40

Data Collection

For fulfilling the objectives of present study and to make this study scientific and specific, primary data have been taken into consideration. For the purpose of collecting primary data, from above 500 respondents; direct personal interview technique was to be used with the help of a questionnaire.

Analysis of Data

The information or the tabulated data collected from these samples were analysed with the help of statistical tools. This study used the following statistical tools: Average, Percentage, Statistical Significance Test, and Graphical presentations. Is the preference / habit of keeping the domestic records influenced by income of the family, nature of the family and occupation of the family head?. For finding out an answer of this question, this study used the " **χ2 –Test".**

In addition to these statistical tools, this study also used the Accounting Principles and Concepts and Process of Accounting to develop **"Domestic Accounting System"**.

Hypothesis

The Null Hypothesis was to be used to find out that- is the preference of a family to keep the records of income and expenses to be influenced by independent variables i.e. nature of the family, income of the family and occupation of the family head?

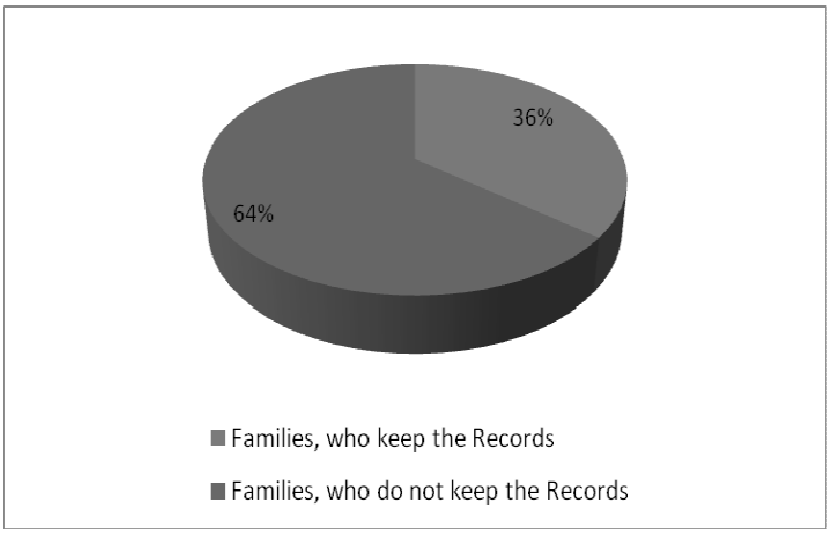
Survey Result

500 families were surveyed to know the accounting awareness among individuals or families. Out of 500 responding families only 179 families keep the domestic records and 321 families do not keep the domestic records. Out of 179, not a single family was found who keeps the domestic records "As per Accounting Principle". Instead they keep the record "As per Memorandum Basis".

The following table shows the survey results regarding those families, who keeps or do not keep the domestic records as "strata-wise":

Table 2: Data Regarding: Accounts Maintained by Domestic Units

		Families, who keep the Records	Families, who do not keep the Records	Total Responding Families
•	**An Overview**	179	321	500
•	**Income of the Family**			
	• Below 1 lakh	15	38	53
	• 1-3 lakhs	80	164	244
	• 3-5 lakhs	66	97	163
	• 5 lakhs and above	18	22	40
	Total	179	321	500
•	**Nature of the Family**			
	• Nuclear Families	116	193	309
	• Semi-Joint Families	41	110	151
	• Joint Families	22	18	40
	Total	179	321	500
•	**Occupation of the Family**			
	• Businessman	38	57	95
	• Professional	14	19	33
	• Employee	110	222	332
	• Other Occupation	17	23	40
	Total	179	321	500



On the basis of aforesaid information it can be said that approx. 64 % families under study in Jodhpur city do not keep the domestic records and only 36 % families keep the records. On the basis of income of the family, out of 179, 8 % families are those having income below 1 lakh, 45 % families having income 1-3 lakhs, 37 % families having income 3-5 lakhs and 10 % families having income 5 lakhs and above keep the domestic records and vice versa. Study on the basis of nature of the family reveals that, out of 179, 65 % are nuclear families, 23 % are semi-joint families and only 12 % are joint families keeping the domestic records. The study reveals that on the basis of occupation of the family head, out of 179 who keep record of domestic transaction, 21 % families are headed by businessman, 9 % families are headed by professional, 61 % families are headed by an employee and only 9 % families and headed by other occupation.

Hypothesis Testing

Hypothesis 1

The preference of keeping the domestic records is not influenced by the income of the family.

Table 3: Observed and Expected Values: Income of the Family

	Below 1 Lakh	1-3 Lakhs	3-5 Lakhs	5 lakhs and above	Total
Families, who keep the Records	15 (18.97)	80 (87.35)	66 (58.35)	18 (14.32)	179
Families, who do not keep the Records	38 (34.03)	164 (156.65)	97 (104.65)	22 (25.68)	321
Total Responding Families	53	244	163	40	500

In the aforesaid table, values beyond the bracket are observed values and within bracket are expected values. At 95 % level of confidence the critical value is 7.815. The calculated $\chi 2$ value that came out was 5.29. This $\chi 2$ value is less than the critical value. Therefore, a difference is to be considered insignificant and null hypothesis is accepted. Hence, it can be concluded that the preference of keeping the domestic records is not influenced by income of the family.

Hypothesis 2

The preference of keeping the domestic records is not influenced by the nature of the family.

Table 4: Observed and Expected Values: Nature of the Family

	Nuclear Family	**Semi-Joint Family**	**Joint Family**	**Total**
Families, who keep the Records	116 (110.62)	41 (54.06)	22 (14.32)	179
Families, who do not keep the Records	193 (198.38)	110 (96.94)	18 (25.68)	321
Total Responding Families	309	151	40	500

In the aforesaid table, values beyond the bracket are observed values and within bracket are expected values. At 95 % level of confidence the critical value is 5.991. The calculated $\chi 2$ value is 11.74. This $\chi 2$ value is more than the critical value. Therefore, difference is to be considered significant and null hypothesis is rejected. Hence, it can be concluded that, the preference of keeping the domestic records is influenced by nature of the family.

Hypothesis 3

The preference of keeping the domestic records is not influenced by the occupation of the family.

Table 5: Observed and Expected Values: Occupation of the Family Head

	Businessman	**Professional**	**Employee**	**Other Occupation**	**Total**
Families, who keep the Records	38 (34.01)	14 (11.81)	110 (118.86)	17 (14.32)	179
Families, who do not keep the Records	57 (60.99)	19 (21.19)	222 (213.14)	23 (25.68)	321
Total Responding Families	95	33	332	40	500

In the aforesaid table, values beyond the bracket are observed values and within bracket are expected values. At 95 % level of confidence the critical value is 7.815. The calculated $\chi 2$ value comes out to be 3.17. This $\chi 2$ value is less than the critical value. Therefore, difference is to be considered insignificant and null hypothesis is accepted. Hence, it can be concluded that, the preference of keeping the domestic records is not influenced by the occupation of the family head.

On the basis of above three hypotheses, it can be concluded that the preference of keeping the domestic records is influenced by the nature of the family but does not get influenced by income of the family and occupation of the family head.

Evolve a System for Domestic Accounting

There is a common perception that accounting is difficult and tedious. Business accounting is also quite difficult and that is why it takes quite a few years to gain proper professional qualifications in the subject. Therefore, this study has tried to provide some easier approach of accounting for domestic situation which can be useful for an individual who may be related to fields like arts, science and commerce. The name of this approach as suggested by this study is- **Domestic Well-Being Accounting or Domestic Accounting System**

This new, simple, accounting system is derived from the traditional format, of so called; double entry accounting that is so firmly established throughout the business world. It means this method is based on the fundamental ideas of business accounting, using double entry bookkeeping, with end of period accounting, to produce reports and Domestic Financial Factors (DFF). These collectively, represent the essential situation, or measure, of the evolving state of a person's financial affairs. From this a person can be able to plan, control and monitor the future evolution of their finances, to meet their own goals and targets.

Need of Domestic Accounting System

Traditionally, years ago, it was always the wage earner and usually the male, who took any responsibility for managing the finances of the household. In contrast, it was most often the lady of the house who actually knew most about household accounting, as she had the responsibility for buying the food, the clothes and everything else contributing to daily life.

Today, we live in a more enlightened society where both male and female are sharing the financial domestic responsibility. Ideally, domestic accounting should be a shared task, with both partners sharing both the burden and the responsibilities. Job security is far less than it used to be. There are very few jobs-for-life. Often, promotion can only be obtained by changing jobs. This adds stress, through having to go through more frequent interviews and selection procedures, than might have been typical in the past. Other forms of insecurity, leading to more worries, are the reduced, corporate responsibility for the longer-term future, with many doubts about future benefits and pensions. This modern pace and stress, demand some assistance from any kind of financial management and control. Domestic accounting system can help to provide that assistance.

Every family needs a home, maybe not a garden, but it needs food and drink, furnishings, especially water, heat, light, cooking facilities etc. There are responsibilities for maintaining the home and vehicles, to minimize depreciation and hopefully, achieving limited appreciation for any property owned. Any surplus funds would need to be stored, as investments of one form or another, as a basis for the more long-term characteristics of future preparation for retirement; medium term investment, if desired, in children's well-being, and the overall increase in wealth and standard of living that most of us seek. Domestic accounting can provide the means to attempting to maximize domestic well-being.

Domestic Accounting Process

In a family, there are many domestic activities which can be measured in monetary terms. These activities can be classified into two parts. First those activities from which domestic finance comes in family and increases and second those activities which are related to the use of this domestic finance in family. Where from to domestic finance comes in family depends upon the occupation of the family member or an individual. But how to use the domestic finance is an important aspect for an individual or a family. A "Karta" of the family takes all decisions regarding the application of domestic finance. For taking sound decisions there is need of a systematic information system. Accounting can provide the systematic information system from which a karta can take the information and the sound decisions for his family.

An individual can use accounting information in day-to-day affairs to manage his bank account, to evaluate job prospects, to make investment for future safety, to decide whether to rent or to buy a house and to evaluate hire purchase decision for house, vehicle and other long term durables etc.

On the basis of the aforesaid discussion, it can be concluded that there is a need to have the "Domestic Accounting System". This Domestic Accounting System can be known as "Domestic Accounting Process". Domestic accounting process is identical to business accounting process. This is also based on fundamental well known universally applicable accounting principles. But there is need for simple and condense accounting package. This is a modest and humble attempt by a researcher to develop a domestic accounting model to serve the purpose of an individual or a family or a domestic unit. The following steps are included in domestic accounting process:

- **Recording**

It is the first step of domestic accounting process. This step is related to the recording of the domestic transaction in "Personal Accounting Dairy" (PAD).

PAD systematically records the domestic financial cash transaction with the help of a source document in a chronological order for the first time. This will be prepared on the basis of receipts and payment principle. This will serve the purpose of journal and cash book of a business entity. But the difference in journal and PAD is that in journal we record all the cash and credit transaction on the basis of "Accrual Method", but in PAD we will record only the cash transaction of a domestic situation.

These domestic transactions will be recorded in PAD by the "Karta" of the family. If there is a joint and semi-joint family and more than one person earn income, then with the Karta, an individual (family member) can also maintain the PAD for his personal transaction.

In the PAD the domestic transaction will be recorded for each month separately and the balance of each month will be transferred in next month. PAD has two sides namely, receipts and payments. The following is the suggestive Performa of PAD:

Personal Accounting Dairy

Date	Receipts	Amount	Date	Payments	Amount
	Salary			Food	
	Wages			Clothing	
	Remuneration			Residence	
	Bonus			Education	
	Commission			Communication	
	Professional Fees			Telephone Bill	
	Share in business Profit			Medicine	
	Interest			Water Bill	
	Dividend			Entertainment	
	Sale of Investment or Fixed Assets			Fixed Assets	
	Gift			Durables	
	Other Casual Income			Other Expenses	
				Balance c/d	

If a family does the transaction mostly through the bank then a family can take two columns of amount in PAD, one for cash and second for bank in both sides.

- **Classification**

This step has two parts: first to prepare "Monthly Summary Statement" (MSS) and second to prepare "Annual Consolidated Statement" (ACS). MSS will be prepared at the end of each month with

the help of PAD and ACS will be prepared at the end of year with the help of MSS of each month. This step will be in place of ledger a/c and Trial Balance.

Monthly Summary Statement (MSS)

Monthly Summary Statement will be divided into two parts: (A) Expenses and (B) Income. In (A) Expenses part there will be 14 columns. First for particular, twelve columns for items of consumables (food, clothing, residence, cosmetics, conveyance, communication, health, education, social, entertainment, pocket money and miscellaneous) and last for durables. In (B) Income part there will be 6 columns. First for particular and remaining five for form of income. The suggestive Performa of MSS is shown as:

MSS (Monthly Summary Statement)												
Name of Month												
(A) Expenses												
Particular	Food	Clothing	Res.	Cosm.	Convy.	Comm.	Edu.	Health	Social	Enter.	P.M.	Misc.
Total												

(B) Income					
Particular	Salary	Commission	Interest/Dividend	Share in Business Profit	Casual & Gift
Total					

On the basis of suggestive Performa it can be said that MSS will be columnar system to have a continuous and grouping of items. MSS will also reduce the labour of posting.

Annual Consolidated Statement (ACS)

It is the second part of this step, where summarized consolidated statement prepared by simple totaling of MSS of all the months of the year. Obviously ACS will be prepared at the end of year. The Performa of ACS will be same as MSS.

- **Finalization**

This step will serve the same purpose as in business organization profit and loss account and balance sheet serve. This is a finalization to find out net result of all the domestic economic activities by preparing "Domestic Income and Expenditure Account" and also to find out the Net Domestic Wealth of the family by preparing the "Domestic Balance Sheet".

It means in this step we will prepare two statements. These statements will be prepared with the help of PAD, MSS and ACS. At this point, the accrual concept will be used and proper valuation of all durables and financial assets will be considered. Proper depreciation also will be taken into account.

Domestic Income and Expenditure Account

This statement can also be known as "Total Domestic Change Statement". This statement will be prepared at the end of the year. It has two sides, one is "income" or "total increases" and second is "Expenditure" or "total decreases". If total of income side is greater than expenditure side the result will be "Net Increase" and vice-versa. The following is the suggestive Performa of Domestic Income and Expenditure Accounting:

Domestic Income and Expenditure Account or Total Domestic Change Statement

Decreases	Amount	Increases	Amount
Consumables Expenses		Regular Income	
Non-recurring Exp. (marriage & other exp.)		Interest and Dividend	
Loss on assets disposal		Casual Income	
Depreciation of assets		Gain on assets disposal	
Decrease in value of assets and investment		Appreciation in value of assets and investment	
Total Domestic Decreases		Total Domestic Increase	
Net Domestic Increase (balancing figure)		**Net Domestic decrease (balancing figure)**	

Domestic Balance Sheet

This statement is also prepared at the end of the year. This statement has two sides; one is "Wealth and Liability" and second is "Assets". This statement shows the total wealth of a family. This wealth can be calculated by this formula:

Wealth = Assets – Liability

In assets we include the list of fixed assets, current assets and Investment. In liability side we include the list of long term and short term liability and net wealth. In this statement both the sides become equal. Following is the suggestive Performa of Domestic Balance Sheet:

Domestic Balance Sheet

Wealth and Liability	Amount	Assets	Amount
Current Liability		**Current Assets**	
Credit Card	-	Accounts Receivables	-
Bank Overdraft	-	Accrued Income	-
Personal Borrowing	-	Inventory of Consumable Stores	-
Vendor Credit	-	Cash in Hand	-
Outstanding Bill and Commitment	-	Cash at Bank	-
Long Term Liability		**Investment**	
Mortgage (House, Vehicle, Durables)		Shares / Debenture / Bonds	-
Term Loan	-	Mutual Funds and FD	-
Domestic Wealth -		Maturity Value of Insurance Policies	-
Add / Less : Net Increases / -		PPF	-
		Fixed Assets	
		(A) Main Residence	-
		Additional House	-
		Farm House	-
		Residential Plot	-
		Gold / Precious Stone	-
		(B) Personal Transport	
		Car	-
		Two Wheeler	-
		(C) Furniture & Fixture	-
		(D) Electrical Items	-
		(E) Electronics Items	-
		(F) Miscellaneous	
		Crockery	-
		Suitcase	-
		Others	-
Total		**Total**	

- **Interpretation**

In accounting process under this step, an accountant interpretate and provide the analysed information to the management so that this will facilitate the management to take rational decisions. Domestic accounting information will be interpretate in lucid manner to take domestic financial managerial decisions.

The last step of business accounting process i.e. communication is not part of domestic accounting process. That is so because domestic accounting is an internal accounting, which is useful only for "Karta" of a family and other family members for taking rational domestic decision making.

Conclusion and Suggestions

- This study suggests that, there should be great thrust to impart education on financial matters separately for the youngsters, however, so far, there is little to offer that might have any hope of dramatically changing the situation. It is believed that the new DWB accounting which is simple enough, that it can be fun, and has the potential to be effective in increasing people's financial visibility and awareness. It is far more complicated to describe than demonstrate and it is hoped that some prototype / on-line tutorials / domestic budgets that can be developed which will show just how easy it is to do. Because of this, DWB accounting or something similar should be considered for use as the basis for inclusion in a new curriculum, as part of social awareness or perhaps, citizenship. As a result, youngsters could take the appropriate lead, to become aware of, and for accepting the responsibilities appropriate for the management of the financial aspects of their future lives.
- None of the ideas above, about solving the current crisis, the potential for personal lifetime improvement, recognition of domestic accounting as a discipline in its own right, and introducing domestic accounting into mainstream education, have any chance of progress without motivation.
- Motivation will only evolve, with the presence of some new focus for evolutionary change. Such a focus has to be created, staffed and led by an appropriately senior and influential figure. Its responsibilities have to address and include publicity, awareness, co-ordination and motivation. Under co-ordination, the areas mentioned above concerning research and information collection and dissemination, are prime early candidates for focus and action. This could result in even easier preparation of financial results, analysis tools, budgeting support and monitoring of progress on satisfying, previously agreed and prepared plans.
- It is suggested that an individual who accepts financial responsibility for a domestic household should carefully forecast in his early years of professional career financial needs 5 years ahead, 10 years ahead, 15 years ahead, 20 years ahead and so on till the age of his superannuation giving such need and effect of inflation which is likely to be there in coming years and thus should plan his saving in appropriate combination of liquid debt and equity to enable him to match his future needs at appropriate rest period of his planning. For this an individual can use sinking fund method approach and annuity method approach.
- It is suggested that an individual also plans for the domestic expenditure after attaining his age of superannuation for at least 20 more years of his living with the same standard of living for each of the 20 years (taking into account growing medical expenses) and use discounted cash flow approach to find the present value of futuristic needs of family through an appropriate technique provision be done during his active earning period to generate this fund.
- It is suggested that a separate study be undertaken to find the in domestic financial planning regarding nuclear, semi-joint and joint family.

- It is suggested that a further study be undertaken for a select appropriate investment strategy for domestic well-being.
- it is suggested that a further study can be undertaken for domestic well-being through debt i.e. loan and its implementation and its tax benefits i.e. an optimum time frame to enter into debt to support domestic need.
- The final point I would like to make at the conclusion of this study is that, here are four fundamental assumptions that must be accepted before anyone can have a chance of any success with domestic well-being accounting:
  - Someone has to accept a sense of financial responsibility towards the members of a domestic household.
  - Accounting in itself will not achieve improvements in domestic finances unless rational allocation of resources is done.
  - Domestic well-being accounting can provide the necessary visibility on domestic financial activity, so that control can be gained and subsequently exercised.
  - Discipline will be required in order to keep to financial plans.
  - All domestic sources and applications can be planned.

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AWARENESS OF FINANCIAL INCLUSION SCHEME:
A STUDY WITH SPECIAL REFERENCE TO PMJDY IN THANE DISTRICT

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ABSTRACT

Effort of inclusive and sustainable growth by taking on board all section of society is faced with challenges like lack of awareness, financial, lack of literacy especially in the rural areas. In order to bring large number of population under the gambit of institutional credit, banking sector has made many endeavours through technological advancement, which has bear fruit only in urban areas with still large rural areas uncovered.

KEYWORDS: *Financial Inclusion, PMJDY, Rural Area, Respondent, KYC Norms, Social Benefit.*

Introduction

Despite 67 years as an independent nation, India is still lagging behind in the process of providing financial services to the masses with nearly half the households remaining unbanked, and nearly ninety percent villages not having bank branches. More importantly, people in these unbanked areas do not fully appreciate why they need a bank account at all, or why loans from the formal sector are more useful than the informal sector. The advantages of a financially inclusive model are many-fold. Illustratively, unbanked and underprivileged could receive appropriate and timely payments for social benefit and employment schemes through the Direct Cash Transfer program.

Financial inclusion is an important tool through which goals like sustainable economic and social development empowerment of under privileged women can be achieved including making them financial literate. In addition to above it does not overlook vulnerable groups but make availability of financial service easy for the better promotion of investment in categories like business, education, insurance etc. Yet after years large part of rural areas have remained untouched with poor spread of financial services which can be attributed to factors like low income, lack of financial literacy etc.

Since over the last decade the government authorities namely central bank of our country and government of India who have been entrusted with the responsibility of promoting financial inclusion started variety initiatives like SHG bank linkage program easing of KYC norms. Use of mobile technologies electronic benefit transfer etc. Though these initiatives are more focused than ever before yet, there is a serious need of assessment of its impact with regards to rural areas.

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Research Methodology

Primary data is collected from respective clusters with convenient sampling method. Primary data has been collected in the month of June, 2016. Out of the 400 respondents 261 were male respondents and 135 were female respondents. Data is collected from various age groups, for the purpose of grouping, strata has been formed in age 15-30 years, 31-45 years, 46-60 years and 60 years and above. Out of the total data collocated 239 respondents belong to age group 15-30 years, 107 belong to 31-45 years, 45 belong to 46-60 years and 6 belong to the 60 years and above age group. When it comes to occupation nearly 32 respondents belong to the worker category, 137 respondents belong to student category, 218 respondents belong to service category and 10 belong to the other category.

Population subscribed to PMJDY

Table 1

District	PMJDY Male Accounts	PMJDY Female Accounts	Total	Total Balance in Accounts
Thane	446267	523047	969314	1964416734

Sources: RTI F.No.10/16/2016-FI dated 21/04/2016.

Objectives of the Research

- To understand about financial inclusion schemes in India.
- To understand whether the benefits of financial inclusion is actually availed by expected beneficiaries.
- To understand whether there is awareness about Pradhan Mantri Jan-Dhan Yojana.

Hypothesis

H_o : There is no significant difference having awareness of zero balance account under Pradhan Mantri Jan-Dhan Yoajana with respect to Income.

H_1 : There is significant difference having awareness of zero balance account under Pradhan Mantri Jan-Dhan Yojana with respect to Income.

Conceptual Framework

Pradhan Mantri Jan-Dhan Yojana (PMJDY) is National Mission for Financial Inclusion to ensure access to financial services, namely, Banking/Savings & Deposit Accounts, Remittance, Credit, Insurance, Pension in an affordable manner.

Account can be opened in any bank branch or Business Correspondent (Bank Mitr) outlet. PMJDY accounts are being opened with Zero balance. However, if the account-holder wishes to get cheque book, he/she will have to fulfill minimum balance criteria.

Special Benefits under PMJDY Scheme

- Accidental insurance cover of Rs.1.00 lac.
- No minimum balance required.
- Life insurance cover of Rs.30,000/-
- Easy Transfer of money across India.
- Beneficiaries of Government Schemes will get Direct Benefit Transfer in these accounts.
- After satisfactory operation of the account for 6 months, an overdraft facility will be permitted.
- Access to Pension, insurance products.
- Accidental Insurance Cover, RuPay Debit Card must be used at least once in 45 days.
- Overdraft facility upto Rs.5000/- is available in only one account per household, preferably lady of the household.
- Interest on Deposit.

Data Analysis and Interpretation

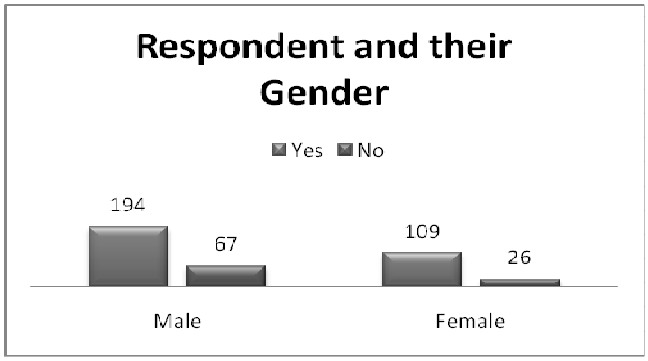

Figure No.1

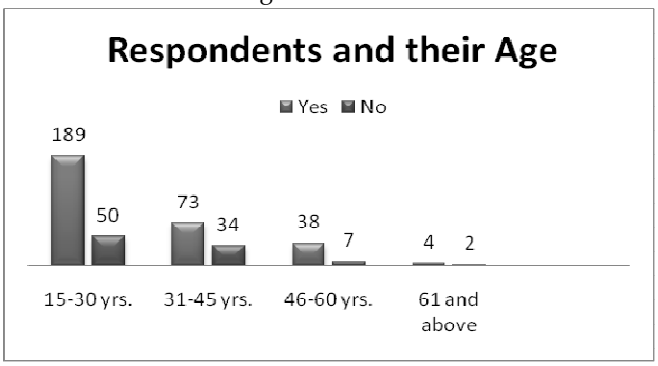

Figure No.2

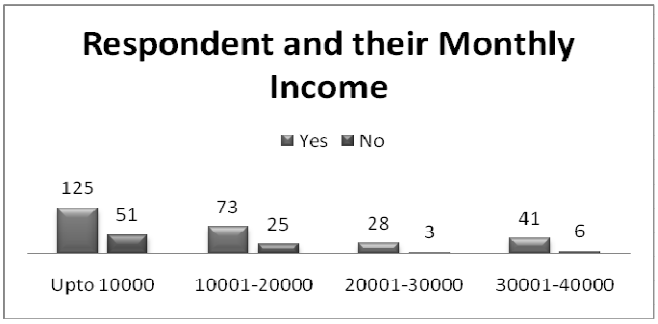

Figure No.3

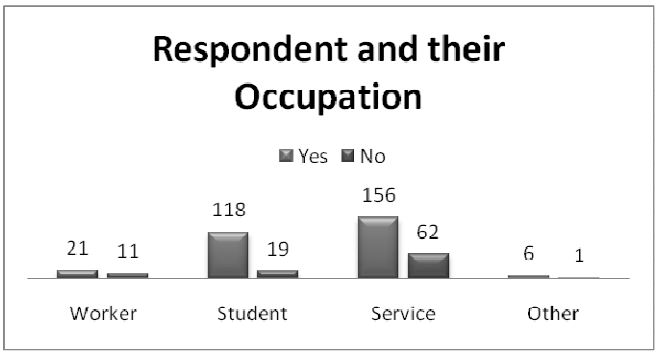

Figure No. 4

Table 2

Count of Respondent	**Column Labels**				
Row Labels	10000	20000	30000	40000	Grand Total
Yes	45	36	15	27	123
No	126	55	14	16	211
Grand Total	171	91	29	43	334
p1, p2,p3,p4	**0.263158**	**0.395604**	**0.517241**	**0.627907**	**0.368263**
	Ṗ	0.368263			
	1-Ṗ	0.631737			
	Expected frequency				
Row Labels	10000	20000	30000	40000	Grand Total
Yes	62.97305	33.51198	10.67964	15.83533	123
No	108.0269	57.48802	18.32036	27.16467	211
Grand Total	171	91	29	43	334
	Data				
Level of Significance	0.05				
Number of Rows	2				
Number of Column	4				
Degree of Freedom	3				
	Results				
Critical Value	7.814728				
p_value	2.97E-05	<0.05	**Hence Reject Null Hypothesis**		
Chi-sq Test Statistics	23.63925				

Interpretation

There is a significant difference having awareness of zero balance under Jan-DhanYojana with respect to Income. The result signifies that lower income group are less aware of Jan-DhanYojna than higher income group and as income increases awareness increases.

