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CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	MODEL DEVELOPMENT OF SMALL AND MEDIUM INDUSTRIAL INVESTMENT CREATIVE ECONOMY BASED IN DENPASAR CITY <i>NI LUH PUTU WIAGUSTINI, I WAYAN RAMANTHA, I KETUT MUSTANDA, NYOMAN ABUNDANTI & I GEDE MERTA SUDIARTHA</i>	1
2.	THE ROLE OF PUSH AND PULL FACTORS IN OCCUPATIONAL CHANGE OF RURAL ARTISANS IN PUNJAB <i>INDERJEET SINGH & DR. BALBIR SINGH</i>	17
3.	A STUDY ON CUSTOMER SERVICE QUALITY OF RETAIL BANKING SECTOR IN CHENNAI <i>SORNAKUMARI & DR. KALYANARAMAN</i>	22
4.	SUSTAINABLE, RESPONSIBLE AND IMPACT INVESTMENT: A GLOBAL REVIEW <i>VINEETA MISHRA & DR. AJIT MITTAL</i>	26
5.	SUPER TREND SCALPING STRATEGY FOR NIFTY FUTURES & OPTIONS TRADING <i>DR. PRAVIN MOKASHI</i>	30
6.	COMPARATIVE EVALUATION OF ULTRASOUND BREAST CANCER IMAGE AND DESPECKLING <i>K. HAKKINS RAJ</i>	32
7.	ROLE OF CONSTRUCTION INDUSTRY IN THE ECONOMIC DEVELOPMENT OF INDIA <i>DR. K. VIJAYA VENKATESWARI</i>	36
8.	POTENTIALITY OF DERIVATIVE TRADING IN INDIAN CAPITAL MARKET: AN EMPIRICAL STUDY ON NSE <i>DR. RAMESH O OLEKAR & MUBARAK</i>	39
9.	SOCIO-ECONOMIC EMPOWERMENT OF WOMEN IN PUNJAB <i>AMANDEEP KAUR & DR. NIRMAL SINGH</i>	45
10.	THE IMPACT OF REMUNERATION MANAGEMENT ON ORGANISATIONAL EFFECTIVENESS: A STUDY IN BANGALORE <i>RAVI KUMAR & DR. D GOVINDAPPA</i>	49
11.	DIGITAL MARKETING AND ITS IMPACT ON BUYING BEHAVIOUR OF YOUTH: A REVIEW OF LITERATURE <i>SWAMYANATHAN.C & KAMALA S</i>	54
12.	DEMONETIZATION AND PARALLEL ECONOMY <i>SILKY JAIN & DEEPAK GUPTA</i>	57
13.	AN EMPIRICAL ANALYSIS OF STOCK PRICE-VOLUME RELATIONSHIP: A CASE STUDY IN AMERICAN COUNTRIES <i>DR. REKHA GUPTA</i>	60
14.	A CONCEPTUAL STUDY ON GIG ECONOMY <i>N. SANTHOSH KUMAR</i>	76
15.	SOCIO-ECONOMIC CONDITIONS OF MICRO SMALL MEDIUM ENTREPRENEURS (MSMEs) IN TELANGANA STATE: A STUDY OF KARIMNAGAR DISTRICT <i>VELDANDI SADANANDAM & SHRUNGARAPU VISHNU</i>	78
16.	PATTERNS OF INTERNATIONAL MIGRATION AND REMITTANCES: A MACRO ANALYSIS FROM ETHIOPIA <i>EYOB BEKELE JUHAR</i>	83
17.	SOCIO-ECONOMIC CONDITIONS OF MICRO SMALL MEDIUM ENTREPRENEURS (MSMEs): A STUDY OF WARANGAL DISTRICT <i>RANJITH UPPULA</i>	90
18.	MICRO SMALL MEDIUM ENTREPRENEURS (MSMEs) IN TELANGANA STATE: AN OVERVIEW <i>LAVURI RAMESH & A.YESHODA</i>	99
19.	MICRO SMALL MEDIUM ENTERPRISES (MSMEs) IN WARANGAL DISTRICT: AN OVERVIEW <i>MANDHA SHYAM & LANKA RAJAGOPAL</i>	102
20.	PROBLEMS FACED BY MICRO SMALL MEDIUM ENTERPRISES (MSMEs) IN INDIA <i>NIMMALA SOMARAJU & MOTHE RAJU</i>	105
	REQUEST FOR FEEDBACK & DISCLAIMER	107

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MODEL DEVELOPMENT OF SMALL AND MEDIUM INDUSTRIAL INVESTMENT CREATIVE ECONOMY BASED IN DENPASAR CITY**NI LUH PUTU WIAGUSTINI****PROFESSOR****FACULTY OF ECONOMICS & BUSINESS****UNIVERSITY OF UDAYANA****INDONESIA****I WAYAN RAMANTHA****PROFESSOR****FACULTY OF ECONOMICS & BUSINESS****UNIVERSITY OF UDAYANA****INDONESIA****I KETUT MUSTANDA****LECTURER****FACULTY OF ECONOMICS & BUSINESS****UNIVERSITY OF UDAYANA****INDONESIA****NYOMAN ABUNDANTI****LECTURER****FACULTY OF ECONOMICS & BUSINESS****UNIVERSITY OF UDAYANA****INDONESIA****I GEDE MERTA SUDIARTHA****LECTURER****FACULTY OF ECONOMICS & BUSINESS****UNIVERSITY OF UDAYANA****INDONESIA****ABSTRACT**

This study aims to (1) analyze Industry investment potentials of Small and Medium Enterprises in Denpasar (2) Formulate Model Development of Small and Medium Industry in Denpasar. These objectives can be achieved with the output, by means of Location Quotient (LQ); (2) Investment Development Model with the analysis tools External Factors External Factors Summary Matrix and Matrix Summary. This study found that (1) the potential that can be developed Industry investment Small and Medium Enterprises in Denpasar is based creative economy include: Crafts, Publishing and Printing, Fashion, Culinary and Music. (2) Business Climate Investment show: Workforce significant effect on the subsector Crafts, Printing and Culinary; Investment and Economic Value significant effect on the subsector of Crafts, Fashion and Culinary; (3) investment development model Creative Economy Subsector Crafts, Fashion, Culinary and Publishing and Printing right in Denpasar is the Model Growth and Build or Empowerment and Growth strategy with the strategy of market penetration, product development, and integrative strategies. Model development investments Creative Economy Subsector Music is Hold and Maintain, with market penetration and product development.

KEYWORDS

growth and build, hold and maintain, market penetration strategy.

INTRODUCTION

Investments into one of the keywords in any efforts to create economic growth. Investment activity is also one of the main factors as drivers of growth and development of the sectors of trade, import-export, banking, transportation and insurance. Besides, the education factor will also be encouraged, so that the impact on improving human resources (HR). Likewise, the investments can reduce unemployment because of the availability of jobs that can increase revenue, and ultimately there will be an increase in people's purchasing power. Through increased investment activity, both in the form of capital accumulation of domestic and foreign, will be a factor lever that is needed for a country or region in moving machine guarding economy sustained growth.

Local Government essentially have the freedom to choose the ways in accordance with the regional development potential of natural resources and the existing human resources by involving public participation. Regional autonomy emphasis on acceleration strategy for regional development in accordance with the elaboration of the Regional Long Term Development Plan and the Government Work Plan.

Investment is a key in efforts to create economic growth. Investment is one of the major factors as drivers of growth and development of other sectors such as trade, import-export, banking, transportation and insurance. Investments to reduce unemployment because of the availability of jobs that can increase revenue, and ultimately there will be an increase in people's purchasing power.

Agyapong (2010) find investment in the sector of Micro, Small and Medium Enterprises (SMEs) was able to emphasize the amount of poverty in the country Ghana in Ghana. SMEs strengthen sectors such as agriculture, fisheries, quarrying, restaurants / restaurants, food processing, and other services. SMEs play an important role in creating jobs, contributing to tax revenues, facilitating the distribution of goods production, contribute to the development of human resources and the business world. The conditions further significantly affect the conditions of poverty reduction in the country of Ghana. APEC SME innovation center in 2006,

conducted a study on the global competitiveness of SMEs in the 13 countries of APEC. Based on the results of the study, showed that Indonesia is among countries that MSMEs its low competitiveness.

Based on the data of poor households in the city of Denpasar, the city of Denpasar need to have a model of development investment that perpetrators promote SMEs in reducing the number of poor households in the city of Denpasar, such as patterns of poverty in the State of Ghana (Agyapong, 2010), in addition to expectations MSME development towards increased global competitiveness. Investment in SMEs, the main alternative in view of Denpasar has limited natural resources, especially associated with the Vision Denpasar to become a Creative City-based cultural wisdom, the goal of poverty alleviation through development of SME investments will be possible.

Research on the Potential Development of Investments in Small and Medium Industries (SMI) in Denpasar are needed for the following reasons (1) SMEs have a direction that is not only economically profitable but also morally, culture, nature and society; (2) The creative power arising from the IKM, positive impact on the improvement of competitiveness and innovation capacity; (3) IKM very precisely developed in areas that have limited natural resources like in Denpasar, where agricultural land is only 2,519 ha (20%) of the 12 778 ha area of Denpasar.

Based on the description that has been presented research aims to (1) analyze Industry investment potentials of Small and Medium Enterprises in Denpasar, and (2) Formulate Small and Medium Enterprises Development Model Industry in Denpasar.

REVIEW OF LITERATURE

INVESTMENT

Sadono (2000) revealed Investments as expenditure-expenditure for the purchase of capital goods or equipment production with the aim to replace and augment capital goods in the economy that will be used to produce goods and services in the future. Based on the definitions referred to it can be seen that the investments are closely related to economic growth.

One of the arguments of the economy is quite well known that describe their relationship is Harrod-Domar theory. Both scientists have concluded there is a direct economic relationship between the magnitude of the overall capital stock, K with GNP (Y) which is formulated as a ratio of capital/output. This explains the relationship if the higher stock of capital in the economy, the higher the output that can be generated. In simple terms this growth theory written as follows (Todaro2000);

$$\frac{\Delta Y}{Y} = \frac{s}{k} \tag{1}$$

From these equations can be understood easily that the growth rate represented by the notation $\Delta Y / Y$ is determined jointly by the national saving rate, s, as well as the national capital-output ratio, k. More buffs, this identity can also be described premises ntingkat growth of national income will be directly or as a "positive" proportional degnan savings ratio (ie semakin many parts GNP yan saved and invested, the greater the growth of GNP) and vice versa.

According to Todaro (2000), the economic logic behind the formula development Harrod version - Domar is very simple where in order to grow exponentially, so every economy must save and invest as much as possible of the GNP. The more you can save for later allocated to the investors so that it becomes an investment, the rate of the economy will be more rapid. In this case it takes a strong assumption that moving to other factors ceteris paribus. Investment in question in the context of the macro economy is shaped investas physical investments such as capital goods (plant and equipment), buildings and inventory. Capital goods generally measured in terms of money, the amount of capital per unit multiplied by the price of the acquisition of capital goods. To prevent confusion, the calculation of the investment must be in accordance with national income perhitungan (prathama, 2008) that were included in the calculation of investment are capital goods, building / construction, and inventories of finished goods that are still new.

CREATIVE ECONOMY SECTOR

Creative economy is an economic concept that relies on individual creativity in optimize competitiveness. Wiko (2010: 22) explains that the true basis of the concept of the creative economy is where science and technology is the main input in stimulating economic development and creating a good economic growth. Creative economy is an economic concept in the new economic era that intensifies information and creativity that relies on ideas and knowledge of Human Resources as the main production factor in the production process

The potential of the creative economy is highly developed in Indonesia. In the year 2007 was 6.3% of total gross domestic product of Indonesia contributed the creative industries. Therefore, the government through the relevant institutions to give great attention and importance in the development of this sector. The other reason we need to develop creative industries in Indonesia are: (1) Providing significant economic contribution; (2) Creating a positive business climate; (3) To develop the image and identity of the nation; (4) Based on a renewable resource; (5) Creating innovation and creativity which is a competitive advantage of a nation; (6) Provide a positive social impact.

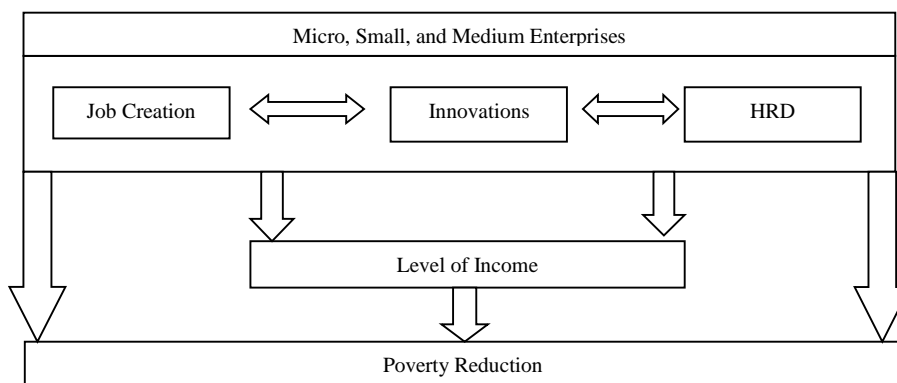
Results convention creative economic development of the Republic of Indonesia's Ministry of Commerce lays about 15 sub-sectors of the creative industries in Indonesia were adjusted to KBLI 2005. The fifteen sectors referred to, among others: (1) Advertising; (2) Architecture; (3) Art Goods Markets; (4) Craft; (5) Design; (6) Fashion; (7) Video; (8) Interactive Games; (9) Music; (10) Performing Arts; (11) Publishing and Printing; (12) Computer and Software Services; (13) Television and Radio (14) Research and Development; (15) and Culinary.

MICRO SMALL AND MEDIUM ENTERPRISES

Ministry of State Minister of Cooperatives and Small and Medium Enterprises defines small enterprises (SEs), including Micro (UMI), is a business entity that has a net worth of at most Rp 200,000,000,00 excluding land and buildings effort, and has annual sales of US \$ 1,000,000,000.00. Medium Enterprises (FME) is a business entity owned Indonesian citizens who have a net worth greater than Rp 200,000,000.00 - USD 10,000,000,000.00 excluding land and buildings. The Central Statistics Agency (BPS) provides a definition of SMEs based on the quantity of labor. Small business is a business entity which has a total workforce is 5-19, while medium-sized enterprises are business entities which have a workforce of 20-99 people.

SMEs can play a role in the economy, improve well-being. It is also reinforced with illustrations submitted Agyapong (2010: 205) regarding the role of SMEs in the alleviation of poverty.

FIGURE 1: CONCEPT ILLUSTRATION ROLE OF SMES TO POVERTY REDUCTION



Source: Agyapong, 2010

POVERTY AND FACTORS CAUSE

Poverty is defined as a low standard of living, namely the existence of a level of material deprivation compared to the standard of living prevailing in the society concerned. The benchmarks used in the World Bank defines poverty it is the achievement of a decent life with earnings of USD 1.00 a day, in the category of countries with low income, USD 2.00 per day in the country with medium income, and \$ 14.00 per day in developed countries.

United Nations Development Program (UNDP) defines poverty as hunger, lack of shelter, the inability of seeing a doctor when sick, no access to school and are illiterate, do not have a job, fear for the future, living in a daily basis, the inability to get clean water, helplessness, no representation and freedom. The Central Bureau of Statistics have different definitions of poverty, which is a condition of a person who is only able to meet their food less than 2100 calories per capita per day.

Poverty can be grouped into three sizes, namely absolute poverty, relative poverty, and cultural poverty (Daryanto and Hafizrianda, 2010: 207). A person classified as poor in absolute if the proceeds are under the poverty line, is not enough to meet the minimum needs of life: food, clothing, health, housing, education. Relatively poor mean that someone actually had to live above the poverty line but still below the ability of people in the vicinity. While poor culturally closely related to the attitude of a person or group of people who are not willing to try to improve the level of life despite the efforts of others who helped.

RESEARCH REVIEW

APEC SME innovation center in 2006, conducted a study on the global competitiveness of SMEs in the 13 countries of APEC. Based on the results of the study, showed that Indonesia is among countries that MSMEs its low competitiveness. Indonesia, along with Mexico and Russia are among the countries with the smallest funding for technological development in SMEs. And based on the results of the same study shows that technological development is one important source of innovation, is also an important source of technology for increasing competitiveness (Tambunan, 2009).

Tambunan (2010), suggests research Asian Development Bank (ADB), which conducted a study to assess the extent to which the results of the efforts of governments and the private sector so far in helping non-agricultural SMEs. Based on these results, indicating that although the government and the private sector has taken various programs, the results are not satisfactory. Most of the respondents were not aware of any public services to develop the business (business development service / BDS). Results of the study also reported that often agencies such as BDS providers do not know what exactly is needed by entrepreneurs of SMEs, because they consider BDS have not established a good network with them. As a result, real services are provided BDS does not correspond to the real needs of SME entrepreneurs.

CESS and Swiss (2003) study of the SMEs export in Bali also shows that in an increasingly competitive market conditions, conducive business environment and adds to costs become very annoying problem trying to comfort exporter / trading house. As a result, the competitiveness of exporters / trading house of Bali which incidentally comes from SMEs, declined sharply because it is difficult to compete with products from countries that cost production cheaper. Bali is one of the main exports of SMEs (including for products from other regions) facing worsening business climate due to the increasing number of levies and regulatory approval. As a result, trading house into export channels for products of SMEs to reach international markets have found it difficult to maintain their business.

RESEARCH METHODOLOGY

The analytical method used in the study Model Development of Small and Medium Industries Investment in Denpasar include the following:

1. Analysis of Investment potential of each district in the city of Denpasar which has the potential to be fostered and developed into a creative economy that is competitive and high value. The analytical tool used: Location Quotient. LQ calculations done by (1) Static Location Quotient (SLQ) and (2) Dynamic Location Quotient (DLQ). SLQ using the Gross Regional Domestic Product (GRDP) of each subdistrict in Denpasar compared with the sector as a whole in Denpasar. By using the formula.

$$SLQ_{ik} = \frac{V_{ik}/V_k}{V_{ip}/V_p} \tag{2}$$

Notation

V_{ik}	=	the value of sector GDP in the region j (Denpasar District of North/South/West/East)
V_k	=	the value of GDP total area of the set (Denpasar District of North/South /West/East)
V_{ip} sector GDP _i	=	Value in the set (Denpasar)
V_p	=	The value of GDP total area of the set (Denpasar)
$SLQ > 1$	=	Study regions (districts) has specialized in sector i compared to regions set (sectors referred featured classified)
$SLQ < 1$	=	Area of study (districts) do not have specialized in sector i than in the set (sector not classified as superior)
$SLQ = 1$	=	i sector are leading sectors both in the study area and in the regions set

DLQ use rate of the Gross Regional Domestic Product (GDP) respectively in Denpasar perkecamatan sector compared with the overall rate of the sector in the city of Denpasar. The results of calculations by this method describes how the rate / fast growth in every sector in every district compared to growth of the same sector in the region himpunannya which in this case is the city of Denpasar. DLQ calculation formula is as follows.

$$DLQ_{ij} = \frac{(1+g_{ij})}{(1+g_j)} \bigg/ \frac{(1+G_i)}{(1+G)} \tag{3}$$

Notation

DLQ	=	Dynamic Location Quotient in a region
g_{ij}	=	The rate of growth in the sector ij (Denpasar subdistrict North/South/West/East)
G_i	=	The rate of growth in the sector i set (Denpasar)
g_j	=	Average regional growth rate j (Denpasar subdistrict North/South/West/East)
G	=	Average rate of growth of the set area (Denpasar)
$DLQ > 1$	=	This sector has the potential for growth is faster than the area set
$DLQ < 1$	=	This sector has the potential for growth is slower than the area set
$DLQ = 1$	=	This sector has large growth potential as fast as the area set

2. Identify internal factors into strengths and weaknesses, as well as external factors that became opportunities and threats Investment Development based creative economy today and the future. Analyzer used stakeholders survey.
3. Determine the position of the Investment Development based Creative Economy by analyzing the internal factors (strengths and weaknesses) and external factors, opportunities and threats) influencing the development of the creative economy based investments in Denpasar. The analysis tool used is Matrix External Factor Analysis Summary (EFAS) and Internal Factor Analysis Summary (IFAS) at the moment and in the future.

RESULTS AND DISCUSSION

INVESTMENT POTENTIAL OF SMALL AND MEDIUM INDUSTRIES IN DENPASAR

Investment potential of SMEs can be known premises to analyze potential investments in Denpasar, which were analyzed by analysis of Location Quotient (LQ), which is an analytical technique used to analyze the potential sectors or base in the economy in a region. Leading sectors that are well developed will have a significant effect on regional economic growth, which in turn can eventually generate income optimally.

LQ calculations done by (1) Static Location Quotient (SLQ) and (2) Dynamic Location Quotient (DLQ). SLQ using the Gross Regional Domestic Product (GRDP) of each sector perkecamatan in Denpasar compared with the sector as a whole in Denpasar. While DLQ use rate of the Gross Regional Domestic Product (GDP) respectively in Denpasar perkecamatan sector compared with the overall rate of the sector in the city of Denpasar. Analysis SLQ and DLQ can be shown the basic sector and sector rate of Denpasar in Table 1.

TABLE 1: RECAPITULATION SECTOR SECTOR BASE AND RATE DENPASAR CITY YEAR 2009 – 2013

No	Districts	Sector							
		Agriculture, Plantations, Livestock, Forestry & Fishing	Processing industry	Electricity, Gas and Water	Property	Trade, Hotels and Restaurants	Transportation and Communications	Financial, leasing and services of the Company	Services
1	North Denpasar	B /LL	NB/LC	NB/LL	B/LC	NB/LC	B/LC	NB/LL	B/LC
2	South Denpasar	B /LL	NB/LC	NB/LC	NB/LL	B/LC	NB/LL	NB/LC	NB/LL
3	West Denpasar	NB/LL	B/LC	NB/LC	NB/LL	NB/LC	NB/LC	NB/LC	NB/LL
5	East Denpasar	B /LL	NB/LC	B/LC	NB/LL	NB/LC	B/LC	B/LC	B/LC

Source: Results Analysis

Notation

- B = Base
- LL = Slow rate
- NB = Non Base
- LC = Faster rate

Based on Table 1 shows that the Manufacturing Sector based at Denpasar District West, with all districts both base and non-base has a rapid growth rate. The manufacturing sector in Denpasar include: Subsector Crafts, Advertising and printing sub-sector, subsector fashion, culinary sub-sector, and subsector Music. These five sectors are the Small and Medium Industries group Creative Economy. The description of each can be described as follows.

FIGURE 2: NUMBER OF INDUSTRIAL ENTERPRISES CREATIVE ECONOMY IN DENPASAR 2014

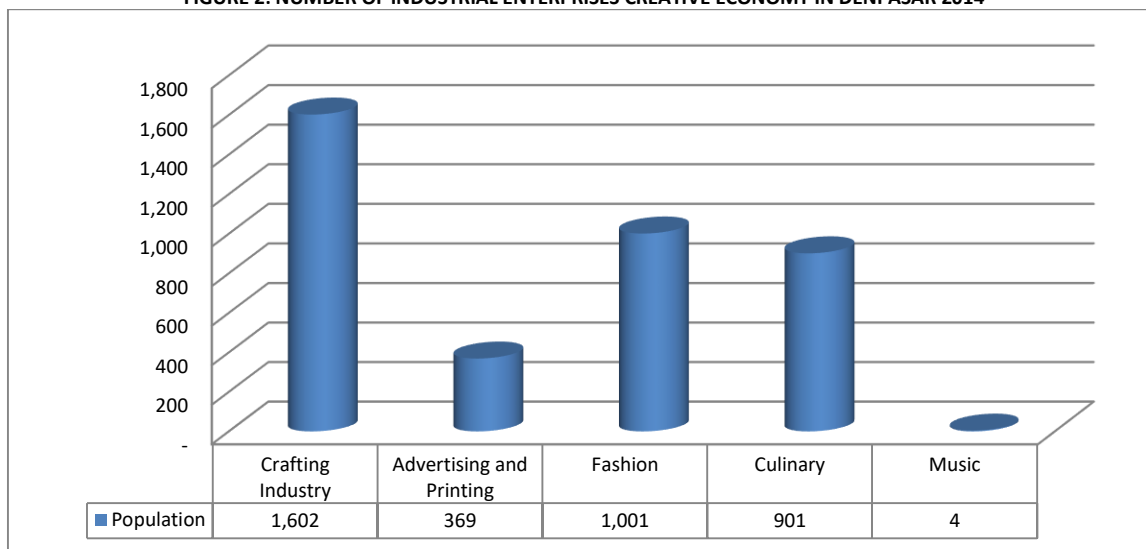
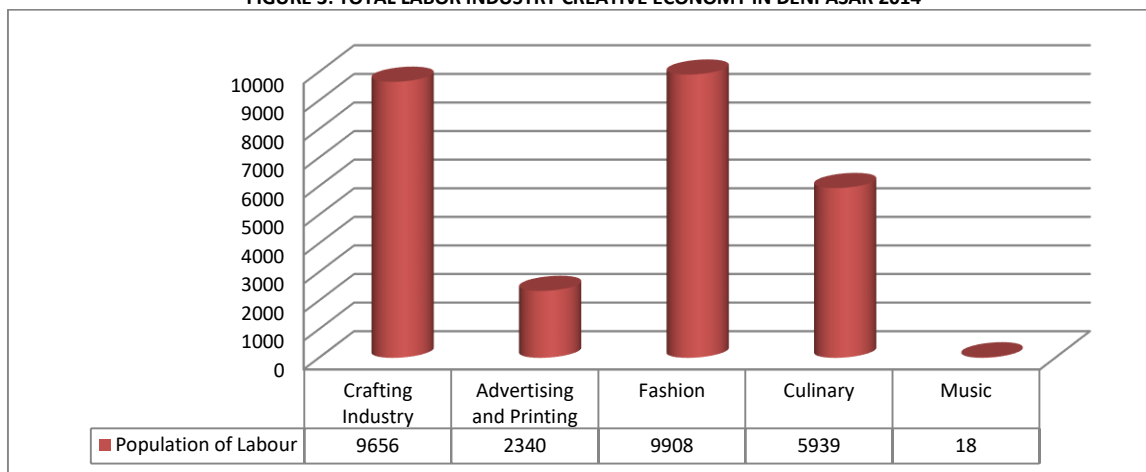


FIGURE 3: TOTAL LABOR INDUSTRY CREATIVE ECONOMY IN DENPASAR 2014



The number of SME businesses based creative economy in Denpasar in 2014 belonging to the group Handicraft subsector amounted to 1,602 units, 369 units Publishing and Printing, Fashion 1,001 people, Culinary 901 units, and Music 4 units (Figure 2). Labor adsorbed amount IKM-based creative economy in Denpasar in 2014 belonging to the group Handicraft subsector amounted to 9656 people, Publishing and Printing 2,340 people, the 9908 Fashion, Culinary 5939 people, and Music 18 (Figure 3). SME Investment Value-based creative economy in Denpasar in 2014 that the group Handicraft subsector amounted to Rp 64,628,949,000, - Advertising and Printing Rp 59,973,935,000, - Fashion Rp 75,760,682,000, -, Culinary Rp 101 765 990 000, - and Music USD 163 800 000, - (Figure 4).

FIGURE 4: CREATIVE ECONOMY INDUSTRY INVESTMENT VALUE IN DENPASAR 2014

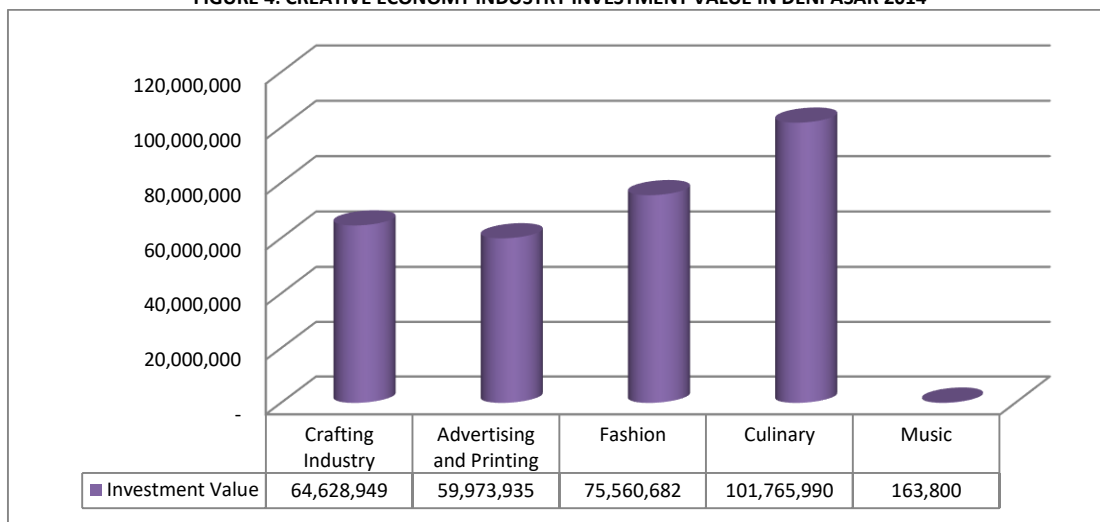
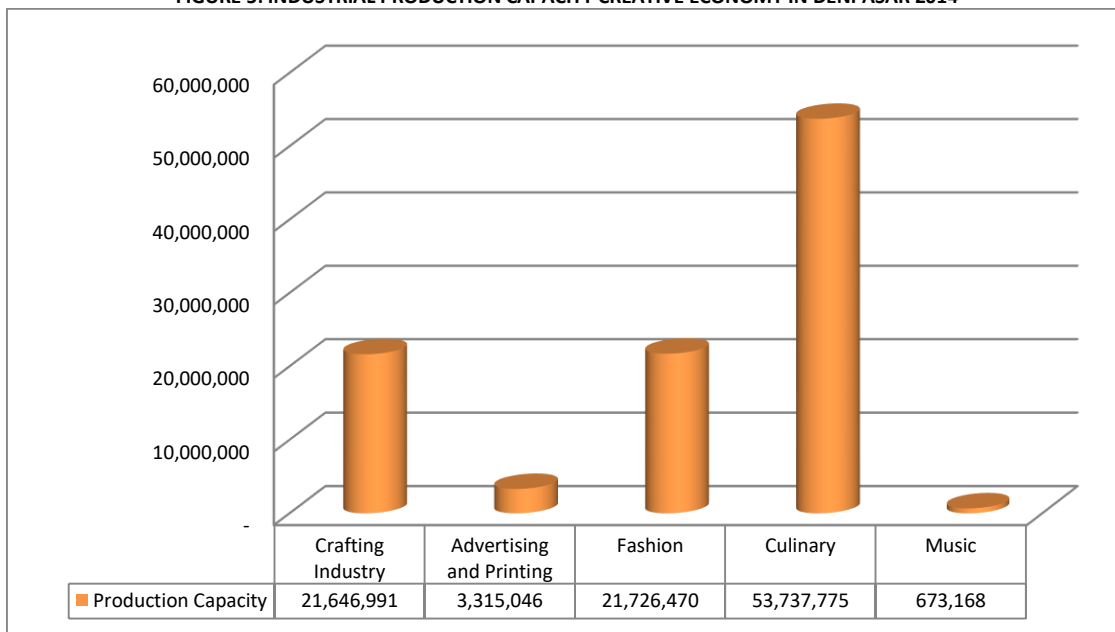


FIGURE 5: INDUSTRIAL PRODUCTION CAPACITY CREATIVE ECONOMY IN DENPASAR 2014



IKM Production Capacity based creative economy in Denpasar in 2014 which amounted to 21,646,991 units subsector Crafts; Advertising and Printing 3,315,046 units; Fashion 21.72647 million units, Culinary 21.72647 million units and 673 168 music unit (Figure 5). IKM Production Value-based creative economy in Denpasar in 2014 that the craft subsector amounted to Rp 378 843 451 000, - USD 103 755 237 000 Publishing and Printing, - Fashion Rp 467 521 398 000, - Culinary Rp 420 525 286 000, - and Music Rp 6,673.100.000, - (Figure 6).

FIGURE 6: INDUSTRIAL PRODUCTION VALUE CREATIVE ECONOMY IN DENPASAR 2014

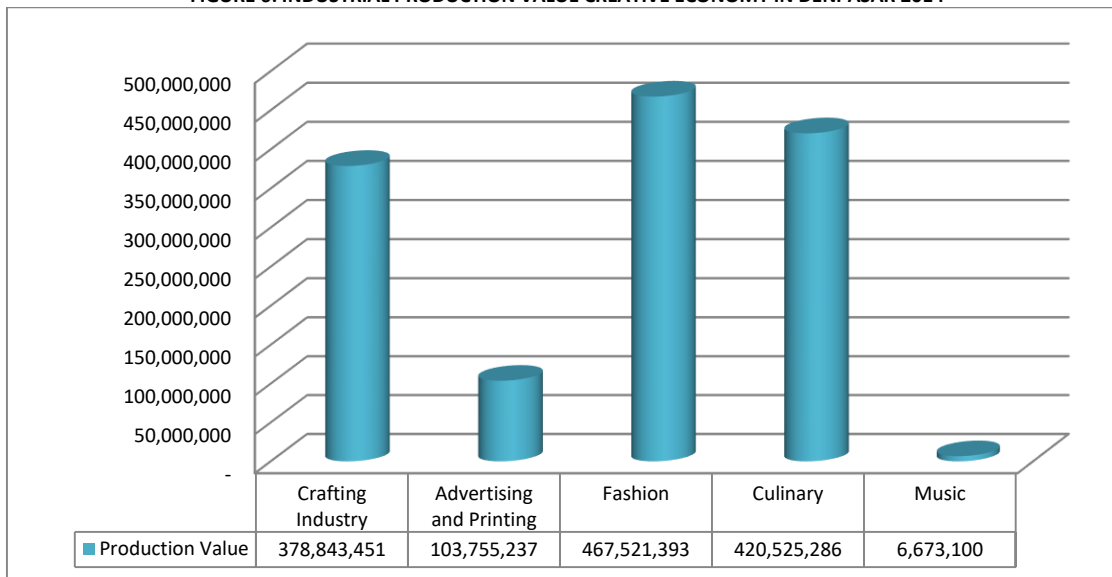
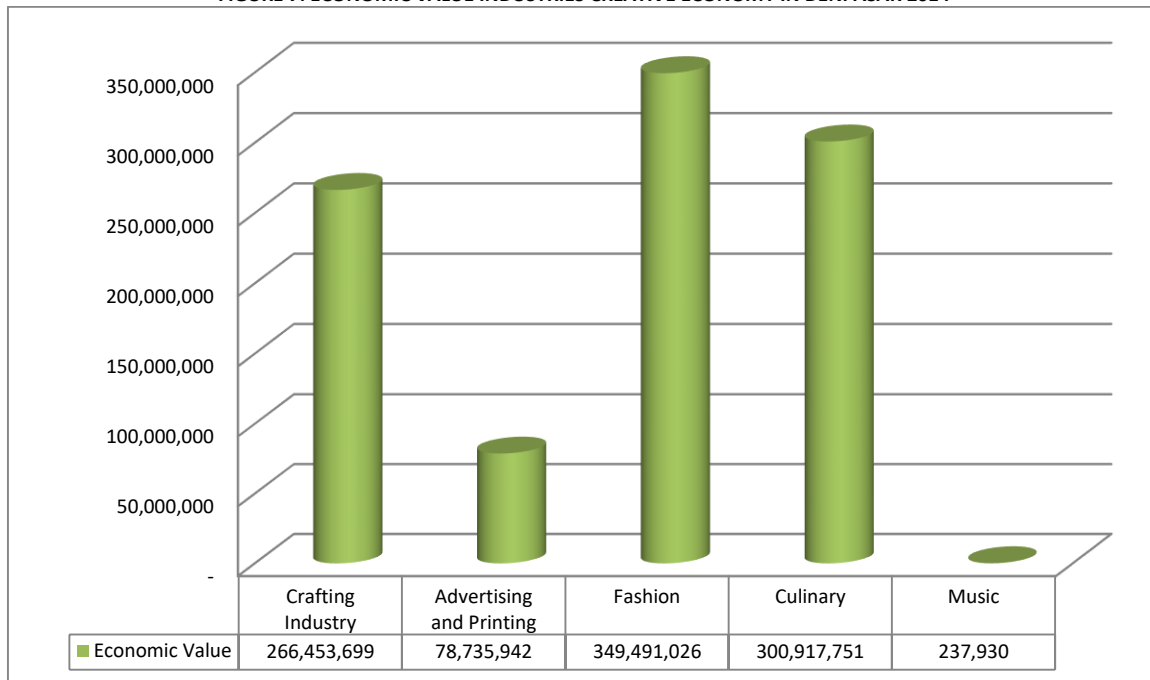


FIGURE 7: ECONOMIC VALUE INDUSTRIES CREATIVE ECONOMY IN DENPASAR 2014



Economic Value-based creative economy in Denpasar in 2014 that the craft subsector amounted to Rp 266.453.699.000, - Advertising and Printing Rp 78.785.942.000, - Fashion Rp 349.491.026.000, - Culinary Rp 300.917.751.000, - and Music Rp 237,93 million, - (Figure 7).

SMALL AND MEDIUM ENTERPRISES DEVELOPMENT MODEL INDUSTRY IN DENPASAR

IDENTIFICATION VARIABLES INVESTMENT DEVELOPMENT DETERMINANTS OF CREATIVE ECONOMY IN DENPASAR

Based Analysis Investment Potential Investment Denpasar found that the creative economy is a sub-sector of Denpasar craft, printing and publishing sub-sector, subsector fashion, culinary sub-sector, and subsector Music. Based on this it is further described each variable determinant of the development of the Creative Economy Investment.

Identification of factors that influence the development of the Creative Economy Investment (subsector craft, printing and publishing sub-sector, subsector fashion, culinary sub-sector, and subsector Music), conducted by distributing questionnaires to the decision maker on the Creative Economy increased investment. In this study questionnaire was filled out by the Head of Department, Head and Sub Head in charge of SME Department of Industry and Trade of Denpasar; Head of Department, Head and Sub Head Office of Cooperative Denpasar; Head of the Board, Head and Co-head Licensing Services Agency One Stop Investment and Denpasar; Head of Department, Head and Sub Head in charge of SME Department of Industry and Trade of the Province of Bali; Head of Department, Head and Sub Head in charge of SME Department of Cooperatives and SMEs Bali Province; Craft Association (Wood Association, the Association of Textile and Clothing, and the Association of silver) numbered; Academics relevant. Briefly respondents determinant variable investment development of the creative economy are presented in Table 2.

TABLE 2: RESPONDENTS VARIABLE INVESTMENT DEVELOPMENT DETERMINANTS OF CREATIVE ECONOMY

No	Sample	Number of sample	Proportion (%)
1	Denpasar Department of Industry and Trade	3	14%
2	Denpasar City Cooperative Office	3	14%
3	Denpasar Licensing Services Agency	3	14%
4	Department of Industry and Trade of the Province of Bali	3	14%
5	Department of Cooperatives and SMEs of the Province of Bali	3	14%
6	SMEs Association	3	14%
7	Academics	3	14%
Total		21	100%

Source: Data processed

Based on Table 2, shows that there are 21 people who filled out a questionnaire about the identification of the factors that determine the investment development of the creative economy to the proportion of each of the same (14%), factors identified determine the investment development of the creative economy consists of factors stratgis internal and external, are presented in Table 3. Table 3 illustrates that there is a strategic factor of 11 internal and 11 external strategic factors identified determine the investment development of the creative economy. Then analyzed each of these factors.

TABLE 3: STRATEGIC INTERNAL AND EXTERNAL FACTORS DETERMINANTS INCREASED INVESTMENTS CREATIVE ECONOMY

No	Internal Factors	No	Eksternal Factors
1	Innovative and creative products	1	Bali Regional Growth Rate
2	Product Variation	2	Inflation Rate
3	Product Quality	3	Interest Rate On Loan
4	Product Image	4	Capital Support From Government
5	Promotional Support	5	Culture/Customs from Community
6	Market Share	6	The Number of SMEs
7	Product Price	7	Suppliers
8	Human Resources Competencies	8	Tastefully Market
9	Marketing Networking System	9	Arrivals of
10	Support equipment operations	10	Local Government Policy
11	Access to information and communication	11	Development in Information Technology

Source: Data processed

Internal factors often called internal strategic environmental factors will be the strength or weakness of companies / industries concerned. If the internal environmental factors have a positive influence will be a force, and when the negative effect would be a drawback. External strategic factors also called external environmental factors is an opportunity or a threat to the enterprise / industry. If the positive effect will be an opportunity, and if the negative effect will be a threat.

FORMULATION OF THE CREATIVE ECONOMY INVESTMENT DEVELOPMENT MODEL

Formulation development model of creative economic investment in the city of Denpasar, first reviewed the environmental conditions Internal and External Creative Economy. This study, which was analyzed by SWOT. SWOT Analysis is an analysis of the environmental variables that can create: strengths, weakness, or opportunity, and threats.

ANALYSIS OF INTERNAL AND EXTERNAL ENVIRONMENTS

Analysis of internal and external environment of creative economic investment made by comparing the respondents' assessment of the importance of internal strategic factor when compared with the future. Respondents in this study consists of the Head of Department, Head and Sub Head in charge of SME Department of Industry and Trade of Denpasar; Head of Department, Head and Sub Head Office of Cooperative Denpasar; Head of the Board, Head of Licensing Services Agency One Stop Investment and Denpasar; Head of Department, Head and Sub Head in charge of SME Department of Industry and Trade of the Province of Bali; Head of Department, Head and Sub Head in charge of SME Department of Cooperatives and SMEs Bali Province; Craft Association (Wood Association, the Association of Textile and Clothing, and the Association of Perak) numbered; Academics relevant, as previously described.

