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CONTENTS

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STATEMENT OF THE PROBLEM
OBJECTIVES
HYPOTHESIS (ES)
RESEARCH METHODOLOGY
RESULTS & DISCUSSION
FINDINGS
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- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

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ANALYSIS OF FACTORS INFLUENCING THE CONVERGENCE OF INDIAN ACCOUNTING STANDARDS WITH IFRS BY THE RESPONDENTS OPINION USING GARRETS' RANKING TECHNIQUE

Dr. ADAPA JYOTHI
GUEST FACULTY
DEPARTMENT OF COMMERCE & MANAGEMENT STUDIES
ANDHRA UNIVERSITY
PG CAMPUS
VIZIANAGARAM

Dr. M N V SATYANARAYANA
PRINCIPAL
GAYATRI GROUP OF INSTITUTIONS
JANGAREDDYGUDEM

ABSTRACT
International Financial Reporting Standards is global reporting language. Convergence of accounting standards across the globe is gaining momentum. Most standard setting bodies have acknowledged that the ultimate goal of convergence is to have a single and globally accepted financially reporting system. Convergence of IFRS around the world is occurring rapidly to bring about accounting quality improvement through a uniform set of standards for financial reporting. Financial reporting outcomes depends on a variety of factors that influence those outcomes and Accounting quality does not depend only on Accounting standards but also on the firms' overall institutional setting, including the English Language, Legal enforcement system, Practical costs for implementation, Market access conditions, Taxation system, Size of capital markets and Multinational companies. The present paper attempted to the factors influencing the convergence of Indian Accounting Standards with IFRS from academician's perspective. A market access condition is the prime influencing factor.

KEYWORDS
IFRS, Indian accounting standards.

JEL CODES
M40, M42, M49.

INTRODUCTION
IFRS are the accounting rules by the International Accounting Standard Board (IASB), an Independent organization based in London. Before the inception of IASB, International Standards were issued by lASB predecessor, the IASC a body established in 1973 through a agreement made by professional accounting bodies from Australia, Canada, France, Germany, Japan, Mexico, Netherlands, United Kingdom, Ireland. In late 1997, IASC recognized that to continue to perform its role effectively must find a way to bring about convergence between national accounting standards and practices and high quality global accounting standards. In 1997, IASC formed a strategic working party that published a discussion paper in 1998 and final recommendation in 1999. IASC Board approved the proposal in 1999 and the IASC member bodies in 2000. The new accounting setting body was named as International Accounting Standard Board (IASB) and since 2001 has been performing the rule making function. IFRS is a universal financial reporting language consisting of set of high quality, understandable and enforceable global accounting standards.

International Financial Reporting Standards (IFRS) comprises of
- IFRS Standards issued after 2001
- International Accounting Standards issued before 2001
- Interpretation originated from International Financial Reporting Interpretation Committee (IFRIS) issued after 2001
- Standard Interpretation Committee (SIC) before 2001.

IFRS is rapidly gaining acceptance; as of now 100 countries require or permit to use IFRS. China and Canada have decided to converge from 2008 and 2011, respectively. It is also very encouraging to note that Institute of Chartered Accountant of India has also set out a roadmap to converge with IFRS by 2011. Convergence will bring both opportunity and challenges. Opportunity, which comes with the use of singular financial reporting framework, eases access to global capital market, peer group comparison, cross-border acquisition or strategic transaction amongst others. Challenges include uniform interpretation and application of principles based standard.

REVIEW OF LITERATURE
Vivek and Rahul (2016) stressed that shareholders, stock exchange, multinational companies, accounting firms, trade unions and income tax authorities are interested in international convergence of accounting standards. The scope for convergence is great because the international variations in practice are very large. The main reason for divergent accounting practices is nationalism, i.e., unwillingness to accept international accounting standards. FASB and IASB are making efforts to achieve convergence in accounting practices at international level. **Shamsaddeen and Essa (2014)** reported that Several challenges to the process of implementing the IASs/IFRS in preparing financial statements were the lack of training programmes; the lack of inclusion in the accounting curriculum of the IASs; the consequent lack of awareness among preparers of the IASs/IFRS and how to implement them; the absence of enforcement; the weakness of the Libyan stock market (LSM) governance system; and the inability of preparers and auditors to use the English Language. Libyan regulators amend the existing laws to facilitate IASs/IFRS applications and Policy-makers also need to incorporate these standards into accounting curriculums and training programmes to ensure that there is synchronization between the accounting profession, and accounting education at the national level. **Rathi and Emhemad (2014)** elaborated that the use of IAS in global arena was patiently waited in order to actively use in business, financial aspects, private sector etc. Currently the new innovations in IAS and Taxation System resulted into rapid growth of using the IAS and Taxation System. **Kim and David (2012)** studied that the need for capital investment evidenced by greater economic growth and capital formation, and higher literacy rates creates signaling incentives for adoption of IFRS. Factors relating to size of capital markets, taxation, and inflation produce disincentives for adoption, which point to internal political and practical costs of converting current accounting systems to IFRS. **Jean and Stolowy (2008)** found that the pervasiveness of earnings management did not decline after the introduction of IFRS, and in fact increased in France. Sharing rules is not a sufficient condition to create a common business language, and that management incentives and national institutional factors play an important role in framing financial reporting characteristics. The IASB, the SEC and the European Commission (EC) should now devote their efforts to harmonizing incentives and institutional factors rather than harmonizing accounting standards. Harmonization of legal enforcement systems, competition rules, market access conditions, and effectiveness of the legal system are factors that appear better able to guarantee comparable accounting practices across countries. **Khaled and**

Hussein (2006) considered that the companies examined have vigorously adopted IASs and 87 percent of the companies disclosed their financial information in the English language which can be considered as a robust factor for adopting IASs and the size of the companies (as measured by total assets) in the United Arab Emirates (UAE) has a significant effect on the level of adoption of IASs. The type of sector and the trading status (listed or unlisted) have no significant effect on the level of adoption of IASs.

OBJECTIVE OF THE STUDY

To study the factors influencing the convergence of Indian Accounting Standards with IFRS from academicians perspective.

RESEARCH METHODOLOGY OF THE STUDY

The present study is based on the both primary and secondary data, an exploratory in nature, was conducted in Visakhapatnam city. Ninety eight respondents were selected who teach accounting and finance and taxation papers. Purposive sampling technique was used. Teachers sample represent 13 junior Lecturers, 20 Senior Lecturers, 18 Assistant professors, 21 Associate professors, and 26 Professor thus, bringing total respondents number to 98. A structured questionnaire containing different questions relating to influencing factors of convergence of Indian Accounting Standards with IFRS has been used. The SPSS 16.0 version was used to interpret and analyze the data. The techniques of frequencies, percentage and Garrets Ranking Technique applied to derive the results.

ANALYSIS AND INTERPRETATIONS

TABLE 1: AGE GROUP-WISE DISTRIBUTION OF RESPONDENTS

Age in years	Frequency	Percent
Below – 30	9	9.2
31-40	23	23.5
41-50	41	41.8
50 and Above	25	25.5
Total	98	100.0

Table 1 presents age wise distribution of the respondents. Out of the total respondents 41.8% are in the age group of 41-50 years, 25.5% are in the age group of 50 and above years. Further, 23.5 per cent are in the age group of 31-40 years and 9.2 per cent are aged below 30 years.

TABLE 2: GENDER OF THE RESPONDENTS

Gender	Frequency	Percent
Male	66	67.3
Female	32	32.7
Total	98	100.0

Table 2 depicts gender-wise distribution of respondents. It can be observed from the sample that majority of the respondents i.e., 66 out of 98 total respondents representing 67.3 per cent belongs to male category whereas the remaining 32 respondents representing 32.7 per cent belongs to female category.

TABLE 3: ACADEMIC QUALIFICATIONS OF THE RESPONDENTS

Academic Qualifications	Frequency	Percent
Ph.D.	53	54.1
M.Phil.	15	15.3
Master	30	30.6
Total	98	100.0

Academic Qualifications of the sample respondents is presented in table: 3. Out of the total sample 53 respondents representing 54.1 per cent possess Ph.D. as their academic qualification, followed by 30 respondents representing 30.6 per cent are having Master's Degree as their academic qualification and 15 respondent's representing 15.3 per cent possess M.Phil. Degree as their academic qualification.

TABLE 4: PROFESSIONAL QUALIFICATIONS OF THE RESPONDENTS

Professional Qualifications	Frequency	Percent
Commerce	91	92.9
Management	7	7.1
Total	98	100.0

Table 4: depicts the Professional Qualifications of the Respondents. It can be observed from the sample that majority of the respondents i.e., 91 out of 98 total respondents representing 92.9 per cent possess Commerce as their Professional Qualifications whereas the remaining 7 respondents representing 7.1 per cent possess Commerce as their Professional Qualifications.

TABLE 5: DESIGNATION OF THE RESPONDENTS

Designation	Frequency	Percent
Junior Lecturer	13	13.3
Degree Lecturer	20	20.4
Assistant Professor	18	18.4
Associate Professor	21	21.4
Professor	26	26.5
Total	98	100.0

Table 5 shows the Designation of the respondents. Out of the total sample 26 respondents representing 26.5 per cent their designation is Professor, followed by 21 respondents representing 21.4 per cent their designation is Associate Professor, whereas 20 respondents representing 20.4 per cent their designation is Degree Lecturer, 18 respondents representing 18.4 per cent their designation is Assistant Professor and the remaining 13 respondents representing 13.3 per cent their designation is Junior Lecturer.

TABLE 6: WORK EXPERIENCE OF THE RESPONDENTS

Work Experience	Frequency	Percent
Below 5 years	11	11.2
6-10 years	32	32.7
11-15 years	23	23.5
16-20 years	10	10.2
21 years and above	22	22.4
Total	98	100.0

Table 6: presents the Work Experience of the respondents. Out of the total sample 32 respondents 32.7 per cent representing their work experience is 6-10 years followed by sample 23 respondents 23.5 per cent representing their work experience is 11-15 years, whereas 22 respondents 22.4 per cent representing and 11 respondents 11.2 per cent representing their work experience is 21 years and above and below 5 years and 10 respondents 10.2 per cent representing their work experience is 16-20 years.

There are seven factors were identified for the purpose of studying the influencing factors the convergence of Indian Accounting Standards with IFRS from academicians perspective. The factors are English Language, Legal enforcement system, Practical costs for implementation, Market access conditions, Taxation system, Size of capital markets and Multinational companies. The respondents were asked to rank the influencing factors of convergence of Indian Accounting Standards with IFRS according to impact of adoption of IFRS in India.

Garrett's Ranking

Garrets Ranking Technique has been used to analyze rank the influencing factors of convergence of Indian Accounting Standards with IFRS according to impact of adoption of IFRS in India. Under the Garrett's Ranking Technique the percentage position is calculated by using the following formula:

$$\text{Percentage position} = \frac{100\,(R_{ij}-0.5)}{N_j}$$

Where Rij = Rank given for i^{th} variable by the j^{th} respondent.

Nj= Number of variables ranked by the respondents

The respondents were asked to rank the seven factors identified for the purpose of this study as 1, 2, 3, 4, 5, 6 and 7 in order to know rank the influencing factors of convergence of Indian Accounting Standards with IFRS. The calculated percentage positions for the ranks 1, 2, 3, 4, 5, 6, and 7 and their corresponding Garrett's table values are given in Table 7.

TABLE 7: PERCENTAGE POSITIONS AND THEIR CORRESPONDING GARETT's TABLE VALUES

Rank	Percentage Position		Garrett's table value
1	100(1-0.5)/7	= 7.14	79
2	100(2-0.5)/7	= 21.43	66
3	100(3-0.5)/7	= 35.74	57
4	100(4-0.5)/7	= 50	50
5	100(5-0.5)/7	= 64.29	43
6	100(6-0.5)/7	= 78.57	34
7	100(7-0.5)/7	= 92.86	21

Table 7 shows the percentage positions for the ranks 1, 2, 3, 4, 5, 6 and 7 and their corresponding Garrets table values. For Rank1, the calculated percentage position is 7.14 the table value is 79. This value is given in the Garrets ranking table for the percentage 6.81, which is very near 7.14(see Appendix). As like for all the calculated percentage positions, the table values are referred from Garrett's ranking table.

Table 8 shows the number of respondents ranking the factors as 1, 2, 3, 4, 5, 6 and 7 for the preference for the selected brand of Talcum powder. This table also shows the total score and the mean score.

TABLE 8: RANKS FOR INFLUENCING FACTORS OF CONVERGENCE OF INDIAN ACCOUNTING STANDARDS WITH IFRS

S. No.	Factor	Ranks							Total No. of respondents	Total Score	Mean Score	Rank
		1	2	3	4	5	6	7				
1	English language	3	20	18	10	28	12	7	98	4842	49.41	V
2	Legal enforcement system	5	12	21	10	27	14	9	98	4710	48.06	VI
3	Practical costs for implementation	18	12	18	10	22	12	6	98	5220	53.26	II
4.	Market access conditions	20	7	16	12	25	10	8	98	5599	57.13	I
5.	Taxation system	12	20	8	18	20	6	14	98	4982	50.84	III
6.	Size of capital markets	8	14	10	17	23	14	12	98	4693	47.89	VII
7.	Multinational companies	7	17	15	16	21	12	10	98	4893	49.93	IV

Note: For influencing factors the total score is calculated by multiplying the number of respondents ranking that factor as 1, 2, 3, 4, 5, 6 and 7 by their respective table values given in Table II. Mean score is calculated by dividing the total score by the number of respondents.

It is seen from Table.8 that according to the Garrett ranking, the influencing factors which induces the respondents to opinion to convergence of Indian Accounting standards with IFRS are in this order namely Market access conditions, Practical costs for implementation, Taxation system, Multinational companies, English language, Legal enforcement system, Size of capital markets.

CONCLUSION

IFRS has today become a universal financial reporting language through which all the global companies are communicating with its global investors rather than having a divergent set of standards applied differently in different countries. Convergence of IFRS around the world is occurring rapidly to bring about accounting quality improvement through a uniform set of standards for financial reporting. Financial reporting outcomes depends on a variety of factors that influence those outcomes and Accounting quality does not depend only on Accounting standards but also on the firms' overall institutional setting, including the English Language, Legal enforcement system, Practical costs for implementation, Market access conditions, Taxation system, Size of capital markets and Multinational companies.

REFERENCES

1. Jean T. and Stolowy H. (2008), "Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption", Journal of Accountant Public Policy 27, PP: 480–494
2. Khaled.A and Hussein.K (2006), "An investigation into the suitability of the international accounting standards to the United Arab Emirates environment", International Business Review, 15, PP: 505–526.
3. Kim M. S. and David C. Y. (2012), "Factors Affecting the Adoption of IFRS", International Journal Of Business, 17(3), PP: 276-298.
4. Rathi N.S. & Emhemad Omar.A. Abusef (2014), "Innovations in International Accounting and Taxation System in Global Arena; Challenges Ahead", International Journal of Management (IJM), Vol: 5, Issue: 2, February, PP: 69-74.
5. Shamsaddeen F., Essa El-Firjani (2014), "Challenges Facing IASs/IFRS Implementation by Libyan Listed Companies", Universal Journal of Accounting and Finance 2(3), PP: 57-63.
6. Vivek K. and Rahul P. (2016) "FASB Convergence With IASB", Sai Om Journal of Commerce & Management, A Peer Reviewed National Journal, Vol. 3, Issue.4, April, PP: 6-9.

STRATEGIC ANALYSIS OF CONSTRAINTS IN MICRO, SMALL AND MEDIUM ENTERPRISES FINANCING BY BANKS

ONKAR CHAND
RESEARCH SCHOLAR (Ph.D. - MANAGEMENT)
SRI SAI UNIVERSITY
PALAMPUR

Dr. K. K. PARMAR
HEAD
DEPARTMENT OF MANAGEMENT
SRI SAI UNIVERSITY
PALAMPUR

ABSTRACT
The Micro, Small and Medium Enterprises have emerged as a strong, dynamic and vibrant sector of the Indian economy and are playing a significant role in the socio economic development of the country. The contribution of Micro, Small and Medium Enterprises in our country's Gross Domestic Product is 8 %, in manufactured output is 45 % and in country's export is 40 %. But still the MSME are confronting the financial constraints. In the current study, we have conducted strategic analysis of the constraints in respect of financing by banks and observed that non availability of credit, inadequate availability of credit, delayed availability of credit are the main constraints followed by collateral security requirements, charging high rate of interest, requirement for audited financials lengthy documentations and non display of banks products, services and schemes for MSMEs in the bank branches. But addressing these constraints the MSMEs financing can be enhanced and MSMEs entrepreneurs can be facilitated. It can add contribution to the economy of the nation.

KEYWORDS
MSME, MSME Financing.

JEL CODE
M10

INTRODUCTION
Small Scale Industry (SSI) was defined as industrial (manufacturing, processing, and preservation) unit in which the investment in plant and machinery does not exceed Rs. 100 lakh. The GOI has enhanced this investment limit to Rs. 500 lakh in respect of certain specified items under hosiery, hand tools, drugs, pharmaceuticals, stationery items and sports goods. The Small Scale units, with investments in plant & machinery upto Rs. 25 lakh were classified as tiny industries and small scale units, with export more than 50% of their output were classified as export oriented units. Industry related service business enterprises with investment in fixed assets excluding land & building up to Rs. 10 lakh were termed as Small Scale Service Business Enterprises (SSSBEs).

The Ministry of SSI and Ministry of agro & Rural Industry, Govt. of India through **Micro, Small and Medium Enterprises Development Act 2006** has envisaged the following broader classification of micro, small and medium enterprise:

In manufacturing sector, the micro enterprises are those enterprises, which are engaged in the manufacture/production/preservation of goods where investment in plant and machinery does not exceed Rs. twenty five lakh. In service sector, the micro enterprises are those enterprises, which are engaged in providing/rendering service where investment in plant and machinery does not exceed Rs. ten lakh. In manufacturing sector, the small enterprises are those enterprises which are engaged in the manufacture/production/preservation of goods where investment in plant and machinery is more than Rs twenty five lakh but does not exceed Rs five crore. In service sector, the small enterprises are those enterprises which are engaged in providing/rendering service where investment in plant and machinery is more than Rs. ten lakh but does not exceed Rs. two crore.

In manufacturing sector, the medium enterprises are those enterprises which are engaged in the manufacture/production/preservation of goods where investment in plant and machinery is more than Rs. five crore but does not exceed Rs. ten crore. In service sector, the medium enterprises are those enterprises which are engaged in providing/rendering service where investment in plant and machinery is more than Rs. two crores but does not exceed Rs. five crore.

The MSME sector is playing a vital role in all the nations world over in providing employment, contributing to Gross Domestic Product, potential for global investors, contribution to exports, engine of economic growth, promoting equitable development, increasing productivity and ensuring best use of local resources.

REVIEW OF LITERATURE
The financial barriers affecting SMEs are high cost of credit, high bank charges, high collateral requirements and lack of outside equity and venture capital (Stiglitz and Weiss, 1981).

Cuevas *et al.* (1993) observed that access to bank credit by SMEs has been a major constraint to industrial growth due to their inability to provide acceptable collateral besides cost of transaction.

Poussion (1996) stated the financial barriers causing business failure as financial weakness from inadequate financing, over financing, poor debt management, wrong finance mix and poor strategic decisions.

Saravanan (2013) highlighted obstacles faced by SMEs in obtaining finance as lengthy loaning procedure, high collaterals, biasness, customer perception and preferences of SME products and schemes.

OBJECTIVE OF THE STUDY
To carry out strategic analysis of constraints in respect of MSME financing by banks.

RESEARCH METHODOLOGY
RESEARCH DESIGN: Research Design is the blue print for collection, measurement and analysis of data. In the captioned study, undernoted sampling and data collection design have been used.

SAMPLING DESIGN: The study has been carried out at Pathankot district of Punjab. The total population consists of about 4500 MSME units which includes registered and unregistered units.

SAMPLING UNIT: Complete Micro, Small, Medium enterprise business units.

SAMPLE SIZE: 100 Micro, Small and Medium Enterprises in propionate to their population.

SAMPLING TECHNIQUE: Simple Random Sampling technique has been used.

DATA COLLECTION DESIGN: The data has been collected by the researcher himself from the SME units by the way of a well structured and designed Questionnaire.

RESEARCH TOOLS AND TECHNIQUES: The data has been obtained through the questionnaire, tabulated, applied Cronbach's Alpha test and applied average beside percentage method. The data has been shown through pie chart.

ANALYSIS AND INTERPRETATIONS OF DATA

Cronbach's Alpha is the common method used to test the reliability of the questionnaire in research. This was originally derived by Kuder and Richard son (1937) and later generalized by Lee Cronbach (1951) as a measure of internal consistency of test. The items in this method are divided into two halves which are correlated. The higher correlation between the two halves reveals higher internal consistency which is expressed as a number between 0 and 1. The Cronbach's Alpha formula is:

$$\alpha = \frac{n}{n-1}\left(1 - \frac{\sum \text{Vi}}{\text{V test}}\right)$$

Where n = number of questions

V_i = Variance of scores on each question

V test = Total variance of overall score on the entire test

In the current study, the reliability of the questionnaire pertaining to scale-based statement questions, the test has been conducted on 100 MSMEs respondents by using Cronbach's Alpha test. The statements in the form of questions as obtained from responses and study (MSME financing Constraints) are as under:

Q (a) Non availability of credits from banks
Q (b) In adequate availability of credit from banks
Q (c) Delayed availability from banks
Q (d) High collateral security oriental approach of banks.
Q (e) High rate of interest and other charges levied by banks
Q (f) Insistence of audited balance sheets and financials by banks.
Q (g) Lengthy documents and documentation procedure of banks
Q (h) Non display of products, services and schemes of MSME financing at bank branches

The statements (questions) have been given scores by MSME respondents as under:

Strongly Agree (5) Agree (4) Agree, but not sure (3) Disagree (some) (2) Disagree (largely) (1)

The total score by each of 100 respondents have been aggregated and variances of scores on each statement (Vi = Variance of score on each statement) has been worked as under:

Variance of Q (a): Non availability of credits from banks

TABLE 1

x	f	d = (x-3)	d^2	fd	fd^2
1	6	-2	4	-12	24
2	16	-1	1	-16	16
3	16	0	0	0	0
4	18	1	1	18	18
5	44	2	4	88	176
	N = 100			∑ fd = 78	∑ fd^2 = 234

σ = √ $\sum fd^2$/ N – $(\sum fd/ N)^2$ = √ 234/100 – $(78/100)^2$ = 1.3159

Variance = $\sigma^2 = (1.3159)^2 = 1.7316$

Variance of Q (b): In adequate availability of credit from banks

TABLE 2

x	f	d = (x-3)	d^2	fd	fd^2
1	6	-2	4	-12	24
2	36	-1	1	-26	26
3	10	0	0	0	0
4	12	1	1	12	12
5	46	2	4	92	184
	N = 100			∑ fd = 66	∑ fd^2 = 246

σ = √ $\sum fd^2$/ N – $(\sum fd/ N)^2$ = √ 246/100 – $(66/100)^2$ = 1.4228

Variance = $\sigma^2 = (1.4228)^2 = 2.0244$

Variance of Q (c): Delayed availability from banks

TABLE 3

x	f	d = (x-3)	d^2	fd	fd^2
1	0	-2	4	0	0
2	6	-1	1	-6	6
3	20	0	0	0	0
4	24	1	1	24	24
5	50	2	4	100	200
	N = 100			∑ fd = 118	∑ fd^2 = 230

σ = √ $\sum fd^2$/ N – $(\sum fd/ N)^2$ = √ 230/100 – $(118/100)^2$ = 0.9527

Variance = $\sigma^2 = (0.9527)^2 = 0.9076$

Variance of Q (d): High collateral security oriental approach of banks

TABLE 4

x	f	d = (x-3)	d^2	fd	fd^2
1	16	-2	4	-32	64
2	6	-1	1	-6	6
3	12	0	0	0	0
4	18	1	1	18	18
5	48	2	4	96	192
	N = 100			∑ fd = 76	∑ fd^2 = 280

σ = √ $\sum fd^2$/ N – $(\sum fd/ N)^2$ = √ 280/100 – $(76/100)^2$ = 1.4908

Variance = $\sigma^2 = (1.4908)^2 = 2.2224$

Variance of Q (e): High rate of interest and other charges levied by banks

TABLE 5

x	f	d = (x-3)	d^2	fd	fd^2
1	4	-2	4	-8	16
2	24	-1	1	-24	24
3	4	0	0	0	0
4	24	1	1	24	24
5	44	2	4	88	176
	N = 100			∑ fd = 80	∑ fd^2 = 240

σ = √ ∑fd^2/ N – (∑fd/ N)^2 = √ 240/100 – (80/100)^2 = 1.3266

Variance = σ^2 = $(1.3266)^2$ = 1.76

Variance of Q (f): Insistence of audited balance sheet and financial by banks.

TABLE 6

x	f	d = (x-3)	d^2	fd	fd^2
1	0	-2	4	0	0
2	16	-1	1	-16	16
3	6	0	0	0	0
4	12	1	1	12	12
5	66	2	4	132	264
	N = 100			∑ fd = 128	∑ fd^2 = 292

σ = √ ∑fd^2/ N – (∑fd/ N)^2 = √ 292/100 – (128/100)^2 = 1.1321

Variance = σ^2 = $(1.1321)^2$ = 1.2816

Variance of Q (g): Lengthy documents and documentation procedure of banks

TABLE 7

x	f	d = (x-3)	d^2	fd	fd^2
1	22	-2	4	-44	88
2	24	-1	1	-24	24
3	2	0	0	0	0
4	12	1	1	12	12
5	40	2	4	80	160
	N = 100			∑ fd = 24	∑ fd^2 = 284

σ = √ ∑fd^2/ N – (∑fd/ N)^2 = √ 284/100 – (24/100)^2 = 1.6681

Variance = σ^2 = $(1.6681)^2$ = 2.7824

Variance of Q (h): Non display of products and services and schemes of MSME financing at bank branches

TABLE 8

x	f	d = (x-3)	d^2	fd	fd^2
1	0	-2	4	0	0
2	10	-1	1	-10	10
3	22	0	0	0	0
4	28	1	1	28	28
5	40	2	4	80	160
	N = 100			∑ fd = 98	∑ fd^2 = 198

σ = √ ∑fd^2/ N – (∑fd/ N)^2 = √ 198/100 – (98/100)^2 = 1.00975

Variance = σ^2 = $(1.00975)^2$ = 1.0196

Cronbach Alpha = α = n / n-1 * (1-∑Vi/V test)

Where n = number of questions Vi = Variance of Scores on each questions

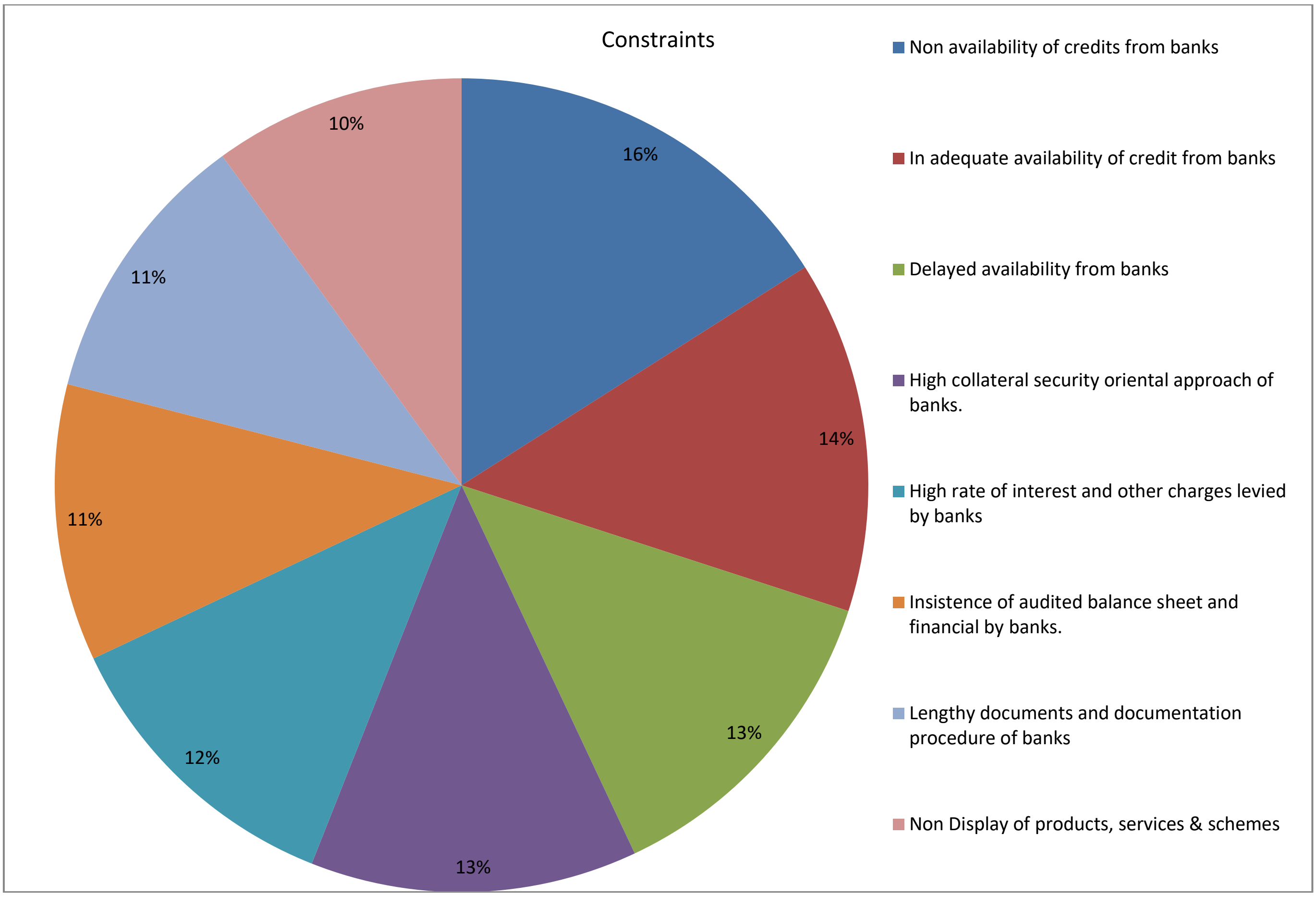
V test = Total Variance of overall score

A = 8/8-1 (1-13.7296/48.21) = 0.817which is considered as good.