Findings

Out of the 334 respondents nearly 171 respondents belong the upto Rs.10000 p.m. income category, out of which 126 respondents are not aware about PMJDY. It means that the expected beneficiaries are not aware about PMJDY.

Suggestions

- Preference should be given for a physical branch. The existing network of more than 1, 55,000 post offices and more than 5,00,000 fair price shops, an outlet of public distribution system with some semblance of government approval, can be explored, especially in rural areas.
- Methods of financial literacy need to be changed from distributing printed literature to audio and visual media such as radio and TV programs, especially in local languages.
- Encouraging banking habits amongst the unbanked masses by installing audio-video enabled ATMs to announce simple instructions in the local language to assist the customer in the unbanked areas, could be considered.

Conclusion

The scope of the term financial services is wide which includes everything from access to bank account to affordable bank credit for starting business to insurance service. It also include financial literacy the term expects the people to be aware about risk and benefits, pros and cons of their

investment. Financial literacy is a huge problem in a country like India, and the problem further being exacerbated by factors like large population (more than 1.3 billion) wide spread of country rapidly growing population are few to underline. Various measures have to undertaken to improve the situation by the government and the RBI among the various initiatives by government for financial inclusion. Optimum utilisation of extensive network of post offices is an important step. Banking facility are being made available at the post offices in order to obtain the goal of financial inclusion. Banking facilities at post office which have extensive network play an important role with this regards.

There is a need to improve capabilities of post offices which in order to make them more efficient as an alternative to banking sectors capabilities include available space, capacity to handle cash balance, resources, available, skills and knowledge of employees etc. The scope for financial inclusion is large and which ranges from financial products to reasonable a cheap way to transfer of money. Technology plays an important role with regards to access to easy and affordable money as this function can sometime prove unavailable for bank. Effective utilisation of technology such as mobile banking, net baking etc. Not only streamline the process of transfer of money but also make it truly affordable and saves time.

However lack of bank account lack of financial literacy play a spoiler and prove as major obstacle in spreading the use of technology on a large scale. Thus these are the challenges if overcome could certainly help improve spread of technology and subsequent process of financial inclusion. High transfer cost thus continues to prove an obstacle in the process of financial inclusion. However there are initiatives that are being made by the central bank with the objective of reducing the cost of remittance and making transfer of payment affordable.

Limitation of the Study

Although research has reached its aims, there were some unavoidable limitations. First because of the time limit, this research was conducted only on small sample size of 400. Secondly, because of the large spread of Thane district to collect data I have divided area into 7 clusters and supposed to collect data through strata but in some areas because of the unavailability of people had to collect data through simple random sampling.

Scope for Further Studies

This study is based on area of Thane district only which is more or less is urban district, but if this study is conducted in backward districts like Chandrapur, Gondiaetc it will show more appropriate results whether these schemes is actually reached to the poor people of below poverty line.

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TRANSITION TO IFRS (International Financial Reporting Standard) IN INDIA: COST-BENEFIT ANALYSIS

Saleha Sultan*
Dr. Pushplata Chouksey **

ABSTRACT

The
n years (2001-02 to 2014-15). The researchers have made an attempt work on the index indicating the disclosure of accounting policies

KEYWORDS:/??????ia.

Introduction

The most talked about issue is the today's corporation world of India is IFRS. A set of high quality financial reporting standards first developed by International Accounting Board in 1960S IFRS provides consistency, uniformity and at most transparency in financial information which results is greater willingness on the part of investors to invest money abroad. The globalization of capital market is decisive for transitions to IFRS from Indian Accounting standards. It will makes the biggest revolutions In financial reporting which facilitates merger Acquisition and other business Expansion world –wide and open a gate for Indians entities to enter into global capital market. This way be achieve by adopting language in view of this harmonization of accounting standard is needed by business communities. Till now more than 100 countries have implemented IFRS.

Declarance by accounting standard board ICAI and ministry of corporation affairs for convergence could not achieve the desire target due to lack of preparedness for transition from Indian

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companies Accounting standard to IFRS. Indian accounting standard remains sensitive to local conditions including legal, social and economic environment. Transition has major impact on Indian corporate governance, tax/laws and security regulations which is really like a Hand Rock To Drill as it requires a shift in the academic approach along with regulatory challenges. Thus study of its Cost and Benefits is important to reach its feasibility in order to reap maximum benefits at reduce cost and steps required to meet future challenges of this transition.

Selected Review of Literature

International financial Reporting Standards is the hottest topic among accounting professional and business community not only in Indian but across the globe. IFRS affects finance, accounting, information, systems, human Resources and other functions and processes within the company.

Here, a brief review of the earlier studies conducted by different Research Scholars are given:

- **Anderson, A (1993)** opined that adoption of common accounting standards all over the world is gold in order to creation of value and global decision making about economic activities of organization.
- **Samuels J.M.(1992)** argues that the benefits of IFRS seems to outweigh the cost and challenges associated with it, but only if it is effectively and efficiently implemented.
- **Mualls (1977)** presented the impact of crisis on the need for a reliable accounting system.
- **Belkaoui and Jones (1996)** opined that determining the best mechanism to employ is establishment of uniform accounting standard may be essential to the acceptability and usefulness of accounting standards.
- **Michael Hulet (2009)** is of view that the process of transformations from Indian accounting standards to IFRS is a lengthy as well as tedious one, besides requiring high skills too.
- **Vineetha V.K.(2009)** opined that one of the vital reason why IFRS is to be adopted is the transparency and comparability it provides to the company's activities and overall performance.
- **Anuradha H.N. (2010)** argues that India can desire maximum benefits of IFRS adoption at minimum cost by learning from the experience of other countries.

Objective of the Study

The prime aim of the present study is to examine the challenges face by Indian companies and the benefits it leaps from transition to IFRS. The following objectives have been framed to accomplish the said aim:

- To analyze the benefits of transitions from Indian companies accounting system to IFRS.
- To investigate the issues and challenges to be face by Indians Co's accounting system.
- To suggest measures based on empirical study to improve IFRS implementations in India and future prospects of consistency.

Hypothesis of Study

- The first hypothesis of the study is to examine the challenges face by Indian accounting system during transition:
  - Indian co accounting system is facing challenges which need redressal.
  - Indian co accounting system is not facing challenges which do not need redressal.
- The second hypothesis is to examine the benefits of transitions:
  - Indian co's accounting system will get maximum benefits from IFRS.
  - Indian co's accounting system will not get maximum benefits from IFRS.
- Third hypothesis is to investigate the measures to improve IFRS implementation and it future prospects:
  - IFRS in India have bright future.
  - IFRS in India does not have bright future.

Methodology of Research

The study of this paper is based on both primary and secondary data. Primary data is collected from C.A. Audition and students pursuing C.A. It is a survey work based on general questionnaire and interview questionnaire. Secondary data is collected from reports of professional bodies like ICAI and References of national and international journals.

Sample Design

In India the size of professional C.A., accountant practicing and students pursuing C.A. are very large and there is time and energy constrains so the study has selected 200 samples in different places in India like Bhopal, Indore, Mumbai and Kotaware (Jharkhand).

Benefits of Accepting IFRS

Transparency provided in financial information through IFRS will improve the comparability, industry standards and financial peers which will be beneficial not only to the economy but also to the stake holders:

- **Benefits to Investors:** Under IFRS Accounting information reflect high degree of reliability, relevance, verifiability and comparability across national borders. By providing predictive and confirmatory value to predict future outcome and provides feedback about previous evaluations helps investors in making decision. Thus, batter understanding of financial statement globally increase faith among the investors.
- **Benefits of Corporate World:** With high quality of accounting information disclosure facilitates entities for cross border business collaboration and associations which in turns help in raising funds for international market at lower cost of capital.
- **Benefits of Accounting Professionals:** An IFRS provides universally accepted accounting practices. Transition to IFRS offers outstanding opportunities to the accounting professionals of India across the globe to give them services in any part of this world.
- **Benefits to Indians Economy:** The two important aspects of globalizations is international trade and foreign direct investment which can be accelerated with the adoption IFRS, improved investment opportunities and return enhance capital liquidity and international capital mobility which in turns contributes towards economic growth of the nation.
- **Benefits to Government:** Under IFRS Is given on preparing financial report on fair market value basis. In India accounting is done on historical cost basis so the information contained in the financial statement requires representation. India is also facing unfavorable political environment

  Where corruption is common and transparency in financial statement is limited, transition to IFRS can being true and fair view thus help the government to remove black money and its revenue in the form of income tax.

Cost of IFRS

Above benefits there one some challenges to be face during the process of transition to IFRS.

- **Legal requirements**:-"Law over side's standards" is an accepted principle is India under which legal requirements gets importance. Adoption of certain accounting standards of IFRS Requires changes is law /regulations sec II of the notes issued by ICAI in July 2011 contain accounting standards which are carve out due to difference in application of accounting principles and practices and economic condition prevailing in India and see III contains other major changes in India accounting standard vis –a-vis IFRSs not resulting in come out.
- **Environmental Differences:** Common set of international accounting standards cannot satisfy the distinct economic conditions prevailing in each economy. Indian standards remains sensitive to local conditions besides these are some legal and political business which hurdles the successful implementation of IFRS**.**
- **Accounting Differences:** From accounting point of view these are some differences between IFRS and Indian GAAP like as per IFRS preliminary expenses are changed to income statement but under Indian accounting system it is treated as defend within off over the period of year.
- **Lake of Competent Accounting Professionals:** In India there is scarcity of adequate professionals having practical experience of IFRS. Transition to IFRS requires detail knowledge of standards accounting professionals must have ability to consider the impact IFRS transition on bunny's transactions and performance measures.
- **Multiyear Exercise:** Benefits of IFRS cannot be reap overnight for many entities transitions to IFRS may require long time consisting of many year since such transition requires changes to technology, infrastructure and system which Is not a one day task.

- **Costly Exercises**: transition to IFRS, no doubt is a costly exercise not only in terms of money but in terms of time management and resources also. Applicability of IFRS to any scale of bossiness operation and rural marketing information system is also challenging.

Findings of the Study

The findings of the study are based on information collected from sample accounting professions through questionnaire, there are as follows:

- More than 80% of sampled CA, auditors and students opined that in spite of great effort done by ICAI to bridge the gap between 2nd cost accounting standard and IFRS still there are some differences due to India's social legal and economic environment and 20% not expressed any opinion about such differences.
- About 98% of sample respondent including one Auditor and tax consultants From Mumbai (Prateek Jatwani-2016) is of view that people should we make aware of IFRS by training the accounting staff and auditors in IFRS and holding the company accounting staff exchange programme . Remaining 2% respondents not expressing their opinion.
- More than 89% of sample respondent including one Audit analyst (Karthika Narayana-2016) from Kerala agreed that transition from Indian Accounting system to IFRS gives many benefits like growth of cross border merger and acquisition, more foreign Capital at lower cost and ample opportunities for stake holders remaining 11%not expressing their option.
- More than 95% of sample respondent including C.A. professional (Ritu bhargawa-2016) from Indore is of the view that transition to IFRS is very lengthy and tedious job as the process of transition face many challenges to overcome. which needs redressel by in calculating .comparability ,Acceptability, Immunity to internal and external presser. Remaining 5% of the respondent not expressing their option which famous the hypothesis Indian accounting system is facing challenges.
- More than 72% of sample respondent including one CA (Kuldeep agarwal-2016) of kota wara (Jharkhand) is of view that in spite of legal and economic barrier IFRS can be successfully implemented through effective corporate governance practice strong auditing practice, strong internal control and strict enforcement while remaining 28% of the respondent not expressing their views. Thus it proves that there are chances of success of IFRS in India.
- More than 78% of the sample respondent including one CA (summiya aslam-2016) of Bhopal working as a finance manager one of view that 2023 IFRS will be acceptable either in total or in partially amended form which proves that IFRS in India has a bright future where as remaining 22% of the respondent not expressing their views. Thus, above findings gives suggestions that through benefits of IFRS India can overcome the cost and challenges associated with its transition but it should be effectively and efficiently implemented. And accounting theories should be examined in countries other than there is which they were developed in order to check then feasibility.

Conclusion

The globalization of capital market is very important for the success or failure of establishing a uniform set of financial reporting rules of world wide. This has been the major driving force behind the transition to IFRS across the globe mare by adoption of IFRS is not enough. It is necessary to develop the accounting Infrastructure of counting is order to reap the full benefit. Then only we can out weight the cost and challenges to be face in the process of transition. By adopting IFRS in India there will be growth in international business which lead is economic development. Future research is needed as to the long time effects of IFRS transitions. We do not know for then searching good and bad consequences of IFRS. True outcome of IFRS transition requires many years to come.

Annexure: Questionnaire

Name	:	.....
Gender	:	Male/Female
Status in Org.	:	.....
Qualification	:	.....
Place	:	.....
Put	:	☑ on number as weightage
Grading	:	5 Highest to 1 as Lowest.

Question 1. How Indian Co.'s accounting system transition can be put on equal footing with IFRS?

1.	Transparency	5 4 3 2 1
2.	Accountability	5 4 3 2 1
3.	Plugging the loopholes	5 4 3 2 1
4.	Consolidating the formats	5 4 3 2 1
5.	Integrating the procedure	5 4 3 2 1

Question 2. Whether Indian Co.'s accounting system is facing challenges which need redressel by inculcating?

1.	Comparability	5 4 3 2 1
2.	Acceptability	5 4 3 2 1
3.	Immunity to internal pressure	5 4 3 2 1
4.	Immunity to external pressure	5 4 3 2 1

Question 3. What can be the best technique to make IFRS a success in India ?

1.	Making IFRS Accounting friendly	5 4 3 2 1
2.	Making people aware of IFRS	5 4 3 2 1
3.	Training the accounting staff in IFRS	5 4 3 2 1
4.	Training the auditors in IFRS	5 4 3 2 1
5.	Holding the co. accounting staff exchange programme	5 4 3 2 1

Question 4. How do you ascertain IFRS in Indian Companies by 2023?

1.	Acceptable in total	5 4 3 2 1
2.	Partially amended from	5 4 3 2 1
3.	Hybrid Indian + IFRS	5 4 3 2 1
4.	Moderately diluted	5 4 3 2 1
5.	Total Rejection	5 4 3 2 1

Question 5. What kind of response IFRS will get in India?

1.	Conducive	5 4 3 2 1
2.	Retarding	5 4 3 2 1
3.	Amend it	5 4 3 2 1
4.	Wait and see	5 4 3 2 1
5.	A chance for trial	5 4 3 2 1

Question 6. Whether the Transition of Indian Co. accounting system will bring a new avatar by bringing changes in institutional Accounting Procedures:

1.	Development programme Accounting system	5 4 3 2 1
2.	Banking Accounting system	5 4 3 2 1
3.	Co-operatives	5 4 3 2 1
4.	NGOs	5 4 3 2 1
5.	Government Accounting	5 4 3 2 1

Question 7. Whether IFRS have any impact or presentation in rural India?

1.	Change in Business man's mind set	5 4 3 2 1
2.	Uniformity in Accounting System having Geographic variations	5 4 3 2 1
3.	Bring uniformity in accounting systems in India	5 4 3 2 1
4.	Applicable to any scale of Business Operation	5 4 3 2 1
5.	Rural marketing Information System	5 4 3 2 1

Survey work by research scholar.

NOTE: To be filled by CA, Auditors, CEO, Accountant and Students pursing CA.

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THE REAL AND ETHEREAL: A STUDY ON THE ETHICAL ISSUES IN ACCOUNTING IN EDUCATIONAL INSTITUTIONS

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ABSTRACT

Ethics in accounting by any organization are connected with the morally upright choices with specific reference to the preparation, presentation and disclosure of information. Ethics in accounting helps in making value-based judgments. Educational institutions are expected to be the role models as far as ethics in accounting are concerned. In the light of this, an empirical research has been carried out with the following objectives:

- *To identify the issues connected with ethical issues in accounting by the educational Institutions.*
- *To know the relationship between ethical issues in accounting followed by the educational Institutions and the ultimate goal of education and edification.*

The sample size is 200. Statistical tools such as chi square test, correlation analysis and factor analysis have been used for analysis.

It is felt by the respondents that reimbursements, promotional policies, proper accounting of stock and equipment, scholarships, managerial policies, bench marking are some of the important facets connected with ethics in accounting by the educational institutions. Accounts are sure to express a real position if and only if the extremely delicate issues or ethereal issues are addressed and redressed on time.

Note: Meaning and objectives of different forms of accounting, review of literature, and the workings related to impact of ethics in education on attaining the goals of education and meanings of key words are shown in addendum in Annex I, II, III and IV respectively.

KEYWORDS: *Ethereal, Ethical, Fallacy, Humane, MIS, Morality, Paramount, Proposition, Real, Solicitude, Surmount.*

Introduction

Ethics in accounting by any organization, whether it is a non-profit or a business organization are connected with the morally upright choices with specific reference to the preparation, presentation and disclosure of information. Ethics in educational institutions have been given due weightage these days. Courses such as Human values and ethical practices, gender sensitization have been introduced as part of the curricula to help students understand these ethics better. Teaching these subjects should work well on both the instructors as well as the students. If such pleasant things happen, then there will not be any problem connected with ethical issues in accounting in educational institutions.

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The following are some of the unethical issues connected with accounting in general and accounting in educational institutions in specific:

- Fraudulent Reporting
- Misappropriation of Assets
- Errors of ethical omission
- Manipulating financial records
- Destroying information
- Providing information to the competitors
- Painting false pictures of the organizations' successes
- Violating the rules
- Greed

The term accounting may mean Financial Accounting, Cost Accounting, Human Resource Accounting or Management Accounting.

Importance of the Study

It is a fact that ethics play an important role in enhancing the goodwill of the organization, and therefore should strictly be followed by the organizations in general and accountants in specific. Following certain values and norms by educational institutions would directly and indirectly help in reinforcing not only the management but also the other stakeholders such as parents and students to follow ethics which in turn inspires one in moving in a right direction. The success of an educational institution depends largely on identifying whether every individual is ethical or not. Ethics in accounting helps in making value-based judgments. In the light of these facts, it is felt that there is a need to probe into the ethical issues connected with accounting in educational institutions.

Statement of Problem

An organization may follow ethics in accounting or may resort to fraudulent accounting. Educational institutes are not exceptional in this regard. If an educational institution moves in the right direction, it is highly appreciable because it is going to affect the well being of the society. It is due to the fact that it is an educational institution which would produce accountants, auditors, managers, manufacturers and so on. Therefore, it is important to note that Fraudulent Accounting by an educational institution is going to ruin not only the institution but also the society at large. It would also affect the auditors for not discovering or revealing the misstatements. It is important to know whether there is a direct relationship between ethical issues in accounting followed by the educational institutions and the ultimate goal of education and edification or not.

Objectives of the Study

The focus of the study is on identifying the issues connected with ethics in accounting by the educational institutions. The following are the objectives of the study

- To identify the issues connected with ethical issues in accounting by the educational institutions
- To know the relationship between ethical issues in accounting followed by the educational institutions and the ultimate goal of education and edification.

Scope of the Study

The study aims to know the perceptions of the respondents living in twin cities of Hyderabad and Secunderabad with regard to ethical issues in accounting with specific reference to educational institutions.

Methodology

The required data are collected by administering a structured questionnaire to 200 respondents consisting of students, parents, lecturers and professional accountants. The study is totally based on primary data. Statistical tools such as chi square test, correlation analysis and factor analysis have been used for data analysis. SPSS package has been used for data processing.

Hypothesis

Null hypotheses have been formulated which are shown hereunder:

H_{01} : There is no significant difference between the opinions of the students and other respondents with regard to the benefits of education in the form of ethics once the accounting graduates enter the workforce.

H_{02} : There is no significant difference between the opinions of the students and other respondents with regard to the relationship between code of conduct and ethics.

H_{03} : There is no significant difference between the opinions of the students and other respondents with regard to the relationship between policies of management and ethics in accounting.

The null hypotheses have been operationalized using Chi-square test in Para 5.

Analysis and Findings of the Study

1. The present part of the study deals with Ethical Skills with specific reference to accounting in an educational institution. The respondents were asked to rank the skills starting with one (1) for the highest and ending with ten (10) for the lowest choice of their preference. The details of the analysis are highlighted hereunder:

Table 1: Ethical Skills Relevant for Accounting in Educational Institutions

Ethical skill or ethical issue	Rank I [Ranks assigned by Students]	Rank II [Ranks assigned by Lecturers, Professionals and Parents]
1. Concern for the concern and profession	7	10
2. Objectivity	8	9
3. Confidentiality	1	5
4. Competence & Due Care	6	6
5. Proper Conduct	2	3
6. Providing reliable and useful information	10	2
7. Honesty and integrity	3	1
8. Fairness	5	4
9. Responsibility	4	7
10. Attitude	9	8
Coefficient of correlation = 0.357576		

Source: Primary Data

The table shows that there is a low but a positive correlation between the opinions of the students and other respondents. The respondents differed significantly regarding two ethical aspects, viz., "Providing reliable and useful information" and "Confidentiality"

2. This part of the study focuses on ethical issues connected with accounting by educational institutions. The required data have been collected on five point rating scale starting with totally agree followed by partially agree, no opinion, partially disagree and totally disagree. Factor analysis has been used for data analysis. Ethical issues connected with Financial Accounting, Human Resource Accounting, Cost Accounting and Management Accounting have been identified. In all 42 attributes have been identified. Principal Component Analysis is employed for extracting the data, which allowed determining the factor underlying the relationships between a number of attributes/variables. Varimax Rotation is applied for the selected 42 variables / attributes. The numbers in each column are the factor loadings for each factor, roughly the equivalent of the correlation between a particular item and the factor. **T**he factor loadings of 42variables / attributes are observed and clubbed into 14 factors. The detailed loadings into each factor are as under:

Table 2: Factor Analysis

Rotated Component Matrix (a)

	Component													
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
I. POLICIES AND FALLACIES														
Reimbursements: Must be a fair affair	.956													
Projection and Presentation: Should never resort to painting false pictures of the organizations' successes.	.940													
Workers: There should not be any scope for posting salaries to ghost workers	.935													
Invigilation: No corruptive practice or malpractice should take place	.886													

Promotional Policies: Should be based on merit rating	.739													
II. VALUING THE VALUES														
Treatment of stock: Both High valued and low valued items need to be valued with equal grace and be properly valued		.841												
Purchase of equipment: It must be done on time and student-equipment standard ratio needs to be followed		.810												
Productivity: Factoral productivity which means the productivity of all individual factors which contribute to the overall productivity needs to be considered		.785												
Idle time: Needs to be categorized into normal idle time and abnormal idle time		.782												
Packages: Original and not pirated ones		.727												
Appeasing and undermining: These two would adversely affect the morale of the employees		.686												
III. USE, ABUSE AND MISUSE														
Scholarships: Should reach the deserving. There should not be any misuse of funds.			.978											
Policies: Right policies should be evolved as the accountants are forced to follow the policies of the management.			.978											
Donations: Need to be rightly accounted for and properly utilized.			.858											
IV. SURMOUNT A PARAMOUNT														
Time keeping: Must be done in an unbiased manner. [**Rule for all and all for rule** should be practised]				.809										
Group Dynamics: Organisation should stand paramount				.798										
Increments and incentives: Right policy needs to be evolved				.691										
Paper setting: Should be given to a person handling the subject for a reasonably long period				.684										

Purchase control: Should be given due weightage				.618										
V. ADDRESSING AND REDRESSING														
Bench Marking: Should be based on best practices					.909									
Project evaluation: Must be unbiased and be done methodically					.727									
Cost audit: The cost auditor shall report on matters which appear to him to be clearly wrong in principle or apparently unjustifiable and cases where the educational institution's funds have been used in a negligent or inefficient manner					.679									
VI. POSITION AND PROPOSITION														
Paper evaluation: Needs to be done with a higher degree of seriousness						.843								
Rules: Should never be violated. They are not to be flouted.						.750								
Merit Rating: Should be fair						.681								
Attitude of Management: Needs to be proactive and positive						.642								
VII. HU'MAN' AND HUMANE														
Gender sensitization: Should be given due weightage							.823							
Fee collected from the students: Must be reasonable and as per the norms prescribed by the government							-.730							
Retaining the female staff beyond office hours: It may be legally correct, but morally wrong.							.503							
VIII. OPEN SECRETS														
Time booking: Proper records need to be maintained by both staff and management								.628						
Secrecy: Should be maintained where necessary [Especially in areas such as paper setting and evaluation]								-.614						
Value analysis [A creative approach for finding out and controlling unnecessary costs]: Exploitation should not take place in the name of value analysis								.523						

IX. GOOD BOOKS														
Physical Facilities: They are not just shown in the books but are physically present.									.829					
Expenditure: Distinction must be made between personal expenditure and official expenditure									.802					
X. QUANTIFICATION														
Motion study and fatigue study: These studies play an important role in delegating the right quantum of work to the lecturers and the non- teaching staff.										.902				
Overtime: Overtime work needs to be appreciated and be fairly compensated.										.645				
XI. EFFICIENCY AND PROFICIENCY														
Result analysis: The institute should not resort to window dressing or painting false pictures											.703			
Pay scales: Need to be commensurate with the qualifications, efficiency & experience											-.486			
XII. DEVISISNG AND REVISING														
Management Information System: Must be timely, accurate and meaningful												.645		
XIII. EVER APPRECIABLE														
Job evaluation: Should be perpetual or a continuous one													.805	
Salary paid to the teaching and non-teaching staff: Needs to be properly accounted for													.708	
XIV. ATTITUDE AND SOLICITUDE														
Attitude of teachers: Needs to be perfectly positive														.882

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. A Rotation converged in 10 iterations

Source: Primary Data

Factor analysis reveals that the **factor I: Policies and fallacies** with reimbursements, projection and presentation, workers, invigilation and promotional policies as the attributes with highest factor loadings are regarded most important ethical issues connected with accounting by educational institutions. Attitude of the teacher, which has the lowest factor loading, is the last factor which is shown under the head attitude and solicitude.