ANALYSIS OF INTERNAL AND EXTERNAL ENVIRONMENT SUBSECTOR CRAFTS

Bali handicraft subsector is very diverse, including raw material: wood, coconut shell, silver, bamboo, rattan, leather, metal, ceramic, cement and spices. Rate respondents about the importance of internal strategic factor today compared to the future on the development of investment subsector Crafts are presented in Table 4, which shows the Internal Factor Analysis Summary (IFAS) subsector investment Crafts Present and Future. The weighted average value of the CRC as strength when worth $2.50 < N \leq 4.00$ and weaknesses when categorized worth $1.00 < N \leq 2.50$.

TABLE 4: INTERNAL FACTOR ANALYSIS SUMMARY (IFAS) INVESTMENT SUBSECTOR CRAFTS DENPASAR PRESENT AND FUTURE VALUE

No	Internal Factors Indicator	Present Value			Future Value		
		Weight (%)	Rating	Weight Average	Weight (%)	Rating	Weight Average
1	2	3	4	5 = 3 x 4	6	7	8 = 6 x 7
1	Innovative and creative products	0.09	3.00	0.28	0.09	3.25	0.29
2	Product Variation	0.09	3.00	0.28	0.09	3.25	0.29
3	Product Quality	0.09	3.00	0.27	0.09	3.25	0.29
4	Product Image	0.09	2.99	0.27	0.09	3.20	0.29
5	Promotional Support	0.09	3.03	0.28	0.09	3.30	0.30
6	Market Share	0.09	3.03	0.28	0.09	3.30	0.30
7	Product Price	0.09	3.10	0.28	0.09	3.30	0.30
8	Human Resources Competencies	0.09	3.20	0.28	0.09	3.40	0.31
9	Marketing Networking System	0.09	3.20	0.29	0.09	3.41	0.31
10	Support equipment operations	0.09	3.20	0.29	0.09	3.46	0.32
11	Access to information and communication	0.09	3.23	0.29	0.09	3.46	0.32
Total		1.00	33.98	3.09	1.00	36.57	3.32

Source: Results Analysis

Based on the weighted average value of IFAS in Table 4, it appears that internal strategic factors Subsector Crafts Denpasar When this is worth 3.09 which means above 2.5 which is the power subsector Crafts. The weighted average value of IFAS in the future for the entire internal strategic factor is 3.32, which means greater than 2.5 which is the power. Value IFAS Subsector Crafts Denpasar in the future is greater than the value of IFAS current ($3.32 > 3.09$). This suggests that the entire internal strategic variables Subsector Crafts Denpasar City has the opportunity / potential to turn out to be stronger in the future.

External environment analysis Investment Subsector Crafts Denpasar is done by comparing the respondents' assessment of the importance of external strategic factors at this time compared to the future. Table 5 shows the External Factor Analysis Summary (IFAS) sector Craft Denpasar Present and Future. The weighted average value of the CRC as opportunities if valued $2.50 < N \leq 4.00$ and categorized threat if worth $1.00 < N \leq 2.50$. Based on the summary in Table 5, it can be described that the weighted value of the current external strategic factors was 3.05, which means it has the opportunity to be developed, because the value is greater than 2.50. The weighted value of the future external strategic factors got was 3.48 and has a value greater than at present. This condition means that factors external strategic faced Denpasar Crafts sector in the future have a better chance than at the moment.

TABLE 5: EXTERNAL FACTOR ANALYSIS SUMMARY (EFAS) INVESTMENT SUBSECTOR CRAFTS DENPASAR PRESENT AND FUTURE VALUE

No	Eksternal Factor Indicator	Present Value			Future Value		
		Weight (%)	Rating	Weight Average	Weight (%)	Rating	Weight Average
1	2	3	4	5 = 3 x 4	6	7	8 = 6 x 7
1	Bali Regional Growth Rate	0.09	2.95	0.28	0.09	3.40	0.30
2	Inflation Rate	0.10	3.20	0.32	0.10	3.80	0.38
3	Interest Rate On Loan	0.10	3.00	0.29	0.09	3.50	0.32
4	Capital Support From Government	0.08	2.80	0.21	0.08	3.20	0.27
5	Culture/Customs from Community	0.10	3.20	0.31	0.09	3.50	0.32
6	The Number of SMEs	0.10	3.00	0.29	0.09	3.43	0.31
7	Suppliers	0.09	2.90	0.25	0.09	3.27	0.28
8	Tastefully Market	0.08	3.00	0.25	0.09	3.40	0.30
9	Arrivals of	0.09	3.20	0.30	0.09	3.50	0.32
10	Local Government Policy	0.09	3.10	0.26	0.09	3.35	0.29
11	Development in Information Technology	0.09	3.10	0.28	0.10	3.80	0.38
Total		1.00	33.45	3.05	1.00	38.15	3.48

Source: Results Analysis

ENVIRONMENTAL ANALYSIS INTERNAL AND EXTERNAL INVESTMENT PUBLISHING AND PRINTING

Subsector Publishing and Printing Bali is very diverse, such as for office purposes, individuals and; made from paper, fabric, plastic and others Ratings respondents about the importance of internal strategic factor today compared to the future on the development of the Fashion subsector investments are presented in Table 6. Based on the weighted average value of IFAS in Table 6, it appears that internal strategic factors Printing and Publishing subsector Denpasar Current-value of 2.94, which means above 2.5 which is the power subsector Printing and Publishing. Internal strategic variable currently has a value ranging from 0.23 to 0.29. The weighted average value of IFAS in the future for the entire internal strategic factor is 2.94, which means greater than 2.5 which is the power. Value IFAS Subsector printing and publishing in Denpasar in the future is greater than the value of IFAS current (3.22 > 2.94). This suggests that the entire internal strategic variable printing and publishing subsector Denpasar City has the opportunity / potential to turn out to be stronger in the future.

TABLE 6: INTERNAL FACTOR ANALYSIS SUMMARY (IFAS) INVESTMENT SUBSECTOR PUBLISHING AND PRINTING DENPASAR PRESENT AND FUTURE VALUE

No	Internal Factors Indicator	Present Value			Future Value		
		Weight (%)	Rating	Weight Average	Weight (%)	Rating	Weight Average
1	2	3	4	5 = 3 x 4	6	7	8 = 6 x 7
1	Innovative and creative products	0.09	3.00	0.27	0.09	3.35	0.30
2	Product Variation	0.09	3.00	0.27	0.09	3.35	0.30
3	Product Quality	0.09	3.05	0.28	0.09	3.35	0.30
4	Product Image	0.08	2.80	0.23	0.09	3.00	0.27
5	Promotional Support	0.09	2.90	0.27	0.09	3.20	0.29
6	Market Share	0.09	2.95	0.25	0.09	3.20	0.29
7	Product Price	0.09	3.00	0.27	0.09	3.20	0.29
8	Human Resources Competencies	0.09	2.80	0.24	0.09	3.20	0.30
9	Marketing Networking System	0.09	2.95	0.27	0.09	3.20	0.30
10	Support equipment operations	0.10	2.95	0.29	0.09	3.20	0.30
11	Access to information and communication	0.10	2.95	0.29	0.09	3.20	0.30
Total		1.00	32.35	2.94	1.00	35.45	3.22

Source: Results Analysis

TABLE 7: EXTERNAL FACTOR ANALYSIS SUMMARY (EFAS) INVESTMENT SUBSECTOR PRINTING AND PUBLISHING DENPASAR PRESENT AND FUTURE VALUE

No	External Factor Indicator	Present Value			Future Value		
		Weight (%)	Rating	Weight Average	Weight (%)	Rating	Weight Average
1	2	3	4	5 = 3 x 4	6	7	8 = 6 x 7
1	Bali Regional Growth Rate	0.09	3.10	0.28	0.09	3.50	0.33
2	Inflation Rate	0.09	3.00	0.28	0.09	3.50	0.33
3	Interest Rate On Loan	0.09	3.00	0.28	0.09	3.00	0.28
4	Capital Support From Government	0.09	2.80	0.26	0.09	3.50	0.33
5	Culture/Customs from Community	0.09	3.00	0.28	0.09	3.50	0.32
6	The Number of SMEs	0.09	3.20	0.28	0.09	3.50	0.31
7	Suppliers	0.09	3.00	0.28	0.09	3.50	0.30
8	Tastefully Market	0.09	3.10	0.29	0.09	3.50	0.32
9	Arrivals of	0.09	3.10	0.27	0.09	3.50	0.30
10	Local Government Policy	0.09	3.20	0.28	0.09	3.50	0.30
11	Development in Information Technology	0.09	3.20	0.30	0.09	3.50	0.33
Total		1.00	33.70	3.06	1.00	38.00	3.45

Source: Results Analysis

External environment analysis Investment Subsector Printing and Publishing Denpasar is done by comparing the respondents' assessment of the importance of external strategic factors at this time compared to the future. Rate respondents about the importance of external strategic factors at this time compared to the future on the development of Printing and Publishing sub-sector investments are presented in Table 7. Table 7 outlines strategic factors that weighted external value at this time is 3.06, which means it has the opportunity to be developed, because its value greater than 2.50. The weighted value of the future external strategic factors got is 3.45 and has a value greater than at present. This condition means that the strategic factors external facing printing and publishing subsector Denpasar in the future have a better chance than at the moment.

ENVIRONMENTAL ANALYSIS INTERNAL AND EXTERNAL INVESTMENT SUB-MODA

Fashion subsector emphasizes local knowledge, Balinese clothes unearthed from the local Balinese culture. Keperluan fashion products in addition to local and domestic travelers and also for export. Rate respondents about the importance of internal strategic factor today compared to the future on the development of the Fashion subsector investments are presented in Table 8, which shows IFAS investment subsector Fashion Present and Future.

TABLE 8: INTERNAL FACTOR ANALYSIS SUMMARY (IFAS) INVESTMENT SUBSECTOR FASHION IN DENPASAR CITY PRESENT AND FUTURE VALUE

No	Internal Factor Indicator	Present Value			Future Value		
		Weight (%)	Rating	Weight Average	Weight (%)	Rating	Weight Average
1	2	3	4	5 = 3 x 4	6	7	8 = 6 x 7
1	Innovative and creative products	0.09	3.25	0.30	0.09	3.50	0.33
2	Product Variation	0.09	3.25	0.30	0.09	3.50	0.33
3	Product Quality	0.09	3.25	0.30	0.09	3.50	0.33
4	Product Image	0.09	3.00	0.28	0.09	3.20	0.28
5	Promotional Support	0.09	2.90	0.26	0.09	3.30	0.31
6	Market Share	0.09	2.95	0.27	0.08	3.60	0.29
7	Product Price	0.09	3.00	0.26	0.09	3.30	0.28
8	Human Resources Competencies	0.08	3.00	0.24	0.09	3.60	0.33
9	Marketing Networking System	0.09	3.30	0.31	0.09	3.60	0.33
10	Support equipment operations	0.09	3.30	0.31	0.09	3.60	0.33
11	Access to information and communication	0.09	3.30	0.31	0.09	3.60	0.33
Total		1.00	34.50	3.14	1.00	38.30	3.48

Source: Results Analysis

Table 8 shows that the internal strategic factors Subsector Fashion Denpasar Current-value of 3.14, which means above 2.5 which is the power subsector's fashion. The weighted average value of IFAs in the future for the entire internal strategic factor is 3.14, which means greater than 2.5 which is the power. Value IFAS Subsector Fashion in Denpasar in the future is greater than the value of IFAS current (3.14 > 2.94). This suggests that the entire internal strategic variables Subsector Fashion Denpasar City has the opportunity / potential to turn out to be stronger in the future.

Analysis of the external environment Investasin Subsector Fashion Denpasar is done by comparing the respondents' assessment of the importance of external strategic factors at this time compared to the future. Rate respondents about the importance of external strategic factors at this time compared to the future on the development of the Fashion subsector investments are presented in Table 9. Table 9 shows the EFAS sector Fashion Denpasar Present and Future. The weighted value of the current external strategic factor is 2.95, which means it has the opportunity to be developed, because the value is greater than 2.50. The weighted value of the future external strategic factors got is 3.14 and has a value greater than at present. This condition means that factors external strategic faced Denpasar Fashion Subsector in the future have a better chance than at the moment.

TABLE 9: EXTERNAL FACTOR ANALYSIS SUMMARY (EFAS) INVESTMENT SUBSECTOR FASHION IN DENPASAR CITY PRESENT AND FUTURE VALUE

No	Eksternal Factor Indicator	Present Value			Future Value		
		Weight (%)	Rating	Weight Average	Weight (%)	Rating	Weight Average
1	2	3	4	5 = 3 x 4	6	7	8 = 6 x 7
1	Bali Regional Growth Rate	0.09	2.80	0.26	0.10	3.00	0.29
2	Inflation Rate	0.09	2.90	0.27	0.09	3.00	0.27
3	Interest Rate On Loan	0.09	3.00	0.28	0.10	3.00	0.29
4	Capital Support From Government	0.09	2.80	0.26	0.10	3.00	0.29
5	Culture/Customs from Community	0.10	3.10	0.32	0.10	3.30	0.34
6	The Number of SMEs	0.08	3.00	0.25	0.08	3.20	0.26
7	Suppliers	0.08	2.80	0.23	0.08	3.00	0.25
8	Tastefully Market	0.10	3.20	0.31	0.09	3.50	0.33
9	Arrivals of	0.08	2.80	0.23	0.08	3.00	0.25
10	Local Government Policy	0.08	2.80	0.23	0.08	3.00	0.25
11	Development in Information Technology	0.10	3.20	0.31	0.10	3.50	0.34
Total		1.00	32.40	2.95	1.00	34.50	3.14

Source: Results Analysis

ENVIRONMENTAL ANALYSIS INTERNAL AND EXTERNAL INVESTMENT CULINARY SUBSECTOR

Culinary subsector is the hallmark for big cities. Culinary products promoting local knowledge, in addition to local and domestic keperlun also for tourists. Rate respondents about the importance of internal strategic factor today compared to the future on the development of investment Culinary subsector are presented in Table 10, which shows IFAS investment subsector Culinary Present and Future. The weighted average value of IFAs in Table 10, it appears that the Sub-MODA Denpasar Current-value of 3.06, which means above 2.5 which is the power subsector Culinary. The weighted average value of IFAs in the future for the entire internal strategic factor is 3.06, which means greater than 2.5 which is the power. Value IFAS Subsector Culinary in Denpasar in the future is greater than the value of IFAS current (3.25 > 3.06). This suggests that the entire internal strategic variables Subsector Culinary Denpasar City has the opportunity/potential to turn out to be stronger in the future.

TABLE 10: INTERNAL FACTOR ANALYSIS SUMMARY (IFAS) INVESTMENT SUBSECTOR CULINARY KOTA DENPASAR PRESENT AND FUTURE VALUE

No	Internal Factor Indicator	Present Value			Future Value		
		Weight (%)	Rating	Weight Average	Weight (%)	Rating	Weight Average
1	2	3	4	5 = 3 x 4	6	7	8 = 6 x 7
1	Innovative and creative products	0.09	3.25	0.30	0.09	3.50	0.31
2	Product Variation	0.10	3.25	0.33	0.09	3.50	0.31
3	Product Quality	0.09	3.25	0.30	0.09	3.50	0.31
4	Product Image	0.10	3.00	0.29	0.10	3.20	0.31
5	Promotional Support	0.09	2.90	0.26	0.09	3.00	0.27
6	Market Share	0.08	2.95	0.24	0.09	3.00	0.27
7	Product Price	0.10	3.00	0.29	0.10	3.30	0.31
8	Human Resources Competencies	0.09	3.00	0.28	0.09	3.00	0.27
9	Marketing Networking System	0.09	3.00	0.26	0.09	3.25	0.29
10	Support equipment operations	0.09	3.00	0.26	0.09	3.25	0.29
11	Access to information and communication	0.09	3.00	0.26	0.09	3.25	0.29
Total		1.00	33.60	3.06	1.00	35.75	3.25

Source: Results Analysis

External environment analysis Investment Subsector Culinary Denpasar is done by comparing the respondents' assessment of the importance of external strategic factors at this time compared to the future. Rate respondents about the importance of external strategic factors at this time compared to the future on the development of investment Culinary subsector are presented in Table 11.

TABLE 11: EXTERNAL FACTOR ANALYSIS SUMMARY (EFAS) INVESTMENT SUBSECTOR CULINARY KOTA DENPASAR PRESENT AND FUTURE VALUE

No	Eksternal Factor Indicator	Present Value			Future Value		
		Weight (%)	Rating	Weight Average	Weight (%)	Rating	Weight Average
1	2	3	4	5 = 3 x 4	6	7	8 = 6 x 7
1	Bali Regional Growth Rate	0.09	3.10	0.28	0.09	3.50	0.33
2	Inflation Rate	0.09	3.00	0.28	0.09	3.50	0.33
3	Interest Rate On Loan	0.09	3.00	0.28	0.09	3.00	0.28
4	Capital Support From Government	0.09	2.80	0.26	0.09	3.50	0.33
5	Culture/Customs from Community	0.09	3.00	0.28	0.09	3.50	0.32
6	The Number of SMEs	0.09	3.20	0.28	0.09	3.50	0.31
7	Suppliers	0.09	3.00	0.28	0.09	3.50	0.30
8	Tastefully Market	0.09	3.10	0.29	0.09	3.50	0.32
9	Arrivals of	0.09	3.10	0.27	0.09	3.50	0.30
10	Local Government Policy	0.09	3.20	0.28	0.09	3.50	0.30
11	Development in Information Technology	0.09	3.20	0.30	0.09	3.50	0.33
Total		1.00	33.70	3.06	1.00	38.00	3.45

Source: Results Analysis

Table 11 shows the EFAS sector Fashion Denpasar Present and Future, with a weighted value of external strategic factors at this time is 2.95, which means it has the opportunity to be developed, because the value is greater than 2.50. The weighted value of the future external strategic factors got is 3.14 and has a value greater than at present. This condition means that factors external strategic faced Denpasar Culinary future have a better chance than at the moment.

ENVIRONMENTAL ANALYSIS OF INTERNAL AND EXTERNAL INVESTMENT SUBSECTOR SUBSECTOR MUSIC

Music Subsector emphasizes local knowledge. This product is more for local consumption rather than for national and foreign consumption. Rate respondents about the importance of internal strategic factor today compared to the future on the development of investment Culinary subsector are presented in Table 12, the weighted average value IFAs Music Subsector Denpasar Current-value of 3.14, which means above 2.5 which is the power Music subsector. The weighted average value of IFAs in the future for the entire internal strategic factor is 2.85, which means greater than 2.5 which is the power. Value IFAS Subsector Fashion in Denpasar in the future is greater than the value of IFAS current (3.20 > 2.85). This suggests that the entire internal strategic variables Music Subsector Denpasar City has the opportunity / potential to turn out to be stronger in the future.

TABLE 12: INTERNAL FACTOR ANALYSIS SUMMARY (IFAS) INVESTMENT SUBSECTOR MUSIC DENPASAR CURRENT AND FUTURE VALUE

No	Internal Factor Indicator	Present Value			Future Value		
		Weight (%)	Rating	Weight Average	Weight (%)	Rating	Weight Average
1	2	3	4	5 = 3 x 4	6	7	8 = 6 x 7
1	Innovative and creative products	0.09	2.90	0.26	0.09	3.20	0.28
2	Product Variation	0.10	2.90	0.29	0.09	3.20	0.28
3	Product Quality	0.09	2.90	0.26	0.09	3.20	0.28
4	Product Image	0.10	2.80	0.27	0.09	3.20	0.28
5	Promotional Support	0.09	2.90	0.26	0.09	3.20	0.28
6	Market Share	0.08	2.95	0.24	0.09	3.20	0.28
7	Product Price	0.10	2.80	0.27	0.09	3.20	0.28
8	Human Resources Competencies	0.09	2.80	0.26	0.10	3.20	0.31
9	Marketing Networking System	0.09	2.80	0.25	0.10	3.20	0.31
10	Support equipment operations	0.09	2.80	0.25	0.10	3.20	0.31
11	Access to information and communication	0.09	2.80	0.25	0.10	3.20	0.31
Total		1.00	31.35	2.85	1.00	35.20	3.20

Source: Results Analysis

Analysis of the external environment Investasin Subsector Culinary Denpasar is done by comparing the respondents' assessment of the importance of external strategic factors at this time compared to the future. Rate respondents about the importance of external strategic factors at this time compared to the future on

the development of investment subsector Music is presented in Table 13. Table 13 shows the EFAS, wherein the weighted value of external strategic factors at this time is 2.94, which means it has the opportunity to be developed, because its value greater than 2.50. The weighted value of the future external strategic factors got is 3.14 and has a value greater than at present. This condition means that factors external strategic faced Denpasar City Music Subsector in the future have a better chance than at the moment.

TABLE 13: EXTERNAL FACTOR ANALYSIS SUMMARY (EFAS) INVESTMENT SUBSECTOR MUSIC IN DENPASAR CITY PRESENT AND FUTURE VALUE

No	Internal Factor Indicator	Present Value			Future Value		
		Weight (%)	Rating	Weight Average	Weight (%)	Rating	Weight Average
1	2	3	4	5 = 3 x 4	6	7	8 = 6 x 7
1	Bali Regional Growth Rate	0.09	2.80	0.26	0.10	3.00	0.29
2	Inflation Rate	0.09	2.90	0.27	0.09	3.00	0.27
3	Interest Rate On Loan	0.09	3.00	0.28	0.10	3.00	0.29
4	Capital Support From Government	0.09	2.80	0.26	0.10	3.00	0.29
5	Culture/Customs from Community	0.09	3.10	0.28	0.10	3.30	0.34
6	The Number of SMEs	0.08	3.00	0.25	0.08	3.20	0.26
7	Suppliers	0.08	2.80	0.23	0.08	3.00	0.25
8	Tastefully Market	0.09	3.20	0.29	0.09	3.50	0.33
9	Arrivals of	0.09	2.80	0.25	0.08	3.00	0.25
10	Local Government Policy	0.09	2.80	0.25	0.08	3.00	0.25
11	Development in Information Technology	0.10	3.20	0.31	0.10	3.50	0.34
Total		1.00	32.40	2.94	1.00	34.50	3.14

Source: Results Analysis

STRATEGIC POSITION IKM CREATIVE ECONOMY

The results of internal and external analysis (IFAS and EFAS) was then inserted into the Matrix Internal External or often called Matrix IE. In IE matrix there are nine cells with the application of the following strategies: (1) Strategy Growth and Build is applied when the position of the organization that are in the cells I, II, and IV; (2) Strategies Hold and Maintain applied if the position of the organization is in cell III, V and VII; (3) Strategy Harvest or Diverst applied if the position of the organization is in cell VI, VIII, and IX

Based on internal and external analysis shown on the value weighted average IFAS and EFAS Industry Sector Creative economy: Subsector Crafts, Publishing and Printing, Fashion, Culinary, Music Denpasar today than in the future, may be determined strategic position respectively subsector is presented in Figure 8 to Figure 12.

Figure 8 shows that the weighted average value of IFAs Subsector Crafts Denpasar today is 3.09 and the weighted average value of EFAS was 3.05 and its position in IE Matrix Cells that are in the I (Ak), which means that the current Subsector crafts Denpasar has competitiveness strong investment and investment attractiveness strong category. Furthermore, the weighted average value of IFAs Subsector craft future Denpasar is 3.32 and the weighted average value of EFAS is 3.48 is in cell I (Bk), which means that in the future subsector Crafts Denpasar have higher investment attractiveness and competitiveness of the investment are stronger. Internal and external environment in the future is predicted to provide great opportunities for Crafts Subsector Denpasar for improved performance.

FIGURE 8: CRAFTS SUBSECTOR STRATEGIC POSITION CURRENTLY DENPASAR AND FUTURE VALUE

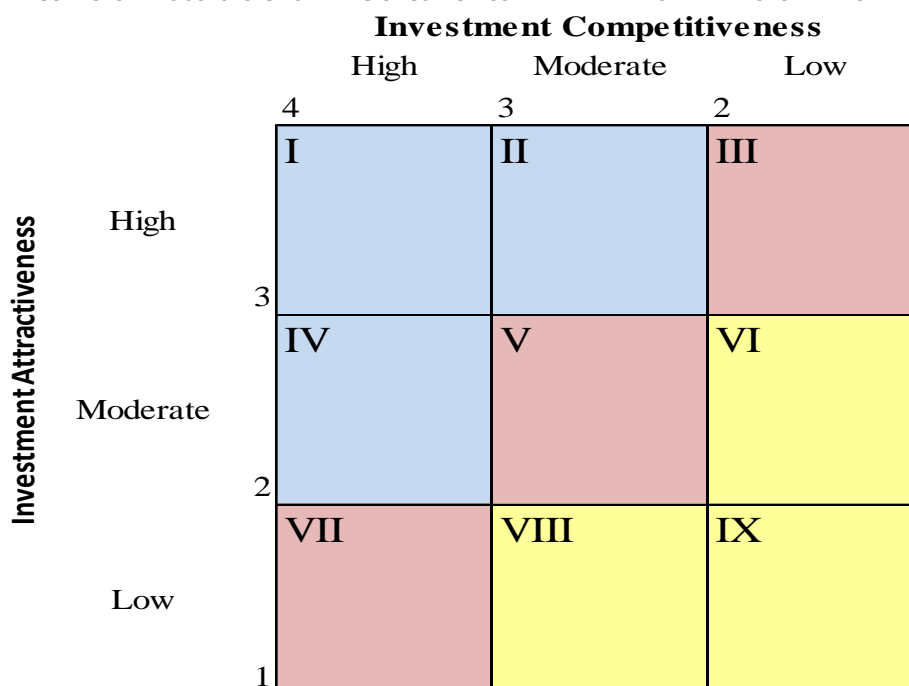


FIGURE 9: FASHION SUBSECTOR STRATEGIC POSITION DENPASAR CURRENT AND FUTURE VALUE

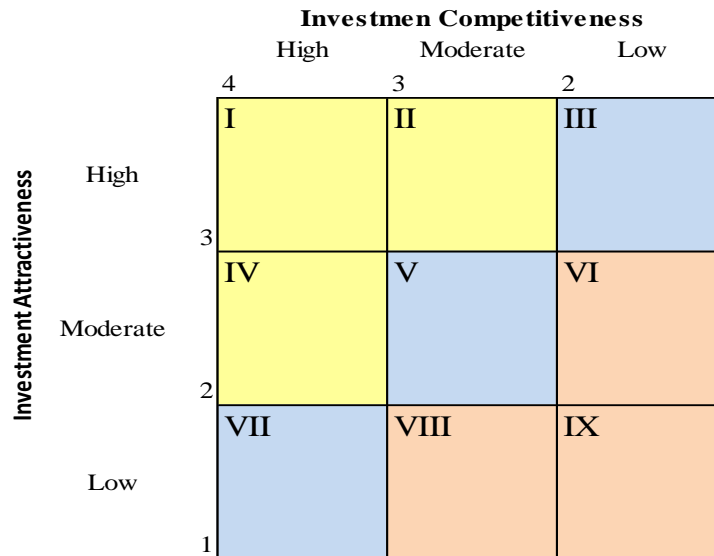


Figure 9 shows the weighted average value of IFAs Subsector Printing and Publishing Denpasar today is 2.94 and the weighted average value of EFAS is 3.03 and its position in the Matrix Cells IV IE is at the point Ap. which means that the current Subsector Printing and Publishing Denpasar has investment competitiveness strong category and investment attractiveness of medium category. Furthermore, internal and external analysis the future is known that the weighted average IFAS Subsector Printing and Publishing Denpasar future is 3,22 and the weighted average value of EFAS is 3.34, which means that in the future subsector Printing and Publishing Denpasar has high attractiveness and competitiveness invesasi stronger investment. In the future expected Printing and Publishing subsector Denpasar City is at a point Bp, which is precisely the cell I.

FIGURE 10: STRATEGIC POSITION SUBSECTOR PRINTING AND PUBLISHING DENPASAR CURRENT AND FUTURE

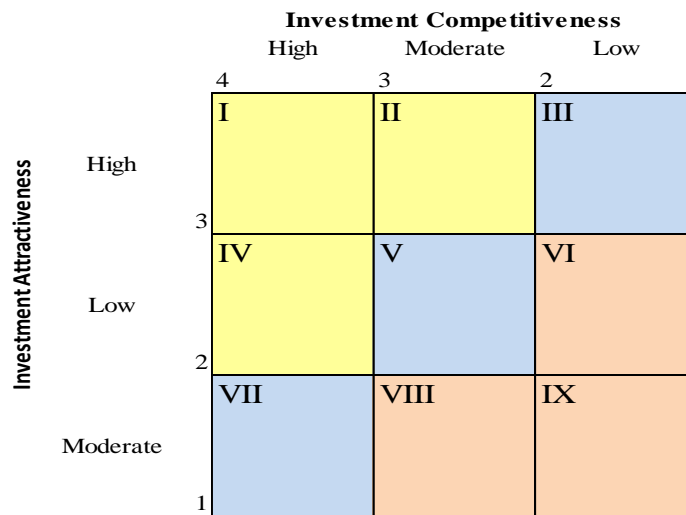


FIGURE 11: FASHION SUBSECTOR STRATEGIC POSITION DENPASAR CURRENT AND FUTURE

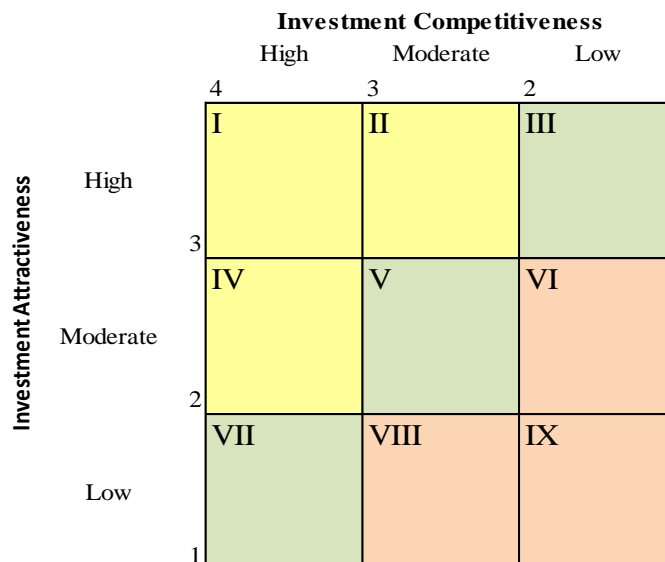


Figure 10 shows the weighted average value of IFAS is 3.14 and the weighted average value of EFAS is 3.06 and its position in the Matrix IE are at Sel I in Af point which means that the current Sub-MODA Denpasar has investment competitiveness category strong and investment attractiveness of high category. Furthermore Based on internal and external analysis of the future is known that the weighted average value of IFAs Subsector Denpasar future MODA is 3.45 and the weighted average value of EFAS was 3.48, which means that in the future Fashion Subsector front Denpasar invesasi have a stronger appeal and competitiveness of higher investment. In the future expected Subsector Fashion Denpasar City is at a point Bf, which is precisely the cell I.

Figure 11 showed that the weighted average value of IFAS is 3.06 and the weighted average value of EFAS is 3.06 and its position in IE Matrix is at an AI Sel I, which means that the current Subsector Subsector Culinary Denpasar has competitiveness strong investment categories and investment attractiveness of high category. This condition show that Culinary Subsector which is the creative economy sector has an important role in Denpasar in improving economic perumbuhan Denpasar. Furthermore, based on internal and external analysis of the future is known that the weighted average value of IFAs Subsector Culinary future Denpasar is 3.25 and the weighted average value of EFAS is 3.45, which means that in the future subsector Culinary Denpasar has appeal higher investment and investment competitiveness stronger. In the future expected Subsector Culinary Denpasar City is at a point Bl, is exactly on the cell I.

FIGURE 12: STRATEGIC POSITION CULINARY SUBSECTOR IN DENPASAR PRESENT AND FUTURE VALUE

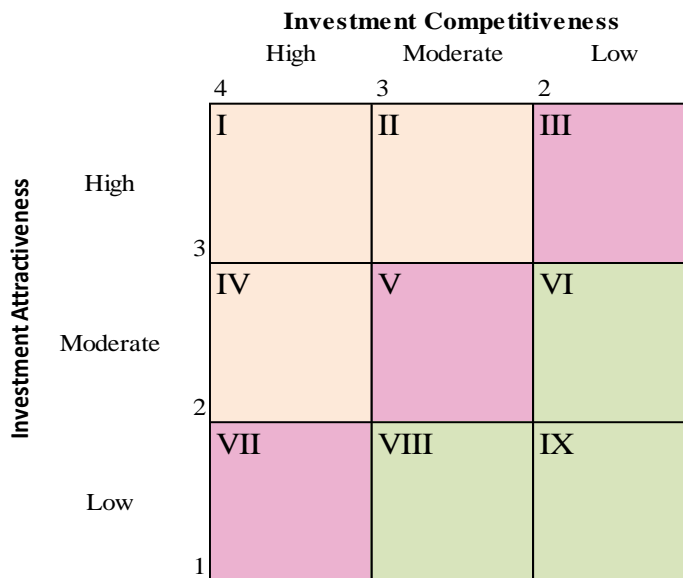
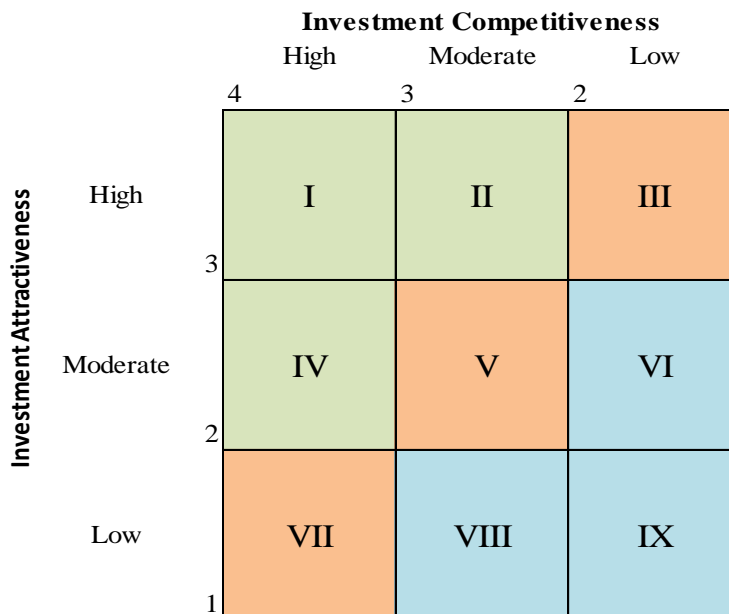


Figure 12 is known that the weighted average value of IFAS is 2.95 and the weighted average value of EFAS is 2.94 and its position in the Matrix IE are at a point Am Cells IV, which means that the current Music Subsector Subsector Denpasar has investment competitiveness category of being and investment attractiveness of medium category. this means that the Sub-music is the creative economy sector can be expected to increase economic perumbuhan Denpasar, through music excavated from local wisdom of Bali. Based on internal and external analysis of the future is known that the weighted average value of IFAs Subsector Denpasar future of Music City is 3.20 and the weighted average value of EFAS is 3.14, which means that in the future Denpasar City Music Subsector have investment appeal high and strong investment competitiveness. In the future expected Denpasar City Music Subsector be at the point Bm, that is exactly on the cell I.

FIGURE 13: STRATEGIC POSITION MUSIC SUBSECTOR SUBSECTOR DENPASAR PRESENT AND FUTURE VALUE



SME DEVELOPMENT MODEL CREATIVE ECONOMY

SMEs must choose a planning strategy to achieve competitiveness berkenajutan, it is in accordance with Horrn (1979), which reveals the strategic planning is very important for SMEs as knowledge for application to the SMEs competitiveness. Based on this, the city administration in mengembangkan Creative Economy Sector Strategy Planning should prepare, as a guide for pengembangann, towards SMEs competitive both nationally and internationally. This is consistent with the findings of Mohammed (2010), which reveals pengembangan SMEs should be supported by the government.

Based on the research found that the strategic position of the SME sub-sector of Crafts, Fashion, and Culinary currently on Tue 1 IE matrix, which has strong competitiveness and high attraction; Printing and Publishing subsector is in cell IV, which has strong competitiveness and appeal of being; The next Music Subsector were no cell V, the competitiveness and attractiveness of the being. Which is in cell division I, II and IV, is the division that should be developed and constructed

or investment. Alternative strategy is Strategy Growth and Build. Which is in cell division III, V and VII, is the division that should be preserved and maintained in this regard need to be selective investments, an alternative strategy is strategy Hold and Maintain (David 2006: 2015).

Based on the Creative Economy sector development should be planned strategy and supported by the government of Denpasar, as well as the opinion of David (2006: 2015) it is based on such things floating investment models based creative economy in the city of Denpasar right based on below.

1. Model S Strategy Growth and Build (Growing and Developing Strategy) or strategies Empowerment and Growth (Empowering Strategy and Growing), for Sub Crafts, Fashion, Culinary; and Advertising and Printing. Model S Strategy Growth and Build cover intensive strategy that includes: pen e condiment market, and new product development or integrative strategy that includes: backward integration, forward integration and horizontal integration) (David 2006 : 2015). Fourth Subsector Creative Economy in the city of Denpasar future must be developed and built creative professionals and professional. This requires investment to develop a more professional, so the future is able to measure in a stronger position, the attractiveness and competitiveness strong.
2. Maintain Hold and Model Strategies (Strategy Holding and Keeping) for Subsector Music, Model S Strategy Hold and Maintain, strategi intensive which include: market penetration, and product development (David 2006:2015). Music Subsector city of Denpasar fore to be arrested and preserved, in order to achieve a strong position, the attractiveness and competitiveness of the powerful

SME investment development model with Growth and Build through integrative strategy in accordance with the opinion of Menguc at all (2010), which reveals that the strategy of integrative role in enhancing the competitiveness of sustainable enterprises. Interagratif strategy was found to improve the performance of companies in the form of increased sales and profits. Furthermore Bhaskaran (2006) examined the field of SME retailers seafood, found that to win a sustainable competitive, SMEs need to have more than any other innovation by integrating vertically or horizontally. Innovation that focuses on the sales and marketing can meningkatkan profit and compete to be great company. Furthermore, Moore and Manring (2009), mengungkapkan that SME development strategy towards business continuity can be done by creating value through collaboration integration between SMEs both vertically and horizontally. Through collaboration integration between SMEs, will improve the competitiveness to achieve greater market share, get more efficient supplier both nationally and globally.

SME investment development model with Growth and Build through market penetration strategy, ddidukung by Pangarkar (2008) who studied 94 SME units in the State of Singapore, found that the penetration of the market with sales between countries (internationalization) found a positive effect on the performance of SMEs. Model development investments of SMEs with Growth and Build through strategic product development is supported by Bell, at all (2004), which examined the small industries in the UK, with a qualitative approach through in-depth interviews with 30 pengambuil key decisions were small firms (15 firms that have knowledge-intensive and 15 traditional companies) are already doing internationalization, found that the innovation of product development according to market the company develops a stimulus towards internationalization. This indicates that the market penetration and progression of products should be directed to iternasionalisasi to improve the competitiveness of SMEs. Qian (2002) meneliti MSMEs in the State US, found that the product development strategy through diversification of products have contributed significantly in increasing the profits of SMEs and able to make large SMEs and Multinational companies. Furthermore Lindman, at all (2008), conducted a comparative study of SMEs engaged in furniture in 3 (three states): Italy, Spain and Finland, it was found that the product development through innovation in accordance with the target market has a real impact in improving product competitiveness SMEs generated.

Creative Economy is a part of the IKM, so the model Creative Economy Investment Development should be in harmony with the development of SMEs in each region / province, must be addressed to achieve the Vision, Mission and Objectives set by the Directorate General of Small and Medium Industry of the Republic of Indonesia. Vision, Mission and Objectives are described as follows.

Vision

"Realizing the Small and Medium Industries (SMI) Competitive Global"

Mission

1. Improving knowledge and skills competency-based human resources.
2. Encourage increased mastery and application of modern technologies.
3. Encourage market expansion.
4. Encouraging increased added value.
5. Encourage the expansion of access to financing sources.
6. Encourage the dissemination of SME development outside Java.

Aim

1. Increased SME competent human resources.
2. Increased Number of New Business Wira (WUB).
3. Increased Modern technology-based SMEs.
4. Increasingly SMEs to meet the Domestic Market and Foreign Affairs.
5. Enhancing the role of SMEs in balancing the Value Added with Big industries.

FINDINGS AND CONCLUSIONS

Based on the description in the previous chapter, it can be concluded as the following:

1. Potential Investment Small Industry Kenengah in Denpasar is based creative economy, identified is the Investment Small Industry Subsector Kenengah Crafts, Publishing and Printing, Fashion, Kuniler, and Music. M foreigners each seen from the number of businesses, employment The value of investments, gains in Denpasar. The potential development of investment -based creative economy is implemented in a Geographic Information System.
2. Variables Determinants of Investment Development Creative Economy in K ota Denpasar consists of Internal Factors and Factors Eksteren. Internal factors include : products are innovative and creative, Variation products, Quality Products, Citra products. Support the promotion, market share, price of products, competence of human resources, network system of marketing, support equipment operations, access to information and communication. Eksteren factors include: Growth Rates of Bali, inflation rates, interest rates loans, capital base of government, culture / customs of society, development of the number of SMEs, existence of a supplier, Tastes market, Arrivals, Local government policies, and the development of information technology.
3. Strategic Position of Creative Economy Subsector Crafts, Fashion, and Culinary in the city of Denpasar has strong competitiveness and high attraction; Printing and publishing subsector have high competitiveness and attractiveness of being; and Subsector Music has posisistrategis competitiveness and attractiveness being.
4. Model development investments Creative Economy Subsector Crafts, Fashion, Culinary and Publishing and Printing right in Denpasar is a model Growth and Build or strategies Empowerment and Growth. Model development investments Creative Economy Subsector right music in Denpasar with Model Hold and Maintain.
5. The right strategy for investment development Creative Economy for the subsector of Crafts, Fashion, Culinary and Publishing and Printing in Denpasar is the strategy of pen e te constellation markets, product development, and integrative strategy. The strategy is right for investment development Creative Economy for Subsector Music is a pen e te constellation of market and product development.

LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

This study has limitations Creative Economy Sectors examined in Denpasar that has developed, have not seen the Creative Economy Sector which has the prospect to develop. Based on this it is advisable to further researchers to predict the Creative Economy Sector which will evolve with technological growth and current market tastes and possibilities that will come.

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THE ROLE OF PUSH AND PULL FACTORS IN OCCUPATIONAL CHANGE OF RURAL ARTISANS IN PUNJAB

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ABSTRACT

Occupation not only determines the employment and income potential of an individual but also indicates his economic and social status as well. People generally choose their occupation according to their capacity, capability, availability and earning. These are considered to be some important variables which influence the behavior of artisans to leave one occupation and join the other (Montana and Brooklyin, 1977). In context of rural Punjab, most of the rural artisans had changed their traditional occupations and shifted toward the other occupations. The rural artisans left their ancestral occupations because they faced a stiff competition with imported factory made products which entered into the villages through commercial castes such as *bania*, traders etc. (Gupta, 1980). The flow of factory made goods in the villages rendered many artisans jobless and they were either shifted toward agriculture as full time labourer or migrated to the cities for the search of livelihood (Jammu, 1974). Specifically, in case of Punjab, the rural artisans were performing various economic activities in the villages. They were directly linked to the agriculture through household tools, farm equipments and maintenance of these equipments (Gurtrell, 1981). The introduction of new agriculture technology has transformed the subsistence agriculture into the commercial agriculture. New farm tools, equipment and machinery had replaced the artisans production and made their production unnecessary to a greater extent. After 1990s, Punjab economy had experienced another important change related to the mode of production in rural areas. The opening up of the economy for industrial produce without taking care of petty producers has disrupted the livelihood means of rural artisans. They remained unable to compete with the imported industrial products (Qureshi, 1987). Further, the developments of infrastructure and communication facilities have extended the approach of industrial commodities to the rural areas. This has resulted the shift in demand pattern in the rural areas from artisans to industrial products. All these forces have compelled the rural artisans to leave their traditional occupations and join the other occupations (Qureshi, 1990). In this paper, an attempt has been made to know the causes behind the occupational change of rural artisans. For this purpose, present paper has been divided into two sections. Section-I examines the percentage of artisan households who left their traditional occupations and joined the other occupations. Section-II analysis the main causes of occupational change of rural artisans. They were changed their traditional occupation in compelling circumstances or they were attracted toward the new occupation remain the major concern of present paper.

KEYWORDS

push and pull factors in occupational change, rural artisans in Punjab.

INTRODUCTION

 Occupation not only determines the employment and income potential of an individual but also indicates his economic and social status as well. People generally choose their occupation according to their capacity, capability, availability and earning. These are considered to be some important variables which influence the behavior of artisans to leave one occupation and join the other (Montana and Brooklyin, 1977). In context of rural Punjab, most of the rural artisans had changed their traditional occupations and shifted toward the other occupations. The rural artisans left their ancestral occupations because they faced a stiff competition with imported factory made products which entered into the villages through commercial castes such as *bania*, traders etc. (Gupta, 1980). The flow of factory made goods in the villages rendered many artisans jobless and they were either shifted toward agriculture as full time labourer or migrated to the cities for the search of livelihood (Jammu, 1974). Specifically, in case of Punjab, the rural artisans were performing various economic activities in the villages. They were directly linked to the agriculture through household tools, farm equipments and maintenance of these equipments (Gurtrell, 1981). The introduction of new agriculture technology has transformed the subsistence agriculture into the commercial agriculture. New farm tools, equipment and machinery had replaced the artisans production and made their production unnecessary to a greater extent. After 1990s, Punjab economy had experienced another important change related to the mode of production in rural areas. The opening up of the economy for industrial produce without taking care of petty producers has disrupted the livelihood means of rural artisans. They remained unable to compete with the imported industrial products (Qureshi, 1987). Further, the developments of infrastructure and communication facilities have extended the approach of industrial commodities to the rural areas. This has resulted the shift in demand pattern in the rural areas from artisans to industrial products. All these forces have compelled the rural artisans to leave their traditional occupations and join the other occupations (Qureshi, 1990).

In this paper, an attempt has been made to know the causes behind the occupational change of rural artisans. For this purpose, present paper has been divided into two sections. Section-I examines the percentage of artisan households who left their traditional occupations and joined the other occupations. Section-II analysis the main causes of occupational change of rural artisans. They were changed their traditional occupation in compelling circumstances or they were attracted toward the new occupation remain the major concern of present paper.

METHODOLOGY

Present study is based on primary survey of three districts of Punjab. There are twenty-two developmental blocks in selected districts. Following random sampling method, one village is selected from each block. Further, ten categories of artisans were selected such as carpenter, blacksmith, goldsmith, weaver, potter, shoes maker and leather worker, barber, tailor, basket maker and mason. All the artisans who left their traditional occupation had selected for study. The data for the study were collected in the year of 2013. The total number of artisan households who changed their traditional occupations were taken for our study is related to the years between 1990 to 2012.

ANALYSIS

SECTION-I

NUMBER AND PER CENT OF WITHDRAWN ARTISANS

TABLE 1: NUMBER AND PER CENT OF ARTISANS HOUSEHOLDS

Categories	Continue	Left	Total
Carpenter	107 (61.15)	68 (38.85)	175 (100.00)
Blacksmith	31 (39.24)	48 (60.76)	79 (100.00)
Goldsmith	16 (29.63)	38 (70.37)	54 (100.00)
Weaver	14 (22.58)	48 (77.42)	62 (100.00)
Potter	25 (27.47)	66 (72.53)	91 (100.00)
Shoes Maker & Leather Worker	17 (23.29)	56 (76.71)	73 (100.00)
Barber	42 (53.16)	37 (46.84)	79 (100.00)
Tailor	84 (67.75)	40 (32.25)	124 (100.00)
Mason	216 (88.16)	29 (11.84)	245 (100.00)
Basket Maker	20 (62.50)	12 (37.50)	32 (100.00)
All Sampled Households	572 (56.41)	442 (43.59)	1014 (100.00)

Source: Primary Survey

Data in the Table 1 shows the total number of artisan households among the sampled villages in the three selected districts of Punjab State. There were 1014 artisan households in all the three districts of Punjab. Out of the total, 43.59 per cent artisan households left their traditional occupations and adopted the other occupations. The data indicates that the proportion of weaver artisans who left their traditional occupation and started the new occupations was found to be the highest at 77.42 per cent followed by 76.71 per cent of shoe maker and leather worker and 72.53 per cent of potter artisans. The percentage share of blacksmith artisans who left their traditional occupation came to be 60.76 per cent. Moreover, 38.85 per cent of carpenter, 32.25 per cent of tailor and 46.84 per cent of barber artisans left their traditional occupations. On the other hand, the percentage share of the mason artisans who left their traditional occupation was found to be very low i.e., 11.84 per cent. It has been found that the mason and carpenter occupations flourished among the sampled districts due to the better earnings in these two occupations. Large numbers of mason artisans were working in their traditional occupation which clearly indicated the growing demand for their services. This has happened due to the increase in demand for new houses among the sampled districts. On the other hand, the use of manufacture wooden furniture in houses along with increased demand for wooden materials in consumption activities, the demand for carpenter services has increased. It has been observed that some of them had not left their traditional occupations completely and continued as part time workers in their traditional occupations. While some withdrawn artisans such as potter, goldsmith, blacksmith and carpenter artisans were working in traditional occupations during the festival, marriage and other social religious ceremonies in order to get subsidiary income. Moreover, some of them engaged in part time work in their previous occupations just for the personal satisfaction through the uses of their own tools and equipments.

SECTION-II

CAUSES OF OCCUPATIONAL CHANGE

Occupational change is primarily motivated by various economic, social and other factors. The basic economic factors which were responsible for occupational change of rural artisans were the push and pull factors. Besides, there are some other factors which supported the artisans to change their traditional occupations. It is quite important to see whether these artisans changed their traditional occupations due to compelling circumstances which pushed them out of their traditional occupations or they were pulled by the attractive conditions in the new occupations. In this part, we made an attempt to look into push, pull and other factors which played an important role in shifting of occupations among the selected artisans.

2.1 PUSH FACTORS

Generally, push factors means those forces and circumstances which compel the individuals and households to leave their occupations. In the present analysis we have divided the push factors into five broad categories, comprises: 'small size of the market', 'irregular and low income', 'problem of raw material', 'problem of finance', 'competition with machine made products' and 'seasonal unemployment'. Push factors are discussed as under:

I. SMALL SIZE OF THE MARKET

The finished products of any occupation required sound and organised market. Most of the artisan households provide their services to fulfill the needs of local villagers. They sold very small quantities of their products and services outside the village market. It has been found that they were consistent to limited size of the market for their products and services. The limited size of the market makes their traditional activities unviable even for simple living. Hence, the earning capacity of these artisans was found very low due to this reason. The economic condition of these artisans had weakened year by year because of lower earnings from traditional occupations. Moreover, their expenditure of daily needs increasing continuously. Under such sort of circumstances, it became difficult for them to continue with their traditional occupations. Thus, the 'small size of the market' emerged as one of the important push factor responsible for the occupational change of rural artisans. The data in the Table 2 reveals that 8.37 per cent of the artisan households left their traditional occupations because of the 'small size of the market'. The category-wise analysis reveals that the proportion of barber and carpenter artisans who left their traditional occupations due to the 'small size of market' was found to be the highest i.e., 13.51 per cent and 13.23 per cent, respectively. The percentage share of goldsmith, blacksmith and mason artisans was found to be almost the same i.e., 10.53 per cent, 10.42 per cent and 10.34 per cent, respectively. This percentage share turned out to be 7.14 per cent in case of shoe maker and leather worker artisans. While, not even a single potter and basket maker artisan left his traditional occupations due to this reason.

Historically, it has been proved fact that the merchants play an important role in the development of trade and commerce. These middlemen purchase the articles from producers at one place in order to sell these articles into the other villages, towns and cities and even in overseas markets. They extract their share through this operation. Regarding the involvement of these important intermediaries in artisans production, the withdrawn artisans expressed their views that these middlemen are not interested in purchase and sale of their produce. The lack of coalesce between artisans and merchants was another reason for the small size of the market for artisans produce.

Moreover, the development of rural urban connectivity through link roads increased the mobility of rural people to the urban areas. The factory made manufactured products attracted the rural population to buy their necessities from urban areas rather than buying the products from rural artisans. It has been found that

the superior quality and lower price of machine made products were the reasons due to which the people changed their preferences from artisan products to urban industrial products. The increased transportation and information among the village people has further minimised the size of market for rural artisans.

In the present era of globalisation, the expansion of market size involves huge cost in term of advertisement, transportation, communication etc. The artisan classes did not enough capacity to invest in these activities. That's why the market of the artisans produce remained limited to their native villages only. Besides, due to the lack of their own means of transportation, these artisans were remained fail to distribute their products outside the villages. The lack of these facilities resulted in the less approach of artisans to the consumers. It has been found that the poor economic condition of artisans and illiteracy among them were the main reasons that they could not able to use the modern means of transportation, advertisement and communication to extend the market for their products and services.

II. IRREGULAR INCOME

Besides, 'small size of the market', the problem of 'irregular income' also insisted rural artisans to seek employment opportunity in other occupations. The main problems reported by them include long time work in a day, hard work and delay in payment by the customers in previous occupations. The earning capacity of these artisans mainly depends upon the demands of the local people for their products and services. The payment made by the local people to artisans for their products and services was often found to be irregular. The problem of irregular income and delay in payment was mainly due to the seasonal nature of income of the farmers. It has been found that major proportion of their produce went to the farmers which caused the delay in their income. Due to the seasonal nature of income of farmers, generally they paid to the rural artisans after the harvesting seasons. It was found that there was a time lag between sale and realisation of sale proceeds. Moreover, the poor classes of society who had less purchasing power were the main customers of artisan products and services. On the other hand, the rich classes of rural society had changed their preference from artisan products to machine made products. Due to this, the income from traditional occupations was found to be very low or irregular. Thus, irregularity of income in previous occupations forced the artisans to shift to the other occupations in view to earn regular income.

As regarding the 'irregular income' cause of occupational change, the data in Table 2 shows that 10.87 per cent artisans changed their traditional occupations due to this reason. The category wise analysis reveals that out of the total withdrawn artisan households who changed their traditional occupations due to the problem of 'irregular income' were found to be the highest at 21.62 per cent in case of barber artisans. It was 17.25 per cent in case of mason artisans. Besides, in case of weaver and tailor artisans, this percentage share turned out to be 12.50 per cent in each case. This percentage was found to be the lowest i.e., 5.26 per cent in case of goldsmith artisans who left their traditional occupation due to this reason.

It has been further found that some artisans got their payment in the form of food grains from village farmers. While in some cases these farmers fixed the proportion of crops which will be given to these artisans for their services and produce. The advantage of traditional mode of payment in kind was that it ensured the three time meals to these artisans. Because of the increase in daily requirement of family and dominant of money economy they were not able to continue with old system of exchange. So, they left their traditional occupations in view to earn regular and monetary income.

III. PROBLEM OF RAW MATERIAL

The scarcity of raw material and its higher prices was the other important reason accountable for occupational change of rural artisans. The availability of raw material ensures the continuation of occupation. Many of them faced the problem of shortage of raw material. Due to this reason, they were compelled to change their traditional occupations. Besides, some artisans were dependent on wholesalers and other middlemen for raw material who charged very high prices for raw material even of poor quality. On the other hand, these artisans were not able to buy raw material in bulk due to their weak financial condition. This made their production cost higher and lower profits. This type of circumstances had been forced them to think about some other occupations.

Data in the Table 2 depicts that about 5.20 per cent artisan households were abandoned their traditional occupations due to the problem of unavailability or high cost of raw material. Among all the categories of artisans, the percentage of potter artisans who faced the problem of raw material was found to be the highest at 22.72 per cent followed by 8.33 per cent of basket maker artisans. This percentage came to be 7.14 per cent in case of shoe maker and leather worker artisans, whereas, it remained just 2.08 per cent in case of weaver artisans. Not even a single blacksmith and tailor artisan found to be left their traditional occupations due to the problem of raw material.

It has been found that large number of shoe maker and leather worker, goldsmith, potter and weaver artisans had faced the problem of higher prices of raw material. The shoe maker and leather worker artisans were worked on hides, skin leathers and foot wears. It was found that the cost of production of finished articles of shoe maker and leather worker artisans was increased mainly due increase in prices of raw hides (cow, buffalo and goat) and skin leathers. The shortage of skin leathers and hides leads to the increase in prices. The scarcity of skin leather and hides appeared because of declined in number of buffalos and cows in rural areas. Moreover, the increased price of chemicals which used for tanning the hides was found the other reason for occupational change of shoe maker and leather worker artisans. On the other hand, all the shoe maker and leather worker artisans who remained in their traditional occupation were mainly confined to occasional flaying of leather and footwear repair work etc. Almost all the potter artisans reported the scarcity of raw materials (i.e., clay soil). The uses of poor quality of raw material degraded the quality of products which ultimately resulted in the dissatisfaction among both consumer and producer. Besides, the higher prices of firewood were found the another reason due to which the large number of potter artisans had shifted toward the other occupations. As regarding the occupational change of weaver artisans, they were suffered mainly due to the increase in price of cotton, yarn, dyes, chemicals etc. Similarly, the higher prices of gold and silver compelled the goldsmith artisans to think about some other occupations. It was observed that the carpenter, weaver, blacksmith and goldsmith artisans purchased their raw material from retailers at higher prices. Because of the higher prices of raw material, they were plundered by the retailers.

There was a substantial competition between organised industrial sector and unorganised artisans. The organised sector was enjoying various facilities such as marketing, finance, regular supply of raw materials etc. The organised sector affected the demand and prices of raw material through its working operation on large scale. The increased demand for raw material by organised sector has resulted the increase in prices. This increased price of raw material has adversely affected the artisans. Due to the inability to purchase raw material at higher prices, these artisans left their traditional occupations.

IV. PROBLEM OF FINANCE

Due to the lack of their own capital sources, credit was found to be the major requirement of artisans for carrying their production activities. The absence of adequate and timely credit facilities has adversely affected the production. On the other hand, the organised sectors of the economy such as factories, corporations etc. have easy access to finance. The organised sector got financial assistance from banks and central Government departments in the form of loans and subsidies. All the artisan activities in the villages were unorganised in nature. These unorganised producers were failed to get the financial assistance from banks, corporations and Government agencies for the purchase of raw materials, modern tools and equipments etc. The lack of finance had a drastic effect upon the quality and quantity of their output. Due to the limitation of lack of finance and income, most of them were compelled to close their traditional occupations and shifted toward the new occupations.

Data in the Table 2 shows that the proportion of artisan households who shifted toward the new occupations due to the 'problem of finance' turned out to be 9.05 per cent. Almost all the artisan categories except basket maker artisans had faced this problem in their traditional occupations. Besides, the percentage share of barber artisans who left their traditional occupation due to this reason came to be the highest at 21.62 per cent followed by 17.65 per cent of carpenter artisans, whereas, it remained just 12.50 per cent in case of blacksmith artisans. In case of shoe maker and leather worker and potter artisans, this percentage share turned out to be 3.57 per cent and 3.03 per cent, respectively.

It has been found that most of these artisans were dependent on moneylenders and other non institutional sources of finance due to the limited availability of credit from institutional sources. These moneylenders exploited them by charging a very high rate of interest. In overall, the lack of income along with increased level of debt and lower earnings from traditional occupations compelled them to leave their old occupations.

V. COMPETITION WITH MACHINE MADE PRODUCTS

The livelihood of the artisans was mainly depending upon the demand for their products and services. The demand for artisan products and services had decreased due to the competition with machine made products. These machine made products were cheaper and better in quality which replaced the demand for artisan products. These new products entered into the villages through link roads by the efforts of merchants such as banias and traders etc. Thus, due to the dwindling

demand for artisan products and services, most of them drifted away from their traditional occupations. The furious competition with machine made products resulted in demolition of artisans traditional occupations.

TABLE 2: MAIN CAUSES OF OCCUPATIONAL CHANGE

Causes	Categories										
	Carpenter	Blacksmith	Goldsmith	Weaver	Potter	Shoe Maker & Leather Worker	Barber	Tailor	Mason	Basket Maker	Total
Small Size of the Market	9 (13.23)	5 (10.42)	4 (10.53)	4 (8.34)	-	4 (7.14)	5 (13.51)	3 (7.50)	3 (10.34)	-	37 (8.37)
Irregular Income	5 (7.35)	5 (10.42)	2 (5.26)	6 (12.50)	6 (9.09)	5 (8.93)	8 (21.62)	5 (12.50)	5 (17.25)	1 (8.33)	48 (10.87)
Problem of Raw Material	-	-	2 (5.26)	1 (2.08)	15 (22.72)	4 (7.14)	-	-	-	1 (8.33)	23 (5.20)
Problem of Finance	12 (17.65)	6 (12.50)	2 (5.26)	3 (6.25)	2 (3.03)	2 (3.57)	8 (21.62)	2 (5.00)	3 (10.34)	-	40 (9.05)
Competition with Machine Made Products	10 (14.71)	11 (22.92)	7 (18.42)	22 (45.83)	19 (28.79)	19 (33.93)	-	12 (30.00)	-	-	100 (22.62)
Seasonal Unemployment	-	-	5 (13.16)	-	5 (7.58)	-	-	2 (5.00)	-	4 (33.34)	16 (3.62)
Spread of Education & Employment in Government and Private Jobs	7 (10.29)	4 (8.33)	4 (10.53)	3 (6.25)	4 (6.06)	3 (5.36)	2 (5.41)	2 (5.00)	5 (17.24)	-	34 (7.69)
Difference in Income	12 (17.65)	10 (20.83)	7 (18.42)	6 (12.50)	10 (15.15)	7 (12.50)	9 (24.33)	10 (25.00)	6 (20.69)	4 (33.33)	81 (18.33)
Other Factors/Causes	13 (19.12)	7 (14.58)	5 (13.16)	3 (6.25)	5 (7.58)	12 (21.43)	5 (13.51)	4 (10.00)	7 (24.14)	2 (16.67)	63 (14.25)
All Sampled Households	68 (100.00)	48 (100.00)	38 (100.00)	48 (100.00)	66 (100.00)	56 (100.00)	37 (100.00)	40 (100.00)	29 (100.00)	12 (100.00)	442 (100.00)

Source: Primary Survey

The analysis of data in Table 2 reveals that 22.62 per cent of artisan households left their traditional occupations due to the 'competition with machine made products'. All the carpenter, blacksmith, goldsmith, shoes maker and leather worker, potter and weaver artisans were suffered due to this reason. The proportion of weaver and shoe maker and leather worker artisans who left their traditional occupations due to competition with machine made products was found to be the highest i.e., 45.83 per cent and 33.93 per cent, respectively. It remained just 30.00 per cent in case of tailor artisans. Similarly, it was found to be 22.92 per cent in case of blacksmith artisans and this percentage turned out to be 18.42 per cent in case of goldsmith artisans.

It has been found from the study that the growth of industrialisation decreased the demand of artisan products to a large extent and attracted the rural buyers towards the machine made products. The rural artisans could not resist the competition offered by machine made products of large scale industry because large scale industry having access to many facilities such as credit, advertisement, modern techniques of production, economies of scale etc. The use of power driven machines in large scale industry increased the production. Besides, these machine made products were cheaper and better in quality as compared to the articles produced by the artisans. The development of link roads, railways and communication strengthen the competition with machine made products. Due to the superiority of these products rural people shifted their demand from artisan products to machine made products. As a consequence, the products of artisans remained unable to compete with machine made products and large number of artisans forced to shift toward the other occupations. It was found that the expansion of village market for industrial products emerged as a major cause for occupational shift of rural artisans. Further, almost all the artisan occupations were dependent on agriculture for their employment. The mechanisation of agriculture broke the traditional linkages between artisans and farmers. Mechanization of agriculture means the uses of power driven or operated machines (tractor, thresher, harvester etc.) for various jobs operations such as sowing and cultivation. The demand for artisan products such as chaff-cutter blades, plough, agricultural tools etc. were replaced by tractor, thresher, harvester etc. As a result, large number of artisan households had left the traditional occupations.

VI. SEASONAL UNEMPLOYMENT

Besides 'small size of the market', 'low and irregular income', 'competition with machine made products', the phenomenon of seasonal unemployment is also insisted rural artisans to seek employment opportunities in other occupations. The nature of demand for some artisan categories such as blacksmith, carpenter, goldsmith, potter, tailoring and basket making was found to be seasonal. These artisans faced very high demand during the season of marriages, festivals and other social religious ceremonies. Due to the seasonal nature of demand, these artisans got employment only for two or three months in a year and subsequently they remained free for a long period of time. The seasonal nature of demand for artisan products has raised the problem of unemployment among them, partially during off season. The problem of unemployment compelled the artisans to join the new occupations which provided them regular employment.

Data in the Table 2 reveals that about 3.62 per cent of artisan households changed their traditional occupations due to the problem of 'seasonal unemployment'. The percentage share of basket maker artisans who left their traditional occupation due to this reason was found to be very high 33.34 per cent. Besides, the percentage share of goldsmith and potter artisans who changed their traditional occupations turned out to be 13.16 per cent and 7.58 per cent, respectively, whereas, 5.00 per cent of tailor artisans left their traditional occupation due to the seasonal nature of demand for their products and services.

The above analysis reveals that seasonal nature of demand for artisan products and services not provided them regular employment. During the peak season (marriage, festivals and social and religious ceremonies), the demand for their products and services increased but during the slack season these artisans remained without work. The problem of seasonal unemployment in their traditional occupations was found another cause responsible for the dissatisfaction of rural artisans. These worrisome circumstances compelled the artisans to think on some alternative sources of earnings.

2.2 PULL FACTORS

Pull factors refers to those forces and facilities which attract the people to leave their traditional occupations and join the new occupations. In the present study, we considered the 'spread of education and employment in Government and private jobs' and 'differences in income' as pull factors. These factors attracted the artisans to change their traditional occupations. Pull factors are discussed as under:

I. SPREAD OF EDUCATION AND EMPLOYMENT IN GOVERNMENT AND PRIVATE JOBS

Education is the process of bringing desirable changes into the behavior of human being. It opens the new opportunities for the people to choose their occupation. It is another aspect which contributed positively for the changing of occupation by the people. As far as Punjab is concerned, the Government schools are available in each village. A very low or negligible fee among these schools has increased the approach of common masses to education. Education created the consciousness among the people about the occupations and employment opportunities. The spread of education enhanced the awareness among the people for seeking better employment in Government, semi Government and private sectors. Once people initiated obtaining education this process stimulated occupational change.

Data in the Table 2 reveals that 7.69 per cent of the artisan households left their traditional occupations and joined the other occupations due to an increase in educational awareness among them which pulled them towards relatively better jobs in public and private sectors. The proportion of mason artisans who left their

traditional occupation due to 'spread of education and employment in Government and private jobs' came to be the highest at 17.24 per cent, whereas, this percentage share found to be 10.53 per cent and 10.29 per cent in case of goldsmith and carpenter artisans, respectively. The percentage share of barber and shoe maker and leather worker artisans was found almost the same i.e., 5.41 per cent and 5.36 per cent, respectively. While not even a single basket maker artisan found to be left his traditional occupation due to this reason.

The Government has provided a variety of incentive to Backward and Scheduled Castes population such as reservation in education and Government jobs, free books, scholarships etc. Most of these artisans were related to the Backward and Scheduled Castes. So, these artisans were getting the benefits from the reservation policy of the Government. They improved their education level in order to get employment in Government jobs. Besides, private sector also offered jobs to the educated people.

II. DIFFERENCES IN INCOME

It has also been observed that the peoples participation not only dependent on the existing employment opportunities but also depend upon the difference between the wage rate and income among different occupations. Almost all the people gave their preferences to the higher income occupations. Most of the withdrawn artisans faced the problem of stagnation in their income in previous occupations due to the lower demand for their products and services. The stagnation of income in previous occupations and increased demand and price of necessities of daily life was found to be another reason for occupational change. Most of the artisans were dependent upon the income from previous occupations which found to be very low after the dominance of money economy. Besides, the availability of better employment opportunities which provided relatively more income attracted the artisans to change their traditional occupations.

Data in the Table 2 depicts that 18.33 per cent of the artisan households changed their traditional occupations due to the 'differences in income' between new and previous occupations. Among all the artisan categories, the proportion of basket maker artisans who attracted toward the new occupations due to 'difference in income' came to be on the top i.e., 33.33 per cent. This percentage share was found to be 25.00 per cent in case of tailor artisans, whereas, this percentage share remained almost the same in case of blacksmith and mason artisans i.e., 20.38 per cent and 20.69 per cent, respectively. In case of weaver and shoe maker and leather worker artisans, this percentage share turned out to be 12.50 per cent in each case.

Hence, 'differences in income' and availability of better employment opportunities emerged as important pull factors that stimulated the occupational change of rural artisans.

2.3 OTHER FACTORS/CAUSES

Major causes of the occupation change of the rural artisans have been discussed under the push and pull factors. There are a variety of some 'other' causes which also supported the artisans to change their traditional occupations. These causes comprised of more number of employment days in new occupation, out-migration for better life, availabilities of facilities in the cities, increasing cost and standard of living, information and technology revolution (such as uses of cell phone for information regarding availability of work) and less tiring work in new occupations.

Data in the Table 2 shows that 14.25 per cent of artisan households left their traditional occupations due to the 'other' factors/causes. The percentage of mason artisans who changed their traditional occupation due to the 'other' factors/causes came to be 24.14 per cent followed by 21.43 per cent of shoe maker and leather worker artisans. This percentage share turned out to be 19.12 per cent in case of carpenter artisans. About 14.58 per cent of blacksmith artisans changed their traditional occupation due to same reason. It came to be very low in case of weaver artisans i.e., 6.25 per cent.

The withdrawn artisan households expressed their views that new occupations were less tiring as compared to their traditional occupations. They worked very hard in tailoring, construction, weaving and pottery occupations. Besides, technological revolution also stimulated the occupational change, they got the information from cell phones through calling, messages, and internet uses regarding availability of work and changed their traditional occupations. On the other hand, the large number of artisans migrated to the towns and cities due to the availabilities of various facilities in the cities such as better education, health facilities etc. While some of them left their traditional occupations and settled abroad due to better earnings. Further, more number of employment days in new occupations attracted these artisans to join the new occupations. These were the main reasons which supported the artisans to join new occupations.

It has been found that the hereditary occupations had been changed and new occupations emerged due to industrialisation, urbanisation, spread of education and communication.

CONCLUSION

In case of India in general and Punjab in particular, the gluts of imported machine made products in the rural economy has affected the social structure. The dominance of money-commodity relations has reduced the importance of rural artisans to supply the tools and equipment for other producers (particularly farmers) and consumer goods for village population. No doubt the State sponsored infrastructure projects has increased the connectivity of the rural areas with the urban centres. But that connectivity was largely used by the traders to bring the machine made products to the rural economy rather than exporting the products of rural artisans to urban centers. The advertisement by the large scale manufacturing products through media has put the products of rural artisans into disadvantage position because they haven't enough financial sources to use these channels to attract the customers for their products. It has been found that the mixture of push, pull and other factors were responsible for the occupational change of rural artisans. These factors were compelling/attracting the rural artisans to change their traditional occupations. The micro level picture of the rural areas reveals that the transformation is not necessarily following the transitional pattern suggested by the development economic literature. In Punjab which is characterised as relatively developed state among the Indian union, the push factors or compulsion played quite important role for the change of occupations of petty producers. The other important point against the established development literature was that it is not only the available of better opportunities and income that influenced the occupational change rather multiple factors played an active part for the transition of means of livelihood from one activity to another.

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A STUDY ON CUSTOMER SERVICE QUALITY OF RETAIL BANKING SECTOR IN CHENNAI

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ABSTRACT

'Service Quality' is a business administration term referred to describe the achievement in service. It reflects both objective and subjective aspects of service area. The measurement of customer service quality requires the predefined dimension for analysis. It is easy to identify the difference between the expected benefit with the perceived result. Customer service quality will be identified on the basis of the customer's imagination of the service they might receive and the service provider's talent to present this imagined service. A customer will have an expectation of service. That is determined by factors such as recommendations, personal needs and past experiences. The expectation of service and the perceived service result may not be equal, thus leaving a gap. Five determinants which may influence the appearance of a gap were described by Parasuraman, Zeithaml and Berry.

KEYWORDS

assurance, empathy, reliability, responsiveness and tangibility.

INTRODUCTION

Customer is vital for the development of trade, industry and service sector particularly in financial services. Therefore, the significance of customer service in the banking sector came to force to compete in a market driven environment. Measuring service quality in the service sector particularly in the banking sector is more difficult than measuring the quality of manufactured goods. The service sector as a whole is very heterogeneous and what is heterogeneous may hold true for one service and may not hold for another service sector. Each bank is having a variety of services. Due to this differentiation, services in this industry could not be standardized, moreover these services are intangible in nature which could not be compared or seen. The concept of customer satisfaction and service quality is interrelated with each other. Moreover, satisfaction of customer depends upon service quality and service quality is increasingly offered as a strategy by marketers to position themselves more effectively in the market place. Due to the advent of e-banking, quality of service has been improved a lot as compared to traditional banking services. Internet banking, Mobile banking, automated teller machine, electronic fund transfer has totally changed the way of providing services by the banks.

Increased competition, highly educated consumers, and increase in standard of living are forcing many businesses to review their customer service strategy. Many business firms are channeling more efforts to retain existing customers rather than to acquire new ones since the cost of acquiring new customer is greater than cost of retaining existing customers. There is enough evidence that demonstrates the strategic benefits of quality in contributing to market share and return on investment. Maximizing customer satisfaction through quality customer service has been described as 'the ultimate weapon' by Davidow and Vital (1989). According to them, in all industries, when competitors are roughly matched, those with stress on customer's service will win. In view of the above mentioned facts, an analysis of service quality perceptions from customer's point of view may be sound and interesting at this juncture. Such an analysis will provide banks, a quantitative estimate of their services being perceived with intricate details such as whether banks are meeting the expectations of the customers or not.

REVIEW OF LITERATURE

Heryanto (2011) in an innovative paper identified the effect of Service Quality On customer Satisfaction with Bank. The objective of the study was to understand the influence of service quality on customer satisfaction. It is found out the factors influenced the service quality on customer satisfaction.

Robert Hinson, N. Owusu-Frimpong, Julius Dasah, (2011) in an innovative paper completely evaluated a perception of customers in the area of service-quality. It is found out the service quality in retail banking. It creates deep impact on customer service. It is also focussed on service knowledge, bank infrastructure and technology in this study. Customer knowledge is found to be a major concern for service quality improvement.

Jaya Sangeetha, S. Mahalingam, (2011) conducted a study on Service quality models in banking. It is analysed that traditional and automated service customer interaction has been used for predicting customer retention with banks. It is identified that the measurement of service quality on the basis of customized scale for the particular culture.

Houn-Gee Chen, Julie Yu-Chih Liu, Tsong Shin Sheu & Ming-Hsien Yang, (2012) investigated the impact of financial services quality and fairness on customer satisfaction. Customer satisfaction in the banking industry has been measured as a function of service quality. The researcher identified that fair service has a significant impact on customer satisfaction. It is further analysed that financial institutions must carefully implement policies and practices to ensure that perceptions of fairness. The fairness of service will provide the additional insights into the fairness of on customer satisfaction.

Swamy, P. S. P.; Tiwari, Kavita; Tiwari, Ritesh (2012), conducted a study on impact of service quality on retention of customers in retail banking. It is identified the effect of service quality on private retail banking to maintain customers. The personal attention will be found the major factor for good service quality.

Jain, Mamta; Yadav, Suresh Kumar; Saxena, Abhineet; Mathur, T. N. (2013), investigated the Banking Services and Customer Satisfaction of Banks. This study examines the perceptions of four specific ethnic groups about how service quality dimensions contribute to their satisfaction with retail banking. It is found that personal behavior will be a major factor for determining service quality.

Mei Lau; Cheung, Ronnie; Lam, Aris Y. C.; Yuen Ting Chu (2013), conducted a study on Measuring Service Quality in the Banking Industry. The characteristics of banking service quality as perceived by customers will be a major attributes of service quality. It is inferred that Tangibility, responsibility, reliability and assurance were more significant in contributing to customer satisfaction. It is concluded that SERVQUAL is a suitable instrument for measuring service quality in the retail banking sectors.

Ms. Jayshree Chavan, Mr. Faizan Ahmad (2013), investigated the study on Factors Affecting on Customer Satisfaction in Retail Banking. The quality of the consumer service provided by the banks has been increased the overall customer satisfaction. The findings revealed that customer satisfaction is based on various factors that influenced with the retail banking industry. It is inferred that in order to strengthening the bond between bank and their customers is depends upon the bank management activities.

Moha Asri Abdullah, Noor Hazilah A. Manaf, Muhammad, Bashir, Owolabi, Yusuf, Kamrul Ahsan and S. M. Ferdous Azam (2014), investigated the factors determinants of Customer Satisfaction on Retail Banks. The bank service quality will be a major determinant in the banking service industry. It is inferred that customer satisfaction is found to be a significant factor for service quality. The service quality of the bank must be a major determinants for retaining their customers loyalty.

Pratap Chandra Mandal (2015), in an innovative study completely evaluated the Dimensions Affecting Customer Satisfaction in Retail Banking. It is identified that the aware of the requirement of their customers will be a major factor determining the service quality of the bank. It is inferred that customer satisfaction can be determined on the requirements of the customers.

H. Vasantha Kumari, S. Sheela Rani (2015), conducted a study on Customer Perception of Services Quality in The Retail Banking Sector. It is identified that demographic characteristics of customers will be a major factor for determining the service quality of the customers. This study identified there is no significant difference between service quality of the customers and their age, gender, occupation. But there is a significant difference between service quality the income and qualification.

A.R. Sudhamani, Dr. N. Kalyanaraman (2015), conducted a survey on Literature Review on Customer Perception on Service Quality in Banking Sector. The gate way of technology and competition will be identified on the basis of service quality. It is inferred that high quality of performance will be expected by the customers. It is measured by SERVQUAL.

NEED OF THE STUDY

The current business environment is becoming competitive and challenging than before. With multidimensional challenges and demand of globalization, the banks are forced to re-engineer their products and systems to improve the service quality and remain competitive. The study aims at examining the dimensions of customer service quality of the retail banking sector in Chennai. As service quality reflects the way the banks are performing, this study attempts to explore the perception of customers in respect to the services provided by the banks. The entry of retail sector banks, the nature of functioning of these banks and the promotional attempts of these banks has changed the landscape of the Banking sector in India.

STATEMENT OF THE PROBLEM

In business world customers are the source of profit and revenue for the service organizations and improvements in service quality leads to customer loyalty. The study investigates the perception of service quality provided by the retail banking sector. A sound association is found between customer satisfaction and the quality of service provided by the banks. The goal of this research is to analyze the differences that exist between customer expectation and the perception of service provider.

OBJECTIVES OF THE STUDY

1. To study the perception of customer service quality in retail banks in Chennai.
2. To analyze the customer expectations and the service quality of service provider.
3. To find out the gap between customer perception and expectation by using SERVEQUAL Model.

SIGNIFICANCE OF THE STUDY

The aim of this research is to investigate the link between service quality and customer satisfaction and the ways through which service firms can improve and manage the process of delivering quality standards to their customers. For this purpose, the study analyses the effect of service quality on customer satisfaction. Customer service is considered as an integral part of any facet of industry and it define the future of any organization. In different services industries the relationship between customer satisfaction and service attributes have been difficult to identify because services nature is intangible. Due to intangible nature of services it is difficult for the firms to analyses how the customers perceive and evaluate the desired outcome of the service quality. The issue of highest priority today involves understanding the impact of service quality on customer satisfaction in retail banking industries.

RESEARCH DESIGN

A descriptive research approach was followed in this study. The existing system was studied in a time frame and analyzed using descriptive analysis and results presented.

SOURCES OF DATA

The study is conducted using both analytical and descriptive type of methodology. The study primarily depends on primary and secondary data. The Survey is conducted in retail banks located in Chennai city. Chennai hosts a number of retail banks making the study realistic and meaningful. The city consists of largest, medium and small retail banking units as well.

METHOD OF DATA COLLECTION

The primary data are collected through questionnaire survey. The respondents are asked to give their opinion relating to the variables namely customer satisfaction and customer service quality. The first part of the customer satisfaction Questionnaire comprises Demographic factors with optional questions. The second part includes statements relating to the core and add-on-services offered by the selected banks. The third part includes statements relating to personal opinion regarding the services provided by the bank and customer loyalty with Likert's 5 point scale. Some optional questions are included along with rating questions.

The Secondary data are collected from Journals, Magazines, Publications, Reports, Books, Dailies, Periodicals, Articles, Research Papers, Websites, Company Publications, Manuals and Booklets.

DATA ANALYSIS

To assess the customer service quality, customer perceptions on five dimensions were captured. Though the customer perception of the services on five dimensions namely reliability, empathy, responsiveness, tangibility and assurance there are differences in the perception of the Banks. The data was collected and analyzed using statistical software package. Descriptive analysis was done with the master data which was tabulated in spread sheets. The scores of the five point scales responded by respondents for all the 22 questions were tabulated to analyze the following.

TABLE 1: DEMOGRAPHIC PROFILE OF RESPONDENTS

PROFILE OF RESPONDENTS	CATEGORY	NO. OF RESPONDENTS	PERCENTAGE
Age	Below 18	260	43.3
	19 – 30	190	31.7
	31 – 50	110	18.3
	Above	40	6.7
Gender	Male	343	57.2
	Female	257	42.8
Marital Status	Married	392	65.3
	Unmarried	208	34.7
Income level	less than 1 lakh	118	19.7
	1-2.5 lakhs	229	38.2
	2.5-4 lakhs	100	16.7
	4-10 lakhs	58	9.7
	10-15 lakhs	56	9.3
Occupation	More than 15 lakhs	39	6.5
	Employed	229	38
	Professional	154	27
	Business	90	15
	Student	53	8
	Retired	42	7
	Homemakers	32	5

TABLE 2: CALCULATION OF UNWEIGHTED SERVQUAL SCORE

Dimension	Statement	Expectation Mean	Perception Mean	Gap Score	Average for Dimension
Tangibles	1	4.54	3.94	-0.60	
	2	4.25	3.63	-0.62	
	3	4.55	3.85	-0.70	
	4	4.35	3.63	-0.72	-0.66
Reliability	5	4.55	3.57	-0.98	
	6	4.32	3.64	-0.68	
	7	4.55	3.95	-0.60	
	8	4.25	3.24	-1.01	
	9	4.36	3.27	-1.09	-0.87
Responsiveness	10	4.55	3.49	-1.06	
	11	4.65	3.67	-0.98	
	12	4.55	3.47	-1.08	
	13	4.32	3.6	-0.72	-0.96
Assurance	14	4.53	3.71	-0.82	
	15	4.56	3.77	-0.79	
	16	4.55	3.65	-0.90	
	17	4.25	3.65	-0.60	-0.78
Empathy	18	4.55	3.8	-0.75	
	19	4.55	3.85	-0.7	
	20	4.57	3.8	-0.77	
	21	4.43	3.43	-1.0	
	22	4.23	3.35	-0.88	-0.82
Unweighted Average SERVQUAL score:					-0.82

TABLE 3: SERVQUAL IMPORTANCE WEIGHTS

Features of Dimensions	Average %
1. The appearance of the banks physical facilities, equipment, personnel and communication materials. 15	13
2. The bank's ability to perform the promised service dependably and accurately 12	15
3. The banks willingness to help customers and provide prompt service. 21	27
4. The knowledge and courtesy of the bank's employees and their ability to convey trust and confidence. 10	17
5. The caring individual attention the bank provides its customers. 42	28
Total	100

TABLE 4: CALCULATION OF WEIGHTED SERVQUAL SCORES

SERVQUAL Dimension	Score from Table :2	Weighting from Table :3	Weighted Score
Tangibility	-0.66	13	-8.58
Reliability	-0.87	15	-13.05
Responsiveness	-0.96	27	-25.92
Assurance	-0.78	17	-13.26
Empathy	-0.82	28	-22.96
Average Weighted score			-16.75

The analysis of the SERVQUAL statements show that Responsiveness is the dimension which has maximum un-weighted (-0.96) and weighted gap score (-25.92), whereas Tangibility is the dimension which has minimum un-weighted (-0.66) and weighted gap score (-8.58). The statement number 9 has recorded maximum mean gap score (-1.09) followed by statement number 1, 7 and 9 which shows the wide gap (-0.60) in the individual attention.