TABLE 9

Sr.	Constraints	No.	(%)
Q (a)	Non availability of credits from banks	16	16
(b)	In adequate availability of credit from banks	14	14
(c)	Delayed availability from banks	13	13
(d)	High collateral security oriental approach of banks.	13	13
(e)	High rate of interest and other charges levied by banks	12	12
(f)	Insistence of audited balance sheet and financial by banks.	11	11
(g)	Lengthy documents and documentation procedure of banks	11	11
(h)	Non Display of products, services & schemes	10	10
Total		100	100%

CHART 1



DISCUSSIONS OF RESULTS

16 % of the respondents have observed, non availability of credit as main constraint in MSME financing. 14% of the respondents have observed inadequate availability of credit as a main constraint in MSME financing. 13% of the respondents have observed, delayed availability of credit as main constraint in MSME financing. 13 % of the respondents have observed collateral security as main constraint in MSME financing. 12% of the respondents have observed high interest rate as main constraint in MSME financing. 11% of the respondents have observed audited balance sheet requirement as main constraint in MSME financing. 11% of the respondents have observed lengthy documentations as main constraint in MSME financing. 10 % of the respondents have observed non display of products, services and schemes main constraint in MSME financing.

CONCLUSION

The non availability of credit, inadequate availability of credit, delayed availability of credit are the main constraints followed by collateral security requirements, charging high rate of interest, requirement for audited financial, lengthy documentations and non display of banks products, services and schemes for MSMEs in the bank branches, as other constraints.

By addressing these constraints, banks MSME and overall credit portfolio can be increased, MSMEs can be facilitated to diversify, expand and modernize their business, thus contributing to the GDP and economy of the country.

As per Alfred Armand Montapert, “the majority see the obstacles, few see objectives; history records the success of the latter, while oblivion is the reward of the former”. Despite so many constraints the banks. MSMEs and government should remain devising dynamic strategies to reduce constraints and develop the MSMEs. The Cronach’s Alpha test value of the constraint statements obtained 0.8170 is considered good, which confirm internal consistency and reliability of the statements. The main constraints observed by MSME respondent’s viewpoints also range between 16 % to 10 %. The study at branches and the literature review also confirm the severity of the constraints to be addressed.

REFERENCES

1. IIBF, “Bank Quest”, Journal of the Indian Institute of Banking and Finance, Mumbai Vol. 78 No. 1 Jan-Mar 2007, Vol. 79 No. to Vol. 81 July-Sept 2010.
2. Nishanth, P & Jakkariya KA (2014),” Barriers faced by Micro Small and Medium Enterprises in Raising Finance,” Abhinav Publication.
3. Poussion, J (1996), “Corporate Failure: The Lesson to be Learnt,” Credit Management.
4. Rao, K. Koteshera, “Management of Commercial Banks”, Delta Publishing House, New Delhi 1994.
5. Sajeevan, G (2012), “Present Status of MSME Statistics,” Journals of Industrial Statistics.
6. Saravanam, S. (2013), “Small and Medium Enterprises Financing,” Abhinav Publication.
7. Stiglitz, J and Weiss, A (19981), “Credit Rationing in Markets with Imperfect Information,” American Economic Review.
8. Subramanian, G. (2006), “Pace Setter”, J.S. Institute of Banking and Finance P Ltd. Bangalore 4th Ed. 2006.
9. Subramanian, G. (2007), “Interview Master Mind, “J.S. Institute of Banking and Finance Pvt. Ltd. Bangalore 8th ed. 2007.
10. Verma, H.L. and Malhotra A.K., “Funds Management in Commercial Banks”, Deep and Deep Publications New Delhi 1993.
11. Yadav, R.J, (2012), “Issues in MSEME Financing,” BOB SC Ahmadabad.

PERFORMANCE EVALUATION OF SELF HELP GROUP AWARENESS AND PARTICIPATION AMONG WOMEN

M. J. CECILIA SHOBANA
RESEARCH SCHOLAR
CORPORATE SECRETARYSHIP
MANONMANIAM SUNDARANAR UNIVERSITY
TIRUNELVELI

Dr. V. K. SOMASUNDARAM
HEAD
PG & RESEARCH DEPARTMENT OF CORPORATE SECRETARYSHIP
BHARATHIDASAN GOVERNMENT COLLEGE FOR WOMEN
PUDUCHERRY

ABSTRACT

In this paper, an attempt is made to explore awareness about various roles of SHG in socio economic development of women. The aim of joining and advantages of joining SHG based on the views of the respondents are also explored here. Regarding awareness, it is concluded that the SHG women are having awareness about five major roles SHG, viz., uplift the socio-economic status by encouraging self-employment among women; help alleviate poverty and preserve traditional culture among women; SHG as voluntary organization promote savings and reduce dependent on money lenders; provide health and nutrition services and medical assistance; and assist women to get loan at low interest to develop entrepreneurship for income generation. At the same time, extent of awareness among the members is more about SHG role in uplifting the socio-economic status by encouraging self-employment among women. When awareness level is related to social status of the respondents, it is identified that the aged but unmarried women members from upper community (other than MBC / OBC community) with low occupational status (either housewife or daily labour) are more aware that SHG uplift the socio-economic status by encouraging self-employment; and function as voluntary organization to promote savings and reduce dependent on money lenders among women. The level of awareness about SHG's role in providing health and nutrition services and medical assistance depend upon the religious affinity of the women members. Similarly, the SHG women who are aware that SHG help alleviate poverty and preserve traditional culture among women; provide health and nutrition services and medical assistance; and promote savings and reduce dependent on money lenders tend to join SHG with aim of improving social status and time passing; and the SHG women who are aware that provide health and nutrition services / medical assistance and assist women to get loan at low interest to develop entrepreneurship for income generation join SHG to promote savings. In sum, it is concluded that women members of SHG are highly aware of most of SHG roles and actively participate in SHG. They have joined in SHG to alleviate poverty and promote saving in order to uplift their socio-economic status.

KEYWORDS
performance evaluation, self help group, awareness & participation among women.

JEL CODE
D14

1. INTRODUCTION

Women's awareness of SHG is measured in terms of their perception about SHG's role in up lifting socio-economic status and alleviating poverty through income generation, promoting savings, providing health and nutrition among women, develop entrepreneurship and assisting them to get loan at low interest rate. The participation of women in SHG is measured in terms of their opinion about duration of membership, frequency of attending SHG, raising their voice in SHG meeting, advantages and aim of joining SHG. In this paper, perception of SHG women in the sample about their awareness of SHG and also about their participation in SHG is evaluated statistically. The results of the analysis are tabulated and discussed in the following part of this paper.

2. RESEARCH METHODOLOGY

Demographic profile of the SHG women is analyzed in this Section. Table 1 depicts the frequency distribution of the respondents (SHG Women in the sample) by demographic characteristics. An observation of the table shows that middle aged women (age between 36 – 40 years) comprising 46.3 per cent of the total sample are major participants in the survey followed by women aged above 40 years and those with age 35 years and below comprising 33.0 per cent and 20.7 per cent of the total sample respectively.

TABLE 1: SOCIAL STATUS OF SHG MEMBERS IN THE SAMPLE

Social Status Attributes	Number of Respondents	% to Total
Age (in Years)		
<= 35	62	20.7
36 – 40	139	46.3
> 40	99	33.0
Religion		
Hindu	247	82.3
Non-Hindu	53	17.7
Community		
Most & Other Backward Community	157	52.3
Backward Community (BC)	113	37.7
Forward Community (FC)	30	10.0
Education		
Middle	42	14.0
SSLC	80	26.7
Higher Secondary	152	50.7
Degree	26	8.7
Occupation		
Housewife	147	49.0
Daily labour	65	21.7
Self-employed	88	29.3
Marital Status		
Married	273	91.0
Unmarried	27	9.0
Family Type		
Joint	69	23.0
Nuclear	231	77.0
Family Size		
Up to 3	31	10.3
4 – 5	183	61.0
6 & above	86	28.7
Total Sample	300	100.0

Source: Primary Data

The women from Hindu religion are the maximum. While 82.3 per cent of the sample are Hindus, the non-Hindu religious group constitute only 17.7 per cent of the total sample. More than half of the respondents are in the MBC (Most backward class) and OBC (Other backward class) (52.3%) category, while those in the BC (Backward class) and FC (Forward class) categories are 37.7 per cent and 10.0 per cent respectively.

The SHG women in the sample with higher secondary level education are 50.7 per cent, SSLC level education are 26.7 per cent, Middle level education are 14.0 per cent and graduates are 8.7 per cent. When distributed by occupational level, it is understood that women in the housewife category constitute 49.0 per cent of the total sample followed by self-employed group with 29.3 per cent and daily labour with 21.7 per cent. Ninety one (91.0) per cent of the SHG women are married. Only 9 per cent of the unmarried women are found to be associated with SHG. Most of the women are in the nuclear family group. While 77.0 per cent of the women member of SHG belongs to nuclear family, the remaining 23.0 per cent is from joint families. It is evident that the family size is middle with number of members from 4 to 5 for 61.0 per cent of the respondents, large with number of members 6 and above for 28.7 per cent and small with members up to 3 for 10.3 per cent of the total sample. By demographic characteristics, it is understood that most of the women members in SHG are middle aged, Hindus, belong to MBC & OBC communities, higher secondary level educated, housewife, living in nuclear families and belong to middle size families.

Table 2 is reported with the results of frequency distribution analysis of respondents based on their economic status.

TABLE 2: ECONOMIC STATUS OF SHG MEMBERS IN THE SAMPLE

Economic Attributes	Number of Respondents	% to Total
Earning Members		
One	226	75.3
More than One	74	24.7
Family Income		
Up to Rs.15000	97	32.3
Rs.15001 - Rs.20000	145	48.3
> Rs.20000	58	19.3
Family Expense		
Up to Rs.15000	110	36.7
Rs.15001 - Rs.20000	97	32.3
> Rs.20000	93	31.0
House Ownership		
Owned	107	35.7
Rented	193	64.3
House Type		
Pucca	110	36.7
Tiled Roof	78	26.0
RCC Roof	112	37.3
Owning Land		
Yes	19	6.3
No	281	93.7
Total Sample	300	100.0

Source: Primary Data

An examination of the table shows that the number of earning members is only one in 75.3 per cent of the families whereas it is two and above (more than one) in 24.7 per cent of the families. The income of the family per month ranges between Rs.5001 and Rs.10000 for 48.3 per cent of the respondents, while it is up to Rs.5000 for 32.3 per cent and above Rs.10000 for 19.3 per cent of the respondent group in the sample.

By monthly expenditure, it is understood that 36.7 per cent of the respondent families spend up to Rs.5000 to run the family whereas spending on family expenditure ranges from Rs.5001 to Rs.10000 for 32.3 per cent and above Rs.10000 for 31.0 per cent of the respondent families. It is found that the 64.3 per cent of the SHG women live in rented house. Only 35.7 (just above one third) is found to be having own house. The type of house is RCC roof for 37.3 per cent, pucca for 36.7 per cent and tiled roof for 26.0 per cent of the respondents. Very little number of women in SHG have own land. While 93.7 per cent of the SHG women do not own any land, only the remaining 6.3 per cent have stated that they own land. Overall, it is found that there is only one earning member, family income per monthly is below Rs.10000 while expenses are higher in most of the families of SHG women. It is further found that most of the SHG women living in rented house, which is mostly either pucca or RCC roof. Very little women members of SHG is found to be owning land.

3. FINDINGS AND DISCUSSION

The awareness level of SHG among the SHG members is measured using 13 item scale with 5 point opinion level ranging from 1, 2, 3, 4 and 5 for 'strongly disagree', 'disagree', 'neutral', 'agree' and 'strongly agree' respectively. The measured data are first subjected to reliability analysis to ascertain the internal consistency of the items in the scale so as to prove that the collected data are reliable for further analysis. Table 4.3 shows the results of the analysis.

TABLE 3: RESULTS OF RELIABILITY / ITEM ANALYSIS FOR SCALE ITEMS MEASURING AWARENESS OF SHB

Item No	Item Description	Item to Total Correlation	Alpha if Deleted
1	SHG is a small voluntary association of poor people	0.4626	0.8322
2	Help promote savings habits among women	0.3857	0.8359
3	Reduce dependency on money lenders	0.3612	0.8366
4	Improve empowerment of women in both family and society	0.4430	0.8321
5	Uplift the socio-economic status of women in the society	0.5050	0.8284
6	Encourage self-employment among women	0.5507	0.8253
7	Provide health and nutrition services to women	0.5232	0.8274
8	Provide medical assistance to people suffering from diseases	0.4424	0.8323
9	Enable rural households to market their produce directly to the consumer	0.4117	0.8344
10	Help preserve the Indian arts and culture	0.4107	0.8345
11	Help alleviate poverty	0.3930	0.8355
12	Assist women for income generation	0.5331	0.8268
13	Assist women to get loan at low interest rate	0.5848	0.8239
14	Develop entrepreneurship among women	0.4772	0.8302
	Overall Cronbach's alpha coefficient	0.8403	

Source: Survey Data

As shown in the table 3, item to total correlations for all 14 items, ranges between 0.3612 (Item 3) and 0.5848 (Item 13), are above the required level of 0.30, in turn indicating that the 14 items scale measuring awareness of SHG among women members of SHG are reliable with each other. The alpha if deleted value, i.e., Cronbach alpha value if the item is deleted is below the overall Cronbach's alpha value of 0.8403 further supports the internal consistency of the scale items. From the overall Cronbach's alpha, it is evident that there has been good internal consistency among the scale items. Hence, it is concluded that 14 items in the scale used for measuring women SHG members' awareness about various role of SHG in the present study are internally consistent and therefore the data collected using the scale are reliable and valid for further analysis.

Table 4 is displayed with the eigenvalues of the factors underlying women's awareness of SHG and also with proportion of variance explained by each factor in the original data before and after varimax rotation. As per the table, the eigenvalue is above one for first five factors that account for 71.04 per cent of the variability in the original data. As the first five factors satisfy the condition of 'eigenvalue above one', it is understood that the awareness of SHG among women comprises of five major components. That is, there are five major aspects based on which the SHG members' awareness of SHG role can be measured. The explained variance before and after varimax rotation is 31.69 per cent and 17.96 per cent; 14.12 per cent and 14.38 per cent; 9.42 per cent and 12.56 per cent; 8.17 per cent and 12.51 per cent; and 7.65 per cent and 13.63 per cent for first, second, third, fourth and fifth factor respectively.

TABLE 4: EIGENVALUE OF FACTORS UNDERLYING AWARENESS OF SHG

Factor	Before Varimax Rotation			After Varimax Rotation		
	Eigenvalue	% Total Variance	Cumulative % of Total Variance	Eigenvalue	% Total Variance	Cumulative % of Total Variance
1	4.7530	31.69	31.69	2.6945	17.96	17.96
2	2.1174	14.12	45.80	2.1572	14.38	32.34
3	1.4126	9.42	55.22	1.8843	12.56	44.91
4	1.2259	8.17	63.39	1.8767	12.51	57.42
5	1.1468	7.65	71.04	2.0431	13.62	71.04
6	0.8845	5.90	76.94			
7	0.6987	4.66	81.59			
8	0.5721	3.81	85.41			
9	0.4676	3.12	88.52			
10	0.4429	2.95	91.48			
11	0.3809	2.54	94.02			
12	0.2925	1.95	95.97			
13	0.2567	1.71	97.68			
14	0.1913	1.28	98.95			

Source: Survey Data

The characteristics of each one of five valid factors are made known by the loadings of each scale item with five valid factors. Table 5 is reported with factor loadings. A perusal of the table shows that the first factor is highly contributed by item 5 (Uplift the socio-economic status of women in the society). Next to this, items 6 (Encourage self-employment among women), 15 (Improve standard of living for people in downtrodden families) and 4 (Improve empowerment of women in both family and society) have substantial contribution to the first factor. Hence, the first factor is identified as the factor measuring the women's awareness of SHG's role in uplifting the Socio-economic status by encouraging self-employment among women.

TABLE 5: FACTOR LOADINGS OF ITEMS IN THE SCALE MEASURING AWARENESS OF SHG

Item No	Item Description	Valid Factors				
		1	2	3	4	5
5	Uplift the socio-economic status of women in the society	**0.9004**	0.0447	0.0861	0.0762	0.0487
6	Encourage self-employment among women	**0.7962**	-0.0255	0.0043	0.1154	0.3791
15	Improve standard of living for people in downtrodden families	**0.7315**	-0.0575	0.2499	0.0105	0.3575
4	Improve empowerment of women in both family and society	**0.6458**	0.1682	0.2414	0.2596	-0.1999
11	Help alleviate poverty	0.0076	**0.8601**	0.0455	-0.0144	0.2345
10	Help preserve the Indian arts and culture	0.0174	**0.8109**	0.0843	0.1491	0.1110
9	Enable rural households to market their produce directly to the consumer	0.0434	**0.7159**	0.1308	0.3630	-0.0523
3	Reduce dependency on money lenders	-0.0140	0.0323	**0.7647**	0.2815	0.0852
1	SHG is a small voluntary association of poor people	0.2408	0.2312	**0.7434**	-0.0050	0.0767
2	Help promote savings habits among women	0.2520	0.0303	**0.7099**	-0.0471	0.1433
7	Provide health and nutrition services to women	0.1889	0.0368	0.0532	**0.8570**	0.2516
	Factor Label	**Uplift the Socio-economic status by encouraging self-employment among women**	**Help alleviate poverty and preserve traditional culture among women**	**SHG as voluntary organization promote savings and reduce dependent on money lenders**	**Provide health and nutrition services and medical assistance**	**Assist women to get loan at low interest to develop entrepreneurship for income generation**

Source: Survey Data

The second factor is highly loaded by item 11 and item 10 followed by item 9 which exposes the SHG role in alleviating poverty, helping to preserve the Indian arts and culture and enabling rural households to market their products director to the consumer. Therefore, this factor is identified as latent variable meant for measuring women members' awareness of SHG's role over poverty alleviation and preservation of Indian culture among women.

With third factor, the loadings of items 3, 1 and 2 are higher than the loadings of these items with other remaining valid factors. That is, the third factor is highly characterized by the SHG's role in reducing dependency on money lenders, functioning as small voluntary association of poor people, and in promoting savings habits among women. Hence, this factor is identified as latent variable which characterizes the SHG as voluntary organization promote savings and reduce dependent on money lenders.

The fourth factor is found to be possessing the most of essence of item 7 and 8 that are used to measure SHG's role in providing health and nutrition services and medical assistance. So, the fourth factor is identified as a major components of women's SHG awareness over SHG role in providing health and nutrition services and medical assistance. Similarly, from the high loadings of items 13, 12 and 14 in the specified order on fifth factor, it is understood that this factor possess the SHG's women's level of awareness about role of SHG in assisting women to get loan at low interest to develop entrepreneurship for income generation. In sum, it is found that there are five major components underlying awareness of SHG women about role of SHG, such as "Uplift the Socio-economic status by encouraging self-employment among women", "Help alleviate poverty and preserve traditional culture among women", "SHG as voluntary organization promote savings and reduce dependent on money lenders", "Provide health and nutrition services and medical assistance" and "Assist women to get loan at low interest to develop entrepreneurship for income generation".

The scores for each valid factor (dimension) underlying SHG awareness of women members is obtained by averaging the scores of items that are loaded with that factor. As the opinion of the respondents is based on 5-point scale ranging from 1 to 5 for 'strongly disagree' to 'strongly agree', the level of opinion of a respondent category is considered to be in 'strongly disagree', 'disagree', 'neither disagree nor agree' (neutral), 'agree' and 'strongly agree', if mean scores of the category is "< 1.50", ">= 1.50 and < 2.50", "> 2.50 and < 3.50". ">= 3.50 and < 4.50" and ">= 4.50" respectively. The status of the awareness of SHG among women members of SHG is explored by mean, standard deviation and 95 per cent confidence intervals obtained from descriptive analysis of data on five awareness dimensions.

Table 6 reports the descriptive analysis results for entire sample. It can be observed from the table that the perception scores of the respondents, between 3.65 and 4.28, are in 'agree' level for all five dimensions as well as for overall awareness of SHG.

TABLE 6: LEVEL OF AWARENESS OF SHG AMONG RESPONDENTS

Dimensions of SHG Awareness	Mean	SD	95% Confidence Interval	
			Lower	Upper
Uplift the Socio-economic status by encouraging self-employment among women	4.28	0.56	4.22	4.35
Help alleviate poverty and preserve traditional culture among women	3.65	0.57	3.59	3.71
SHG as voluntary organization promote savings and reduce dependent on money lenders	3.90	0.37	3.85	3.94
Provide health and nutrition services and medical assistance	3.93	0.58	3.86	3.99
Assist women to get loan at low interest to develop entrepreneurship for income generation	4.28	0.49	4.22	4.33
Overall Awareness	4.03	0.35	3.99	4.07

Source: Primary data

This envisages that the women members of SHG are aware of various roles played by SHG in uplifting the socio-economic status, promoting savings habit, alleviating poverty, providing health and nutrition and medical assistance and helping the women members to get loan at low interest rate. But by ordering the mean

values from high to low, it is evident that the level of awareness about SHG role in up-lifting the socio-economic status through self-employment and assisting the women in getting loan at low interest rate to develop entrepreneurship for income generation is higher among women members of SHG.
In order to find out whether there is any notable influence of social status and economic status variables on perceived level of awareness about various SHG roles among women members of SHG, the variables in the two sets (five major roles of SHG as one set and social status variables / economic status variables as another set – first set is considered as dependent set or criterion set and the second set is independent set or predictor set) are related using canonical correlation analysis. It is the multivariate extension of correlation analysis and it calculates the correlation between linear combination of two sets of variables (dependent and independent sets).
Canonical correlation first finds a weighted average of the questions from the first test (dependent set) and correlates this with a weighted average of the questions from the second test (independent set). The weights are constructed so that it maximizes the correlation between these two averages. This is called the first canonical correlation coefficient. Another set of weighted averages unrelated to the first is created and correlation between these two second sets of weighted average is calculated. This correlation is the second canonical correlation coefficient. This process continues until the number of canonical correlations equals the number of variables in the smallest group.
As the canonical correlation analysis is to measure the strength of the relationship between the two sets of variables, this technique is used here for determining the magnitude of the relationships that may exist between the social / economic status variables and women members' extent of awareness about five major roles of SHG. The first step in canonical correlation analysis is to derive one or more canonical functions. Each function consists of a pair of variates, one representing the predictor variables (frequency / purpose of using car) and the other representing the criterion variables (socio-economic status variables).
The strength of the relationship between the pairs of variates is reflected by the canonical correlation. When squared, the canonical correlation represents the amount of variance in one canonical variate accounted for by the other canonical variate. This may also be called as the amount of shared variance between the two canonical variates. Squared canonical correlations are called canonical roots or eigenvalues. The significant canonical functions with very low canonical correlation (much less than 0.30, i.e., near to 0.20 or below) are generally not considered for making inference.

4. CONCLUSION
In this paper, an attempt is made to explore awareness about various roles of SHG in socio economic development of women. The aim of joining and advantages of joining SHG based on the views of the respondents are also explored here. Regarding awareness, it is concluded that the SHG women are having awareness about five major roles SHG, viz., uplift the socio-economic status by encouraging self-employment among women; help alleviate poverty and preserve traditional culture among women; SHG as voluntary organization promote savings and reduce dependent on money lenders; provide health and nutrition services and medical assistance; and assist women to get loan at low interest to develop entrepreneurship for income generation. At the same time, extent of awareness among the members is more about SHG role in uplifting the socio-economic status by encouraging self-employment among women.
When awareness level is related to social status of the respondents, it is identified that the aged but unmarried women members from upper community (other than MBC / OBC community) with low occupational status (either housewife or daily labour) are more aware that SHG uplift the socio-economic status by encouraging self-employment; and function as voluntary organization to promote savings and reduce dependent on money lenders among women. The level of awareness about SHG's role in providing health and nutrition services and medical assistance depend upon the religious affinity of the women members. Similarly, the SHG women who are aware that SHG help alleviate poverty and preserve traditional culture among women; provide health and nutrition services and medical assistance; and promote savings and reduce dependent on money lenders tend to join SHG with aim of improving social status and time passing; and the SHG women who are aware that provide health and nutrition services / medical assistance and assist women to get loan at low interest to develop entrepreneurship for income generation join SHG to promote savings. In sum, it is concluded that women members of SHG are highly aware of most of SHG roles and actively participate in SHG. They have joined in SHG to alleviate poverty and promote saving in order to uplift their socio-economic status.

REFERENCES
1. Ariz, A. (1999). "Women empowerment: Self Help Groups", *Kurukshetra*, Vol.47, No.7, pp.19-20.
2. Bhatia, Navin and Bhatia, Anju. (2000). "A Lending To Groups." *Yojana*, Vol.5, No.4, pp.18.
3. Dasgupta, R. (2000). "An informal journey through SHG's." *Indian Journal and Agricultural Economics*, Vol.56, No.3, pp.415.
4. Karmarkar, K.G. (1999). *Rural credit and self help groups, Microfinance needs and concepts in India*, Sage Publication, New Delhi, pp.1-174.
5. Puhazhendhi, V. (2000). *Evaluation study of self help groups in Tamil Nadu*, National Bank for Agriculture and Rural Development (NABARD), Mumbai.
6. Puhazhendhi, V. and Satyasai, K.J.S. (2000). *Microfinance for Rural People: An Impact Evaluation*, NABARD, Mumbai

FINANCIAL LITERACY AMONGST ADULT MALE SLUM DWELLERS OF BIDHANNAGAR, INDIA

KOUSHIK CHATTERJEE
PROF-IN-CHARGE
DEPARTMENT OF BUSINESS LAW
ST. XAVIER'S COLLEGE (AUTONOMOUS)
KOLKATA

AERICA SARDAR
COMPANY SECRETARY
AL & ASSOCIATES, 24, N. S. ROAD
KOLKATA

ABSTRACT

Slums are a result of poverty at the face of urbanisation and illiteracy. In India, as per the 2011 census report there was a record of 1.3 crore urban slum households which is approximately 65 million people dwelling in slums. This study is based on selected slums of Bidhannagar, a satellite township of the urban agglomeration of Kolkata, West Bengal, India. In Bidhannagar the slum population is 49,173, which is approximately 29.3% of the total population of the township. This paper has used both desk data as well as primary data collected by interviewing residents of the slums in order to assess their basic and advance financial literacy using descriptive statistics, chi-square test and percentage of co-efficient of variation. The study illustrates their sources of finance, the level of financial literacy, the challenges they face and their behaviour and attitude towards achieving financial goals. It determines the prevailing gap in the financial literacy and suggests possible measures to overcome it. The co-efficient for education has non-linear relationship with the respondents' knowledge on basic financial literacy. If the slum dwellers of the entire nation are gradually educated on available financial avenues then huge untapped savings will come into the mainstream of formal investments.

KEYWORDS

slum dwellers, financial literacy, financial planning, financial inclusion.

JEL CODE

G11, G40, G41.

INTRODUCTION

India, to become a developed country requires capital formation through savings and investment. In order to achieve this goal there should be proper planning, promotion and channelized investment pattern among inhabitants. Even the basic services offered by the financial sector have not yet reached the vulnerable groups- weaker section and low income groups. Financial inclusion may be defined as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost (The Committee on Financial Inclusion, Chairman: Dr. C. Rangarajan). It can be broadly defined as universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity products (The Committee on Financial Sector Reforms, Chairman: Dr. Raghuram G. Rajan).Financial services include access to savings, loans, insurance, payments and remittance facilities offered by the formal financial system (Srinivasan, 2010). Among the key financial services that are of great relevance here are risk management or risk mitigation services like economic shocks. This aspect of financial inclusion is of vital importance in providing economic security to individuals and families. Since the financial crisis, importance of financial literacy and the improvement in consumers' financial activities have been increasingly recognized by the OECD and G20. Thus, become important to enhance Indian consumers' financial decision making (Saravanan, 2010).

According to Census 2011, the urban poor population of the country is estimated to be around 8 crores, of them about 50% live in slums. They work in the unorganized sector to make their livelihood. About 40% of the adult urban population in India does not have access to a bank account, thereafter depriving them of a whole set of financial services. The poor in urban areas as well as their counterparts in rural areas have the same basic financial service needs like secured savings, credit and a medium to transfer remittances back home.

The functions of finance includes mobilizing savings, allocating capital and transforming risk. In order to achieve a more equitable growth a well-functioning financial system is essential. In developing countries, access to finance is considered along with basic services. According to National Sample Survey (2007) challenge to the financial system is predominant presence of money lenders in rural and urban areas. There are two major ways by which the promotion of financial inclusion can be done. Firstly, by expanding the role of the formal financial system and secondly, through the growth of micro finance institutions in rural and urban areas (Padmaja, 2010).

FINANCIAL LITERACY

As defined by the OECD/INFE High-level Principles on National Strategies for Financial Education (2012), financial literacy is 'a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being'. Financial Literacy is the ability to understand how money works in our day to day functions and how someone manages it, how individuals invest it and how a person offers it to others. More specifically, it refers to the set of skills and knowledge that allows an individual to make informed and effective decisions with all of their financial resources (IRJFE, Sustainability Report 2014).

Dr. K.C.Chakrabarty, Deputy Governor, RBI at the Stakeholders' Workshop on Financial Literacy organized jointly by the UNDP, NABARD and MicroSave at Mumbai on 4th February,2013 said, "financial literacy has emerged as a focus area for policy makers not just in India, but all across the globe, particularly in the aftermath of the global financial crisis. Success in dissemination of financial literacy has been identified as key to meeting the critical objectives of financial inclusion and consequently, financial stability".

LITERATURE REVIEW

The innovative definition of financial literacy was 'the ability to make informed judgments and to take effective decisions regarding the use and management of money' (Noctor et al, 1992). Studies have also shown that university students in the US have inadequate knowledge on personal finance (Chen and Volpe, 1998; Volpe, Chen and Pavlicko, 1996). Chen and Volpe (1998) conducted a financial literacy survey involving 924 college students from thirteen colleges and that the overall mean percentage of correct scores was just 52.87 percent.

A study on the financial literacy of US workers found that they too, had inadequate financial skills and knowledge (Chen and Volpe, 2005).The first Australian financial literacy surveys conducted on a sample of first-year students from the University of Southern Queensland reached the overall conclusion that university students were not skilled, nor knowledgeable in financial matters and that this would tend to impact negatively on their future lives through incompetent financial management (Beal and Delpachitra, 2003). Financial literacy skills enable individuals to navigate the financial world, make informed decisions about their money and minimise their chances of being misled on financial matters (Beal and Delpachitra, 2003; CBF, 2004b; Raven, 2005).