3. The present part of the study aims to know if there is a relationship between ethics in accounting followed by the educational institutions and the goals of education and edification.

Majority of the respondents are of the opinion that the following goals of education can be achieved by following ethics in accounting by the educational institutions:

- Improving all aspects of the quality of education and ensuring excellence of all
- Ensuring that the learning needs of all young people and adults are met
- Acquisition and creation of knowledge
- Personality development

Note: The work sheet is shown in the addendum in Annex 3.

4. This part of the study deals with the opinions of the respondents with regard to the measures to be adopted by the educational institutions in bringing about pure ethical practices in accounting. The respondents were asked to rank the measures identified from 1 to 12 starting with 1 for the top priority and ending with 12 for the last priority. Coefficient of correlation has been used for analysis.

Table 3: Measures To Bring About Ethics in Accounting

	Rank I Assigned by the Students	**Rank II** Assigned by other respondents
1. Using the same rules and principles in every situation	5	6
2. Developing a righteous workplace policy	3	3
3. Holding employees accountable for all their actions	2	1
4. Guiding employees to discharge their duties to uphold professional standards throughout their tenure in the office	8	4
5. Using informal communication as a tool by encouraging interaction with supervisors and peer group	6	9
6. Experimenting with workplace ethics simulation	7	8
7. Designating an ombudsman in charge for accounting related grievances	11	12
8. Increasing the awareness of public interest [duty to serve society and public]	4	5
9. Making use of auditors as moral agents	9	10
10. Giving due importance to ethical or moral competency	1	2
11. Inclusion of experienced/ senior faculty in the process of establishment of and monitoring the code of ethics	12	11
12. Ethical motivation among accounting students, faculty and practitioners	10	7
Coefficient of correlation = 0.853147		

Source: Primary Data

It may be observed from the table that there is a perfect positive correlation between the preferences of the respondents with regard to the measures to bring about ethics in accounting by the educational institutions.

5. This part of the study deals with the impact of three important issues on ethics in accounting by the educational institutions. Chi square test has been applied to know if there is any significant difference in the opinions of the respondents with regard to these issues.

Table 4: Ongoing Effect or Benefits of Education in the Form of Ethics Once Accounting Graduates Enter the Workforce

	Effective	**Not effective**	**Total**
Students	**42**	**58**	**100**
Others [Professionals, Lecturers and parents]	28	72	100
Total	70	130	200
Chi square value = 4.3072 The computed value of x2 = 4.3076 is less than the table value of x2 = 3.841455 for one degree freedom at 5 percent level of significance, we may reject H0. It means that there is a significant difference between the opinions of the students and other respondents with regard to benefits of education in the form of ethics once the accounting graduates enter the workforce. H01 is not accepted.			

Source: Primary Data

Table 5: Implication of Code of Conduct in a College

	Provides a basis for ethics	Does not provide a basis for ethics	Total
Students	**79**	**21**	**100**
Others [Professionals, Lecturers and parents]	46	54	100
Total	**125**	**75**	**200**
Chi square value 21.1980 The computed value of x2 = 2o. 5478 is more than the table value of x2 = 3.841455 for one degree freedom at 5 percent level of significance, we may reject H0. It means that there is a significant difference between the opinions of the students and other respondents with regard to the statement that code of conduct provides a basis for ethics. H02 is not accepted.			

Source: Primary data

Table 6: Policies of Management

	Influence the ethical behaviour	Do not Influence the ethical behaviour	Total
Students	82	18	100
Others	85	15	100
Total	**167**	**33**	**200**

Chi square value = 0.1452
Source: Primary data

The computed value of x2 = 0.01452 is less than the table value of x2 = 3.841455 for one degree freedom at 5 percent level of significance. Thus, we may accept H0. It means that there is no significant difference between the opinions of the students and other respondents with regard to the relationship between policies of management and ethics in accounting. H_{03} is accepted.

Conclusion

The study reveals that there is a direct relationship between ethics followed by the educational institutions and the goals of education and edification. Some of the ethical issues connected with accounting by educational institutions as identified by majority of the respondents include: proper accounting of salary paid to the staff, proper disbursal of scholarships to the students, fair handling of reimbursements, restraining from painting false pictures of the institutions' success, policies and maintaining secrecy. Most of the respondents stated that merit rating should always be fair and rules should never be flouted. Some of the ethical skills as identified by the respondents include honesty and fairness. It is concluded that the proactive and positive attitude of the management of the educational institutions plays a key role in ethical accounting as everything depends on evolving right policies which are usually thrust on the accountants. Exploitation should not take place in the name of value analysis. Accounts are sure to express a real position if and only if the extremely delicate issues or ethereal issues are rightly addressed and redressed.

Addendum

Annex I

Branches/ Forms of Accounting

Financial Accounting	Cost Accounting	Management Accounting	Human Resource Accounting
"Financial accounting is the process of recording, summarizing and reporting the myriad of transactions resulting from business operations over a period of time."	"Cost accounting is a process of collecting, recording, classifying, analyzing, summarizing, allocating and evaluating various alternative courses of action & control of costs."	*"Management accounting is a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy".*	According to Stephen Knauf, 'HRA is the measurement and quantification of human organizational inputs such as recruiting, training, experience and commitment'.

Objectives of Accounting

Financial Accounting	Cost Accounting	Human Resource Accounting	Management Accounting
To provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity	To ascertain the cost per unit of the different products manufactured by a business concern, to minimize costs and eliminate wastages.	To furnish cost value information for making proper and effective management decisions about acquiring, allocating, developing, and maintaining human resources in order to achieve cost effective organizational objectives.	The basic objective of management accounting is to assist the management in performing its functions effectively. The functions of the management are planning, organizing, directing and controlling.

Annex II

Review of Literature

A few articles relevant for the study have been reviewed. The gist of the articles reviewed has been highlighted hereunder:

Seventy Technology Colleges To Shut Down In Telangana:

[Source:http://www.deccanchronicle.com/141213/nation-current-affairs/article/70-technology-colleges-shut-down-telangana]: The article reads "Around 60 to 70 private engineering colleges in the state may soon shut down. Many engineering colleges didn't allow the inspection teams to enter and shut their gates when they reached the campus. We also found that some colleges borrowed teachers from others', sources said."

College Scholarship Fraud Prevention Act Of 2000 Annual Report to Congress U.S. Department of Education U.S. Department of Justice Federal Trade Commission:

[Source:https://www.ftc.gov/sites/default/files/documents/reports/college-scholarship-fraud-prevention-act-2000-eleventh-annual-report-congress-united- states/1211scholarshipfraudreport.pdf]:

The executive summary of the report reads "Millions of U.S. high school graduates and their families look for ways to finance the costs of a college education. In the process, they sometimes are either victimized by, or unwittingly participate in, federal student financial aid fraud. To avoid deception, Congress passed the College Scholarship Fraud Prevention Act of 2000. This act established stricter sentencing guidelines for criminal financial aid fraud.

Haryana Teachers' Recruitment Scam

[Source: https://en.wikipedia.org/wiki/List_of_scandals_in_India]: The article reads "Ex Haryana CM Om Prakash Chautala and his son Ajay Singh Chautala have been convicted for 10 years in teacher recruitment scam"

Ethical Behavior In Higher Educational Institutions: The Role of the Code of Conduct: [Source: https://www.google.co.in/search?q=ethics+in+accounting+in+educational+institutions&oq]

The article reads 'The report of the Treadway Commission suggests that all public companies should establish effective written codes of conduct in promoting honorable behavior by corporations. The need for written "codes of conduct" for businesses is evident in the current literature. However, there is not sufficient evidence regarding the implication of codes of conduct in a college. Academic dishonesty has become an important issue in institutions of higher education. Codes of conduct can also provide a basis for ethical behavior in colleges and universities.

Ethics Education in Accounting: Moving Toward Ethical Motivation and Ethical Behaviour [Source:http://www.sciencedirect.com/science/article/pii/S0748575102000179]

This paper reviews the literature on ethics education in accounting and utilizes Thorne's 1998 Integrated Model of Ethical Decision Making to categorize that literature. The review reveals a preponderance of work discussing moral development, which consists of sensitivity and prescriptive reasoning, but a shortage of work addressing virtue, which consists of ethical motivation and ethical behavior.

CID Confirms Eamcet Question Paper Leak, 3 Taken Into Custody:

[Source: http://www.news18.com/news/india/telangana-cid-confirms-eamcet-question-paper-leak-3-taken-into-custody-1274702.html]; The article states "Telangana CID confirmed that the question paper of the Medical EAMCET-II was leaked prior to the exam and took three persons into custody in this connection. One of the persons taken into custody is an accused, who was arrested in 2014 in connection with the irregularities in the PG medical entrance test conducted by Vijayawada-based Dr NTR University of Health Sciences in March that year."

₹ Fee Reimbursement Scheme-A Big SCAM'

[Source:http://www.thehindu.com/news/cities/Hyderabad/fee-reimbursement-scheme-a-big-scam/article6242532.ece]: The following is the gist of article published by The Hindu in 2012 "The falling standards of professional education, especially in private engineering colleges, in Telangana, is a cause of concern for the new State as lakhs of engineering graduates passing out of these institutions lack basic employable skills. "Many of these colleges are run only for the fee reimbursement schemes and not for providing quality education. What's the use of such institutions? If this is the quality, what should a new state like Telangana showcase?" avers Telangana Chief Minister K. Chandrasekhar Rao in an exclusive interview to The Hindu. Honorable CM Sri Chandra Sekhara Rao said "Many colleges lack basic facilities like laboratories. Many do not have qualified faculty members. Most of these colleges do not pay salaries prescribed for teaching and non-teaching staff. There have been instances where under-qualified persons being recruited as lecturers. When the students pass out of these institutions what will their capabilities be? These colleges were thriving only on the fee reimbursement scheme, which is one of the biggest scandals in AP…"

Eng. Colleges Commit Fee Reimbursement SCAM

[Source: http://greattelangana.info/eng-colleges-commit-fee-reimbursement-scam]:The article reds "The arrest of a person, Zakeer, revealed that the many of the engineering colleges of the city have siphoned off lakhs of rupees of public money by making fake fee reimbursement claims. Explaining the modus operandi of his gang, Zakeer said that they would supply fake students to various engineering colleges from states like Asom, Nagaland, Manipur, Mizoram and Arunachal Pradesh on commission basis. The fake students are required by the colleges to siphon off money of the union government in the name of students. He said that the colleges make fake claims under a fee reimbursement scheme meant for the benefit of students from the northern eastern states."

Scholarship Scam: Wardha Institutes Return Rs 170 Crores to Government

[Source:Thehitavada.com/Encyc/2016/5/11/Scholarship-Scam--Wardha-Institutes-return-Rs-170-crore-to-Government]: After the formation of Special Investigation Team (SIT), some of the institutions in Wardha district, who are under SIT's scanner, have quietly returned money received by them in the form of scholarship, to the tune of approximately ₹ 170 crores. However, mere returning money is not sufficient; as the SIT is probing scholarships received by hundreds of institutions from last couple of years and has got third extension to complete the term before large-scale tough action is initiated against scamsters and their godfathers.

Annex III

Impact of Ethics in Education on Attaining the Ultimate Goals of Education

Goals of Education	**Yes**	**Yes-in – part**	**No**	**Mean Score**
As Suggested By UNESCO [Source: http://www.unesco.org/new/en/education/themes/leading]				
Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.	171	20	9	2.81
Ensuring that by 2030 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to, and complete, free and compulsory primary education of good quality.	132	63	5	2.63
Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes.	185	11	4	2.90
Achieving a 50 per cent improvement in levels of adult literacy by 2030, especially for women, and equitable access to basic and continuing education for all adults.	75	95	30	2.22

Eliminating gender disparities in primary and secondary education by 2025, and achieving gender equality in education by 2030, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.	121	75	4	2.58
Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills	195	4	1	2.97
Other Goals				
Individual Development	110	72	18	2.46
Social and National Development	116	15	69	2.23
Social Transformation	132	14	54	2.39
Developing communicative competence	135	52	13	2.81
Acquisition and creation of knowledge	165	32	3	2.88
Personality development	177	23	0	2.87
Professional development	175	24	1	2.57
Mental and physical health	121	73	6	2.36
Handling complex situations with confidence and composure	92	88	20	2.38
Knowledge and wisdom	122	33	45	2.46

Source: Primary Data

Annex IV

Key Words and their Meanings

- **Ethereal** : [Also etherial]: Extremely delicate or light
- **Ethical** : Morally upright
- **Fallacy** : A mistaken belief
- **Humane** : Showing concern and kindness towards others
- **MIS** : Management information is the scientific way of collecting, processing, storing and communicating information relating to various activities of an organization in an efficient way for the betterment of all.
- **Morality** : The extent to which an action is right or wrong
- **Paramount**: More important than anything else
- **Proposition:** A matter or person to be dealt with/ a statement expressing judgement or opinion
- **Real** : Actually existing or occurring; worthy of the description
- **Solicitude:** Care or concern
- **Surmount:** Stand or be placed on top of

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MICRO FINANCE: A SOURCE OF WOMEN EMPOWERMENT IN INDIA

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ABSTRACT

Microfinance programme extend small loans to very poor people (particularly women) for self-employment projects that generate income and allow them to take care for themselves and their families. In recent years, empowerment of women has become a subject of great concern for the nations all over the world especially in poor and developing countries. Empowerment is a way of acquiring the ability and opportunity to participate in decision making and implementation of decisions with proper knowledge of self-dignity and self-confidence. Empowerment means participation of women in harmonious co-existence with men in the society. Power provides social recognition, prosperity, dignity, property and security. Hence empowerment has acquired considerable importance. Participation in the micro finance programme has led to greater levels of women empowerment in terms of increase in economic, knowledge, self-confidence, social and political awareness, development of organizational skills and mobility, etc. Microfinance has given women an opportunity to change their destiny. The microfinance has function to its potential to empower. Poor women, who are a part of the microfinance movement in the country, use small loans to increase their economic activity, keeping in view the immense potential inherent in SHGs in savings mobilization and credit multiplication. Women entrepreneur play great role in rural economies, and it generates large percentage of micro-enterprises and other businesses field in developing countries are undertaken by women.

KEYWORDS: *Women, Empowerment, Microfinance, Decision Making, Social Recognition, Micro-Enterprises.*

Introduction

"Gender equality is more than a goal in itself. It is a precondition for meeting the challenges of reducing poverty, promoting sustainable development and building good governance"

(Kofi Annan)

Microfinance is a small source of financial service for poor people and small entrepreneurs lacking access to banking and related services. It is worldwide movement whose object is 'a world in which as many poor and near poor households as possible permanent access to an appropriate range of high quality financial services, including not only credit but also insurance and savings. The major objective of microfinance for policy planners in India is to search products and strategies for delivering financial services to the poorer and small entrepreneurs mostly women mainly of backward areas in a sustainable manner that generally lack banking related services. The source of microfinance in India has been viewed as a development tool which would alleviate poverty, empower women and enhance growth of the country through financial inclusion. In our society women face gender specific barriers like access education, health, employment etc. Micro credit are available solely and entirely to target group of women. The first organization to introduce the concept of microfinance to enhance the agriculture and rural development activities in India was NABARD. After that microfinance was steadily improved growing through SHGs. Presently Government of India with RBI have done wonderful job for easy

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accessibility of financial services to poor and small businesses. Microfinance sector has made substantial progress over the past few decades and brought number of people above poverty line in India. This sector play a very important role in beginning and expanding the micro business by offering micro loans to lower income groups which generate income and employment to local communities.

Microfinance sector has grown rapidly over the last few decades. Mohammad Yonus from Bangladesh is credited with laying the foundation of Grameen Bank; Bangladesh in 1976. In India, there has been impressive growth in microfinance activities over past few decades or more. Microfinance is one of the few markets - based, scalable anti-poverty and women empowerment solutions that are in place in India today, and the value argument to scale it up to meet the overwhelming need is compelling. Microfinance has emerged as a strong tool for financial inclusion that links low comminutes with banks. It's crucial for achieving inclusive economic process and solely such growth is property. The basic idea of microfinance is to provide small credit to the poor people who otherwise would not have access to banking services. This programme is working in many developing countries. About the concept of microfinance programme, impact assessment studies have been done by many authors in different countries like India, Bangladesh, Pakistan, Nepal, Thailand and many other countries of South Asia and Africa. The microfinance literature offers a diversity of findings relating to the type and level of impact of the programme. There are various studies on microfinance programme which shows the significant positive impact in increasing employment, reducing poverty empowering women. As per the reports of number of studies participant households enjoy higher standard of living as compared to the non-participants. The programme reduces consumption as well as income vulnerability among its beneficiaries. Some of the studies also confirm that the programme is helpful in attaining millennium development goals by reducing poverty, hunger, infectious diseases and through women empowerment. The number of studies explained that participation in the micro finance programme has led to greater levels of women empowerment in terms of increase in economic, knowledge, self-confidence, social and political awareness, development of organizational skills and mobility, etc. Some review also show that the programme is not reaching the bottom poor people living below poverty line and the group loans are utilized for non-income generating activities such as consumption and other emergency needs. Microfinance studies also show that the women participants have limited control over the use of group loans. The microfinance review also provides mixed results about the impact of microfinance programme on the participants. The studies provide valuable insights into the benefits and drawbacks associated with microfinance programme.

Review of Literature

In this study the researcher focus is on how underprivileged women come forward for forming self-help group and demanding loan for small entrepreneurship from formal and informal microfinance institution and ultimately empower themselves. The researcher has made an attempt to go through the available literature in the sphere of Self Help Group and microfinance for women empowerment in India within the conceptual framework of the study. In this connection the researcher has tried to concretize and highlight the salient features of the trends and practices towards self-help group and microfinance for women empowerment. Besides, this organized effort has been made by the researcher to have a glimpse on few literature related to self-help group and microfinance for women empowerment. The review collected has been categorized under the following heads:

- **Ramakrishna (1997)** further discusses that the impact of entrepreneurship set up by the self-help group members by using credit given by bank varies from woman to woman. These come due to the difference in productive activities or different backgrounds. Sometimes, programmebenefited the women who are already better off, and the poor women couldn't take benefit from the programmes because of their low resource base, lack of skills and market contacts. However, it is possible that the poorer women can also be more free and motivated to use credit for production.
- **Narashimhan Sakunthala (1999)** in her study used of secondary data to arrive at meaningful conclusions. The main objective of the study is to assess the effectiveness of alternative strategies on poorer woman development and empowerment of women. The study suggests that instead of economic intervention, there is needed to create awareness among women. The study reveals for every area of empowerment, acquiring knowledge and skill will play more effective role. Some

great features has given by Rahman (1999) about the proper use of loan by women folk in their development which is practically based on the basis of anthropological approach with in-depth interviews, participant observations, case studies and a household survey in a village. The studies showed that about 40% to 70% of the loans disbursed to the women group are used by the husband and a relation gap exists there which later turned to domestic violence.

- **Manimekalai and Rajeswari (2001)** examined the socio-economic back ground of self-help women groups in rural micro enterprises; they also studied the factors that motivated the women to become self-help group members and eventually entrepreneurs. The study analyzed role of economic activities is growth indicators such as supplementary finance, marketing and other related aspects and identified the problems faced by self-help group women in running the enterprises and suggested policy measures. From the studies it is oblivion that the provision of micro finance by NGOs to women SHGs has helped the groups to achieve a measure of economic and social empowerment.
- **Dwarakanath (2002)** asserts out that women led self-help groups have successfully meet the needs of the women through financial assistance. The study which was conducted in Andhra Pradesh has shown the effectiveness of self-help groups among rural folks about the significance of women empowerment and rural credit. The credit needs of rural women are fulfilled through women groups. They became successful in bringing socio-economic development of women in Andhra Pradesh.
- **Kothal (2003)** stated that four different models of linkage could be between SHGs and banks. Acceptance of a particular model depends on the perception of the bank and the strength of the SHGs and the NGO. The performance of SHGs has been seen satisfactory.
- **Raghavendra (2003)** revealed that the total number of SHGs, in the country reached a phenomenal figure of 4.61 lakh by March 2002. Almost 90 per cent of them were linked to banks were exclusive women groups and periodic studied have shown that repayment of loans by SHGs to banks has been consistently over 95 per cent.

Objective

The main objective of the study is to examine the changing trends in the status of women in India and assess the present role of women empowerment through microfinance.

Methodology

The study was based on both primary and secondary data. The primary data collected through interview from participants and non-participants sample women SHG members. Primary data was collected from the women respondents on a specially structured pre-tested questionnaire through personal interview method. The impact of microfinance programme has been determined by comparing two groups: participant women of the programme (henceforth called as participants) and non-participants. Participants were the members of the SHGs which has been benefited from the scheme and was received the bank loans. Non-participants members was those in the same areas which was eligible for the microfinance programme and was formed the SHGs but did not access credit up to the time of the survey. As per the NABARD guidelines, Self Help Groups are provided bank loans only after the active existence of the groups for about six months after the time of their inception. So, the non-participants was belonged to the same group which was less than six months old at the time of survey; and have not availed any benefit of the programme. The Researcher has taken random sample of 100 each among participant and non-participant women members of the programme in which participant get benefited from the scheme and had received the bank loans and non-participants in the same area which was eligible for the microfinance scheme and was formed the SHGs but did not get access credit up to the time of the survey. So the total of 200 samples was used for the study area. As per survey 81 respondents comes from experienced of more than six months and 74 come from women respondents with experience of less than six months.

There was also used secondary source of data to understand the concepts, definitions, theories and empirical results. The researcher has used books, research literatures, articles, journals and reports, as secondary sources for study. Internet source was also been used for secondary sources.

Socio-Economic Condition of SHG Members

Every sphere of women life is influenced by the social and economic background of society in which they live. Economic status provides the financial support to involve in new activities. Participation in various programmes and activities depends on the social background. Economic gain along with social upliftment changes the social outlook and attitude of women.

Table 1: Reliability Test

S. No.	Variables	Cronbach's Alpha	No. of Items
1	Women respondent with experience of less than six months.	.833	8
2	Women respondents with experience of more than six months	.901	8

Source: Survey Data

The reliability test was taken on data among two groups of variables Women respondent with experience of less than six months and Women respondents with experience of more than six months. The obtain values of Cronbach's Alpha are Greater than to Standard Value of Cronbach's Alpha i.e. 0.7, it mean that the data is reliable and provides necessary information as we want from data side.

Table 2: Socio-Economic Empowerment of Both Experienced and Inexperienced Women Respondents

	Part First Experience of Less than Six Months				Part Second Experience of More than Six Months			
Variables	Fully benefit	Partly benefit	Not benefit	Total	Fully benefit	Partly benefit	Not benefit	Total
Decision Making	5 (6.7%)	11 (14.8%)	58 (78.3%)	74 (100%)	5 6.1%	55 67.9%	21 25.8%	81 (100%)
Power over resources	2 (2.7%)	9 (12.1%)	63 (85.1%)	74 (100%)	22 27.1%	46 56.7%	13 16%	81 (100%)
Freedom of Movement	11 (14.8%)	27 (36.4%)	36 48.6%	74 (100%)	55 67.9%	22 27.1%	4 4.9%	81 (100%)
Increase in income	2 2.7%	7 9.4%	65 87.8%	74 (100%)	17 20.9%	49 60.4%	15 18.5%	81 (100%)
Employment Opportunity	13 17.5%	22 29.7%	39 52.7%	74 (100%)	51 62.9%	23 28.3%	7 8.6%	81 (100%)
Saving increase	3 4%	9 12.1%	62 83.7%	74 (100%)	19 23.4%	52 64.1%	10 12.3%	81 (100%)
Social Status	16 21.6%	27 36.4%	31 41.8%	74 (100%)	19 23.4%	48 59.2%	14 17.2%	81 (100%)
Importance in community	15 20.2%	23 31%	36 48.6%	74 (100%)	24 29.6%	46 56.7%	11 13.58%	81 (100%)

Source: Survey Data

The Table 2 shows the socio-economic empowerment of women sample respondents with experience of less than and more than six months. The table is divided into two parts, part first shows sample respondents with experience of less than six months and part second shows the sample respondents with experience of more than six months. So as per data it shows that there is lot more improvement in socio-economic status of women respondents with experience of more than six months through microfinance than respondents with experience of less than six month women respondents after joining self-help group. The data was analyzed through SPSS by using regression analysis between experience of less than six month and more than six month women respondents.

Table 3: Regression of Sample Respondents with Experience of Less than Six Months and More than Six Months for Socio-Economic Empowerment

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.114[a]	.020	.016	3.66648	2.049

a. Predictors: (Constant), Experienced Above Six Month

b. Dependent Variable: Experienced Less Six Month

The model shows Above Six Month women respondent independent variable and Below Six Month dependent variable. The model summary table indicates that Above Six Month women respondents have 2.0% effect on Below Six Month. Since the r square value of table is .020 which means Above Six Month has direct but very low relationship with Below Six Month women SHG members and the R Value 0.114 show positive correlation but very low The Durbin Watson value is between 1–3 it mean that there is no auto correlation of the errors – Data is free of auto correlation.