CONCLUSION

This study measured service quality gap of retail sector banks with reference to Chennai by using the Servqual Model. The primary part of the empirical analysis indicated that the five dimensions of perceived service quality generally have a negative gap. It was also found that there is a huge service gap on Responsiveness and less on Tangibility. This study also showed that Servqual instrument is valid and reliable to measure the perceived service quality in banking service. Bank staff should be trained to give a better service to this segment by giving personalized and individual attention. Language also plays a crucial role in providing better experience. Bank may consider translators for better service.

LIMITATIONS

The study focuses on the service quality at all levels for retail banks located in Chennai city only. The study provides a general overview of the satisfaction level followed by various banks. The study considers perception of service quality provided by the retail banks

1. The study is limited to the study of expectations and perceptions of customers having an account in retail banks.
2. The perceptions and expectations of customers are limited to the time period of the study.
3. The study is limited only to Chennai city.
4. Findings are purely based on sample survey through questionnaire method. Hence there is a scope for the respondents to be biased in this study.

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SUSTAINABLE, RESPONSIBLE AND IMPACT INVESTMENT: A GLOBAL REVIEW

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ABSTRACT

Sustainable and Responsible Investment (SRI) combines investors' financial objectives with their commitment to social justice, economic development, peace or a healthy environment. The fundamental motives for 'Sustainable and Responsible Investment' is to do away with investor 'complicity' with activities that they object, to encourage companies to improve their impact on society, the environment or the economy and to generate investment outperformance in order to make money. These motives are in line with the Triple bottom line approach of sustainable development. This paper is an attempt to review the various SRI strategies followed by fund managers across the globe, their main characteristics, advantages and limitations. This in turn will help Indian Fund managers in developing SRI products in the form of pension funds and mutual funds.

KEYWORDS

socially responsible, investment, sustainability, ethical, impact investment.

INTRODUCTION

Sustainable and Responsible Investment' has come a long way since the boycotts of companies operating in apartheid South Africa and the application of religious 'screening'. From these principled roots, the industry has developed a diverse range of intellectually-mature and globally-applicable investment strategies.

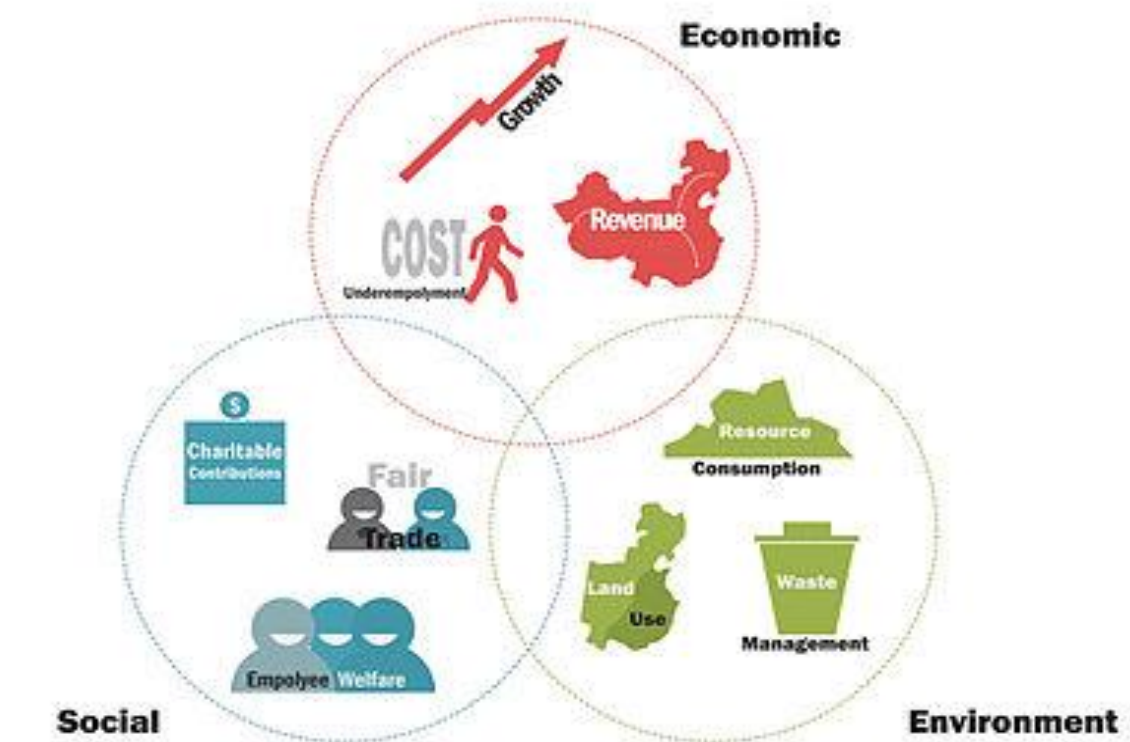
The UK Social Investment Forum defines SRI as "investment which combines investors' financial objectives with their commitment to social justice, economic development, peace or a healthy environment".

EuroSIF refers to "investment which "combines investors' financial objectives with their concerns about social, environmental and ethical (SEE) issues".

There are three fundamental motives for 'Sustainable and Responsible Investment':

- To do away with investor 'complicity' with activities that they object to
- To encourage companies to improve their impact on society, the environment or the economy
- To generate investment outperformance and make money

This looks in line with the triple bottom line approach which includes social, environmental and economic factors as illustrated in Fig 1.

FIGURE 1: TRIPLE BOTTOM LINE

(Source: Wikipedia)

TABLE 1: PROPORTION OF SRI RELATIVE TO TOTAL MANAGED ASSETS

Region	2012	2014
Europe	49.00%	58.8%
Canada	20.20%	31.30%
United States	11.20%	17.90%
Australia	12.50%	16.60%
Asia	0.60%	0.80%
Global	21.50%	30.20%

(Source: GSIA Review 2014)

As the 'Sustainable and Responsible Investment' industry has grown and evolved, its sophistication has increased greatly such that seven distinct SRI strategies can now be identified.

SUSTAINABILITY THEMED INVESTMENT

A new world is emerging which is driven by trends such as change in climate, demographic trends, urbanization at a rapid rate, issues related to food security, poverty and loss of biodiversity causing irreparable damage to the society and whole ecosystem. Sustainability themed investment can be defined as the selection of companies that contribute to specific agendas of social responsibility such as cleaner earth, low carbon emission, and good health of society.

Today many investors are showing their reaction to these changes by demanding and taking investment opportunities that offer solutions to such challenges. These investments can generate positive social and environmental impacts along with good financial returns.

Clean technology that includes renewable energy, waste and water management, sustainable forestry and agriculture in addition to inclusive finance and products and services that support global health are some of the investment arenas included in E&S themed investing.

For some investors, the environmental and social impact of investments could be integral to the mission of the fund and reflect the requirement of their beneficiaries. Investors can also expect betterment to their overall risk v/s return profile and diversification benefits from these investments. Investors can either choose to dedicate a small percentage to investments in social and/or environmental areas, via a dedicated team or they can apply for opportunities on the environmental and/or social theme across classes of assets and investment teams.

ESG SCREENING OR THE 'BEST-IN-CLASS' APPROACH

It means investing in corporations or businesses that are leaders in meeting environmental, social and governance (ESG) criteria in their particular investment category or universe or asset classes.

This type of strategy uses the sustainability scores to determine those business entities that perform the best in their sector.

Companies which apply this filter within their investment decisions are assessed on the basis of their success in implementing ESG goals in relation to their overall profits. A score is calculated that provides a best-in-class sustainability rating.

Hence, winners of best-in-class approach are those that have specifically created a framework to help their ESG objectives. Conventional energy companies that are actively developing alternative forms of clean and green energy would be an example.

Best-in-class investment is considered a winning strategy because Companies that show successful environmental leadership gain a competitive advantage that result in good and sustainable financial performance. Also, Companies having a track record of least environmental damages and penalties compared to their industry counterparts will benefit from lesser environmental overhead costs in the future. And, Best-in-class companies can create matching best-in-class technology, research and new investment propositions which will strengthen their business as an investment of choice. In addition to this, by showing how their firm benefits from sustainable and ethical practices and clean technology, companies showing robust ESG goals can positively influence others.

NORMS-BASED SCREENING

The European Sustainable Investment Forum (Eurosif) defines norms-based screening as "screening of investments according to their compliance with international standards and norms".

For instance, companies are expected to look up to the UN Universal Declaration of Human Rights, OECD guidelines or UN Global Compact in their policies and standards.

The standards that are followed to ensure fair and right treatment of employees and of the environment are indicated by national and international authoritative bodies.

MAJOR SCREENING NORMS

1. UN Global Compact – It is regarded as the world's largest corporate sustainability initiative. It is a group of businesses that promote respect for people and the planet. It backs that businesses should ensure that human rights are protected and that they have to make sure that the company is not involved in any kind of abuses. It then says that employers need to guarantee workers' rights and help tackle forced labor and child labor. It states that a company's environmental policies should "promote greater environmental responsibility" and that firms should work against all types of corruption. The UN further issued a list of Guiding Principles on Business and Human Rights, with the same objectives.
2. The Organization for Economic Co-operation and Development (OECD): It has published the "Guidelines for Multinational Enterprises". It is a sum of recommendations addressed by governments to multinational business enterprises operating in or from the group countries. They give non-binding principles and standards for responsible business conduct in global context that are consistent with applicable laws and also with internationally recognized standards.
3. The International Labour Organization (ILO): It released the "Tripartite declaration of principles concerning multinational enterprises and social policy". It addresses large companies about duties towards employees, consumers and the environment.
 - a) United Nations Guiding Principles on Business and Human Rights (UNGPs): The UNGPs are bound by three pillars outlining how states and businesses should implement the framework called "Protect, Respect and Remedy Framework". This framework was developed by Professor John Ruggie. It promotes that:
 - b) The state duty to protect human rights
 - c) The corporate responsibility to respect human rights
 - d) Access to remedy for victims of business-related abuses

In this way, shareholders can judge the positives and negatives of a business. They can find out whether a business is abiding to those rules, which protect vulnerable people, workers and the environment.

It is a very effective method to develop the engagement process between investors and the company. Also, is very good for companies to keep on the sustainable path and behave justly.

EXCLUSION FROM INVESTMENT UNIVERSE

It is an approach that excludes specific investments or classes of investment from the investible universe such as companies, sectors, or countries (EUROSIF 2012). This approach excludes companies, sectors, or countries from the permissible investment universe if involved in certain activities based on specific criteria in a systematic way. The most common criteria include arms and weapons, pornography, tobacco and animal testing.

Alternatively, it advocates complete avoiding those businesses which can harm other people, animals or the ecosystem. This strategy also excludes certain countries due reasons such as violations of human rights.

Alcohol, gambling, tobacco, armaments, pornography and nuclear power have been historically, the most common areas of negative screening for ethical investors. Together, they're also referred to as the sextet of sin.

INTEGRATION OF ESG FACTORS IN FINANCIAL ANALYSIS

This strategy suggests that asset managers should include ESG risks and opportunities into financial analysis. Investment decisions should base on a systematic process and appropriate research sources. It should be something more than basic fundamental and technical analysis and while deciding the risk return tradeoff sustainability should not be overlooked.

ENGAGEMENT AND VOTING ON SUSTAINABILITY MATTERS

It is a means by which investors can express their views and suggestions to companies. This process is *long-term*. It sensitizes the management regarding ESG matters. Investors can play active roles in businesses, by opining over ESG issues and voting for or against a proposal. By doing this, they can ensure that the business is honoring its promises. Investors can raise their voice against practices that are controversial. They can suggest improvements, and demand transparency or commitment in the relevant area. Mostly the companies listen to investors when they demand more sustainable business practices through negotiation or during their annual general meetings (AGMs). But it is difficult to prove the effectiveness of this practice.

Investor engagement and voting also influences a company's corporate social responsibility (CSR) policies. CSR is a highly effective way to promote a firm's sustainability.

Engagement, voting, and ownership, are potential drivers for change within business that society needs to see.

IMPACT INVESTMENT

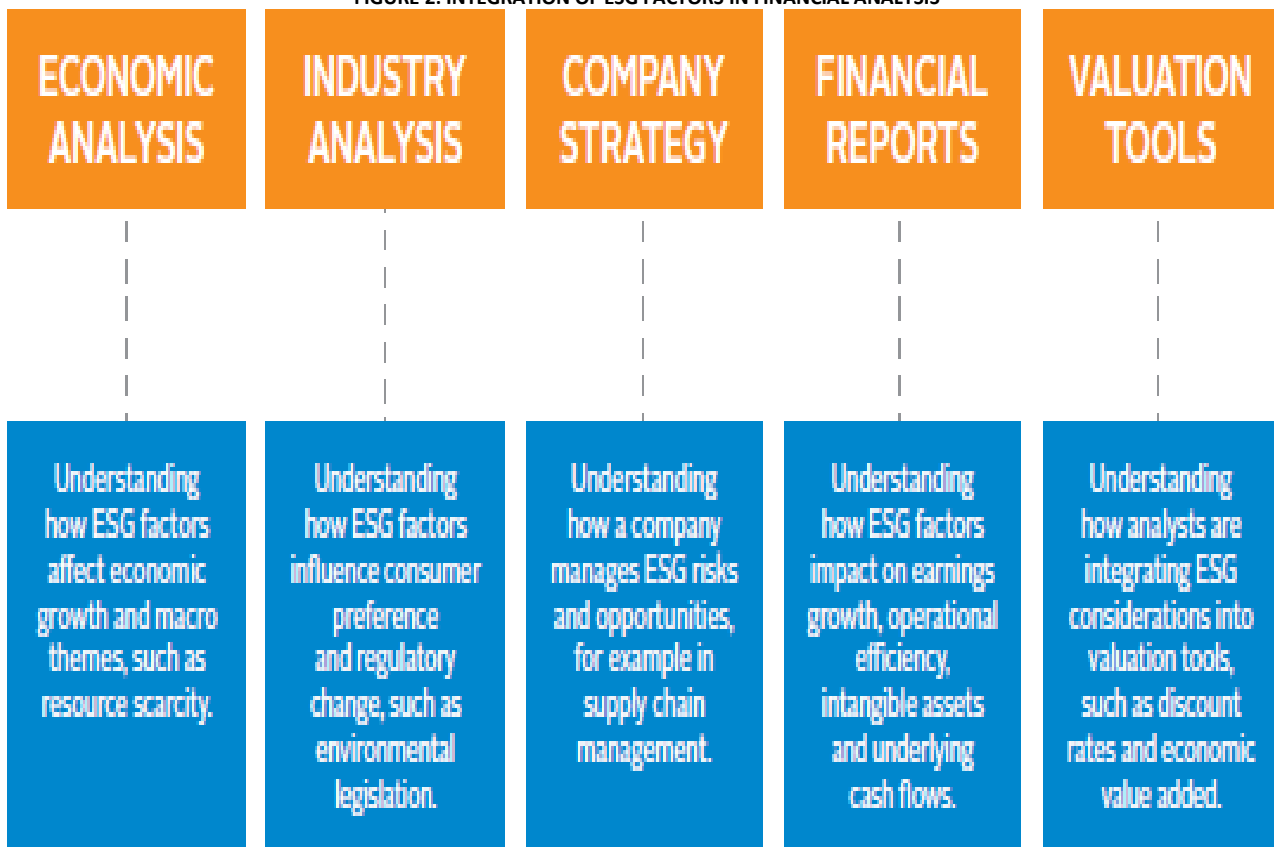
It has been defined as 'investments made with the motivation to generate social and environmental impact alongside a financial return, and it should be financially sustainable in the long run'. Impact investment is often set apart from SRI, as it also includes investments in emerging markets and microfinance. Most impact investing strategies operate outside the stock-exchange and invest directly in entrepreneurs or projects that generate the impact these investors seek

There is this long long-held view that social and environmental issues should be taken forward only by philanthropic donations, and that market investments should focus only on achieving financial returns. Impact investing challenges this.

The impact investing market offers diverse and viable opportunities for investors to advance social and environmental solutions through investments that also produce financial returns.

Impact investment has attracted a wide variety of investors, both individual and institutional. They may be Diversified financial institutions, Pension funds, and Private foundations making program- and/or mission-related investments, Insurance companies, Development finance institutions, Family offices, Fund managers and Individual investors.

FIGURE 2: INTEGRATION OF ESG FACTORS IN FINANCIAL ANALYSIS



(Source: PRI Research)

FIGURE 3: TYPES OF IMPACT INVESTMENT



(Source: Global Impact Investing Network)

IX DISCUSSION

In addition to the six above discussed strategies many other hybrid or similar strategies are being practiced by investment managers across the globe. They could be enumerated as follows:

1. Active corporate governance: It involves screening the companies that have proactive execution of the general rights and responsibilities of share ownership.
2. Constructive engagement: It involves investors encouraging company management to improve the impact that they have on society and / or the environment through a process of research and communication.
3. Shareholder advocacy: It is quite popular and is a more confrontational form of engagement, whereby investors use their shareholdings to submit resolutions to company AGMs and sometimes launch public campaigns against specific corporate practices.
4. Community investing: This strategy involves the provision of capital and financial services to communities that are underserved by traditional financial services and particularly to low-income individuals, small businesses and community services such as child care, affordable housing, and healthcare.
5. Funds solidaire: Also called as solidarity funds. is a uniquely French strategy in which managers invest 5%-10% of their portfolio into unlisted companies that are officially accredited as meeting 'solidarity' criteria (by employing staff on supported job schemes, by sanctioning the election of management by the workforce or by applying certain rules on the pay of executives and staff).
6. Economic empowerment investment: It's popular in South Africa. It involves direct investment in the economic infrastructure that is needed to support ordered and equitable economic growth together with sustainable community development.
7. Microfinance: This form of SRI promotes local economic development at the 'bottom of the pyramid' through the issuance of 'micro-loans' and 'micro-insurance'.
8. Income sharing funds: This strategy enables the investors to donate a portion of their income to socially good causes.

Integrated quantitative approach: This strategy uses quantitative and statistical methods to predict relationship between sustainability aspects and financial performance. This helps in finding out the correlation and application of that ratio to manage stock portfolios on a quantitative basis.

Allocations in SRI are usually small as compared to conventional investment. This is due to barriers such as:

1. Immaturity of certain investment areas;
2. Lack of data relating to historical performance, lack of track record of specialist mutual funds / fund managers;
3. Limited or lack of knowledge on the part of the investor;
4. High levels of perceived or real risk;
5. Smaller deal size, a typical barrier for large asset owners; and
6. Lack of standardization of evaluation metrics on environmental and social impacts and, the burden of data collection in relation to it.

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SUPER TREND SCALPING STRATEGY FOR NIFTY FUTURES & OPTIONS TRADING

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ABSTRACT

In the Indian stock market, a new class of intraday traders has emerged after the online trading and availability of cheap internet as well broker's softwares. Scalping is the shortest form of intraday trading in which the scalpers try to make money by accumulating smaller profits from multiple trades every day. This paper provides an effective strategy for scalping with the use of super trend indicator devised by Oliver Seban.

KEYWORDS

calls, puts, scalping, super trend.

INTRODUCTION

Markets of the traded financial securities have globally evolved over the years & have opened lucrative opportunities for traders & investors. Extensive use of computers, software & internet have made it possible for the educated class in urban areas to have direct online access to these markets. Fundamental & technical analysis are the means of understanding & analysing these markets with fair degree of effectiveness. This paper is based on my practical working in the Indian stock market for the period of last 22 years. Though this paper is confined to scalping¹ NIFTY² F&O³ using Super Trend⁴ Indicator of technical analysis, the strategy can prove to be effective in other financial markets of traded securities, as well.

TRADING V/S INVESTING

In stock markets, the term 'traders' is used to indicate the market participants who buy, hold & sell or short-sell, wait & buy to cover position within a short period. This period may be of a few minutes [scalp trading], few hours [day trading], two days [BTST⁵/STBT⁶], three days to few weeks [swing trading] or one to three months [position trading]. 'Investor' on the other hand is essentially a short, medium or long term buyer & seller with the holding period of more than three months to few quarters, years or even decades.

SCALPING

As stated earlier, scalping is the fastest method of intra-day trading in which the trader holds his/her position [long or short] only for a few minutes. Sometimes, even few seconds are sufficient to get in & out of a trade. A scalper may hold on to his position for few more minutes if the market is continuously moving in the direction of his/her trade.

PRE-REQUISITES OF SCALPING

1. A scalper must have interest in scalping & ability to sit in front of computer throughout the trading session with full concentration.
2. A scalper must have working knowledge of using computers, internet, technical analysis & trading softwares, provided by the brokers.
3. A scalper must have minimal transaction cost in the form of brokerage, tax & other charges. Scalpers generally pay fixed amount of brokerage, irrespective of number of transactions & volume of their trades. Scalpers have bigger trading exposure against their deposits with brokers.
4. Stocks or Indices suitable for scalping have very high liquidity in terms of traded volume. Index stocks as well as F&O securities are therefore more suitable for scalping. In the Indian stock markets, National Stock Market [NSC] index NIFTY & BANKNIFTY are excellent securities for scalping.
5. Scalpers remain focused on the trading charts throughout the trading session, therefore, they need a proper trading place or the trading room.

RULES FOR SCALPING NIFTY

1. Trade what you see & not what you think.
2. Trading strategy must be robust, tested & confirmed.
3. Keep your trading lot size fixed.
4. When in doubt, get out & stay out.
5. Keep yourself mentally & physically alert.

THE STRATEGY

Finally, the statistically confirmed & experientially proven professional NIFTY scalping strategy is explained in the following lines.

01. Markets have three trends – major, intermediate & short term. In NIFTY scalping, the three trends are indicated by 75 minutes, 15 minutes & 3 minutes' charts. In the ocean analogy, it is described as tide, wave & ripple respectively. Tide has the strongest trend followed by wave & ripple. Therefore, in NIFTY scalping, trades are always selected in the direction of tide trend. When wave & ripple are following the tide trend, trades are identified & executed.
02. For trading the trend, [as explained in 1] identifying the trend is crucial. The method used for this purpose is [03, 10] & [01, 10] pair of Super trend indicator. It is practically more effective in NIFTY scalping than most of the other trend following indicators.
03. NIFTY Futures charts is the basis of NIFTY scalping. All the decisions of entry, stop loss & exit levels are taken only by analysing the NIFTY futures chart.
04. Details of calculating ATR [Average True Range]⁷ & Super trend⁸ could be seen in the videos referred in the end notes.
05. As stated earlier, the Super Trend pair of [03, 10] & [01, 10] is used on three time frames viz. 03 min., 15 min. & 75 min. It's advisable to use tilted charts to have complete view of the three time frames simultaneously.
06. LONG/BUY⁹ signal is triggered on NIFTY FUTURES chart when price crosses above the previous day's high &
 - a. [01, 10] Super Trend is > [03, 10] Super Trend on 75 min. chart &
 - b. [01, 10] Super Trend is > [03, 10] Super Trend on 15 min. chart &
 - c. [01, 10] Super Trend is > [03, 10] Super Trend on 03 min. chart &
 - d. Price close is > [01, 10] Super Trend on 03 min. chart.
 - e. STOP LOSS¹⁰ is placed < the [01, 10] Super Trend on 03 min. chart, below the previous price bar. A scalper keeps trailing the STOP LOSS.
 - f. EXIT signal is triggered when Price is < [01, 10] Super Trend on 03 min. chart below the previous price bar.
07. SHORT SELL¹¹ signal is triggered on NIFTY FUTURES chart when price crosses below the previous day's low &
 - a. [01,10] Super Trend is < [03, 10] Super Trend on 75 min. chart &

- b. [01, 10] Super Trend is < [03, 10] Super Trend on 15 min. chart &
 - c. [01, 10] Super Trend is < [03, 10] Super Trend on 03 min. chart &
 - d. Price close is < [01, 10] Super Trend on 03 min. chart.
 - e. STOP LOSS is placed > the [01, 10] Super Trend on 03 min. chart, above the previous price bar. A scalper keeps trailing the STOP LOSS.
 - f. EXIT signal is triggered when Price is > [01, 10] Super Trend on 03 min. chart, above the previous price bar.
08. In this strategy, re-entry is always possible after a stop loss or exit, if other conditions are satisfied. In fact, a scalper frequently enters & exits to have multiple trades in a trading session.
09. Scalping the NIFTY OPTIONS¹²:
- a. Even for Nifty options trading, the chart used is of Nifty Futures only.
 - b. Instead of using the options strategy, buying CALLS¹³ when buy signals are triggered & buying PUTS¹⁴ when sell signals are triggered on Nifty Futures chart is the safe strategy. This strategy limits the risk to the extent of premium paid, at the point of entry.
 - c. While buying CALLS or PUTS, always select 'AT THE MONEY'¹⁵ strike price because, it has maximum liquidity & it's cheaper than IN THE MONEY¹⁶ or DEEP IN THE MONEY¹⁷ strike priced calls or puts. OUT OF THE MONEY¹⁸ calls or puts are cheaper but very slow moving.
 - d. Similarly, always buy calls or puts of the current series & not of the next or far series due to the liquidity problem.
 - e. As a scalper, one should never carry a position overnight, even if exit signals are not generated by the end of the session. This is for discipline & clarity in preparing oneself mentally before, during & after the sessions.
10. This scalping strategy has been statistically confirmed & experientially proven. The documentation of last 10 years proves its success rate between 73 % to 81 % in trending markets.

CONCLUSION

This NIFTY F&O scalping strategy is a means through which a scalper can not only make an affluent living but by extending its application to other financial markets of traded securities, be a professional scalper/trader.

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6. Sell today buy tomorrow
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8. https://www.youtube.com/watch?v=L_PvUIP1si8
9. Buying a security expecting it to go up
10. Exiting from the position to stop further loss of money
11. Selling the security without possessing it with the intention of buying or covering it at a lower price in the future
12. Vohra & Bagri, Futures and Options, (2003), Tata McGraw Hill, p.250 Option to close the trade in the future, before a predetermined date by paying premium/interest
13. A fixed lot of security bought at a premium with the intension of selling it at higher price in the future, before a predetermined date
14. A fixed lot of security sold at a premium with the intention of buying it at a lower price in the future before a predetermined date.
15. The strike price of options closest within the current price of the underlined security
16. The strike price of options next to the closest current price of the underlined security
17. The strike price of options even further than the in the money
18. The strike price of the option beyond the current price of the underlined security

COMPARATIVE EVALUATION OF ULTRASOUND BREAST CANCER IMAGE AND DESPECKLING

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ABSTRACT

Breast cancer is the common form of cancer with 81% of cases occurring in women aged 50 years and over in world wide. In Ethiopia the majority (55.2%) of the patients was in the 30-49 age groups. The modalities like Mammography cause severe pain and producing ionizing reactions which causes hazard for the health. By using Ultrasound, the safest imaging modality can be used in the developing countries like Ethiopia and enhance the images and reducing noises which will helps society to increase the awareness about the breast cancer.

KEYWORDS

breast cancer image, despeckling.

1. INTRODUCTION

Breast cancer is one of the most common cancers affecting women throughout the world. Millions of women are diagnosed with the disease every year and hundreds of thousands die needlessly. Breast cancer is the second leading cause of death among African American women in the U.S., according to the Komen for the Cure organization. There is little reliable data on the incidence and prevalence of breast cancer in Africa because of the absence of reporting, diagnostic and treatment processes. Breast cancer cases in Africa are likely to be documented only when patients come to hospitals, health centers, clinics and laboratories for diagnostic and treatment services. Facilities with mandatory reporting requirements are far and few between in the rural areas of Africa where the vast majority of women live.

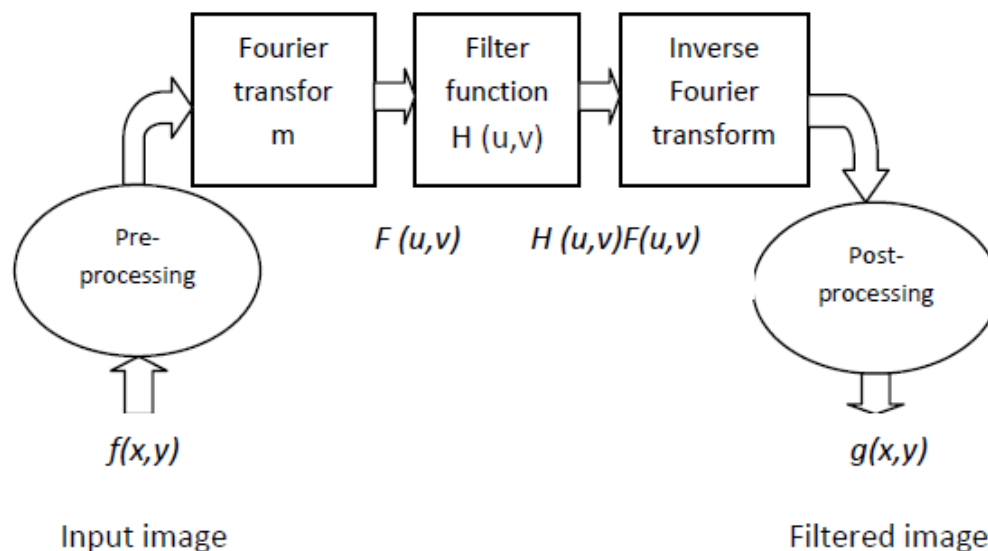
Breast cancer development increases with age, beginning to rise at approximately age 30 years, and most breast cancers occur during the postmenopausal years. The Mammography is the specialized imaging system using X-ray to view the nodes of breast cancer. In the growing countries like Ethiopia the limited availability of mammogram and lack of awareness which increase the volume of breast cancer.

To overcome this problem Ultrasound (US) imaging has become one of the most preferred imaging techniques in today's medical practice as it is inexpensive, widely available and comparatively safe to the users as well as the operators. To create awareness mobile Ultrasound can be used and the images enhanced by various enhancement techniques.

2. US IMAGE ENHANCEMENT TECHNIQUES**2.1.1 FILTERING IN FREQUENCY DOMAIN**

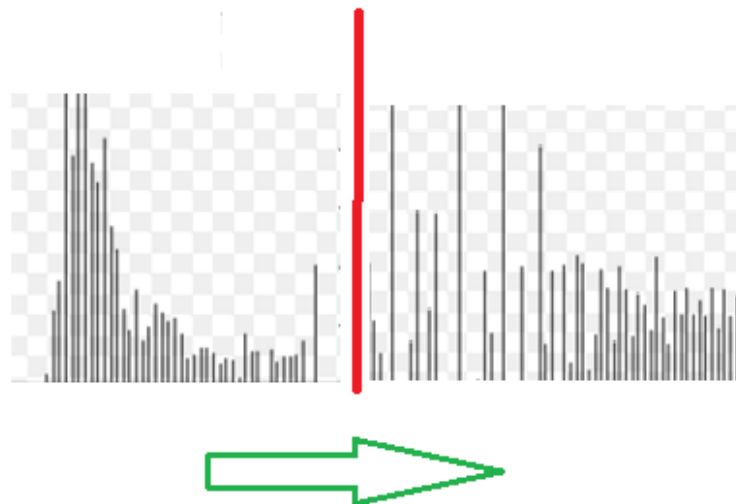
The image operation by preprocessing and using Fourier transform, filter function and taking the Inverse Fourier transform of the result to obtain the processed image.

FIG. 1: BASIC STEPS IN FREQUENCY DOMAIN FILTERING

**2.1.2. HISTOGRAM EQUALIZATION**

Histogram equalization is a technique for adjusting image intensities to enhance contrast. The distributing of image pixels which causes improve visual appearance.

FIG. 2: ADJUSTING THE INTENSITIES BY EQUALIZATION



2.1.3 WAVELET TRANSFORM FILTERS

When digital images are to be viewed or processed at multiple resolutions, the discrete wavelet transform (DWT) is the mathematical tool of choice. In wavelet-based filtering, the basic steps for removing the noise are

- 1) Decomposing the original image data into l-level of wavelet transform.
- 2) Performing thresholding of the resultant wavelet coefficients for noise suppression.
- 3) Performing wavelet reconstruction technique based on the original approximation coefficients.

3. REMOVING OF SPECKLE NOISE

In Ultrasound the high frequency sound waves which are emitted from a probe and the echoes that bounce back from structures in the body are shown on a screen as image. The structures can be much more clearly seen when moving the probe over the body and watching the image on the screen. The main problem in these scans is the presence of speckle noise which reduces the diagnosis ability.

3.1.1 DESPECKLING BY ADAPTIVE WAVELET

Wavelet denoising attempts to remove the noise present in the signal while preserving the signal characteristics, regardless of its frequency content. As the discrete wavelet transform (DWT) corresponds to basis decomposition, it provides a non-redundant and unique representation of the signal.

Wavelet thresholding (first proposed by Donoho) is a signal estimation technique that exploits the capabilities of wavelet transform for signal denoising. It removes noise by killing coefficients that are insignificant relative to some threshold.

3.1.2 WAVELET THRESHOLDING

Standard wavelet thresholding can be performed by following steps.

1. Compute a linear forward discrete wavelet transform of the noisy signal.
2. Perform a nonlinear thresholding operation on the wavelet coefficients of the noisy signal
3. Compute the linear inverse wavelet transform of the threshold wavelet coefficients.

The most traditional wavelet thresholding methods apply the conventional hard and soft thresholding operators.

3.1.3 ADAPTIVE WAVELET THRESHOLDING

VisuShrink is thresholding by applying the Universal threshold proposed by Donoho and Johnstone. This threshold is given by

$$\sigma \sqrt{2 \log M}$$

where σ is the noise variance and M is the number of pixels in the image.

For denoising images, VisuShrink is found to yield an overly smoothed estimate.

SUREShrink is a thresholding by applying subband adaptive threshold. It is based on Stein's Unbiased Estimator for Risk (SURE), a method for estimating the loss in an unbiased fashion. Let wavelet coefficients in the j th subband be $\{X_i : i = 1, \dots, d\}$ For the soft threshold estimator

$$SURE(t; X) = d - 2 \# \left\{ |X_i| \leq t \right\} \sum_{i=1}^d \min(|X_i|, t)^2$$

Select threshold t^s by

$$t^s = \arg \min SURE(t; X)$$

FIG. 3 INPUT IMAGE

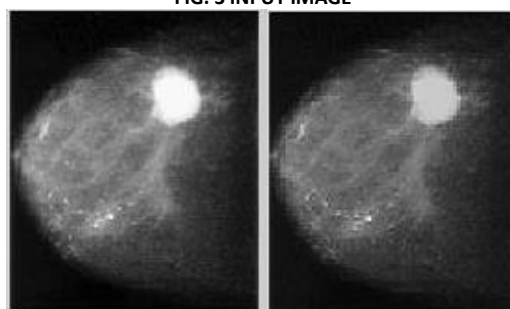


FIG. 4: WAVELET DECOMPOSITION ENHANCED IMAGE



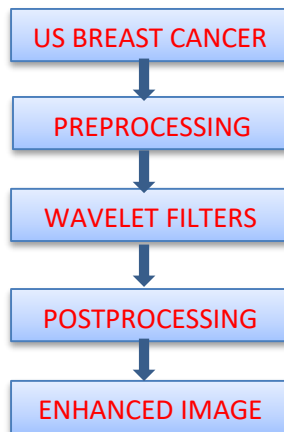
BayesShrink is an adaptive data-driven threshold for image denoising via wavelet soft-thresholding. We assume generalized Gaussian distribution (GGD) for the wavelet coefficients in each detail subband. We then try to find the threshold T which minimizes the Bayesian Risk.

4. RESULTS AND DISCUSSION

The ultrasound breast cancer image has been enhanced by using wavelet filters. By using the programme Matlab the input image (preprocessed image) has been enhanced by using the wavelet filters results to obtain the processed image output.

The enhanced breast cancer image is obtained by the following steps.

FIG. 5



4.1 ADAPTIVE WAVELET THRESHOLDING

In the modified bayes shrink the speckle noise has been reduced as compared with other methods.

OBTAINED PSNR FOR DIFFERENT NOISE INTENSITIES BY USING MATLAB

TABLE 1

Noise	5	10	20	30	40	50
Method	US BREAST CANCER IMAGE					
Average filter	35.9	31.3	25.5	22.2	20.2	18.4
VisuShrink	34.3	28.2	22.1	18.7	16.4	14.6
SureShrink	25.1	25.1	25.1	25	24.8	26.5
Modified BayesShrink	37.1	32.5	30.5	30.5	27.5	27.1

FIGURE 6: ORIGINAL IMAGE

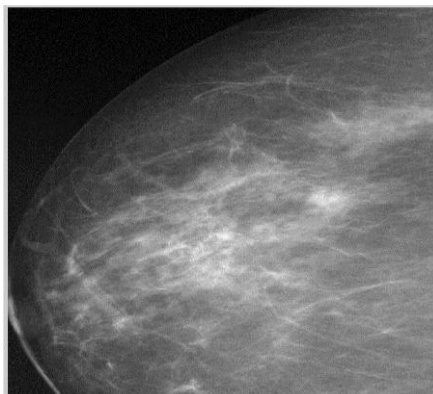


FIGURE 7: SURE SHRINK

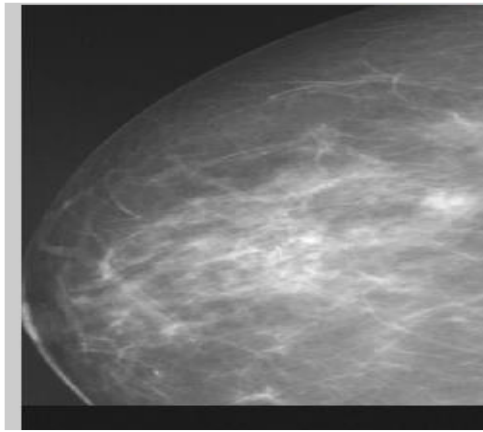
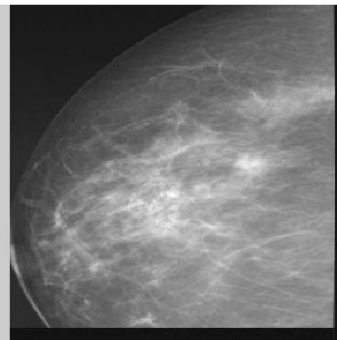


FIGURE 8: MODIFIED BAYESSHRINK



5. CONCLUSION

Thus we have enhanced and denoised the ultrasound breast cancer image using Adaptive wavelet transforms and enhanced by wavelet filters, and experimental results shows that this technique is accurate and effective in low resolution ultrasound images. The ultrasound imaging modalities are easier and safer technique to evaluate the breast cancer. In the developing countries need to adapt this type of techniques increase the awareness among the public by mobile ultrasound diagnostic in every places particularly in the rural areas.

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ROLE OF CONSTRUCTION INDUSTRY IN THE ECONOMIC DEVELOPMENT OF INDIA

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ABSTRACT

One of the major sectors of the economy which is receiving increasing attention as a possible area for the development of better institutional structure in the emerging nation of India is construction. This is an industry present in every developmental activity which contributes to economic development by satisfying some of the basic objectives of development including output generation, employment creation, income generation and re-distribution. It also plays a major role in satisfying basic physical and social needs, including the production of shelter, infrastructure and consumer goods. The construction industry in India may be viewed as that sector of the economy which transforms various resources into constructed facilities. Type of public and private facilities produced range from residential and non-residential buildings to heavy construction, and these physical facilities play a critical and highly visible role in the process development. Major objective of development is economic growth. Construction along with manufacturing tends to play an increasingly important role in the economy while agriculture's importance declines. Construction's direct contributions to development are significant, it also stimulates sizeable amount of growth through backward and forward linkages. Construction industry's requirements for goods and services from other industries are considerable. Many upstream economic activities depend upon construction sector. The development of the construction industry, therefore, stimulates various ancillary industries, thus encouraging further economic growth. This paper aims at studying the contribution of the Construction Industry for the development of Indian economy.

KEYWORDS

GDP, PPP, BRICS, WTO, CIDC, backward and forward linkages.

I. INTRODUCTION

Economy of India is the tenth-largest in the world by nominal GDP and the third-largest by purchasing power parity (PPP). The country is one of the G-20 major economies, a member of BRICS and a developing economy that is among the top 20 global traders according to the WTO. India was the 19th largest merchandise and 6th largest services exporter in the world in 2013. Over five years from 2009-2013, India's share in global exports increased from 1.4% to 1.7% in 2013. India has emerged as a major global player in service exports. World Bank has projected the Indian economy to expand by 7.9% in the financial year 2017 and 8% by the financial year 2018. Agricultural sector is the largest employer in India's economy but contributes a declining share of its GDP (13.7% in 2012-13). Its manufacturing industry has held a constant share of its economic contribution, while the fastest-growing part of the economy has been its services sector which includes construction, telecom, software and information technologies, infrastructure, tourism, education, health care, travel, trade, banking and other components of its economy.

In India, the construction of physical facilities makes up more than one half of gross domestic investment and tends to be concentrated on basic infrastructure in agriculture, transportation, communication, mining etc. Infrastructural services make some contribution to GDP, but they also stimulate the development of other industries which, in turn, contribute more directly to economic growth. Once the basic infrastructure is created, more effort can be devoted to construction for manufacturing, commerce and services and to the building of dwellings and institutional facilities.