The Adult Financial Literacy Advisory Group (AdFLAG) of UK undertook a study to determine “how to promote better access to financial education to young people and adults” (AdFLAG, 2000, p. 10). They concluded that the need for financial literacy would continue to grow because individuals were expected to become more self-reliant. High number of people with low levels of financial literacy presents a serious problem for both the economic well-being of nations and the personal well-being of such individuals (CBF, 2004a; Morton, 2005; RMR, 2003).

Added to this were the difficulties arising from changing work patterns, an ageing population, less government involvement and increasingly complex financial products. AdFLAG recommended that short term financial literacy education should be built around education, employment, housing, financial services and communication, with particular focus on needy population sectors such as older people, young people, sole parents, ethnic minorities, people with disabilities and people living in social housing. Financial literacy has become increasingly important for the economic wellbeing of the nation’s future (CBF, 2004b), it is important that it can be explicitly linked with financial behaviour, and hence financial success and sustainability.

OBJECTIVES OF THE STUDY

The primary objective is to examine how socio-economic and demographic background of the respondents have affected their knowledge about financial services to understand the level of financial literacy among the slum dwellers.

Further, the secondary objectives are as follows:

1. To assess the knowledge of the respondents towards basic and advance financial literacy.
2. To find out the determinants of financial literacy.
3. To understand how financial literacy differs with various socio-economic and demographic characteristics.

HYPOTHESIS

Hypothesis were tested to investigate the underlying relationship between socio-economic and demographic profile of the respondents who belong to the slum households in Bidhannagar and their knowledge on basic and advance financial literacy.

H_0: There is no significant association between socio-economic and demographic profile of urban slum residents and their knowledge on basic and advance financial literacy.

H_1: There is significant association between socio-economic and demographic profile of urban slum residents and their knowledge on basic and advance financial literacy.

RESEARCH METHODOLOGY

DATA COLLECTION & STUDY PERIOD

For the purpose of the study, a survey has been conducted amongst 200 adult individuals residing in the 20 slums of Bidhannagar (List of slums with ward number provided in Annexure 1). Primary data from the respondents have been collected using a structured questionnaire.

DATA ANALYSIS

Assessment of financial literacy

The financial literacy scores were computed based on correct or incorrect responses and the results were presented in Table 1. With regard to numeracy, particularly 46% of respondents could do the simple interest rate calculations. Simple interest is applied from bank loans to personal loans. The knowledge on simple interest and compound interest would help the borrowers and lenders to understand loan contracts. The importance of compound interest cannot be ignored in money management. A capital, which is invested at compound interest when interests of each periods are incorporated into the capital increase gradually. Compounding interest lever the savings, which is known to 40% of the respondents. The respondents appeared to understand the effects of inflation as the effect of the inflation was felt by 42% of the respondents. Inflation drains their savings leaving less or no money to save. One of the most fundamental concepts in finance in that money has a time “value”. The money in hand today is worth more than money that is expected to be received in the future. Time discounting was not known to 79% of the respondents and money illusion was answered correctly by 26% of the respondents only.

TABLE I: FINANCIAL LITERACY SCORES OF THE RESPONDENTS

Variables	Correct	Percentage	Incorrect	Percentage
Basic Financial Literacy				
Simple Interest	92	46	108	54
Compound Interest	80	40	120	60
Effect of Inflation	84	42	116	58
Time Discounting	42	21	158	79
Money Illusion	52	26	148	74
Advance Financial Liberty				
Function of Stock Market	63	31.5	137	68.5
Knowledge of Mutual Funds	74	37	126	63
Relationship between Interest Rates and Bond Prices	66	33	134	67
Risk Diversification	37	18.5	163	81.5
Stocks are riskier than Bonds	51	25.5	149	74.5
Long Period Returns	72	36	128	64
Highest Fluctuations	69	34.5	131	65.5
Knowledge on Risk Bearing	73	36.5	127	63.5
Knowledge on Returns	75	37.5	125	62.5

Source: Primary Data. Field Survey, 2017.

In order to evaluate the different types of investments on its merits or otherwise, people should possess many skills such as the ability to assess rates of interest paid, fees and charges, terms and conditions. The respondents who are living in slum in an underprivileged conditions were not at all having advance financial literacy. Knowledge on investment through stocks, bonds and risk associated with it are far away from the reach of the respondents. It is obviously revealed through their incorrect answer to most of the key questions on advance financial literacy. The incorrect answers were found with regard to stock market returns (62.5%), functions of stock market (68.5%), long period returns (64%), relationship between interest rates and bond prices (67%) and return on investment (74.5%). Stock ownership was answered correctly by 31.5% of the respondents and for rest of the questions even less than 40% of the respondents answered correctly. The lack of financial education is the reason why India with a huge population could not mobilize savings for productive investments. It is inferred from the above description that moderate basic financial literacy is prevailing among the urban slum residents. With regard to advance financial literacy, financial literacy is not only widespread but is particularly severe among demographic groups who live in slums.

Respondents' characteristics and their level of financial literacy

The respondents were assessed for basic financial literacy with their knowledge on five dimensions namely- simple interest, compound interest, money illusion, time value of money and inflation with one score for every right answer. Based on the total score obtained, respondents were classified for the level of knowledge on basic financial literacy with score of 1 as low, 2-3 as medium and 4-5 as high. The advance financial literacy included the test of knowledge on nine dimensions namely stock ownership, mutual fund, investment in bonds, rate of return associated with time, market fluctuations, risk spread, disposal of long term asset prior to maturity, risk levels in stocks and bonds and preference between stock and mutual fund. Each right answer assigned with the score of 1. The respondents were classified for the level of knowledge on advance financial literacy with score below 3 points as low,4-6 points as medium and 7-9 points as high level of advance financial literacy, as shown in Table II. The socio economic and demographic profile of the sample respondents consisted of 56% male and 44% female, with majority of them (38%) in the age group 35-50 years. Of the total respondents 53.5% were married, 42.5% were unmarried and live in nuclear families (67.5%) as against joint families (32.5%). Majority of the respondents had education upto SSLC (36.5%) and a meagre percentage of respondents were post graduates and predominantly employed in organized sector (66%) in lower management positions and 34% had taken up jobs in unorganized sector.

Majority of the respondents (37.5%) were head of the household and others (4%) were members of household. Decisions involving finance made in consultation with the spouse (30%) and also on their own (3.5%) by the respondents. People with low education mostly rely on the family and friends for their financial decision (Lusardi, 2003). In few households, financial decisions were made exclusively either by spouse or by other family members. With respect to house ownership, the respondents do not have their own house, rental or leased house (17.5%) and in own but mortgaged house is nil and the remaining respondents live with their parents or any other arrangements respectively and in most of cases the house type is semi- *pucca* (48%) and pucca (30.5%) and remaining is *kaccha* house. Majority of the respondents have family size of four (37.5%), 17.5% of the respondents have two member family and 19.5% of the respondents have above four members. They had at least two earning members (28.5%) or one earning member (44%) with dependents. About 40% of the respondents have earned monthly income upto Rs.5000, 33% of the respondents earned monthly income between Rs.5000-10000 and the remaining 27% earned above Rs.10000 per month. (Considerable amount of income contribution by other family members is also noted.) About 54.5% were contributing upto Rs.5000 per month and about 28.5% contributing above Rs.10000per month and 17% between Rs. 10000 - 20000 per month.

The basic financial literacy is the fundamental for all financial decision making (Mahesh, 2014). A medium level of basic financial literacy was found among respondents with the age group between 35 and 50 years, predominantly married and particularly among male respondents and those who live in nuclear families. The education above SSLC level helped them in attaining the basic and advance financial literacy (Chai, 2002). A medium and lower level of financial literacy was noted among respondents who were the head of the households when compared to members of the households and also in organized sector jobs where compulsory opening of savings bank account for salary purpose promotes basic financial literacy. The respondents who live on own outright property and of semi pucca structure also have medium basic financial literacy. The family size, number of dependents and number of earnings members in the household impact knowledge on basic financial literacy (Kasilingam, 2008). Medium level of basic financial literacy is noted among respondents with the family size of three to four members and less number of dependents, with more of individual and collective earning members in the family were found to have more knowledge of basic financial literacy.

The knowledge of the basic financial literacy promotes savings whereas knowledge on advance financial literacy facilitates investments. The medium and the high level of advance financial literacy is noted among nuclear families with respondents being head of the household and also among those respondents who took joint financial decision in consultation with their spouse. As education attainment determines respondents knowledge on financial literacy, with education upto SSLC have medium knowledge and a high level of financial literacy was found among graduates, post graduates, among those working in an organized sector jobs and also from the respondents who live in pucca and semi-pucca houses and with two or more earning members. The advance financial literacy was found to be low among respondents with family size of three and above with two or more dependents. Low advanced financial literacy was found among the respondents with lower income brackets and also with low income contribution by the other family members.

TABLE II: RESPONDENTS CHARACTERISTICS AND THEIR LEVEL OF FINANCIAL LITERACY

VARIABLES		BASIC FINANCIAL LITERACY						ADVANCE FINANCIAL LITERACY						TOTAL	
		LOW		MEDIUM		HIGH		LOW		MEDIUM		HIGH			
		NO. OF RESPONDENT	%	NO. OF RESPONDENT	%	NO. OF RESPONDENT	%	NO. OF RESPONDENT	%	NO. OF RESPONDENT	%	NO. OF RESPONDENT	%	NO. OF RESPONDENT	%
AGE (IN YEAR)	18-35	17	22.67	10	13.33	7	9.33	15	20	7	9.46	18	24	74	37
	35-50	11	14.67	9	12	15	20	19	25.33	7	9.21	15	20	76	38
	ABOVE 50	9	18	5	10	11	22	17	34	5	10	3	6	50	25
GENDER	MALE	20	17.86	10	8.93	23	20.54	34	30.36	12	10.71	23	20.54	112	56
	FEMALE	28	31.82	13	14.77	9	10.23	11	12.5	15	17.05	12	13.64	88	44
MARITAL STATUS	MARRIED	29	27.1	11	10.3	8	7.5	20	18.7	6	5.6	33	30.8	107	53.5
	UNMARRIED	6	7	22	25.9	14	16.4	3	3.5	15	17.6	25	29.6	85	42.5
	SEPARATED	-	-	-	-	4	50	1	12.5	3	37.5	-	-	8	4
EDUCATION	PRIMARY	4	18.18	3	13.6	3	13.9	4	18.1	6	27.2	2	9	22	11
	SCHOOL	15	41.6	10	27.8	2	5.55	3	8.3	1	2.7	5	13.8	36	18
	HSC	10	13.8	8	11	19	26	13	17.8	12	16.4	11	15	73	36.5
	UG	12	24	6	12	10	20	9	18	7	14	6	12	50	25
	PG	4	21	6	31.8	-	-	3	15.7	-	-	6	31.5	19	9.5
OCCUPATION	ORGANIZED	31	23.4	17	12.9	8	6	25	18.9	36	27.2	3	2.27	132	66
	UNORGANIZED	19	27.94	14	20.6	4	5.9	6	8.82	9	13.2	16	23.5	68	34
FAMILY SYSTEM	NUCLEAR	36	26.67	25	18.52	10	7.41	33	24.44	22	16.29	9	6.67	135	67.5
	JOINT	15	23.08	7	10.77	4	6.15	19	29.23	10	15.38	10	15.38	65	32.5
HOUSE OWNERSHIP	OWN OUTRIGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	OWN MORTGAGE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RENTAL	10	28.57	8	22.86	4	11.43	7	20	4	11.42	2	5.71	35	17.5
	LIVE WITH PARENT	13	20	12	18.46	10	15.38	13	20	8	12.30	9	13.85	65	32.5
	OTHER ARRANGEMENTS	26	26	17	17	11	11	23	23	14	14	9	9	100	50
STATUS IN FAMILY FINANCIAL DECISION MAKING	HEAD	13	17.33	19	25.33	12	16	13	17.33	11	14.67	7	9.33	75	37.5
	MEMBER	-	-	1	12.5	3	37.5	2	25	1	12.5	1	12.5	8	4
	OWN	-	-	2	28.57	1	14.28	1	14.29	3	42.86	-	-	7	3.5
	SPOUSE	9	15	11	18.33	8	13.33	12	20	11	18.33	9	15	60	30
	BOTH	9	22.5	8	20	7	17.5	7	17.5	5	12.5	4	10	40	20
	OTHERS	3	30	3	30	1	10	2	20	1	10	-	-	10	5
HOUSE TYPE	PUCCA	6	9.84	13	21.31	12	19.67	15	24.59	7	11.47	8	13.11	61	30.5
	SEMI-PUCCA	27	28.13	20	20.83	13	13.54	16	16.67	12	12.5	8	8.33	96	48
	KUCCHA	14	32.56	9	20.93	7	16.27	11	25.58	-	-	-	-	43	21.5
FAMILY SIZE	2	8	22.86	5	14.29	4	11.42	9	25.71	6	17.14	3	8.57	35	17.5
	3	12	23.53	9	17.65	8	15.69	14	27.45	6	11.76	2	3.92	51	25.5
	4	-	-	23	30.67	15	20	17	22.67	11	14.67	9	12	75	37.5
	ABOVE 4	-	-	13	33.33	6	15.38	5	12.82	8	20.51	7	17.95	39	19.5
NO. OF EARNINGS MEMBERS	1	21	23.86	19	21.59	14	15.91	15	17.05	8	9.09	11	12.5	88	44
	2	12	21.05	8	14.03	6	10.52	14	24.56	12	21.05	4	7.01	57	28.5
	3	6	20	5	16.67	3	10	7	23.33	6	20	3	10	30	15
	ALL	-	-	9	36	7	28	-	-	4	16	5	20	25	12.5
INCOME (P.M.)	UP TO 5000	17	21.25	8	10	14	17.5	25	31.25	13	16.25	3	3.75	80	40
	5001-10000	13	19.69	14	21.21	6	9.09	11	16.67	15	22.73	7	10.61	66	33
	ABOVE 10000	10	18.52	7	12.96	9	16.67	14	25.93	8	14.81	6	11.11	54	27
CONTRIBUTION BY OTHER MEMBER (P.M.)	UP TO 5000	35	32.11	12	11.01	9	8.26	27	24.77	19	17.43	7	6.42	109	54.5
	5001-10000	13	22.81	15	26.32	8	14.03	11	19.29	4	7.01	6	10.52	57	28.5
	ABOVE 10000	3	8.82	6	17.65	7	20.59	-	-	8	23.53	10	29.41	34	17
TOTAL INCOME (P.M.)	UP TO 10000	27	25.71	16	15.23	14	13.33	19	18.09	17	16.19	12	11.43	105	52.5
	10000-20000	11	22	9	18	7	14	13	26	6	12	4	8	50	25
	ABOVE 20000	9	20	13	28.89	6	13.33	8	17.78	6	13.33	3	6.67	45	22.5

Source: Primary Data. Field Survey, 2017.

Association between Socio-economic and demographic profile of the respondents and knowledge on financial literacy

The impact of various socio economic factors such as age, gender, marital status, family system, role in financial decision, educational attainment, occupation, housing tenure, number of earning members and family size (Ramakrishana, 2007) on financial literacy and thereby financial inclusion were tested. Low literacy and lack of information affect the ability to save (Annamaria, 2008). The association between demographic and socio-economic profile of urban slum residents and their knowledge on basic and advance financial literacy is found by framing null hypothesis using chi-square test.

In Table III regarding the knowledge on basic financial literacy, a highly significant association was noted with the variables namely age, education, family system, role in financial decision-making, contribution of income by other family members and monthly income of the respondents. Significant associations were found with respect to gender, occupation and age.

TABLE III: ASSOCIATION BETWEEN SOCIO-ECONOMIC AND DEMOGRAPHIC PROFILE OF URBAN SLUM RESIDENTS AND THEIR KNOWLEDGE ON FINANCIAL LITERACY

Independent	Basic Financial Literacy		Advanced Financial Literacy	
	Chi-Square	Significance	Chi-Square	Significance
Age	13.363	0.1	1.820	0.9
Gender	8.500	0.9	7.200	0.5
Marital Status	13.400	0.001	7.220	0.1
Family System	23.400	0.000	6.410	0.005
Role in Financial Decision Making	30.092	0.000	24.230	0.000
Education	30.214	0.000	31.620	0.000
Occupation	2.316	0.260	3.248	0.170
Monthly Income	22.410	0.000	4.220	0.510
Contribution to Income by Family Members	32.420	0.000	23.400	0.000

With respect to advance financial literacy, a highly significant association was noted with age, gender and monthly income. Thus the respondents' gender, age, education, respondents role in financial decision making, contribution to household income by other family members are the key variables strongly associated with the financial literacy of the urban slum dwellers.

Determinants of Financial Literacy

To focus more sharply on the determinants of respondents' knowledge on financial literacy the percentage of coefficient of variation is chosen. This model has been used to determine how various demographic and socio-economic variables influence the knowledge on basic financial literacy and advance financial literacy of the respondents. In understanding the model the impact factor found out determines which of the determinants is most influential. If the coefficient of variation (C.V.) is > 1, it is high variance and if coefficient of variation (C.V.) is <1, it is low variance.

TABLE IV: DETERMINANTS OF FINANCIAL LITERACY USING % OF CO-EFFICIENT OF VARIATION

Variable	Impact Factor
Age	0.08
Gender	0.12
Marital Status	0.03
Role in Financial Decision Making	1.24
Education	1.30
Family Size	0.06
No. of Earning Members in Household	0.07
No. of Members	0.03
Monthly Income	0.99
Income Contribution by Family Members	1.02

The personal and family characteristics of the respondents namely age, gender, marital status, family system, respondents status in the family, role on financial decision making, education, family size, number of earning members in the household number of dependents, monthly income, income contributed by family members and total household income were expected to have a positive effect on the probability of acquiring knowledge on financial literacy. The estimated co-efficient of variation indicates the effect of the explanatory variables on the likelihood of acquiring knowledge on basic financial literacy and advance financial literacy by the respondents.

Basically the impact factor do indicates that the financial literacy is most important among all the other indicators. The indication of having less negative values do depicts the importance of all these variables in the life of slum dwellers.

MAIN FINDINGS

Financial literacy and financial planning is all that is needed for achieving financial stability. Enhancement of the knowledge and judgement skills with respect to financial decision making would be the outcome of better understanding of the features of various financial products such as risk/return aspects. It is also expected to develop a regular savings and stable accumulation of wealth, appropriately purchasing insurance and borrowing when necessary. Participation in financial inclusion plan would inculcate financial discipline among subjects. Thus, an inclusive financial system needs to be simple to understand and easy to adopt to enhance the level of participation for secure and safe saving practices. Hence, facilitating investments for sustainable growth and development.

RECOMMENDATIONS

On the basis of the analysis, few strategic suggestions have been made. Firstly, financial literacy programmes should impart regularity in saving, budgeting and planning for insurance. The income, expense, awareness and knowledge about finance vary amongst the slum dwellers and hence different forms of motivation need to be provided to promote financial literacy. Secondly, promotion of advance financial literacy through advocating joint family system, which provides scope for saving and investment should also continue during inflation. Further, imparting basic financial education at the schools will enable early adoption of financial accountability and responsibility. Thirdly, there is imperative need for coordinated financial education by all concerned stakeholders. Fourthly, the financial education programmes are carried out in India is incorporated in formal and non-formal education at different stage but its benefit is not reaped either due to low income, higher cost of living, low education and ignorance among urban slum residents.

A strong implementation machinery for the welfare measures would have beneficial impact. In order to promote financial literacy delivery, Codes of Conduct for the staff of financial institutions should be made compulsory. Furthermore, the weaker section should be encouraged to borrow from the banks and also imbibe a thrift of saving in banks. The Government of India is making all efforts to introduce novel products and measures, especially for the weaker sections. Due to improper monitoring and supervision, the true purpose of the initiatives are not fully achieved. So all the responsible bodies should monitor and supervise the schemes and measures launched by GOI so that benefits go to the right people.

REFERENCES

1. Adult Financial Literacy Advisory Group (AdFLAG), 2000, *Report to the Secretary of State for Education and Employment* [online], Department of Education and Skills, London, available: http://www.dfes.gov.uk/adflag
2. Arokia, Jerold, (2008), *"Financial Inclusion and Literacy India"* Indian Journal of Finance, Vol.2, No.7, pp25-27
3. Australian Government Report, (2007), *"Financial literacy-Australians understanding Money"* Australian Government Report policy Brief 2006, OECD Observer, pp. 7-10
4. Beal, D.J. and Delpachitra, S.B., 2003, "Financial literacy among Australian university students"*, Economic Papers*, 22(1), 65-78,
5. Chen, H. and Volpe, R.P, 1998, "An Analysis of Personal Financial Literacy among College Students," *Financial Services Review*, Vol. 7, No. 2, pp. 107-128
6. Chen, H. and Volpe, R.P., 2005, "Financial Literacy, Education, and Services in the Workplace", *B>Quest (Business Quest): A Journal of Applied Topics in Business and Economics* [Online]
7. Chunxiao, L.Y., (2013), *"financial Literacy – an important influence factor of family finances",* International Journal of Engineering and Industries, Vol. 4, No. 4, pp.35-41.
8. Commonwealth Bank Foundation (CBF), 2004a, *Australians and Financial Literacy*, Commonwealth Bank Foundation, Sydney.
9. Commonwealth Bank Foundation (CBF), 2004b, I*mproving Financial Literacy in Australia: Benefits for the Individual and the Nation*, Research Report, Commonwealth Bank Foundation, Sydney.
10. Jack R Kapoor.,(2007), *"Personal Finance",*McGraw Hill Publishing Company Ltd, Delhi, pp.35-53
11. Kasilingam and Jayagopal, (2008), *"Impact of family size and family income on investment behaviour of Salaried Class Investors",* The IUP Journal of Public Finance, Vol. 7, No.1, pp35-50
12. Lusardi, Annamaria, (2003) *"Planning and Saving for Retirement",* Working Paper, Darmouth College.
13. Lusardi, Annamaria, (2008), *"Household saving begaviour: the role of financial literacy, in formation and financial inclusion programme",* Working Paper w13829, National Bureau of Economic Research, 2008
14. Mahesh, (2014), "Financial Literacy: Important for Growth and Inclusion" *International Journal of Innovative Research and Development*, Vol.3, No.4, pp. 214-221
15. Mecham, Lenodias Ralph, (2005), *"Bankruptcy Basics Applicable to Cases Field on or After"* October 17, 2005, Bankruptcy Judges Division" Administrative Office of United States Courts, Washington DC.
16. Morton, H. 2005, "Financial Literacy: A Primer for Policy Makers", National Conference of State Legislatures, Denver, Colorado.
17. Noctor, M., Stoney, S. and Stradling, R., 1992, *Financial Literacy: A Discussion of Concepts and Competences of Financial Literacy and Opportunities for its Introduction into Young People's Learning*, Report prepared for the National Westminster Bank, National Foundation for Education Research, London.
18. Padmaja, M, (2010), *"Financial Inclusion of Tamil Nadu –A study on Bankers Initiatives to reach the vulnerable groups",* Growth with Equity Financial Inclusion, Vijay Nicole Imprints Private Ltd, Chennai, pp.69-72
19. Ramakrisna R, (2007), "Investment Behaviour of Rural Investors", *Finance India*, Vol. 23, No.4, pp.128-129
20. Raven, F., 2005, *Financial Literacy: A Basic Skill for Social Mobility* [online], Digital Divide Network.
21. Ray Morgan Research (RMR), 2003, *ANZ Survey of Adult Financial Literacy in Australia: Final Report, May 2003*. Melbourne: Ray Morgan Research.

22. Saravanan O,S (2010), "The Performance Perspective of Financial Inclusion by Financial Infrastructural Institutions", *Global Financial System in the Post Crisis Era,* Vijay Nicole Imprints Private Ltd, Chennai, pp.490-496
23. Srinivasan N,(2010), *"Microfinance India State of the Sector Report",* Sage Publications, Delhi, pp.140-141

DOCUMENTS CONSULTED

24. IRJFE, Sustainability Report 2014
25. OECD/INFE High-level Principles on National Strategies for Financial Education (2012)
26. Report of The Committee on Financial Inclusion, Chairman: Dr. C. Rangarajan
27. Report of The Committee on Financial Sector Reforms, Chairman: Dr.Raghuram G. Rajan
28. Speech of Dr. K. C. Chakrabarty, Deputy Governor, RBI at the Stakeholders' Workshop on Financial Literacy organized jointly by the UNDP, NABARD and MicroSave at Mumbai on 4th February, 2013

ANNEXURE 1

WARD NO.	NAMES OF SLUMS
1	Mahishbatan
	Bunopara
	Nayapatti
	Thakurdari
	Palaneite
17	Uttargurumara
	Trinathpalli
	Naobhanga
	Nabopally
	Ghoshpara
	Kullipara
	Khashmahal
	Chainabhi
	Basanti Colony
	DurgaBhashan
18	Sukantanagar
23	Duttabad
24	Duttabad
25	Duttabad

AN EVALUATION OF DETERMINANTS OF DIVIDEND POLICY A STUDY OF THE BANKING SECTOR IN KENYA

BOSIRE JARED ARERI
LECTURER
DEPARTMENT OF ACCOUNTING
KISII UNIVERSITY
KENYA

VINCENT NYAKONDO NYANG'AU
LECTURER
DEPARTMENT OF HUMAN RESOURCE & STRATEGIC MANAGEMENT
KISII UNIVERSITY
KENYA

ABSTRACT

Recent financial crisis shows that excessive dividends lead to financial distress. Thus, there is a strong need for qualitative and quantitative restrictions on the dividends considering the potential conflict with debt-holders. The approach to dividend policy presented focuses on specific attributes of the firm as sources of value expression through dividend payment. Because of increasing complexities, competition, global and corporate structure, it is difficult to single out one single factor affecting dividend and dividend policy explaining why some companies pay dividends while others do not. The general objective of this study was to evaluate the determinants of dividend policy in the Kenyan banking sector. The specific objectives were to establish the effect of leverage on dividend policy among banks in Kenya, determine the effect of size of the firm on dividend policy among banks in Kenya, and investigate the effect of business risk on dividend policy among banks in Kenya. This paper focused on the agency theory, pecking order theory, the signaling theory, and the high dividends increase share value theory. Descriptive research design was adopted. The researcher sampled Kenyan financial banks listed in Nairobi Stock Exchange for a period of ten years from 2007-2016. Data were collected from the audited financial statements using Questionnaires and secondary information from capital Markets Authority. Data were analysed quantitatively using unbalanced panel estimation techniques.

KEYWORDS
dividend policy, leverage on dividend policy, financial distress, business risk, asset structure.

JEL CODES
G3, G35.

INTRODUCTION

Dividend policy refers to a plan of action adopted by the firm whenever dividend decision is to be made. It is the third major financial decision the financial manager must decide whether the firm should distribute all the profits, retain them, or distribute a portion and retain the balance. This dividend payment should be determined in terms of its impact on the shareholders' value and provide information regarding the performance of the firm to the stockholders (Pandey, 2008).

The study of dividend policy is increasingly becoming interesting for several reasons. First, it affects the capital structure of the firm and also changes the firm's stock value (Nikolaos, 2005). Second, announcement of dividend signals information to investors about the firm's efficiency in terms of profitability, liquidity and investment opportunity (Alli, 1993). Third, through cash dividend policy, managers reduce principal-agent relationship costs (Brigham and Gapenski, 2002). The need to receive dividends forms part of the primary motive why shareholders buy shares. In subscribing for a firm's shares, investors always take into consideration a host of factors such as the size of the firm, business risk as well as leverage. As a result, management strives to command a fair price for her stocks while ensuring prompt payment of dividends.

Dividend payout is important to companies for some reasons. First, dividends provide certainty about the company's financial position. Second, dividends provide current income for investor's especially requiring security of income. Third, dividends may assist in maintaining a company's share price in the stock market.

Since the pioneering work of Miller and Modigliani (1958) in their seminal article, a series of empirical and theoretical research in dividend policy have emerged, some relaxing the assumptions of the Modigliani & Miller and offering theories and building models to guide managers formulate their dividend policy decisions. However, empirical evidences from these studies vary considerably (Gordon, 1963; Litner, 1962; kawal & Sujata (2008). Some suggest that increase in dividend payout increases the firm's market value; others posit that increase in dividend payout decreases the firm's value, while some argue that dividend policy does not affect the market value of the firm.

Dividend policy also involves judgmental decisions and that there has been emerging concern that there is no single explanation of dividend policy because of increasing complexities, competition, global and corporate structure therefore difficult to single out one single factor affecting dividend policy (Amidu, 2006)

In spite of the continuous and increasing theoretical and empirical debate on dividend policy, there is still no generally accepted standard on how firms actually pay out dividend to shareholders at a given time period. Thus, the dividend decision is a controversial issue, which still leaves some questions unanswered: What is the impact of dividend policy on value? What are the factors influencing dividend policy? Is dividend policy determined dependently or independently? What proportion of a firm's after tax income should be distributed to shareholders? Should the distribution be cash dividends or should the cash be passed on to shareholders by buying back some shares? The other important concern is how stable should the distribution be?

Despite empirical evidence suggesting similarities in macro-level characteristics within emerging markets, the evidence of firm-level investigations, such as dividend payout determinants, has displayed great empirical disparities. For example, while some studies have observed the impact of leverage on dividend policy to be significant and inversely related, others have noted leverage to have no implication for dividend policy. Similar divergences in evidence have also been observed regarding the effect of size of the firm on dividend payout.

With regard to the above contradictory evidence, this study contributes to the literature in two ways. First, it attempts to shed light on the issue of dividend policy in the context of an emerging market. Second, it examines dividend policy across financial sector, as it can be expected that different business types may plausibly differ in dividend payment policies.

IMPORTANCE

The findings of this study will give a better insight about determinants of dividend policy in the banking sector in Kenya. The findings would further aid in shaping future policy by the government on dividend policy and possible replication in the Kenyan finance industry. The findings are also expected to provide reference for educators and readers in general and rekindle further research in the area.

STATEMENT OF THE PROBLEM

Dividend policy is an integral part of financial management decision of a business firm. Issues related to dividend policy have been analysed for many years but no universally accepted dividend policy has been established. The evidence of firm-level investigations, such as dividend payout determinants has displayed great empirical disparities (Michel & Shaked, 1986; Travlos, 2001). Kang and Lee (2003) state that firms in different countries may follow different dividend policies because of differences in macro-economic environments, economic developments, regulations, tax systems, market transaction costs, and other institutional factors. Dividend policy has been associated with a host of factors which contradict amongst themselves in different researches among them leverage, size of the firm, and business risk. It is with this in mind that the researcher is inspired to conduct the study so as to identify the factors determining dividend policy in the Kenyan banking sector.