ANOVA [a]

Table Tests Whether the Overall Regression Model is a Good Fit for the Data

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	**.262**	**1**	**.262**	**2.012**	**.013[b]**
	Residual	**1328.341**	**61**	**21.776**		
	Total	**1328.603**	**62**			

a. Dependent Variable: Experienced Less Six Month

b. Predictors Constant: Experienced Above Six Month

This model has average fit as indicated by F-test value which is 2.012 insignificant at .013[b] level of significance.

Coefficients [a]

Model		Un Standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24.001	3.389	.114	7.082	.000
	Above Six Month	-.024	.221		1.110	.013

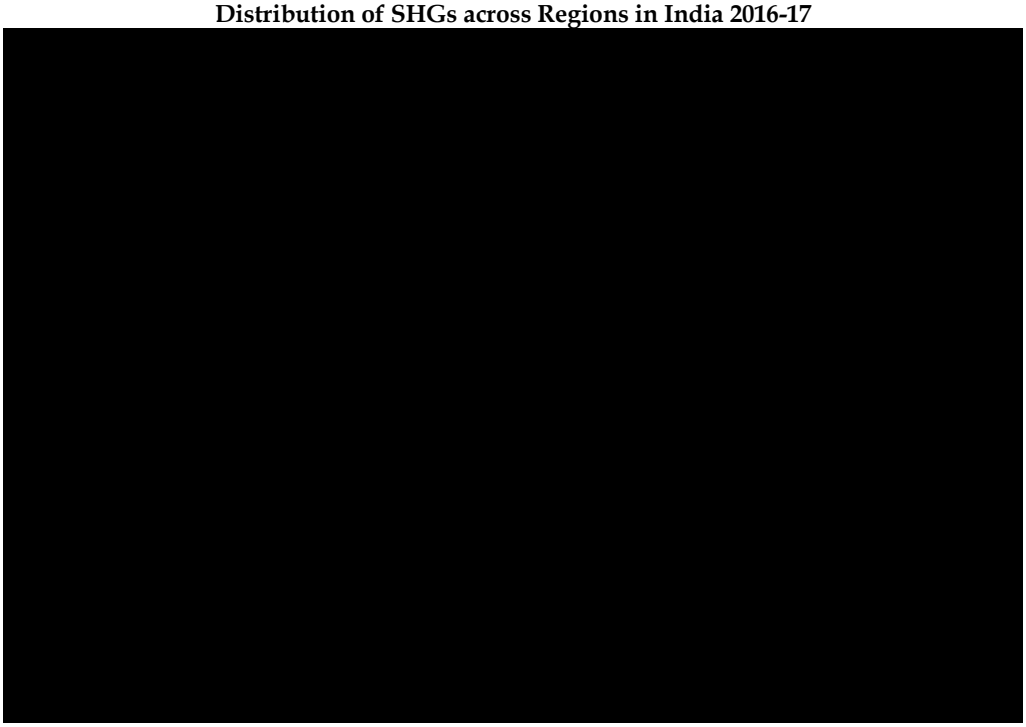
a. Dependent Variable: Below Six Month

The result of regression from the coefficient table indicates that Above Six Month has direct but low relationship with Below Six women respondents. It shows the socio-economic condition of women respondent with experience of less than six month is different from women respondents with experience of more than six months. Having beta value of 0.114 tested through t-test having t-value of 1.110 (t standard value is 1.96) which is insignificant at 0.013 level of significance.

Micro Finance Operations in India

In India most microfinance operations are located in the Southern and Western regions. These two regions account a share of 61% in the whole credit provision of India, and a share in all Indian deposits of 49%, whereas its population is only 32% of the total population. Distribution of SHGs in the country has always remained skewed towards Southern Zone which accounts for almost half (48%) of the SHGs in the country followed by Eastern Zone with 23% in 2016-17 (Figure 1.I). Among the states Tamil Nadu has the maximum number (12.8%) of SHGs after split of Andhra Pradesh. As compared to previous year, there has been a marginal fall in the share of saving linked SHGs in the Southern Region from 44.87% from 48.32% and in Northern Region 4.98 from 4.69% in 2016-17while the other regions have recorded slight upward swing. In North Eastern Region, apart from Tripura all other states and all four states in Central Region have recorded a rise in number of saving linked SHGs during the year as compared to previous year. Eastern Region has also registered a rise in number of saving linked SHGs despite a fall reported in Bihar, Jharkhand and Odisha.

Chart 1
Distribution of SHGs across Regions in India 2016-17



Source: NABARD

Suggestions

- As many women do not have adequate knowledge about SHG, they should be provided literature with case studies in regional language so that they could have at least theoretical knowledge about the SHG and not become burden on the SHG or vice-versa.
- As micro-credit gives women an opportunity to change their economic status through savings and credit policy but few commercial banks are reluctant to give loan to the mature SHGs. So, that they could start their enterprise and can break the long chain of poverty and unemployment.
- Attending meeting should be made compulsory so that people should get benefit out of SHGs.
- The study also revealed that majority of general members are illiterate so non-formal education would be very much effective for understanding group activities specially group savings and credit policy which avoid unnecessary conflict among the group members. It also helps to retain members in the group.

Conclusion

The researcher comes to the conclusion that Empowering of women pre-supposes a drastic, dynamic and democratic change in the perception and expectation from women in our society. To help women to attain economic independence is the first priority for such a change. When a woman attains economic independence, she naturally becomes the mistress of her own body and author of her own decisions. A scientific perception of women needs is essential for the process which leads to the empowerment. Now-a-days economic development is one of the factors that have changed the entire scenario of social and cultural environment within the country, especially for the women. The rural women are engaged in small-scale entrepreneurship programme with the help of SHGs. Through that they were economically empowered and attaining status in the family and community. Women are the vital human infrastructure and their empowerment would accelerate the pace of development. Women comprise half of human resources of the country. They have been identified as key agents of sustainable development. Women equality is central to a more holistic approach towards stabilizing new patterns and process of development that are sustainable. The contribution of women and their role in the family as well as in the economic development and social transformation are pivotal.

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BITCOIN DIGITAL CURRENCY: A NEW PARADIGM

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ABSTRACT

Electronic commerce (e- commerce) is generally known as doing business or trade using internet. It is basically a type of business model which facilitates the business or a firm to do business electronically. In Bitcoin the transactions of digital currency can be performed without any links with banking system or any other centralized system. Nowadays, Bitcoin is coming forth as the most prosperous implementation of the concept known as digital currency. The Bitcoin maintain its transactions through a public log which is called the blockchain. The Bitcoin technology - the protocol and the cryptography – which runs under a strong security track record and this network is known to be as one of the largest distributed computing project in the world. These currencies can passively being attacked or harmed during the transactions or it can also be targeted on its online storage exchanges or accounts.
In Bitcoin system, person can transfer money from one pool to another without transaction charges. This study is a examine to analyze the conceptual framework, legal perspectives and strengths and weaknesses of Bitcoin if it is being used in e-commerce in place of real money.

KEYWORDS: *E-commerce, Bitcoin, Digital Currency, Blockchain, Bitcoin Mining.*

Introduction

Commerce on the Internet has emerged as the most trusted way of online transactions exclusively on financial institutions serving as entrusted third parties for digital payments. While most of the transactions works well enough during the access of accounts, it still suffers from its pros and cons. A certain percentage of fraud is accepted as unavoidable. In physical currency transactions, these costs and payment uncertainties can be abstaining, but unfortunately no other mechanism sustain to carry on payments over a communications channel without a trusted party. What is needed is a digital payment system based on cryptographic proof instead of trust that allows any two willing parties to transact directly with each other without the need for a trusted third party.

The concept of Bitcoin is a latest way of currency transaction throughout the world economic market but not in reach to every person due to lack of understanding of its concept, usage and the endangerment it poses to national security. Its legal status and its potential for terror financing require more deliberation. Investors in the country need to be provided the whole ambit of Bitcoin functioning to helps them to take the best decision in the interest of the nation. This brings us to the question of whether Bitcoin digital currency is a dangerous portend for India's national security. E-commerce operates in all four of the major market segments: B to B (business to business), B to C (business to consumer), C to C (consumer to consumer), and C to B (consumer to business). Bitcoin is emerging as the fastest digital payment system, which depends on cryptographic proof that these payment systems need not any single administrator. Bitcoin is also referred as virtual currency, crypto-currency or digital currency. The mastermind of Bitcoin was to distribute the ledger containing all Bitcoin payments among each user in

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the network. Hence, every single transaction is authenticated by every single user and no centralized authority required for this. This is why blockchain technology is many a time referred to as 'distributed ledger' technology, and the blockchain is called a 'distributed ledger.'

Literature Review

This is quite surprising that the primary application predicated for Bitcoin - e-commerce - has not yet been subjected to rigorous scientific scrutiny, despite the fact that its use as an electronic payment system for transactions has many important consequences for information systems and distribution strategies via electronic channels. This includes transaction costs (Chircu & Mahajan, 2006; Sung, 2006; Teo & Yu, 2005), as well as the distribution of risk and trust between traders and customers (Glover & Benbasat, 2011; Li, Pieńkowski, Van Moorsel, & Smith, 2012). Few research has been done to investigate the link between consumers' level of knowledge and their use of Bitcoin in e-commerce.

Objectives of the Study

- To know the concept of Bitcoin as a whole.
- To study the working of Bitcoin in E-commerce.
- To study the harmful effects of Bitcoin on the Indian economy.
- To evaluate the challenges of Bitcoin.

Research Methodology

Secondary data has been used. Data has been collected from various journals, websites and books. Being a new concept, and as it is not being used too frequently worldwide, thus it was quite difficult to collect the data easily. Secondary data was also not readily available.

Conceptual Framework of Bitcoin

The Bitcoin is a virtual digital currency – the technical aspects of which are largely unknown to the general public. The Bitcoin, a peer-to-peer digital payment system, is a good technical primer for the amateur or those keen to know about it. The unique attributes of the Bitcoin are as under:

- A Bitcoin has no physical attribute. It is a string of data which retains its uniqueness. The serial numbers of a currency notes makes each note unique, the Bitcoins have their own method to remain unique.
- A Bitcoin is protected through a system of digital signatures, hash functions, chain blocks, and time stamps. This process ensures that there is no double spending in Bitcoins.
- There is no need to establish a trusted third party (like the Reserve Bank of India in the case of the Indian rupee) as is done with normal currencies. In Bitcoin, a peer-to-peer network ensures that the Bitcoin remain unique. Bitcoin has its own unique identity which can be an important trust factor for this digital payment system.
- A Bitcoin is not denominated in any national currency. Its basic unit is 1 Bitcoin. You can trade it for any value, even infractions.

The Bitcoin has its concerns too. The first and principal relates to its stability as a digital currency. The Bitcoin volatility index today is 4.07 percent. In comparison, the unpredictability of gold averages around 1.2 percent while other major currencies average between 0.5 percent and 1.0 percent. Presently, the Bitcoin is a unstable currency. The next concern is what happens if the crypto currency or a Bitcoin exchange crashes? However, many countries have adopted Bitcoin as a legal currency though no financial institution in the world today is supporting this currency because of its risky nature. Some observers feel that China supports it as it provides an alternative to the US dollar, and being a major locus of Bitcoin nodes, China can control it.

Legal Issues of Bitcoin in India

The Reserve Bank of India (RBI) has given a statement against the usage of fundamental currencies/encrypted money like Bitcoin. They have restricted the usage of this currency and taken it as breach of anti-money laundering provisions. Also, in an official statement, RBI has alert investors and traders of Bitcoin or any other virtual currency, 'about the potential financial, legal, and security risks arising from their use'. In India, the RBI continually alerting and giving notices against crypto currency several times in the pastt few years. For instance, in December 2013, Bitcoin exchanges in India had to halt their operations after a similar announcement by the RBI. Also, surprise attacks were performed on Bitcoin trading platforms. Post RBI alerting and raids, where several Indian digital currency

companies like Laxmi coin postponed their launch, some continued with trading. Recently, on 14th July, 2017 the Supreme Court strictly issued instructions to RBI to ban Bitcoin in India. Furthermore, in June 2015, the Bitcoin exchange BTCX India was shut down. While we do not have any reported instances of crowd funding in this respect, crypto currencies have been widely suspected to finance criminal activities. We have to be carefully and critically watching these developments."

Security Issues

The Bitcoin is the purely digital currency that has no physical existence. The issues related to the security of the currency are the center of the discussion from the beginning. The efforts are made to make these currencies and related as transactions and mining secured but there are still some loops exist in front of this currency system. The mining processes as well as transactions are not fully protected and colluding investors can take the advantage of the weaknesses in this process. There are few services that provide the facility of online digital cash for their clients and it can also be on target of hackers.

Status of Bitcoin in India

Use of the Bitcoin has increased in India. Using Indian currency one can buy and sell at Bitcoin exchanges. On the internet, some of the Bitcoin exchanges in India are bitcoin.in, unocoin, indiabitcoin.com, etc. Bitcoin transactions can be assessed in India, thus, act as a medium to carry out terror finance. The responsibility for the regulation of currency in India rests with the Reserve Bank of India (RBI). As per Reserve Bank of India, the use of Bitcoin as a source for payment is not authorised by any central bank or monetary authority.

In fact, no legislative or regulatory framework or law has been passed in India as yet. The RBI advice, is only a recommendation, use of the Bitcoin is not illicit in India. Now a day's Bitcoin regulatory framework has been use by Terrorists as terror funding in India. Hawala transactions are also being carried out through this Bitcoin system which is also hazardous for Indian economy. However, some people are supporters of the Bitcoin in India, who states that it is reliable because the Bitcoin service providers are following the Know Your Customer (KYC) guidelines. However, if the Reserve Bank of India has not recognized the Bitcoin in India, the KYC guidelines has no meaning for their followers as these are not regulated by any legally authorized entity in India.

Pros of Bitcoin as Digital Currency

Bitcoins have a way to go before becoming an alternative to existing electronic transaction systems, but they do provide real advantages to users as under:

- **Freedom in Payment**
  - Bitcoin makes easy to send and get money anywhere in the world at any given time.
  - It is a facility that empowers users without any worry about crossing borders, rescheduling for bank holidays, or any other limitations one might think will occur when transferring money.
  - Without Central authority one can control money with Bitcoin.
- **Information is Transparent**
  - By using block chain, all transactions are available for everyone to see, however personal information is hidden.
  - Your public address is what is visible; however, your personal information is not tied to this.
  - Anyone at anytime can verify transactions in the Bitcoin block chain.
  - The manipulation of Bitcoin protocol cannot be carried out by any person, organization, or government. This is due to Bitcoin being cryptographically secure.
- **Very Low Fees**
  - Currently there are either no charges, or very low charges within Bitcoin payments.
  - With transactions, users might include charges in order to process the transactions faster. The higher the fee, the more priority it gets within the network and the quicker it gets processed.
  - Digital Currency exchanges provides base for merchant process transactions by converting Bitcoins into flat currency. These services generally have lower fees than credit cards &d PayPal.
- **Fewer Risks for Merchants**

Bitcoin transactions cannot be altered, do not carry with them personal information, and are secure, merchants are protected from potential losses that might occur from fraud.

Cons of Bitcoin as Digital Currency

- **Lack of Awareness & Understanding**
  - Fact is many people are still unaware of digital currencies and Bitcoin.
  - People need to be educated about Bitcoin to be able to apply it to their lives.
  - Entrepreneurs are accepting Bitcoins because of its advantages, but still people have more belief on older methods of physical currencies.
  - Companies like Tiger direct and Overstock accepting Bitcoin as payment is great. However, if they do not have knowledgeable staffs that understand digital currencies, how will they help customers understand and use Bitcoin for transactions?
  - The workers need to be education on Bitcoin so that they can help the customers. This will definitely take some time and effort. Otherwise, the uses of Bitcoin will no longer be an advantage for such large companies, if their staff members are not well educated about the mechanism of Bitcoin.
- **Risk and Volatility**
  - Bitcoin has instability mainly due to the fact that there is a limited amount of coins and the demand for them increases by each passing day.
  - However, it is expected that the volatility will decrease as more time goes on.
  - As more businesses, medias, and trading houses begin to accept Bitcoin, its' price will automatically settle down.
  - Currently, Bitcoin's price fluctuate everyday mainly due to current events that are related to digital currencies.
- **Still Developing**
  - Bitcoin is still at its childhood stage with incomplete features that are in development.
  - To make the digital currency more secure and useful, new features, tools, and services are currently being developed.
  - Bitcoin has some growth to do before it comes to its full and final potential.

Conclusion

The concept of Bitcoin is the first known successful implementation of crypto currency but it is still in immature state and the developers are continuously putting their efforts to reduce the vulnerability of the Bitcoin. The main threats for Bitcoin are its vulnerability in the mining process and transactions and threat to security during the storage of the coins on the online pools. People are just beginning to become more aware of it. Bitcoin success depends on, more people need to understand what it is and not let their preconceived notions distort the concept of digital currencies. There are always pros and cons to any situation in life. To be able to make a good decision, you need to look for the good and bad thoroughly before finalizing your decision. Do the same for Bitcoin as digital currency. One should first understand what it is, and then decide what you want to do with it.

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POTENTIAL FOR CASHLESS ECONOMY IN INDIA

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ABSTRACT

A cashless society is a term describing the economic eco-system in which palpable, physical money, namely paper banknotes and metal coins, are replaced with virtual, digital money, and where cash circulation is substituted with payments done by using numerous types of cards, mobile devices and various other equipment connected to the internet. The amount and potential for cashless payments made by households in India is tried to understand in this paper. Through an extensive household survey of Jodhpur city, It is estimated the extent to which households make non cash expenditure. It is also identified the bottlenecks which prevents households to make non cash payments. For it various statistical techniques like, descriptive statistics and ANOVA had been used.

KEYWORDS: *Cashless Transactions, Mobile Banking, Indian Economy, Electronic Merchants, E- Payment.*

Introduction

A cashless economy is one where cash flow is minimal or non-existent. In a cashless economy, electronic channels like debit card, credit card, mobile banking, electronic merchants, payments such as IMPS, payment through apps like PAYTM are mode of transaction. India has been a cash-dependent economy, with 97-98% of all transactions still in cash. Only half the nation's adult population i.e. around 233 million, possess a bank account, a precursor for a cashless economy. Most retailers don't accept cards, or don't have the infrastructure for online payments limiting the ability to use cards. Bank accounts or online banking are not of any use even when people have access to it, if retailers want the payment in cash bank accounts or online banking are of no use. India being an agrarian economy we have to take them into consideration too.

Challenges in Transitioning to a Cashless Society

- Acceptance infrastructure and digital inclusion
- Financial Inclusion Digital and Financial Literacy
- Cyber Security
- Changing habits and attitude
- Urban – Rural Divide

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METHODOLOGY

This study is carried out to estimate the status, potential and importance cashless economy in the country. The study focuses on extensive study based on secondary data. The data has been collected with help of e-books magazines, newspapers, research article, research journal, e-journals. The research will be conducted with objective to find out the extent towards cashless transaction. The study will be based on questionnaire. The required data will be collected from both secondary and primary sources. After multiple follow-ups, 200 questionnaires were successfully retrieved and 125 were considered fit for statistical analysis. For testing the hypothesized relationship, the main concepts measured in this study mode of payment for transaction, awareness, eagerness. Survey was measured by using 20 questions. ANNOVA regression analysis was employed to test the research hypothesis.

Objectives

- To know the challenges of cashless economy in India.
- To know the opportunities of cashless economy in India.
- To know the socio- eco impact of cashless economy on society in India.
- To understand the factor influence the customer's moving towards cashless.
- To find the potential of cashless economy in India.

Hypothesis

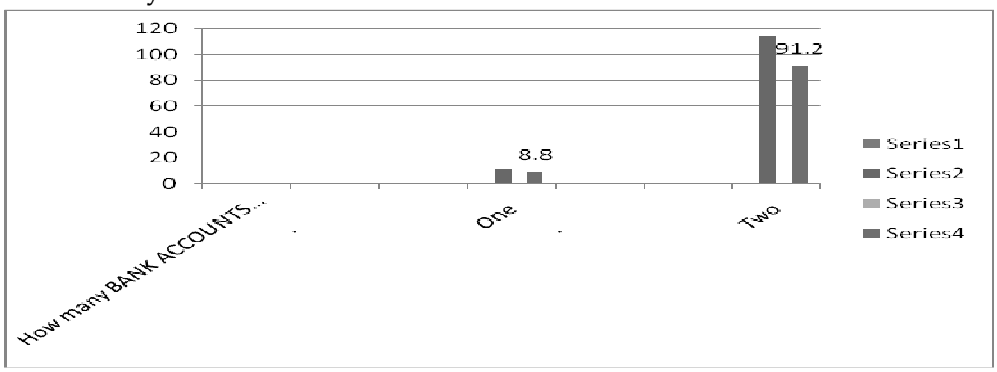
$\mathbf{H_{01}}$: There is significant potential of cashless economy in India.

$\mathbf{H_{11}}$: There is no significant potential of cashless economy in India.

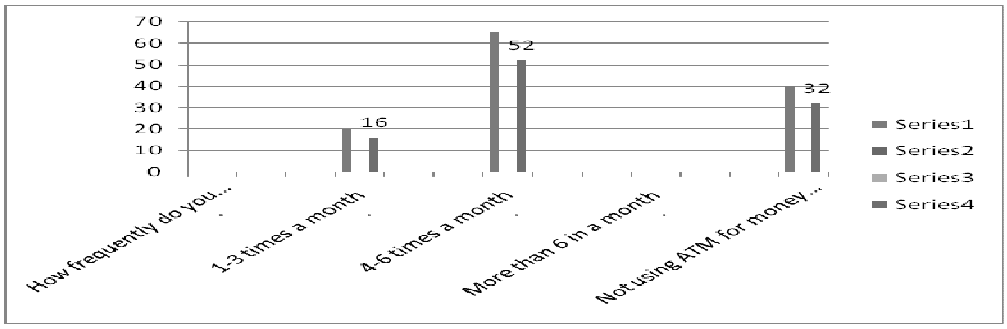
Analysis and Interpretation

- **Gender**: male respondent's proportion was 70% and female represented only 30%.
- **Profession**: 30% were serving in private companies, 25% were students, 15% housewives and 30% were from government sector.

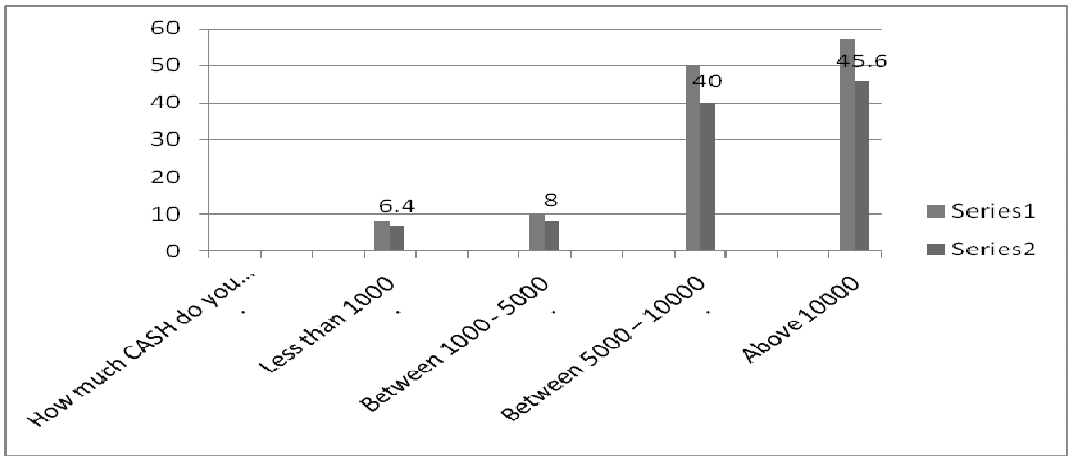
Responses of Survey



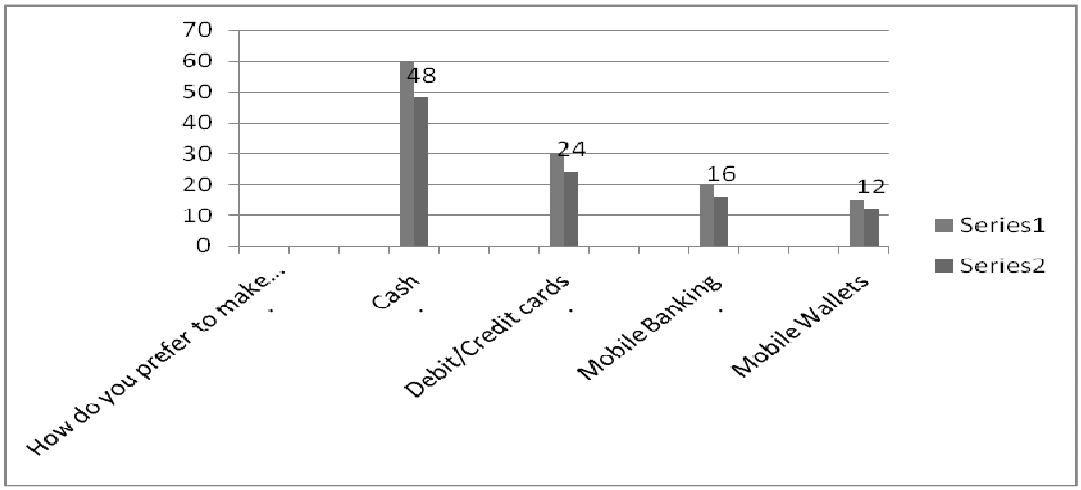
8.8% respondents have one bank account and 91.2% have more than one account.