The development of physical infrastructure in the country and, consequently, the construction sector has been in focus during the last decade. The increasing significance of construction activities in the growth of the economy was also evident during the course of implementation of the Tenth Plan with areas such as transportation, irrigation, housing, urban development and civil aviation having received greater importance. It is well established that the influence of the construction industry spans across several sub-sectors of the economy as well as the infrastructure development, such as industrial and mining infrastructure, highways, roads, ports, railways, airports, power systems, irrigation and agricultural systems, telecommunication systems, hospitals, schools, townships, offices, houses and other buildings, urban infrastructure, including water supply, sewerage and drainage and rural infrastructure. Thus, it becomes the basic input for socio-economic development.

During the period of eleventh five year plan, the contribution of construction to the GDP at factor cost in 2006-07 was Rs.1,96,555 crore, registering an increase of 10.7% from the previous year. The share of construction in GDP has increased from 6.1% in 2002-03 to 6.9% in 2006-07. The increase in GDP has primarily been on the account of increased government spending on physical infrastructure in the last few years, with programmes such as National Highway Development Programme (NHDP) and PMGSY/Bharat Nirman Programme receiving a major fillip of late.

II. OBJECTIVES OF THE STUDY

The objectives of this paper are

1. To study the overview of Indian Construction Industry.
2. To know the employment generation from the construction industry.
3. To analyse the developments and FDI inflows into the Indian Construction Industry.

III. RESEARCH METHODOLOGY

This paper is based on secondary data only. Required data has been collected from books, journals, articles and websites. Available secondary data was widely used for the study.

IV. EMPLOYMENT IN THE CONSTRUCTION INDUSTRY

With around 31,000 enterprises involved in the construction industry in 2011, the industry is the second largest employer in the country after agriculture. Over 95% of the enterprises numbering around 29,600 employ less than 200 persons, over 3% or around 1050 enterprises employ between 200 to 500 persons and only a little over 1% or 350 enterprises have more than 500 employees. The employment figures have shown a steady rise from 14.5 million in 1995, 31.5 million in 2005 to 41 million in 2011. Between 1995 and 2005, there was a substantial drop in the proportion of skilled engineers in the workforce from 4.71% to 2.65. This trend seems to have been arrested if not reversed with the number of engineers in 2011 at 2.56%, that is, 1.12 million. The number of technicians and foremen is 1.12 million which represents 2.74% of the workforce which shows an improvement over the 2005 when their proportion was 1.85%. The number of skilled workers at 3.7% constitutes 9.1% of the total workforce which is marginally lower than their proportion of 10.57% in 2005. Apart from clerical staff of 0.93%, that is 2.26%, the rest workforce of 41 million in 2011 is comprised unskilled workers whose number stood at 34.2 million representing 83.3 % which is almost at par with the proportion of 82.45% in 2005.

V. DEVELOPMENTS DURING THE TENTH AND ELEVENTH FIVE YEAR PLANS

Some notable achievements during the previous plan periods have been:

- Construction sector was declared as an industrial concern under the IDBI Act in March 2000 in order to increase the flow of institutional credit to the sector.
- Implementation of national Human Resource Development (HRD) initiatives in the non-formal sector, including the workers' level to the upper levels of engineering and managerial categories.
- Setting up of disaster identification and mitigation centres which helped in development of a cadre of professionals well-trained to take disaster mitigation activities.
- Development of institutions and implementation of plans for safety and quality related issues.
- Obtaining the state-of-the-art global technology through strategic association between industry, government and international bodies.
- Improvement in procurement practices for the public sector, and also development of regulatory manuals to ensure quick and effective procurement procedures.
- Electronic tendering process, online publishing of tender notices and related procedures are becoming more and more common.
- Setting up of models of public-private partnership in construction activity.
- Specialised institution (Construction Industry Vocational Training Council) was set up at the national level to provide training to vocational and supervisory trades of the construction industry.
- Safety record of the industry has shown improvement. The accident frequency rate in 2011 declined to 0.006 accidents per million man-hours worked from 0.009 in 2007. This is due to professionalization of big contractors.
- On account of better training opportunities and enhanced mechanization, productivity per person in the industry has increased from Rs. 78,440 in 2007 to Rs. 98,620 in 2011.
- A national level comprehensive Green Rating Initiative has been made ready and is ready to be launched.
- National level awards (Vishwakarma Awards) instituted by CIDC for outstanding performance have received good response. The Awards cover all levels from artisans to life-time achievement awards for industry captains. Awards are also given for projects, with categories including Safety, Health, Environment, Special Features and so on.

VI. AN OVERVIEW OF CONSTRUCTION INDUSTRY IN INDIA

The evolution of Construction Industry in India is almost similar to the construction industry evolution in other countries: founded by government and slowly taken over by private enterprises. After independence, the need for industrial and infrastructural developments in India laid the foundation stone of construction, architectural and engineering services. The period from 1950 to mid-60's witnessed the government playing an active role in the development of these services and most of construction activities during this period were carried out by state owned enterprises and supported by government departments. In the first five-year plan, construction of civil works was allotted nearly 50% of the capital outlay. The first professional consultancy company, National Industrial Development Corporation (NIDC), was set up in the public sector in 1954. Subsequently, many architectural, design engineering and construction companies were setup in the public sector. In the late 1960s government started encouraging foreign collaborations in these services. The guidelines for Foreign Collaboration, first issued in 1968, stated that local consultant would be the prime contractor in such collaboration. The objective of such an imposition was to develop local design capabilities parallel with the inflow of imported technology and skills. This measure encouraged international construction and consultancy organizations to set up joint ventures and register their presence in India.

In the Twelfth five year plan, the construction sector has been contributing around 8% to the nation's GDP (at constant prices) in the last five years (2006-07 to 2010-11). As indicated by the following table, GDP from construction at factor cost (constant prices) increased to Rs.3.85 lakh crores (7.9% of the total GDP) in 2010-11 from Rs. 2.85 lakh crores (8% of the total GDP) in 2006-07. The growth of the construction sector in GDP has primarily been on account of increased spending on physical infrastructure in the last few years.

TABLE 1: CONSTRUCTION SECTOR – MACRO AGGREGATES

Macro – variable	2006-07	2007-08	2008-09	2009-10	2010-11
GDP from construction(crores)	2.85	3.15	3.33	3.56	3.85
Share of GDP (%)	8.0	8.1	8.0	7.9	7.9
Growth rate for GDP in construction (%)	10.3	10.7	5.4	7.0	8.1

Source: Handbook of Statistics, RBI, 2010-11

As per the principal findings of the study by IIM –Ahmedabad (July 2000) entitled "Impact of Investment in the Housing Sector on GDP and Employment in the Indian Economy", the Construction Sector ranks higher than the important sectors like Transport and Agriculture (whose ranks are fifth and sixth respectively out of 14) in terms of additional income generated in the economy as a whole.

The Planning Commission, Government of India jointly with the Indian Construction Industry has setup Construction Industry Development Council (CIDC) as an apex organisation to take up and promote activities for the development of the Indian Construction Industry. The council started its functioning from August 1996 and has taken up several important projects related to issues of concern vis-à-vis the industry. This helps to secure wider appreciation of the interest of construction business by the government, industry and peer groups in the society.

VII. FDI INFLOWS INTO CONSTRUCTION ACTIVITIES

The Indian Government's decision to allow 100% Foreign Direct Investment (FDI) in the real estate industry has stimulated construction activities throughout the country. Foreign capital continues to inflow into India which remains an attractive proposition for multi-national investors. Construction activities including housing, roads and highways have also been attracting FDI inflows. The following table depicts the year and cumulative FDI flows into construction activities including roads and highways sector. The cumulative FDI inflows from April 2000 to August 2011 into construction activities stood at around US \$9,417 million or Rs.42, 072 crores, which is nearly 6% of the total cumulative FDI inflow into the country during the same period.

The construction sector is one among the sectors attracting highest FDI equity inflows in India. The following table shows the year wise and cumulative FDI inflows into the various sectors. Construction sector has the second rank among sectors attracting highest FDI equity inflows. It contributes highest percentage to the cumulative FDI inflow into the country next to the services sector (Finance, Banking, Insurance, Outsourcing, R&D, Courier etc).

TABLE 2

Rupees in crores (US \$ in millions)

Rank	Sector	2012-13 (Apr. –Mar.)	2013-14 (Apr. –Mar.)	2014-15 (Apr. –Mar.)	Cumulative Inflows (Apr. 2000-Sep.) 2014	% of Total Inflows (US \$)
1	Services sector (Financial and Non- financial)	26,306 (4,833)	13,294 (2,225)	7,366 (1,225)	1,92,936 (40,685)	18%
2	Construction development: Townships, Housing, Built-up Infrastructure	7,248 (1,332)	7,508 (1,226)	3,410 (568)	1,11,968 (23,874)	10%
3	Tele communications	1,654 (304)	7,987 (1,307)	14,389 (2,465)	81,407 (16,628)	7%
4	Computer software and Hardware	2,656 (486)	6,896 (1,126)	2,532 (421)	62,202 (13,239)	6%
5	Drugs and Pharmaceuticals	6,011 (1,123)	7,197 (9,027)	6,519 (1,091)	62,589 (12,689)	5%
6	Automobile industry	8,384 (1,537)	9,027 (1,517)	6,273 (1,035)	54,469 (10,847)	5%
7	Chemicals (other than fertilizers)	1,596 (292)	4,738 (878)	2,485 (414)	47,719 (10,081)	4%
8	Power	2,923 (536)	6,519 (1,066)	2,457 (410)	45,112 (9,310)	4%
9	Metallurgical Industries	7,878 (1,466)	3,436 (568)	1,183 (197)	39,433 (8,271)	4%
10	Hotel and Tourism	17,777 (3,259)	2,949 (486)	2,493 (415)	38,702 (7,532)	3%

Source: http://dipp.nic.in/fdi_statistics/india_fdi_index.htm

VIII. FLOW OF FUNDS TO CONSTRUCTION INDUSTRY IN INDIA

The construction sector, including the residential and Non-residential buildings and infrastructure sector, is attracting both domestic (government funding and institutional funding) as well as foreign direct investment. Before the year 2000, the deployment of gross bank credit in the construction sector was declining from 2.13% in 1990 to 1.37% in 2000. In order to increase the flow of institutional credit to the construction sector, it was declared as an industrial concern under the Industrial Development Bank of India Act in March 2000. During the year 2006-07 Rs.19, 997 crores were lent by banks to the construction industry and it has been increased to Rs.50, 135 crores in the year 2010-11, which was 1.4% of the gross bank non-food credit disbursed during the year.

IX. CONCLUSION

Even though the construction sector is attracting both domestic (government funding, institutional funding) as well as foreign direct investment, more resources are needed for the sector to fulfill the ever rising pressures of enhancing the housing and infrastructure sectors in the country. Institutional financing of construction sector still remains underdeveloped area in India. The Indian construction industry is faced with high operation, maintenance, and financial costs. This aspect is further exacerbated by inadequate access to institutional finance, especially for small contractors who execute over 90% of the total construction works. Moreover, subsequent to the conferring of Industrial Concern Status on the construction sector neither introduced any special incentives nor schemes for financing import of hi-tech construction equipment for infrastructure projects.

The Twelfth Financial Plan Working Group Report reaffirms the significance of the flow of institutional finance to the construction sector in the wake of massive investment requirement for the sector. Such a vast financial requirement cannot be addressed by a single enterprise or institution and requires focused initiatives by the government in coordination with all the constituents of construction industry for dedicated flow of credit to the sector.

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POTENTIALITY OF DERIVATIVE TRADING IN INDIAN CAPITAL MARKET: AN EMPIRICAL STUDY ON NSE**DR. RAMESH O OLEKAR****CHAIRMAN****DEPARTMENT OF STUDIES & RESEARCH IN COMMERCE****VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY****BALLARI****MUBARAK****ASST. PROFESSOR, COORDINATOR & RESEARCH SCHOLAR****DEPARTMENT OF STUDIES & RESEARCH IN COMMERCE****V.S.K. UNIVERSITY****P. G. CENTRE NANDIHALLI****SANDUR****ABSTRACT**

Discovery of derivatives have restructured and revolutionized the entire financial industry across the globe and derivatives have earned a well-deserved and extremely significant place among all the financial products. Derivatives are specialized contracts which are employed for a various utility such as reduction of funding cost, enhancing the yield and minimizing risk etc. However, the most significant use of derivatives is price discovery and transferring market risk, called Hedging, which is a protection against losses resulting from price volatility. Thus derivatives are a very important tool of risk management as well as speculative and arbitraging tool that help in effective management of risk and optimizing the results by stakeholders. As awareness about the usefulness of derivatives as a risk management, speculative and arbitraging tool has increased; the markets for derivatives too have grown. The emergence of derivative market an ingenious feat of financial engineering that provides an effective and less costly solution to the problem of risk that resulting from high uncertainty and price volatility. Since 2000, financial derivatives market in India has shown a remarkable growth both in terms of volumes and number of traded contracts and the stock markets are becoming globally efficient. Earlier BSE was the most popular and reliable stock exchange in India but after introduction of NSE (National Stock Exchange), it has taken over BSE in terms of turnover. NSE alone accounts for 90 per cent of the derivatives trading in Indian markets. The statistical data seems that the total turnover on the financial derivatives segment has grown by Rs 648258.24 billion during the year 2015-16 as compared with Rs 2365 in the year 2000-01. If compare to trading figures of NSE, performance of NSE is well deserved and extremely elegant and is encouraging both in terms of volumes and number of contracts traded in all categories of derivatives product. Thus present study is undertaken to analyze the derivative trading in NSE in India. It is an endeavor to portray the growth and expansion of financial derivative of NSE in India during the time period of 2000-01 to 2015-16.

KEYWORDS

NSE, CAGR, financial derivatives, derivative trading, variations.

INTRODUCTION

The individuals, business firms, multinationals, mutual funds, banks, financial institutions, foreign and institutional investors and market operators (traders, hedgers, speculators, arbitrageurs) are freely using derivatives, also popularized as future market instruments, in most of the developed countries of the world to manage different risks by the stakeholders. Emerged in 1970s, the derivative markets have seen remarkable growth and trading volumes have nearly doubled in every three years, making it a multi-trillion-dollar business market. The future markets in various segments have developed so much that now one cannot think of the existence of financial markets without the derivatives instruments. In other words, the derivatives markets whether belonging to commodities or financials have become today, an integral part of the financial system of a country.

The Indian Capital markets indeed waited for too long for derivatives trading to emerge. The time of waiting is over; the statutory hurdles have been cleared. Regulatory issues have been sorted out. Stock exchanges are gearing up for derivatives. Mutual funds, foreign institutional investors, financial institutions, banks, insurance companies, investment companies, pension funds and other investors who are deprived of hedging opportunities now find the derivatives market to bank on. They found important derivatives instruments in the Indian financial markets to manage their portfolios and associated risks.

Financial derivatives are innovative instruments in the financial markets, both in the developed economies like USA, UK and emerging economies like India, China, Japan, Korea and Indonesia and so on. Basically there are four categories of derivatives i.e., Forwards, Futures, options and swaps. These derivatives are traded in two markets i.e., over the counter (OTC) markets and exchange traded markets (ETM). Banks, financial institutions, mutual funds, corporations and individual investors are the players in the derivative markets. They play in the derivative markets as Hedgers, Speculators and Arbitrageurs. Regulatory Authorities of particular country promote and regulate derivative instruments and markets. In India SEBI, RBI and Forward Market Commission (FMC) are the regulatory authorities for derivative markets and instruments. Besides Stock Exchanges, Commodity Exchanges and Clearing Houses are also facilitating the market operations particularly for Futures and Options.

Financial derivatives have changed the face of finance by entering new ways to understand and manage financial risks. Ultimately derivatives offer the organizations the opportunity to split financial risks into smaller components and then buy or sell those components to best meet the specific risk management objectives. In the present highly volatile business phenomena, the utility of risk management is much eager than ever before. The emergence of derivatives market an ingenious feat of financial engineering that provides an effective and less costly solution to the problem of risk that is expressed in the price uncertainty at the underlying assets.

SIGNIFICANCE OF THE STUDY

Financial derivatives' trading offers a risk-reduction mechanism to the farmers, producers, exporters, importers, investors, bankers, trader, etc. which are essential for any country. In the words of Alan Greenspan, Chairman of the US Federal Reserve Board, "The array of derivative products that has been developed in recent years has enhanced economic efficiency". The economic function of these contracts is to allow risks that formerly had been combined to be unbundled and transferred to those most willing to assume and manage each risk components. Development of derivative markets in many countries has contributed significantly in terms of invisible earnings in the balance of payments, through the fees and other charges paid by the foreigners for using the markets. Further, economic progress of any country, today, much depends upon the service sector as on agriculture or industry. Services are now backbone of the economy of the future. India has already crossed the roads of revolution in industry and agriculture sector and has allowed the same now in services like financial futures and options. India has all the infrastructure facilities and potential exists for the whole spectrum of financial futures and options trading in various financial derivatives like stock market indices, treasury bills, gilt-edged securities, foreign currencies, cost of living index, stock market index, etc. For all these reasons, there is a major

potential for the growth of financial derivatives markets in India. This study has covered the major trends of NSE in terms of number of contracts and respective total turnover of futures and options segment.

OBJECTIVES OF THE STUDY

1. To analyze the growth of financial derivatives products traded at NSE.
2. To examine the factors driving the growth of Financial Derivatives in India.
3. To evaluate the trends of NSE.

RESEARCH METHODOLOGY

This study is undertaken to analyze the potentiality of derivative trading in National Stock Exchange. The present study has undertaken based on secondary sources. Secondary data for the study collected from websites of NSE and other literature has been gathered from various websites, books and journals. Here the study period is undertaken from 2000-01 to 2015-16. This study has covered last 15 years major trends of NSE in terms of number of contracts and respective total turnover of futures and options segment. The tools used for this study for analysis and interpretation of data are trend analysis, percentage analysis, mean, standard deviation and Cumulative Annual Growth Rate (CAGR).

GROWTH OF FINANCIAL DERIVATIVES MARKET IN INDIA

India is one of the most successful developing countries in terms of a vibrant market for exchange traded derivatives. The exchange traded derivatives market in India has witnessed tremendous growth in terms of trading volume and number of trading contracts since 2000. Financial derivatives such as Index Futures, index options, Stock Futures and Stock Options are commenced in Indian market in 2000, at NSE.

DERIVATIVES PRODUCTS TRADED IN DERIVATIVES SEGMENT OF NATIONAL STOCK EXCHANGE

National Stock Exchange is among the youngest stock exchange in India (1992). NSE was set up as a tax paying company in 1992, which later on registered as a stock exchange under the Securities Contract Regulation Act 1956. On 12th June 2000, NSE started trading in Index Futures. This financial derivative index is based on the underlying S&P CNX Index. NSE introduced Index Option on 4th June 2001. Futures on individual securities started on 9th November 2001. The Futures contracts are available on 233 securities propounded by SEBI. Trading in options on individual securities commenced from 2nd July 2001. The options contracts are American style of option exercise. Trading Interest Rate Futures was introduced on 24th June 2003 but it was closed subsequently due to pricing problems. The NSE has introduced Mini Index Futures and Options on January 1, 2008 with a minimum contract size of Rs 1 lakh. Later NSE introduced the trading of Currency Futures on US Dollar-Rupee in the Indian Derivative Market on December 10, 2008. Further NSE was launched Interest Rate Futures on August 2009. On February 2010 NSE was launched Currency Futures. NSE introduced Currency Options on USD-Rupee on October 2010. Later NSE commenced trading in 91 days T-Bill Futures. Further NSE launched S&P CNX Nifty Futures in Japan on January 2013. NSE launched NVIX Futures on February 2014.

The following Table Number 1 exhibits the date of commencement of various Financial Derivatives products in NSE during the period of 2000 to 2014

TABLE 1

SL. NO	DATE OF COMMENCEMENT	DERIVATIVE PRODUCT TRADED AT NSE
1	June 12, 2000	Commencement of Derivatives Trading(Index Futures)
2	June 4, 2001	Commencement of trading in Index Options launched
3	July 2, 2001	Commencement of trading in Stock options launched
4	November 9, 2001	Commencement of trading in Stock futures launched
5	June 23, 2003	Interest rate futures – T. Bills & 10 years Bond
6	August 29, 2003	CNX IT Futures and Options introduced
7	June 13, 2005	Bank Nifty Futures and Options commenced
8	June 1, 2007	CNX Nifty Junior Futures and Options
9	June 1, 2007	CNX 100 futures & options
10	October 5, 2007	Nifty Midcap 50 Futures and Options
11	January 1, 2008	Mini Index Futures and Options- S&P CNX Nifty Index
12	March 3, 2008	Long term Options contracts on S&P CNX Nifty Index
13	August 29, 2008	Currency Derivatives Introduced on US Dollar Rupee
14	August 29, 2008	Interest Rate Futures launched
15	December 10, 2008	S&P CNX Defty Futures & options
16	February 2010	Launch of currency futures on additional currency pairs
17	July 2010	S&P CNX Nifty futures on CME
18	October 2010	Introduction of currency option on USD-INR
19	October 2010	Introduction of European style stock options
20	July 2011	Commercial of Trading in 91 day T-Bill futures
21	August 2011	Launch of derivatives on global indices
22	September 2011	Launch of derivatives on CNX PSE & CNX Infrastructure indices
23	May 2012	Future and options contract on FTSE 100
24	January 2013	Launch of S & P CNX Nifty futures in Japan
25	February 2014	NSE Launched NVIX futures on India v ix Index
26	March 2014	Commencement of trading of CNX Nifty future on OSE

Source: Compiled from NSE fact book

FACTORS DRIVING GROWTH OF FINANCIAL DERIVATIVES MARKET IN INDIA

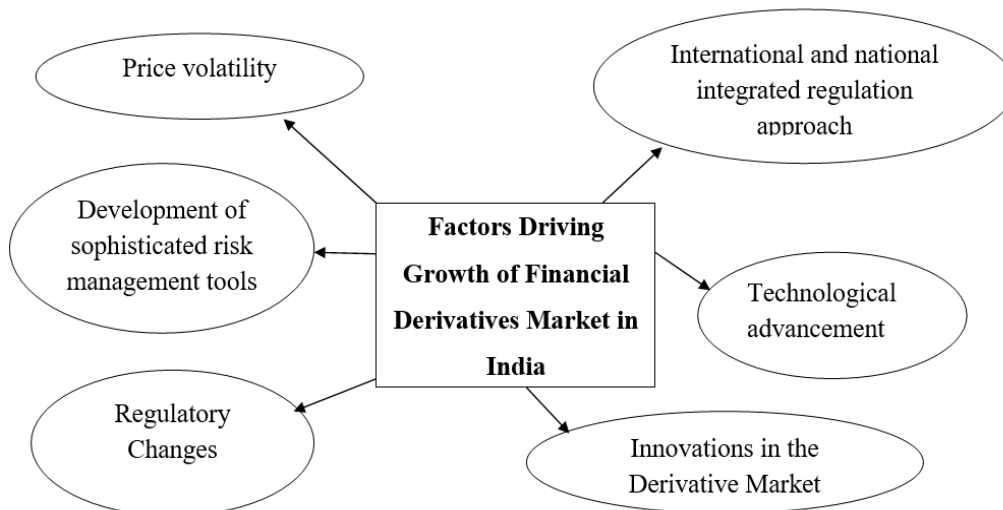
Over the last three decades, the global derivatives market has been a phenomenal growth. Large variety of derivative contracts has been launched at exchanges across the globe. The explosive growth in financial derivatives in the recent past is a consequence of number of factors. The important factors driving the growth of financial derivatives are:

1. Increased price volatility in the underlying assets in financial markets.
2. Increased integration of national financial markets with international financial markets i.e., globalization of markets.
3. Technological advancement, improvement in telecommunication facilities and sharp declining in their costs.
4. Development of more sophisticated risk management tools, providing a wider choice of risk management strategies.
5. Innovations in the derivatives markets in terms of transformation of thoughts into ideas, the application of these ideas to produce new and improved processes and products in financial markets.

6. Regulatory changes in financial derivative market has fostered by an atmosphere of deregulation of financial sector and advances in financial theory to have pinnacle of financial derivative market. A number of financial theories, formulae, methods, valuation models and strategies have been developed to give extra mileage in the progress of financial derivative market.

The below picture portrays the factors driving growth of financial derivatives market-

FIG. 1



TRENDS OF DERIVATIVE TRADING IN NSE

The following tables depict the trends of financial derivatives in terms of number of contracts and total turnover of futures and option segments in NSE. The below tables shown the trends of futures and options in NSE. The number of contracts and turnover of futures and options trends can be analyzed by computing mean, median and standard deviation.

TABLE-2 EXHIBITS TOTAL DERIVATIVES CONTRACTS AND TURNOVER IN NSE

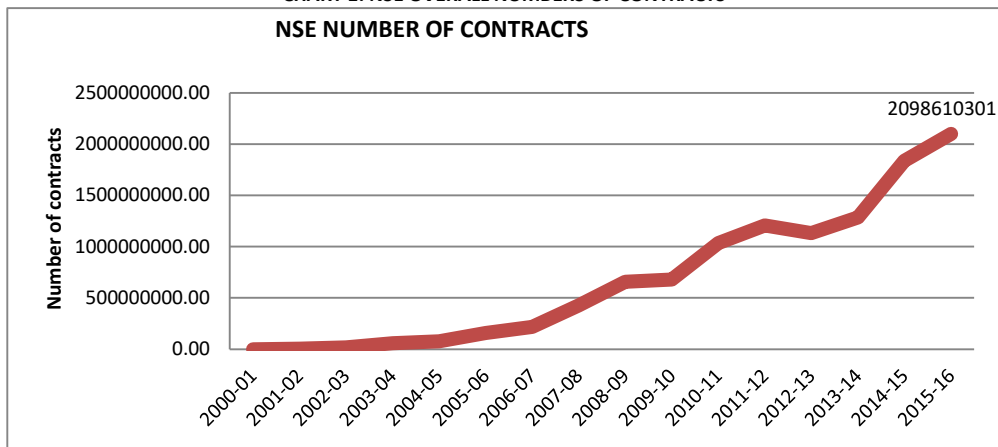
YEAR	NSE	
	Number of Contracts	Turnover (In Rs billion)
2000-01	90580	2365
2001-02	4196873	1019.26
2002-03	16768909	4398.62
2003-04	56886776	21306.1
2004-05	77017185	25469.82
2005-06	157619271	48241.74
2006-07	216883573	73562.42
2007-08	425013200	130904.78
2008-09	657390497	110104.82
2009-10	679293922	176636.65
2010-11	1034212062	292482.21
2011-12	1205045464	313497.32
2012-13	1131467418	315330.04
2013-14	1284406775	382092.15
2014-15	1837029857	556041.97
2015-16	2098610301	648258.24
Sum	10881932663	3101711.14
Maximum	2098610301	648258.24
Minimum	90580	1019.26
Average	680120791.4	193856.9463
Median	541201848.5	120504.8
Standard Deviation	682400238.6	204403.849

(Source: Compiled from NSE Website)

INTERPRETATION

Table -2 exhibits total turnover and contracts of derivatives segment in NSE from its inception to present days. During inception of derivatives in India, turnover of NSE was Rs 2365 billion and number of contracts traded was 90580. After, that NSE has seen a remarkable growth both in terms of turnover and contracts traded. Now presently, it has turnover of Rs 648258.24 billion and 2098610301 contracts during the year 2015-16. Table number 2 reveals that NSE has recognise themselves as king in derivatives segment among all stock exchanges of India but unfortunately due to global financial crises and drastic change in stock market environment, NSE not able to have remarkable progress in derivatives segment during 2008-09, the entire picture has tended to changed due to that NSE has down fall in total turnover and number of contracts. The same table reveals that 2009-10 onwards NSE is well performing and put forth its great efforts and again gains the rhythm in derivatives segment and currently NSE has potential growth in derivatives segment.

CHART 1: NSE OVERALL NUMBERS OF CONTRACTS



INTERPRETATION

Chart-1 shows that the number of contracts traded on NSE over the years has had a elevated trend till the 2011-12, thereafter which has been decline in the year 2012-13 and thereafter, there has been a continues rise in number of contracts of NSE. During the year 2000-01 the number of contracts stood at 90580 and there by a remarkable increase over the years from 2000-01 to 2011-12. And after 2011-12 it can be seen that the trend has volatility. After that NSE has shown rising trend in number of contracts traded. Currently NSE has 2098610301 of derivatives contracts.

CHART 2: NSE TOTAL VALUE OF TURNOVER



INTERPRETATION

Chart-2 shown that the total turnover of NSE has been on a rise from the years 2000-01 to 2007-08, after which there has been a fall in the turnover in the year 2008-09 the amount being Rs 110104.82 billion and 2009-10 onwards there has been a continues increase in the turnover of NSE. Now presently NSE has Rs 648258.24 Billion of turnover.

TABLE 3: SHOWS THE TURNOVER IN THE DERIVATIVES SEGMENT IN NSE SINCE INCEPTION OF DERIVATIVES IN INDIA (Turnover in Rs Billion)

YEAR	INDEX FUTURES		STOCK FUTURES		INDEX OPTION		STOCK OPTION	
	Number of Contract	Turnover	Number of Contract	Turnover	Number of Contract	Turnover	Number of Contract	Turnover
2000-01	90580	23.65	-----	-----	-----	-----	-----	-----
2001-02	1025588	214.83	1957856	5151.5	175900	37.65	1037529	251.63
2002-03	2126763	439.52	10676843	2865.33	442241	92.46	3523062	1001.31
2003-04	17191668	5544.46	32368842	13059.39	1732414	528.16	5583071	2172.07
2004-05	21635449	7721.47	47043066	14840.56	3293558	1219.43	5045112	1688.36
2005-06	58537886	15137.55	80905493	27916.97	12935116	3384.69	5240776	1802.53
2006-07	81487424	25395.74	104955401	38309.67	25157438	7919.06	5283310	1937.95
2007-08	156598579	38206.67	203587952	75485.63	55366038	13621.11	9460631	3591.37
2008-09	210428103	35701.11	221577980	34796.42	212088444	37315.02	13295970	2292.27
2009-10	178306889	39343.89	145591240	51952.47	341379523	80279.64	14016270	5060.65
2010-11	165023653	43567.55	186041459	54957.57	650638557	183653.66	32508393	10303.44
2011-12	146188740	35779.98	148344617	40746.71	864017736	227200.32	36494371	9770.31
2012-13	96100385	25271.31	147711691	42238.72	820877149	227815.74	66778193	20004.27
2013-14	105252983	30831.03	170414186	49492.82	928565175	277673.41	80174431	24094.89
2014-15	129303044	41072.15	237604741	82917.66	1378642863	399227.63	91479209	32825.52
2015-16	140538674	45571.14	234243967	78286.06	1623528486	489519.31	100299174	34881.74
Sum	1509836408	389822.05	1973025334	613017.48	6918840638	1949487.29	470219502	151678.31
Maximum	210428103	45571.14	237604741	82917.66	1623528486	489519.31	100299174	34881.74
Minimum	90580	23.65	1957856	2865.33	175900	37.65	1037529	251.63
Average	94364775.5	24363.87813	131535022.3	40867.832	461256042.5	129965.8193	31347966.8	10111.88733
Median	100676684	28113.385	147711691	40746.71	212088444	37315.02	13295970	3591.37
Standard Deviation	70401236.89	16892.90761	81048145.23	25559.57191	548795744.5	162149.6307	35407908.09	11959.01547

(Source: Compiled from NSE Website)

INTERPRETATION

Table-3 reveals the product-wise volume and turnover in NSE. Financial derivatives are classified into Index futures and index option and stock futures and stock options. The Index futures were traded from 2006. The Index futures turnover in NSE rise from Rs 25395.74 billion to Rs 45571.14 billion in 2015-16. It also reveals the trends of stock futures in NSE in the form of number of contracts traded and turnover. Stock futures in NSE rise from Rs 38309.67 billion to Rs 78286.06 billion in 2015-16. The index options also traded at NSE, that has worldwide recognized product in derivatives trading. However, the growth of index options at NSE in terms of turnover has a drastic rise from Rs 7919.06 billion to Rs 489519.31 billion in 2015-16. Stock options at NSE rise from Rs 1937.95 billion to Rs 34881.74 billion in 2015-16. It shows potentiality of derivatives trading in NSE.

TABLE 4: SHOWS CUMULATIVE ANNUAL GROWTH RATE (CAGR) OF NSE

Year	Number of contracts	CAGR (%)	Turnover (Rs in Billion)	CAGR (%)
2000-01	90580	4533.33	2365	-56.90
2001-02	4196873	299.56	1019.26	331.55
2002-03	16768909	239.24	4398.62	384.38
2003-04	56886776	35.39	21306.1	19.54
2004-05	77017185	104.66	25469.82	89.41
2005-06	157619271	37.60	48241.74	52.49
2006-07	216883573	95.96	73562.42	77.95
2007-08	425013200	54.68	130904.78	-15.89
2008-09	657390497	3.33	110104.82	60.43
2009-10	679293922	52.25	176636.65	65.58
2010-11	1034212062	16.52	292482.21	7.19
2011-12	1205045464	-6.11	313497.32	0.58
2012-13	1131467418	13.52	315330.04	21.17
2013-14	1284406775	43.03	382092.15	45.53
2014-15	1837029857	14.24	556041.97	16.58
2015-16	2098610301		648258.24	
	CAGR	95.43%	CAGR	45.39

The **compound annual growth rate (CAGR)** is a useful measure of growth over multiple time periods. It can be thought of as the growth rate that gets you from the initial trading value to the ending trading value if you assume that the trading volume has been compounding over the time period.

The formula for CAGR is

$$\text{CAGR} = (\text{EV} / \text{BV})^{1/n} - 1$$

Where:

EV = Trading ending value

BV = Trading beginning value

n = Number of periods (years)

INTERPRETATION

The CAGR stands Cumulative Annual Growth Rate. The CAGR for the number of contracts of NSE represent at 95.43%, which seems to be a high percentage of growth as compared to growth rate of BSE, but the average annual growth rate has drastic variations over the number of years and shown irregular variations. While in some years the CAGR percentage has significantly rise and in some years there has been a negative growth. For instance, in the year 2003-04 the percentage stands at 239.24% while in rest of the years seems to be a drastic variation in growth rate. The lowest CAGR percentage in the year 2008-09 at 3.33%, similarly in the year 2011-12, negative percentage stands at -6.11% and in the year 2014-15 the average annual growth rate stood at 14.24%.

The CAGR for the total turnover of NSE represent at 45.39%, which seems to be a high percentage as compared to growth rate of BSE, but the average annual growth rate has huge variations over the number of years. While in some years the CAGR percentage has significantly rise and in some years there has been a negative percentage of growth. For instance, in the starting year 2000-01 negative percentage stands at -56.90% and in the year 2003-04 the percentage stands at 384.38 % while in rest of the years seems to be a drastic variation in growth rate. The lowest CAGR percentage in the year 2011-12 at 0.58%, which is lowest growth rate as compared to BSE growth rate, similarly in the year 2007-08, negative percentage stands at -15.89 % and in the year 2014-15 the average annual growth rate stood at 16.58%.

FINDINGS OF THE STUDY

The significant findings of the study which derived from quantitative analysis of BSE and NSE trading volume and total turnover from the year 2000-01 to 2015-16. National Stock Exchange is one of the youngest and well popularize stock exchange among all exchanges of India. NSE is one of the largest stock exchanges of India, which is called as youngest stock exchange with lot of energetic growth in terms of both trading volume and total turnover. NSE has had incredible rise both in terms of number of contracts traded and total turnover, in the beginning years of derivatives trading, NSE has had significant rise both in terms of number of contracts traded and total turnover but has huge and drastic variations in the rest of the years of trading. However, NSE has Rs 2365 billion turnover in the year 2000-01 and it has risen to Rs 648258.24 billion in the year 2015-16. It has observed that NSE has very high trading volume and turnover. The NSE has a significant record in terms of both number of contracts traded and total turnover as compared to all Asian stock exchanges.

The Cumulative Annual Growth Rate of NSE in terms of both number of contracts traded and total turnover stands at 95.43% and 45.39%. The annual growth rate of NSE has had tremendous rise and fall over the past 15 years. There has been a drastic drop in CAGR percentage in some of the years and in some of the years seems to be negative growth rate.

However, it is to be observed that, NSE has incredible and remarkable growth both in terms of number of contracts traded and total turnover since from introduction of derivatives in Indian Capital Market. It is evident from the CAGR, NSE has a tremendous growth in terms of number of contracts (95.43%) and total turnover (45.39%).

RECOMMENDATIONS

1. NSE has performing comparatively quite well as compared to that of competitive exchanges, though it has to concentrate on steady and consistent growth in increasing contracts and turnover instead of hazardous variations in derivatives trading.
2. NSE has to chackout suitable policies to enhance its growth in terms of number of contracts traded and total turnover, because its growth rate seems to be volatility.
3. NSE need to concentrate not only on increasing trading volume and total turnover but also on pushing consistent and continues cumulative annual growth rate.
4. NSE has to concentrate on increasing its turnover because as it CAGR quite less as compared to its CAGR of number of contracts.
5. NSE needs to create awareness and educate about derivatives trading among all types of investors.
6. NSE needs to market and advertise need of derivatives trading among all types of investors to enhance their potential results by using derivatives as risk management, speculative and arbitraging tool.

CONCLUSION

Innovation of derivatives have restructured and redefined the entire financial industry across the globe and derivatives have earned a well-deserved and extremely significant place among all the financial products. Derivatives are risk management tool that help in effective management of risk by various an opportunity to transfer risk, from the one who wish to avoid it; to one, who wish to accept it, similarly derivatives are also use as speculative and arbitraging tool for enhancement of returns and exploiting opportunities in the financial market. The financial markets have undergone qualitative changes in the last three decades due to phenomenal growth of derivatives. An increasingly large number of institutions now consider derivatives to play a significant role in implementing their financial policies. Derivatives are considered not only a risk management tool but also speculative and arbitraging tool that helps in effective management of risk by stakeholders. In the present highly uncertain business phenomena the importance of risk management is much higher than ever before.

The emergence of derivative market an ingenious feat of financial engineering that provides an effective and less costly solution to the problem of risk that resulting from high uncertainty and price volatility. Since 2000, financial derivatives market in India has shown a remarkable growth both in terms of volumes and number of traded contracts and the stock markets are becoming globally efficient. Earlier BSE was the most popular and reliable stock exchange in India but after introduction of NSE, it has taken over BSE in terms of turnover. NSE alone accounts for 90 per cent of the derivatives trading in Indian markets. The statistical data seems that the total turnover on the financial derivatives segment has grown by Rs 648258.24 billion during the year 2015-16 as compared with Rs 2365 in the year 2000-01. If compare to trading figures of NSE, performance of NSE is well deserved and extremely elegant and is encouraging both in terms of volumes and number of contracts traded in all categories of derivatives product.

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SOCIO-ECONOMIC EMPOWERMENT OF WOMEN IN PUNJAB**AMANDEEP KAUR****ASTT. PROFESSOR****DEPARTMENT OF COMMERCE & MANAGEMENT****GURU NANAK COLLEGE****BUDHLADA****DR. NIRMAL SINGH****ASSOCIATE PROFESSOR****NIILM UNIVERSITY****KAITHAL****ABSTRACT**

In past decades, Indian women face discrimination in every segment like economically, socially. The importance of individual provided on basis of sex. The females are treated very badly in boundary of their houses and gave low living standard. But in the consideration of changes, society adopts change toward the role of women in society. In percent time, Indian female protected by Indian constitute and other factors such as education etc. these determinants encourage women to share equally household resources. Progressive assumptions create developing environment for them. Punjab governments develop policies to upgrade their living and social deals. This study identifies the actual condition of woman due to several facilities which given government including decision making capability.

KEYWORDS

women education, socio-economic empowerment of women.

INTRODUCTION

Empowerment is historic term covering all type of empowerment such as education, financial, social, politics, and legal emotional and social empowerment of women. The planet declaration throughout world meeting in 1990 laid emphasis on "education of most lays pressure on universalizing entry and advertising equity both the issues that are vital to be able to empowerment associated with women". Due to past period, women survived under critical conditions like economic disorder. Changing scenario of society shows different image of women in current period, these facilities involving more involvement in decision making, raising self-confidence, progress ratio in employment etc. Government of Punjab, NGO introduced numerous schemes to empower women economically, socially, financially. The Indian Constitution provides equal rights and privileges for women and men. A series of provisions regarding woman improve status of women in India. Various welfare and development plans have been introduced to improve the living conditions of women and capable them to access and to control on economic and social resources.