OBJECTIVES

1. To evaluate the effect of leverage on dividend policy among banks in Kenya.
2. To evaluate the effect of size of the firm on dividend policy among banks in Kenya.
3. To evaluate the effect of business risk on dividend policy among banks in Kenya.

HYPOTHESES

1. There is no known the effect of leverage on dividend policy among banks in Kenya.
2. There is no significant effect of size of the firm on dividend policy among banks in Kenya.
3. There is no effect of business risk on dividend policy among banks in Kenya.

METHODOLOGY

Descriptive research design was adopted. Data were collected from the audited financial statements using Questionnaires and secondary information from capital Markets Authority.

LITERATURE REVIEW

THEORETICAL BACKGROUND OVERVIEW

Three main contradictory theories on dividends can be identified. Some argue that increasing dividend payments increases a firm's value. Another view claims that high dividend payouts have the opposite effect on a firm's value; that is, it reduces firm value. The third theoretical approach asserts that dividends should be irrelevant and all effort spent on the dividend decision is wasted. These views are embodied in three theories of dividend policy: high dividends increase share value theory, low dividends increase share value theory, and the dividend irrelevance hypothesis. Dividend debate is not limited to these three approaches. Several other theories of dividend policy have been presented increasing the complexity of the dividend puzzle further. The theories behind this research are based on the models and theories given by researchers elaborating on important variables and factors, which affect dividend payout and capital structure of the company. These include the agency cost hypotheses, the pecking order theory, signaling theory, bankruptcy theory, bird in hand theory, and clientele effect theory. All these theories play an important role in explaining the reasoning behind the factors affecting capital structure and dividend payout policy of the firms. A brief explanation of the theories and variables will help us further comprehend the basis of the economic model.

AGENCY THEORY

Agency theory tells us about agency problem that exists due to the separation of ownership and management in organizations. The Agency theory was propounded by Jensen and Meckling (1976) who describe the relation between the owners and the managers as the relation between the principals and the agents. The managers are the agents or owners of the firm and can pursue such decisions that increase their own welfare rather than increasing the value of the firm. This situation leads to the conflict of interest between the owners and the managers of the firm. The agency models of leverage and dividend policy foretell that use of debt financing and dividend payments can work as tools to tackle with agency problem. According to Rozeff (1982), Easterbrook (1984) and Bhaduri (2002), both dividend payments and ability to issue debt can decrease the cash flows that are under the control of management. Jensen (1986) explains that dividend payments can reduce the agency problem through reducing excess cash flows in the organization. Reduction in excess cash flow makes cash less available to the managers to use for unproductive purposes. From the agency theory perspective, it is generally accepted by authors that leverage and dividend policy decisions are mainly influenced by institutional ownership, asset tangibility, and liquidity.

PECKING ORDER THEORY

The pecking order theory was first suggested by Donaldson (1984) and then developed by Myers and Majluf (1984) who explain that because of existence of asymmetric information, the companies follow an order while taking decisions about financing. The companies will prefer to finance their projects by retained earnings (the least costly source of finance); if the investment opportunities are not fully financed by the retained earnings then debt (the less costly source of finance) will be preferred to equity issues (the most costly source of finance). This order is favorable for companies as it reduces the chances of passing up profitable opportunities. Further, the pecking order theory says that the companies pay dividends after meeting the investment requirements. Profitability and liquidity of the firm will be used as a significant factor in leverage and dividend policy models.

SIGNALING THEORY

The signaling theory is based on the concept that there is an information asymmetry between managers and the investors of the firm. The work of Miller and Modigliani (1961) draws attention that dividend payments are signals to the market. If a firm is paying more dividends then it is taken as positive signal by the investors and it would appreciate the market value of the stock. If a firm is giving fewer dividends then it is taken as negative signal by the investors and it would reduce the market value of the firm. The work of Bhattachariya (1980) also explains that the firms use dividend payment as a signal to investors about its financial health. Ross (1977) contributed to the concept that the issue of debt is also used by the investors as a source of information regarding the performance of the firm. The investors take the issue of debt by the managers as a positive signal that the firm's profits are high and the managers do not want to share these high profits with outside investors. The firms having good financial performance can issue more debt because of the capabilities to repay loans while the firms with poor financial performance issue low level of debt because of low capabilities to repay loans. From the signaling theory perspective, institutional ownership and profitability of the firm can be used to examine the effect on leverage and dividend policy decisions.

HIGH DIVIDENDS INCREASE SHARE VALUE THEORY

In a world of uncertainty and imperfect information, dividends are valued differently to retained earnings (capital gains). Myron (1963) argued that investors prefer certain dividends to retained earnings since the stock price declines as dividends increase. This leads to firms setting a large dividend payout ratio to maximize fair share price. Investors prefer the bird in hand hypothesis of cash dividends rather than the two in the bush of future capital gains. Increasing dividend payments, ceteris paribus, may then be associated with increase in a firm's value. Empirical support for the bird in hand theory as an explanation for paying dividends is generally very limited, and the argument has been challenged especially by (Miller M.H., 1961)who argued that the required rate of return is independent of dividend policy, suggesting that investors are indifferent between dividends and capital gains.

EMPIRICAL LITERATURE

Although there are plenty of potential determinants for the dividend decisions, explanatory variables that are included in this study are only internal variables, which consist of profitability, firm size, debt level /leverage, liquidity, asset structure, industry type, growth opportunities and business risk are included.

LEVERAGE

High debt means that firms have high interest expense, which will lead to a low net income and thus less earnings will be available for shareholders. Dividend payments to shareholders may lead to suffering of financing and investment plans especially in case of high leveraged firms. Earnings of highly leveraged firms are more risky and volatile and accordingly pay low dividends. Highly leveraged firms tend to pay low dividends payouts in order to reduce transaction cost of external capital (Al-Twairjy, 2007) found negative relationship between leverage and dividend payout ratios of firms listed in Kuala Lumpur stock exchange and concluded that highly leveraged firms retain more instead of distributing profits to shareholders.

Kowalski (2007) argued that more indebted firms prefer to pay lower dividends. Also, Al-(Kuwari, 2009) confirms that dividend policy is negatively related to leverage ratio. However, (Mollah, 2001) examined an emerging market and found a direct relationship between financial leverage and debt-burden level that increases transaction costs. Thus, firms with high leverage ratios have high transaction costs, and are in a weak position to pay higher dividends to avoid the cost of external financing.

Appannan (2011) in their study of Malaysia listed companies for food industries under the consumer products sector showed that variables having a strong relationship with dividend payout are not necessarily the determinants of the dividend payment decision such as profit-after-tax that has the strongest relationship with dividend per share. The study further confirmed the fact that debt-to-equity ratio and past dividend per share were the important determinants of dividend payment.

FIRM SIZE

The size of a firm has been considered to be a factor in determining dividend policy of a firm. (Kinfe, 2011) undertook an empirical study on the determinants of dividend payout of six private banks in Ethiopia during 2006-2010 using lintners model, the study concluded that there was a positive relationship between the firm size and dividend payout ratio, a negative relationship between liquidity and dividend payout. However, there was no relationship between payout ratio and profitability, growth and leverage. He concluded that banks in Ethiopia considered agency conflicts, previous year's dividends and liquidity when making decisions so as to pay dividends.

Firm size is one of the major determinants of cash dividend payout. Larger sized firms have easier access to capital market. This reduces their rate of dependency on internally generated revenue and hence, fosters prompt payment of higher rate of dividend (Vogt, 1994). Studies by Gaver and Gaver (1993) also supported a positive relationship between firm size and dividend payout.

On the other hand, (Lloyd, 1998) concluded that size plays a prominent role in explaining firms' dividend policy. As firm grow, they mature, have easy access to financial market and become less dependent on internally generated funds which allow them to pay higher dividends. Large firms pay lower transaction cost as compared to smaller ones for raising new financing and pay more dividends. (Hafeez, 2008) in his study found positive relationship between the firm size and dividend payments whereby Investors perceive that larger firms are less risky hence are in a better position in the market and can raise more funds as compared to smaller firms and pay more dividends (Al-Malkawi, 2007) has concluded that size positively correlate with dividend payout ratio. They play an important role in reducing agency cost. Size plays significant negative impact on dividends reasoning that large firms reinvest their profits into assets instead of paying dividends to shareholders.

(Myers, 1984) Found that the asymmetric information situation between managers and external investors leads to underinvestment problems. Based on that, (Deshmukh, 2003)clarified this with respect with to the change in the dividend. When other things are constant, the higher the level of asymmetric information that can be shown due to the smaller firm size, the higher probability of underinvestment, and so the lower the dividend paid to stockholders. (Naceur, 2006) Results, based on 48 listed companies listed on the Tunisian Stock Exchange between 1996 and 2002, showed that smaller corporations want to disburse more dividends as they can catch attention of potential investors to lessen their inherent risks. Thus, there seems to be a relationship between firm size and dividend yield but there are still arguments about the direction of this association.

(Mehta, 2012) empirically investigated the determinants of dividend payout for all firms in the areas of real estate, energy sector, construction sector, telecommunications sector, health care and industrial sectors (except bank and investment concerns). The study analysed a range of determinants of dividend policy: Profitability, Risk, Liquidity, Size and Leverage of the firm. Correlation and the multiple regression techniques were applied to find out the most significant variables used by the UAE firms in making the dividend decisions. The study provides evidence that profitability and size are the most important considerations of dividend payout decisions by UAE firms.

BUSINESS RISK

(Nguyen.T., 2012) Results show that while profitability affects dividends payment positively, there is negative relationship between business risk and dividend disbursement to companies in the sample Vietnam. The results are consistent with previous empirical studies in the US (Li, 2008), the UK (Al-Najjar, 2009) defined business risk as the probability of decrease in returns on investment owing to exceptional circumstances. Under transaction cost theory, (Rozeff, 1982) suggested that the transactions costs of external financing will be higher when the firm has higher operating and financial leverage or more risks that can be measured through the greater beta coefficient. An association between dividend payments and industry type or audit quality is also found in this study that is similar to researches of (Baker H. a., 2000),specifically, regulated enterprises pay more dividends than unregulated ones and dividends among listed firms being audited by one of the ten biggest audit companies. The most important point is that among tested factors to the sample, profitability is the main determinant of dividend policy in Vietnam.

Lee (2009) investigated the determinants of dividend policy in Korean banking industry using a panel data of Korean banks between 1994-2005. The study found a positive relationship between the bank's profitability, bank size, and the dividend payout. They concluded that because banks were subject monitoring and surveillance from their regulator on their operations, the dividend policy would be more closely associated with their riskiness.

A brief scrutiny of the review of literature in this section reveals that a number of studies investigating the dividend behaviour of the companies abroad have been conducted. To the researchers, no study on determinants of the dividend policy of corporate sector in Kenya has been made to date. From the review of literature, it has been observed that there exists a general agreement on the set of factors influencing dividend policy. Different authors have used different combinations of variables to explain the dividend behaviour. Besides there are different approaches to the decision involving the distribution verses the retention of the net profit after tax. Again, the factors influencing corporate dividend policy may vary substantially from country to country because of inconsistencies or, the variation in legal, the tax and accounting policy among the countries. In view of these facts, the present day study aims at identifying the factors significantly that influence the corporate dividend policy in Kenya.

METHODOLOGY

Lee (2009) investigated the determinants of dividend policy on Korean banking industry using a panel data of Korean banks during 1994-2005. The study found a positive relationship between the bank's profitability, banks size, and dividend payout. They concluded that because banks were subject to monitoring and surveillance from the regulator on the operations, the dividend policy would be more closely associated with their riskiness.

In comparative study of Australia and Japanese firms, Ho, (2003) opined that out of all regressed variables of profitability, size, liquidity, risk, asset mix and growth, the dividend policies are affected positively by size in Australia and liquidity in Japan and negatively by risk in Japan only. The study observed that industry effect was also significant in both Australia and Japan, which indicates the importance of the industry in which a firm competes.

Odawo (2015) did a study on dividend policy in public ltd banks in Kenya and adopted a descriptive research design and analysed data quantitatively and qualitatively. The results showed that the liquidity was negatively related to dividend payout while profitability was positively related to dividend payout. Also firm size is positively and significant with dividend payout

The effect of four factors shown to influence dividend policy among companies operating in developing countries using a Tobit regression model, it is observed that dividend payout ratio is impacted negatively by the growth rate, debt ratios and firm size and positively by earnings, market to book ratio and retained earnings to total asset ratio. The data consists of both cross sectional and time series information; it does not contain equal information in all banks in the sample for the entire period.

Therefore, in this study unbalanced panel estimation techniques will be used. Panel techniques takes into account the heterogeneity present among individual banks and allow the study of the impact of all factors with less collinearity among variables, more degree of freedom and greater efficiency.

RESULTS AND DISCUSSIONS

The above cited literature shows that the following are major determinants of dividend policy:

LEVERAGE

High debt means that firms have high interest expense which will lead to a low net income and thus fewer earnings will be available to shareholders. High leveraged firms means a large fixed payment for external financing, which indeed is a substitute for the dividend payment. High leverage increases transaction costs and the risk of the firm.

FIRM SIZE

The higher the level of asymmetric information that can be shown due to smaller firm size the higher the probability of underinvestment so the lower the dividend payment. Smaller firms would want to disburse more dividends to catch the attention of potential investors to lessen their inherent risk. As a firm grows in size they mature, have access to financial market and become less dependent on internally generated funds which allow them to pay higher dividends. Large firms pay higher cash dividends for several reasons. First, large firms face high agency costs as a result of ownership dispersion. Second, as a result of weak control in monitoring the management in large firms, a large dividend payment increases the need for external financing which in turn leads to increased monitoring of these firms by creditors. Third, large firms have easier access to capital markets and they are able to raise funds with lower issuance costs for external financing, consequently large firms are better placed to distribute higher dividends to shareholders than smaller firms.

BUSINESS RISK

Higher levels of business risk make the relationship between current and expected future profitability less certain. Firms with higher levels of business risk are expected to have lower dividend payment. The uncertainty of a firm's earning may lead to the payment of lower dividends because volatile earnings materially increase risk of default. Al-Kuwari (2009) Business risk appeared to be statistically insignificant. These suggests that the transactions costs do not have a direct influence on the dividend payout policy. (Amidu,2006) concluded that beta has a negative association with dividend payment greater systematic risk increased the uncertainty of expected future earnings. Therefore, firms force to pay fewer dividends due to increased uncertainty of earnings.

CONCLUSION

From the review of the literature, it has been observed that there exists no general agreement on the set of factors influencing the dividend policy. Different authors have used different combinations of the variables to explain the dividend behavior. Besides, there are different approaches to the decision involving the distributing versus, the retention of the net profit after the taxes. Again, the factors influencing the corporate dividend policy may vary substantially from country to country because of the inconsistency or, the variation in legal, the tax and the accounting policy among the countries. In view of these facts, the present study aims at identifying the factors/ variables significantly that influence the dividend policy in Kenyan banks.

REFERENCES

1. Alli, K. L. (1993). Determinants of corporate dividend policy. *The Financial Review*, 523–547.
2. Al-Malkawi, H. (2007). Detrminants of Corporate Dividend Policy in Jordan. *Journal of Economics &Administrative Sciences*, 44-70.
3. Al-Najjar, B. H. (2009). The Association Between Dividend payout and outside directorships. *Journal of applied accounting Research, 10*(1), 4-19.
4. Al-Twairjy, A. (2007). Dividend policy and Payout Ratio. *Journal of Risk Finance*, 349-363.
5. al-yahyaee, k. (2006). *capital structure and dividend policyin personal tax free enviroment.* australia: university of new south wales.
6. Amidu, M. (2006). Determinants of Dividend Payout Ratios in Ghana. *The Journal of Risk Finance, vol 7*(2), 136-145.
7. Amidu, M. a. (2006). Determinants of dividend payout ratio in Ghana. *Journal of Risk Finance*, 136-145.
8. Amidu, M. A. (2006). Determinants of Dividend Payout Ratio in Ghana. *The Journal of Risk Finance, 7*, 136-145.
9. Baker, H. a. (2000). Determinants of Corporate Dividend Policy. *Financial practice and education, 10*, 29-40.
10. Hafeez, A. a. (2008). Dynamics and determinants of dividend policy in Pakistan evidence from Karachi stock exchange for nonfinancial listed firms. *MPRA paper*, 37342.
11. Kinfe, T. (2011). Determinants of dividend payoutan empirical examination of large banking industry in Ethiopia. *unpublished master thesis*.
12. Kowalewski, O. S. (2008). Does Corporate governance determine dividend payouts in Poland? *PostCommunist*, 203 -218.
13. Li, K. a. (2008). Assymetric information and dividend policy. *Financial Management*, 673-694.
14. Lloyd, W. a. (1998). Agency Costs and Dividend Payout Ratio. *Journal of Business and Economics*, 19-29.
15. Mehta, A. (2012). An Empirical Analysis of Determinants of Dividend policy. *Global Review of Accounting and Finance, vol 3*(1), 18-31.
16. Miller M.H., &. M. (1961). Dividend policy, Growth and Evaluation of Shares. *Journal of Business*, 411-433.
17. Modigliani, F. (1982). Debt, dividend policy,taxes,inflation and market valuation. *journal of finance*, 255-273.
18. Muchiri, I. A. (2015). Factors considered in Dividend Payout Decisions. *Research Journal Of Finance and Accounting*.
19. Myers, S. (1984). The Capital Structure puzzle. *Journal of Finance*, 575-592.
20. Nguyen.T. (2012). Determinants of Dividend Policy The case of Vietnam. *International Journal of business and Economics and Law*, 2289-1552.
21. Odawo, C. (2015). Determinants of Dividend Payout Policy in Public LTD Banks in Kenya. *Journal of Management*, 182-191.
22. Ongore, V. (2011). The Relationship Between Ownership structure and firm perfomance. *African Journal for Business Management*, 2120-2128.
23. Rozeff, M. (1982). Growth, Beta and Agency Costs as Determinants of Dividends payout Ratios. *Journal of Financial Research*, 249-259.

ASSESSING THE SUSTAINABILITY OF INFORMAL SAVING GROUPS AS A SOURCE OF FINANCE FOR THE ZIMBABWEAN INFORMAL SECTOR

LINDA M. MABWE
LECTURER
DEPARTMENT OF ACCOUNTING AND FINANCE
ZIMBABWE EZEKIEL GUTI UNIVERSITY
BINDURA

THABANI DUNDU
TEACHING ASSISTANT
TECHNOPRENERSHIP DEVELOPMENT CENTRE
HARARE INSTITUTE OF TECHNOLOGY
HARARE

ABSTRACT

Informal saving groups is an area that has been of interest to various researchers, especially in the African context due to the challenges being faced by various economies in terms of operations of financial institutions and donor funding. Various economic activities in third world countries are carried out by informal groups whose success has increasingly become a cause for concern. For example, Rotating Saving and Credit Associations (ROSCAs) and Accumulating Savings and Credit Associations (ASCAs) have contributed much to the social development of various economies due to their flexibility and less regulations. However, their sustainability has been of much concern as these are not extending beyond one cycle or they are there for limited cycles. The focus of this paper is to assess the sustainability of these informal saving groups and their contribution to the informal sector. Findings suggest that the continuity of these informal saving groups is being limited by economic conditions that are making it difficult for some business operators to continue participating in these groups as well as unemployment. Also some members are taking advantage of the economic condition to run away from their own obligations. It is argued that to ensure the survival of these informal saving groups, groups should have documentation and constitutions in place to guide their operations so as to minimise the risk of members defaulting payment of their dues and getting away with it. Participation by non-governmental organisations in these informal groups is recommended so as to promote the permanent existence of the informal saving groups and as a reference check of the operations of these informal groups.

KEYWORDS
ROSCAs, ASCAs, round tables, economic transformation, informal sector.

JEL CODE
O17

INTRODUCTION AND BACKGROUND OF THE STUDY

Zimbabwe, a landlocked country in Southern Africa has gone through various economic and political transitions since its inception to independence in the year 1980. The country had to deal with difficult numerous transitions from economic meltdown, politics, economics, public sector administration, national security, regional and international relations as well as social economic development (Kiggundu, 2002). At such a time when the country was experiencing economic meltdown, the banking sector was not spared in the turmoil. Zimbabwe's financial services sector witnessed phenomenal growth since economic deregulation in 1991. However, this was short-lived as economic turbulences and political meltdown, took over the country since year 2000 creating a new and challenging environment (Muranda, 2006). Nine banks have closed since 2011 and this was attributed to weak and ineffective regulatory and supervisory framework, poor corporate governance, high levels of non-performing loans and concentrated ownership (Mhlanga, 2015).

The activities during the first decade of the new millenium led to the erosion of consumer confidence in the financial system, posing challenges to the viability of this sector as well as further segregation of the marginalised population of the society from using formal banking channels which in turn has a devastating effect on the economy as a whole. This group of people have turned to their own foam of solace of raising income for their personal projects as well as improving their standards of living which is known as '*round tables'* which are referred to as either rotating savings and credit association (ROSCA) or accumulative savings and credit association (ASCA).

The informal sector has been growing due to the high unemployment levels in the country. Companies have been closing down and retrenching employees due to the harsh economic climate in the country. The survey carried out by (ZIMSTATs) in 2004 revealed that the employed population aged 15 years and above was estimated to be 5.1 million and of these 681 000 were considered to be in the informal sector. The same survey carried out in 2011 revealed that the employed population aged 15 years and above, was estimated to be 5, 4 million. Of these, 84% were considered to be in informal employment, 11% were in formal employment and 5% were in employment not classifiable.

A survey carried out by Finscope 2011 revealed that 31% of adults in Zimbabwe do not have a savings culture though the majority of people in the rural areas continue to save money outside the formal banking system due to limited banking products being offered (FINSCOPE, 2012). A follow up survey on the Finscope consumer survey of 2011 which was carried out in 2014 revealed that 7% Zimbabwean adults rely on informal mechanisms such as mukando or round, this entailed borrowing from friends and family, though it excluded any formal credit products.

Not only individuals are relying on 'round-table' money saving clubs but also small to medium enterprises (SMEs). A survey carried out by Finscope in 2012 also revealed that MSMEs have also turned to these round tables for solace as borrowing from the formal sector has proven to be challenging. According to the survey, 72% of MSME owners save. Of this 72%, 65% keep their savings at home, and 31% save with a savings club club (FINSCOPE, 2013). At least 17% save with a commercial bank, while 23% buy something and sell it later for profit. The main reason for savings relate to managing and growing the business. A similar survey carried out in 2014 revealed that 7% of the adult population relied on informal mechanisms such as Mukando or Round (FINSCOPE, 2014).

This alone is a reflection of what important role these informal saving groups haven taken in the Zimbabwean context, with particular mention to the informal sector where unregistered operators are housed. Research has shown that the informal sector is playing a significant role in human capital development as well as social capital development (Beck, 2012). However, these informal savings groups have their life cut shot as they are either run for one cycle or for a period not exceeding three cycles. Some of the benefits that are expected to be derived from these informal saving groups do not reach the fruition stage due to various reasons thereby affecting the participants. The study used a survey approach for the people in Mufakose, Harare to assess the sustainability of the informal saving groups as a source of finance of the informal sector. The paper first presents the background of the study in the introduction, which contextualizes the problem, followed by the statement of the problem, the main objectives, specific-objectives, literature review, methodology, and the research findings and lastly the conclusion and recommendations.

STATEMENT OF THE PROBLEM

In a time when the economy is facing challenges in the banking sector as well as employment in the formal sector, a number of individuals from the marginalised groups of society have come up with their own survival schemes as this is common amongst human beings. Despite the economic challenges facing Zimbabwe, people are developing themselves, starting up businesses and expanding on the existing businesses, and even in their homesteads through finance sourced from the informal saving groups. It is against this background that the study intends to research on the floatation of 'round tables' money saving clubs that have found their ways into various communities in Zimbabwe and assess their sustainability.

RESEARCH OBJECTIVES

1. To investigate the drive behind the floatation of round tables.
2. To assess the impact of round tables to the operations of the community and the informal sector.
3. To assess the sustainability of round table money saving groups as a source of finance for the informal sector

LITERATURE REVIEW

THE ROTATING SAVINGS AND CREDIT ASSOCIATION (ROSCA)

ROSCAs might have originated from cooperative work groups among farmers; petty traders, artisans, and factory workers, individuals who are risk averse, and whose saving capacity is usually modest (Ardener, 2014). They can be created by wealthy people as an expression of solidarity with their less fortunate kinfolks, neighbours and associates, amongst others (Ardener, 2014). In the United Kingdom, ROSCAs featured during the earliest movement of Asians settling in Oxford used their rotating *kameti* and *kuri* clubs to acquire down-payments for their properties (Srinivasan 1995). They also existed when the Eritreans also had their rotating of *iqubs* (Almedon, 1995) and the Caribbean people had their traditional clubs, known as *partners* in Oxford which helped them in acquiring properties (Besson, 1995).

In Africa, ROSCAs were first positioned by Crowther's (1843), among the Egba (a Yoruba, Nigerian people), who applied the term *esu* to refer to contributions (Ardener, 2014). Herskovitz (1947) also concurs with Crowther by establishing the use of the word *susu* in Trinidad inferred it had been taken there by Yoruba slaves. ROSCAs in Cameroon originated through a group of friends from up-country who usually met during the weekends to socialize through rotating *njangi* (Ardener, 2014).

Various researches have established that ROSCAs play an important role in various communities, especially in developing countries. They have proven prolonged existence, fighting with inflation and providing personal needs (Chigara & Mutesasira, 2001). They offer social benefits in a domain of growing anonymity and personal seclusion while providing stepping stones for the disadvantaged and the ambitious. In addition, ROSCAs alleviate budgets, while offering company in socially intimidating environments. However, despite their benefits, ROSCAs also have their own shortcomings which include members defaulting from paying their contributions regularly and members stopping to contribute when their turn of receiving the pot has passed (Hirschland, 2005). These limitations are contributing to the dwindling of the life of the ROSCAs when such are actually the source of income for members who operate in the informal sector. However, social sanctions are applied to deter such members from participating in further ROSCAs (Beck, 2012).

ACCUMULATIVE SAVINGS AND CREDIT ASSOCIATION (ASCA)

ASCAs are others foams of informal saving groups which are not similar to rotating groups, the money do not rotate; each member receives a share of any added value, according to their investment (Ardener, 2014). ASCA, is a term that was first introduced in reference to savings groups in which cash is not instantly withdrawn, but are left to mature for loan making (Bouman, 1995). In Africa, ASCAs can be traced back to the year 1993 where members of CARE's Matu Masu Dubara (Women on the Move) programme in rural Niger added their own improvements to the already standing and commonly used ROSCA model. This was done to advance the supposed Village Savings and Loan Associations (VSLA), which turned out to be the primary and most prominent ASCA. They then designed time bound links for rural women and soon extended the programme by training village agents that were hired by interested groups of women to train them the ASCA system. This promoted the fast spread of the ASCA system and other big Non-governmental organisations (NGOs) such as the Catholic Relief Services; Oxfam/Freedom from Hunger, Plan, and World Vision soon adopted the system (Allen & Panetta, 2010).

ASCAs act as micro finance for the participants as they are independent from external financial sources or legislations governing them thus they can operate with very low transaction costs compared to other financial institutions. Group members agree on their individual investments and loan conditions, therefore individuals, no matter how poor can participate (Beck, 2012). In other countries, NGOs make use of ASCAs such as Mozambique, as a social tool to develop the marginalised sector of the society. Organisations such as World Vision promote groups through operations of a social fund, where members contribute monthly and can withdraw in case of emergencies, sort of an insurance system. Funds not exhausted at the end of the cycle, can be channelled towards a charitable cause such as buying school material for orphans (Wilson et al., 2010).

In comparison with savings groups in the formal sector, ASCAs also have their own shortfalls. They are unreliable source of finance compared to formal microfinance institutions because members may not meet their designated investments or to repay their withdrawn credits to the group (Johnson et al., 2002). Security of the funds contributed may also be limited as cash might be stored in one member's house which can be prone to theft (Johnson & Sharma, 2007). Johnson and Sharma (2007) attest that there might be abuse of power by traditional leaders to dominate their associations and enrich themselves. Associations whose membership includes relatives and friends may be challenging to pursue sanctions in case of default, or to turn down a loan thereby creating conflict of interest between abuses of power. In addition, there is potential disturbance of the smooth operations due to unity thus rationalized accounting methods which should be introduced. These help to institutionalize doubt while the original trust among group members can be preserved (Johnson & Sharma, 2007).

SUSTAINABILITY OF ROUND TABLES

It is assumed that informal groups rely on social sanctions to solve their enforcement problems. However, in contrast institutional features of these informal groups serve in some part to prevent members from defaulting on their responsibilities. Reliable individuals tend to belong to ROSCAs where the order of the ranks is randomly drawn at each cycle and where members can request to change their rank if required. Also, fixed ROSCAs are more sustainable compared to random ROSCAs (Ardener, 2014).

GENDER AND ROUND TABLES

Research carried out has reflected that women are often dominant in ROSCAs. They play significant roles in the ROSCAs such as being chosen as treasurers for their prudence and reliability, less likely as presidents (Ardener, 2014). The interest shown by women demonstrates the belief that the association should be of joint benefit; since each participant has contributed to each lump sum, hence everyone will be interested seeing that it is wisely and suitably spent (Ardener & Burman , 1995).

SMALL TO MEDIUM ENTERPRISES (SMES) AND ROUND TABLES

SMEs have limited internal cash flow to finance their day to day business hence they require credit from banks that inturn demand collateral security (Paulet et al., 2014). In Ghana, SMEs can access finance from both the formal and informal markets (Domeher et al., 2017). The formal market includes the banks, microfinance institutions and savings and loans institutions whilst the informal market includes but not limited to friends, families, moneylenders and ROSCAs and ASCAs (Domeher et al., 2017). In the UK, entrepreneurs place value on savings and informal means of funding though most SMEs depended mostly on financial institutions for assistance financialy and lessly on their immediate families whilst in China it is the opposite (Hussairi et al., 2006).

In a research carried in Chinhoyi on ROSCAs and SMEs, findings revealed that SMEs considered the ROSCAs as a vital that tool for funding sustainable Micro Enterprises. This is due to the fact that ROSCAs assists in smoothening business financial cycles as well as help in cash flow management. In addition, ROSCAs also enhance micro enterprise sustainability through pooling financial resources to one member per time period thereby facilitating recapitalization of enterprise (Mbizi & Gwangava, 2013).