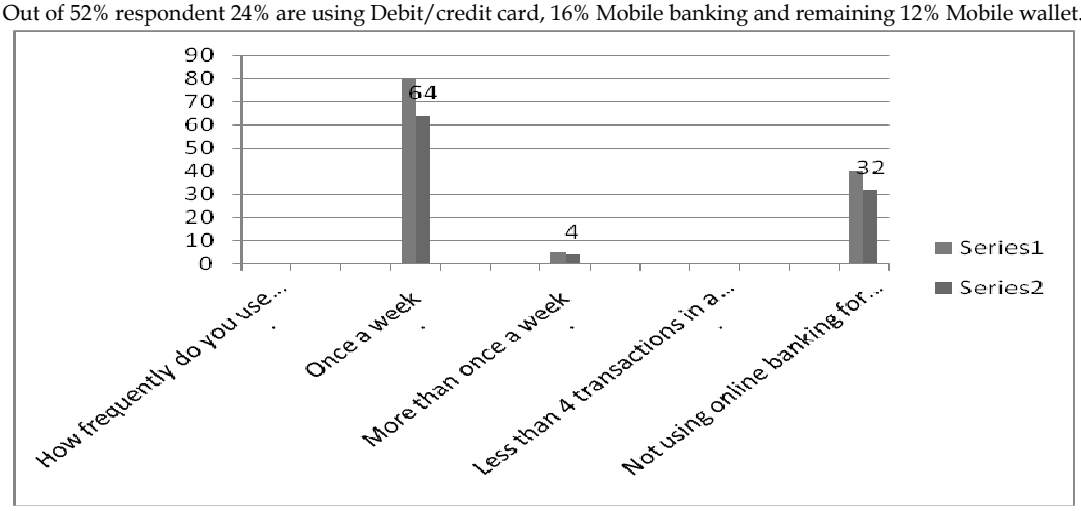
16% respondents withdraw 1-3 times money, 52% withdraw 4-6 times in a month and 32% are not using ATM.



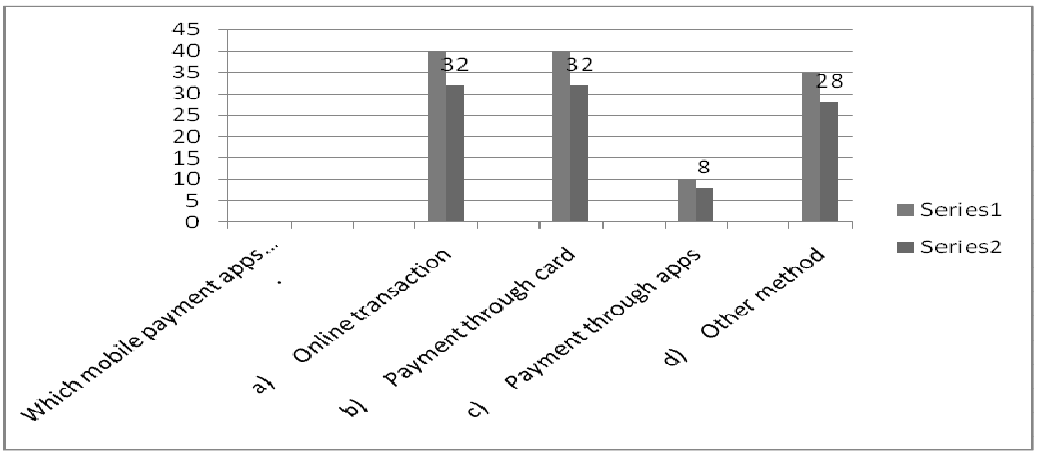
6.4% prefer to have Rs. Less than 1000, 8% 1000-5000, 40% have Rs. 5000-10000 and 45.6% have Above 10000



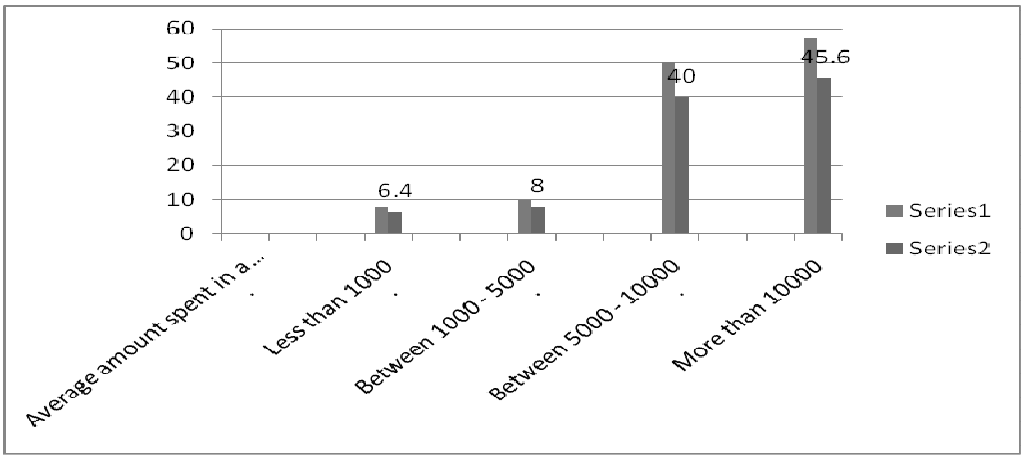
48% prefer to make payment in cash while other 52% are using non-cash payment method.
Out of 52% respondent 24% are using Debit/credit card, 16% Mobile banking and remaining 12% Mobile wallet.



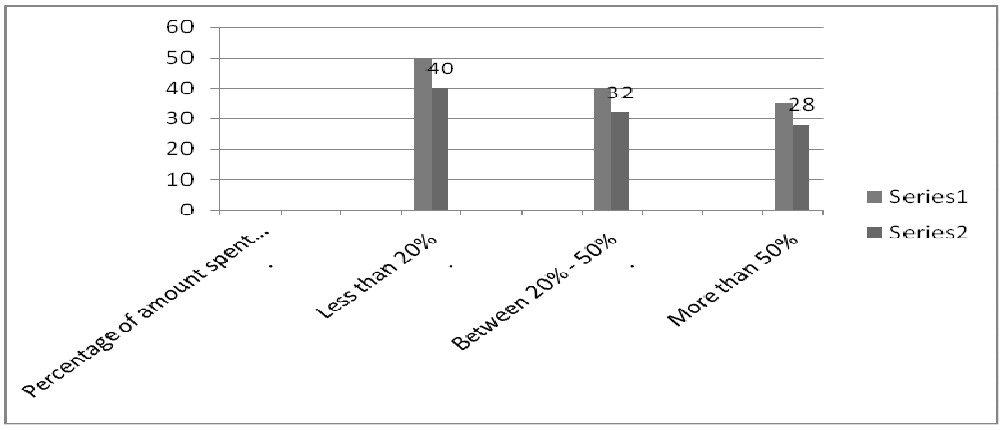
64% are using online banking Once a week, 4%Twice a week, 32% are Not using ATM.



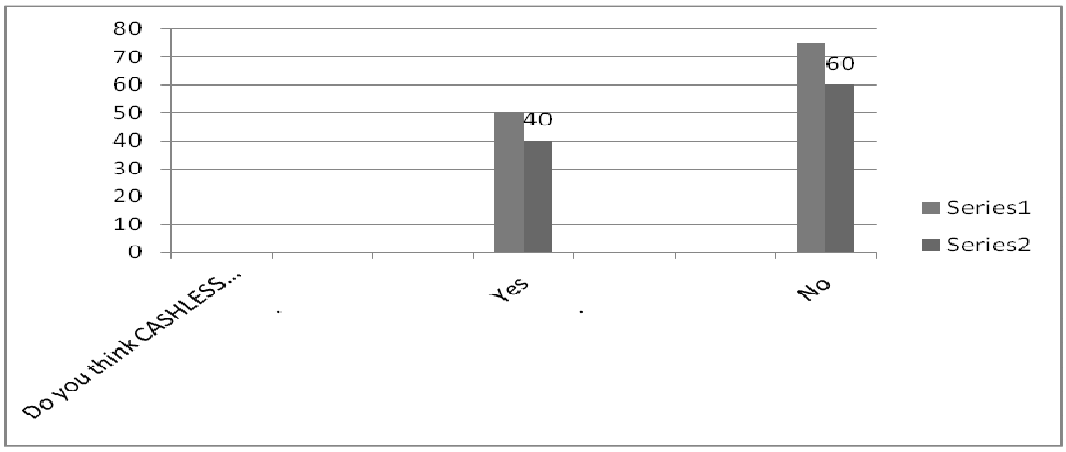
32% are using online transaction for mode of payment, 32% are using Payment through card, 8% made Payment through apps and remaining 28% uses Other method for made payment.



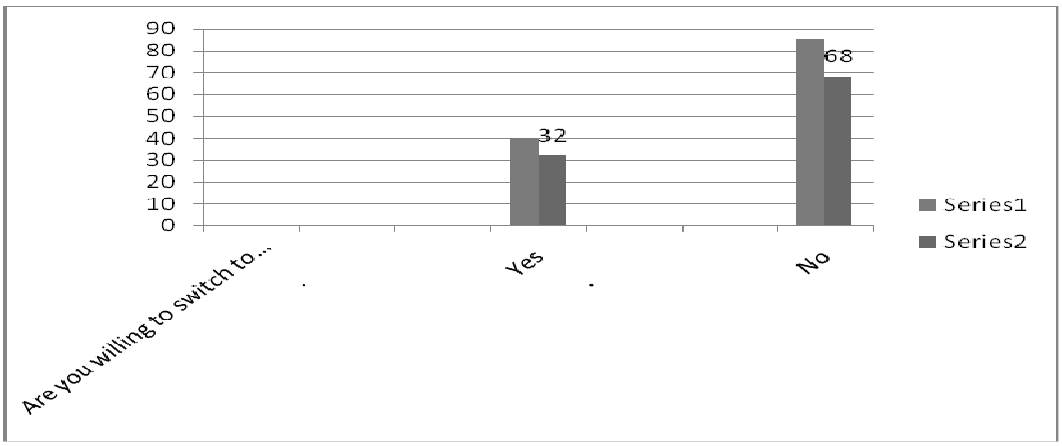
6.4% prefer to have Rs. Less than 1000, 8% 1000-5000, 40% have Rs. 5000-10000 and 45.6% have Above 10000 through e- payment out of 52% who are using cashless transaction.



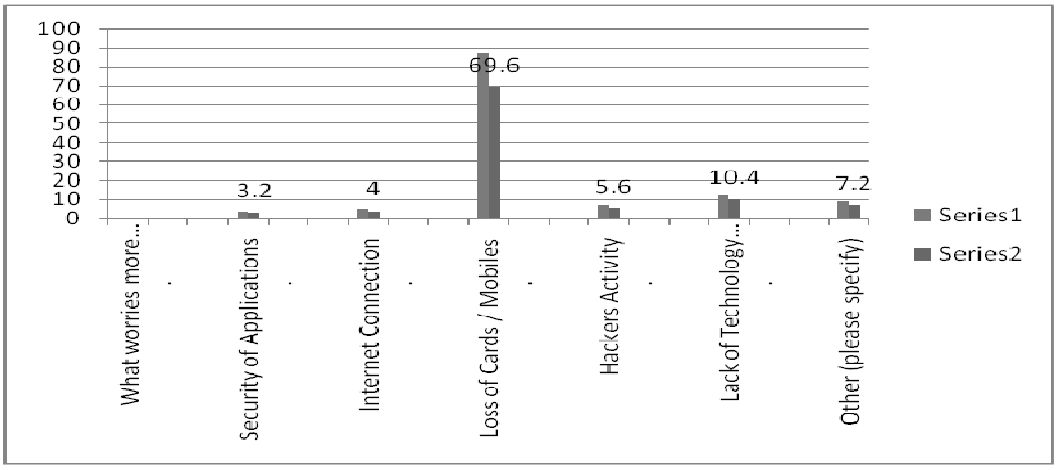
40% of respondents are using 20-40%, 62% are using Rs. 20-50% and 28%% have Above 50% through e- payment out of 52% who are using cashless transaction.



40% of the respondent accept Cashless transactions are more convenient than cash transaction for daily transaction but 60% are not fully agree with it.



32% respondents are willing to switch to cashless transaction and rest 68% do not want to switch.



3.2% respondent are worried for Security of applications, 4% by Internet connection, 69.6% by Loss of card, 5.6% by Hackers activity, 10.4% by Lack of technology and 7.2% by other worries for switching into cashless transaction

Table 1 Descriptive Analysis Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
VAR00001	125	1.00	2.00	1.9040	.29578
VAR00002	125	1.00	2.00	1.1680	.37537
VAR00003	125	1.00	2.00	1.9360	.24574
VAR00004	125	1.00	4.00	1.2080	.63875
VAR00005	125	1.00	3.00	1.1200	.43255
VAR00006	125	1.00	4.00	1.4320	1.05751
VAR00007	125	1.00	2.00	1.7920	.40751
VAR00010	125	1.00	6.00	3.4160	1.08646
VAR00008	125	1.00	2.00	1.1280	.33543
VAR00009	125	1.00	2.00	1.8320	.37537
Valid N (list wise)	125				

Table 1 reflects the descriptive statistics of all independent and dependent variables. There is high fluctuation and variation in question no. 6 & 10. Various mode of payment are used by respondent. Different worries made them not to switch into cashless transaction. Rest part of responses of the question is constant.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
VAR00001	Between Groups	.169	1	.169	1.948	.165
	Within Groups	10.679	123	.087		
	Total	10.848	124			
VAR00002	Between Groups	.518	1	.518	3.757	.055
	Within Groups	16.954	123	.138		
	Total	17.472	124			
VAR00003	Between Groups	.075	1	.075	1.247	.266
	Within Groups	7.413	123	.060		
	Total	7.488	124			
VAR00005	Between Groups	.264	1	.264	1.417	.236
	Within Groups	22.936	123	.186		
	Total	23.200	124			
VAR00007	Between Groups	.794	1	.794	4.932	.028
	Within Groups	19.798	123	.161		
	Total	20.592	124			
VAR00009	Between Groups	.518	1	.518	3.757	.055
	Within Groups	16.954	123	.138		
	Total	17.472	124			
VAR00010	Between Groups	3.175	1	3.175	2.728	.101
	Within Groups	143.193	123	1.164		
	Total	146.368	124			

VAR00006	Between Groups	3.424	1	3.424	3.114	.080
	Within Groups	135.248	123	1.100		
	Total	138.672	124			
VAR00004	Between Groups	.794	1	.794	1.961	.164
	Within Groups	49.798	123	.405		
	Total	50.592	124			

Table 2 shows ANOVA is used to understand the how the various independent factor customer's behavior, awareness, habit & mode of payment, technology friendly, eagerness to adopt innovative ideas effect the dependent factor consumer's cashless transaction positively. Likewise F value for number of bank account .165, withdrawing cash through ATM .055, habit of prefer cash .266 level, habit of paying bill online .236, habit of online payment 1.924 average amount and its percentage spent in a month through e-payment .08 and convenient of 0.55 and worries of digital transaction system .101 which is positively prove the hypothesis. So, it can be said that there is great and optimum potential for making India digital and cashless.

Conclusion

Indian economy is primarily to be driven by the use of cash and less than 5% of all payments happen electronically. This is largely due to the lack of access to the formal banking system for a large part of the population and as well as cash being the only means available for many. Large and small transactions continue to be carried out via cash. Even those who can use electronic payments, use cash. Indians traditionally prefer to spend and save in cash and a vast majority of the more-than 1.2 billion population doesn't even have a bank account. Indian economy is primarily driven by the informal sector and it relies heavily on cash based transactions. A report by Google India and Boston Consulting Group showed that IN 2015 around 75% of transactions in India were cash-based while in developed countries like USA, Japan, France, Germany etc. it was just around 20-25%.

The main goal of current research was to ascertain the potential of Indian economy tend towards cashless. There are various factors which affects the people's behavior for adopting various mode of payment. India is a developing country. It has huge capacity for development through man, material, natural resources, generating and adopting new way and thoughts. Due to various factors discussed in the paper, it is found that Indian economy is developing. It's GDP is among first top ten countries. It is tend to be cash to cashless. It has great potential for moving towards cashless.

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Questionnaire for Survey

1) How many bank accounts do you have?

a) One
b) Two
c) Three
d) more

2) How frequently do you withdraw money from ATM?

a) 1-3 times in a month
b) 4-6 times in a month
c) More than 6 month
d) Not using ATM for money withdrawal

3) How much cash do you prefer to have in hand?

a) 1000
b) 1000-5000
c) 5000-10000
d) Above 10000

4) How do you prefer to make payment of your monthly bill?

a) Cash
b) Debit/credit card
c) Mobile banking
d) Mobile wallet

5) How frequently do you use online payment/ mobile banking?

a) Once a week
b) Twice a week
c) 4 times in a month
d) Not using ATM

6) Which type of payment do you use?

a) Online transaction
b) Payment through card
c) Payment through apps
d) Other method

7) What is the average amount spent in a month through e-payment?

a) 1000
b) 1000-5000
c) 5000-10000
d) Above 10000

8) What is the percentage of amount spent through e-payment?

a) 0-10%
b) 10-20%
c) 20-50%
d) More thna50%

9) Do you think Cashless transactions are more convenient than cash transaction for daily transaction?

a) Yes
b) no

10) Are you willing to switch to cashless transaction?

a) Yes
b) no

11) What worries more to switch into cashless transaction?

a) Security of applications
b) Internet connection
c) Loss of card
d) Hackers activity
e) Lack of technology

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TRENDS AND DETERMINANT OF FOREIGN DIRECT INVESTMENT IN INDIA: A POST REFORM ANALYSIS

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ABSTRACT

Foreign direct investment has become a major source of financing growth in India. Through this paper we make an attempt to investigate macroeconomic determinants of the foreign direct investment in India for the period 1991 to 2014. The two set of variable named nominal determinants and real determinants are transformed into models. However in order to have a deeper look, two composite indices are made with the help of Principal Component Analysis (PCA), as it avoids the problem of multicollinearity. The paper concludes that real factors are more significant but and their impact is also more because the value of coefficient is large. However, nominal factors are less significant and their impact on FDI inflow is also smaller as the value of their coefficients is smaller. In general, if real factors increase by 1% then FDI increases by 7 per cent, approximately. Similarly, if financial factors increase by 1%, FDI increases by 2 per cent, approximately. This implies that policy makers need to take measures for controlling volatility of financial market so that we can gain more of FDI inflows. Also, it is necessary to combine real and nominal variables to encourage FDI inflows into India. Before crisis itself it was clear that FDI inflows were lagging behind. Just before crisis a bubble is noticed. After crisis FDI fell at an additional rate of 62% per annum.

KEYWORDS: *Foreign Direct Investment, Gross Domestic Product, Trade, Market Capitalization.*

Introduction

Foreign Direct Investment (FDI) is considered as a key element in the process of accelerated economic growth in the developing countries. "FDI is more popular among host country in comparison to other external source of finance since it is non-debt creating, non-volatile and the returns depend on the performances of the projects financed by the investors (Planning Commission, 2003)". It initiated the process of economic development especially in the capital scarce country, where the domestic base of created assets like technology, skills and entrepreneurship are to a certain extent limited. It provides financial resources for investment in a host country and thereby augments domestic saving efforts. In Indian context, the importance of FDI was realized way back in 1948, when emphasis was given on creating domestic base. However, since access to finance was quite limited, the attitude towards FDI was receptive (Kumar, 2004). Thereafter lot of discussion has been regarding necessity of FDI and finally in 1980s Government of India decided to went for deregulation of industries. Also in 1991, India has observed a phenomenal change in the flow and direction of FDI into the country. This is mainly a result of removal of restrictive and regulated practices. The basic logic behind the encouragement of FDI lies in the fact that these countries are lacking in domestic saving and investment, which leads to lower economic growth, lower income, consumption and low level of employment. Thus, FDI perceived as an important vehicle to make out a gap between investment requirement need of a country and its domestic savings. "It can

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compensate the need of investment deficiency complementing local savings and by supplying more effective management, marketing and technology to improve productivity (Moran, 1999)". Apart for the above mentioned benefit, FDI helps the host country to bring new and updated technology, improves skills, provide international platform for their products and supports in creating additional employment in country. As foreign direct investment brings lots of advantage for host country and provided funds for investment opportunity which further enhance economic growth of a country, so it become important to analysis the trend and find out variables which are significantly affecting the inflows of FDI.

Review of Literature

After analyzing an extended literature of foreign direct investment, we are able to observe that most of the researcher only emphasized on few variables, however we strongly believe that on one side there is need to include few more variables, on the other side, there is need to club them so that we can be easily estimated that what kind of determinant is having more positive impact of foreign capital flow. Some studies summarized below:-

Ana Mar (1997) in their studies tried to find out the major factors which promotes the countries to invest in the low income countries. The analysis is run over a period of 1970-96. The result of the analysis indicated that there are three major factors, which generally MNC's considered while investing in the low income countries and these are as follow: large market size, low labor cost and high return in natural resources.

Morris Sebastian (1999) in their analysis used case study method to estimate the determinant of foreign direct investment. He took the case studies of fourteen firms in the textiles, paper, light machinery, consumer durables and oil industry in Kenya and South East Asia. This observation of study shows study that the homegrown private corporate sector is the major source of investments. It also indicate that current tax system of a country and export policy of a country is another two important factor which motivated foreign direct investment inflow in host country.

Mucchiellli and Soubaya (2000) in their study made an attempt to investigate the determinants of the volume of trade of the French Multinational Corporations (MNCs). The major findings reveals that inward FDI has a positive and significant impact onthe foreign trade. However the impact is larger in case of export than imports.

Naga Raj R (2003) in their proposal presented the trends in FDI in India. Also the analysis contains comparison of FDI inflow with China. Based on the result of descriptive analysis comparative experience, the study suggest that a more realistic foreign investment policy framework is required to expect increased flow of FDI.

Nayak D.N (2004) observed that India is not witnessing any change in magnitude of a flow of funds from Canadians firms. The main reason for no change in significant flow of FDI in India is indifferent attitude of Canadians and lack of information of Investment opportunities in India.

Chakraborty and Nunnenkamp (2004) with the help of industry specific analysis try to estimate growth implications of FDI in India. They also used Granger causality tests within a panel co-integration framework and suggested that "FDI is unlikely to work wonders in India if only remaining regulations were relaxed and still more industries opened up for FDI".

Kulwinder Singh (2005) critically analysed FDI in India and concluded that the different policy period has a mixed impact of the flow of FDI in India. Also the result indicates that industrial is needed to be supplemented by infrastructure reforms for representing India as better investment centre.

Nirupam Bajpai and Jeffrey D. Sachs (2006) with the help of their extensive research attempted to diagnose the issues and problems associated with current FDI framework of India and secondly estimated the factor which re responsive for making India unattractive as an investment center. "The conclusion of the study shows a restricted FDI regime, high import tariffs, and exit barriers for firms, stringent labor laws, poor quality infrastructure, centralized decision making processes, and a very limited scale of export processing zones makes India an unattractive investment location".

Balasubramanyam and Sapsfordm (2007) used comparative analysis, where comparison is made between the level of flow of FDI in India and China. They found that India is receiving only one tenth of flow of FDI than of china. According to their findings, the country may need much larger volumes of FDI than it currently attracts.

Basu, Nayak and Vani (2007) in their analysis willing to studied the regime shift in the FDI inflows in India and came on the conclusion that although the country is not very effective in cost terms but also precieve as hot target for R&D activities. The study also suggests negative impact of corporate tax on FDI inflows.

Burak and Cevis (2009) made an attempt to develop a framework to estimate the determinants of FDI inflows. To conduct an analysis, they used a panel data of 17 developing countries and analysis of a period is 1989-2006. The variables were taken for this research namely is FDI, GDP growth rate, wage, trade rate, inflation rate and economic investment. The results conclude that the past year flow of FDI is important determinant of growth.

Hooda (2011) analysed attempted to estimate the factor which affects growth in the long run. The period of analysis is from 1991-92 to 2008-09. She has used OLS method for this purpose. The empirical results found that foreign Direct Investment (FDI) is a vital and significant factor influencing the level of growth in Indian economy. She also estimated the determinants of FDI inflows and found that trade GDP, Research and Development GDP, Financial position, exchange rate, Reserves GDP are the important macroeconomic determinants of FDI Inflows in India.

Hypotheses

We now consider a set of hypotheses that could validate the determinants of FDI inflows:

$\mathbf{H_{01}}$: Foreign direct investment does not determined by financial factors;
$\mathbf{H_{a1}}$: Foreign direct investment is determined by financial factors.
$\mathbf{H_{o2}}$: Foreign direct investment is not determined by real factors;
$\mathbf{H_{a2}}$: Foreign direct investment determined by real factors.
$\mathbf{H_0}$: Foreign direct investment is not jointly determined by real and nominal factor.
$\mathbf{H_a}$: Foreign direct investment is jointly determined by real and nominal factor.

Objectives of the Study

The objective of the study is:

- To analyze the general trend of FDI in India;
- To estimate the real determinants of FDI;
- To estimate the nominal determinants of FDI in India; and
- To estimate the joint determinants of FDI in India.

Data and Methodology

- **Data:** The requirement of study includes two set of variables. One set of variables are categorized as nominal determinants whereas other set of variable are categorized as real determinants. Nominal determinants of FDI include Nominal exchange rate (NER), wholesale price index (WPI) and Broad money (BM). The Real set of variable comprises Gross domestic product (GDP), trade, market capitalization (MC) and risk free interest rate (RFI). We have employed a number of statistical tools and econometrics tools for analyzing each objective. The period of our analysis is from 1991 to 2014.We had taken all the variables in denomination of Rupees.
- **Variables**

Table 1: Descriptions of Variables

Variable	Description	Form	Name	Real/ Nominal
Trade balance	Ratio of (Export/Import)	Logarithmic	L(X/M)	Real
Nominal exchange rate (NER)	Nominal exchange rate considered in order to account for price impact	Logarithmic Logarithmic	LNER	Nominal
Broad money (M3)	Money supply being considered to capture monetary impact	Logarithmic	LBM	Nominal
Gross Domestic product	In order to capture the impact of domestic income level, GDP being considered	Logarithmic	LGDP	Real
Wholesale price index	Wholesale price index is included to incorporated the impact of inflation	Logarithmic	LWPI	Nominal
Risk free interest rate	It shows minimum return must generated on investment	Logarithmic	LRFI	Real
Market Capitalization	It shows confidence of investor in market and therefore stimulate growth of FDI	Logarithmic	LMC	Real

- **Research Methodology**

We have conducted four steps in the methodology:

  - Double-log equations for nominal and real determinants of FDI.
  - Construction of two composite Indices for real and nominal variables. Joint equation– Double-log equation for determinants of FDI.