LITERATURE REVIEW

- Dr. Ansuman Sahoo has reviewed about SHGs which have become a substantial movement in India. The Self-Help Collection (SHG) movement in India has become working within the right course in strengthening women along with eradicating poverty within the rural and urban areas. Many women in Asia strongly rely on the movement and hold it accountable for improving their particular livelihoods. Nonetheless, women remain not empowered as per the requirement. The present study is usually an attempt to research the part and effectiveness of SHGs to advertise women's empowerment in Cuttack Section of Odessa. The wide objective with the study would be to analyze the operating-system of SHGs pertaining to mobilization of saving, delivery of credit towards the needy, repayment of loans along with in increasing of view of SGH customers regarding increase within the power of decision making. Both main and supplementary data are usually collected along with age, family process and amount of dependents within the family, and so on., are reviewed in demographic information. The analysis focuses on the role of SHGs in women empowerment, social solidarity along with socio-economic betterment with the poor for their consolidation.
- Amtul Waris offers evaluated that the gender equality is considered a critical take into account achieving interpersonal and institutional change that leads to sustainable development using equity along with growth. Inequalities between men and women manifest themselves in most areas of development. Inequalities are biggest in: health insurance and education, monetary development, violence against women, participation in public areas life along with policy-making along with social attitudes and sexual category stereotyping.
- H. S. Ogato has analysis that critically assessed the sexual category equality along with women's empowerment efforts in lowest developed international locations (LDCs) along with proposed policy and tactic measures pertaining to achieving millennium development targets (MDGs) in Ethiopia. Ethiopian women are in the economy, socially, culturally along with politically disadvantaged within the enjoyment of equal rights, in being able to access opportunities, decision-making processes, and fundamental resources. Basically, although many policies are usually emerging in which support along with encourage women's contribution in growth, women's use of and command of successful resources, facts, training along with education, job and in decision-making are usually limited. The typical objective on this paper would be to assess the pursuit of gender equality and women's empowerment in least developed countries to accomplish MDGs along with identify policy and tactic implications pertaining to Ethiopia. This document adapts a new human ecological approach and a comprehensive assessment and analysis with the existing novels was made so that you can obtain both equally theoretical experience and supplementary data on the review styles.
- Soumitro Chakravarty offers analyzed regarding the women's Empowerment, which has become an issue of enormous discussions along with contemplation over the last few generations world-wide. This just as one agenda has become over the lists on most government strategies & programs also. Efforts happen to be made all the time across nations to deal with this issue and improve the socio-economic reputation of women. However, it is observed that almost all of the policies along with programs see empowerment within the economic impression only in the belief that economic self-reliance allows women ignoring other factors like wellbeing, education, literacy and so on. This doing the job research document attempts to recognise the thought of women empowerment on a holistic groundwork and severely examine the particular efforts started towards strengthening women using special concentration upon the particular Self Aid Groups (SHGs) based upon empirical function undertaken within the Ranchi region of Jharkhand state in Asia. It even more aims in the direction of understanding the particular linkages concerning SHGs & women empowerment along with proposing recommendations to accelerate the empowerment push paying due care about the community level area specific factors for the developing state like India which have a critical impact when region certain women empowerment practice and thereby point how for even more research in the area.
- M. Nagaraja relates to "empowerment of women" in India along with throws light-weight on particularly" bureau approach "to gauge women empowerment. Separated into about three sections, this document presents the particular illustration of modern way of empowerment in Section-I; an breakdown of the efforts put in India pertaining to empowering women in Section-II along with analyses the amount of accomplishment of empowerment by means of adopting

a number of the modern indicators in Section-III. This document hinges mainly on secondary sources of data linked to India, published by Nationwide Family Well being Survey, National Taste Survey Firm and a number of the research reports.

- Dr. Vinisha Bose has looked at about Function of Entrepreneurship growth agencies to advertise women Entrepreneurship: a study of Kerala which have become a substantial movement in India. This paper will be based upon a probe completed to severely analyze the pluses and minuses of different measures initiated from the state, central governing bodies and loan companies for the particular promotion of women entrepreneurship in Kerala. Methodology - The analysis is a new field amount investigation done one of the women entrepreneurs as well as the officials with the various companies rendering help to women entrepreneurs. The analysis revealed that the reality upon ground regarding the development procedures for endorsing women entrepreneurship will not match the particular blueprint with the programme in official creating. This implies that women entrepreneurship development within the state is still in a new rudimentary state and adequate measures can be initiated in promoting women entrepreneurship which can be a very important necessity pertaining to mitigating the particular mounting joblessness problem. The analyze gives many constructive suggestions for making changes within the existing systems of support, launching fresh schemes along with making helpful relations concerning officials with the agencies along with women internet marketers. We also reviewed another research articles such as Mirielle. R. Singariya to analyzed that Dr. Ambedkar – the particular determined fighter and a deep scholar has created significant work to guide the society on the path of Liberty, Equal rights and Fraternity. Dr. Sahab Singh offers studied upon Empowerment of rural women has emerged just as one important issue in these days. The monetary empowerment of rural women will be regarded right now as an incredibly popular indicator of progress for the country, hence the challenge of monetary empowerment of women is really a paramount importance towards the Economists, Politics thinkers, Sociale scientists along with economic reformers.

OBJECTIVES

1. To assess the impact of education on the economic decision making capability of women in Punjab.
2. To evaluate the freedom of mobility and power of women utilizing the education quotient and identify problems to take higher education.
3. To identify the response of society towards government’s schemes that develops the women.

RESEARCH METHODOLOGY

This study is based on primary data. The data was collected from 300 respondents and four cities budhlada, mansa, bathinda, bareta (malwa region) covered for filled questionnaires. Data collected through close ended questionnaire.

ANALYSIS

To identify economic freedom, the question filled by respondents such as Female has freedom to accumulate capital or buy a house or similar or empower yourself or your family by her salary.

TABLE 1: ANSWER GIVEN BY RESPONDENTS

	No. of Respondents	% of Respondents
Strong Agree	55	18
Agree	122	41
Neutral	81	27
Disagree	42	14
Strong Disagree	00	0
Total	300	100

The above table shows that,122 (41%) respondents are agree and 55 are strongly agreed with this statement and gave positive response to enjoy freedom of accumulating capital according to their own choice. They said majority of women enjoy the right of financial decision taking in their families and outside home. But 14 % respondent gave their views in negative order because of male dominating society, some has obliged to take permission from their male members.

TABLE 2: MORE OF ECONOMIC FREEDOM ENJOYED BY WOMAN AS COMPARISON PAST

	No. of Respondents	% of respondents
Strong Agree	68	23
Agree	170	56
Neutral	60	20
Disagree	2	1
Strong Disagree	0	
Total	300	100

The above table shows that the majority of 170(56%) interviewee gives their feedback in positive way in order to agree with statement that today’s women are having more economic freedom then past time. In modern period, women have more involvement in banking sector as comparison previous period. In that period, they were not having rights to make any economic decision without the consent of male family members. Today women are independent and can take their mutual decision even without the consent of male member of the family. Out of 300 only two respondents have given negative response for the economic freedom of women in present time. They said there is not a bigger difference in the position of women in the present or in past. they are of the view that it is very difficult for women to go out because of many criminal surroundings.

TABLE 3: WOMAN HAS FREEDOM FOR MOBILITY IN PRESENT TIME

	No. of Respondents	% of respondents
Strong Agree	77	26
Agree	169	56
Neutral	42	14
Disagree	11	4
Strong Disagree	1	0
Total	300	100

In the above table, 169(56%)of the respondents said that women have the mobility in the present times as compare to the past times in which women are not given any right or they are not having any mobility to work or not having any freedom to go out for work. While out of the total respondents, one of the respondent responded that women are not given any freedom to go out even in the present times, she gave her views in negative way because according to her some part of society pose some restrictions on females and not allowed them to go out alone. While many 77(26%) of the respondents are strongly agree with the statement of freedom to females and they said in present times, women are given a freedom to great extent than in the past times.

TABLE 4: SEVERAL SOCIAL AND CULTURAL FACTORS POSE SERIOUS PROBLEMS BEFORE GIRLS TO TAKE HIGHER EDUCATION

	No. of Respondents	% of respondents
Strong Agree	62	21
Agree	180	60
Neutral	43	14
Disagree	15	5
Strong Disagree	0	0
	300	100

The above table shows that 180 (60%) respondents are agreed with this statement that several social and cultural factors pose serious problems before girls to take higher education that the reason behind it, culture of family, surroundings and environmental changes discourage the parents to allow the girls to go out for study at long distance. To improve this problem, government established specially girls' schools in local areas and in 12th plan govt. makes compulsory the primary education for children's to develop the nation. Some of them are disagree with that statement because they said in modern time educated families never bound the girls to take higher education from anywhere from any hindrances.

TABLE 5: GOVT. TAKES VARIOUS STEPS TO DEVELOP HIGHER EDUCATION

	No. of Respondents	% of respondents
Strong Agree	47	16
Agree	176	59
Neutral	49	16
Disagree	21	7
Strong Disagree	7	2
	300	100

The above table shows the agreed response of respondents. Out of 300, 176(59%) respondents gave positive response that Punjab govt introduced several policies for the higher education namely Kanya Jagriti Jyoti scheme. Under this scheme BPL families are covered to give free education. Balri Rakshak Yogyna, under this scheme single girl child family are supported to free education to their daughters. But 21(7%) are disagreed with this statement according to them those family which are not able to offer education to their children's but belongs to general categories, they do not take benefits of these scheme.

CONCLUSION

Due to development, social environment facilitates women at large extent and offer better financial status. Punjab government has department that ease female and children to give facilities for their better future. Many policies like mai bhago scheme introduced to give employment and create entrepreneurial environment. But Indian woman also face some obstacles in their growth path and to adopt profession. The published data shows women involvement in political field like they have a poor 11% representation in India's Lok Sabha and 10.6% in the Rajya Sabha. The less awareness regarding their rights develops problems for them.

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THE IMPACT OF REMUNERATION MANAGEMENT ON ORGANISATIONAL EFFECTIVENESS: A STUDY IN BANGALORE

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ABSTRACT

The compensation process and methods have transformed in all the industries, from time to time. The genetic definition of the process need, seek, get, evaluate, satisfy and compensate, has remained the same, but the methods have changed and transformed. The change is attributable to change in need, change in method of seeking, change in method of getting, change in method of evaluating, and hence the change in the concept of compensation for good results, retention of excellent experienced employees.

KEYWORDS

remuneration management, organisational effectiveness.

INTRODUCTION

Remuneration is the compensation an employee receives in return for his/her contribution to the organization. Remuneration occupies an important place in the life of an employee. His/her standard of living status in the society motivation, loyalty and productivity depends upon the remuneration he/she receives. For the employer too, employee remuneration is significant because of its contribution to the cost of production. Besides, many battles (in the form of strikes and lockout) are fought between the employer and the employee on the issues relating to wages or bonus. For HRM too, employee remuneration is a major function. The HR specialist has a difficult task of fixing wages and wage differentials acceptable to employees and their leaders.

The remuneration management is very significant in that the retention of highly talented and competent work force, hinges upon the kind and quality of compensation package. In the era of multi-skilling, the availability of right kind of the human resources is determined by the intrinsic and extrinsic aspects of remuneration management. Wage, salary, perquisites, fringe benefits, incentives are considered as extrinsic factors, while the reward, recognition, appreciation, job satisfaction and job enrichment are considered as intrinsic factors.

The cutting edge factor in today's competitive organizational environment is strategic human resource management. In every aspect of organizational decision making the human resource manager plays a crucial role in bringing about organizational success and effectiveness – be it expansion, diversification, going global, cross-country hiring, the role of human resource has assumed greater relevance at present. Acquisition of right skill mix, their development, utilization, compensation, retention and separation are the touchstone of human resource function in the present era.

Employee compensation package includes everything an employed individual receives in return for his work. Compensation includes all expenditures of valued resources by the organization for the employees. This includes all employees irrespective of the status and style of function. One of the most rapidly expanding areas of compensation is the fringe benefits which is also referred to as supplementary compensation and includes vacations, employee discounts, stock options and the like. Today's, compensation package includes fringe benefits, non-monetary benefits apart from salary and wages.

SIGNIFICATION OF REMUNERATION MANAGEMENT

An effective system of remuneration is highly significant because several problems relating to personal centre around one element, namely, remuneration. Many employees for example, absent themselves from work often because they feel they are not paid enough. They look for new and better prospectus because the present emoluments may not be attractive enough to stay on. They agitate, pelt stones, use foul language, resort to graffiti, turn violent, felsic, because the remuneration pay to them may not be adequate.

Talks on job satisfaction, loyalty, organization before self, altruism and the like may be alright for board rooms discussion and for delivery lectures in class rooms. The talk may also be relevant in country like Japan, where people are inspired by fanatical devotion to work. But in our country an average worker cares only for money. Such being the reality, remuneration must fulfil the expectations and aspiration of employees and exploit their energies for the benefit of organization.

DETERMINANTS OF REMUNERATION MANAGEMENT

The last three years have seen corporate move towards differentiation in compensation of individuals, with differentials of up to 50 percent in the same salary grades.

"In a way it is healthy as young people are clear. Loyalty is to themselves and their careers rather than organisations and the attitude is : 'I am selling my talent to the highest bidder'. Companies have to manage that and learn to take in talent and groom them. Loyalty has to be Indian corporates are re-examining the compensation issue and are coming up with more attractive packages. Compensation package is perceived to be beyond the size of the wallet. The employees look for some of the components like:

- Job content
- Being a well established company
- Having an informal work atmosphere
- Flexible work timings
- Opportunity for self-development
- Being a multinational company
- Opportunity to travel abroad
- Opportunity for developing technical skills
- Opportunity to interact with the best brains in the field
- Job that leaves enough time for personal interests

EMPLOYEE REWARDS AND COMPENSATION

Although it is a given that employees wish to receive what they feel is fair and competitive financial compensation for their efforts, compensation beyond this level is not as motivating as the factors related to the internal work environment and their relationships with clients. Recognition for a job well-done, by employers, colleagues and clients, is very inspirational. A feeling of respect and mutual trust is very motivating.

STATEMENT OF THE PROBLEM

The organizational effectiveness in terms of productivity, profitability, market capitalization, market share, diversification, expansion, competitive edge and going global are determined by a significant factor called employee and executive remuneration paradigm. The reward must either be equal to or more than the effort tendered by the work force. In devising the compensation plan, several parameters come to forefront and a maze of issues arise and act as labyrinth in the formulation of remuneration package.

The core of organizational success in today's competitive global order is quality human resources. The success or failure of any organization can be attributed to the kind of human resources possessed by it. The HR management is not about attracting the human resource but it is about retaining the competent people in the organization. To do so remuneration is a key factor. The present study addresses the question of retaining that talent pool in the organization. The research issues in the present study are on;

- ❖ Whether the pay package should be skilled based or time based?
- ❖ Whether the remuneration package should act as a driver for further disclosing of the hidden potentialities of human resources of in an organization?
- ❖ How far the compensation package triggers the productivity and profitability of the company?
- ❖ In what way the remuneration package induces the employee and executive to commitment, engagement effectiveness?
- ❖ How to determine that a particular organization has a right mix of human resources in the right place at the right time contributing to the survival and growth of the organization?

These and other issues called for a thorough research programme; hence, the present study will be undertaken.

OBJECTIVES OF THE STUDY

1. To identify the components of work force remuneration package in typical multi-national companies located in Bangalore;
2. To evaluate the factor influencing the compensation package of employee and executives in these sample companies;
3. To assess the challenges and opportunities in devising and implementing the remuneration plan;
4. To compare industry-wise pay differentials on select parameters; and
5. To make suggestions that is practicable to bring about efficiency in remuneration management.

SCOPE OF THE STUDY

The arena of the study encompasses the corporate strategy, enterprise value, compounded annual growth rate, sales per employee, profitability, productivity, the organizational; values, culture and philosophy. It also includes internal and external factors influencing remuneration plan, challenges and issues in devising and implementing compensation plan. Merit based pay, skill based pay, time rate, piece rate, incentives, perquisite, fringe benefits, cost to the company (CTC), pay secrecy and the like.

REVIEW OF LITERATURE

Ahmad Jamal Tahir, Muhammad Sohaib Ahmed, Muhammad Zohair Sahoo, Subhan Ullah, Kamran Azam, Anwar Khan Marwat (2012) company's financial assets have always occupied central importance and banks are the part of the financial institutions that look after that aspect. However, world's recent plunge into financial crisis has raised this importance to critical level. Particularly, this has put direct effect upon financial sector. The fact that organizations cannot control their external environment in the current period of recession has put direct emphasis on management of internal environment of such organizations.

Allan N. Nash and Stephen J. Carroll, Jr. (2009) in their study, "the management of compensation" have dealt with sensitive nature of compensation and stated that an organisation must manage its compensation program carefully. They stated that compensation was one of the more poorly managed areas of organisation, even though it was of importance to the economic health of organisations and the source of many personnel problems.

Brenner and Schwalbach (2009) in their study entitled "Management quality, firm size and managerial compensation: A comparison between Germany and UK" have considered the relation between management quality, firm size and managerial compensation and stated that the impact of firm size on pay vanished if it controlled for manager quality. For UK, they found negative firm size elasticities. In Germany the pay / firm size relation could only be partially explained by management quality measures. They felt that the impact of manager quality on firm size appeared predominantly in the stochastic individual effects. Only for the German sample was the education / firm size relation significant.

Brown and David (2011) in their task force report on Canadian Federal pay equity opined that female workers employed full time earned only 71 percent of their male counterparts pay. Gender discrimination in pay violated the Canadian Human Rights Act, but pay equity depended on a careful analysis of job requirements and wages. The report recommended that all federal employees and others regulated by the federal Govt. created a pay equity committee, implemented a pay equity plan and monitored results.

RESEARCH GAP

A lot of research work has already been carried out the topic compensation management. However, only a handful of research work touches upon the compensation management in the open regime. Further, all the previous research work did not cover a wide spectrum of industries. Hence there exists a huge research chasm. To narrow it, the present study was undertaken considering changed scenario and related challenges in compensation management.

HYPOTHESES

The Null Hypotheses assumed for the purpose of study are:

- No significance difference between the approaches towards motivating the employees and the employees' response to the work assigned.
- No significance difference between the approaches for grievance handling and the improving of grievance handling system.

All these hypotheses are tested at 5% level of significance.

METHODOLOGY

For the purpose of the present research programme, survey, analytical and descriptive study has been used. The inferences drawn are based on the primary data and the secondary data has been used to support the primary data. The questionnaire was personally administered by the Researcher to collect the primary data. Certain information was also gathered informally from the respondents that would have bearing on the study.

The secondary source of data has been taken from various articles, survey reports, annual reports, journals, magazines, newspapers and also through the website.

SAMPLING

The study has been made by drawing sample from the state capital of Karnataka – Bangalore. The cosmopolitan nature and the presence of all the types of sectors, industries have been considered to be a good representation of the indicators of compensation package. The sample has been drawn out randomly from the city of Bangalore, which comprised of 250 employees and 50 employers duly ensuring that all the questions are filled up. Bangalore

SAMPLING TECHNIQUE USED

The universe of the study are all organisations (both manufacturing and service sectors). The companies list were gathered from confederation of Indian Industries, Associated Chamber of Commerce and Industries, Federation Indian Chamber of Commerce and Industries and Federation of Karnataka Chambers of Commerce and Industries.

ANALYSIS OF DATA

The collected data have been analysed with the help of statistical tools and techniques such as averages and percentages. The hypothesis have tested with the help of Chi-square test, wherever necessary tables, diagrams and charts have been used to analyse and interpret the data successfully.

LIMITATIONS OF THE STUDY

- Certain high profile executives refused to divulge the complete compensation package components;
- A medium of subjective bias is impossible to eliminate;
- The findings of the study may subject to change in course of time owing to changes in the environmental factors influencing compensation management;

REFERENCE PERIOD

From May 2009 to May 2013

GENERAL INFORMATION ANALYSIS**TABLE 1: SAMPLE RESPONDENTS**

SL.No.	Respondents	No. of Questionnaire Distributed
1	Government	09
2	Private Sector	185
3	Public Sector	56
	Total	250

(Source: Primary Data)

ANALYSIS

To know the effectiveness of remuneration management practices in the Indian context, sample respondents from different spectrum of industries were considered. Accordingly, the benchmarking of best practices in employee remuneration management prevailing in healthcare, automotive, information technology, electronics, travel and tourism and hospitality sectors were taken into consideration. The well-structured questionnaire and semi-structured interview were conducted. The respondents are drawn from different levels of management incorporating executives, employees, top management, supervisors, raters and other HR consultants attached to the sample firms. 9 respondents were chosen from Government sector, 185 from private sectors and 56 from public sector organisations. Thus the total sample size is 250.

TABLE 2: GENDER OF RESPONDENTS

SL.No.	Gender	No. of Respondents	Percentage
1	Male	172	68.8
2	Female	78	31.2
	Total	250	100

(Source: Primary Data)

ANALYSIS

The total number of respondents considered for the present research programme is 250. Out of which 68.8 percent are males and 31.2 percent are from female category. The proportion of male to female category is based on the availability of women employees and executives in the total workforce strength.

INFERENCE

In so far as the relationship between gender and remuneration management is concerned, the male employees individual need ascertainment and filling the gap can easily be achieved rather than female employee need ascertainment and filling up of gap for individual performance and organizational performance. In the Indian context, on account of culture, women have to play multiple roles, even if performance deficiencies are identified, the training for them requires lot of time space which majority of them is unable to comply with.

TABLE 3: AGE GROUP

SL.No.	Age group	No. of Respondents	Percentage
1	18-25	43	17
2	26-35	87	35
3	36-45	75	30
4	46-55	30	12
5	55 Above	15	06
	Total	250	100

(Source: Primary Data)

ANALYSIS

It could be observed that the young employees in the sample organizations aged between 18 to 25, 26 to 35 and 36 to 45 are more pronounced. In sample multinational corporations, the average age of the employees ranges from 25 to 27. These category of employees fall under demographic dividend of our country. The young professionals in IT, automotive, and hospitality industry are the segments which are shown then growth path, deficiencies and training needs for their individual development. Interestingly, there are the sample employees respondents, who have crossed mid forty, have shown keen interest in learning, updating and transcending from the existing positions.

INFERENCE

Age of employees and remuneration management are positively correlated. The young employees are ready for challenging jobs and also to undergo training for their individual development (35 percent). The middle aged employees possess the necessary job experience and the course of their future action is well determined (30 percent). The aged employees have saturated with the current jobs and therefore, do resent with the further training or learning. The individual development strategy will not work relatively for the old age employees (12 percent) it can be concluded that performance appraisal, individual development of employees and the age are positively related.

REMUNERATION MANAGEMENT DIMENSIONS - ANALYSIS AND INTERPRETATION OF DATA**EMPLOYEES WORKING IN ORGANIZATION ON SHIFT BASIS****TABLE 4: THE EMPLOYEES ARE WORKING IN ORGANIZATION ON SHIFT BASIS**

Factors	No. of Respondents	Percentage
Yes	50	20
No	200	80
Total	125	100

When the demand is very high, one of the important requirements is to work round the clock. However, owing to many regulations, including the Factories Act 1948, work cannot be stretched beyond specified hours though to a permissible extent, overtime could be permitted. However, when even the extended hours of working would not contribute to the required demand, it would be obvious that more number of employees have to be recruited and make them work in various time intervals. Thus the concept of shift working has come a long way in contributing to the growth of many sectors. However, the organization should provide certain incentive for any departure from the standard working slab hours. In this study, 50 respondents have indicated that they are working in shifts accounting for 20% of the sample while the remaining 200 respondents have indicated that they do not work in shifts.

Working in shifts has certain physiological as well as psychological problems associated with it. However, organizations have several means to compensate for such contributions by the employees.

WHETHER TRANSPORTATION FACILITY PROVIDED FOR WORKING IN SHIFTS?

TABLE 5: THE TRANSPORTATION FACILITIES PROVIDED FOR MULTIPLE SHIFT WORKERS

Variables	No. of Respondents	Percentage
Yes	50	100
No	0	0
Total	50	100

All the 50 respondents who are working in shifts have indicated that they work in three shifts and all the respondents have indicated that the organization is providing the transportation facility for working in multiple shifts. Since all the respondents who are working in shifts are not working in single or two shifts, they are working in three shifts, which provide for non-overlapping of the timings and is the maximum period in the multiple shifts.

THE NIGHT SHIFT ALLOWANCE PROVIDED FOR WORKING IN MULTIPLE SHIFTS?

TABLE 6: THE NIGHT SHIFT ALLOWANCE IS PROVIDED FOR MULTIPLE SHIFT WORKING

Variable	No. of Respondents	Percentage
Yes	33	66
No	17	34
Total	50	100

In specific night shift working as well as in multiple shifts working there is a clear departure from the day time working and work in day has been universally accepted to be more suited to the health of the employees. When organizations require their employee to work in night, they should be adequately compensated, though the same cannot be claimed as a matter of right always. In this regard, 33 respondents have brought out that they are being provided with night shift allowance other than the shift allowance. The remaining 17 respondents accounting for 34% have indicated that they are not being provided with incentive for night shift working.

HYPOTHESES TESTING

CHI-SQUARE TEST ON EMPLOYEE ASPECTS

Relation between approach towards motivation of employees and employee response to work assignments:

TABLE 7: CROSS TABULATION OF APPROACH TOWARDS MOTIVATION OF EMPLOYEES AND EMPLOYEE RESPONSE TO WORK ASSIGNMENTS

		Approach towards Motivation of Employees				
		Highly Satisfied	Satisfied	Neutral	Dis –satisfied	Highly Dis –satisfied
Employees Response to Work Assignments	Positive Reinforcement	10	9	33	11	2
	Fair Treatment of People	6	13	37	8	1
	Satisfying Employee needs	19	19	38	3	1
	Setting work related goals	3	8	10	4	0
	Recreational activities	2	3	7	2	1
	Total	40	52	125	28	5

To put to test the opinion, chi-square test has been employed by assuming the Null Hypothesis as "H₀: No significance difference between the approaches towards motivating the employees and the employees' response to the work assigned". The alternative hypothesis considered is "H_a: There is significance difference between the approaches towards motivating the employees and the employees' response to the work assigned". The chi-square value obtained is 19.1552. The table value at 16 degrees of freedom and at 5% significance level is 26.296. The derived value being lesser than the table value, the null hypothesis is accepted and it is concluded that there is no significance difference between the approaches towards motivating the employees and the employees' response to the work assigned. Whether or not there is motivation, and whether or not the approaches to motivation are clearly defined, the employees are not showing it up with the works assigned to them. This indicates that the employees work attitude is good and they do not allow the organization to suffer. It is also quite logical to conclude that the two aspects considered in the test are not related as a larger number of the values lie in the middle, most of the employees remaining neutral on these two issues.

SUMMARY OF FINDINGS, CONCLUSION AND SUGGESTIONS

FINDINGS

Though the study has not been taken from the psychological perspective, the implications of psychological aspects could be discerned through the feelings echoed by the respondents. Therefore, statistical tools have been employed and hypothesis has been set. The following are the Null Hypothesis assumed which are tested at 5% significance level.

- No significance difference between the approaches towards motivating the employees and the employees' response to the work assigned.
- No significance difference between the approaches for grievance handling and the improving of grievance handling system.
- No significance difference exists between the basis of compensation package and the best practices of compensation
- No significance difference exists between the basis of compensation package and the parameters of performance measure

CONCLUSION

Being one of the most dynamic subjects, the study of compensation management forms a part of the Human Resource Management. However, the nature of the compensation being complicated it has been quite often thought better to be studied it as a separate subject. The ever-changing nature of the social, cultural and psychological aspects brings about the further complex nature of the subject.

SUGGESTIONS

- No study relating to Compensation Management would serve the purpose unless the study is taken up with Employers and Employees views. Therefore, for a better design of compensation, it is very essential that more cordial relationship should exist between the two.\
- The needs and wants of the employees are dependent on current socio-cultural requirement. It is essential for the management of every organization to understand such needs and wants for designing the package. Organizations should simply weed out the old and unwanted elements of compensation package and introduce the new and dynamic elements in their package. This may offer as morale booster for the employees as their current needs and wants are satisfied at least in part.

- In India, there has been a lot of disparity in compensating for the work between the private, public and government sectors. If more parity is provided, by offering a dynamic package that would cover the needs and wants of most of the employees, the system may work well on all spheres. This aspect could be contemplated in the next Central Pay Commission and if the results are encouraging, the same may be translated to State Government, duly modifying wherever necessary.
- The number of hours worked alone does not count for the organization. Therefore, the skill of the employee is very important. Methods of working could be so designed to avoid duplication of work by calling for a highly skill oriented nature of work from the employees. The organization should provide all facilities to carry out the high skilled nature of work.

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DIGITAL MARKETING AND ITS IMPACT ON BUYING BEHAVIOUR OF YOUTH: A REVIEW OF LITERATURE

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ABSTRACT

The buying pattern of consumer is changing at a faster rate in the customer oriented market environment. Consumer behaviour differs when it comes to the product, price, features, quality, packaging, buying behaviour, status, generation, age of the customer etc. however, youth is the most complicated group to correspond with. The changing preferences of the present day youth affects the buying pattern because they mostly follow the rhythm of fashion and taste according to the changing time. Therefore, Marketers spend crores of rupees and invest too much time on market research every year to identify and predict the changing youth behaviour. Now digital marketing has posed many challenges to the marketer in the retail segment. The present generation is more fascinated with the online shopping than the conventional buying. The marketers are forced to introduce the innovative way of selling due to the pressure of the younger generation's buying behaviour. The buying behavior and behavioural pattern of youth has as greater influence in the purchasing behaviour, hence in this study, "Digital marketing and its impact on buying behavior of youth is focused as the core issue. The study reveals that most of the youngsters of the present generation have access to the digital media but they lack the awareness about its optimum utilization.

KEYWORDS

digital marketing, youth, buying behaviour of youth.

INTRODUCTION

Digital Marketing is defined as buying and selling of information, products, and services via computer networks or internet. Internet and electronic commerce technologies are transforming the entire economy and changing business models, revenue streams, customer bases, and supply chains. New business models are emerging in every industry of the New Economy. Travel industry and ticketing has seen a sea change in the last decade. One estimate suggests that online travel industry contributes about 76% of total net commerce in India. Ticketing is now done either in third party websites or airline sites. Customers of online shopping are delighted with prompt delivery and flawless payment mechanisms building trust in consumers. Even online classifieds have made a successful transition online with jobs and matrimonial taking the lead. Online retailers are now pushing a larger number of categories such as electronics and white goods. In these emerging models, intangible assets such as relationships, knowledge, people, brands, and systems are taking center stage. The internet is a disruptive technological innovation but consumers everywhere are waking up to the idea of shopping online. The impact on retailing has been profound and as a result many businesses are changing the channels they use to sell their goods and services. In some parts of the world, retailers have been quick off the mark in developing their own individually branded e-commerce stores, whereas in other parts the e-market place dominates.

DIGITAL MARKETING SCENARIO IN INDIA

India is the world's 3rd largest internet population. After the proliferation of Internet, Marketing strategy has taken an off root to reach out to the public. The tremendous growth that digital marketing has shown cannot be match up with any other strategy. Looking up to the current scenario in India, people here are not only aware of Internet but are employing it for various purposes in life. Thus, there's a booming internet marketing industry in India. In India social media is the driving the adoption of digital marketing.

The retail sector in India is booming both on and offline. India is a relative latecomer to the online shopping revolution but it is predicted that online sales will grow by 50 per cent annually in the next few years. The country is already the third largest nation of internet users with over 120 million and the rapid uptake of mobile commerce is predicted to increase the number of users to over 330 million by 2015. Social media is helping to drive the development of digital marketing. Increasingly wealthy populations of young internet savvy customers are spending more time and money online and in doing so are influencing shopping trends. Among the popular products online are books, consumer electronics, travel, financial services, apparel and beauty care. Online shopping activity is concentrated in major urban conurbations with Mumbai being the main centre followed by Delhi and Kolkata. A large proportion of the purchases are conducted in online market places such as Snapdeal, launched in 2010. Currently, the internet accounts for only a small proportion of India's GDP but the predictions are that an internet boom is just around the corner for Retailers.

YOUTH IN INDIA

Indian youth are supposed to follow strict moral and family values and supposed to invest their whole time and attention towards study and career. So the career, education has to be the sole aim of a student. Indian youth are the powerful segment in the market who directs the manufacturers to make what they want. This study evaluates the extent to which the youth plays role in directing the marketer. The study will be useful for the marketer to devise the marketing strategies to capture the present and potential youth segment in the products under study. According to the National Youth Policy-2014, the study will cover the entire youth in the age-group of 15-29 years, which constitutes 27.5 per cent of the population according to Census-2011, that is about 33 crore people.

BUYING BEHAVIOUR OF YOUTH

Buying behaviour of an individual plays a predominant role in the consumer behavior in general and among the youth in particular. Buying behaviour marketing is a process of establishing relationships between products offered in the market and targeted buying behaviour groups. It involves segmenting the market on the basis of buying behaviour dimensions, positioning the product in a way that appeals to the activities, interests and opinions of the targeted market and undertaking specific promotional campaigns which exploit buying behaviour appeals to enhance the market value of the offered product. In India internet is around 20 years old. India is among the top 3 population of internet users with 145 million consumers. The digital marketing is having just 3-4% of organised retailing. This reveals that some elements are the hindrance in the prosperity of online marketing in India. The risk perceived by the youth in India is one of them. The prosperity of online shopping in India is huge because of its big size of youth population. The government is investing a lot in internet infrastructure. The organized retailing can't reach to the rural part of India easily whereas online retailers are finding their buyers in cities including villages of across India.

REVIEW OF LITERATURE

- 1. Dr. Vishal Khasgiwala & Dr. Monica Sainy (Gujarat):** In their study titled "Gender disparity wise study of Impulsive buying behavior and exploratory tendencies of youth in central India", impulsive buying behaviour is experimented. Impulsive buying is a common behavior today and can occur in any setting. Much of the human activity is driven by impulses that are biochemically & psychologically stimulated. Beatty and Ferrell (1998) described that Impulse buying refers to immediate purchases which are without any pre-shopping objective either to purchase the specific product category or to fulfill a specific need. It is not consciously planned, but arises immediately upon confrontation with certain stimulus (Wolman, 1975 (Schiffman and Kanuk, 2007). India Being a transitional economy technological boom such as television shopping channels and the Internet expand consumers' impulse purchasing opportunities, increasing both the accessibility to products and services and the ease with which impulse purchases can be made. Impulse buying is an unplanned purchase that is characterized by relatively rapid decision-making, and a subjective bias in favor of immediate possession (Rook & Gardner, 1993).
- 2. (Dastidar & Datta, 2009).** In this study it was found that, relationship present gender wise between both the variable and influence of exploratory tendencies on impulsive buying behavior on in young female is higher than young male. It reveals that, variety seeking, risk taking/innovativeness, and curiosity motivated behavior in young female is higher result spontaneous buying behavior. While study shows that, in male it is very lower. The population in the age-group of 15-34 increased from 353 million in 2001 to 430 million in 2011. Current predictions suggest a steady increase in the youth population to 464 million by 2021. By 2020, India is set to become the world's youngest country with 64 per cent of its population in the working age group (The Hindu, 17 April 2013).
- 3. (S. Sathish and DR. A. Rajamohan 2012).** In their study Consumer behaviour and buying behaviour marketing, a general approach of consumer is taken. A consumer's buying behaviour is seen as the sum of his interactions with his environment. Buying behaviour studies are a component of the broader behavioural concept called psychographics." Harold W. Berkman and Christopher Gilson define buying behaviour as "unified" patterns of behaviour that both determine and are determined by consumption. The term "unified patterns of behaviour" refers to behaviour in its broadest sense. Attitude formation and such internal subjective activities may not be observable, but they are behaviour nonetheless. Buying behaviour is an integrated system of a person's attitudes, values, interests, opinions and his over behaviour. It is found in this study that "Consumer behaviour is still a young discipline and most of the research now available has been generalised only during the past fifteen years or so. Innovations such as the buying behaviour concept and AIO research represent ways to move the study of consumers away from isolated, often unrelated projects towards broader integrated systems and research techniques.
- 4. Rashmi Bansal (2007),** in her article defined urban youth as youth marketers of today in India and not as per the version of sociologists and media men who relate it to the statistics of men under the age of 25. Youth could be defined as a potent and cultural force, the consumers of today and the growth engines of tomorrow. This study concentrates on the aspirations, inspiration and perspiration of urban Indian youth and not on the response of the youth's choice of either Western or Indian styles or the cultural values. There is little doubt that increasing affluence would lead to radical choices for the future generations.
- 5. Priyanka Mehra (2009)** in her article mentions that youth have always been a prime target for marketers. More so in India now, as two-thirds of the population is below 35 years of age. According to MindShare Insights, the research divisions of a media buying agency MindShare, 65%, or over 700 million Indians, are younger than 35 years. This segment has an influence on consumer spending far in excess of its numerical strength. Nine million people in the age group of 12-25 years from the top 35 cities (one million plus population) in India are the ones setting the trends and raising the aspiration value for one-billion-plus Indians, reports Mind Share Insights.
- 6. Manjeet (1999)** in her article finds out that India's youth are ambitious, technology-oriented and confident. By 2015, Indians under 20 will make up 55% of the population and wield proportionately higher spending power. In the west, the youth segment has almost always been pitted against their seniors. Rebellion was the key starting point. Adventure, music and other symbols of 'cool' became a perfect recipe for creating cult brands that rallied against the system. This model of tapping youth presupposes that it's always youth versus old. It also preoccupies itself with a continuous search for what's 'cool' among youth. Since the behavioural distance between the youth and the others in these societies is significant, it's easy to rally youth around such points of difference. This model however is at a loss in India, where everything and everyone is young.

NEED OF THE STUDY

Digital Marketing has brought astonishing changes in the way in which the marketer markets the product and the way in which the customers are buying the same. Buying behaviour of an individual influences many factors, and these factors invariably affects the marketer to match the needs of the customers in general and youth in particular. So it is realized that there is a need to study Digital Marketing and its impact on buying behavior of the youth.

STATEMENT OF THE PROBLEM

Thanks to the development of science and technology today's innovation becomes obsolete tomorrow. The tastes and preferences of the consumers are also changing at a rapid rate. The marketers are finding it difficult to cope up with the changing need of the customers. These changes in the expectations of the customers are due to many reasons, but one of the main reasons is changing buying behaviour. Buying behaviour changes are more seen among the youth than the younger children and old age people. The buying behaviour of younger generation not only influences their individual buying behavior, but also it influences the buying behavior of the family. As a marketer one needs to understand the changing needs of the customers and produce the goods and services accordingly.

OBJECTIVES OF THE STUDY

1. To identify the factors influencing the changing buying behavior of the youth
2. To examine the changing buying behaviour of the youth and their impact on Digital marketing
3. To suggest the Indian marketers, the changing buying behaviour of the youth and its influences on their buying behavior.

RESEARCH METHODOLOGY

The study is a conceptual study conducted through the review of various studies conducted in this area. Several literatures have been reviewed to understand the youth and their buying behavior in general.

SOURCES OF DATA

This is a conceptual paper based on the review of literature. Several literatures have been referred. Some secondary sources were also used wherever necessary. Such secondary sources are drawn from the published articles, research papers, census survey, published general reports, sources through related websites etc.

SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION**FINDINGS**

1. India is the 5th largest nation in term of YouTube users
2. On an average, Indian's spend around 16 hours a week online, which completely overshadowed Television.
3. The Indian Online advertising market is growing fast at the rate of 50% per year and it was reported to cross 1000 crores in 2020.
4. The factors which generally influence the buying behaviour of the youth includes, lifestyle, attracting the opposite sex, purchasing power, family background, employment status of the youth, intervention of Western culture, educational qualification etc.
5. India has nearly 950 mobile subscribers and at least 50 million subscribers have internet enables mobile phones.
6. The number of websites in India is more than 90 million while that of Facebook profiles is more than 500 million.
7. Every day over 8 million inbound and 12 billion outbound messages are sent via Whatsapp.
8. Besides, online retail in India is on rise as 60% percent of web users in the country visit online retail sites.

9. The study reveals that most of the youngsters of the present generation have access to the digital media but they lack the awareness about its optimum utilization.
10. Using mobile internet and many more other factors account for a growing digital marketing industry in India.
11. When all other industries in India are struggling with 10 to 12 %, digital marketing industry is booming high with 30% growth rate.
12. Even after having such blowing opportunity, India still lack people who are skilled and mastered in Digital marketing.
13. India needs talented Digital marketers who can use this opportunity which can create a revolution. Things will get better in the current scenario and in future too as India has the resources. All that to be done is to polish the talent.
14. The markets of the present day also do lot of research to understand the youth and their buying behaviour pattern, so that they can match to the requirement of the youth segment
15. Buying behaviour is a changing factor and that too it is changing at a faster rate, so most of the products which is of recent innovation becomes obsolete too quickly
16. Innovation kills innovation. Due to changing technology what is an innovation today becomes obsolete tomorrow. This poses many challenges to the marketers.

SUGGESTIONS

1. Marketers need to understand the accessibility of the digital facilities to the youth segment, before launching any product in online.
2. Marketers need to conduct pre market survey to identify the need of the consumers especially in digital marketing.
3. Consumers need to be aware of digital marketing and there is a need to create a proper awareness.
4. As most of the studies revealed that the customers are risk averse and hence they need to be taught how to handle risk associated with digital marketing.
5. The study ultimately suggests the readers and users to be aware of all the Digital marketing portals and make use of their utility to the maximum extent with utmost care and caution.

CONCLUSION

To conclude, the youth, their buying behaviour, their purchasing power, awareness about the products etc. have greater influence on the individual and family buying behaviour. As per the present National Youth Policy there are around 33 crore population in India is the youth in the age range of 15-29 years. They form a major portion of market segment in India. Every marketer must understand the psychology of these youth segment, so that they can be a successful marketer in the days to come in the competitive economy. The Digital marketing which has revolutionized the economy in general and marketing in particulars poses many threat and challenges to the marketer in the competitive market. Changing buying behaviour warrant the marketers to understand the youth in a better way to devise suitable marketing strategies to retain the present and to capture the potential market, so that the market can move on from the mere customer oriented marketing approach to Technological Customer Oriented Marketing approach in the near future.

LIMITATIONS OF THE STUDY

1. The study is based on the review of the various studies conducted in India and abroad, hence the outcome cannot be generalised to Indian specific market situation.
2. Though several studies have been conducted only a few selected studies which were relevant were reviewed for better understanding of the concept
3. This is a conceptual paper not an aspherical study based on the primary data and its analysis.

SCOPE FOR FURTHER RESEARCH

1. The present study is only a conceptual study hence there is a scope for conducting an aspherical study on the same topic in a given specific area.
2. The study can be diversified into the buying behavior of the individual in general.
3. A study also can be carried out to exclusively examining the different digital marketing medium and analysis its pros and cons.