ROSCAS AND ASCAS IN THE CONTEXT OF ZIMBABWE

Gumbo (1994) locates the existence of ROSCAs in Zimbabwe in periods backdated to over two decades and beyond where they were attributed by the lack of formalised security systems for the low income groups, particularly women of the Zimbabwean economy (Chigara & Mutesasira, 2001). Chigara and Mutesasira (2001) established the existence of ROSCAs and ASCAs in Zimbabwe in the early years of the 21st century.

Allen and Hobane (2004) carried out a research in Midlands on the impact of Income Generating Activities (IGA) on the livelihoods of people, with particular mention to Kupfuma Ishungu (KI). The study availed that IGAs had a positive influence on people's lives. A majority (86.76%) of the respondents in the study were women compared to men, of these 75% were married. In addition, the majority of the respondents had an age range between 20years -50 years. It also revealed that housing quality had improved due to IGAs and the number of income generating activities per household increased by 45%. Household labour allocated to IGAs increased by 48% and loan funds tended to be used both for consumption and productive activities, with a bias towards production. All this shows a positive impact on the informal saving groups on the livelihoods of people as well as their income generating activities.

In a similar research carried out in Gutu on ROSCAs, findings revealed a positive impact on the livelihood of people who participated in the groups (Mushuku & Mayisa, 2014). Examples of the impact include ability to send children to school, entrepreneurial benefits, assets acquisition, insurance against emergencies, etc. Such enables people to manage attainment of human capital through educating children, physical capital by accumulating assets and financial capital as a resulting of setting up businesses. These findings concur with the findings of the research carried out by Chigara and Mutesarira (2001). However, the ROSCAs are also facing challenges such as members defaulting, lack and inconsistent payment, mismanagement of funds and fraud and also lack of finance to contribute regularly were encountered by ROSCA members. Such problems threaten the life of the ROSCAs.

METHODOLOGY

The researcher used the survey method. This is a widely accepted method that engages fact-finding. It involves adequate and truthful analysis of findings (Cooper and Schindler, 2003). The research was carried out by gathering data from primary sources in order to identify gaps and achieve the research objectives. A survey questionnaire was developed based on the research objectives. The questionnaire was divided into four sections: profile of the individual, operations of the informal group, benefits and challenges associated with being a member. The survey questionnaire was pre-tested using 10 participants of the informal saving groups. A total of 150 questionnaires were circulated through networks of co-workers, relatives, church members and friends and colleagues of acquaintances. A total of 102 of the distributed questionnaires were returned and of these 94 were accepted as complete for the purpose of data analysis. Focus group discussions (FGD) were also conducted to gather information on the operation of the informal saving groups. With relevant collected data, examination of facts was then conducted based on the research objectives and conclusions drawn.

FINDINGS

The results obtained from the survey through questionnaires are presented in this section. Table 1 show that the majority (62%) of the saving clubs are ROSCAS whilst the others are in the foam of ASCAs.

TABLE 1: NATURE OF INFORMAL SAVING GROUP

Distributed Questionnaires	Returned Questionnaires	Spoiled Questionnaires	ROSCAs	ASCAs
150	102	8	58	36

Source: Raw Data

THE OPERATION OF ROUND TABLES

The study revealed that the majority (62%) of the saving clubs are ROSCAS whilst the others are in the foam of ASCAs where the ratio of membership of women to men is greater (78%:22%) which concurs to Ardener's survey that when it comes to gender, women are the ones who mainly participated in these saving groups. Legibility of membership into these groups was based from one being a co-worker, relative, family member, acquaintance, church member business partner or a person who has an association with an existing member.

The research showed that a majority of the ROSCAs met only once at the beginning of the cycle to decide on issues such as amount of cash to be contributed, to identify and agree to the members of the group and the period with the money would be due as long as the length of the cycle (which was usually dependant on the group size). The ASCAs usually met once a week or twice a month to discuss issues pertaining to who has been given a loan and who has delayed payment and how much money the group had to date. For some of the ASCAs at the end of each cycle, a gathering will be held where members would contribute and the person chosen would host them.

DRIVE BEHIND THE FLOATATION OF ROUND TABLES

The research revealed that the factors behind the formation of these saving groups vary from one group to the other. The majority of the ROSCAs (64% 0f 62%) were created mainly for the purposes of savings, whilst 22% were created for the purpose of acquiring assets, 4% for insurance purposes, 8% for business purposes whilst 2% for other purposes. Of the ASCAs (48% of the respondents), the majority were created for income generation (38%), 32% for savings, 15% for business purposes, 10% for acquiring assets, 3% for insurance purposes, and the remaining balance(2%) for other purposes.

The above are revealed in Table 2 below:

TABLE 2: REASONS FOR CREATING INFORMAL SAVING GROUPS

Reason	**ROSCA (%)**	**ASCA (%)**
Savings	64	32
Investments	0	38
Acquisition of Assets	22	10
Business	8	15
Insurance	4	3
Other	2	2
Total (%)	**100**	**100**

Source: Raw Data

The findings also reveal that there are no costs attached to the operations of these groups but the costs that may cripple in are in the foam of bad debts of members who would have defaulting paying their dues. This has been common in the case of round tables that are operated by members who are employed in the informal sector. The informal sector members are attributing it to the state of the economy where business is not doing well and where people are also defaulting to pay the amounts due to them as well.

THE IMPACT OF ROUND TABLES

The research also revealed that the majority (58%) of the participants of these informal groups were employed in the informal sector and they engaged in business such as cross boarder trading, transport operators, selling vegetables (*musika*), hair dressers, operating tuckshops, etc. 26% were civil servants, 10% were employed in the private sector whilst the balance (6%) was unemployed at all. Of those operating in the informal sector, they were split as follows:

1. Cross-border traders (16%)
2. Operating *musika* (6%)
3. Hair dressers (4%)
4. Operating tuckshops (9%)
5. Flea markets (13%)
6. Transport (3.5%)
7. Other (6.5%)

The majority of the participants aired that they were benefiting from the informal saving groups, especially those that are in the informal sectors. Some of the reasons are that they get to have financial assistance in terms of emergencies and their living standards have actually improved due to the acquisition of assets and starting their own business as well as expanding their own businesses as well.

SUSTAINABILITY OF ROUND TABLE MONEY SAVING GROUPS

The study revealed that a majority of the participants had Ordinary level (31%), followed by diploma (28%), then degree (24%) and postgraduate (12%), and followed lastly by Advanced level (5%). This had a bearing on the operations of the group and its going concern. Only 44% kept records for their operations whilst 56% did not maintain any records. For those who kept records, they are maintained either by the group leader or secretary of whom the two play similar roles but just a difference of terminology.

The research revealed that 28 % of the groups were recurring whilst 72% were once off groups that did not recur. The ones that recurred were found in those groups that were formed by civil servants and it was definite that their salaries would be received month end. The reasons for the once off groups were cited as the following:

1. Different membership (12%).
2. Lack of trust amongst members (26%).
3. Members defaulting (32%).
4. Achievement of set objectives of foaming the group (2%).

The informal saving groups are facing problems in terms of some members defaulting to contribute their designated portion and repayment of loans. This in turn is having a negative impact on the operations of the cycles as well as the income for the groups. Since there are no formal procedures, recovering the money from the members who would have defaulted is proving to be difficult hence lack of trust amongst the members is declining.

CONCLUSIONS AND RECOMMENDATIONS

The study revealed that there is potential for the informal saving groups to contribute to economic development as various individuals and households are benefiting from such schemes. Informal traders are benefiting hugely as since their businesses are not registered hence they are not in a position to borrow from the formal sector. The informal saving groups are providing capital for new business ventures as well as expansion of existing ones which is improving on the operations of various traders. However, the challenges of some members defaulting has featured in many groups hence if not monitored it can lead to the death of these groups in the societies. The researcher is proposing that an Association be created by the City Council of Harare to monitor the operations of these groups so that some members do not benefit unjustly. The researcher is also proposing that Banks also partner with these groups (ASCAs) so that instead of the money lying idle when no one is borrowing, it be invested in the banks were it earns interest. Formalisation of these groups may actually reduce the risks of people defaulting in paying their dues. The researcher is also proposing further research to be carried out on informal savings groups as a tool for women empowerment as this research has revealed that a majority of the participants are women. In addition, further research may also be carried out on the role that NGOs can play in developing these informal saving groups.

REFERENCES

1. Kiggundu, M.N., 2002. *Managing Globalization in Developing Countries and Transition Economies: Building Capacities for a Changing World*. United States: Greenwood Publishing Group.
2. Muranda, Z., 2006. Financial distress and corporate governance in Zimbabwean banks. *Emeraldinsight: Corporate Governance*, pp.643-54.
3. FINSCOPE, 2012. *FinScope Consumer Survey Zimbabwe 2011*. FINMARK Trust and ZimStat.
4. FINSCOPE, 2013. *FinScope MSME Survey Zimbabwe 2012*. FINMARJ TRUST, The Ministry of Small and Medium Enterprises and Cooperative Development, and the World Bank.
5. FINSCOPE, 2014. *FinScope Consumer Survey Zimbabwe 2014*. FinMark Trust.
6. Mhlanga, F., 2015. *Zimbabwe Independent*. [Online] Available at: http://www.theindependent.co.zw/2015/03/13/bank-closures-1-000-workers-lose-jobs/ [Accessed 19 March 2016].
7. Ardener, S. & Burman, S., 1995. *Money-go-rounds: The importance of ROSCAs for women.* Oxford: Berg.
8. Ardener, S., 2014. Credit unions and money clubs (ROSCAs). *ANTHROPOLOGY TODAY*, 30(4), pp.3-6.
9. Fyfe, C., 1962. *A history of Sierra Leone*. Oxford UP.
10. Allen, H. & Panetta, D., 2010. *Savings Groups – What Are They?* Washington: The SEEP Network.
11. Dean, J., Schaffner, J. & Smith, S., 2005. *Attacking poverty in the developing world – Christian Practitioners and Academics in Collaboration*. Waynesboro: Authentic Books.
12. Johnson, S., Mule, N., Hickson, R. & Mwangi, W., 2002. The Managed ASCA Model –Innovation in Kenya's Microfinance Industry. *Small Enterprise Development*, 13 (2), pp.56–66.
13. Wilson, K., Harper, M. & Griffith, M., 2010. *Financial Promise for the Poor – How the Poor Build Microsavings*. Sterling: Kumarian Press.
14. Hirschland, M., 2005. *Savings Services for the Poor*. Bloomfield: Kumarian Press.
15. Johnson, S. & Sharma, N., 2007. Institutionalizing suspicion': The management and governance; challenge in user-owned microfinance groups. In Dichter, T. & Harper, *What's Wrong with Microfinance?* Rugby,Warwickshire: Intermediate Technology Publications. pp.61–72.
16. Beck, M., 2012. *Impact of Accumulating Savings and Credit Associations on Child Well-Being*. Marburg: World Vision.
17. Collins, D., Morduch, J., Rutherford, S. & Ruthven, O., 2009. *Portfolios of the Poor – How the World's Poor Live on $2 a Day*. Princeton: Princeton University Press.
18. Almedon, A., 1995. A note on ROSCAs among Ethiopian women in Addis Ababa and Eritrean women in Oxford. In Ardener, S. & Burman *Money-go-rounds: The importance of ROSCAs for women*. Oxford: Berg. pp.71-76.
19. Besson, J., 1995. Women's use of ROSCAs in the Caribbean: Reassessing the literature. In Ardener, S. & Burman, S. *Money-go-rounds: The importance of ROSCAs for women*. Oxford: Berg. pp.263-88.
20. Allen, H. & Hobane, P., 2004. *Impact Evaluation of Kupfuma Ishungu*. Harare and Arusha: CARE.
21. Mushuku, A. & Mayisa, J., 2014. Unlocking the Door from Poverty through Rotating Savings and Credit Associations: A Study of Group Based Savings in Ward 14 of Gutu District, Zimbabwe. *Bangladesh e-Journal of Sociology*, 11(2), pp.118-31.
22. Mbizi, R. & Gwangava, E., 2013. ROTATING SAVINGS AND CREDIT ASSOCIATIONS: AN ALTERNATIVE FUNDING FOR SUSTAINABLE MICRO ENTERPRISE- CASE OF CHINHOYI, ZIMBABWE. *Journal of Sustainable Development in Africa,* 15(7), pp.181-93.
23. Bouman, F., 1995. Rotating and Accumulating Savings and Credit Associations – a Development Perspective. *World Development*, 23,(3), pp.371–84.
24. Chigara, P. & Mutesasira, L., 2001. *Use of Impact of Savings Services Among Poor People in Zimbabwe: What it Means for Microfinance Institutions*. MicroSave.
25. Paulet, E., Parnaudeau, M. & Abdessemed, T., 2014. The SME struggle for financing: a clampdown in European banks crisis. *Journal of Business Strategy*, 35(2), pp.36-45.
26. Domeher, D., Musah, G. & Poku, K., 2017. Micro determinants of the extent of credit rationing amongst SMEs in Ghana. *International Journal of Social Economics*, 44(12), pp.1796-817.
27. Hussairi, J., Millman, C. & Matlay, H., 2006. SME Financing in the UK and China: A comparative perspective. *Journal of Small Business and Enterprise Development*, 13(4), pp.584-99.

EFFICIENCY INSURANCE COMPANIES IN INDONESIA, MALAYSIA AND SINGAPORE

PUTU ATIM PURWANINGRAT
RESEARCH SCHOLAR
FACULTY OF ECONOMIC & BUSINESS
UNIVERSITY OF UDAYANA
BALI

ABSTRACT

The insurance sector as part of the financial services sector has a strategic role in the establishment of a country's economic stability through risk management aspects. Efficiency in the insurance industry is a benchmark in assessing the performance of insurance companies. This study aims to determine how the efficiency of insurance companies in Indonesia, Malaysia, and Singapore during period 2013-2015 based on the concept and all empirical studies. Analysis technique used to explain this research is Data Envelopment Analysis (DEA) by using claim and premium as output indicators. Operating expenses, commission fees and share capital as input indicators. The population in this study is the insurance companies listed on Stock Exchange in Indonesia, Malaysia, and Singapore. The sample measurement technique used in this research is census technique with total sample of 20 companies. The results showed that the level of technical efficiency of insurance companies in Indonesia, Malaysia and Singapore using Data Envelopment Analysis (DEA) of Constant Returns to Scale (CRS) model is 4 companies from 20 sample companies, while Variable Returns to Scale (VRS) model is 8 companies from 20 sample companies. The scale efficiency of existing insurance companies in Indonesia, Malaysia and Singapore in 2013, 2014 and 2015 respectively are 12, 12 and 10 companies. The results of data analysis as a whole based on anova tests show that there are efficiency differences in insurance companies in Indonesia, Malaysia and Singapore.

KEYWORDS
technical efficiency, scale efficiency, data envelopment analysis.

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INTRODUCTION

The Commission on Insurance Terminology of the American Risk and Insurance Association defines insurance as the collection of unintended losses by transferring the risk of loss to the insurance company, in which the company is willing to provide insurance of financial loss to the insured party through the payment of a sum of money or fulfil certain services related to the recognized risk of loss.

TABLE 1: REAL GROSS DOMESTIC PRODUCT (GDP) GROWTH OF ASEAN COUNTRIES-6 (% per year)

Country	2010	2011	2012	2013	2014	2015	Average of 2011-2015
Indonesia	6.1	6.5	6.2	5.8	5.0	4.8	7.40
Malaysia	7.4	5.1	5.6	4.7	6.0	5.0	7.20
Filipina	7.6	3.9	6.8	7.1	6.2	6.1	7.90
Singapore	2.8	5.2	4.6	5.9	4.1	1.3	5.56
Thailand	7.5	0.1	6.5	2.9	0.9	2.9	4.48
Average	6.3	4.2	5.9	5.3	4.4	4.0	6.53

Source: The Organisation for Economic Co-operation and Development (OECD), 2016

Table 1 shows that in 2010 the growth of ASEAN's five major economies, namely Indonesia, Malaysia, Philippines, Singapore and Thailand rebounded at 6.3%. According to the OECD, during 2011-2015 the ASEAN economic growth expanded an average of 6.53 %, slightly above the 2008 pre-crisis growth rate of 6.1%.

Global Insurance Outlook (2015) revealed that Indonesia is included in the emerging category, Malaysia in developing category, while Singapore is involved in the mature category. The three countries do have different developments in the insurance sector, but the country which has a good development in the insurance sector that is shown by the performance of a good company is not necessarily have better efficiency. This study will analyse insurance companies listed on the stock exchanges in Indonesia, Malaysia and Singapore in terms of technical and scale efficiency.

TABLE 2: GROSS PREMIUMS, GDP, POPULATION, PENETRATION AND INSURANCE DENSITY IN INDONESIA, MALAYSIA AND SINGAPORE

No	Country	Year	Gross Premiums	GDP	Population	Penetration	Insurance Density
1	Indonesia	2013	193.060.000	9.084.000.000	248,80	2,13%	775.964,63
		2014	247.290.000	10.542.000.000	252,00	2,35%	981.309,52
		2015	295.560.000	11.540.000.000	255,00	2,56%	1.159.058,82
2	Malaysia	2013	46.473	1.018.821	30,20	4,56%	1.538,84
		2014	49.964	1.106.580	30,60	4,52%	1.632,81
		2015	52.445	1.156.881	31,00	4,53%	1.691,77
3	Singapore	2013	19.626	373.471	5,39	5,26%	3.641,21
		2014	22.056	386.812	5,46	5,70%	4.039,67
		2015	25.261	394.288	5,53	6,38%	4.550,00

Source: Data Analysed, 2016

Indonesia's insurance industry must be recognized encountering variety of problems and challenges which are complicated, both in national and global coverage. The development of statistics confirm that the insurance industry is challenging a critical stage. Regulation and market situations are still relatively unfavourable amid the threat of distrust of society to industry players. Indonesia's position in the "world of global insurance" is quite worrying (Rahim, 2013). In terms of premiums, Indonesia ranked 37th in the world for life insurance and 44th for the value of general insurance premiums from 88 countries, which are analysed in the World Insurance Outlook. The rankings, which are based on the rate of insurance penetration (percentage of premiums to GDP) and the insurance density (per capita premiums) are getting worse, which are 74th and 78th position for the insurance industry as a whole.

Efficiency is the most important topic in many sectors. Efficiency of a company means accomplishing the best use of available resources. Efficient companies establish better performance with input utilization (Janjua and Akmal, 2015). Technical efficiency is one of the components of overall economic efficiency. In order to achieve economic efficiency, a company must be technically efficient. To achieve maximum profitability, a company must be able to produce an optimum level of output with a certain amount of input (technical efficiency) and produce output with the right combination at a specific price level (allocative efficiency) (Kumbhakar, 2000). For the entire Indonesian insurance industry, the asset growth rate reaches 36% per year, with total assets equaling US $ 33.9 billion or comparable to Rp 319 Trillion (exchange rate of US $ 1 = Rp 9,404). This high growth figure demonstrates the potential of domestic insurance market, which is still very big. The development of the insurance industry is believed to continue to expand positively with a population of 240 million, which is the largest population in Southeast Asia.

Efficiency is a measure of how well an organization manages inputs into outputs or the amount of output achieved from one input used. According to Huri and Indah (2004), the companies can be said to be efficient when applying fewer input units compared to the number of input units used by other companies by producing the same output units and using the same number of inputs but can create larger amount of outputs. Inefficient companies are generally initiated by three conditions: the presence of prolonged bureaucratic chain, misallocation in the use of existing resources and the absence of economics of scale (Permono and Darmawan, 2000).

As stated by Sexton, et al. (1986) the frontier approach in measuring efficiency is divided into two types, which are parametric and non-parametric approaches. The parametric frontier approach can be determined by parametric statistical tests such as using the Stochastic Frontier Approach (SFA) and Distribution Free Approach (DFA) methods. The non-parametric frontier approach is calculated by non-parametric statistic tests using Data Envelopment Analysis (DEA) method. Based on all the methods characterised above, there are two most commonly used methods of measuring efficiency in the insurance industry, SFA and DEA. The SFA also known as the Frontier Econometric Approach specifies a functional form of cost, profit or production relationship with input, output and environmental factors and tolerates random error (Berger and David, 1997). While DEA is a non-parametric analysis which is the development of linear mathematical programming. Even though adopting the same input and output variables, there is a difference between DEA and SFA because the SFA approach includes random error on the frontier, while the DEA approach does not include it. The consequence of this would lead to the DEA approach is not being able to take into account macro variable factors such as the difference in the size of DMU (Decision Making Unit) asset or the rules that affect the efficient level of DMU.

Occasionally, the distinction in outcomes between the SFA and DEA methods lead to different results, but some experts claim that the results of the study either by practicing SFA or DEA methods are relatively consistent. The favour of DEA is able to identify the input or output used by the bank as reference that can help to find the dispute and solution from the source of the inefficiency of the bank. Hadad (2003) concluded that DEA can measure the overall efficiency of DMU.

Several prior empirical studies have examined the efficiency of insurance firms using different analytical approaches, for example utilising econometrics, stochastic frontiers, thick frontier and Data Envelopment Analysis (DEA) as performed by Nektarios and Carlos (2010), Zhi and Jin (2011), Lin, et al. (2011), Al Amri and Said (2012), Sun and Chen (2012), Ansah (2012), Chakraborty (2013), Rahman (2013), Kweh, et al. (2014), Dalkilici and Aysen (2014), Janjua and Akmal (2015) and Malhotra, et al. (2017). The empirical study is a gap in this study to conduct research on the efficiency of insurance companies in Indonesia and analyse it with Malaysia and Singapore.

This study will scrutinise the performance of insurance companies in Indonesia, Malaysia and Singapore in terms of efficiency that refers to research organised by Mandal (2014) who has been researching the efficiency of non-life insurance companies in India during the recession using Data Envelopment Analysis (DEA). Meanwhile, this study applies cases in Indonesia, Malaysia and Singapore from different sides (primal) with some developments that match the characteristics of insurance companies in each country. This study also evaluates the insurance companies listed on the Indonesia, Malaysia and Singapore Stock Exchange.

REVIEW OF LITERATURE

CONCEPT OF INSURANCE

Insurance business organise many benefits for the community, the development of the country and the company itself. The insurance benefits according to Darmawi (2001:4) are: 1) insurance to protect investment risk, 2) insurance as a source of investment funds, 3) insurance to complete credit terms, 4) insurance can reduce concerns, 5) insurance reduces capital costs, 6) insurance guarantees the stability of the company, 7) insurance can flatten profits, 8) insurance can provide professional services; 8) insurance encourages prevention of loss and 9) insurance helps health care. The basic principle of insurance as stated by Danarti (2008:18) consists of six principles, namely: insurable interest, utmost good faith, proximate cause, indemnity, suborgation and contribution.

COMPANY PERFORMANCE

Company performance demonstrate the company's ability to generate profits or return on the resources invested in it. Performance is one of the major business operations of all companies. Performance includes a variety of definition of efficiency and effectiveness. Return on capital investment is an important indicator of the company's long-term strength (Subramanyam and Wild, 2010). Financial performance is an information of the company's financial condition at certain position concerning the aspect of funds collection and distribution which is usually assessed by capital adequacy indicator, liquidity and profitability of the company (Jumingan, 2011). The financial performance of insurance companies is measured using risk based capital (RBC) ratio.

CONCEPT OF EFFICIENCY ECASUREECNT

Measurement of efficiency can help an entity to assess and evaluate its performance and competitiveness in an industry. How big the entity can overcome challenges in its industry and be able to compete and survive and even develop its entities in the future. Measurement of efficiency can be done by considering the competitiveness of the output and input or expense and return (Shafique, et al., 2015).

DATA ENVELOPMENT ANALYSIS

Data Envelopment Analysis (DEA) is a mathematical program optimization method that calculates the technical efficiency of a Decision Making Unit (DMU) and compares relatively to other DMUs. DMU is a terminology accepted alongside units to be measured for efficiency. DEA analysis techniques are designed specifically to evaluate the relative efficiency of DMU in many input and output conditions. The relative efficiency of DMU is the efficiency of DMU associated to other DMUs in sample utilizing the same type of input and output. DEA formulates DMU as a fractional linear program to find a solution, if the model is transformed into a linear program with weighted value of input and output (Sutawijaya and Etty, 2009).

A DMU is revealed to be relatively efficient if its dual value is equal to 1 (100 percent efficiency value), otherwise if its dual value is less than 1 then the DMU is considered inefficient or disorganised (Huri and Indah 2004). In this circumstance, the study concerning DEA will analyse the relative efficiency of DMU in one group of observation to another DMUs with the best performance in the observation group.

CONSTANT RETURN TO SCALE (CRS) MODEL

The model of constant return to scale was developed by Charnes, Cooper and Rhodes (CCR Model) in 1978. This model assumes that the ratio between input and output additions is identical. In other words, if there is an additional input of x times, then the output will increase by x times as well. Another assumption used in this model is that every company or Decision Making Unit (DMU) organise on an optimum scale. The formula of constant return to scale can be written as follows.

Max Ɵ (Efficiency of DMU with CRS Model)

$$\sum_{j}^{n} = 1xij\,'ij \geq \theta i0 \qquad (1)$$
$$\sum_{j}^{n} = 1yrj\,'j \geq yi0$$
$$\sum_{j}^{n} = 1\,'j \geq 0$$

Notation:

Ɵ = technical efficiency (CRS)
n = number of DMU
m = number of input
s = number of output
x_{ij} = number of input of the i type of the j DMU
y_{rj} = number of output of the r type of the j DMU
'j = weight of j DMU for the calculated DMU

DMU of less than 1 means inefficiency, while DMU whose efficiency value equals to 1 implies that the DMU is efficient. Optimization of CCR modeling can be oriented on input and output. The input-oriented of CCR intends to minimize the input to obtain a certain level of output. The results of the CCR-Input modeling will contribute recommendations for inefficient DMUs, how much input should be reduced in order to achieve efficient stages of the output, while the output-oriented CRS modeling attempts to maximize output with certain level of input. The results of CCR-Output modeling will provide judgements for inefficient DMUs, how much output needs to be improved with existing inputs to reach efficient phases.

VARIABEL RETURN TO SCALE (VRS) MODEL

This model was developed by Banker, Charnes and Cooper (BCC model) in 1984 and is an improvement of the CCR model. This model believes that the company is not or not yet organised on an optimum scale. The assumption of this model is that the ratio between input and output additions is not the same. Specifically, the addition of input x times will not cause the output to increase by x times, can be smaller or bigger than x times. Increased proportion can be Increasing Return to Scale (IRS) or it can also Decreasing Return to Scale (DRS). The results of this model adds convexity conditions to weight values, by including in the following boundary model.

$\sum_{j=1}^{n} xj = 1$ (2)

Furthermore, BCC model can be written with the following equation.

Max (Efisiensi DMU Model VRS)

$\sum_{j}^{n} = 1xij\,'ij \geq xi0$ (3)

$\sum_{j}^{n} = 1yrj\,'j \geq yi0$

$\sum_{j}^{n} = 1\,'j \geq 1$

$\sum_{j}^{n} = 1\,'j \geq 0$

Notation:

Θ = technical efficiency (VRS)
n = number of DMU
m = number of input
s = number of output
x_{ij} = number of i input of the j DMU
y_{rj} = number of r output of the j DMU
'j = weight of j DMU for the calculated DMU

The value of the efficiency is always less than or equal to 1. DMU whose efficiency value is less than 1 means inefficiency, while DMU whose value is equal to 1 indicates efficient. The optimization of BCC modeling can be oriented on input and output. Input-oriented BCC aims to minimize the input to obtain certain level of output. The results of the BCC-Input modeling will provide recommendations for inefficient DMUs, how many inputs should be reduced in order to achieve the efficient stage of output, while the output-oriented BCC modeling intends to maximize output. The results of the BCC-Output modeling will provide recommendations for inefficient DMUs, how much output needs to be improved with existing inputs to reach efficient phases.

This research applying comparative and descriptive approaches that conceptually cannot be defined but will be described, concerning how the efficiency of insurance companies in Indonesia, Malaysia and Singapore using Data Envelopment Analysis (DEA) method.

NEED/IMPORTANCE OF THE STUDY

This study contributes theoretical implications for the development of empirical studies. This research provides that Data Envelopment Analysis method is applicable to measure the efficiency of insurance companies, considering that DEA method can use some input and output indicators. The indicators can also have different measurement units. The results of this study lead to the development of prior research, especially the findings on efficiency comparisons between countries.

For the government, because the sector of insurance industry is very promising, lots of new companies are entering this industry sector, both loss and life insurance companies. For company's management, this study offers some basic managerial guidelines.

HYPOTHESIS

EFFICIENCY OF INSURANCE COMPANIES IN INDONESIA, MALAYSIA, AND SINGAPORE

Efficiency is a measure of how well an organization arranges input into output or the number of outputs generated from one input used. Abidin and Endri (2010) in Bernada, et al. (2016) explained that one of the most important aspects to a company's success is efficiency. According to Global Insurance Outlook (2015), insurance companies in Indonesia, Malaysia and Singapore have different developments and performances. Singapore is already in the mature category, Malaysia in the category of developing, while Indonesia is included in the category of emerging. Generally, companies that have good developments and performances do not necessarily have good level of efficiency as well. Research conducted by Mahmoud (2008) denied this, because the results reveal that there is a relationship between efficiency and performance of insurance companies in Greece. Based on the results of these empirical studies, the research hypothesis can be developed as follows.

H_1: There is difference between the efficiency of insurance companies in Indonesia, Malaysia and Singapore.

RESEARCH METHODOLOGY

This research is performed to know the efficiency of insurance companies listed on Indonesia, Malaysia and Singapore Stock Exchange during period of 2013-2015 by applying Data Envelopment Analysis. This study implementing comparative and descriptive approaches for exploration and clarification of phenomenon or social reality through describing variety of variables concerning the problems and units under study.