- **Double-log equations for nominal and real determinants of FDI**

In order to analyze the trends in foreign direct investments (FDI), we have transformed our set of variables, named nominal determinants and real determinants into two models. In first model, we have made an attempt to analyze the relationship between foreign direct investment (FDI) and Real determinants with the help of following equation:

$FDI_t = \alpha_1 . GDP_t^{\beta 11}.RFI_t^{\beta 12}.MC_t^{\beta 13}. (X/M)_t^{\beta 14}$ …….. (1)

Taking log both the side and adding error term

$Ln\ FDI_t = Ln\ \alpha_1 + \beta_{11}\ Ln\ GDP_t + \beta_{12}\ Ln\ RFI_t + \beta_{13}\ Ln\ MC_t + \beta_{14}\ Ln\ (X/M)_t + \mu_{t1}$..... (1a)

Where FDI = Foreign direct investment

α_1 = intercept

T = (1990-91 to 2011- 2012)

μ_{t1} = error term

GDP= gross domestic product

RFI= risk free interest rate

MC= market capitalization

X/M = trade balance

Similarly, in our second we will try to analysis the relationship between Foreign direct investment and nominal determinants with the help of following equation:-

$(FDI)_t = \alpha_2 . NER_t^{\beta 21}.BM_t^{\beta 22}.WPI_t^{\beta 23}$ …….. (2)

Taking log both the side and adding error term

$Ln\ FDI_t = Ln\ \alpha_2 + \beta_{21}\ Ln\ NER_t + \beta_{22}\ Ln\ BM_t + \beta_{23}\ Ln\ WPI_t + \mu_{t2}$ ..... (2a)

Where FDI = Foreign direct investment

α_2 = intercept

T = (1990-91 to 2011- 2012)

μ_{t2} = error term

NER= Nominal Exchange Rate

BM= Broad Money

WPI= wholesale price index

However, looking into real and nominal determinant solely does not provide us with true and comprehensive picture. Therefore, there is a need to see the combined effect of real and nominal determinants on FDI trends. However when we combined these two aspects, the problem of multicollinearity arises. So, In order to avoid multicollinearity problem we are taking another method called Principle component analysis. The main advantage of this method is that it has a property of removing multicollinearity.

- **Construction of two Composite Indices for Real and Nominal Variables**

For construction of the composite indices we have used PCA.

Principal Component Analysis

When we consider developmental variables like, GDP, and trade, as well as nominal variablelike BM, NER andso on, there is bound to be a high degree of correlation amongst such variables. This would lead to multicollinearity. Therefore, there could be three strategies that can be used for dealing with such an econometric problem:

- If we drop all correlated variables there is a great loss of information.
- We could use Principal Component Analysis (PCA) to determine the "principal variables."
- We could use PCA for formation of a composite index.

"The method of Principal Component Analysis (PCA) has two purposes. Firstly, we use PCA for data reduction, especially where the variables are interrelated. Secondly, we use PCA for compilation of

a composite index. For estimating the trends and determinant of FDI we have used a two-step procedure. Firstly, the whole variables are divided into nominal and real factors. Also, variables like GDP, Macro-economic variables, MC etc., may be correlated. Under such circumstance it is not possible to use the variables directly in a regression framework on account of multicollinearity. Secondly, when there are a large number of variables we need to collapse them into a single variable with the help of PCA. The variable should be such that it captures all the information contained in all the individual variables. PCA is based on a linear transformation of the regressors so that they are orthogonal to each other by design. Hence, no information contained in the points in the event space is lost. Second, the normality assumption is not essential in PCA. Third, with such a dispersed set of outcomes, PCA is ideally suited because it maximizes the variance rather than minimizing the least square distance. One aim of our empirical work is to evolve a set of composite indices so as to include the entire nominal variable, on the one hand and real variable, on the other hand. Hence, we need to choose the essential variables by a data reduction procedure and arrive at relative weights for the purpose of consolidating these variables into a single index. We chose Principal Components Analysis (PCA), which is popular in the literature since it has a number of desirable properties. It retains the maximum information, allows the composite of variables to remain uncorrelated amongst each other. The data reduction procedure involves selection of the most relevant variables that capture the maximum information and diverse information. Both the unrotated and rotated solutions explain exactly the same amount of variation in the variables. The choice between them hinges upon the interpretative power of each solution. The component scores (both rotated and unrotated), with respect to the first component are calculated. The most popular orthogonal rotation procedure is Kaiser's Varimax rotation. We therefore retain this procedure." The following consideration should be kept in mind while applying PCA:

- For determining the retained component we need a criterion.
- The PCA methodology tells us the total variance explained by each retained principal component as well as the cumulative percentage of the explained variation. This is a measure of the explanatory power of the component for the information content of the procedure.
- There were various methods of rotation but the most popular method is the Varimax with the Kaiser normalization. The purpose of the rotation is to make the interpretation of the PCA more meaningful. Method of rotation however retains the same information and explanatory power.

Method for Construction of the Index

The method for construction of a composite index is given by Jha and Murthy (2006). Once the number of retained principal components is determined and the rotated component scores obtained, we have the choice of using the principal components as such or selecting certain sub-set of variables from the larger set of variables. Jolliffe proposes selecting one variable to represent each of the retained principal components. The variable that has the highest loading on a component is chosen to represent that component, provided that it has not already been chosen. If it has been chosen, the variable with the next largest loading is selected. The procedure starts with the largest principal component and proceeds to the smallest retained component[1].

$$Index = \sum_{j}^{3} wjxj \qquad \text{.... (1)}$$

Xj = retained variables

Wj = component scores (weights).

This procedure has been used for creating the following indices:

- Index of nominal factors (IdxF); and
- Index of Economic Development (IdxR).

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[1] An alternative approach is to delete variables by using the discarded principal components. Starting with the smallest discarded component, the variable with the largest weight on that component is deleted. Then the variable with the largest loading on the second smallest component would be discarded. If the variable has previously been discarded, then the variable with the next highest loading would also be discarded. This procedure continues up to the largest such discarded component.

Joint Determinants of FDI

In the final analysis we have estimated the following regression equations:

$(FDI_{IF})_t = e^{\{[\alpha_3]+[\beta_{31}]*(t)+D_2+[\beta_{32}]*D_2(t)\}}.(IdxF)_t^{\beta 33}.(IdxR)_t^{\beta 34}$ ..(3)

Log-linearizing and adding an error term:

$L\ (FDI_{IF})_t = \alpha_0 + \beta_{31}*(t) + D_2 + [\beta_{32}]*D_2\ (t) + \beta_{33}L\ (IdxF)_t + \beta_{34}L\ (IdxR)_t + U_{t3}$ (3a)

Where, FDI_{IF} = Foreign Direct Investment Inflow of the World

α_0 = Intercept

t = 1990- 1991 to 2o11-2012

β_{31} = Growth Rate of FDI

D_2 = Intercept Dummy

B_{32} = Slope dummy

β_{33}, β_{34} = Elasticities of real and nominal determinants

IdxF = Composite Index of nominal factors

IdxR = Composite Index of real factors

Being a double log function ß33 and ß34 gives us the Elasticity of Financial direct investment w.r.t. nominal factors and real factors.

Results

Given below are the results of the above mentioned empirical exercises:

- **Real Determinant of Inward FDI**

We have first estimated a double-log equation for estimating the real determinants of FDI. The purpose of this equation is to estimate the impact of individual real determinants of FDI inward.

Table 2: Real Determinants of Inward FDI

SUMMARY OUTPUT

Dependent Variable: Log FDI inflow

Regression Statistics	
Multiple R	0.992156
R Square	0.984373
Adjusted R Square	0.973955
Standard Error	0.269883
Observations	21

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	55.05809	6.882261	94.48905	1.17E-09
Residual	12	0.874039	0.072837		
Total	20	55.93213			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	808.8934	737.1073	1.097389	0.294004
LGDP	1.321945	2.884992	0.458214	0.654985
LTRADE	3.559591	0.954455	3.729448	0.002877
LRFI	0.937327	0.881135	1.063772	0.30837
LMC	0.100057	0.201219	0.497253	0.627996
LTB	3.438386	0.9924	3.464717	0.004676
Year	-0.43388	0.388101	-1.11795	0.285472
CD	966.1367	288.1504	3.35289	0.005749
SD	-0.48114	0.143398	-3.3553	0.005724

In the above Table 2, it is clear to interpret that the overall model is highly significant. Moreover, the value of the adjusted R-squared is 0.97, which shows the power of independent variable to explain the dependent variable is very high. It is also evident that all variable are highly significant.

Volume of trade and trade balance is most important variable. It shows that if volume of trade increases by 1%, FDI inflow would increase by 3.55% approximately. There is no doubt that volume of trade has ability to increase the FDI inflows and same is also visible in case of Indian economy. Trade balance also has a large, significant and positive effect since India trade balance is rising. For instance, if trade balance increased by 1% then, FDI inflow will be rise by more than 3.4%.

GDP is third important element for determining inflow of FDI in India. It is clearly shown, if GDP increase by 1%, there is accelerated effect by 1.32% on FDI inflow. However it is not significant at all as it contains very high level of variability due to exogenous variable to our economy. Risk free interest rate is less significant because its P- value is very high i.e. 0.30. Elasticity is also less than 1 but it is important variable because FDI is attracted if long run return in a host country is high enough. Risk free interest rate (RFI) in central government securities represents opportunity cost of investment. However coefficient is almost 1 therefore 1% increase in RFI will lead to 0.93% increase in FDI inflow.

The factor having least impact as well very less significant is market capitalization (MC). Here the logic is that when the market capitalization (MC) is increase, domestic capital formation in the host country also increases and therefore then the FDI not encouraged so much in a host country because the capital market efficient to transfer saving from deficit spender unit to surplus spender unit. It means scope for FDI goes down. In general, the time variable which represent exogenous factor has negative sign. This shows that in general policy variable and business environment are not that much supporting and are placing a constraint in the path of FDI inflow. This implies that all other variable not accounted such as, tax incentives, condition for repatriation for profit, rigidity in the system, corruption and slow process, all of these variable discourage growth of GDP. We have estimated the double log equation with the help of dummy variable to see the impact of crisis in the FDI inflow. There are two dummy variable one for intercept and slope in each period. It shows that foreign direct investment fell at the rate of 43% per annum, before the crisis. However, after crisis the negative growth rate intensified further and staring falling at rate of 48 % per annum. it is quite possible as our economy is largely depends on foreign direct investment (FDI) for development purpose which is directed from developed countries if they were hit by recession, we would expect decline in the flow of FDI.

Nominal Determinant of Inward FDI

Next, we have estimated a double-log equation for estimating the nominal determinants of FDI. As the value of the adjusted R-squared is 0.96, it shows that the power of independent variable to explain the dependent variable is very high. It is significant even at 1%. It is also clearly evident from the Table 8.2 that nominal factors are not encouraging, in general. However, the main nominal factor WPI is very effective due to two reasons. Firstly, wholesale price index is very significant having a P- Value 0.00. Moreover, the elasticity is -12.43% which implies that 1% increase in Wholesale price index (WPI), FDI goes up by12.43%. Hence inflation is encouraged FDI inflow in India. Therefore, the policy implication is that we should manage inflation rate in such a way so that can be used to further enhance flows of FDI.

Table 3: Nominal Determinants of FDI inflows

SUMMARY OUTPUT

Dependent Variable: Log FDI inflow

Multiple R	0.986515
R Square	0.973212
Adjusted R Square	0.961732
Standard Error	0.327142
Observations	21

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	6	54.43382	9.072304	84.77069	3.4E-10
Residual	14	1.498304	0.107022		
Total	20	55.93213			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	684.6857	1058.502	0.646844	0.528196
LNER	-1.43781	0.915409	-1.57068	0.138578
LWPI	12.43155	2.692546	4.617025	0.000399
LBM	-0.28469	4.043618	-0.0704	0.944868
Year	-0.3606	0.55474	-0.65003	0.526197
CD	969.7334	299.696	3.235724	0.00598
SD	-0.48266	0.149177	-3.23551	0.005983

Secondly, Broad Money (BM) has a negative impact i.e. elasticity is (-) .261%. Although, it is not significant at all as it contain very high variability. The policy implication is that if money supply increases by 1%, FDI falls to the tune of .26%. Another very less significant domestic variable is nominal exchange rate (NER). This has elasticity of (-) 1.43% and also very less significant. This is possible as Indian currency is weakening in comparison to other developed country.

Therefore it does not provide incentives to foreign investor to invest into a physical asset of a country due to high volatility. The time variable which also incorporates the impact of other variable which is not considered in our studied has negative impact on FDI inflow. Before crisis, the flow of FDI falls at the rate of 36% per annum.

However, just after the crisis the inflow of FDI worsen. It started falling at the rate of 48% per annum. This is fairly possible as our economy depend on developed economy for foreign investment and if their economy shaken then automatically there is lesser flow of FDI towards developing nation.

Construction of Composite Index

- **Nominal determinant of FDI**

To begin with we have taken the nominal factors and real factors and applied PCA; it has been explained about how we shall be developing a composite index, that summaries the information contained in all these variables. Jha and Murthy (2006) specify a three steps procedure for constructing the composite index. The first step involves testing for sampling adequacy and sphericity. We estimated The KMO and Bartlett's Test.

Table 4: KMO and Bartlett's Test for Nominal Variables

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.434
Bartlett's Test of Sphericity	Approx. Chi-Square	83.499
	Df	3
	Sig.	.000

In the case of nominal determinants we find that the KMO measure is 0.434 which is slightly low but this may be due to volatile and unstable nature of variables. However, the Bartlett's Test is highly significant. On the whole, the tests indicate that PCA is applicable.

Table 5: Total Variance Explained For Nominal Factor Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	**% of Variance**	**Cumulative %**
1	1.733	57.754	57.754
2	1.254	41.805	99.559
3	.013	.441	100.000

The above Table 5 shows that the total variance after rotation is 100% since we have included all three nominal factors. Before rotation all factors were equally weighty. The process of Varimax Rotation results in greater clarity of the contribution of each factor.

Table 6: Rotated Component Scores of Nominal Factor Rotated Component Matrix [a]

	Component		
	1	**2**	**3**
BM	**.956**	.292	-.026
WPI	.836	.538	**.111**
NER	.347	**.938**	.013

The rotated component scores are 0.956 for BM; 0.111 for WPI; and 0.938 for NER in the case of nominal determinants of FDI. Finally, we estimate the Composite Index for nominal factors as follows:

We use the above weights to construct the two indices.

Composite Index of nominal factors

IdxF = 0.956*BM + 0.111*WPI + 0.938*NER

Real Determinant of FDI

Table 7: Real determinant of FDI KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.772**
Bartlett's Test of Sphericity	Approx. Chi-Square	141.790
	Df	10
	Sig.	.000

In case of real factors we find that the KMO measure is .715 and the Bartlett's Test is highly significant even at 1%. This justifies the use of PCA. (Table 9).

Table 8: Total Variance Explained for Real Factor Total Variance Explained for Real Factors

Component	**Rotation Sums of Squared Loadings**		
	Total	**% of Variance**	**Cumulative %**
1	2.488	49.761	49.761
2	1.243	24.865	74.626
3	1.210	24.191	98.817

In this case a selection criterion is not to include all variables and only those factors whose Eigen values is greater than 1. While this is done, we have five variables but only three variables qualified and retained. In this case it is necessary to do data reduction because number of factor is too large. Varimax rotation is used and rotated sum of squared loadings in Table 8 shows that the selected factors explained 98.817% variation. This shows redundancy of some of the variable. Total variation explained for real factors is shown in Table 8.

Table 9: Rotated Component Matrix for Real Factors Rotated Component Matrix [a]

	Component		
	1	**2**	**3**
MC	**.886**	.272	-.330
TRADE	.856	.353	-.354
GDP	.844	**.411**	-.329
RFI	-.353	-.930	.094
TB	-.363	-.097	**.927**

The rotated component scores are 0.886 for MC; 0.411 for GDP; 0.927 for RFI. Table 9 gives the results of PCA for real determinants of FDI.

Composite Index of real factors

IdxR= 0.411*GDP (-) 0.927*TRADE-BALANCE(X/M) + 0.886*MC

Determinants of FDI inflows in India

The joint determinants of FDI in India are explained below:

Table 10: Real and Nominal Determinants of FDI Inflows in India

DEPENDENT VARIABLE: Log FDI Inflow

Regression Statistics	
Multiple R	0.973951
R Square	0.948581
Adjusted R Square	0.931441
Standard Error	0.437872
Observations	21

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	5	53.05615	10.61123	55.34424	3.90945E-09
Residual	15	2.875972	0.191731		
Total	20	55.93213			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	1705.174	1326.835	1.285143	0.218232
Year	-0.91035	0.693218	-1.31322	0.208842
CD	1255.745	417.4015	3.008483	0.008819

SD	-0.62535	0.207727	-3.01045	0.008784
LIdxR	6.829017	2.653295	2.573788	0.021174
LIdxF	2.251417	5.646856	0.398703	0.69573

The overall model is highly significant. In statistical terms, the significance can be seen by the adjusted R-square that is 0.93 which shows that the strength of explanatory variables to explain model is very good. The coefficients of the result are also explained in term of elasticity as all the variables are being taken into log form, except the exogenous variable time, crisis dummy (CD) and the slope dummy for the crisis period (SD), which are in semi-log form.

The intercept and the exogenous variable are both significant at around 20%. The time variable actual declines in the pre-crisis period, all other variables are affecting foreign direct investment significantly and positively, with the exception of the slope dummy, which is negative and significant. The SD shows a further decline due to crisis. The CD however, shows a bubble effect just before the global financial crisis.

Real factors are more significant and the impact is also larger because the value of coefficient is large. However, nominal factors are not significant and their impact on FDI inflow is less as the value of its coefficient is smaller. In general, if real factors increased by 1% then FDI increased by 6.8% approximately. Similarly if financial factors increased by 1%, FDI increased by 2.2% approximately.

Nominal factors are less significant due to their volatile and unstable behaviour. Therefore, the policy implication for India is that it would able to gain more form FDI flow if volatility of financial factors are controlled.

On the other hand time variable which represent exogenous factor has negative sign. This shows that in general policy variable and business environment are not supporting the FDI inflow. This also implies that all other variable not accounted above such as tax incentives, condition for repatriation for profit, rigidity in system, corruption and slow process, all of these discourage flow of FDI.

Conclusion

With the help of double log equations and composite indices, we have estimated the post reform determinants of foreign direct investment in India. The paper concludes that real factors are more significant and impact is more because the value of coefficient is larger. However, nominal factors are not significant and their impact on FDI inflow is smaller, as the value of their coefficients is small. In general, if real factors increased by 1% then FDI increased by 6% approximately. Similarly if financial factors increased by 1%, FDI increased by 2% approximately.

This implies that policy makers need to take measures for controlling volatility of financial market so that we can gain more of FDI inflows. Also, it is necessary to combine real and nominal variables to encourage FDI inflows into India. Before crisis itself it was clear that FDI inflows were lagging behind. Just before crisis a bubble is noticed. After crisis FDI fell at an additional rate of 62% per annum.

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A COMAPARATIVE STUDY ON REPORTING OF MERGERS AND ACQUISITIONS ACTIVITIES UNDER IGAAP AND IND AS

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ABSTRACT

Under the existing GAAP, accounting for mergers and acquisitions was split into different accounting guidance which included AS 14 covering accounting for amalgamations, AS 21 for consolidation and AS10 for accounting for acquisition of asset group. On the other hand, under the new Ind AS regime, accounting for all types of business combinations is covered by Ind AS 103 on business combination. As such, the accounting for business combinations will change fundamentally for those entities looking to grow by acquiring new companies in future. The present paper is an attempt to make a comparative study of accounting of mergers and acquisitions activities as covered by AS 14 and Ind AS 103.

KEYWORDS: *Accounting, Amalgamations, Consolidation, Business Combinations, Asset.*

Introduction

The process of mandatory implementation of Ind AS has already started in phased manner starting from the financial year 2016-17. In the first phase, the listed and unlisted companies having net worth of more than INR 500 crores have prepared their financial statements as per Ind AS for the financial year 2016-17. In the second phase, all listed companies and unlisted companies having net worth of more than INR 250 crores will follow Ind AS for preparation and presentation of their financial statements for the financial year 2017-18 onwards. All other companies will follow Ind AS from the financial year starting from 1st April, 2018. However, this roadmap does not include banking companies, insurance companies, NBFCs and SMEs which are exempted from the same for the time being.

Though the business fundamentals remain the same, adoption of Ind AS will impact businesses by impacting the reported values of net profit, net worth and similar other performance indicators. Recent studies showed that accounting for business combinations is one of the most important areas which have been impacted largely due to adoption of Ind AS. **PWC (2016),** found that business combinations and consolidations were the important areas where significant adjustments were noted on account of Ind AS adoption. Of the total population of 75 companies covered by the study, 16 % of the companies had adjustments in this area and there was an increase of overall INR 690 crores (for the Q1, 2015) in net profit due to adjustments in the area of business combinations. Further, the adjustments in

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the area of business combinations have also resulted in an increase of 3.1% in the reported values of equity as on March 31, 2016 (equity as per IGAAP restated as per Ind AS). The study made by **Ernst and Young (2016),** which was based on a sample of 60 companies also found that 15% of the companies under study were impacted on account of adjustments in the area of business combination. Moreover, the study conducted by **KPMG (2016)** which was based on a sample of 71 companies listed in BSE; found that 24 out of the total companies reflected an increase in revenue by around 8.51% while 34 companies reflected a reduction in revenue by around 3.74%. According to the study, EBITDA showed a marginal reduction for the covered companies as a whole. Of the 71 companies that have reported their results as per Ind AS, 38 saw an increase in EBITDA by 4.68% whereas 33 saw a reduction in their EBITDA by 6.42%. The key changes that impacted EBITDA were the changes in accounting for revenues, foreign currency fluctuations, financial instruments, business combinations etc.

Under the existing GAAP, accounting for business combinations was driven multiple accounting guidance. Accounting for amalgamations was covered by AS 14, accounting for consolidation was covered by AS 21 and accounting for acquisition of assets group was covered under AS 10. However, under the new Ind AS regime, accounting for all forms of business combinations is taken care of by Ind AS 103 on business combinations. As such, the accounting for business combinations will change fundamentally for all those companies looking to grow by acquiring more businesses in future.

Objectives of the Study

The present study is designed with the objective of making a comparative discussion of accounting for mergers and amalgamations activities under AS 14 and Ind AS 103.

Scope of the Study

In accounting, AS 14 deals with amalgamation activities of companies including mergers and acquisitions though this standard does not deal with acquisition of stake of one entity by another entity. Accounting for such acquisitions are covered by AS 21, AS 23 and AS 27 depending on the degree of control acquired. AS 21 covers accounting for holding and subsidiary companies, AS 23 covers joint ventures while AS 27 deals with accounting for associates. The scope of this paper is limited to the extent of a comparative study between AS 14 and Ind AS 103.

Research Methodology

The study is basically qualitative in nature and does not use any quantitative tool to analyse data. It has been conducted mainly on the basis of literature survey and secondary information. Various journals, newspapers, magazines and books have been referred to in writing this paper. Moreover, information published in the various websites including the official websites of ministry of corporate affairs and the ICAI relating to various accounting and reporting issues in India have been used extensively for the study.

Accounting for Mergers and Acquisitions under Ind AS 103

Definition of Business

Business combination as defined and prescribed under Ind-AS 103 covers a much wider aspects than the erstwhile accounting standard i.e. AS 14 which used to talk about amalgamations only. As per Ind-AS 103, a business is an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing returns. The returns can be provided in the form of dividends, profits, lower costs or other economic benefits. A business is generally a set of inputs on which processes are applied that has the capability to create outputs.

Ind-AS defines business combination as a transaction in which an acquirer obtains control over one or more businesses. The control over one or more businesses can be obtained through issue of cash, assets and equity instruments or by incurring liabilities. When we talk about business as acquired under Ind-AS 103, the determination of whether the acquired assets is business or not is seen from the view of a

market participant and not as per the acquirer or seller. It is not important if the seller of the assets was using the set of assets as business and it is again not important if the acquirer is going to use the assets as business or not. The definition of business is seen from the view point of a market participant or the people in general rather than the buyer and seller.

Ind-AS 103 talks about initial recognition and measurement of business combination. When the standard talks about business combinations, it can be in the form of mergers, acquisitions of subsidiary and any other acquisitions of control over a business. It is not restricted to only mergers and amalgamations as in the case of AS14. It means, Ind-AS 103 covers initial recognition and measurement of any control that is acquired over a business. For all such acquisitions, we have to first come to Ind-AS 103, do initial recognition and measurement in Ind-AS 103, calculate goodwill and non-controlling interest, if any, then go to other standards.

Method of Accounting

Ind-AS 103 prescribes mandatory use of acquisition method for accounting of business combinations. This is in contrast with the existing provisions where in amalgamations are accounted for either by pooling of interest method or by purchase method. The standard has said that there are certain steps we have to follow for accounting for business combinations. These steps are:

- Identification of the Acquirer and Determine the acquisition Date
- Identify and Measure the Consideration Transferred.
- Identify and Measure Identifiable Assets and Liabilities.
- Measure Non-Controlling Interest.
- Determine Goodwill or Gain on Bargain Purchase.

Identification of acquirer becomes important as the standard insists on substance over form. It means an entity going and merging with some other entity does not necessarily mean that the latter is the acquirer and the former is the transferor. It might so happen that the entity merging with the other is the acquirer and the entity to whom it is merged is the transferor. Hence, it is important to understand who is the acquirer and who is the transferor. Identification of the acquirer is important as the accounting treatment for business combinations prescribed under Ind-AS 103 is for the books of accounts of the acquirer and not the transferor. The standard says that all the assets and liabilities of the transferor must be fair valued and accounted for in the books of the acquirer.

Acquirer is the entity that obtains control of businesses. Definition of control is given in standards on consolidation i.e. Ind-AS 110 which says that control is the power to manage or exercise over the transferor company so that it is possible to manage the returns out of that company along with exposure to the risk of variable returns. Ind-As 103 provides some additional factors also which should be considered for identification of the acquirer. These are:

- Acquirer is usually the entity that transfers cash or assets and incur liabilities.
- Relative voting rights in the combined entity.
- Composition of Board of Directors of the combined entity.
- Relative size of entities.

Determination of acquisition date is also important because all the transactions take place on the acquisition date. The accounting takes place on the acquisition date. Acquisition date is the date on which the acquirer obtains control of the transferor. In Indian GAAP, it is the high court which decides the acquisition date and it is normally the effective date of the consolidation which is considered as the acquisition date. However, Ind-AS 103 says that all the accounting entries must be done on the acquisition date on which:

- All the assets and liabilities acquired must be fair valued.
- Fair value of the purchase consideration transferred is calculated.
- Goodwill is calculated.