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DEMONETIZATION AND PARALLEL ECONOMY**SILKY JAIN****H. N 874/35, W NO-2****MILAN PARK, JANTA COLONY****ROHTAK****DEEPAK GUPTA****ASST. PROFESSOR****INDIRA GANDHI MEERPUR UNIVERSITY****REWARI****ABSTRACT**

Demonetization is a radical monetary step in which a currency unit's status as a legal tender is declared invalid. This is usually done whenever there is a change of national currency, replacing the old unit with a new one. Prime Minister Narendra Modi's sudden announcement to demonetize Rs 500 and Rs 1,000 notes in circulation, though welcomed by people across the country, has left many in the lurch. Despite facing the opposition's ire, the Prime Minister, in an impassioned plea on Sunday, urged the people to support the move while asking them to bear the "pain for 50 days" to help him deliver the "India of your dreams". The surprise move by the govt. is a disaster for people who have accumulated lakhs and crores of unaccounted cash under their pillows and mattresses. By moving Rs 500 and 1000 notes out of the circulation govt. wants to clamp down on the parallel economy which runs side by side to the main economy or structured economy. The present paper is aimed at to study the impact of demonetization on parallel economy.

KEYWORDS

demonetization, parallel economy, structured economy.

INTRODUCTION

The Government of India announced that the Rs 500 and Rs. 1000 denominated currency notes will cease to be legal tender. Since our govt. is replacing the old Rs. 500 notes with newer ones and doing away with Rs.1000 notes, it would be more appropriate to call the move as 'scrapping' or 'phasing out' of certain currency notes.

The move was targeted towards:

1. Eliminating fake currency;
2. Inflicting losses on those with black money;
3. Disrupting terror and criminal activities.

Later, new objectives were tracked on:

4. Enabling growth in bank credit,
5. Turning India into a cashless economy.

It is going to be one of the economic events of our time. Its impact is felt by every Indian citizen. It affects the economy through the liquidity side.

A study by the National Investigation Agency and the Indian Statistical Institute, in 2016, estimated that fake Indian currency notes in circulation have a face value of Rs 400 crores. This is an incidence of fake currency of 0.022%. The scale of counterfeiting of the Indian rupee is not out of line with what is seen in other countries, and the procedures adopted worldwide to address this include investigative actions against counterfeiters, phased replacement of old series of notes with new notes that have better security features, etc. De-monetization is generally not seen as a tool for dealing with counterfeiting. We must also not forget that the counterfeiters will now get to work on the new 500/2000 rupee notes. When talking about international level, such a step was taken when the European Monetary Union nations decided to adopt Euro as their currency. However, the old currencies were allowed to convert into Euros for a period of time in order to ensure a smooth transition through demonetization. Zimbabwe, Fiji, Singapore and Philippines were other countries to have opted for currency demonetization.

HISTORY OF DEMONETIZATION

The term demonetization is already experienced by the Indian economy. Periodic experiences are cited as under:

1946: In Jan. 1946, Rs 1,000, Rs 5,000, and Rs 10,000 notes were taken out of circulation. The highest denomination note ever printed by the Reserve Bank of India was the Rs 10,000 note in 1938. However, all these three notes were reintroduced in a fresh avatar eight years later in 1954 before the Morarji Desai government demonetized these notes in 1978.

1977: The Wanchoo committee a direct tax inquiry committee, (set up in 1970s), suggested demonetization as a measure to unearth and counter the spread of black money. But this recommendation sparked black money hoarders to act fast and rid themselves of high denominations before the government was able to clamp down on them. Rs 1,000, Rs 5,000 and Rs 10,000 notes became illegal for the second time in Jan. 1978.

But these two phases of demonetization did not have a big impact on the country as less than 5 percent of population in India had access to such notes and most banks never had such currency notes. In the recent, it is the banning of the 500 and 1000 denomination currency notes as a legal tender. The government's move to discontinue high denomination notes is expected to make it difficult for hoarders to amass large sums of wealth, the suddenness of the move is likely to impact businesses of all sizes in the short term, experts said. Undoubtedly the common public and bankers are facing hardship with the latest round of demonetization. But this move will ensure that more transactions move from cash to digital modes and come under the purview of tax authorities in the long term.

It was decided to curb the illegal use of high denomination currency for corrupt deals in the country. More than 85 percent of currency in circulation has been rendered illegal. Demonetization surely would hamper the current economy in the prevailing situation and will also have impact on India's growth in the forth coming years and to have the positive long lasting effects.

WHAT IS PARALLEL ECONOMY

Economy consists of economic system of a country or other area, the labor, capital and land resources, and the economic agents participating in the production, exchange, distribution, and consumption of goods and services of that area. All kind of professions, occupations, economic agents or economic activities, contribute to the economy. Consumption, saving and investment are its core components and determinants.

Parallel economy means functioning of an unsanctioned sector in the economy whose objectives run parallel and in contradiction with the objectives of official or sanctioned or legitimate sector in the same economy (Rajaram, 2006, 577). This is variously referred to as unaccounted economy, illegal economy, subterranean economy, or unsanctioned economy, shadow economy and underground economy.

It is an economic activity that is neither taxed nor monitored by a government, contrasted with a formal economy. So it is not included in that government's Gross National Product (GNP). Black money is the currency of parallel economy.

According to the D. K. Rangnekar (as cited by Datta & Sundharam, 2004, 376), "If the 'Parallel economy poses a serious threat to stability and growth of the official economy, surely it stems from the fact that the magnitude of 'black-money' is large and rigged deals are growing in volume and complexity at an alarming rate. Apart from the wide ramifications of the 'parallel economy, one might also be alive to the fact that 'black incomes' are accentuating the inequalities in income and wealth and breeding a new class of 'black' rich in a society which is already harshly stratified."

Illegal economy is tax-evaded economy. It is possible to convert illegal economy or black money into white money and vice versa. The parallel economy has political, commercial, legal, industrial, social and ethical aspects. The objectives of the legitimate and illegitimate sectors running under parallel economy have wide confrontation. D.R.Pendse (as cited by Lekhi, 2003, 191) argued that there are two possible sources of black money. Firstly, it may originate from illegitimate source of income arising out of illegal gratification such as payment of 'Selami or Pagri' or income from smuggling, bribery etc. Secondly, it may originate from legitimate and legal sources of income but concealed from tax authorities out of tax evasion.

OBJECTIVES

Main objectives that are lying behind this paper are:

1. To analyze the causes of parallel economy.
2. To study the impact of parallel economy on the India's structured economy.
3. To analyze the impact of demonetization as a major initiative of Indian government to tackle this problem.

CAUSES OF GENERATION OF BLACK ECONOMY

1. Controls and licensing system give birth to black money in India.
2. Inflation: The increase in prices of commodities like crude oil etc. in international market causes a rise in the prices of commodities due to the increment in duties and taxes imposed by the government, which ultimately leads to buy things with unaccounted money.
3. Inappropriate tax structure: High rates of tax and ineffective enforcement of tax laws results in tax evasion as a growing tendency among the tax payers.
4. Funding of political parties with the help of black money.
5. Making money through shortcuts not out of extension of the business activities.
6. Agricultural income: The reluctance to bring the agricultural income in the realm of income tax has also contributed to creation of black money.
7. Privatization: Privatization has opened up a new area to the private sector as well as to ministers and bureaucrats for making black money.
8. Other factors: Generation of black money in a country like India also results from different activities like smuggling, property deals, Bribery, kickbacks, concealment of income by professionals, artists etc this way an enormous amount of black income results in enhancement of black money.

IMPACT OF PARALLEL ECONOMY ON THE INDIA'S STRUCTURED ECONOMY

Parallel economy is a new threat for the Indian economy. In India, this economy is expanding very rapidly. Generation of black income and thereby establishment of shadow economy has been creating the following serious impacts on the social and economic system of the country.

1. Underestimation of GDP: In India as an enormous volume of income is diverted to this unaccounted sector resulting in growing continuation of parallel economy which is not included in GDP.
2. Strengthening of the parallel economy.
3. Loss of revenue to the state exchequer as a result of tax evasion.
4. Diversion of resources to purchase real estate & luxury housing.
5. Transfer of funds from India to foreign countries through clandestine channels.
6. Inequalities in income and wealth.
7. Increase in real savings.
8. Virtues like hardwork and honesty are underestimated.
9. The existence of parallel economy has totally distorted and disrupted the planning of the economy.
10. It deals with the portion of the income that is earned from legal and illegal activities which cannot be accounted for by the standard measurement procedures used in computation of national income account.
11. Inflation.
12. Immensely complex tax system requiring inordinate taxpayer time, paper work and expenses.
13. Smaller share of national output for direct consumption by wage earners.
14. One of the more serious consequences of parallel economy is difficult to quantify namely the lack of public confidence in the system of taxation and general administration and the ability of the government to operate efficiently and fairly.

IMPACT OF DEMONETIZATION ON PARALLEL ECONOMY

The move is a "decisive blow" to the black economy. As we have faced two unsuccessful rounds of demonetization earlier but the present action has better chance of success as it proceeds logically. First, people across India were given an Identity card (Aadhar), then Jan-Dhan bank accounts were opened and people across India can transfer money using SMS today. This time there are better mechanisms that people can switch to.

Another argument is that, people can deposit the money now and withdraw cash five months later for black money transactions. Of course they can. But there are various laws that track the cash withdrawer. These guidelines were framed for Prevention of Money Laundering Act. As per RBI rules, under that every withdrawal needs a PAN card reference. Further, every branch manager is required to file detailed statement of weekly/monthly cash transactions. The cost-benefit for legitimate fellows becomes high. Tax authorities can easily monitor them.

It appears from the logical approach followed by the government that this is merely the beginning of effort against black money. I suspect these two mechanisms will be taken care of in subsequent actions. The most fundamental answer is that black money is not a pool but a chain. Breaking the chain or making it costly cause inconvenience to the poor who did not have access to bank systems. But with Jan-Dhan accounts, poor have ready access to banking channels (though not credit). So if you are law-abiding citizen then you can sail through mostly unscathed no matter how poor/rich you are.

BODY BLOW TO FAKE CURRENCY RACKETS

The move will also reduce the flow of fake currency in Indian markets as data shows that most of the counterfeit currency in circulation exists in high-denomination notes of Rs 500 and Rs 1000.

According to the Reserve Bank of India's annual report published in 2016, more than 2.61 lakh counterfeit notes in the denomination of Rs 500 were detected by banks in the year 2015-2016 while another 1.43 lakh fake notes of Rs 1000 were detected.

CONCLUSION

The demonetization undertaken by the government is a large shock to the economy. It is like a surgical strike on the parallel economy. The impact of the shock in the medium term is a function of how much of the currency will be replaced at the end of the replacement process and the extent to which currency in circulation is extinguished. While it has been argued that the cash that would be extinguished would be "black money" and hence, should be rightfully extinguished to set right the refractive incentive structure in the economy, this argument is based on impressions rather than on facts. While the facts are not available to anybody, it would be foolhardy to argue that this is the only possibility. As argued above, it is possible that these cash balances were used as a medium of exchange. In other

words, while the cash was mediating in legitimate economic activity, if this currency is extinguished there would be a contraction of economic activity in the economy and that is a cost that needs to be monitored in while assessing the impact of the demonetization on the parallel economy and its agents.

It is likely that there would be a spurt in the banking deposits. While interpreting the phenomenon, however, one has to keep in mind that a large part of their deposits were earlier used for transactional purposes. Black money is a wider societal ill and demonetization is but one step in the war against black money. The biggest mission of demonetization is described as fighting black money. India's economy historically holds a big parallel economy where unreported income is the norm. It sends a strong message about the government's anti-corruption drive and would improve India's reformist stance by clamping down on the parallel economy. The parallel economy will surely collapse. Demonetization is a fight against corruption. Dishonest will have to suffer, absolutely that is the right thing and also provides a boost to government's financial inclusion drive pushing more households towards efficient banking and payment infrastructure.

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AN EMPIRICAL ANALYSIS OF STOCK PRICE-VOLUME RELATIONSHIP: A CASE STUDY IN AMERICAN COUNTRIES

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ABSTRACT

In this paper examines the relationship between stock returns and trading volume for six American country indices. For this purpose, Unit root test, correlation, Granger Causality Tests, VAR and GARCH (1,1) have been used. There is no evidence of asymmetry in the relationship between the volatilities and trading volume; trading volume is not important in predicting their future dynamics as well as those of the return. The Granger-causality test shows the evidence of unidirectional causality running from return to volume for almost indices. This study also shows that data related to return, trading volume and volatilities are stationarity. According to GARCH model values of parameters indicates that old news has more effect. It also concludes that lagged trading volume does not contain information which can be useful in predicting stock returns.

KEYWORDS

American country indices, Stock price-volume relationship.

1. INTRODUCTION

The relationship between stock returns and volume has been widely documented in finance literature. The concept of the volume impact is built on the fact that price needs volume to move, thus, the high volatility of stock prices may be produced as consequence of volume volatility and trading activities. However, since investors are heterogeneous when interpreting new information, stock returns may stay unchanged even though new information is brought to the market. On the other hand, stock returns may only change if there is positive trading volume. As it happens with returns, trading volume and its changes mainly reflect the available set of relevant information perceived by the market. A large segment of the finance literature investigates the link between information and prices.

Understanding the relationship between returns, volatility and trading volume in financial markets is equally important for traders, researchers and policy makers. The distribution of returns has implications for various financial models and risk management practices. The dynamic relationship between returns and trading volume helps to understand the market clearing process and frictions in the market. Also, implications trading volume in forecasting volatility help segments like traders, with a very short term investment horizon and many portfolio managers that have a medium to long term investment horizon. This paper reports an empirical study for American Stock markets.

2. LITERATURE

There have been number of empirical studies in developed markets that provide evidence on their relationship between trading volume and stock returns. In the sequential information arrival model (arrival model and distribution model), the flow of information to the market participants is considered to be asymmetric (i.e., the new information is not disseminated to all market participants simultaneously); the model allows several intermediate equilibrium positions before the final market equilibrium is reached. Due to this sequential information flow, lagged trading volume may contain information that can be useful in predicting current stock returns and lagged stock returns may contain information that can be useful in predicting current trading volume. This suggests a positive causality between trading volume and stock returns running from either direction. The mixture of distribution model suggests a unidirectional causality from trading volume to stock returns. In this model, Epps (1976) uses trading volume to measure disagreement among traders; investors revise their reservation prices when the new information reaches the market and the level of trading volume increases as the degree of disagreement among market participants widens. Karpoff (1987) provides a comprehensive review of theoretical and empirical work together with reasons for the importance of understanding this relationship. Researchers in this area have examined the volume-price/return relationship in a variety of contexts by employing a range of analytical techniques. Chordia and Swaminathan (2000) examine the interrelationship between trading volume and the predictability of short-term stock returns. They find that daily and weekly returns of high volume portfolios lead returns of low volume portfolios. The authors attribute these findings to the differences in the speed of price adjustment to information between the two types of stocks; stocks in low volume portfolios respond slowly to market-wide information while their high volume counterparts responding promptly to such information. Sarika and Balwinder (2008) found the causality test support the sequentially arrival of information hypothesis, which implies that new information is not simultaneously available to all traders and it takes time to absorb, which hamper the price discovery efficiency of the market. Thus, volume provides information on the precision and dispersion of information signals rather than saving as a proxy for the information signal itself. This paper investigates the causal and dynamic relationship between stock returns and trading volume for nine indices.

3. HYPOTHESIS

The main purpose of this study is to test the long as well as short term relation between return and volume of European country indices. To address the objective of the study and after the review of literature, the following hypotheses are formulated and put on test using collected data.

Hypothesis 1: Existence of Unit Root (non stationarity) in stock indices;

Hypothesis 2: No causality is found between returns and volume (return and volatility);

Hypothesis 3: There is no correlation among return, volume and return;

Hypothesis 4: No dynamic relationship is measured between returns and trading volume and volatility and trading volume;

Hypothesis 5: There is no effect of conditional volatility; and

Hypothesis 6: There is no lagged relation between return (volatilities) and volume.

4. DATA AND RESEARCH METHODOLOGY

This paper investigates the relationship between stock indices trading volume, returns and volume and volatilities of six country indices. Daily price (High, Low) of all the sample countries are obtained over a period of five years. For this purpose, the data for indices are retrieved from econstats website. The dataset used in this study comprises of the equity indices and the corresponding trading volume series. Share price of each stock index is obtained as:

$$\text{Share Price} = (P_H + P_L) / 2$$

P_H = Highest market price during the day; and

P_L = Lowest market price during the day.

The **daily return** of the stock markets is calculated as:

$$R_t = \ln (P_t - P_{t-1})$$

Following methods have been applied for this paper:

- Testing for stationarity is done by using both the Augmented Dickey– Fuller and the Phillips-Perron tests. Augmented Dickey–Fuller (ADF) test is most frequently used test of unit root. It is based on simple logic. A non-stationary process has infinite memory as it does not show decay in a shock that takes place in the process. Every random shock carries away the process from its earlier level not to return back again unless another random shock push it towards its previous level. PP Test performs a Phillips-Perron univariate unit root test. This test assumes that the true underlying process is a unit root process with drift.
- A statistical approach proposed by Clive W Granger (1969) to infer cause and affect relationship between two or more time series is known as Granger causality. Granger Causality is based on the simple logic that effect cannot precede cause. It is important to note that the statement “ x Granger causes y ” does not imply that y is the effect or the result of x . Granger causality measures precedence and information contents. For causality Test, Granger test is used.
- Co integration is a statistical property of time series variables. If two or more series are individually integrated (in the time series sense) but some linear combination of them has a lower order of integration, then the series are said to be co integrated. Johansen Co-integration test is used for pinpointing the long run relationship among the markets under study.
- For testing the positive contemporaneous relationship between volume and return GARCH (1, 1) model has been used. In which one day lag return and volume is taken as dependent variable. Thus, to investigate whether trading volume explains the GARCH effects for returns, GARCH (1, 1) model with a volume parameter in the variance equation is applied.
- The vector auto regression (VAR) test is commonly used for forecasting systems of interrelated time series and for analyzing the dynamic impact of random disturbances on the system of variables. VAR process assumes that white noise is independently distributed with zero mean. Where each variable linearly depends upon its lagged values and lagged values of other variables in the vector, which implies that future value of the process are a weighted sum of the past and present value plus some noise and possible exogenous variables.

5. RESULT AND DISCUSSION

An augmented Dickey–Fuller test (ADF) is a test for a unit root in a time series sample. The augmented Dickey–Fuller (ADF) statistic, used in the test, is a negative number. ADF test statistic and test critical value at one, five and ten per cent for six indices is presented in tables-1. The more negative it is, the stronger the rejection of the hypothesis that there is a unit root at some level of confidence. It is cited from table that with using intercept term at the level form all ADF statistics are negative and significant at one and five per cent level. It reveals that null hypothesis is rejected and all American countries indices data are stationary. ADF test is also used with intercept and trend that is shown in table-2. It indicates the same result as with intercept, so it can be depicting that all indices data are stationary in their level forms.

The Phillips-Perron test provides an alternative way for checking the stationarity of a time series. Tables-3 and 4 shows the output related to PP test. The results of this test indicate that alternative hypotheses are accepted, statistics are negative and significant at one and five per cent level. It reveals that the time series of various stock indices under study are stationary at their level form. Both tests with intercept and intercept and trend are supporting the stationarity of six indices during the period of five years both separately and combined.

Correlation presents the picture of degree of relation between variables. For measuring the relation between among return, volume and volatilities have been used correlation. The results of this test have been presented in table-3. It can be said after analysis the table-5 that there is very less degree of relation exist among these three variables. Most of the observation shows negative correlation. It reveals that return, volume and volatilities of American indices are not correlated together.

Co- integration test is a property of two or more variables moving together through time but does not represent the correlation among them. Johansen’s co integration test is suitable for measuring the long run co-integration. For this purpose, trace statistics and Max-Eigen statistics have been measured between return and volume. Trace statistic and Eigen values are presented in tables-7 which state the four co-integrating vectors exist at one and five per cent level. Max-Eigen statistic and Eigen value also tells long run co integration exists between return and volume which is states in table-8. Therefore, both the tests conclude that return and volatility of six American country indices is co-integrated. It means that return has a long run co-integration with the trading volume.

Granger causality test has been used for lagged values of one series have significant explanatory power for another series. For knowing the cause and effect variables such as return and volume Granger causality test results have been presented in Table-9. This study reveals that volume of all indices have not significant effect on return, it means volume is not cause for return fluctuating. This study also states there are many observations which return has significant effect on volume. This test result supports the one-way causality.

For knowing the degree and the direction of correlation among volatilities and volume pair- wise Granger Causality tests have been conducted. Table-10 presents the results, when analysis is done on volatility and trading volume. It states that there are some observation shows one-way causality between volatility and trading volume of all indices. In which volume is cause and volatilities is effect. But majority of observation depicts no causality found between volume and volatilities. It can be said that proceeding information related to volume has significant effect in a very few cases. But proceeding return information has not significant effect.

In order to investigate the effect of trading volume and conditional volatilities, time series of all stock returns are using GARCH (1, 1) model with a volume parameter in the mean equation. The results of this model are reported in table-11. It indicates that contemporaneous relationship only exists in IBC. Thus, Canada and Brazil stock markets show significant relation. It can be reveals that return and trading volume relation does not exist in American countries except in few cases (six cases out of thirty-four cases).

It can be seen from table-11 that conditional variance is affected by lagged variance, which shows that previous information significantly affects current returns. This study also presents that in all observation past conditional variance have a greater impact on volatilities of sport market returns than recent news announcement. It reveals that country indices are more affected by old news and less by current news.

For investigate the volume explains the GARCH effects for return, GARCH (1, 1) model with a volume parameter in the variance equation is measured. It can be cited from table-12 that coefficient of volume is significant in all stock markets shows positive volume coefficient. It reveals that in all stock markets volume explains the GARCH effect. This study also present that persistence of volatility is decline, when volume is included in variance equation.

VAR has been also applying for testing the effect of lagged volatilities with trading volume. It can be seen from tables-13 and 14 that volatilities have not been affected by lagged volume. Therefore, lagged return has no significant effect on volume. It can be cited that lagged volume has not effect on risk of all indices.

6. CONCLUSION

This study investigates relationship between the stock price and trading volume. The findings of the present study are as follows:

- All country indices data are stationarity;
- There is no strong degree of correlation found between return and volume as well as return, volatilities and volume;
- Results of co-integration test indicates that long term relation are predicting between return and volume;
- This study reveals that volume is not cause for return fluctuating. But states that return has significant effect on volume. This test result supports the one way causality.
- There is no contemporaneous relationship between return and volume according to GARCH (1,1) model;
- current news has less effect as compared to old news on stock markets;
- Return and volatilities have not been affected by lagged volume.

On comparing the present study with the previous studies, it has been found that there is some variation in the results. The result of American country indices does not fully support the other country indices such as return, volume and volatilities relation.

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ANNEXURE

TABLE 1: AUGMENTED DICKEY-FULLER TEST (INTERCEPT)

Name of Country Indices	Years	First		Second		Third		Fourth		Fifth		First to Fifth	
		Test critical values	ADF test statistic	P V	ADF test statistic	P V	ADF test statistic	PV	ADF test statistic	P V	ADF test statistic	P V	ADF test statistic
Dow Jones Composites	ADF test statistic	-11.48729	0	-12.95406	0	-13.95803	0	-12.33063	0	-13.45139	0	-26.21102	0
	1% level	-3.456622		-3.45673		-3.456514		-3.456408		-3.456408		-3.435356	
	5% level	-2.872998		-2.873045		-2.87295		-2.872904		-2.872904		-2.863638	
	10% level	-2.572951		-2.572976		-2.572925		-2.5729		-2.5729		-2.567937	
	ADF test statistic	-7.982171	0	-8.266299	0	-3.834218	0	-4.224266	0	-6.565492	0	-3.846714	0
	1% level	-3.456514		-3.45673		-3.45673		-3.456408		-3.456408		-3.435369	
	5% level	-2.87295		-2.873045		-2.873045		-2.872904		-2.872904		-2.863644	
	10% level	-2.572925		-2.572976		-2.572976		-2.5729		-2.5729		-2.56794	
	ADF test statistic	-13.03589	0	-13.25961	0	-11.72015	0	-6.517718	0	-5.655502	0	-4.575422	0
	1% level	-3.456514		-3.45673		-3.456514		-3.456408		-3.45695		-3.435436	
	5% level	-2.87295		-2.873045		-2.87295		-2.872904		-2.873142		-2.863674	
	10% level	-2.572925		-2.572976		-2.572925		-2.5729		-2.573028		-2.567956	
IPC All-Share	ADF test statistic	-11.54154	0	-10.51079	0	-13.07097	0	-11.08302	0	-11.49636	0	-24.62727	0
	1% level	-3.455887		-3.45684		-3.45684		-3.456514		-3.454626		-3.435271	
	5% level	-2.872675		-2.873093		-2.873093		-2.87295		-2.872121		-2.863601	
	10% level	-2.572778		-2.573002		-2.573002		-2.572925		-2.572482		-2.567917	
	ADF test statistic	-9.218451	0	-9.824495	0	-9.852177	0	-6.25061	0	-10.73946	0	-7.51569	0
	1% level	-3.455887		-3.45673		-3.45684		-3.456514		-3.454534		-3.435283	
	5% level	-2.872675		-2.873045		-2.873093		-2.87295		-2.872081		-2.863606	
	10% level	-2.572778		-2.572976		-2.573002		-2.572925		-2.57246		-2.56792	
	ADF test statistic	-13.07134	0	-5.334211	0	-12.70102	0	-3.09787	0	-13.0564	0	-5.654531	0
	1% level	-3.455887		-3.45695		-3.45684		-3.45695		-3.454534		-3.435352	
	5% level	-2.872675		-2.873142		-2.873093		-2.873142		-2.872081		-2.863637	
	10% level	-2.572778		-2.573028		-2.573002		-2.573028		-2.57246		-2.567936	
S&P TSX Index Compo	ADF test statistic	-11.81111	0	-12.38585	0	-12.41946	0	-13.66301	0	-11.29203	0	-28.68848	0
	1% level	-3.460173		-3.45695		-3.457286		-3.456622		-3.456622		-3.435532	
	5% level	-2.874556		-2.873142		-2.873289		-2.872998		-2.872998		-2.863716	
	10% level	-2.573784		-2.573028		-2.573106		-2.572951		-2.572951		-2.567979	
	ADF test statistic	-3.206486	0	-10.06064	0	-10.12756	0	-8.366059	0	-6.607251	0	-4.427504	0
	1% level	-3.460596		-3.45695		-3.457286		-3.456622		-3.456622		-3.435572	
	5% level	-2.874741		-2.873142		-2.873289		-2.872998		-2.872998		-2.863734	
	10% level	-2.573883		-2.573028		-2.573106		-2.572951		-2.572951		-2.567988	
	ADF test statistic	-13.7395	0	-7.392389	0	-6.014855	0	-2.908331	0	-14.04902	0	-3.21184	0.02
	1% level	-3.460173		-3.457061		-3.457515		-3.457061		-3.456514		-3.435636	
	5% level	-2.874556		-2.87319		-2.87339		-2.87319		-2.87295		-2.863762	
	10% level	-2.573784		-2.573054		-2.57316		-2.573054		-2.572925		-2.568003	
IBC	ADF test statistic	-11.35018	0	-7.794141	0	-10.13481	0	-8.817378	0	-12.16006	0	-11.35091	0
	1% level	-3.437152		-3.457865		-3.458347		-3.4574		-3.460453		-3.437145	
	5% level	-2.864432		-2.873543		-2.873755		-2.873339		-2.874679		-2.864429	
	10% level	-2.568363		-2.573242		-2.573355		-2.573133		-2.57385		-2.568361	
	ADF test statistic	-4.774053	0	-11.88661	0	-5.489504	0	-12.29448	0	-15.11683	0	-6.770298	0
	1% level	-3.43716		-3.45763		-3.45847		-3.457286		-3.460453		-3.437137	
	5% level	-2.864435		-2.87344		-2.873809		-2.873289		-2.874679		-2.864425	
	10% level	-2.568364		-2.573187		-2.573384		-2.573106		-2.57385		-2.568359	
	ADF test statistic	-6.758792	0	-5.183407	0	-9.98836	0	-10.84238	0	-9.699194	0	-6.760109	0
	1% level	-3.437167		-3.457747		-3.458347		-3.457286		-3.460453		-3.43716	
	5% level	-2.864439		-2.873492		-2.873755		-2.873289		-2.874679		-2.864435	
	10% level	-2.568366		-2.573215		-2.573355		-2.573106		-2.57385		-2.568364	
S&P 500	ADF test statistic	-11.7438	0	-12.09596	0	-12.77088	0	-12.70021	0	-12.77715	0	-26.78395	0
	1% level	-3.456408		-3.456622		-3.456622		-3.456408		-3.456408		-3.435352	
	5% level	-2.872904		-2.872998		-2.872998		-2.872904		-2.872904		-2.863637	
	10% level	-2.5729		-2.572951		-2.572951		-2.5729		-2.5729		-2.567936	
	ADF test statistic	-7.952085	0	-8.274563	0	-3.351489	0	-4.200383	0	-6.560958	0	-3.839428	0
	1% level	-3.456408		-3.456622		-3.45695		-3.456408		-3.456408		-3.435365	

	5% level	-2.872904		-2.872998		-2.873142		-2.872904		-2.872904		-2.863642	
	10% level	-2.5729		-2.572951		-2.573028		-2.5729		-2.5729		-2.567939	
	ADF test statistic	-12.69339	0	-13.16368	0	-13.06813	0	-3.452013	0	-18.57597	0	-3.42563	0.01
	1% level	-3.456408		-3.456622		-3.456622		-3.45673		-3.456408		-3.435453	
	5% level	-2.872904		-2.872998		-2.872998		-2.873045		-2.872904		-2.863681	
	10% level	-2.5729		-2.572951		-2.572951		-2.572976		-2.5729		-2.56796	
Bovespa	ADF test statistic	-	-	-	-	-12.49045	0	-12.11662	0	-11.9985	0	-19.59529	0
	1% level	-	-	-	-	-3.45847		-3.45673		-3.457286		-3.439142	
	5% level	-	-	-	-	-2.873809		-2.873045		-2.873289		-2.86531	
	10% level	-	-	-	-	-2.573384		-2.572976		-2.573106		-2.568834	
	ADF test statistic	-	-	-	-	-2.203871	0.2	-3.269686	0	-9.661854	0	-3.350945	0.01
	1% level	-	-	-	-	-3.458973		-3.457061		-3.457286		-3.439398	
	5% level	-	-	-	-	-2.874029		-2.87319		-2.873289		-2.865423	
	10% level	-	-	-	-	-2.573502		-2.573054		-2.573106		-2.568894	
	ADF test statistic	-	-	-	-	-12.38074	0	-3.16391	0	-16.22898	0	-5.338304	0
	1% level	-	-	-	-	-3.45847		-3.457061		-3.457286		-3.43918	
	5% level	-	-	-	-	-2.873809		-2.87319		-2.873289		-2.865327	
	10% level	-	-	-	-	-2.573384		-2.573054		-2.573106		-2.568843	

PV: P Value

Exogenous: Level; and Lag Length: Automatic based on SIC, MAXLAG=25

TABLE 2: AUGMENTED DICKEY-FULLER TEST (TREND AND INTERCEPT)

Name of Country Indices	Years	First		Second		Third		Fourth		Fifth		First to Fifth	
		ADF test statistic	PV	ADF test statistic	PV	ADF test statistic	PV	ADF test statistic	PV	ADF test statistic	PV	ADF test statistic	PV
Dow Jones Composites	ADF test statistic	-11.49391	0	-12.93144	0	-13.97084	0	-12.32127	0	-13.42993	0	-26.20598	0
	1% level	-3.995492		-3.995645		-3.99534		-3.995189		-3.995189		-3.965387	
	5% level	-3.428049		-3.428123		-3.427975		-3.427902		-3.427902		-3.413402	
	10% level	-3.137397		-3.13744		-3.137353		-3.13731		-3.13731		-3.128737	
	ADF test statistic	-8.970338	0	-9.2942	0	-4.616176	0	-5.152286	0.0001	-7.956892	0	-6.274281	0
	1% level	-3.99534		-3.995645		-3.995645		-3.995189		-3.995189		-3.965404	
	5% level	-3.427975		-3.428123		-3.428123		-3.427902		-3.427902		-3.41341	
	10% level	-3.137353		-3.13744		-3.13744		-3.13731		-3.13731		-3.128743	
	ADF test statistic	-13.19235	0	-13.42507	0	-12.15675	0	-6.669428	0	-22.17203	0	-4.754284	0.0006
	1% level	-3.99534		-3.995645		-3.99534		-3.995189		-3.995189		-3.9655	
IPC All-Share	ADF test statistic	-11.51758	0	-10.52787	0	-13.04198	0	-11.06853	0	-11.64928	0	-24.64375	0
	1% level	-3.994453		-3.9958		-3.9958		-3.99534		-3.99267		-3.965265	
	5% level	-3.427546		-3.428198		-3.428198		-3.427975		-3.426682		-3.413342	
	10% level	-3.1371		-3.137485		-3.137485		-3.137353		-3.13659		-3.128702	
	ADF test statistic	-10.19931	0	-9.87605	0	-10.04469	0	-6.481183	0	-10.70638	0	-10.11006	0
	1% level	-3.994453		-3.995645		-3.9958		-3.99534		-3.99254		-3.965282	
	5% level	-3.427546		-3.428123		-3.428198		-3.427975		-3.426619		-3.413351	
	10% level	-3.1371		-3.13744		-3.137485		-3.137353		-3.136553		-3.128707	
	ADF test statistic	-13.13353	0	-5.565782	0	-12.89529	0	-3.130276	0.1016	-13.77151	0	-5.727942	0
	1% level	-3.994453		-3.995956		-3.9958		-3.995956		-3.99254		-3.965381	
S&P TSX Index Compo	ADF test statistic	-11.79634	0	-12.40409	0	-12.41652	0	-13.63628	0	-11.33454	0	-28.68606	0
	1% level	-4.000511		-3.995956		-3.996431		-3.995492		-3.995492		-3.965636	
	5% level	-3.430477		-3.428273		-3.428503		-3.428049		-3.428049		-3.413524	
	10% level	-3.138828		-3.137529		-3.137665		-3.137397		-3.137397		-3.12881	
	ADF test statistic	-11.31665	0	-10.16656	0	-10.25425	0	-8.627038	0	-10.67353	0	-7.495607	0
	1% level	-4.000511		-3.995956		-3.996431		-3.995492		-3.99534		-3.965661	
	5% level	-3.430477		-3.428273		-3.428503		-3.428049		-3.427975		-3.413536	
	10% level	-3.138828		-3.137529		-3.137665		-3.137397		-3.137353		-3.128817	
	ADF test statistic	-13.83988	0	-7.617578	0	-6.351644	0	-2.939485	0.152	-15.46527	0	-3.28927	0.0685
	1% level	-4.000511		-3.996113		-3.996754		-3.996113		-3.99534		-3.965783	
5% level	-3.430477		-3.428349		-3.42866		-3.428349		-3.427975		-3.413596		
10% level	-3.138828		-3.137574		-3.137757		-3.137574		-3.137353		-3.128852		

IBC	ADF test statistic	-11.34529	0	-7.783227	0	-10.15065	0	-8.941883	0	-12.13196	0	-11.34777	0
	1% level	-3.967937		-3.99725		-3.99793		-3.996592		-4.000907		-3.967926	
	5% level	-3.414648		-3.4289		-3.429229		-3.428581		-3.430669		-3.414643	
	10% level	-3.129476		-3.137898		-3.138092		-3.137711		-3.138941		-3.129473	
	ADF test statistic	-11.88858	0	-11.84888	0	-6.93229	0	-12.70402	0	-15.10069	0	-9.096161	0
	1% level	-3.967905		-3.996918		-3.998104		-3.996431		-4.000907		-3.967916	
	5% level	-3.414633		-3.428739		-3.429313		-3.428503		-3.430669		-3.414638	
	10% level	-3.129467		-3.137804		-3.138142		-3.137665		-3.138941		-3.12947	
	ADF test statistic	-6.821037	0	-5.383075	0	-10.43777	0	-10.78422	0	-9.752081	0	-6.837949	0
	1% level	-3.967958		-3.997083		-3.99793		-3.996431		-4.000907		-3.967948	
	5% level	-3.414659		-3.428819		-3.429229		-3.428503		-3.430669		-3.414653	
	10% level	-3.129482		-3.137851		-3.138092		-3.137665		-3.138941		-3.129479	
S&P 500	ADF test statistic	-11.72482	0	-12.08028	0	-12.82654	0	-12.67567	0	-12.76479	0	-26.77487	0
	1% level	-3.995189		-3.995492		-3.995492		-3.995189		-3.995189		-3.965381	
	5% level	-3.427902		-3.428049		-3.428049		-3.427902		-3.427902		-3.413399	
	10% level	-3.13731		-3.137397		-3.137397		-3.13731		-3.13731		-3.128736	
	ADF test statistic	-8.940396	0	-9.306125	0	-4.821852	0	-5.139357	0.0002	-7.935924	0	-6.291544	0
	1% level	-3.995189		-3.995492		-3.9958		-3.995189		-3.995189		-3.965398	
	5% level	-3.427902		-3.428049		-3.428198		-3.427902		-3.427902		-3.413408	
	10% level	-3.13731		-3.137397		-3.137485		-3.13731		-3.13731		-3.128741	
	ADF test statistic	-12.73338	0	-13.16194	0	-14.28547	0	-3.537928	0.0376	-19.8236	0	-3.54737	0.0349
	1% level	-3.995189		-3.995492		-3.995492		-3.995645		-3.995189		-3.965524	
	5% level	-3.427902		-3.428049		-3.428049		-3.428123		-3.427902		-3.413469	
	10% level	-3.13731		-3.137397		-3.137397		-3.13744		-3.13731		-3.128777	
Bovespa	ADF test statistic	-	-	-	-	-12.5203	0	-12.10512	0	-12.02165	0	-19.58425	0
	1% level	-	-	-	-	-3.998104		-3.995645		-3.996431		-3.970761	
	5% level	-	-	-	-	-3.429313		-3.428123		-3.428503		-3.416027	
	10% level	-	-	-	-	-3.138142		-3.13744		-3.137665		-3.130293	
	ADF test statistic	-	-	-	-	-2.919996	0.16	-6.320282	0	-9.646125	0	-2.534162	0.3114
	1% level	-	-	-	-	-3.998815		-3.995645		-3.996431		-3.971123	
	5% level	-	-	-	-	-3.429657		-3.428123		-3.428503		-3.416204	
	10% level	-	-	-	-	-3.138345		-3.13744		-3.137665		-3.130397	
	ADF test statistic	-	-	-	-	-12.63636	0	-3.145878	0.0982	-16.47037	0	-5.338229	0
	1% level	-	-	-	-	-3.998104		-3.996113		-3.996431		-3.970814	
	5% level	-	-	-	-	-3.429313		-3.428349		-3.428503		-3.416053	
	10% level	-	-	-	-	-3.138142		-3.137574		-3.137665		-3.130308	

PV: P Value

Exogenous: Level; and Lag Length: Automatic based on SIC, MAXLAG=25

TABLE 3: PHILLIPS-PERRON TEST STATISTIC (INTERCEPT)

Name of Country Indices	Years	First		Second		Third		Fourth		Fifth		First to Fifth	
		Test critical values	PP test statistic	P	PP test statistic	P	PP test statistic	P	PP test statistic	P	PP test statistic	P	PP test statistic
Dow Jones Composites	PP test statistic	-12.5354	0	-12.9125	0	-13.9668	0	-13.9463	0	-13.4359	0	-30.222	0
	1% level	-3.45651		-3.45673		-3.45651		-3.4563		-3.45641		-3.43535	
	5% level	-2.87295		-2.87305		-2.87295		-2.87286		-2.8729		-2.86364	
	10% level	-2.57293		-2.57298		-2.57293		-2.57288		-2.5729		-2.56794	
	PP test statistic	-8.10957	0	-8.42533	0	-7.2605	0	-5.18256	0	-6.37865	0	-6.73401	0
	1% level	-3.45651		-3.45673		-3.45651		-3.4563		-3.45641		-3.43535	
	5% level	-2.87295		-2.87305		-2.87295		-2.87286		-2.8729		-2.86364	
	10% level	-2.57293		-2.57298		-2.57293		-2.57288		-2.5729		-2.56794	
	PP test statistic	-13.0359	0	-13.2575	0	-12.243	0	-12.1785	0	-19.6999	0	-32.7051	0
	1% level	-3.45651		-3.45673		-3.45651		-3.4563		-3.45641		-3.43535	
	5% level	-2.87295		-2.87305		-2.87295		-2.87286		-2.8729		-2.86364	
	10% level	-2.57293		-2.57298		-2.57293		-2.57288		-2.5729		-2.56794	
IPC All-Share	PP test statistic	-10.9831	0	-10.5761	0	-13.0111	0	-11.0958	0	-11.4376	0	-25.0928	0
	1% level	-3.45589		-3.45673		-3.45684		-3.45641		-3.45453		-3.43527	
	5% level	-2.87268		-2.87305		-2.87309		-2.8729		-2.87208		-2.8636	
	10% level	-2.57278		-2.57298		-2.573		-2.5729		-2.57246		-2.56792	
	PP test statistic	-9.41048	0	-9.74609	0	-9.81779	0	-9.81246	0	-11.0117	0	-24.9807	0
	1% level	-3.45589		-3.45673		-3.45684		-3.45641		-3.45453		-3.43527	
	5% level	-2.87268		-2.87305		-2.87309		-2.8729		-2.87208		-2.8636	
	10% level	-2.57278		-2.57298		-2.573		-2.5729		-2.57246		-2.56792	

	PP test statistic	-13.0367	0	-12.2805	0	-13.2158	0	-10.5002	0	-13.0866	0	-32.2124	0
	1% level	-3.45589		-3.45673		-3.45684		-3.45641		-3.45453		-3.43527	
	5% level	-2.87268		-2.87305		-2.87309		-2.8729		-2.87208		-2.8636	
	10% level	-2.57278		-2.57298		-2.573		-2.5729		-2.57246		-2.56792	
S&P TSX Index Compo	PP test statistic	-11.8111	0	-12.3347	0	-12.2465	0	-13.6159	0	-11.4088	0	-28.4304	0
	1% level	-3.46017		-3.45695		-3.45729		-3.45662		-3.45651		-3.43553	
	5% level	-2.87456		-2.87314		-2.87329		-2.873		-2.87295		-2.86372	
	10% level	-2.57378		-2.57303		-2.57311		-2.57295		-2.57293		-2.56798	
	PP test statistic	-9.13825	0	-10.6529	0	-10.2155	0	-8.32872	0	-9.89141	0	-20.5626	0
	1% level	-3.46017		-3.45695		-3.45729		-3.45662		-3.45651		-3.43553	
	5% level	-2.87456		-2.87314		-2.87329		-2.873		-2.87295		-2.86372	
	10% level	-2.57378		-2.57303		-2.57311		-2.57295		-2.57293		-2.56798	
	PP test statistic	-13.7623	0	-13.5531	0	-12.1629	0	-15.276	0	-14.2418	0	-39.3502	0
	1% level	-3.46017		-3.45695		-3.45729		-3.45662		-3.45651		-3.43553	
	5% level	-2.87456		-2.87314		-2.87329		-2.873		-2.87295		-2.86372	
	10% level	-2.57378		-2.57303		-2.57311		-2.57295		-2.57293		-2.56798	
IBC	PP test statistic	-21.8949	0	-10.4969	0	-10.0261	0	-12.6651	0	-12.158	0	-21.9197	0
	1% level	-3.43712		-3.45763		-3.45835		-3.45729		-3.46045		-3.43711	
	5% level	-2.86442		-2.87344		-2.87376		-2.87329		-2.87468		-2.86441	
	10% level	-2.56835		-2.57319		-2.57336		-2.57311		-2.57385		-2.56835	
	PP test statistic	-24.5829	0	-12.1698	0	-9.62322	0	-12.5988	0	-15.1163	0	-24.9965	0
	1% level	-3.43712		-3.45763		-3.45835		-3.45729		-3.46045		-3.43711	
	5% level	-2.86442		-2.87344		-2.87376		-2.87329		-2.87468		-2.86441	
	10% level	-2.56835		-2.57319		-2.57336		-2.57311		-2.57385		-2.56835	
	PP test statistic	-22.207	0	-10.0386	0	-10.3577	0	-10.8873	0	-9.69919	0	-22.2203	0
	1% level	-3.43712		-3.45763		-3.45835		-3.45729		-3.46045		-3.43711	
	5% level	-2.86442		-2.87344		-2.87376		-2.87329		-2.87468		-2.86441	
	10% level	-2.56835		-2.57319		-2.57336		-2.57311		-2.57385		-2.56835	
S&P 500	PP test statistic	-11.6165	0	-12.096	0	-12.5563	0	-13.4409	0	-12.8316	0	-28.6097	0
	1% level	-3.45641		-3.45662		-3.45662		-3.4563		-3.45641		-3.43535	
	5% level	-2.8729		-2.873		-2.873		-2.87286		-2.8729		-2.86364	
	10% level	-2.5729		-2.57295		-2.57295		-2.57288		-2.5729		-2.56794	
	PP test statistic	-8.07125	0	-8.43231	0	-8.7452	0	-5.38742	0	-6.3785	0	-7.61807	0
	1% level	-3.45641		-3.45662		-3.45662		-3.4563		-3.45641		-3.43535	
	5% level	-2.8729		-2.873		-2.873		-2.87286		-2.8729		-2.86364	
	10% level	-2.5729		-2.57295		-2.57295		-2.57288		-2.5729		-2.56794	
	PP test statistic	-12.5963	0	-13.3925	0	-14.2618	0	-13.3832	0	-18.181	0	-35.795	0
	1% level	-3.45641		-3.45662		-3.45662		-3.4563		-3.45641		-3.43535	
	5% level	-2.8729		-2.873		-2.873		-2.87286		-2.8729		-2.86364	
	10% level	-2.5729		-2.57295		-2.57295		-2.57288		-2.5729		-2.56794	
Bovespa	PP test statistic	-	-	-	-	-12.4464	0	-12.5317	0	-11.7398	0	-21.109	0
	1% level	-	-	-	-	-3.45847		-3.45662		-3.45729		-3.43913	
	5% level	-	-	-	-	-2.87381		-2.873		-2.87329		-2.86531	
	10% level	-	-	-	-	-2.57338		-2.57295		-2.57311		-2.56883	
	PP test statistic	-	-	-	-	-4.27997	0	-6.99841	0	-9.66185	0	-7.07068	0
	1% level	-	-	-	-	-3.45847		-3.45662		-3.45729		-3.43913	
	5% level	-	-	-	-	-2.87381		-2.873		-2.87329		-2.86531	
	10% level	-	-	-	-	-2.57338		-2.57295		-2.57311		-2.56883	
	PP test statistic	-	-	-	-	-12.9123	0	-12.6062	0	-16.2215	0	-25.5925	0
	1% level	-	-	-	-	-3.45847		-3.45662		-3.45729		-3.43913	
	5% level	-	-	-	-	-2.87381		-2.873		-2.87329		-2.86531	
	10% level	-	-	-	-	-2.57338		-2.57295		-2.57311		-2.56883	

PV: P Value

Exogenous: Level; and Bandwidth: Newey-West using Bartlett Kernel.