TABLE 3: INSURANCE COMPANIES REGISTERED ON MALAYSIA STOCK EXCHANGE

No	Stock Code	Name of Issuer	Date of IPO
1	1058	Manulife Insurance Berhad	1981
2	6009	Pacific & Orient Insurance Co. Berhad	1995
3	5230	Tune Insurance Malaysia Berhad	2013
4	6459	MNRB RetakafulBerhad	09/02/1973

Source: www.bursamalaysia.com, 2017

TABLE 4: INSURANCE COMPANIES REGISTERED ON INDONESIA STOCK EXCHANGE

No	Stock Code	Name of Issuer	Date of IPO
1	ABDA	Asuransi Bina Daya Arta Tbk	06/07/1989
2	AHAP	Asuransi Harta Aman Pratama Tbk	14/09/1990
3	AMAG	Asuransi Multi Artha GunaTbk	23/12/ 2005
4	ASBI	Asuransi Bintang Tbk	29/11/1989
5	ASDM	Asuransi Dayin Mitra Tbk	15/12/1989
6	ASJT	Asuransi Jaya Tania Tbk	23/12/2003
7	ASMI	Asuransi Mitra Maparya Tbk	16/01/2014
8	ASRM	Asuransi Ramayana Tbk	19/03/1990
9	LPGI	Lippo General Insurance Tbk	06/09/2005
10	MREI	Maskapai Reasuransi Indonesia Tbk	04/09/1989
11	PNIN	Paninvest Tbkd.h Panin Insurance Tbk	20/09/1983
12	VINS	Victorian Insurance Tbk	28/09/2015

Source: www.idx.co.id, 2017

TABLE 5: INSURANCE COMPANIES REGISTERED ON SINGAPORE STOCK EXCHANGE

No	Stock Code	Name of Issuer	Date of IPO
1	I805G	United Overseas Insurance Ltd	02/10/1978
2	I557L	Raffles Health Insurance PTE. Ltd. / Rafles Medical Group	11/04/1997
3	I527C	Prudential Assurance Co. Singapore (PTE) Ltd	25/05/2010
4	R900G	Singapore Reinsurance Corporation Ltd	26/10/1987

Source: www.sgx.com, 2017

The object of this study focused on the efficiency of insurance companies listed on the Indonesia, Malaysia and Singapore Stock Exchange. The financial statements of the company will provide information about the condition of the insurance company which is of course very important to know for the stakeholders who are the customers and investors relating to choose the right insurance companies to cover the risks and also to invest capital for the investors.

Based on the descriptions, the variables in this study are technical and scale efficiency. Companies that perform technical efficiency will maximize output by utilising input in a certain amount. Scale efficiency is associated with achieving the economies of scale of the unit in carrying out the operations.

The operational definition of a variable is an explanation given to each variable in order to specify that variable. This study will measure technical and scale efficiency using output orientation with CRS and VRS models during 2013-2015 observation period. Hadad, et al. (2003) suggested that the concepts used in defining input and output relationships in the financial activities of financial institution on parametric and non-parametric methods are approach of asset, production and intermediation. Berger and Humphrey (1992) recommended three approaches for determining the variables of output and input for estimating the efficiency of banks and financial institutions, namely approach of asset, cost and value added.

This research utilises three input indicators, which consist of operating cost, commission fee and equity capital. The adoption of these three variables is also consistent with previous related research. Operating cost is cost that is not directly related to the company's products, but affects to day-to-day operations of the company. Operating cost applying the unit of Indonesian Rupiah, Malaysian Ringgit and Singapore Dollar, which are taken from the income statement of each insurance company in the period of observation 2013-2015. Commission fee is fee charged by insurance companies in paying agency commissions based on existing policies. Commission fee implementing unit of Indonesian Rupiah, Malaysian Ringgit and Singapore Dollar, which are acquired from the income statement of each insurance company in the period of observation 2013-2015. Equity capital shows the amount of money that the investors deposit for the company's activities with the ownership of the company's shares. Equity capital operating unit of Indonesian Rupiah, Malaysian Ringgit and Singapore Dollar which are conducted from the statement of financial position of each insurance company in the period of observation 2013-2015.

Data analysis techniques used to solve the problems in this study are Data Envelopment Analysis (DEA) and Anova Test. DEA is a mathematical program optimization method that measures the technical efficiency of Decision Making Unit (DMU) and compares relatively to other DMUs. DMU is said to be relatively efficient if its dual value is equal to 1 (100 percent efficiency value), otherwise if its dual value is less than 1 then the DMU is considered inefficient or disorganised (Huri and Indah 2004).

Further analysis technique that will be used to compare the efficiency of existing insurance companies in Indonesia, Malaysia and Singapore is anova test. Anova test is commonly referred as One Way Analysis of Variance, which is a parametric statistical technique used to examine the differences between three or more groups of interval or ratio data derived from one independent variable (Winarsunu, 2006).

RESULTS AND DISCUSSIONS

RESULTS AND DISCUSSIONS OF TECHNICAL EFFICIENCY MEASUREMENT WITH DATA ENVELOPMENT ANALYSIS (DEA) APPROACH

Measurement of efficiency for insurance companies in Indonesia, Malaysia and Singapore is accomplished first before testing the hypotheses. This efficiency value is calculated using Data Envelopment Analysis (DEA) to compare several unit of economic activities utilising three input indicators and two output indicators. The unit of economic activities in this study are 20 insurance companies in Indonesia, Malaysia and Singapore with three years observation period. The assessment of the efficiency of this insurance company using operating cost, commission fee, and equity capital as input indicators, while claim and premium are used as output indicators.

The results of these measurements indicate that different levels of efficiency of each insurance company are the sample of the study. The maximum value is 1.00 which means that the insurance company is efficient. The results on efficiency adopting Constant Return to Scale (CRS) model found that from total of 20 samples, only four insurance companies have perfect efficiency as shown in Table 6.

TABLE 6: AVERAGE EFFICIENCY VALUE TEST RESULTS OF CRS

Stock Code	Name of Issuer	Year			Average Efficiency
		2013	2014	2015	
ABDA	Asuransi Bina Daya Arta Tbk	1	0.5500	0.5160	0.6887
AHAP	Asuransi Harta Aman Pratama Tbk	1	0.9290	0.8070	0.9120
AMAG	Asuransi Multi Artha Guna Tbk	0.9990	0	1	0.6663
ASBI	Asuransi Bintang Tbk	0.5110	0.8490	0.5030	0.6210
ASDM	Asuransi Dayin Mitra Tbk	1	0	1	0.6667
ASJT	Asuransi Jaya Tania Tbk	0.5110	0.3830	0.3610	0.4183
ASMI	Asuransi Mitra Maparya Tbk	1	0.5620	0.6950	0.7523
ASRM	Asuransi Ramayana Tbk	0.8350	0.5920	0.5420	0.6563
LPGI	Lippo General Insurance Tbk	1	1	1	1
MREI	Maskapai Reasuransi Indonesia Tbk	1	0.9000	0.9340	0.9447
PNIN	Paninvest Tbkd.h Panin Insurance Tbk	1	1	1	1
VINS	Victorian Insurance Tbk	0	0.3310	0.5240	0.2850
1058	Manulife Insurance Berhad	1	0.8510	0.9220	0.9243
6009	Pacific & Orient Insurance Co. Berhad	0.8920	1	1	0.9640
5230	Tune Insurance Malaysia Berhad	0.5300	0.4250	0.4610	0.4720
6459	MNRB RetakafulBerhad	0.9740	1	0.7790	0.9177
I805G	United Overseas Insurance Ltd	1	1	1	1
I557L	Raffles Health Insurance PTE. Ltd. / Rafles Medical Group	0	0	0	0.0000
I527C	Prudential Assurance Co. Singapore (PTE) Ltd	1	1	0.960	0.9867
R900G	Singapore Reinsurance Corporation Ltd	1	1	1	1

Source: Data Analysed, 2017

According to table 6, the insurance companies have perfect efficiency value are Asuransi Multi Artha Guna Tbk, Asuransi Dayin Mitra Tbk, Lippo General Insurance Tbk, Maskapai Reasuransi Indonesia Tbk, Paninvest Tbkd.h Panin Insurance Tbk, Manulife Insurance Berhad, United Overseas Insurance Ltd and Singapore Reinsurance Corporation Ltd. These insurance companies have used their resources properly in order to have good performance and are relatively appropriate for reference development of various other insurance companies. Other insurance companies that have value of technical efficiency lower than 1 should be able to apply their resources proficiently.

TABLE 7: AVERAGE EFFICIENCY VALUE TEST RESULTS OF VRS

Stock Code	Name of Issuer	Year			Average Efficiency
		2013	2014	2015	
ABDA	Asuransi Bina Daya Arta Tbk	1	0.8880	0.8350	0.9077
AHAP	Asuransi Harta Aman Pratama Tbk	1	0.9290	0.8080	0.9123
AMAG	Asuransi Multi Artha GunaTbk	1	1	1	1
ASBI	Asuransi Bintang Tbk	0.5110	0.8490	0.5030	0.6210
ASDM	Asuransi Dayin Mitra Tbk	1	1	1	1
ASJT	Asuransi Jaya Tania Tbk	0.5110	0.3830	0.3610	0.4183
ASMI	Asuransi Mitra Maparya Tbk	1	0.5620	0.7020	0.7547
ASRM	Asuransi Ramayana Tbk	0.8390	0.8000	0.7060	0.7817
LPGI	Lippo General Insurance Tbk	1	1	1	1
MREI	Maskapai Reasuransi Indonesia Tbk	1	1	1	1
PNIN	Paninvest Tbkd.h Panin Insurance Tbk	1	1	1	1
VINS	Victorian Insurance Tbk	0	0.3700	0.5330	0.3010
1058	Manulife Insurance Berhad	1	1	1	1
6009	Pacific & Orient Insurance Co. Berhad	0.8920	1	1	0.9640
5230	Tune Insurance Malaysia Berhad	0.5300	1	1	0.8433
6459	MNRB RetakafulBerhad	0.9740	1	0.8680	0.9473
I805G	United Overseas Insurance Ltd	1	1	1	1
I557L	Raffles Health Insurance PTE. Ltd. / Rafles Medical Group	0	0	0	0
I527C	Prudential Assurance Co. Singapore (PTE) Ltd	1	1	0.9740	0.9913
R900G	Singapore Reinsurance Corporation Ltd	1	1	1	1

Source: Data Analysed, 2017

Variable Return to Scale (VRS) model reveals that from total of 20 company samples, there are 8 insurance companies that have efficient value as shown in Table 7. The companies consist of 5 insurance companies in Indonesia, 1 in Malaysia and 2 in Singapore. According to the research findings, the average value of the technical efficiency of the insurance industry is 0.82, which indicates that there are insufficient resources and inefficiencies.

RESULTS AND DISCUSSIONS OF SCALE EFFICIENCY ECASUREECNT WITH DATA ENVELOPMENT ANALYSIS (DEA) APPROACH

Scale efficiency is associated with accomplishing the economic scale of a unit in realising its operations over a period of time. Inefficient on a scale can only be overcome by adopting technology or service procedures. The results of the study for the scale efficiency of the insurance companies are shown in Table 8, Table 9 and Table 10 below. The average scale efficiency for the insurance industry in the period of 2013-2015 shows stagnant trend and then declines, from 60% to 50%.

TABLE 8: SCALE EFFICIENCY TEST RESULTS IN 2013

Stock Code	Name of Issuer	CRS	VRS	Scale Efficiency
ABDA	Asuransi Bina Daya Arta Tbk	1	1	1
AHAP	Asuransi Harta Aman Pratama Tbk	1	1	1
AMAG	Asuransi Multi Artha GunaTbk	0.999	1	1
ASBI	Asuransi Bintang Tbk	0.511	0.511	0.511
ASDM	Asuransi Dayin Mitra Tbk	1	1	1
ASJT	Asuransi Jaya Tania Tbk	0.511	0.511	0.511
ASMI	Asuransi Mitra Maparya Tbk	1	1	1
ASRM	Asuransi Ramayana Tbk	0.835	0.839	0.839
LPGI	Lippo General Insurance Tbk	1	1	1
MREI	Maskapai Reasuransi Indonesia Tbk	1	1	1
PNIN	Paninvest Tbkd.h Panin Insurance Tbk	1	1	1
VINS	Victorian Insurance Tbk	0	0	0
1058	Manulife Insurance Berhad	1	1	1
6009	Pacific & Orient Insurance Co. Berhad	0.892	0.892	0.892
5230	Tune Insurance Malaysia Berhad	0.530	0.530	0.530
6459	MNRB RetakafulBerhad	0.974	0.974	0.974
I805G	United Overseas Insurance Ltd	1	1	1
I557L	Raffles Health Insurance PTE. Ltd. / Rafles Medical Group	0	0	0
I527C	Prudential Assurance Co. Singapore (PTE) Ltd	1	1	1
R900G	Singapore Reinsurance Corporation Ltd	1	1	1

Source: Data Analysed, 2017

Table 8 confirms that from 20 samples of insurance companies, there are 12 companies that have perfect efficient value. The company consists of 8 insurance companies in Indonesia, 1 in Malaysia and 3 in Singapore. The efficient companies are Asuransi Bina Daya Arta Tbk, Asuransi Multi Artha Guna Tbk, Asuransi Dayin Mitra Maparya Tbk, Lippo General Insuranse Tbk, Manulife Insurance Berhad, United Overseas Insurance Ltd, Prudential Assurance Co. Singapore (PTE) Ltd, Singapore Reinsurance Corporation Ltd.

TABLE 9: SCALE EFFICIENCY TEST RESULTS IN 2014

Stock Code	Name of Issuer	CRS	VRS	Scale Efficiency
ABDA	Asuransi Bina Daya Arta Tbk	0.550	0.888	0.888
AHAP	Asuransi Harta Aman Pratama Tbk	0.929	0.929	0.929
AMAG	Asuransi Multi Artha GunaTbk	0	1	1
ASBI	Asuransi Bintang Tbk	0.849	0.849	0.849
ASDM	Asuransi Dayin Mitra Tbk	0	1	1
ASJT	Asuransi Jaya Tania Tbk	0.383	0.383	0.383
ASMI	Asuransi Mitra Maparya Tbk	0.562	0.562	0.562
ASRM	Asuransi Ramayana Tbk	0.592	0.800	0.800
LPGI	Lippo General Insurance Tbk	1	1	1
MREI	Maskapai Reasuransi Indonesia Tbk	0.900	1	1
PNIN	Paninvest Tbkd.h Panin Insurance Tbk	1	1	1
VINS	Victorian Insurance Tbk	0.331	0.370	0.370
1058	Manulife Insurance Berhad	0.851	1	1
6009	Pacific & Orient Insurance Co. Berhad	1	1	1
6459	MNRB RetakafulBerhad	1	1	1
I805G	United Overseas Insurance Ltd	1	1	1
I557L	Raffles Health Insurance PTE. Ltd. / Rafles Medical Group	0	0	0
I527C	Prudential Assurance Co. Singapore (PTE) Ltd	1	1	1
R900G	Singapore Reinsurance Corporation Ltd	1	1	1

Source: Data Analysed, 2017

Table 9 explains that from 20 samples of insurance companies, there are 12 companies that have perfect efficient value. The company consists of 5 insurance companies in Indonesia, 4 in Malaysia, and 3 in Singapore. The efficient companies are Asuransi Multi Artha Guna Tbk, Asuransi Dayin Mitra Tbk, Lippo General Insurance Tbk, Maskapai Reasuransi Indonesia Tbk, Paninvest Tbkd.h Panin Insurance Tbk, Manulife Insurance Berhad, Pacific & Orient Insurance, Tune Insurance Malaysia Berhad, MNRB Retakaful Berhad, United Overseas Insurance Ltd, Prudential Assurance Co. Singapore (PTE) Ltd, dan Singapore Reinsurance Corporation Ltd.

TABLE 10: SCALE EFFICIENCY TEST RESULTS IN 2014

Stock Code	Name of Issuer	CRS	VRS	Scale Efficiency
ABDA	Asuransi Bina Daya Arta Tbk	0.516	0.835	0.835
AMAG	Asuransi Multi Artha GunaTbk	1	1	1
ASBI	Asuransi Bintang Tbk	0.503	0.503	0.503
ASDM	Asuransi Dayin Mitra Tbk	1	1	1
ASJT	Asuransi Jaya Tania Tbk	0.361	0.361	0.361
ASMI	Asuransi Mitra Maparya Tbk	0.695	0.702	0.702
ASRM	Asuransi Ramayana Tbk	0.542	0.706	0.706
LPGI	Lippo General Insurance Tbk	1	1	1.0
MREI	Maskapai Reasuransi Indonesia Tbk	0.934	1	1.0
PNIN	Paninvest Tbkd.h Panin Insurance Tbk	1	1	1.0
VINS	Victorian Insurance Tbk	0.524	0.533	0.533
6009	Pacific & Orient Insurance Co. Berhad	1	1	1
5230	Tune Insurance Malaysia Berhad	0.461	1	1
6459	MNRB RetakafulBerhad	0.779	0.868	0.868
I805G	United Overseas Insurance Ltd	1	1	1
I557L	Raffles Health Insurance PTE. Ltd. / Rafles Medical Group	0	0	0.000
I527C	Prudential Assurance Co. Singapore (PTE) Ltd	0.960	0.974	0.974
R900G	Singapore Reinsurance Corporation Ltd	1	1	1

Source: Data Analysed, 2017

Table 10 indicates that from 20 samples of insurance companies, there are 10 companies that have perfect efficient value. The company consists of 5 insurance companies in Indonesia, 3 in Malaysia, and 2 in Singapore. The efficient companies are Asuransi Multi Artha Guna Tbk, Asuransi Dayin Mitra Tbk, Lippo General Insurance Tbk, Maskapai Reasuransi Indonesia, Paninvest Tbkd.h Panin Insurance Tbk, Manulife Insurance Berhad, Pacific & Orient Co. Berhad, Tune Insurance Malaysia Berhad, United Overseas Insurance Ltd, Singapore Reinsurance Corporation Ltd.

TABLE 11: INEFFICIENT INDICATORS

Stock Code	Name of Issuer	Year		
		2013	2014	2015
ABDA	Asuransi Bina Daya Arta Tbk	-	OC/CF/C	OC/CF/EC/C
AHAP	Asuransi Harta Aman Pratama Tbk	-	OC/CF	OC/CF/EC/C
AMAG	Asuransi Multi Artha GunaTbk	-	-	-
ASBI	Asuransi Bintang Tbk	OC/CF/EC/C	OC/C	OC/CF/EC/C
ASDM	Asuransi Dayin Mitra Tbk	-	-	-
ASJT	Asuransi Jaya Tania Tbk	OC/CF/EC/C	OC	OC/CF/EC/C
ASMI	Asuransi Mitra Maparya Tbk	-	OC	OC/CF/EC/C
ASRM	Asuransi Ramayana Tbk	OC/CF/EC/C	OC/C	OC/CF/EC/C
LPGI	Lippo General Insurance Tbk	-	-	-
MREI	Maskapai Reasuransi Indonesia Tbk	-	-	-
PNIN	Paninvest Tbkd.h Panin Insurance Tbk	-	-	-
VINS	Victorian Insurance Tbk	-	OC/CF/EC/C	OC/CF/EC/C
1058	Manulife Insurance Berhad	-	-	-
6009	Pacific & Orient Insurance Co. Berhad	OC/CF/EC/C	-	OC/CF/EC/C
5230	Tune Insurance Malaysia Berhad	CF/EC	-	-
6459	MNRB RetakafulBerhad	CF/EC	-	OC/CF/EC
I805G	United Overseas Insurance Ltd	-	-	-
I557L	Raffles Health Insurance PTE. Ltd. / Rafles Medical Group	-	-	-
I527C	Prudential Assurance Co. Singapore (PTE) Ltd	-	-	OC/CF/EC/P
R900G	Singapore Reinsurance Corporation Ltd	-	-	-

Source: Data Analysed, 2017

Notation:

OC = Operating Cost
CF = Commission Fee
EC = Equity Capital
C = Claim
P = Premium

Table 11 shows the indicators that generate the company to be inefficient. The test results reveal that there are some companies have inefficiency. In 2013 the indicators that led to inefficiency are operating cost of 20%, commission fee of 30%, equity capital of 30% and claim of 20%. While inefficient companies in 2014 are caused by operating cost of 47%, commission fee of 20%, equity capital of 7% and claim of 26%. Finally, efficient companies in 2015 experienced a decrease in the number coming from inefficiency of operating cost by 26%, commission fee by 26%, equity capital by 26%, claim by 20% and premium by 2%.

TABLE 12: SIGNIFICANCE RESULTS OF ANOVA TEST

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.391	2	.195	4.371	.017
Within Groups	2.547	57	.045		
Total	2.937	59			

Source: Data Analysed, 2017

Table 12 displays the significance value of 0.017, less than 0.05, which means that there are significant differences in efficiency (VRS) among 3 countries, namely Indonesia, Malaysia and Singapore. Hypothesis 1 (H_1) which states that there is a difference between the efficiency of insurance companies in Indonesia, Malaysia and Singapore is confirmed. This implies that efficiency is directly proportional to company's performance. A company that has good performance is certainly a company that has value of efficiency. The statement is supported by research organised by Mahmoud (2008) which concluded that there is relationship between efficiency and performance of insurance companies in Greece.

TABLE 13: DESCRIPTIVE RESULTS OF ANOVA TEST

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Indonesia	36	.8081	.25859	.04310	.7206	.8955	.00	1.00
Malaysia	12	.9387	.13669	.03946	.8518	1.0255	.53	1.00
Singapore	12	.9978	.00751	.00217	.9931	1.0026	.97	1.00
Total	60	.8721	.22312	.02880	.8145	.9298	.00	1.00

Source: Data Analysed, 2017

Based on table 13, Singapore become the country with the highest efficiency (VRS) from the period of 2013-2015, which is on average of 0.9978, closest to 1 compared to Malaysia and Indonesia. The descriptive table also indicates that the average value of efficiency in Indonesia is 0.8081, which is lower than the average efficiency in Malaysia about 0.9387. This determines that Malaysian insurance companies are more efficient than insurance companies in Indonesia. The average value of efficiency in Indonesia is 0.8081, which is lower than the average efficiency in Singapore of 0.9978. This means that insurance companies in Singapore are more efficient than insurance companies in Indonesia. The average value of efficiency in Malaysia is 0.9387, which is lower than the average efficiency in Singapore around 0.9978. This implies that insurance companies in Singapore are more efficient than insurance companies in Malaysia.

CONCLUSIONS

The level of technical efficiency of insurance companies in Indonesia, Malaysia and Singapore during the observation period of 2013-2015 shows that there are 4 out of 20 companies which achieve optimum efficiency level or 20% using Constant Return to Scale (CRS) model, this is in accordance with the results research. Efficient insurance companies in Indonesia are 2 companies, Singapore are 2 companies and no efficient insurance companies in Malaysia. The results of the research applying Variable Return to Scale (VRS) model discovers that there are 8 out of 20 companies that accomplish the optimal level of efficiency or by 40%. The number of efficient insurance companies in Indonesia are 5 companies, Singapore as many as 2 companies, and Malaysia just 1 company.

The level of scale efficiency of existing insurance companies in Indonesia, Malaysia and Singapore in 2013 are 60% or 12 companies, which consist of 8 insurance companies in Indonesia, 1 in Malaysia and 3 in Singapore. In 2014, the efficient insurance companies are 60% or as many as 12 companies involving of 5 insurance companies in Indonesia, 4 in Malaysia and 3 in Singapore. In 2015, the efficient insurance companies are 50% or as many as 10 companies consisting of 5 insurance companies in Indonesia, 3 in Malaysia and 2 in Singapore.

The results of data analysis based on anova test reveal that there are differences in technical efficiency (VRS) in insurance companies in Indonesia, Malaysia and Singapore. The average value of efficiency in Indonesia is lower than the average value of efficiency in Malaysia, which means that Malaysian insurance companies are more efficient than insurance companies in Indonesia. The average value of efficiency in Indonesia is lower than the average value of efficiency in Singapore, which implies that insurance companies in Singapore are more efficient than insurance companies in Indonesia. The average value of efficiency in Malaysia is lower than the average value of efficiency in Singapore, which indicates that insurance companies in Singapore are more efficient than insurance companies in Malaysia.

LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

This research is expected to be beneficial for the company and further research. Company that has not optimal level of efficiency should know the factors that cause the inefficiency. Company's managers can make policies to anticipate the factors that lead to inefficiency in the company, namely operating cost, commission fee, equity capital and claim. Efficient insurance companies can be used as benchmarks in formulating company's strategies or policies to be more efficient as the development of existing potential improvements and also as one of the basic considerations of decision making. Company management should be able to reduce operating cost and commission fee which are the main cause of inefficiency in insurance companies.

The study has limitations using only 3 input and 2 output indicators. Therefore, suggestions for future research are able to use more input and output indicators such as number of policies and total assets. Further research are also expected to be able to add wider sample objects. The sample used in this study only amounted to 20 insurance companies consisting of 12 insurance companies listed on Indonesia Stock Exchange, 4 insurance companies listed on the Malaysian stock exchange and 4 insurance companies listed on the Singapore Stock Exchange. As the results, the next researchers should be able to examine not only listed insurance companies in stock exchange, but also the closed ones. The next researchers also should pay attention to the scale of the company, because the larger company will have higher corporate scale.

REFERENCES

1. Al-Amri, Khalid and Said, Gattoufi. (2012), "Analyzing the Technical Efficiency of Insurance Companies in GCC," The Journal of Risk Finance Emerald Group Publishing Limited, Vol. 13, No. 4, pp. 362-380.
2. Al-Amri and Khalid. (2015), "Takaful Insurance Efficiency in the GCC Countries," Journal Sultan Qaboos University, Vol. 31. No. 3, pp. 344-353.
3. Ansah, Kwadjo, Andoh, Charles and Abor, Joshua. (2012), "Evaluating the Cost Efficiency of Insurance Companies in Ghana," Journal of Risk Finance Emerald Group Publishing Limited, Vol. 13, No. 1, pp 61-76.
4. Banker, R., Charnes, A., and Cooper, W. (1984), "Some Methods for Estimating Technical and Scale Inefficiency in Data Envelopment Analysis," Journal Management Science, Vol. 30, No. 9.
5. Beck, T. and Levine, R. (2004), "Stock Markets, Banks, and Growth: Panel Evidence," Journal of Banking and Finance, Vol. 28, pp. 423–442.
6. Benarda, Sumarwan, Ujang, Muhamad and Nadratuzzaman Hosen. (2016), "Tingkat Efisiensi Industri Asuransi Jiwa Syariah Menggunakan Pendekatan Two Stage Data Envelopment Analysis," (Level of Efficiency Sharia Life Insurance Industry Using Two Stage Data Envelopment Analysis Approach) Jurnal Aplikasi Bisnis dan Manjemen, Vol. 2, No. 1, pp. 64-72.
7. Berger, Allen N. and Humprey, David B. (1992), "Measurement and Efficiency Issues in Commercial Banking in Griliches, Output Measurement in the Service Sector, 56 National Bureau of Economic Research, Studies in Income and Wealth," Chicago: University of Chicago Press.
8. _____ (1997), "Efficiency of Financial Institutions: International Survey and Directions for Future Research," European Journal of Operation Research, Vol. 98, No. 2, pp. 175-212.
9. Chakraborty, Kalyan, Anirban, Dutta and Partha, Pratim S. (2013), "Efficiency and Productivity of Indian Life Insurance Industry," Journal Asia Pacific Risk and Insurance Association, Vol. 7, No. 1, pp. 1-26.
10. Charnes, A., Cooper, W. and Rhodes, E. (1978), "Measuring the Efficiency of Decision Making Units," European Journal of Operation Research, Vol. 2.
11. Chu, Fen Li (2007), "Problem in Bank Branch Inefficiency: Management, Scale and Location," Asian Journal of Management and Humanity Sciences, Vol. 1, No. 4, pp. 523-538.
12. Coelli, T. J., Rao, D. S., O'Donnel, C. J. and Battese, G. E. (2005), "Introduction to Efficiency and Productivity Analysis (Second Edition ed)," Boston: Springer.
13. Dalkilic, Nilufer and Aysen, Altun A. (2014), "Efficiencies of Life/Pension Insurance Industry in Turkey: An Application of Data Envelopment Analysis," Journal of Applied Finance & Banking, Vol. 4, No. 1, pp. 181-191.
14. Farrell, M. (1957), "The Measurement of Productive Efficiency," Journal of the Royal Statistical Society, Vol. 120, No. 3.
15. Feyen, Erik, Lester, Rodney, and Rocha, R. (2011), "What Drives The Development of The Insurance Sectors?: An Empirical Analysis Based on a Panel of Developed and Developing Countries," Policy Research Working Paper, The World Bank Financial and Private Sector Development, Finance and Policy Units, No. 5572.
16. Hadad, M. D., Santoso, Wimboh, Ilyas, Daniel and Mardanugraha, Eugenia (2003), "Analisis Efisiensi Industri Perbankan Indonesia: Penggunaan Metode Nonparametrik Data Envelopment Analysis (DEA)," (Analysis of the Efficiency of Indonesian Banking Industry: The Use of Non-parametric Methods of Data Envelopment Analysis (DEA)) Penelitian dan Pengembangan Manajemen (PPM) Fakultas Ekonomi Universitas Gajah Mada, Kertas Kerja Bank Indonesia, Yogyakarta.
17. Hasibuan, Malayu S. P. (2005), "Manajemen Sumber Daya Manusia." (Human Resource Management) Jakarta: Edisi Bumi Aksara.
18. Huang, Li-Ying, G. C., Lai and Wen, M. M. (2008), "The Effect of Corporate Governance and Auditor Independence on the Efficiency Performance of the US Life Insurance Industry," Journal of Risk and Insurance, Vol. 78, pp. 519-550.
19. Huri, Mumu Daman and Indah, Susilowati (2004), "Pengukuran Efisiensi Relatif Emiten Perbankan dengan Metode Data Envelopment Analysis: Studi Kasus Bank-Bank yang Terdaftar di Bursa Efek Jakarta Tahun 2002," (Relative Efficiency Measurement of Banking Issuer with Data Envelopment Analysis Method: Case Study of Banks Listed in Jakarta Stock Exchange 2002) Jurnal Dinamika Pembangunan, Vol. 1, No. 2, pp. 95-110.
20. Hwang, T. and Gao (2003), "The Determinants of Demand for Life Insurance in an Emerging Economy the Case of China," Managerial Finance, Vol. 29, No. 5, pp. 82-96.
21. Janjua, P. Z. (2015), "A Comparative Analysis of Economic Efficiency of Conventional and Islamic insurance industry in Pakistan," Journal of Global Business and Economics, Vol. 3, No. 1, pp. 122-137.
22. Julius, Latumaerissa (2011), "Bank dan Lembaga Keuangan Lain," (Banks and Other Financial Institutions) Jakarta: Salemba Empat.
23. Jumingan (2011), "Analisis Laporan Keuangan (Edisi Keempat)." (Financial Statement Analysis (Fourth Edition)) Jakarta: Bumi Aksara.
24. Karim, A. (2007), "Ekonomi Mikro Islam," (Microeconomics of Islam) Jakarta: Raja Grafindo Persada.
25. Kumbhakar, S C. and Knox, Lovell (2000), "The Effect of Deregulation on Performance of Financial Institutions: The Case of Spanish Saving Banks," Journal Department of Economic University of Texas.
26. Kweh, Qian L., Wen, Min Lu and Wei, Kang Wang (2014), "Dynamic Efficiency: Intellectual Capital in the Chinese Non-Life Insurance Firms," Journal of Knowledge Management Emerald Group Publishing Limited, Vol. 18, No. 5, pp. 937-951.
27. Lin, Hsein Da., Ya-Hui, Lee and Meng-Long, Shih (2011), "A Study on Technical Efficiency and Productivity Changes of Taiwan's Life Insurance Industry," Journal National Taitung University Taiwan.
28. Mahmoud, Osama Hanafy (2008), "A Multivariate Model for Predicting the Efficiency of Financial Performance for Property and Liability Egyptian Insurance Companies," Discussion Paper Program, pp. 53-78.
29. Malhotra, Rashmi, Malhotra, D. K. and Akash, Dania (2017), "Evaluating the Health of Life and Health Insurance Companies," Journal Applications of Management Science Emerald Publishing Limited, Vol. 18, pp. 93-108.
30. Mandal, Santanu (2014), "A DEA Investigation of Efficiency of the Indian General Insurance during Recession," Journal of Advances in Management Emerald Group Publishing Limited, Vol. 11, No. 1, pp. 115-136.