Identify and Measure the Consideration Transferred

Purchase consideration can include assets transferred, liabilities incurred to previous owners, equity instruments issued etc. Here, it is required to identify any items that are not part of the business combination and account for such items separately from the same for instance acquisition related costs. Purchase consideration also includes contingent consideration. Contingent consideration is any consideration which is dependent on happening or non- happening of a future event. According to Ind-AS 103, we need to find out the probability of happening or non- happening of the event and then multiply the contingent consideration by that probability to calculate the amount of contingent consideration to be included in the purchase consideration. On the happening or non- happening of that event, the excess or deficit of contingent consideration included in the purchase consideration over the actual consideration paid is transferred to profit and loss account of the year in which the payment is made.

Identify and Measure Identifiable Assets and Liabilities

Identifiable assets and liabilities mean those which can be separated or those which can be sold, transferred or otherwise separable out of the company. For recognition, these assets and liabilities must meet the definition of assets and liabilities at acquisition date and these must be exchanged as a part of acquisition. While recognizing, those assets are also recognized which were not recognized by the transferor. The identifiable assets and liabilities must be measured at fair value at acquisition date..

As mentioned above, Ind-AS requires recognition of even those assets which were not recognized by the transferor previously. It also says that all the intangible assets such as trade mark, customers list, patented technology which are identifiable and meet the definition of assets as prescribed should be recognized by the acquirer separately apart from goodwill. The separation of such intangible assets from goodwill is necessary because these intangible assets (other than goodwill) are amortized over their expected useful life whereas goodwill is tested for impairment.

Though, only those assets and liabilities which meet the definition of the same as prescribed under Ind-AS are recognized by the acquirer, there is an exception to this recognition rule. The exception is that Ind-AS prescribes that contingent liabilities should also be recognized if:

- It is a present obligation from a past event.
- Fair value can be measured reliably.

Measure Non-Controlling Interest

Under Ind-AS 103, non-controlling interest is measured either by the following two methods:

- Proportionate interest in fair value of identifiable net assets.
- Fair valuation of the non-controlling interest itself.

These methods for measuring non-controlling interest can be applied by the acquirer on a transaction-by-transaction basis. It means the entity has the option to select either of the two methods in different combinations. It is not required to follow one method consistently.

Determine Goodwill or Gain on Bargain Purchase:

Under Ind-AS 103, goodwill is measured as the difference between the sum of:

- Fair value of consideration transferred
- Recognized amount of non-controlling interest in the transferor

And recognized amount of the identifiable assets acquired and liabilities assumed. If this difference is positive, the resultant amount is goodwill and if the difference is negative, the amount so obtained is called gain on bargain purchase. As mentioned above, unlike the Indian GAAP where

goodwill was normally amortized over a period of five years, the same is to be tested for impairment under Ind-AS. Under Ind-AS, the gain on bargain purchase is transferred to capital reserve as was done under IGAAP. It is pertinent to note that, gain arising on bargain purchase is transferred to profit and loss account under IFRS. This is one of the major curve-outs existing in between IFRS and Ind-AS.

Summary and Conclusion

There are large numbers of differences between the exiting AS 14 and the Ind AS 103 in accounting for mergers and acquisitions activities. The differences are large enough to bring changes in the reported performance indicators of companies. The major differences are summarised below:

- Ind AS 103 prescribes mandatory use of purchase method of accounting whereas under AS 14, accounting for amalgamations could be done under pooling of interest method as well as purchase method. This may impact the MAT liabilities as well as the combine earnings of the amalgamated entities.
- Ind AS 103 gives a clear cut definition of business which was not there under AS 14. Definition of business is important in the sense that it may impact the reported value of goodwill since goodwill can be recognized only when there is an acquisition of business distinguished from the acquisition of assets.
- Identification of the acquirer is an important area where the Ind AS 103 is different from the AS 14. In fact, under AS 14 there is no such provision for identification of the acquirer. Identification of the acquirer and the acquired is significant since Ind AS prescribes fair valuation of all assets and liabilities of the acquired and not the acquirer on the date of acquisition.
- Under Ind AS 103, transaction cost is treated as an expense and is transferred to profit and loss account which was earlier included in the cost of acquisition under AS 14. This may impact the amount of profit or loss and goodwill on amalgamation.
- Under the Ind AS 103, the amount of contingent consideration is calculated using fair value method on the date of acquisition itself and is transferred to profit and loss account which was not considered relevant under AS 14. This will impact reported net profit of the combining entities.
- Ind AS 103 requires testing of goodwill arising on amalgamation for impairment whereas the same was used to be amortized over a period of five years normally. This will significantly impact the amount of reported profitability and net worth of the combining entities.

Though, the differences stated above are accounting differences and will not have any impact on business fundamentals yet the corporates should be very much concerned about the planning of the mergers and acquisitions deal, execution of the deal and at the stage of post-acquisition. It is critical that organisations consider IND-AS accounting implications in each of the acquisition phases to avoid any accounting hurdle subsequently. Organisations should sensitize all departments – legal, tax, Mergers & acquisition team and other relevant stakeholders about nuances of IND-AS so that they are mindful of accounting issues and involve relevant experts in each phase of transaction.

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IMPACT OF WORKING CAPITAL MANAGEMENT ON FIRM PROFITABILITY: A STUDY OF SELECT FMCG COMPANIES IN INDIA

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ABSTRACT

Working Capital Management (WCM) is one of the pre-conditions for the financial management of the companies. It aims at maintaining an adequate amount of readily available cash resources in the business for carrying out the daily operations of the company. Simultaneously, the managers also need to keep a watch on the profitability position of the company. The corporate managers try to maintain an efficient working capital management by maintaining a good liquidity position in the business without jeopardizing the level of profit earned. It, therefore, becomes important for them to determine a trade-off between profitability and liquidity position of the companies for their smooth running and expansion. In this context, in the proposed paper, an attempt has been made to examine the working capital management of Fast Moving Consumer Goods (FMCG) companies in India and its impact on the profitability of these companies. The analysis is done on the select 5 companies listed on Bombay Stock Exchange (BSE) in India for a period of 15 years during 2000-01 to 2013-14 using panel data regression. The study reveals that there is a positive relationship between working capital and profitability. However, the profitability of the companies is strongly affected by other factors like capital structure, growth and size of the companies.

KEYWORDS: *Working Capital Management, Profitability, Return on Asset (ROA).*

Introduction

The Indian FMCG industry is today, the fourth largest industry in the economy with the revenue generation of USD 47.3 billions during 2015.The industry deals with packaged consumer goods having a shift turnover and relatively low cost. The goods generally, include soaps, beauty products, oral care products, foot wears, dairy products, food and beverages along with non-durables like bulbs, stationary products and plastic products. The basic characteristic of these goods is that they are replaced within a year. The innovative electronic items such as mobile phones, digital camera, Laptops and MP3 players are also included in FMCGs as these are replaced more often than other electronic items. The industry has brought a change in the life of every Indian and has the widest reach among all sectors in India. A major part of the monthly budget of each household is secured for FMCG products. Working capital management is one of the prominent issues being looked upon by the managers of companies in this

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industry nowadays. The reason being the basic characteristics of the products the companies deal with, that require continuous movement of funds in the business without affecting the profit earned. The managers study the concept of working capital in depth and frame policies for managing working capital efficiently. Working capital refers to that portion of capital is invested in current assets such as inventory, finished goods, debtors and cash for daily operations for a short duration generally one accounting period. The two most important objectives while managing working capital are: Profitability and Solvency i.e. meeting the obligations of creditors and lenders.

A company is incorporated with the basic objective of profit maximization. For having a good profitable position, the company may sacrifice its solvency and maintain a low level of current assets. In such a case, firm's profitability will improve as funds are not idle, but used for productive purposes, but its solvency would be endangered. This may lead to problems like cash shortage and stock outs.

On the other hand, to ensure solvency, the firm should be liquid, i.e. it should carry larger current asset holdings. This will ensure no difficulty in paying to the creditors when they become due and ensure smooth production. Maintaining larger asset holdings means a considerable amount of funds will remain idle in the form of working capital and to the extent this fund will be idle, the firm's profitability will suffer. A good liquidity position is the significance of the margin of safety for the creditors. On the other hand, a good profitable position is the significance of a successful running business for the stakeholders. Working capital management aims at maintaining a balance between the liquidity and profitable position of the companies. In this context, the present study is proposed to know the working capital management of the select FMCG companies and its effect on the profitability of these companies.

Literature Review

Following reviews covers research studies conducted on working capital and its relation with profitability:

- **Narware (2004)** examined National Fertilizer Ltd. for the years, 1991-2001 to know the impact of working capital on the profitability of the company. The results showed that there existed both positive and negative associations between working capital variables and profitability. The author also found that the working capital management of the company had low influence over the profitability which was insignificant at 0.05 per cent level of significance and significant at 0.50 per cent level of significance.
- **Toby (2008)** had different findings based on the study conducted on Nigerian manufacturing companies during 1990-2002. The study showed that with a 1 per cent increase in the liquidity, the profitability also showed a tremendous increase. It was concluded that there was a statistically positive and significant influence of liquidity ratios on the profitability.
- **Anandasayanam (2011)** studied 80 Sri Lankan Listed companies for the years 2003 to 2009 and refuted the earlier results. The results of this study were based on panel data analysis and also took into consideration variables like growth, size of company and debt-equity ratio as control variables. The results showed that working capital management had a significantly negative impact on the profitability of the companies. Moreover, the study disclosed that the influence of other variables like growth, size and financial structure should not be ignored. The author suggested the companies to keep their conversion period minimum in order to maximize profits.
- **Panigrahi (2012)** based on the case study on the cement company in India, i.e. ACC Ltd. during 1900-00 to 2009-10 found that there existed a moderate relationship between working capital management and profitability as few working capital variables had a positive impact on profitability while the others had negative. It was concluded that even though there was some influence of working capital management on the profitability, it was highly insignificant.

- **Mansoori and Muhammad (2012)** provided evidences from the Companies listed on Singapore stock exchange after a study done for the period commencing from 2004 to 2011. The results of the study were at parity with the study conducted by Anandasayanam (2012). Taking into consideration the different economic sectors, the results showed the effect of working capital management on the profitability of the companies. The study, therefore, suggested that the managers must efficiently manage their working capital for increasing the profitability.
- **Bamal et al (2013)** made a comparative analysis of chemical and pharmaceutical industries in India from 2002 to 2011 to understand the relationship between working capital management and profitability. The findings depicted that the working capital management variables had a strong positive association with the profitability variables of the chemical industry than that of the pharmaceutical industry. The working capital variables had positive but insignificant influence on the profitability position of the pharmaceutical companies.
- **Lastly, the research works by Mawutor (2014) and Kodithuwakku (2015)** on manufacturing companies of Ghana (2006-2010) and manufacturing companies listed on Columbia Stock exchange (2008-2012) respectively, presented a similar view. The results showed that the working capital management had significantly negative influence on the profitability. Further, it was also shown in the analysis that the variables like growth, the size of the company and debt-equity ratio also had a strong influence on the profitability apart from the working capital management.

The above reviewed literatures included both national and international studies conducted during different time period from 1990 to 2012. Except for Toby (2008), all the international research works showed that the working capital management had a strongly negative effect on the profitability of the companies. In India, however, this generalization could not be made due to the difference in the viewpoints of the researchers based on their studies. The present study aimed at studying the working capital management of the FMCG industry and its impact on the profitability. The study has tried to fill the gaps existed in the earlier studies and provide a more generalized opinion.

Table 1: Tabular view of the Literatures Reviewed

S. No.	Researcher	Company	Time Period	Impact of WCM on Profitability
1	P.C. Narware (2004)	National Fertilizer Ltd., India	1991-2000	Both negative and positive, but insignificant
2	Adolphus J.Toby (2008)	Nigerian Manufacturing Companies	1990-2002	Positive and significant
3	Saradhadevi Anandasayanam (2011)	80 Sri Lankan Listed firms	2003-2009	Negative and Significant
4	Dr. Ashok Kumar Panigrahi (2012)	ACC Ltd., Cement Company	1999-00 to 2009-10	Moderate and Insignificant
5	Ebrahim Mansoori and Datin Dr. Joriah Muhammad (2012)	Companies listed on the Singapore Stock Market	2004-2011	Negative and significant
6	M.S. Turan, Sucheta Bamal, Babita Vashist, Nidhi Turan (2013)	Chemical Industry and Pharmaceutical Industries, India	2002-2011	Chemical Industry- Positive and significant impact Pharmaceutical Industry: Positive and insignificant
7	Dr. John Kwaku Mensah Mawutor (2014)	5 listed manufacturing companies, Ghana	2006-2010	Negative and Significant
8	Sujeewa Kodithuwakku (2015)	20 Manufacturing companies listed on Columbia Stock Exchange	2008-2012	Negative and Significant

Source: *Prepared based on the literatures reviewed for the study*

Objectives of the Study

- To study the working capital and profitability position of the selected companies of the FMCG industry.
- To examine the impact of working capital management on profitability of the selected companies of the FMCG industry.

Hypothesis of the Study

H_{01}: There is no significant impact of the Acid Test Ratio (ATR) on Return on Assets (ROA).

H_{11}: There is a significant impact of the Acid Test ratio (ATR) on Return on Assets (ROA).

H_{02}: There is no significant impact of the Current assets to total asset ratio (CTTR) on Return on Assets (ROA).

H_{12}: There is a significant impact of the Current assets to total asset ratio (CTTR) on Return on Assets (ROA).

H_{03}: There is no significant impact of the Current asset to Sales ratio (CTSR) on Return on Assets (ROA).

H_{13}: There is a significant impact of the Current asset to Sales ratio (CTSR) on Return on Assets (ROA).

H_{04}: There is no significant impact of the Current ratio (CR) on Return on Assets (ROA).

H_{14}: There is a significant impact of the Current ratio (CR) on Return on Assets (ROA).

Research Methodology

The research methodology of the study covers:

- **Data Collection:** The present study analyses the financial data of select 5 FMCG companies listed on the BSE India namely, Hindustan Unilever Limited (HUL), ITC Ltd., Marico Ltd., Nestle India Ltd. and Tata Coffee Limited. The financial data of the companies are collected for a period of 15 years from FY2000-01 to FY2013-14 from PROWESS software of the CMIE Database which has been suitably rearranged, classified and tabulated according to the requirements of the study. In addition, the Economic Survey of India of different years, research publications, various books, journals, newspapers, related websites, Publications of Bombay stock exchange (BSE) and National Stock exchange (NSE) of India have been viewed for collecting the required data.
- **Variables:** The study aims to analyze the impact of working capital management on profitability, for which one dependent variable, 4 independent variables and 3 control variables are chosen. The selection of the variables is influenced by conceptual knowledge of the researcher and the above studied literatures. The selected variables are mentioned below:

Table 2: Variables Selected for the Study

Categories	Variables	Formula
Dependent Variable	Return on Assets (ROA)	(Profit after Tax/ Total assets)
Independent Variables	Acid test Ratio or Quick Ratio (ATR)	Quick Assets/ Current Liabilities
	Current Assets to Total Assets Ratio (CTTR)	Current Assets/ Total Assets
	Current Assets to Sales Ratio (CTSR)	Current Assets/ Sales Ratio
	Current Ratio (CR)	Current Assets/ Current Liabilities
Control Variables	Debt Equity Ratio (DER)	Debt/ Shareholders' funds
	Growth	(Salest – Salest-1) / Salest-1
	Size	Log(Sales)

Source: *Based on Literature Reviewed.*

- **Technique Applied:** The selection of the techniques applied is based on the type of data and their measurement scale. Here, the financial data have been collected from 5 companies for 15 years. The data type is therefore, both cross-sectional and time series and is measured on a ratio scale. To test the hypothesis of the study, the following techniques/tools have been applied on the selected variables:

- **Objective 1:** Descriptive statistical tools: Mean, Standard Deviation (Overall, between and within), and Minimum & Maximum values.
- **Objective 2:**
  - Panel Data Regression: Pooled OLS Model, Fixed effect Model and Random effect Model
  - To test the Model Fit: Hausman Test and Restricted F-test.
  - Test for regression assumptions: Unit Root Test, Durbin Watson Test and Jarque Bera Test.

- **Analysis and Interpretation:** Table 3 titled "Descriptive Statistics: Working Capital Management Variables" measures the working capital and profitability position of the select companies. In the table, the financial ratios have been studied by using descriptive statistical techniques, namely, Mean, Standard Deviation (overall, between and within), Minimum and Maximum values. The table represents an overall picture of the working capital management of the companies under examination.

Table 3: Descriptive Statistics Working Capital Management Variables

Variable		Mean	Std. Dev.	Min	Max	Observation
ATR	**Overall**	0.31	0.15	0.06	0.71	75
	Between		0.07	0.19	0.36	5
	Within		0.14	0.08	0.66	15
CTTR	**Overall**	0.34	0.09	0.17	0.58	75
	Between		0.06	0.28	0.43	5
	Within		0.07	0.20	0.54	15
CTSR	**Overall**	0.25	0.13	0.11	0.67	75
	Between		0.13	0.14	0.48	5
	Within		0.04	0.15	0.45	15
CR	**Overall**	0.87	0.32	0.41	1.67	75
	Between		0.26	0.53	1.11	5
	Within		0.22	0.33	1.45	15
ROA	**Overall**	19.33	7.69	2.80	34.87	75
	Between		7.14	8.19	25.94	5
	Within		4.22	6.79	30.55	15

Source: *Computed from financial data taken from PROWESS*

According to the Table 3

- **Acid Test Ratio:** The overall mean value of the acid test ratio is 0.31 and theminimum and maximum value is 0.06 and 0.71. This shows that the companies are keeping a low level of quick assets in the business as the quick ratio is much below the normal thumb rule of 1:1. Further, the overall standard deviation is 0.15. According to the table, the companies show more time period variation (0.14) than cross-sectional variation (0.07). This means that the company's liquidity position varies more over the period of time.
- **Current Assets to Total Assets Ratio:** The overall mean value of the Current Assets to Sales ratio is 0.34 and the minimum and maximum value is 0.17 and 0.58. This signifies that more of company's funds are invested in fixed assets than the current assets. Further, the overall standard deviation is 0.09. The companies, as per the results, show more time period variation (0.07) than cross-sectional variation (0.06). This shows that the company's liquidity position varies more over the period of time.

- **Current Assets to Sales Ratio:** The overall mean value of the Current Assets to Sales ratio is 0.25 and the minimum and maximum value is 0.11 and 0.67. This depicts that the current assets are used efficiently to generate sales. Further, the analysis shows that the overall standard deviation is 0.13 and the companies have more cross-sectional variation (0.13) than time period variation (0.04). This depicts that the company's liquidity position varies from company to company.
- **Current Ratio:** The overall mean value of the Current ratio is 0.87 and the minimum and maximum value is 0.41 and 1.67. This means that the companies are keeping a low level of current assets as the current ratio is much below the preferred level of 2:1. Further, the overall standard deviation is 0.32. The companies show more cross-sectional variation (0.26) than time period variation (0.22). This means that the company's liquidity position varies more company-wise.
- **Return on Assets:** The overall mean value of the Return on Assets is 19.33 and the minimum and maximum value is 2.80 and 34.87. This shows that the company's efficiency to generate profits by using their total assets. According to the results, the companies are able to generate a maximum of 34.87 per cent of the profits from the total assets. Further, the overall standard deviation is 7.69. The companies show more cross-sectional variation (7.14) than time period variation (4.22). This means that the company's profitability position varies more company-wise.

The results signify that the company's overall working capital position and profitability position is not satisfactory. The companies are maintaining less working capital in the business and on the contrary, the profitability position of the companies is not good.

Panel Data Regression

In order to test the hypothesis the financial data collected is arranged and classified as panel data series on which panel data regression is applied. The models formulated for the panel data regression are as follows:

- **Model 1:** $ROA_{it} = \beta_{1i} + \beta_2 ATR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + B_5 Sizeit + u_{it}$ ---------- (I)
- **Model 2:** $ROA_{it} = \beta_{1i} + \beta_2 CTTR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + B_5 Sizeit + u_{it}$ ---------- (II)
- **Model 3:** $ROA_{it} = \beta_{1i} + \beta_2 CTSR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + B_5 Sizeit + u_{it}$ ---------- (III)
- **Model 4:** $ROA_{it} = \beta_{1i} + \beta_2 CR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + B_5 Size_{it} + u_{it}$ ---------- (IV)

Where,
i is the individual, i.e. company,
t is the time period,
β_1 is the intercept,
β_2, β_3 andβ_4 are the slope co-efficients and
u_{it} is the error term of the company, I at time t.

There are 75 observations on which the regression analysis will run. Prior to this, the best regression model fit for the study is to be determined out of the available options, namely, Pooled OLS Model, Fixed Effect Model and Random Effect Model.

Checking the Model Fit

Before analyzing the results of the regression analysis, it is best to select the best model fitted for the dependent variable, ROA. For this purpose, the R^2 value (test for level of variability in outcome by its predictors) and the Durbin Watson test value (test for auto-correlation) are checked. For further clarity, the two appropriate tests, i.e., Hausman Test and Restricted F-test is used for this purpose. The Hausman test applied to check the appropriateness between the Random effect model and fixed effect model. The restricted –test is used to decide between pooled OLS and fixed effect model. The results of the Models available are below mentioned:

Table 4.1: Results of Regression Models with Dependent Variable, Return on Asset (ROA) and Independent Variable, Acid Test Ratio (ATR)

Model 1: $ROA_{it} = \beta_{1i} + \beta_2 ATRit + \beta_3 DER_{it} + \beta_4 Growth_{it} + \beta_5 Size_{it} + u_{it}$

Model	R-squared	Adjusted R-Squared	Probability (F-Statistics)	Durbin Watson
Pooled OLS	0.50	0.47	0.00	0.34
Fixed effect	0.83	0.81	0.00	1.18
Random effect	0.50	0.47	0.00	0.34
Hausman test			0.00	
Restricted F-test			31.77 (0.00)	

Source: *Computed from financial data taken from PROWESS.*

Comparing the results of the three models (Pooled OLS, Fixed effect and Random effect) for independent variable, ATR in the above table (Table 4.1), it is found that though all the models are highly significant (p-value 0.00), the R^2 value (0.83) in the fixed effect model has increased and the Durbin-Watson test d value (1.18) is higher. This suggests that the other two models (Pooled OLS and Random Effect model) are mis-specified.

Table 4.2: Results of Regression Models with Dependent Variable, Return on Asset (ROA) and Independent Variable, Current Assets to Total Assets Ratio (CTTR)

Model 2: $ROA_{it} = \beta_{1i} + \beta_2 CTTR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + \beta_5 Size_{it} + u_{it}$

Model	R-squared	Adjusted R-Squared	Probability (F-Statistics)	Durbin Watson
Pooled OLS	0.56	0.53	0.00	0.36
Fixed effect	0.85	0.83	0.00	1.19
Random effect	0.56	0.53	0.00	0.36
Hausman test			0.00	
Restricted F-test			30.98 (0.00)	

Source: *Computed from financial data taken from PROWESS.*

Comparing the results of the three models (Pooled OLS, Fixed effect and Random effect) for independent variable, CTTR in the above table (Table 4.2), it is found that though all the models are highly significant (p-value 0.00), the R^2 value (0.85) in the fixed effect model has increased and the Durbin-Watson test d value (1.19) is higher. This recommends that the other two models (Pooled OLS and Random Effect model) are mis-specified.

Table 4.3: Results of Regression Models with Dependent Variable, Return on Asset (ROA) and Independent Variable, Current Assets to Sales Ratio (CTSR)

Model 3: $ROA_{it} = \beta_{1i} + \beta_2 CTSR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + \beta_5 Size_{it} + u_{it}$

Model	R-squared	Adjusted R-Squared	Probability (F-Statistics)	Durbin Watson
Pooled OLS	0.69	0.67	0.00	0.76
Fixed effect	0.83	0.81	0.00	1.21
Random effect	0.69	0.67	0.00	0.76
Hausman test			0.00	
Restricted F-test			13.90 (0.00)	

Source: *Computed from financial data taken from PROWESS*

Comparing the results of the three models (Pooled OLS, Fixed effect and Random effect) for independent variable, CTSR in the above table (Table 4.3), it is found that though all the models are highly significant (p-value 0.00), the R^2 value (0.83) in the fixed effect model has increased and the Durbin-Watson test d value (1.21) is higher. This shows that the other two models (Pooled OLS and Random Effect model) are mis-specified.

Table 4.4: Results of Regression Models with Dependent Variable, Return on Asset (ROA) and Independent Variable, Current Ratio (CR)

Model 4: $ROA_{it} = \beta_{1i} + \beta_2 CR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + \beta_5 Size_{it} + u_{it}$

Model	R-squared	Adjusted R-Squared	Probability (F-Statistics)	Durbin Watson
OLS	0.57	0.55	0.00	0.49
Fixed effect	0.83	0.81	0.00	1.17
Random effect	0.57	0.55	0.00	0.49
Hausman test			0.00	
Restricted F-test			24.63 (0.00)	

Source: *Computed from financial data taken from PROWESS*

Comparing the results of the three models (Pooled OLS, Fixed effect and Random effect) for independent variable, CR in the above table (Table 4.4), it is found that though all the models are highly significant (p-value 0.00), the R^2 value (0.83) in the fixed effect model has increased and the Durbin-Watson test d value (1.17) is higher. This depicts that the other two models (Pooled OLS and Random Effect model) are mis-specified. Finally, for more verification, Hausman Test for Fixed versus Random effect is applied for this. The test tells the most appropriate model for the analysis. In the study, in all the four models, the Hausman test P-value of the test comes to be below 0.05, which means that the null hypothesis (Random effect is appropriate) fails to accept and the fixed effect model is the appropriate one. On the other hand, Restricted F-test signifies the appropriateness of OLS Model versus Fixed effect Model. In the present study, the F-value is highly significant i.e.below 0.05. This symbolizes that the OLS Model (Restricted Regression) is invalid.