31. Muharam, Harjum and Rizki, Puspitasari (2007), "Analisis Perbandingan Efisiensi Bank Syariah di Indonesia dengan Metode Data Envelopment Analysis Periode Tahun 2005," (Comparative Analysis of Sharia Bank Efficiency in Indonesia with Data Envelopment Analysis Method Period Year 2005) Jurnal Fakultas Ekonomi Universitas Diponegoro Semarang, Vol. 2, No. 3, pp. 80-116.
32. Nektarios, Milton and Carlos, Pestana Barros (2011), "A Malmquist Index for the Greek Insurance Industry," The Geneva Papers on Risk and Insurance, No. 35, pp. 309-324.
33. Otoritas Jasa Keuangan (Indonesian Financial Services Authority) (2015), "Statistik Perasuransian, Industri Keuangan Non-Bank," (Insurance Statistics, Non-Bank Financial Industry) pp 1-323.
34. Ozcan, Yasar A. (2008), "Health Care Benchmarking and Performance Evaluation," Springerz: New York.
35. Permono, Iswardono S. and Darmawan (2000), "Analisis Efisiensi Industri Perbankan di Indonesia (Studi Kasus Bank-Bank Devisa di Indonesia Tahun 1991-1996)," (Analysis of Banking Industry Efficiency in Indonesia (Case Study of Foreign Exchange Banks in Indonesia in 1991-1996)) Jurnal Ekonomi dan Bisnis, Vol. 35, No. 1.
36. Purwanti, Anih (2016), "Analisis Perbandingan Efisiensi pada Industri Asuransi Umum Syariah dan Konvensional di Indonesia dengan Pendekatan Two Stage Data Envelopment Analysis," (Comparative Analysis of Efficiency in Sharia and Conventional General Insurance Industry in Indonesia with Two Stage Data Envelopment Analysis Approach) Jurnal Fakultas Ekonomi dan Bisnis Universitas Diponegoro.
37. Rahim, Hendrisman (2013), "Optimisme Pertumbuhan Asuransi Indonesia Proyeksi Perkembangan Lima Tahun (2014-2018)." (Optimism of Indonesia Insurance Growth Projection of Five Year Development (2014-2018)) Jurnal Asuransi dan Manajemen Resiko, Vol. 1, No. 2, pp. 1-21.
38. Rahman, Azizur (2013), "Comparative Study on the Efficiency of Bangladeshi Conventional and Islamic Life Insurance Industry: A Non-Parametric Approach," Journal Asian Business Review, Vol. 2, No. 3, pp. 88-99.
39. Ramanathan, R. (2003), "An Introduction to Data Envelopment Analysis: A Tool for Performance Measurement," New Delhi: Sage Publications.
40. Sedarmayanti (2009), "Manajemen Sumber Daya Manusia, Reformasi Birokrasi dan Manajemen Pegawai Negeri Sipil," (Human Resource Management, Bureaucratic Reform and Civil Servant Management) Badung: PT Refika Aditama.
41. Setiawan, Sigit (2012), "Analisis Sektor Pasar Modal Indonesia Menghadapi Liberalisasi dan Integrasi ASEAN," (Analysis of Indonesia Capital Market Sector Facing Liberalization and ASEAN Integration) Policy Paper Pusat Kebijakan Regional dan Bilateral, No. 2.
42. Sexton, Thomas R., Richard, H. Silkman and Andrew, J. Hogan (1986), "Data Envelopment Analysis: Critique and Extensions In Measuring Efficiency: An Analysis of Data Envelopment Analysis," San Francisco: Jossey-Bass Inc., Publishers.
43. Shafique, M, N., Ahmad, N., Ahmad, H. and Adil, M. Y. (2015), "A Comparative Study of the Efficiency of Takaful and Conventional Insurance in Pakistan," International Journal of Accounting Research, Vol. 2, No. 5.
44. Sun, Wujun and Chen, Zhong (2012), "Cost X-efficiency in China's Insurance Companies: A Stochastic Frontier Approach," African Journal of Business Management, Vol. 5, No. 30, pp. 11916-11924.
45. Sutawijaya, Adrian and Etty, Puji Lestari (2009), "Efisiensi Teknik Perbankan Indonesia Pasca Krisis Ekonomi: Sebuah Studi Empiris Penerapan Model DEA," (Efficiency of Indonesian Banking Techniques Post Economic Crisis: An Empirical Study of the Application of DEA Model) Jurnal Ekonomi Pembangunan, Vol. 1, No. 10, pp. 49-67.
46. Syamsi, Ibunu (2004), "Efisiensi, Sistem dan Prosedur Kerja," (Efficiency, Working System and Procedures) Jakarta: PT. Bumi Aksara.
47. Triandaru, Sigit and Totok, Budisantoso (2006), "Bank dan Lembaga Keuangan Lain, Edisi Dua," (Banks and Other Financial Institutions, Second Edition) Jakarta: Salemba Empat.
48. Umri, Nazmil (2009), "Kinerja Efisiensi Biaya Dengan Metode Data Envelopment Analysis," (Cost Efficiency Performance with Data Envelopment Analysis Method) Jurnal Teknik Industri, Jurnal Teknik Industri Universitas Diponegoro, pp. 1411-6340.
49. Wibowo, S. and Supriadi, D. (2013), "Ekonomi Mikro Islam," (Microeconomics of Islam) Bandung: CV Pustaka Ceria.
50. www.bnm.gov.my (accessed on July 17, 2017)
51. www.bursamalaysia.com (accessed on July 17, 2017)
52. www.dosm.gov.my (accessed on July 17, 2017)
53. www.idx.co.id (accessed on July 17, 2017)
54. www.mas.gov.sg (accessed on July 17, 2017)
55. www.sgx.com (accessed on July 17, 2017)
56. www.singstat.gov.sg (accessed on July 17, 2017)
57. Zhi, Yan and Jin, Li Hu (2011), "A Cross-Strait Comparative Study of Efficiency of Life Insurance Companies: An Application of the Input Slack Adjustment Approach," African Journal of Business Management, Vol. 5, No. 14, pp. 5746-5752.

AGRICULTURAL FINANCE IN ODISHA: A COMPARATIVE STUDY OF FARMER'S PERCEPTION AND BANKERS ATTITUDE TOWARDS AGRICULTURAL CREDIT

SURENDRA KUMAR MALLICK
RESEARCH SCHOLAR IN MANAGEMENT
RAVENSHAW UNIVERSITY
CUTTACK

ABSTRACT
Agricultural Finance is a yearly sectorial distribution of commercial banks on total loans and advances to the agricultural sector. The purpose of the study is to identify the beneficiaries of commercial banks on agricultural credit and to access the impact for bank finances and the barrower farmers. The study reveals pattern of financing by commercial banks to agricultural sectors. The banking system is still hesitant in various ground to provide agricultural credit to small and marginal farmers. An attempt has been made to analyze the farmer's perception relating to agricultural finance by using quantitative tools viz: ANOVA, chi-square test, percentage, etc. This study is based on both primary and secondary source.

KEYWORDS
agriculture finance, commercial banks, farmers perception, bankers attitude, co-operative banks.

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Q14

INTRODUCTION
Agriculture is a vital sector of the economy of Odisha. This sector consists of forestry, animal husbandry, mining and fishing. Strategically, it is in this sector, the battle for long term economic development will be won or lost. The importance of agriculture development in economic development is stressed due to the fact that agriculture is the most popular sector of economy in the early stages of economic growth in most of the countries. It is evident that the history of economic development of countries like England, Russia, Australia, Japan, reveals that the initial economic development was mainly due to agricultural development. Agricultural development is a pre-requisite for industrial development in developing countries like India. In the Indian economy, agriculture contributes one-third of national income.

Sixty percent of the export directly or indirectly originates from agriculture sector. It provides employment to 67 percent of the work forces. It plays a decisive role in economic development and planning and provides numerous to the industrial and service sector.

Credit is one of the critical inputs for agricultural development. It capitalizes farmers to undertake new investment and/or adopt new technologies. The importance of agricultural credit is further re-enforced by the unique role of Indian agriculture in the macroeconomic framework along with its significant role in poverty alleviation. Realizing the importance of agricultural credit in fostering agricultural growth and development, the emphasis on the institutional framework for agricultural credit is being emphasized since the beginning of planned development era in India. So agricultural credit is an essential input for augmenting agricultural production and helps a lot to the poverty-stricken farmers of Odisha.

STATEMENT OF THE PROBLEM
There are two important institutions viz. the commercial Banks and the Co-operative Banks are lending to agriculture in the study area of Kendrapara District in Odisha. Many commercial banks have been lending direct and indirect finance to agriculture. RRB sponsored by commercial banks and co-operative banks are inclined towards working for agriculture and rural development. Many priority sector banks tend to invest the funds in Rural Infrastructure Development in attending the Statutory of 40 percent of net bank credit to the priority sector. Even though this indirect finance promotes the infrastructure facilities and service in rural areas to poor farmers, which are unable to acquire the services due to financial constraints. Thus, agricultural credit delivery mechanism is loosely integrated and not reaching the target beneficiaries. Risk are heavy in agriculture that hampers the productivity and mispricing of the output thereby dent to their revenues. The proposed study "Agricultural Finance in Odisha – A Comparative study of farmer's perception and bankers attitude towards agricultural credit", focuses on different questions. Such as:

1. To what extent the credit supplied by commercial banks and co-operative banks could meet the requirements of farmers?
2. What are the new trend of pattern of financing in agriculture?
3. To study what extent farmers are benefited through bank credit?
4. What is the Bankers attitude towards fulfillment of all the requirement of agricultural credit?
5. Whether the credit given are properly recovered by banks or not?

DESCRIPTION OF THE STUDY AREA
Kendrapara District was carved out of erstwhile Cuttack District on 1st April 1993. Kendrapara District comprises one sub-division with 9 Tahasils, 9 Blocks 2 Municipality and 230 Gram Panchayat. The District Headquarters, Kendrapara, is on the western border of the district. The district has an area of 2644 Sq. Km. Agriculture is the main occupation of people. Paddy, Mung, Black gram, Sugarcane, Jute and vegetable are the main crops. Besides, there is ample potential for dairy, poultry and fishery activities. The credit flow for crop loan during last three years has increased from 537.06 crore to 671.86 crore. The district has commercial banks, Co-operative and Regional Rural Banks. There are 21 Commercial Banks, 1 (One) Co-operative and 1(One) Regional Rural Bank are functioning and also 121 PACS functioning. The role of RIDF is significant in the districts infrastructure development in spite of these credit platform, farmers distress also exist. The study tries to find out the reasons for the farmers distress in the district.

SIGNIFICANCE OF THE STUDY
Credit is the key factor to accelerate agricultural development in a developing country like India. As Odisha is an Agrain State, credit is essence for farm production and productivity. The farmer needs three types of credit such as:

a. Short term credit to finance agricultural operation like purchase of seeds, fertilizes, pesticide and payment of wages etc.
b. Medium term credit for purchase of plough, agricultural equipment, tractors, mirror irrigation works etc.
c. Long term credit for improvement of land, construction of farmhouses, digging of wells, purchase of land, farm machinery etc.

The study brings out the fact that banks are simply giving agricultural lone just to reach the target of priority sector lending. In India, agricultural productivity is low, soil health is in danger zone and risk mitigation mechanism is normal. The rural financing agency are not vertically integrated to a complete extent at different phases in this regard. There is need to make banks more participative through policy implementation and built a conductive environment for sustainable farming system. By transversing most of the previous study, the present study felt the research gap in this aspect and does stress the need for study.

SCOPE OF THE STUDY

This study is confined to the farmers mainly engaged in cultivation of land in Kendrapara District. It provides the detail status of farmers a, perception of the farmers about agricultural finance and problems encountered by farmers for receiving agricultural loan and socio-economic background of the farmers. It covers the farmers perception towards agriculture finance provided by various sector of banks in Kendrapara district.

REVIEW OF LITERATURE

Literature relating to the subject has been surveyed before formulating the problem, which infact posture the awareness of the researcher in the field. There are different kinds of literature in the field. There are different kinds of literature available relating to the subject. Eminent experts published a number of books in the field of Banking, those also Government of India from time to time. Published and unpublished research reports of various universities were verified, moreover, a few have contributed research papers to reputed journals in the banking field.

Ratnajyoti Dutta (2016) This paper emphasis that application of information technologies via mobiles, SMS alerts, Portals can empower farmers for all kharif (Summer) crops, for all Rabi(Winter) crops. Technology aided information flow empowers a farmers as to when to expect rainfall and also where to store produce after harvest. This study gives importance farmers awareness programmes are run on regular basis through multi-media platforms.

Seena P.C (2015) This paper describes the management of agricultural credit in India and the impact of various Banking sector reforms on agriculture. She concluded that performance of agriculture credit in India revels that though the overall flow of Institutional credit has increased over the years, There are several gaps in the system like inadequate provision of credit to small and marginal farmers, limited deport mobilization and heavy dependence on borrowed funds. Efforts are required to address and rectify these issues. Banking sector reforms like fixing prudential norms, reduce SLR, CRR. Banking diversification all affect the Indian agriculture sector.

K. Baby (2014) researcher examined that credit is an input process of development. Agricultural finance is a very important aspect to the farmers Lack of access to finance is a key impediment to farmers in improving the efficiency of their productions and adopting better technologies. He says that "Indian farmer is born in debt, lives in debt and dies in debt".

RESEARCH GAP

By going through literature review in form of research paper, I came to know that all research paper are at the national level. I have not found any good standard of research at the state level particularly Odisha which would be giving grater support to the governments and academician. Hence, an attempt is made in the study to examine the comparative study of farmers perception and bankers attitude towards agricultural credit in Kendrapara district of Odisha state. The main focus of the study is famers perception towards bank credit for agriculture and to determine the attitude of bankers lending and recovering process on farm credit.

OBJECTIVES OF THE STUDY

The specific objective of the present study are given below:

1. To make comparative study in between CBs, Co-Banks and other RRBs to the agriculture sector.
2. To study existing and new trends patterns of financing.
3. To study difference between requirements and availability of agriculture credit.
4. To understand farmers perception towards bank loan for agriculture and its outcome.
5. To examine the attitude of bankers in advancing farm loans and subsequent recovery process.

RESEARCH METHODOLOGY

Research methodology includes the assumptions and values which is useful for interpreting data and reaching the conclusions. Methodology involves:

I. Sources of Study – The for the present study is both from primary and secondary sources. The primary data is to be collected from farmers by using interview questionnaire methods. The secondary data have been collected from the published journal books, committee reports magazines and web-sites.

II. Sampling Design – for administrate convenience, the entire Kendrapara district has been divided into 9 blocks, namely : Aul, Derabish, Gardpur, Kendrapara, Mahakalpada, Marshaghai, Pattamundai, Rajnagar and Rajkanika. In each Block one schedule commercial bank, one co-operative bank and one regional rural bank is selected at random. The total sample size covers 540 (9blocks x 3banks x 20farmers) respondents.

III. Pilot Study – A pilot study was mode before carrying out the actual study. The interview schedules were used in the pilot study from selected farmers. From pilot study necessary changes were carried out in the interview schedule for the final administration.

IV. Tools for Analysis – The following tools and techniques are used to analyze the data with reference to fulfill the objectives of the study. Percentage variation, trained analysis, chi-square test, one-way ANOVA.

ANALYSIS

COMPARATIVE ANALYSIS OF AGRICULTURE CREDIT (ODISHA & INDIA)

TABLE 1

Trends in Agriculture Credit as proportion of GSDP in Odisha and All India			
Years	Odisha	All India (average)	Difference
1	2	3	4-3-2
2009-10	3.07%	5.45%	2.38%
2009-10	3.98%	6.10%	2.12%
2010-11	0.43%	0.63%	0.19%
2011-12	0.37%	0.68%	0.31%
2012-13	3.46%	7.18%	3.72%
2013-14	3.48%	7.81%	4.33%
2014-15	0.34%	7.59%	7.24%
2009-10	3.07%	5.45%	2.38%
2009-10	3.98%	6.10%	2.12%
2010-11	0.43%	0.63%	0.19%
2011-12	0.37%	0.68%	0.31%
2012-13	3.46%	7.18%	3.72%
2013-14	3.48%	7.81%	4.33%
2014-15	0.34%	7.59%	7.24%
(GSDP is used at current price, 2004-05).			

Source: Various volume of Basic Statistical Returns of Scheduled Commercial Banks (SCBs) in India and Handbook of Statistics on India Economy published by Reserve Bank of India (RBI).

Agriculture credit as proportion of GSDP is lower in case of Odisha as compare to all India average (excluding Odisha) (in table-6.1).Overall average of agriculture credit of Odisha is just half of the all India average. Difference of agriculture credit between Odisha and all India average is widening against Odisha over the period of time. The descriptive statistics indicates both minimum and maximum credit to GSDP of Odisha of the agriculture is half of the all India average is presented.

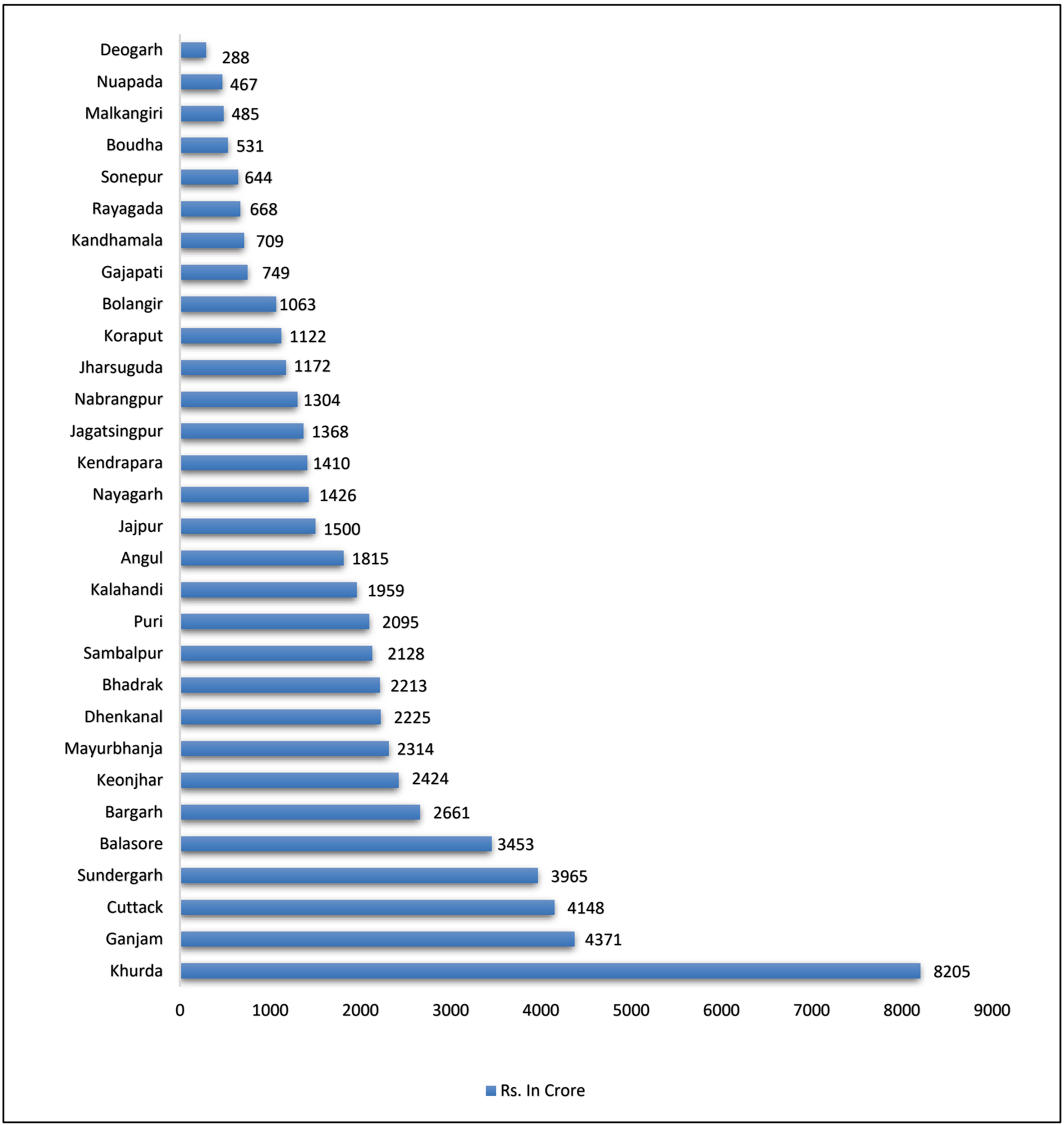
TABLE 2: AGRICULTURAL CREDIT ADVANCE IN KENDRAPARA(ODISHA) FROM 2010-16 TABLE: 2 '000

Year	Commercial Banks	Co-operative Banks	RRBs	Total
2010-11	2230600	1445000	344500	4020100
% of Total Loan	55	36	9	100
2011-12	808210	1485396	302952	2596558
% of Total Loan	31	57	12	100
2012-13	1388948	1790804	471060	3650812
% of Total Loan	38	49	13	100
2013-14	1091419	3531866	42648	4665933
% of Total Loan	23	76	1	100
2014-15	2750561	2817243	482118	6049922
% of Total Loan	45	47	8	100
2015-16	1606670	5605632	125961	7338263
% of Total Loan	22	76	2	100

Source : Annual credit plan SBI lead bank office Kendrapara

On the above table, indicate that Co-operative Banks lending higher percentage of agricultural credit to study area as compared to Commercial Banks and Regional Rural Banks.

CHART 1: SPATIAL DISTRIBUTION OF AGRICULTURE CREDIT IN DIFFERENT DISTRICT IN ODISHA DURING 2016-17



Source: NABARD State Focus Paper Odisha Region

CONCLUSION AND SUGGESTION

In India Agriculture is complex sector. Odisha is an under developed state inspite of its vast natural resources. It was observed that agricultural credit flow to state is half of the national average. Co-operative bank contribute major share of credit flow to agriculture sector as compared to commercial bank and RRB. However, what is observed, in recent years the flow of credit to the agriculture by these agencies has declined and this has affected the investment and growth in agriculture. Farmer's perceptions are attitudinal in nature and basically it depends upon farmer's category. Financial illiteracy, indiscipline, lack of group cohesiveness attributes, stimulate farmers to come out from banking hold. The banking institution should change attitude to diversify agricultural credit structure in rural economy. It is necessary to intervene and portray a road map for the banks of credit planning. It also for the state Govt. to take special focus in accelerating the pace of capital formation in agriculture for sustainable growth.

REFERENCES

1. Annual credit plan SBI lead bank office Kendrapara.
2. Banks (SCBs) in India and Handbook of Statistics on India Economy published by Reserve Bank of India (RBI).
3. K. Baby (2014): "Sources of rural credit"- Kurukshetra, A journal on rural development. Vol. 63 No. 1 Page 52.
4. NABARD State Focus Paper Odisha Region.
5. Ratnajyoti Dutta (2016) : "Farm productivity through information flow Kurukhetra, a journal on rural development", Vol. 64 No. 4 Page 52.
6. RBI Agriculture agenda for Odisha.
7. Seena P.C (2015): "Management of agricultural credit and impact of Indian banking sector reforms on agriculture" International review of research in emerging markets and global economy Vol. 1, Issue 3.
8. State agriculture policy 2013 department of agriculture Odisha.
9. State Bank of India Annual credit plan.

BUYING BEHAVIOUR OF REFRIGERATORS WITH SPECIAL REFERENCE TO CALICUT CITY

ANITHA K
M. Phil. SCHOLAR
SREE NARAYANA GURU COLLEGE
CHAVADI

ABSTRACT

The purchase of refrigerators is now a common phenomenon among middle class and the consumer is flooded with various models with fine features and new brands. People are in a consumer market where the marketers do not merely satisfy a need but try to achieve consumer delight. The decision to purchase a refrigerator is not a one-man decision. Though the financial decision is taken by the bread winner of the family usually men in Indian middle class families the decision regarding colour, brands and the like are taken by women that is wife. Hence, the decision making is complicated. So the marketers need to understand the consumer behaviours and perceptions before formulating a marketing strategy. Studies pertaining to consumer behaviour are always interesting as the findings provide meaningful knowledge base for designing market friendly strategies and to retain the competitive edge. While there are sizeable numbers of studies pertaining to consumer behaviour, especially to first time purchase and repeat purchase, very limited studies are available in the Indian context regarding replacement purchase. The major objective of the study is to identify the factors that influence the replacement purchase with reference to refrigerators. Further, the study is to review the market scenario of the products identified, to present the profile of buyers considered for the study, to evaluate the variables influencing replacement purchase behaviour, to categorize replacement buyers based on the extent of influence of select variables as regards replacement purchase and to examine the possible relationship between the buyer categories and the demographic variables.

KEYWORDS
Calicut district, buying behaviour, consumers, marketing, refrigerators.

JEL CODES
P36, P39, P46.

1. INTRODUCTION

Organization's capacity to keep up fulfilling client connections requires a comprehension of consumer purchasing conduct. This alludes to the purchasing conduct of consumers who buy items or administrations for their own or family utilize. Consumers have limited time, energy and financial resources. Within the available resources, they make purchase and consumption choices as they wish. Consumers buying choices occur over some stretch of time. The general objective amid this choice procedure is to assess different choices and pick the item that fulfils the consumer in an ideal way. Consumers get impacted by a few central point while they settle on their choices.

The consumer's level of enthusiasm for an item and the significance he/she puts on this item decides the consumer's level of contribution. High-association items are generally costly and are noticeable to other individuals, for example, a Diamond ring/gems or an Expensive auto. Low-contribution items are more affordable and have less social hazard related with them, for example, some espresso or every day utilization things. When purchasing much of the time bought, ease commonplace things that require next to no pursuit and choice exertion, they show routinized reaction conduct. When purchasing items sporadically or when they have to get data around a new brand in a recognizable item class, they utilize constrained critical thinking. When they purchase new, costly items, they utilize expanded critical thinking.

2. REVIEW OF LITERATURE

Imbagoud.S. (2012), in his article titled "The Behavior of Consumer's Expenditure in India", opined that the connection amongst pay and utilization has drawn the consideration of business analysts for quite a while. Be that as it may, the investigation of utilization conduct on a hypothetical level was first inspected by J.M. Keynes. Since the appearance of Keynesian utilization work theory numerous business analysts completed exact examinations and reasoned that family unit utilization was predictable with the recommendation of Keynes yet the total utilization was not observed to be relative to the level of total wage.

Khare Arpita (2012), In her paper entitled "Impact of Consumer Decision-Making Styles on Indian Consumer's Mall Shopping Behaviour", made an attempt to understand the role of consumer decision-making styles on mall shopping behaviour of Indian consumers. The mall shopping attributes were analysed to identify the factors most significant to Indian consumers. The results suggested that the age of the consumers affects their shopping decision styles. The brand conscious, novelty seeking and recreational shopping styles influence mall shopping attributes.

Ratika Rastogi and Sonia Chaudhary (2012), In their study on "Psychology and Buying Behaviour of Rural Consumers with Special Reference to Television, Washing Machine and Refrigerator in the Rural Areas of Meerut Region", observed that the brand awareness in males is high in comparison to females. The large number of rural consumers prefer the brands and their products because of the quality of the product and then the price of the product respectively. The study shows that most of the rural people used to buy these products when there is a need for them to purchase.

3. SCOPE OF THE STUDY

The primary aim of this study is to find out Consumer's buying behaviour of Refrigerators in Calicut city. The study will further help consumer's to buy refrigerators available in market. It also measures the consumer's satisfaction level of buying refrigerators. It also cover buying behaviour, brand awareness and satisfaction level of the consumer's. The scope of a subject refers to everything that is studied as part of that subject. When we set out to explain the scope of consumer behaviour we need to refer to all that which forms part of consumer behaviour. Consumer behaviour includes not only the actual buyer and his act of buying but also the various role played by different individuals and the influence they exert on the final purchase decision.

4. STATEMENT OF THE PROBLEM

Knowledge of consumer behaviour directly affects marketing strategy. This is because of the marketing concept, i.e., the idea that firms exist to satisfy customer needs. Firms can satisfy those needs only to the extent that they understand their customers. There is a widespread recognition that consumer behaviour is the key to contemporary marketing success. The primary problem of the study is consumers of refrigerators does not have brand awareness and also consumers are not aware of existing companies in market. It leads to choosing wrong product or expensive product and it will not fit for consumer's usage. Satisfaction is an important term for this study. Consumer's buying behaviour is good when their satisfaction level is high. It is important for marketers to recognize how and why individuals make their consumption decision, so that we can make better strategic marketing decision. Understanding buyer's behaviour of the target market is an essential task of marketing mangers under the marketing concept. If marketers understand consumer's behaviour, they are able to predict how consumers are likely to react to various informational and environmental cues, and are able to shape their marketing strategies accordingly. Without doubt, marketers who understand consumer behaviour have great competitive advantage in market and this study may help them greatly. Apart from marketers, it also helps customers as they benefit from insights into their own consumption-related decisions what they buy, why they buy, how they buy and the promotional influences that persuade them to buy. The study of buying behaviour enables them become wiser. Hence, the researcher has chosen to study. "Buying Behaviour of Purchase of Refrigerator in Calicut City".

5. OBJECTIVES OF THE STUDY

The purpose of this study is to understand key external variables influencing the buying behaviour of a particular segment of customers towards the product category of Refrigerator and the specific objectives are as per following:

1. To study the influence of various factors like brand name, price and quality on the purchase decision of refrigerators.
2. To study the brand awareness of refrigerators among the consumers.
3. To know the most preferred brand among the selected brands like whirlpool, Samsung and LG.

4. RESEARCH METHODOLOGY

This paper involves primary and secondary research.

As part of primary research, this paper uses qualitative research to determine the relevance of both static and dynamic elements in refrigerators and consumers buying behaviours on the same.

In order to obtain primary data the instruments used were observations of consumers, questionnaires and in-depth interviews with the consumers in structured format.

The research was undertaken among three brands of refrigerators in Calicut city. Namely;

- Whirlpool
- LG
- Samsung

The sample size of the research paper was 200 and the sample studied was across all age group (20-30 yrs, 31-40, 41-50, 50 and above).

The process was carried out by visiting each of the consumers and by observing their responses. In order to begin communication with potential consumer's qualifier questions were asked to understand their buying habits. Appointments were fixed with the respondents willing to give interviews over telephones, which were followed by structured in-depth interviews via telephone or e mails. The data were recorded in the form of written notes.

The parameters chosen for analysis during the depth interviews were as follows:

- Income level of the respondents
- Family size
- Years of usage
- Source of finance
- Knowledge about different brand
- Influence of factors
- Promotional schemes
- Concern on quality
- Price

Secondary research has been undertaken through the following sources:

- Newspapers
- Periodicals
- Websites
- Magazines

5. ANALYSIS

TABLE 1: AGE OF RESPONDENTS

	Age	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 - 30 Years	46	23.0	23.0	23.0
	31 - 40 Years	49	24.5	24.5	47.5
	41 - 50 Years	51	25.5	25.5	73.0
	50 & Above	54	27.0	27.0	100.0
	Total	**200**	**100.0**	**100.0**	

INTERPRETATION: It is found that 23% (46) are belongs to age group of 20 – 30 Years and 24.5% (49) of them are belongs to age group of 31 – 40 Years, 25% (51) are belongs to the age group of 41 – 50 Years and 27% (54) are belongs to age group of 50 Years and above.

It is concluded that majority 27 % of respondents are belonging to the age group of 50 Years and above.

CHART 1: AGE OF RESPONDENTS

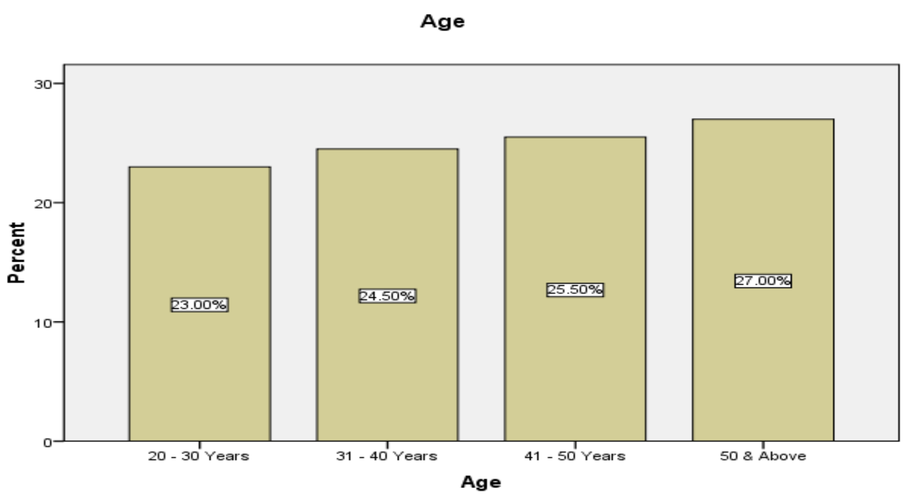


TABLE 2: INCOME LEVEL OF RESPONDENTS

	Income level of the family	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 10000	39	19.5	19.5	19.5
	10001 - 20000	40	20.0	20.0	39.5
	20001 - 30000	46	23.0	23.0	62.5
	30001 - 50000	35	17.5	17.5	80.0
	Above 50000	40	20.0	20.0	100.0
	Total	**200**	**100.0**	**100.0**	

INTERPRETATION: It is found that 19.5% (39) are earning income Below Rs.10000 and 20 % (40) are earning income of Rs.10001 - 20000, 23% (46) of them are earning Rs.20001 - 30000 and 17.5% (35) are earning income of Rs.30001 – 50000. And finally 20% (40) are earning income of above Rs.50000.
It is concluded that majority 23 % of respondents are earning income of Rs.20001 – 30000.

CHART 2: EARNING MEMBERS OF FAMILY

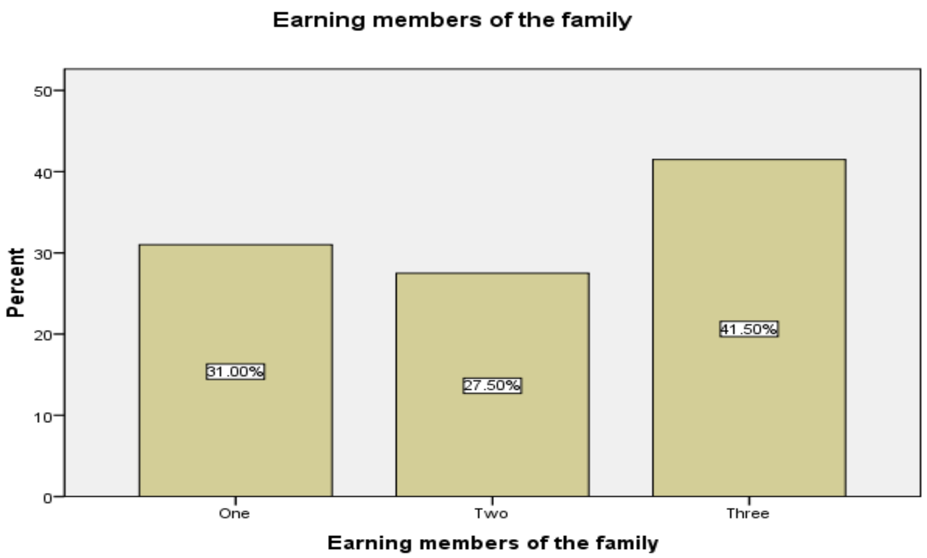


TABLE 3: REFRIGERATOR IS OWNED

	Do you have a refrigerator?	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	200	100.0	100.0	100.0
	No	0	0	0	0

INTERPRETATION: It is found that 100% (200) of respondents owned a refrigerator. All most everyone already has a refrigerator.

TABLE 4: KNOWLEDGE OF BRAND OR MODEL

	Came to know about your brand /model of refrigerator	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Newspaper	55	27.5	27.5	27.5
	Magazines	37	18.5	18.5	46.0
	Through Friends & Relatives	60	30.0	30.0	76.0
	Social Media	48	24.0	24.0	100.0
	Total	**200**	**100.0**	**100.0**	

INTERPRETATION: It is found that 27.5% (55) are know about the refrigerator brand by reading newspaper and 18.5 % (37) of them are know about refrigerator by reading magazines, 30% (60) are know about refrigerator brand through friends and Relatives and 24% (48) are know about the refrigerator by social media.
It is concluded that majority 30 % of respondents are know about refrigerator brand through friends and Relatives.

CHART 3: KNOWLEDGE OF BRAND OR MODEL

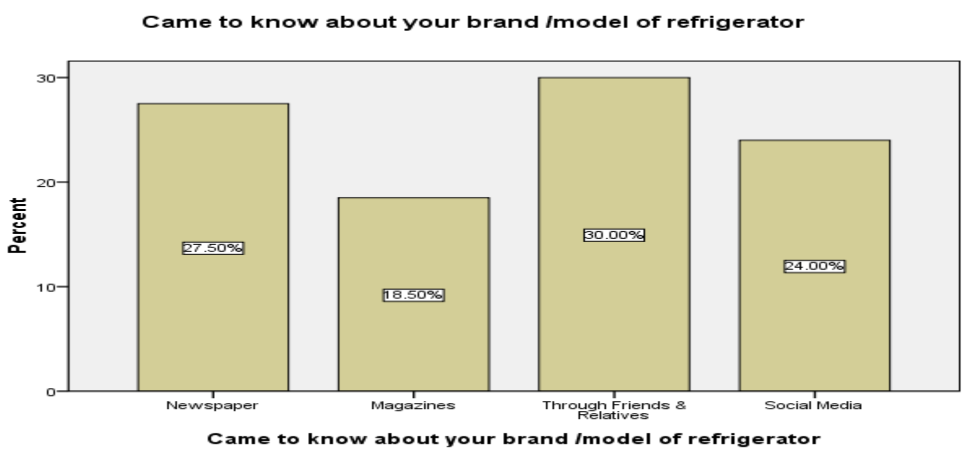


TABLE 5: BRAND OF REFRIGERATOR OWNED

	Brand of refrigerator own	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Whirlpool	69	34.5	34.5	34.5
	LG	68	34.0	34.0	68.5
	Samsung	63	31.5	31.5	100.0
	Total	**200**	**100.0**	**100.0**	

INTERPRETATION: It is found that 34.5% (69) are having Whirlpool Refrigerator and 34 % (68) having LG Refrigerator, 31.5% (63) having Samsung Refrigerator
It is concluded that majority 34.5 % of respondents are having Whirlpool Refrigerator.

CHART 4: BRAND OF REFRIGERATOR OWNED

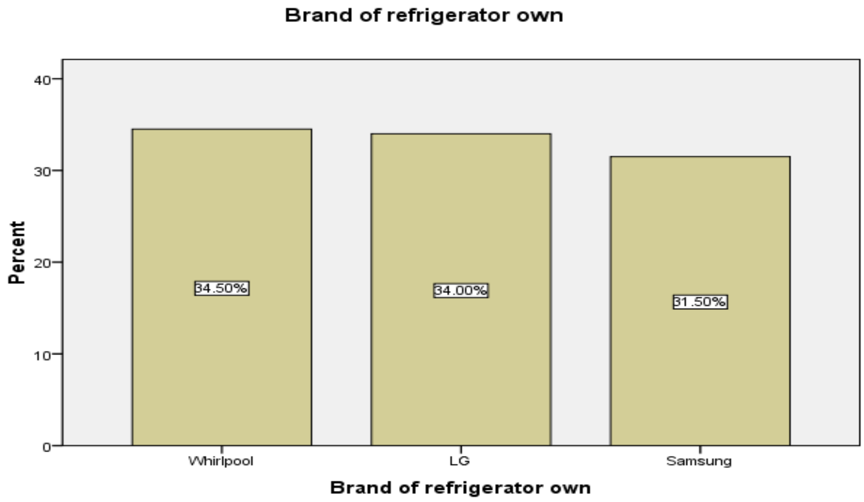
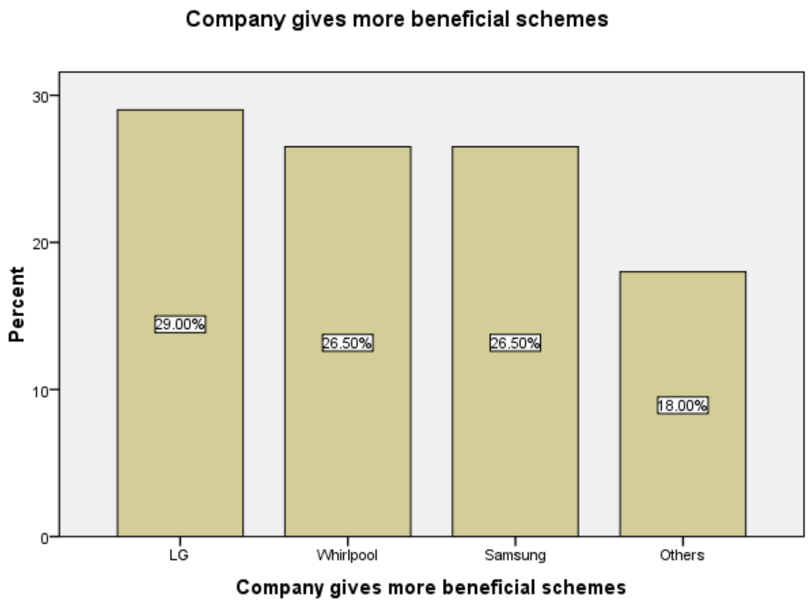


TABLE 6: BENEFICIAL SCHEMES GIVEN BY COMPANY

	Company gives more beneficial schemes	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LG	58	29.0	29.0	29.0
	Whirlpool	53	26.5	26.5	55.5
	Samsung	53	26.5	26.5	82.0
	Others	36	18.0	18.0	100.0
	Total	**200**	**100.0**	**100.0**	

INTERPRETATION: It is found that 29% (58) LG is giving more beneficial schemes and 26.5 % (53) are feel that Whirlpool is giving more beneficial schemes, 26.5 % (53) are feel that Samsung is giving more beneficial schemes, and 18% (36) are feel that other refrigerator company is giving more beneficial schemes
It is concluded that majority 58 % of respondents are feel that LG is giving more beneficial schemes.

CHART 5: BENEFICIAL SCHEMES GIVEN BY COMPANY



6. FINDINGS

In terms of customers, shopping experience following static parameters emerged as customers key preferences while choosing particular refrigerators.
23% (46) are belongs to age group of 20 – 30 Years and 24.5% (49) of them are belongs to age group of 31 – 40 Years, 25% (51) are belongs to the age group of 41 – 50 Years and 27% (54) are belongs to age group of 50 Years and above .19.5% (39) are earning income Below Rs.10000 and 20 % (40) are earning income of

Rs.10001 - 20000, 23% (46) of them are earning Rs.20001 - 30000 and 17.5% (35) are earning income of Rs.30001 – 50000. And finally 20% (40) are earning income of Above Rs.50000. 100% (200) of respondents owned a refrigerator. All most everyone already has a refrigerator.

Majority of the respondents are aware of the various brands available in the market. Among the three brands chosen for study whirlpool is the most favourable brand preferred by the customers.

Among the various promotional strategies adopted by the companies majority of the respondents comes to know about the brand through their friends and relatives. News paper advertising also has a significant role in making the consumer aware of the various schemes provided by the company's. Social Medias also plays an important role in educating consumers.

Consumers have an opinion that the price of the refrigerators are reasonable when compared to the benefits provided by the companies. Also they are satisfied with the quality of the products offered by the companies.

It was observed that the variety of promotional schemes provided by the companies are widely attracted the consumers to take a valuable decision on their purchase of refrigerators. Value for money is also an important factor for this type of products. Hence, in that case the consumers are satisfied with the price of the products quoted by the companies.

7. SUGGESTIONS

Refrigerator plays an important role among all home appliances. In this study of consumer buying behaviour enables marketing researchers to predict how consumers make the purchase decision.

When comparing age group of respondents well settled people is buying refrigerators than other age group. The study suggested that to concentrate on target the people of age above 50 Years.

Most of the people like to purchase refrigerator offer. So, Refrigerator Company should give more offers. So, companies can motivate their customer by giving discount price.

Companies should provide quick delivery and sales service after selling the product. Stores is one of the important place where people come together to buy refrigerator at discount price.

Majority of people are highly aware about brands. So it is suggested that the company must give quality product to the market.

Majority of respondents are purchase refrigerators in their own source and they not opt for loan. So by providing attractive discounts and offers more customers will prefer to buy refrigerators.

Consumers who using refrigerators responds that quality of refrigerator is good and maintaining the same will leads to increase the customer base and the right promotional strategy the industry would be able to increase their market share.

8. CONCLUSION

The consumers' behaviour towards Refrigerator is very positive and their satisfaction level is very high. The consumers of refrigerator are preferred Whirlpool refrigerator most. The consumers believe that company provides high quality product with reasonable prices. Consumers of refrigerator mainly get information from the TV commercial. To achieve the leading position and success, lot of improvement is required for industry. As refrigerator became essential for the consumer day by day, many marketers are coming with this product in this electronic industry. So that it has also become a competitive market for refrigerator in spite of having a good brand image and local presence in Calicut district. They should also take much more attention and careful action to establish its product line in the market. Also should be identify their customer's behaviour and keep the commitment with them strongly. To build a positive perception and awareness among the consumers about their product they have to be stronger in their promotional activities and should maintain a good relationship both internally and externally in their corporate life. Finally I can conclude that Refrigerator Company provide quality product with reasonable price. They provide their service to customer with carefully.

10. LIMITATIONS OF THE STUDY

The main drawback of the study is the non-cooperation of heads of sample respondents in providing reliable data relating to some of the questions incorporated in the schedule. Because of this, some of the aspects relating to buying behaviour of refrigerators buyers are not covered as planned. Although sincere efforts were made by the researcher to collect the maximum, most, authentic and relevant information even then this study may have the Following limitations:

- The results of this study cannot be generalized and taken as representing the general behaviour of all the consumer of refrigerator since it is unique and the research limited to Calicutcity;
- Time was another limiting factor and
- Cost was too another limiting factor.

REFERENCES

BOOKS

1. Chunawalla, S.A. "Commentary on consumer behaviour", Himalaya Publishing House, Mumbai, 2005.
2. Glock C.Y. and Nicossia, F.M. "The study of consumer and consumption behaviour in S.H. Britt (ed)", consumer behaviour and the behavioural sciences, New York, John Wiley and Son's, 1966.
3. Gupta, D.B. "Consumption Pattern in India: A Study of International Variations", Tata Mc. Graw-Hill, Bombay, 1973.
4. John, A, Howard and Jagadish, N, Sheth, "The theory of buyer behaviour", New York, Wiley, 1969.
5. Karuna Karan, K. "Marketing Management Text and Cases in Indian Context", Himalaya Publishing House, 2007.
6. Kaynes JM "The General theory of employment, interest and money" McMillan and Co. Ltd, New York, 1954.
7. Leon G. Schiffman, Leslie Lazar Kanuk, "Consumer behaviour", Prentice Hall of India, New Delhi, 2006.
8. Marketing Management-ICFAI center for Management Research, 2004.
9. Mohammad Amanathulla, "Principles of Modern Marketing", Kalyani Publishers, New Delhi, 2009.
10. NikhileshDholakia, et.al, "Marketing Management Cases and Concepts", McMillan India Ltd, 1978.
11. Philip Kotler, "Marketing Management", Pearson-Education Ltd, 2004.
12. Philip Kotler, Kevin lane Keller, "Marketing Management", 12edition, Prentice Hall of India Pvt. Ltd, New Delhi, 2005.
13. Raj Kumar, G., "Marketing Management, Sikkim University, 2004.
14. Rajeev kumra, "Consumer behaviour, an applied orientation in Indian context", Himalaya Publishing House, Mumbai, 2008.
15. Ramaswamy, V.S., Namakumari, S. "Marketing Management Global perspective Indian Context", Fourth Edition, Macmillan Publishers, India Ltd, 2009.
16. Sherlekar, S.A. "Marketing Management", Himalaya Publishing House, Bombay, 2004.
17. Sontakki, C.N. "Consumer behaviour", Himalaya Publishing House, Mumbai, 2006.
18. SujaR.Nair, "Consumer Behaviour and Marketing Research (text and cases)", Himalaya Publishing House, 2004.
19. Varshney, R.L., Gupta, S.L. "Marketing Management Text and Cases (An Indian perspective)" Sultan Chand & Sons Educational Publishers, New Delhi, 2008.
20. VipinMathur, "Consumer behaviour challenges of New Millennium Markets", Cybertech publications, New Delhi, 2008.
21. Walter C.G and Patil, G.W. "Consumer Behaviour: An Integrated Frame Work", Richard. D. Irwin Home Wood Illinois, 1970.
22. Webster and Philip Kotler, "Consumer Behaviour", Kalyani publications, 2010.

E-BANKING IN INDIA

POOJA
ALUMNA
MAHARSHI DAYANAND UNIVERSITY
ROHTAK

ABSTRACT
In today's era most of the banking happens when you are sipping tea or taking a call. ATMs are situated at the doorstep. Services of bank are available at 24x7. There is more plastic money in the wallet than physical notes. A big part of the change is because of the use of Information Technology. Currently, banks operate in a highly globalized, privatized and liberalized environment with tough competition. In order to exists in this tough environment banks have to use Information Technology. Banking industry in India has witnessed of enormous developments because of sweeping changes that are taking place in the IT. E-banking has developed from such an creative environment. The aim of this paper is to study the growth made by banking industry in India through the adoption of technology. The paper also emphasizes the problems faced by banks in India adoption of technology and suggestions are made to overcome these problems. The paper states that in upcoming years, e-banking will not only be allowable medium of banking but also will be desirable medium of banking.

KEYWORDS
bank, e-banking, information technology.

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INTRODUCTION
Technology has become a useful tool in organizations. Currently, banks operate in a highly globalized, privatized and liberalized environment with tough competition. In order to exists in this tough environment banks have to use Information Technology. Information Technology has introduced various new business dimensions. Day by Day Information Technology playing more significant role in upgrading the services or products in the banking industry in India. Banking industry in India has witnessed of enormous developments because of sweeping changes that are taking place in the IT. E-banking has developed from such an creative environment. Modern technology is recognized as a remedy for most of the diseases that the banking industry faces today. Currently, India is a relative non-bank economy as the credit-to-GDP ratio is one of the lowest between various developing countries. So, Indian banks are facing the double challenge of increasing accession and high growth orientation. The banking sector can kill two birds with one stone that is with the use of the technology. Enormous progress took place in the area of technology which has concentrated the globe to a global village and it has brought incredible transition in the banking sector. Branch banking conception in the brick and mortar style has been converted into click and order channel style.

E-BANKING
E-banking refers to Electronic Banking. E-banking is one which denotes and surrounds the entire sphere of technology capabilities that have taken place in the area of banking. E-banking is a common term making use of electronic mode through internet, mobile phones, telephone etc. for remittance or delivery of banking services and products. The concept and scope of electronic-banking is still in the evolutionary stage. E-banking has shattered the hurdles of branch banking. It does not consist of any physical transfer of money, but it's all done electronically. E-banking is just like normal banking with one huge exception. You don't have to go the bank for banking transactions. Instead you can access your account from any part of the globe at any time and do the same when you have the time and not when the bank is open. E-banking, also known as Electronic Fund Transfer (EFT) is normally the use of electronic mode to transfer funds directly from one account to other, rather than by cash or cheque.

CHARACTERISTICS OF E-BANKING
1. Easy fund transfer facility.
2. Making the payments of bills.
3. It can show the balance of accounts and statements.
4. It can bring doorstep services.
5. Better in management of customer relationship.
6. It introduces innovative banking products and services.
7. Mobile banking.
8. Easy to search balance and transaction history.
9. Export the transaction history.
10. There are no geographical barriers.
11. On-line purchase of goods and services.
12. It is not bound by operational timings.
13. Services can be offered at minimal cost.

OBJECTIVES OF THE STUDY
1. To study various electronic-banking services or products adopted by banks in India.
2. To study the problems faced by Indian banks in adoption of e-banking and make suggestions to overcome these problems.

RESEARCH METHODOLOGY
The study is based on secondary data. Published and unpublished article, ongoing academic working paper and internet are used extensively as a source of information.

E-BANKING IN INDIA
India is still in the initial stages of E-banking development. Tough Competition and transition in technology and lifestyle have converted the face of banking. The issue here is-'Where does India lie in the domain of e-banking.' E-banking is likely to bring a host of opportunities as well as unprecedented risks to the fundamental nature of banking in India. The impact of e-banking in India is not yet apparent. Indian e-banking is still flowering, although it is presentable a strategic necessity for most commercial banks, as competition increases from private banks and non banking financial institutions. The credit of launching e-banking in India goes to ICICI bank. Citibank and HDFC followed with e-banking services in 1999.

The Reserve Bank has also established a "Group (Working) on Electronic-banking to examine various aspects of e-banking. The group focused on three major areas of e-banking i.e. 1) Technology and Security Issues (2) Legal issues and (3) Regulatory and Supervisory issues. RBI has accepted the guidelines of the group and they provide a good insight into the security requirements of e-banking.
The importance of the impact of technology and information security cannot be doubted. Technological developments have been one of the key drivers of the global economy and represent an instrument that if exploited well can boost the efficiency and competitivity of the banking sector. However, the rapid growth of the internet has introduced a completely new level of security related problems. The problem here is that since the internet is not a regulated technology and it is readily available to millions of people, there will always be people who want to use it to make illicit gains. The security issue can be addressed at three levels. The first is the security of customer information as it is sent from the customer's PC to the web server. The second is the security of the environment in which the internet banking server and customer information database resides. Third, security measures must be in place to prevent unauthorized users from attempting to long into the online banking section of the website.
From a legal perspective, security procedure security procedure adopted by banks for authenticating users needs to be recognized by law as a substitute for signature. In India, the Information Technology Act, 2000, in section 3(2) provides for a particular technology (viz., the asymmetric crypto system and hash function) as a means of authenticating electronic record. Another method used by banks for verification should be recognized as a source of legal risk.
Regarding the regulatory and supervisory issues, only such banks which are licensed and supervised and have a physical presence in India will be permitted to offer e-banking products to residents of India.
To cope with the problems of tough competition, Indian banks have adopted many initiatives and e-banking is one of them. The competition has been especially tough for the public sector banks, as the private sector and foreign banks are leaders in the adoption of e-banking. Indian banks offer following e-banking products and services:
1. Automated Teller Machines (ATMs)
2. Internet Banking
3. Mobile Banking
4. Phone Banking
5. Electronic Clearing Cards (ECC)
6. Electronic Fund Transfer (EFT)

The three broad facilities that e-banking offers are:
i. Suitability- Accomplish your banking at your ease at your home etc.
ii. No need of Queues- No queues required in online banking.
iii. 24X7 service- Online banking services is provided at 24X7.

1. AUTOMATED TELLER MACHINE

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

2. INTERNET BANKING

As the banking industry has been constantly innovating and with the advent of technological development particularly in the area of telecommunication and information technology, one such innovation is internet banking. Internet banking, also known as online banking, virtual banking or e-banking, is an electronic payment system that enables customers of a bank to conduct a range of financial services through internet portal. All Indian banks using internet as an extra channel or banks using internet only as delivery channel are now on the equal footing to offer their banking services on the internet and to compete for customers around the globe. Internet banking is useful for both the bankers and the customers. The rationale use of internet banking technology from the bank point of view is mainly related to cost savings. Internet banking sites can be segregated into four categories from level I, which offers just minimum functionalities, such as access to one's deposit account data, to level IV sites that offer sophisticated services. Generally, internet banking is offered in two ways. First, an existing branch with physical offices can establish a website and offer its customer internet banking in addition to traditional banking channels. Second way is that bank may be established as "virtual", "branchless" or "internet" with a computer server at its heart that is housed in an office that serves as bank's legal address. Virtual banks may offer customers the ability to deposit and withdraw the funds at automated teller machine or other remote channels used by the banks.

3. MOBILE BANKING

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

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

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

4. PHONE BANKING

Phone banking refers to the authorized consumers to utilise special telephone number of the bank. This facility is available with the help of a voice response system (VRS). This system accepts only TONE dialed input (For callers phone instruments for dialing necessary numbers) and suitable voice response message/ information to the caller. Tele-banking is of two kinds:

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

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

5. ELECTRONIC CLEARING CARDS

Recently e-cash is being used in place of physical cash. ECE such as debit card and credit card. Debit card permits' anywhere any time accesses' to the customers from their personal account. A consumer having a debit card doesn't require carry hard cash. Credit cards are also easy mode of exchange. It allows a customer to buy goods and services within specified limits from certain authorized dealer without making quickly payments in cash. It is also known as plastic money. The main difference between a debit card and a credit card is that while debit card is a pre-paid and credit card is post-paid.

6. ELECTRONIC FUND TRANSFER

In the present age of integrated technology consisting of computers and communication facility, distances need no longer be constraint in providing customer service. EFT system hosted and operated by the RBI, permits transfer of funds, from any account to any other account at any branch of any member bank in any other city. In other words, electronic fund transfer facilitates the quick movement of deposit money from one bank account of one customer to the bank account of another customer. In this system, the sender and the receiver may be located at different cities. As an important tool of customer services, EFT system addresses the needs of individual customers to transfer money from one place to another within a day or two.

PROBLEMS IN ADOPTION OF E-BANKING

Followings problems comes in the way of Indian banking sector:

1. The main challenge faced by e-banking is that it is not secure and risk-free.
2. Less awareness regarding internet and new technology among people.
3. Lack of computer knowledge.
4. There is a tendency in people to hold cash.
5. Illiteracy among population.
6. Lacking of trained workers in banking industry.
7. Weak information infrastructure for installation of e-delivery channels.
8. Hardware devices are not adequate in the country.
9. There are various risks included in e-banking such as: managerial risk, legal risk etc.
10. There is a lack of Laws and Regulations regarding e-banking.

SUGGESTIONS

1. Create popularity/awareness among people about electronic-banking. Customers should be made educate about the use of e-banking services.
2. More focus should be given on appropriate network facility.
3. Banks should regularly keep back-up of their data. There should be periodic check on the back up data to ensure the recovery without loss of transaction.
4. Banks should make explicit security plan for information security equipments.
5. To avoid the loss of banking data banks should employed trained and expert personnel to confirm the security of consumer's funds.
6. Special arrangements should be made by banks to confirm full security of customer funds. Technical defaults should be avoided by employing well-trained and expert technicians in field of computers, so that loss of data can be avoided.
7. Easy method to operate e-banking should be installed by the bank for frequent use of e-banking.
8. Government should make heavy investments for building the basic infrastructure.

CONCLUSION

In our country (India), e-banking is in its initial stage. Undoubtedly, Indian banks are making efforts for the adoption of technology and e-delivery channels but still masses are deprive of the concept of the e-banking. Banks in India are making genuine efforts to familiarise the e-banking products and services. In upcoming years, e-banking will not only be allowable medium of banking but also will be desired medium of banking.

REFERENCES

1. Basavarajappa, M.T. "E-banking in India & its Present Scenario & further Prospects", UGC sponsored National Conference on Information Technology & its implication on Banking Sector: Challenge and Prospect.
2. Lal, R. and Saluja, R. (2012). "E-banking-The Indian Scenario", Asia Pacific Journal of Marketing and Management Review, Vol. I (4).
3. Nirala Chandrawati and Pandey, B.B. (2015). "Evolution of E-banking in India-An empirical analysis", International Journal of Multidisciplinary Research and Development, Vol. 2, Issue 11, pp. 585-588.
4. Uppal, R. K. (2011). "E-Age Technology- New Face of Indian Banking Industry: Emerging Challenges and New Potentials", Journal of Social and Development Sciences, Vol.1, No. 3, pp. 115-129.
5. Uppal, R. K. (2011). "E-Delivery Channels in Banks- A Fresh Outlook", Researchers World-Journal of Arts Science & Commerce, Vol. II, No. 1, pp. 180-191.

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