Checking the relevant Regression Assumptions

In the regression analysis, there are a few assumptions that may affect the direction and degree of relationship between the selected working capital and profitability variables. They may lead to spurious regression results because of multi-collinearity, serial correlation, non-stationary, not normal data and correlations of error term with dependent and independent variables. Before testing the hypothesis, the relevant assumptions of panel data regressions are to be satisfied. In all the administered models, Durbin Watson is close to 2 showing no serial correlation. The residuals of the models were proved to be stationary and normal after applying ADF test and Jarque Bera test respectively. Further, there was no correlation of residuals with dependent and independent variables and no multi-collinearity between the independent variables. Hence, all the required assumptions are satisfied.

Regression Results

As per table 5, titled "Results of Panel Data Regression (fixed effect model)", R-squared value and the adjusted R-square value signify that the model explains more than 80% of the variation in the dependent variable.

Table 5: Results of Panel Data Regression (Fixed Effect Model)

Independent Variable	Slope co-efficient	P-value	R-squared	Adjusted R-Squared	Result
ATR	0.68	0.8296	0.83	0.83	Positive
DER	-7.43	0.0001			Not Significant
Growth	9.97	0.0007			
Size	4.85	0.0096			
CTTR	17.37	0.0074	0.85	0.83	Positive
DER	-5.93	0.0007			Significant
Growth	7.62	0.0079			
Size	5.53	0.0017			

CTSR	-7.30	0.4582	0.83	0.81	Negative
DER	-7.28	0.0001			Not Significant
Growth	9.62	0.0012			
Size	5.43	0.0053			
CR	0.48	0.8159	0.83	0.81	Positive
DER	-7.38	0.0002			Not Significant
Growth	9.92	0.0008			
Size	4.95	0.0068			

Source: *Computed from financial data taken from PROWESS*

The table (Table 5) shows that only CTTR (R^2= 0.85 and p-value 0.0074 4582 i.e. $p < 0.05$) has a significant positive relationship with the ROA. On the other hand, ATR (R^2= 0.83 and p-value 0.00744582 i.e. $p > 0.05$) and CR (R^2= 0.83 and p-value 0.8159 4582 i.e. $p > 0.05$) have a positive but an insignificant association with ROA and CTSR (R^2= 0.83 and p-value 0.4582 i.e. $p > 0.05$) has an insignificantly negative association. The table depicts that the maximum impact on profitability is explained by the control variables, viz-a-viz. DER, growth and the size of the companies.

Conclusion and Recommendations

The FMCG industry is one of the prominent industries of the Indian manufacturing sector. The study aims to find out the impact of working capital management on the firm profitability of the select FMCG companies for the period 2000-01 to 2013-14. The results of the study signify that the companies kept limited funds for their working capital needs during the period under study. Further, the profitability position suggests that the companies earned a low level of profits during the study period which varies from company to company.

Based on the panel data regression analysis, the results show that there is positive relationship between working capital variables (ATR, CTTR and CR) and ROA. The results are in favor of the literature studied such as Bamal et al (2013) and Toby (2008). However, the study found that there are other factors like size of the firm, growth and leverage that have significant impact on firm profitability. It is suggested that the firms need to manage their working capital effectively by making optimum investment in current assets. The companies' managers must also focus on the other factors like leverage, growth and size of the companies in order to maximize the profits of the companies.

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IMPACT OF DEMONETIZATION ON STOCK MARKET: EVENT STUDY METHODOLOGY

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ABSTRACT

Demonetization is the act of divesting a currency unit of its status as legal tender. It is a tool to handle black money in the economy by lowering the cash circulation in the country which is directly concerned with the corruption. It directly or indirectly influences the various sectors. The effect of taking out so much money from the market is obviously affect the various sectors, which are driven by the black economy like real estate, construction, etc. But this move of government has also affected those sectors that are driven by cash because they are the first that are affected when so much money is suddenly removed from circulation. This research paper is trying to analyze the impact of demonetization on Indian Stock market. This study is using Event Study Methodology to analyze the stock of S&P BSE 100 companies. The result is being observed from the comparison of both pre and post-event window and found that there is no significant impact of demonetization on the stock market. The study also found that this short period downfall in the stock prices can be due to some other factors.

KEYWORDS: *Demonetization, S & P BSE 100, Stock Market, Event Study.*

Introduction

Demonetization is the Process of removing currency from general usage, or circulation is known as demonetization. In India demonetization of 500 and 1000 rupee notes has been taken place in 8th Nov. 2016 by Central Government. Indian economy is the cash based economy where 90% transaction has taken place in cash only. The recent abrupt move to demonetize Rs 500 and Rs 1,000 currency notes is not new in India. Rs 1,000 and higher denomination notes were earlier demonetized in January 1946 and again in 1978. The highest denomination notes of Rs. 10,000 were printed by the Reserve Bank of India in 1938 and again in 1954. As per RBI data, these notes were demonetized again in January 1946 and again in January 1978. To check undisclosed black money, corruption and fake currency the Government of India on the 8th November 2016 announced demonetization of high denomination currency notes of Rs 500 and Rs1000. A newly redesigned series notes of Rs 500 and Rs 2000 is in circulation since 10 November 2016.

The impact of demonetization on various industries would be different and depending on the demand and supply conditions. Industries whose business is depended more on cash affected more rather than those industries where dependence on cash is low. It is also argued amongst researcher that

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effect of demonetization is temporary; it will revert once normalcy is attained. The stock market is a good indicator of how perceptions of investors have been grounded across sectors during this period. The ideal indicator to analyze the impact would be the financial performance of companies in any industry as changes in sales and profits could be interpreted regarding how sectors were impacted. However, this information of company will be available to the market only after the third quarter results are announced. Stock price movements could be quick perceptions indicator, which admittedly would be affected by various other factors such as company-specific developments, industry related issues, etc. on a real time basis. This can nonetheless be used as an indicator of how sectors are expected to be impacted on account of demonetization.

Since November, eight no major events have been taken place in the industry that could guide the stock prices. Inflation was stable, and RBI policy has remained unchanged. The rupee has declined, but this is more on account of the dollar strengthening. Foreign Portfolio Investor flows have turned negative during this period as both equity and debt segments witnessed net outflows. In this research study, the author is trying to analyse the impact of demonetization on the stock market. For the same, a study has taken S&P BSE 100 index and used event study methodology. The one major event is considered for the study, the day when demonetization is announced i.e. on 8th November 2016. And the impact of demonetization has been seen from 30th October, 2016 to 21st November, 2016.

Literature Review

As not much literature is available on this topic, it motivates the author to do research on this topic and contribute into the scarce literature. On 8th November 2016, PM Narendra Modi announced the cancellation of Rs. 500 and 1000 notes which resulted in 86% of the circulated money being removed from the economy overnight. As demonetization affect every sector of the economy, but here we are analyzing the impact of demonetization on the stock market.

- As per the credit rating report, 2016 demonetization affect the stock market. The study took the data period from 1st October 2016 to November 8th and than November 8th to 23rd December. The study analysed the stock prices of all the sector and found that consumer durable, healthcare, auto industry, banks and real estate affected more (Care Ratings, 2016).
- **Bhardwaz et.al. (2017)** analysed the impact of demonetization on the stock market by using efficient market hypothesis. The study took 16 companies from National Stock Exchange, India from 2012-2016. The study found a significant impact of demonetization on the stock market and also observed some fluctuations.
- **Veerakumar, K.(2017)** analysed the impact of demonetization on the public perception. The study found that gender, age, occupation and annual income have significant impact association with demonetization. The study also found that demonetization will help to destroy black money, corruption and terrorism.
- **Kaur, M.(2017)** has analysed the impact of demonetization on the cashless payment system. The study found that rising use of credit cards, debit cards, online banking and other online payment transaction was due to demonetization.
- **Bansal, C. J. (2017)** analysed the impact of demonetization on Indian economy. The study analysed the impact on manufacturing, service and agriculture sector. The result showed that only agriculture sector grows positively while manufacturing and service sectors were crashed down.
- **Mahajan, P., & Singla, A. (2017)** examined the impact of demonetization on financial inclusion in India. The study analysed demonetization effects on ordinary people, informal sectors, NBFC-MFIs, MSMEs and E-wallet companies. The findings of the study show that ordinary people were the most affected.

The above-given literature shows that impact of demonetization has been analysed in most of the sectors of India. While a little amount of literature is found over the stock market. It gives motivation to the author to evaluate the impact of demonetization over the stock market.

Objective of the Study

The main objective of this study is to examine the impact of demonetization announcement on market reaction.

Data and Data Sources

The sample has been drawn from Prowess IQ of 100 companies closing price which come under S&P BSE 100 Index calculated on free-float market capitalization basis from the period 30th October 2016 to 21st November, 2016. The event of interest for the study is the announcement of demonetization of all 500 and 1000 rupee' notes by the Government of India on 8th November, 2016. The event window has been chosen as -7 through zero to +7, where zero represents the demonetization date and -7, and +7 are the period before and after the announcement date.

Hypothesis

To accomplish the objective of the study, the following hypotheses are formulated:

H_1 : There is no significant average annual return (AAR) during the event window caused by announcement of demonetization of all 500 and 1000 rupee note

H_2 : There is no significant cumulative average annual return (CAAR) during the event window caused by announcement of demonetization of all 500 and 1000 rupee note.

Acceptance of the null hypothesis suggests that the announcement of demonetization of all 500 and 1000 rupee' note is confiscated in the prices of the security so instantly and precisely that the investors do not find any opportunity to get any abnormal return from the security. This indicates the presence of efficient market pricing at its semi-strong level.

Research Methodology

Event study methodology is used to capture the impact of demonetization announcement on security returns (Brown & Warner, 1980; Bowman, 1983; Brown & Warner, 1985). While doing event study, Brown & Warner (1980, 1985) states the statistical power of three different return generating models (RGM) that authors are using in this study. The principle objective of an event study is to detect whether the performance of security is statistically different from what is expected. Abnormal return for the firm *i* and on the event date *t* is given by,

$$ARit = Rit - E(Rit / \Omega t\text{-}1) \quad (1)$$

where,

ARit = abnormal return for firm *i* for day *t*

Rit= actual return for firm *i* for day *t*

E(Rit / Ωt-1) = normal or expected return for firm *i* for day *t*, Ω is conditional information set in the period *t*. Note that methodology of event study assumes that security returns are generated by some RGM. Actual return of the firm (Rit) is calculated as the difference between natural log of closing price of security at day *t* and natural log of closing price of security at day *t-1*.

Abnormal return can be based on statistical relationship like OLS Market Model, Market-Adjusted Return Model and Mean-Adjusted Return Model or on theoretical economic models like Capital Asset Pricing Model and Arbitrage Pricing Model. This study uses statistical relationship models to calculate abnormal return of securities.

Model Description

- **OLS Market Model**

This model is also known as Risk-Adjusted Market Model (Sharp, 1964) as the model reduces the variance in the abnormal return of the security by removing the part of return that is caused by variation in market return.

$$ARit = Rit - (a + \beta Rmt) \quad (2)$$

where,

Rmt = market return calculated as the difference between natural log of closing price of S&P BSE SENSEX at day *t* and day *t-1*.

α and β are assessed over the estimation period (event window) using ordinary least square (OLS) technique by equation 3.

$$Rit = a + \beta Rmt \quad (3)$$

Then, the expected return of the security *i* for day *t* of the event window is calculated by putting the values of α, β and Rmt in the following equation:

$$E(Rit / \Omega t\text{-}1) = a + \beta Rmt \quad (4)$$

- **Market-Adjusted Return Model**

This model neglects the influence caused by variance in market return in abnormal return of the security.

$$ARit = Rit - Rmt \quad (5)$$

Variables ARit, Rit and Rmt are previously defined.

- **Mean-Adjusted Return Model**

This model neither considers the influence of market nor the variance in market return in the calculation of abnormal return of the security. It takes mean of security *i* as expected return.

$$AR_{it} = R_{it} - \overline{R_i} \quad (6)$$

where $\overline{R_i}$ is the simple mean of security *i* daily return.

The AAR is the sample mean of abnormal return for each day of the event window considering all the securities is calculated for all three models to eliminate the effect of abnormal return on any specific security.

$$AAR_t = \sum_{i=1}^{N} AR_{it}/N \quad (7)$$

Where N is the number of securities in the sample (100 securities in this study)

To assess the accumulated effect of the event during the event, CAARs are calculated for each day of the event window. CAAR is calculated as the sum of daily mean abnormal return over the pre-specified period starting from k1 to k2.

$$CAAR_{(k_1,k_2)} = \sum_{t=k_1}^{k_2} AAR_t \quad (8)$$

Test Statistics

Test statistics are used to know the significance level of AAR and CAAR during the event window caused by the announcement of demonetization of all 500 and 1000 rupee′ note. If calculated t-value of AAR or CAAR exceeds the critical t-value at one or five percent of the level of significance (99 degrees of freedom), the null hypothesis is rejected indicating the significant impact of demonetization on the securities. Hence it can be concluded that security pricing is inefficient in the market at its semi-strong form. Computation of t-statistics AARt is given below (Asquith, 1983);

$$t - AAR_t/S.E. \quad (9)$$

where, S.E., standard error = $\sqrt{\sum(AR_{it} - AAR_t)^2/N-1}$

t-statistics for $CAAR_{(k_1,k_2)}$ is computed as (Brown and Warner, 1980)

$$t = CAAR_{(k_1,k_2)}/S.E. \quad (10)$$

where, standard error = $\sqrt{\sum_{i=1}^{N} \sigma^2_{i,(k_1,k_2)}/N^2}$

$\sigma^2_{i,(k_1,k_2)}$ = variance of the abnormal return of stock *i* for (k1, k2) period

Results and Discussion

Table 1 reports the results of the event study accompanied to inspect the impact of demonetization announcement on security prices. It shows AAR and its respective t-statistics of all three models for each day of the event window. The t-statistics values are found to be inconsistently significant before and after the event day. It indicates no influence of demonetization announcement on security prices. Although, it could be seen from the figure 1 that there is a sharp decline for the day one but t-statistics is highly insignificant for all models.

BSE SENSEX opened with massive loss of around 1300 points but later it recovered. The graphical appearance of AARs also shows that ARRs are significantly different from zero in almost all event window days.

Conversely, the t-statistics for -1 and -2 days are found to be significant for all models but cannot figure out the reasons for the same. Moreover, the victory of provocative US presidential candidate Donald Trump on the same day could have impacted the stock market but it did not.

Table 1: AAR of Event Window and Computed t-statistics

Day	OLS Market Model		Market-Adjusted Return Model		Mean-Adjusted Return Model	
	AAR	t-statistics	AAR	t-statistics	AAR	t-statistics
-7	0.0051	6.3859***	-0.0014	-2.3746	0.0090	11.3499***
-6	0.0072	3.8085***	0.0037	1.9398	0.0076	3.9911***
-5	-0.0069	-4.3586	-0.0073	-4.4839	-0.0101	-6.2409
-4	-0.0010	-0.6825	-0.0034	-2.3032	-0.0019	-1.2456
-3	-0.0093	-4.6180	-0.0135	-6.6891	-0.0080	-4.0243
-2	0.0146	8.9648***	0.0080	4.5617***	0.0186	10.6627***
-1	0.0083	5.7879***	0.0034	2.5376**	0.0103	7.1405***
0	0.0111	4.6448***	0.0283	8.0967***	-0.0121	-3.8811
1	0.0017	0.8615	-0.0268	-8.1622	0.0309	9.7393***
2	-0.0234	-11.7433	-0.0241	-10.7824	-0.0261	-12.9798
3	-0.0140	-4.8486	-0.0100	-3.1138	-0.0223	-7.5446
4	0.0110	4.3870***	0.0112	4.5009***	0.0073	2.8790***
5	0.0081	5.0608***	0.0065	4.0528***	0.0062	4.0196***
6	0.0092	5.3186***	0.0046	2.7497***	0.0107	6.1836***
7	-0.0219	-10.0065	-0.0266	-12.4895	-0.0200	-9.3841

Notes: *** indicates significance at one % level,
** indicates significance at five percent and * indicates significance at ten % level
Source: Author's calculation

The investor comprehends the real impact of event through CAAR as presented in table 2. It appears from the table that there is insignificant impact on before and after the event as calculated t-statistics is very less as compared to tabulated t-statistics.

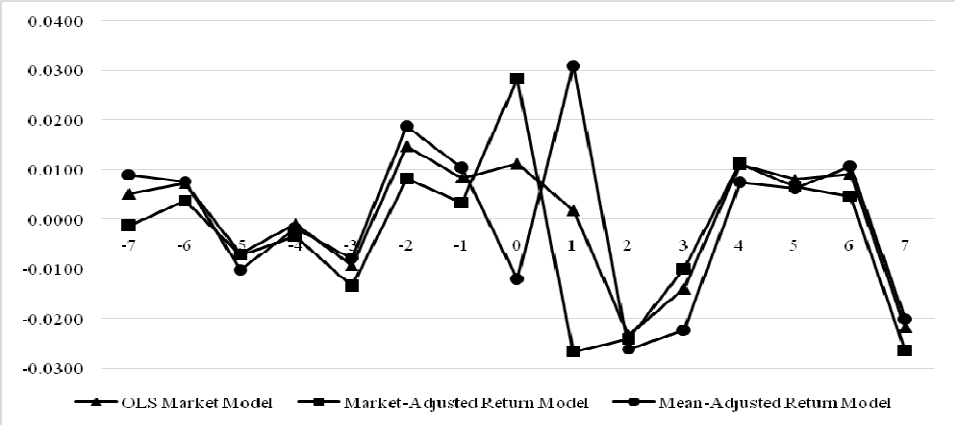

Figure 1: Graphical presentation of ARR in the Event Window
Source: Author's calculation

Table 2: Computed t-statistics of CAAR

Time Interval	OLS Market Model	Market-Adjusted Return Model	Mean-Adjusted Return Model
-7 to -1	0.9486	-0.4891	1.0246
1 to 7	-0.8591	-1.8776	-0.3061

Notes: **** indicates significance at one % level, ** indicates significance at five percent and * indicates significance at ten % level.*
Source: *Author's calculation.*

Conclusion

The study examined the impact of demonetization announcement on market reaction of S&P BSE100 index. Data analysis shows that no significant impact of demonetization is found stock market prices. The effect of demonetization was only for a shorter duration, but it recovered soon. So, this study did not find any significant impact of demonetization announcement on stock market prices.

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PERFORMANCE OF INDIAN IPO'S-FROM ISSUE PRICE TO LISTING PRICE DURING THE FINANCIAL YEAR 2016-17: A STUDY

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ABSTRACT

In India now-a-days IPO has become one of the preferred investments for small investor. There are many traditional investments places are possible in India but Initial Public Offer become one of the most preferred investment place where with less investment capital and less risk more gain or return on investment can be possible. One of the tough parts about the performance is to predict its price on its initial day of trading or we can say listing price. It is totally depend upon with the market trend i.e. bullish to bearish. In this study, researcher tried to analysis the average return form an IPO and tried to find out the true return during the study period. In this research study, researcher has studied 28 ipo's offer price and listing price. At the end of the research, it can be concluded that small investor with no expertise knowledge are suggested to invest in new IPO's as on an average more return can be seen during study period with very less duration of time period. Out of all the companies taken in the study we can say that ***17.85%*** *companies saws negative return and 82.15% companies saws positive return. From the empirical study it can be concluded that during the study period IPO's trend saws very positive trend which will be very beneficial to the investor.*

KEYWORDS: *Positive, Performance, Empirical, Traditional, Investment.*

Introduction

Initial Public offering means when any company offers its share to the general public for the first time is consider being IPO. In India the trend of initial public offering came in the eighties when a many companies need basic capital and came out with public issues. Market of India saw a dramatic recovery in IPO sector during last few years. One of the main aims behind IPO is to increase the capital of the company. IPO helps to get wide range of investor to the company. IPO give an opportunity to small investor to gain positive return with minimum risk and less capital even without expertise knowledge. There is general trend and proper empirical evidence that world had noted that IPO generate positive good return on listing day. So it is in the benefits of small investor to invest their capital with short duration of time to get abnormal return. IPO also motivate the small investor their funds form

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unproductive to high growth opportunities. This Research Article tires to focuses on the performance of Indian IPO from issue price to listing price during the period from 1/04/2016 to 31/04/2017.

Research Design and Methodology

Objective of the Study

This research article has some of the following objectives.

- To study the performance of IPO'S during the study period.
- To find out the true return on investment on IPO.
- To find out the new horizon for small investor.
- To measure the percentage change in issue price and listing price.

Collection of Data

This research study is totally depending on secondary sources. The data is collected from the different websites and sources available. Researcher has tried to do the financial performance of IPO which is listed in Indian secondary market that is NSE during the period from 1 April, 2016 to 31 March, 2017.

Research Problem

One of the main problems for the small investor is to take investment decision with such a limited capital. And small investors don't have the expertise knowledge. So with in the short duration of time with less capital small investor can invest their money and can avail the opportunity of high return than the traditional one. This study was undertaken by the researcher to analyze to performance of IPO which is listed in Indian secondary market.

Time Duration of Study

This research study has been done by the researcher for the period of one year that is starting form 1 April, 2016 to 31 March, 2017. During the study performance of Indian IPO has calculated.

Scope of the Study

The scope of the research study is limited to the Indian initial public offering (IPO) during last financial year 1 April, 2016 to 31 March, 2017. Within this study period researcher tried to find out financial performance of 28 Indian IPOs.

Basic Concept Regarding Research

- **Issue Price:** When any company first time offers it's share to the market with a certain price is known as issue price. This price might be at premium, at par or at discount. It is totally depend upon company's reputation or wish.
- **Listing Price:** Listing price is the price at which the company IPO is first listed with a specific price on listed day in the secondary market (NSE). This price might be more than its issue price or less than its issue price. It is totally depend upon the market demand of that IPO.
- **Over / Under Performed:** Here in this Table two words has used by the researcher. When over performed word is used it indicates positive return means listing price is more than the issue price. When under-performed word is used it indicates negative return means listing price is less than the issue price.

Below Table Shows The Percentage Change In IPO's Issue Price And Listing Price During Last Financial Year 1 April, 2016 To 31 March, 2017

Name of IPO	Issue Open	Issue Price	Listing Price	% Change	Performed
Shankara Building Products Ltd	5 April, 17	460	555	20.65	Over
Cl Educate Ltd.	31 Mar, 17	502	398	-20.71	Under
Music Broadcast Ltd.	17 Mar, 17	333	420	26.12	Over
Avenue Supermarts Ltd.	21 Mar, 17	299	640.75	115	Over
BSE Ltd.	3 Feb, 17	806	1089	35	Over

Laurus Labs Ltd.	19 Dec, 17	428	490	14.48	Over
Sheela Foam Ltd.	9 Dec, 17	730	860	17.8	Over
PNB Housing Finance Ltd.	7 Nov, 16	775	863	11.35	Over
Varun Beverages Ltd.	8 Nov, 16	445	430	-3.33	Under
Endurance Technologies Ltd.	19 Oct, 16	472	572	21.18	Over
HPL Electric & Power Ltd.	4 Oct, 16	202	190	-5.94	Under
ICICI Prudential Life insurance	29 Sep, 16	334	329	-1.49	Under
G N A Axles Ltd.	26 Sep, 16	207	252	21.73	Over
L & T Technology Service Ltd.	23 Sep,16	860	920	6.97	Over
RBL Bank Ltd.	31 Aug, 16	225	274	21.77	Over
S P Apparels Ltd.	12 Aug, 16	268	305	13.8	Over
Dilip Buildcon Ltd.	11 Aug, 16	219	240	9.58	Over
Advanced Enzymes Tech.	1 Aug, 16	896	1210	35.04	Over
L & T Infotech Ltd.	21 Jul, 16	710	667	-6.05	Under
Quess Corp Ltd.	12 Jul, 16	317	500	57.72	Over
Mahanagar Gas Ltd.	1 Jul, 16	421	540	28.26	Over
Parag Milk Foods Ltd.	19 May,16	215	217.5	1.16	Over
Ujjivan Finance Service Ltd.	10 May,16	210	231.9	10.42	Over
Thyrocare Technologies Ltd.	9 May,16	446	662	48.43	Over
Equitas Holding Ltd.	21 Apr,16	110	144	30.90	Over
Infibeam incorporation Ltd.	4 Apr, 16	432	458	6.01	Over
Bharat Wire Ropes Ltd.	1 Apr, 16	45	47.35	0.52	Over

Source: http://www.chittorgarh.com/ipo/ipo_list.asp Mean of the data 19.12

$$\textbf{PERCANTAGE CHANGE} = \frac{\text{LISTING PRICE} - \text{ISSUE PRICE}}{\text{ISSUE PRICE}} * 100$$

Interpretation

In this table researcher has taken total 28 companies for the study purpose for the period of 1 financial year 1/04/2016 to 31/03/2017. And in this research article total 28 companies are to be analyzed. In this table researcher has tried to find out the financial performance of selected Indian companies IPO's performance with two prices i.e. issue price and listing price for the study period. Here in this table researcher has found out percentage change between two prices i.e. issue price and listing price for the study period. Here in this table researcher has mentioned each company's performance (i.e. over performed, underperformed) with the help of two prices i.e. issue price and listing price. If issue price is more than the listing price, it is called as underperformed. If issue price is less than the listing price, it is called as over performed.

Findings

- In this research article we can conclude that on an average out of total 28 companies **19.12** % return can be possible.
- Out of total 28 companies only **5** companies saws negative return means listing price is lower than issue price.
- Out of total 28 companies only **23** companies saws positive return means listing price is higher than issue price.
- In this research article we have seen that Avenue Supermarts Ltd has given highest return **(115%)** out of all the companies taken in the study.
- In this research article we have seen that Cl Educate Ltd. has given lowest return **(-20.71%)** out of all the companies taken in the study.

- Out of all the companies taken in the study we can say that **17.85%** companies saws negative return which is not good for the small investor.
- Out of all the companies taken in the study we can say that **82.15%** companies saws positive return which is beneficial for the small investor which also can attract investor.

Conclusion

Investment at right place with good return in India has become more necessity for the common people. Looking to the traditional investment place we find another modern investment place with high return with low risk and within the short duration of time. Now-a-days trend of IPO has become very popular and safe and does not require to have good, sound and expertise knowledge. There need not have any kind of analytical knowledge to investment in share market. After looking to the study, the analysis will help different stake holder to find out whether to invest in IPO can become beneficial to all as average return out of 31 scripts are more positive than the negative. At last after the good research in this study, it can be find out that for the common people IPO can become the favorite place and rational place where they can get good return in short run.

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