TABLE 4: PHILLIP-PERRON TEST STATISTIC (TREND AND INTERCEPT)

Name of Country Indices	Years	First		Second		Third		Fourth		Fifth		First to Fifth	
		PP test statistic	P	PP test statistic	P	PP test statistic	P	PP test statistic	P	PP test statistic	P	PP test statistic	P
Dow Jones Composites	PP test statistic	-12.52357	0	-12.86757	0	-13.93411	0	-13.92568	0	-13.40001	0	-30.21085	0
	1% level	-3.99534		-3.995645		-3.99534		-3.99504		-3.995189		-3.965381	
	5% level	-3.427975		-3.428123		-3.427975		-3.42783		-3.427902		-3.413399	
	10% level	-3.137353		-3.13744		-3.137353		-3.137268		-3.13731		-3.128736	
	PP test statistic	-9.180961	0	-9.365328	0	-8.955698	0	-6.528352	0	-8.107831	0	-15.01239	0
	1% level	-3.99534		-3.995645		-3.99534		-3.99504		-3.995189		-3.965381	
	5% level	-3.427975		-3.428123		-3.427975		-3.42783		-3.427902		-3.413399	
	10% level	-3.137353		-3.13744		-3.137353		-3.137268		-3.13731		-3.128736	
	PP test statistic	-13.16635	0	-13.42461	0	-12.54004	0	-12.3653	0	-22.7251	0	-32.74403	0
	1% level	-3.99534		-3.995645		-3.99534		-3.99504		-3.995189		-3.965381	
	5% level	-3.427975		-3.428123		-3.427975		-3.42783		-3.427902		-3.413399	
	10% level	-3.137353		-3.13744		-3.137353		-3.137268		-3.13731		-3.128736	
IPC All-Share	PP test statistic	-10.94678	0	-10.56723	0	-12.98121	0	-11.07716	0	-11.45497	0	-25.06906	0

	1% level	-3.994453		-3.995645		-3.9958		-3.995189		-3.99254		-3.96526	
	5% level	-3.427546		-3.428123		-3.428198		-3.427902		-3.426619		-3.41334	
	10% level	-3.1371		-3.13744		-3.137485		-3.13731		-3.136553		-3.128701	
	PP test statistic	-10.12682	0	-9.747336	0	-10.02501	0	-10.09354	0	-10.98219	0	-25.52296	0
	1% level	-3.994453		-3.995645		-3.9958		-3.995189		-3.99254		-3.96526	
	5% level	-3.427546		-3.428123		-3.428198		-3.427902		-3.426619		-3.41334	
	10% level	-3.1371		-3.13744		-3.137485		-3.13731		-3.136553		-3.128701	
	PP test statistic	-13.152	0	-12.29887	0	-13.31989	0	-10.66874	0	-13.77358	0	-32.22429	0
	1% level	-3.994453		-3.995645		-3.9958		-3.995189		-3.99254		-3.96526	
	5% level	-3.427546		-3.428123		-3.428198		-3.427902		-3.426619		-3.41334	
	10% level	-3.1371		-3.13744		-3.137485		-3.13731		-3.136553		-3.128701	
S&P TSX Index Compo	PP test statistic	-11.79634	0	-12.35084	0	-12.23806	0	-13.58846	0	-11.3871	0	-28.42029	0
	1% level	-4.000511		-3.995956		-3.996431		-3.995492		-3.99534		-3.965636	
	5% level	-3.430477		-3.428273		-3.428503		-3.428049		-3.427975		-3.413524	
	10% level	-3.138828		-3.137529		-3.137665		-3.137397		-3.137353		-3.12881	
	PP test statistic	-11.39669	0	-10.7268	0	-10.29055	0	-8.638512	0	-10.84607	0	-22.24537	0
	1% level	-4.000511		-3.995956		-3.996431		-3.995492		-3.99534		-3.965636	
	5% level	-3.430477		-3.428273		-3.428503		-3.428049		-3.427975		-3.413524	
	10% level	-3.138828		-3.137529		-3.137665		-3.137397		-3.137353		-3.12881	
	PP test statistic	-13.83988	0	-13.72699	0	-12.39159	0	-15.17773	0	-15.4653	0	-39.43243	0
	1% level	-4.000511		-3.995956		-3.996431		-3.995492		-3.99534		-3.965636	
	5% level	-3.430477		-3.428273		-3.428503		-3.428049		-3.427975		-3.413524	
	10% level	-3.138828		-3.137529		-3.137665		-3.137397		-3.137353		-3.12881	
IBC	PP test statistic	-21.88264	0	-10.4764	0	-10.01005	0	-12.62401	0	-12.12987	0	-21.90898	0
	1% level	-3.967884		-3.996918		-3.99793		-3.996431		-4.000907		-3.967873	
	5% level	-3.414622		-3.428739		-3.429229		-3.428503		-3.430669		-3.414617	
	10% level	-3.129461		-3.137804		-3.138092		-3.137665		-3.138941		-3.129458	
	PP test statistic	-26.34879	0	-12.12985	0	-11.06938	0	-12.90722	0	-15.10062	0	-26.36133	0
	1% level	-3.967884		-3.996918		-3.99793		-3.996431		-4.000907		-3.967873	
	5% level	-3.414622		-3.428739		-3.429229		-3.428503		-3.430669		-3.414617	
	10% level	-3.129461		-3.137804		-3.138092		-3.137665		-3.138941		-3.129458	
	PP test statistic	-22.14228	0	-10.38489	0	-10.73828	0	-10.86529	0	-9.752081	0	-22.15077	0
	1% level	-3.967884		-3.996918		-3.99793		-3.996431		-4.000907		-3.967873	
	5% level	-3.414622		-3.428739		-3.429229		-3.428503		-3.430669		-3.414617	
	10% level	-3.129461		-3.137804		-3.138092		-3.137665		-3.138941		-3.129458	
S&P 500	PP test statistic	-11.59476	0	-12.08028	0	-12.60274	0	-13.41426	0	-12.73228	0	-28.59723	0
	1% level	-3.995189		-3.995492		-3.995492		-3.99504		-3.995189		-3.965375	
	5% level	-3.427902		-3.428049		-3.428049		-3.42783		-3.427902		-3.413396	
	10% level	-3.13731		-3.137397		-3.137397		-3.137268		-3.13731		-3.128734	
	PP test statistic	-8.971783	0	-9.433305	0	-10.48439	0	-6.858998	0	-8.085413	0	-16.24368	0
	1% level	-3.995189		-3.995492		-3.995492		-3.99504		-3.995189		-3.965375	
	5% level	-3.427902		-3.428049		-3.428049		-3.42783		-3.427902		-3.413396	
	10% level	-3.13731		-3.137397		-3.137397		-3.137268		-3.13731		-3.128734	
	PP test statistic	-12.61787	0	-13.3833	0	-14.59538	0	-13.59374	0	-19.86187	0	-35.58122	0
	1% level	-3.995189		-3.995492		-3.995492		-3.99504		-3.995189		-3.965375	
	5% level	-3.427902		-3.428049		-3.428049		-3.42783		-3.427902		-3.413396	
	10% level	-3.13731		-3.137397		-3.137397		-3.137268		-3.13731		-3.128734	
Bovespa	PP test statistic	-	-	-	-	-12.47031	0	-12.51006	0	-11.75178	0	-21.09158	0
	1% level	-	-	-	-	-3.998104		-3.995492		-3.996431		-3.970743	
	5% level	-	-	-	-	-3.429313		-3.428049		-3.428503		-3.416019	
	10% level	-	-	-	-	-3.138142		-3.137397		-3.137665		-3.130288	
	PP test statistic	-	-	-	-	-7.494954	0	-8.396766	0	-9.646125	0	-7.437361	0
	1% level	-	-	-	-	-3.998104		-3.995492		-3.996431		-3.970743	
	5% level	-	-	-	-	-3.429313		-3.428049		-3.428503		-3.416019	
	10% level	-	-	-	-	-3.138142		-3.137397		-3.137665		-3.130288	
	PP test statistic	-	-	-	-	-12.92067	0	-12.64809	0	-16.47037	0	-25.58629	0
	1% level	-	-	-	-	-3.998104		-3.995492		-3.996431		-3.970743	
	5% level	-	-	-	-	-3.429313		-3.428049		-3.428503		-3.416019	
	10% level	-	-	-	-	-3.138142		-3.137397		-3.137665		-3.130288	

PV: P Value

Exogenous: Level; and Bandwidth: Newey-West using Bartlett Kernel.

TABLE 5: CONTEMPORANEOUS CORRELATIONS COEFFICIENTS AMONG RETURN, VOLUME AND VOLATILITIES

Name of Country Indices		First			Second			Third		
		R	V	RR	R	V	RR	R	V	RR
Dow Jones Composites	R	1	-0.019	0.017	1	-0.089	-0.161	1	-0.194	0.135
	V	-0.019	1	0.248	-0.089	1	0.295	-0.194	1	0.481
	RR	0.017	0.248	1	-0.161	0.295	1	0.135	0.481	1
IPC All-Share	R	1	0.088	-0.030	1	-0.059	-0.011	1	0.043	0.014
	V	0.088	1	0.389	-0.059	1	0.350	0.043	1	0.395
	RR	-0.030	0.389	1	-0.011	0.350	1	0.014	0.395	1
S&P TSX Index Compo	R	1	0.010	-0.043	1	-0.094	-0.162	1	-0.027	-0.028
	V	0.010	1	0.125	-0.094	1	0.199	-0.027	1	0.265
	RR	-0.043	0.125	1	-0.162	0.199	1	-0.028	0.265	1
IBC	R	1	-0.049	0.041	1	0.129	-0.140	1	0.180	-0.114
	V	-0.049	1	0.126	0.129	1	0.116	0.180	1	0.072
	RR	0.041	0.126	1	-0.140	0.116	1	-0.114	0.072	1
S&P 500	R	1	-0.021	-0.024	1	-0.087	-0.105	1	-0.257	0.069
	V	-0.021	1	0.315	-0.087	1	0.366	-0.257	1	0.523
	RR	-0.024	0.315	1	-0.105	0.366	1	0.069	0.523	1
Bovespa	-	-	-	-	-	-	-	1	0.015	-0.009
	-	-	-	-	-	-	-	0.015	1	.240
	-	-	-	-	-	-	-	-0.009	.240	1
		Fourth			Fifth			First to fifth		
		R	V	RR	R	V	RR	R	V	RR
Dow Jones Composites	R	1	-0.107	-0.072	1	0.026	0.278	1	-0.084	-0.051
	V	-0.107	1	0.416	0.026	1	0.304	-0.084	1	0.394
	RR	-0.072	0.416	1	0.278	0.304	1	-0.051	0.394	1
IPC All-Share	R	1	0.039	-0.022	1	0.076	0.104	1	0.016	-0.026
	V	0.039	1	0.544	0.076	1	0.317	0.016	1	0.407
	RR	-0.022	0.544	1	0.104	0.317	1	-0.026	0.407	1
S&P TSX Index Compo	R	1	-0.141	-0.248	1	0.075	0.102	1	-0.101	-0.202
	V	-0.141	1	0.397	0.075	1	0.336	-0.101	1	0.372
	RR	-0.248	0.397	1	0.102	0.336	1	-0.202	0.372	1
IBC	R	1	0.053	0.415	1	-0.067	0.228	1	0.100	-0.041
	V	0.053	1	0.071	-0.067	1	0.125	0.100	1	0.139
	RR	0.415	0.071	1	0.228	0.125	1	-0.041	0.139	1
S&P 500	R	1	-0.099	-0.031	1	0.024	0.213	1	-0.084	-0.037
	V	-0.099	1	0.439	0.024	1	0.325	-0.084	1	0.409
	RR	-0.031	0.439	1	0.213	0.325	1	-0.037	0.409	1
Bovespa	R	1	0.010	-0.171	1	0.010	0.023	1	0.017	-0.168
	V	0.010	1	0.442	0.010	1	0.429	0.017	1	-0.068
	RR	-0.171	0.442	1	0.023	0.429	1	-0.168	-0.068	1

R-Return;
V- Volume; and
RR- Volatilities.

TABLE 6: DESCRIPTIVE STATISTICS OF INDEX RETURN OF DIFFERENT AMERICAN COUNTRIES

Name of Country Indices		First			Second			Third			Fourth			Fifth			First to Fifth		
		RETUR N	VOLUM E	VOLATILITIE S	RETUR N	VOLUM E	VOLATILITIE S	RETUR N	VOLUM E	VOLATILITIE S	RETUR N	VOLUM E	VOLATILITIE S	RETUR N	VOLUM E	VOLATILITIE S	RETUR N	VOLUM E	VOLATILITIE S
Dow Jones Composites	Mean	0.00049	2082617	3.07E-05	0.00045	2536207	4.04E-05	-8.08E-05	3599973	8.63E-05	-0.002	5553493	0.00038	0.0014	5099389	9.21E-05	7.42E-05	3781038	0.0001
	Median	0.00048	2088095	1.03E-05	0.00046	2544415	1.18E-05	-0.0006	3417765	3.74E-05	-0.0019	5410895	0.00011	0.00152	4963200	3.97E-05	0.00026	3398150	2.82E-05
	Maximum	0.01746	3152470	0.00031	0.01767	4065230	0.00074	0.03197	6544690	0.00102	0.07778	1.1E+07	0.00623	0.04421	9120100	0.00195	0.07778	1.1E+07	0.0062
	Minimum	-0.0177	3724940	1.70E-08	-0.0273	832550	5.39E-11	-0.0286	2600	1.08E-08	-0.0789	1219310	2.46E-08	-0.0297	1267710	2.22E-09	-0.0789	2600	5.39E-11
	Std. Dev.	0.00553	325651	5.21E-05	0.00635	444313	7.37E-05	0.00931	916848	0.00014	0.01934	1608455	0.00084	0.00929	1152030	0.00018	0.01122	1698041	0.0004
	Skewness	-0.1464	-0.1088	3.06293	-0.4357	0.10466	4.71822	0.24277	0.46927	3.66902	0.04489	0.50153	4.43711	0.25318	0.32793	6.06228	-0.1798	0.87288	9.1728
	Kurtosis	3.93818	3.7359	13.4706	4.45037	5.04356	37.4726	3.78407	4.01256	19.575	6.01106	3.34679	25.2752	4.64516	3.89627	54.4781	11.6875	3.35707	107.45
	Jarque-Bera	10.0614	6.13437	1532.9	29.5847	43.6061	13199.9	8.85963	19.8554	3422.68	95.2828	11.827	6036.81	30.9877	12.8998	29251.9	3953.38	166.037	588063
	Probability	0.00653	0.04655	0	0	0	0	0.01192	4.9E-05	0	0	0.0027	0	0	0.00158	0	0	0	0
	Sum	0.12122	5.21E+08	0.00767	0.11031	6.29E+08	0.01002	-0.0202	9.00E+08	0.02157	-0.5004	1.40E+09	0.09491	0.3512	1.28E+09	0.02313	0.09315	4.75E+09	0.1579
	Sum Sq. Dev.	0.00761	2.64E+13	6.76E-07	0.00997	4.88E+13	1.34E-06	0.02157	2.09E+14	5.17E-06	0.09391	6.49E+14	0.00018	0.02263	3.32E+14	7.92E-06	0.15786	3.62E+14	0.0002
	Observations	250	250	250	248	248	248	250	250	250	252	252	252	251	251	251	1255	1255	1255
	IPC All-Share	Mean	0.0016	97473.1	8.21E-05	0.00155	124193	0.00016	0.00021	132093	0.00017	-0.0019	169008	0.00038	0.00192	172873	0.00012	0.00074	139714
Median		0.00252	96104.4	3.75E-05	0.0025	121816	4.93E-05	0.00041	126508	8.14E-05	-0.002	159416	9.62E-05	0.00255	164131	3.69E-05	0.0016	134679	5.18E-05
Maximum		0.02124	199007	0.00078	0.04176	332634	0.00174	0.00456	361514	0.00208	0.07321	434799	0.00627	0.03634	447963	0.00132	0.07321	447963	0.0063
Minimum		-0.028	4037.5	5.72E-11	-0.0417	12896	5.58E-09	-0.0436	12445.6	1.69E-09	-0.0792	17653.2	5.59E-11	-0.0289	27257.4	3.70E-10	-0.0792	4037.5	5.59E-11
Std. Dev.		0.00893	37369.7	0.00012	0.01248	43083.7	0.00028	0.01309	45076.9	0.00028	0.01955	63202.6	0.00085	0.01064	55038.5	0.00019	0.01345	57541.9	0.0004
Skewness		-0.4005	-0.0282	2.48537	-0.269	0.90967	3.42368	-0.0092	0.82458	3.58769	0.14307	0.81488	3.90413	-0.1898	0.64871	2.72422	-0.1734	0.88258	6.9185
Kurtosis		3.25662	2.83428	10.7084	4.23548	6.11279	16.5129	3.6714	5.83016	19.4917	5.9836	5.15436	20.4004	3.73685	5.61833	12.0177	6.92784	5.29893	68.115
Jarque-Bera		7.54742	0.32695	897.365	18.7635	134.328	2371.35	4.64276	110.425	3328.96	93.955	76.3186	3804.14	7.72895	96.063	1248.79	826.642	446.646	235606
Probability		0.02297	0.84919	0	8.4E-05	0	0	0.09814	0	0	0	0	0	0.02097	0	0	0	0	0
Sum		0.40825	2.5E+07	0.02101	0.38448	3.1E+07	0.03906	0.05201	3.3E+07	0.04213	-0.4689	4.2E+07	0.09642	0.51771	4.7E+07	0.03145	0.94846	1.78E+08	0.2314
Sum Sq. Dev.		0.02035	3.56E+11	3.40E-06	0.03846	4.58E+11	1.89E-05	0.04212	5.00E+11	1.92E-05	0.09554	9.99E+11	0.00018	0.03046	8.15E+11	9.38E-06	0.23069	4.22E+12	0.0002
Observations		256	256	256	248	248	248	247	247	247	251	251	251	270	270	270	1276	1276	1276
S&P TSX Index Compo		Mean	0.00105	140097	3.76E-05	0.00032	187623	5.01E-05	7.33E-06	222853	8.39E-05	-0.0017	254023	0.00039	0.00126	190341	5.99E-05	0.00018	200220
	Median	0.00135	138655	1.21E-05	0.00059	187666	1.77E-05	0.00079	219872	3.53E-05	-0.0014	245330	0.00011	0.0022	186238	4.04E-05	0.00117	197405	3.20E-05
	Maximum	0.01835	298064	0.00065	0.02594	348967	0.00067	0.04092	422722	0.00168	0.06894	599756	0.00664	0.02931	369938	0.00086	0.06894	599756	0.0066
	Minimum	-0.0254	28665.1	2.43E-11	-0.0227	56502.9	2.39E-09	-0.0329	57123.4	3.53E-09	-0.0815	78237.2	2.17E-09	-0.026	47051.5	1.11E-09	-0.0815	28665.1	2.43E-11
	Std. Dev.	0.00605	37154.1	6.69E-05	0.00708	43998.5	8.41E-05	0.00918	50779.1	0.00017	0.01981	69967	0.00085	0.00973	46970.8	0.00014	0.0116	63475.4	0.0004
	Skewness	-0.4259	0.60934	4.69784	-0.3618	-0.0231	3.68924	-0.0588	0.09107	5.43484	-0.3622	1.49227	4.25357	-0.1089	0.28737	2.68998	-0.6603	0.91898	8.7707
	Kurtosis	4.52354	4.39422	35.9585	3.88036	4.44194	21.2855	5.03333	5.00757	42.012	5.5121	8.41287	24.1105	3.18486	4.85617	11.5553	10.7767	6.64431	100.84
	Jarque-Bera	27.9289	31.4328	10766.6	13.3115	21.3336	3985.2	42.0011	41.1432	16605.8	70.9161	396.395	5374.52	0.84974	39.3301	1063.93	3144.72	841.977	499396
	Probability	1E-06	0	0	0.00129	2.3E-05	0	0	0	0	0	0	0	0.65386	0	0	0	0	0
	Sum	0.23022	3.1E+07	0.00827	0.07843	4.6E+07	0.01232	0.00178	5.4E+07	0.02039	-0.4293	6.3E+07	0.09808	0.31514	4.8E+07	0.02398	0.22105	2.43E+08	0.1632
	Sum Sq. Dev.	0.00803	3.02E+11	9.81E-07	0.01229	4.74E+11	1.73E-06	0.02039	6.24E+11	6.90E-06	0.09734	1.21E+12	0.00018	0.02358	5.49E+11	4.88E-06	0.16319	4.88E+12	0.0002
	Observations	220	220	220	246	246	246	243	243	243	249	249	249	250	250	250	1213	1213	1213
	IBC	Mean	-0.0007	2857.95	0.00014	0.0019	6415.17	0.00028	-0.0014	4240.99	0.0001	0.00091	429.862	0.00012	0.00128	119.466	6.48E-05	0.00067	2846.75
Median		-0.0006	569	2.78E-05	0.00168	4134.8	2.60E-05	-0.0007	1922.6	2.88E-05	0.00012	179.6	2.96E-05	0.00146	50.4	2.41E-05	0.00061	566.6	2.78E-05
Maximum		0.08667	44593.6	0.00921	0.09597	44593.6	0.00921	0.03056	23663.6	0.00118	0.04433	6703.4	0.00197	0.02611	3522.2	0.00068	0.09597	44593.6	0.0092
Minimum		-0.096	1.2	9.32E-13	-0.0867	427.2	1.85E-11	-0.0344	23.2	2.44E-10	-0.0285	1.2	1.92E-12	-0.0191	1.4	9.32E-13	-0.0867	1.2	9.32E-13
Std. Dev.		0.01194	5164.62	0.00056	0.01662	6574.9	0.00104	0.01003	5817.76	0.00018	0.0108	753.443	0.00026	0.00797	270.567	0.00011	0.01193	5160.96	0.0006
Skewness		0.27187	3.28925	10.8917	-0.7554	2.49725	6.10931	0.07294	2.37199	2.90318	0.75402	4.30491	4.93048	0.0779	9.49189	2.86729	-0.2722	3.29798	10.8917
Kurtosis		16.3135	17.3079	147.132	15.4582	11.5395	44.3723	4.08919	15.5284	12.7613	5.64804	27.9878	31.3729	3.89951	116.436	11.8936	16.3308	17.3665	147.28
Jarque-Bera		6931.64	9682.09	829579	1574.88	978.672	18609.6	11.7743	588.537	1257.71	94.0244	7072.5	9135.41	17.57002	120155	1017.17	6957.12	9766.99	832159
Probability		0	0	0	0	0	0	0.00278	0	0	0	0	0	0.02271	0	0	0	0	0
Sum		-0.6277	2677903	0.13379	0.45577	1539641	0.06689	-0.3211	992391	0.02388	0.22005	104456	0.02844	0.27827	26043.6	0.01414	0.62916	2670255	0.1338
Sum Sq. Dev.		0.13337	2.50E+10	0.00029	0.06603	1.03E+10	0.00026	0.02344	7.89E+09	7.34E-06	0.02824	1.37E+08	1.62E-05	0.01378	1.6E+07	2.66E-06	0.13337	2.50E+10	0.0003
Observations		937	937	937	240	240	240	234	234	234	243	243	243	218	218	218	938	938	938
S&P 500		Mean	0.00041	2082604	2.02E-05	0.00034	2536970	2.69E-05	-0.0003	3589036	8.34E-05	-0.0021	5540851	0.00042	0.00152	5096335	8.62E-05	-2.04E-06	3773673
	Median	0.00043	2082360	8.44E-06	0.00016	2545760	8.85E-06	-0.0006	3401300	3.56E-05	-0.0019	5388115	0.0001	0.00212	4963200	3.35E-05	0.00014	3368080	2.28E-05
	Maximum	0.01359	3152470	0.00042	0.01535	4065230	0.00049	0.0											

TABLE 7: UNRESTRICTED CO- INTEGRATION RANK TEST (TRACE) BETWEEN RETURN AND VOLUME

Name of country Indices		Dow Jones Composites		IPC All-Share		S&P TSX Index Compo		IBC		S&P 500		BOVESPA	
Years	Hypothesised No. of CE(s)	None *	At most 1 *	None *	At most 1 *	None *	At most 1 *	None *	At most 1 *	None *	At most 1 *	None *	At most 1 *
First	Eigen Value	0.2	0.06	0.18	0.05	0.17	0.04	0.11	0.04	0.18	0.05	-	-
	Trace Statistic	70.71	14.54	63.66	14.09	47.33	8.15	149.52	38.42	61.75	13.76	-	-
	0.05 Critical value	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	-	-
	Prob.	0	0	0	0	0	0	0	0	0	0	-	-
Second	Eigen Value	0.22	0.08	0.16	0.1	0.18	0.08	0.12	0.1	0.23	0.09	-	-
	Trace Statistic	82.48	21.34	67.47	24.7	66.77	19.88	56.54	25.79	86.13	21.8	-	-
	0.05 Critical value	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	-	-
	Prob.	0	0	0	0	0	0	0	0	0	0	-	-
Third	Eigen Value	0.22	0.04	0.2	0.08	0.2	0.11	0.15	0.05	0.25	0.04	0.2	0.02
	Trace Statistic	69.16	9.43	75.58	20.29	78.83	27.01	47.52	10.9	81.27	9.82	55.97	4.96
	0.05 Critical value	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84
	Prob.	0	0	0	0	0	0	0	0	0	0	0	0.03
Forth	Eigen Value	0.19	0.04	0.17	0.05	0.2	0.08	0.15	0.12	0.2	0.04	0.19	0.04
	Trace Statistic	62.67	9.46	59.16	12.73	74.24	19.36	69.11	29.94	63.51	9.37	61.44	9.82
	0.05 Critical value	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84
	Prob.	0	0	0	0	0	0	0	0	0	0	0	0
Fifth	Eigen Value	0.14	0.05	0.17	0.08	0.16	0.07	0.18	0.12	0.15	0.05	0.18	0.11
	Trace Statistic	47.7	11.59	69.43	21.18	60.34	17.4	69.47	26.57	51.14	11.69	76.29	28.52
	0.05 Critical value	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84
	Prob.	0	0	0	0	0	0	0	0	0	0	0	0
First to Fifth	Eigen Value	0.18	0.01	0.17	0.04	0.18	0.04	0.11	0.05	0.18	0.01	0.18	0.02
	Trace Statistic	256.94	14.7	286.09	53.15	287.82	45.65	156.4	45.29	266.6	14.59	162.54	17.64
	0.05 Critical value	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84	15.49	3.84
	Prob.	0	0	0	0	0	0	0	0	0	0	0	0

Trace test indicates 4 co-integration eqn (s) at the 0.05 level ; Trend assumption: Linear deterministic trend ; and Lag interval: 1 to 4.

TABLE 8: UNRESTRICTED CO- INTEGRATION RANK TEST (MAXIMUM EIGEN VALUE) BETWEEN VOLATILITIES AND VOLUME

Name of country Indices		Dow Jones Composites		IPC All-Share		S&P TSX Index Compo		IBC		S&P 500		BOVESPA	
Years	Hypothesised No. of CE(s)	None *	At most 1 *	None *	At most 1 *	None *	At most 1 *	None *	At most 1 *	None *	At most 1 *	None *	At most 1 *
First	Eigen Value	0.2	0.06	0.18	0.05	0.17	0.04	0.11	0.04	0.18	0.05	-	-
	Max.Eigen Statistic	56.17	14.54	49.56	14.09	39.18	8.15	111.1	38.42	47.99	13.76	-	-
	0.05 Critical value	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	-	-
	Prob.	0	0	0	0	0	0	0	0	0	0	-	-
Second	Eigen Value	0.22	0.08	0.16	0.1	0.18	0.08	0.12	0.1	0.23	0.09	-	-
	Max.Eigen Statistic	61.14	21.34	42.77	24.7	46.89	19.88	30.74	25.79	64.33	21.8	-	-
	0.05 Critical value	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	-	-
	Prob.	0	0	0	0	0	0	0	0	0	0	-	-
Third	Eigen Value	0.22	0.04	0.2	0.08	0.2	0.11	0.15	0.05	0.25	0.04	0.2	0.02
	Max.Eigen Statistic	59.73	9.43	55.29	20.29	51.82	27.01	36.62	10.9	71.45	9.82	51.01	4.96
	0.05 Critical value	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84
	Prob.	0	0	0	0	0	0	0	0	0	0	0	0.03
Forth	Eigen Value	0.19	0.04	0.17	0.05	0.2	0.08	0.15	0.12	0.2	0.04	0.19	0.04
	Max.Eigen Statistic	53.21	9.46	46.42	12.73	54.88	19.36	39.17	29.94	54.14	9.37	51.63	9.82
	0.05 Critical value	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84
	Prob.	0	0	0	0	0	0	0	0	0	0	0	0
Fifth	Eigen Value	0.14	0.05	0.17	0.08	0.16	0.07	0.18	0.12	0.15	0.05	0.18	0.11
	Max.Eigen Statistic	36.11	11.59	48.25	21.18	42.94	17.4	42.9	26.57	39.45	11.69	47.76	28.52
	0.05 Critical value	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84
	Prob.	0	0	0	0	0	0	0	0	0	0	0	0
First to Fifth	Eigen Value	0.18	0.01	0.17	0.04	0.18	0.04	0.11	0.05	0.18	0.01	0.18	0.02
	Max.Eigen Statistic	242.24	14.7	232.94	53.15	242.17	45.65	111.1	45.29	252.01	14.59	144.9	17.64
	0.05 Critical value	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84	14.26	3.84
	Prob.	0	0	0	0	0	0	0	0	0	0	0	0

Max-eigenvalue test indicates 4 co-integration eqn (s) at the 0.05 level

TABLE 9: GRANGER CAUSALITY TESTS BETWEEN RETURN AND VOLUME

Name of Country Indices	Years	First			Second			Third			Fourth			Fifth			First to Fifth		
		Null Hypothesis:	Obs	F-Statistic	Prob.	Obs	F-Statistic	Prob.	Obs	F-Statistic	Prob.	Obs	F-Statistic	Prob.	Obs	F-Statistic	Prob.	Obs	F-Statistic
Dow Jones Composites	V does not Granger Cause R	249	249	0.7017	247	1.15734	0.2831	249	0.05135	0.8209	251	1.29248	0.2567	250	3.84427	0.051	1254	0.15572	0.6932
	R does not Granger Cause V			0.2554	0.00101	0.9747	0.25233	0.6159	3.22805	0.0736	0.00362	0.9521	3.39822	0.0655					
IPC All-Share	V does not Granger Cause R	255	255	0.6346	247	1.12408	0.2901	246	3.45214	0.0644	250	2.83361	0.0936	269	3.1461	0.0773	1275	1.59114	0.2074
	R does not Granger Cause V			0.6194	6.68737	0.0103	3.41158	0.066	0.00231	0.9617	0.00033	0.9856	5.25414	0.0221					
S&P TSX Index Compo	V does not Granger Cause R	219	219	0.4895	245	0.14591	0.7028	242	0.97524	0.3244	248	1.7656	0.1852	249	1.01444	0.3148	1212	0.00155	0.9686
	R does not Granger Cause V			0.2924	3.18773	0.0754	4.35253	0.038	4.8236	0.029	0.56799	0.4518	9.82461	0.0018					
IBC	V does not Granger Cause R	936	936	0.0057	239	0.01327	0.9084	233	1.45696	0.2287	242	1.46979	0.2266	217	0.24579	0.6206	937	0.27692	0.5989
	R does not Granger Cause V			0.0165	0.21591	0.6426	0.12608	0.7229	2.01412	0.1571	1.21214	0.2721	0.77062	0.3802					
S&P 500	V does not Granger Cause R	250	250	0.5491	248	1.25572	0.2636	248	0.09432	0.759	251	2.75914	0.098	250	3.26279	0.0721	1255	0.04875	0.8253
	R does not Granger Cause V			0.1858	0.14196	0.7067	4.92937	0.0273	4.00102	0.0466	0.35714	0.5506	5.21372	0.0226					
Bovespa	V does not Granger Cause R	-	-	-	-	-	-	232	0.07391	0.786	248	1.93535	0.1654	242	0.01771	0.8942	726	0.18524	0.667
	R does not Granger Cause V	-	-	-	-	-	-	0.01903	0.8904	0.29351	0.5885	0.83053	0.363	0.00319	0.955				

R-Return, V-Volume.

Trace test indicates 4 co-integration eqn (s) at the 0.05 level; Trend assumption: Linear deterministic trend; and Lag interval: 1 to 4.

TABLE 10: GRANGER CAUSALITY TESTS BETWEEN VOLATILITIES AND VOLUME

Name of Countries	Years	First			Second			Third			Fourth			Fifth			First to Fifth		
		Obs	F-Statistic	Prob.	Obs	F-Statistic	Prob.	Obs	F-Statistic	Prob.	Obs	F-Statistic	Prob.	Obs	F-Statistic	Prob.	Obs	F-Statistic	Prob.
Dow Jones Composites	V does not Granger Cause RR	249	3.1892	0.0754	247	0.2383	0.6259	249	32.331	4.00E-08	251	21.463	6.00E-06	250	13.213	0.0003	1254	85.654	9.00E-20
	RR does not Granger Cause V		0.47979	0.4892		0.71626	0.3982		2.90706	0.0895		0.89913	0.3439		1.93483	0.1655		7.97202	0.0048
IPC All-Share	V does not Granger Cause RR	255	1.5507	0.2142	247	0.0015	0.9682	246	11.0021	0.001	250	18.613	2.00E-05	269	1.3639	0.2439	1275	31.528	2.00E-08
	RR does not Granger Cause V		0.00337	0.9537		0.02991	0.8628		0.15411	0.695		3.86681	0.0504		0.61412	0.4339		1.99361	0.1582
S&P TSX Index Compo	V does not Granger Cause RR	219	2.20982	0.1386	245	1.31175	0.2532	242	14.5956	0.0002	248	8.26323	0.0044	249	1.33277	0.2494	1212	55.241	2.00E-13
	RR does not Granger Cause V		1.03897	0.3092		4.37387	0.0375		1.36376	0.2441		3.58825	0.0594		0.09095	0.7632		10.5932	0.0012
IBC	V does not Granger Cause RR	936	7.28259	0.0071	239	0.56981	0.4511	233	1.04875	0.3069	242	1.35137	0.2462	217	0.5091	0.4763	937	4.17914	0.0412
	RR does not Granger Cause V		8.33164	0.004		5.36774	0.0214		7.1582	0.008		1.92589	0.1665		0.09023	0.7642		16.3506	6.00E-05
S&P 500	V does not Granger Cause RR	250	5.93891	0.0155	248	0.94725	0.3314	248	55.7501	1.00E-12	251	23.0318	3.00E-06	250	8.18215	0.0046	1255	93.733	2.00E-21
	RR does not Granger Cause V		1.83041	0.1773		0.01066	0.9179		3.79234	0.0526		0.64196	0.4238		3.04724	0.0821		6.54236	0.0107
Bovespa	V does not Granger Cause RR	-	-	-	-	-	-	232	1.65367	0.1998	248	14.6459	0.0002	242	12.3656	0.0005	726	1.50594	0.2202
	RR does not Granger Cause V	-	-	-	-	-	-		1.80653	0.1803		3.41398	0.0659		0.52329	0.4701		0.57957	0.4467

RR-Volatilities, V-Volume.

Trace test indicates 4 co-integration eqn (s) at the 0.05 level ; Trend assumption: Linear deterministic trend ; a nd Lag interval: 1 to 4.

TABLE 11: GARCH (1, 1) IN VOLUME-RETURN RELATIONSHIP

NAME OF COUNTRY INDICES	YEARS	First				Second				Third				Fourth				Fifth				First to Fifth				
		Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
Dow Jones Composites	C	-0.001	0.002	-0.340	0.73	0.002	0.003	0.911	0.36	0.005	0.002	2.316	0.02	0.000	0.002	0.137	0.89	0.005	0.002	2.101	0.04	0.001	0.000	1.856	0.06	
	R(-1)	0.214	0.063	3.410	0.00	0.195	0.068	2.865	0.00	0.106	0.068	1.550	0.12	0.150	0.071	2.105	0.04	0.210	0.056	3.775	0.00	0.182	0.029	6.248	0.00	
	V	0.000	0.000	0.560	0.58	0.000	0.000	-0.783	0.43	0.000	0.000	-2.324	0.02	0.000	0.000	-0.422	0.67	0.000	0.000	-1.824	0.07	0.000	0.000	-1.018	0.31	
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
	C	0.000	0.000	4.249	0.00	0.000	0.000	1.243	0.21	0.000	0.000	1.349	0.18	0.000	0.000	1.580	0.11	0.000	0.000	-0.936	0.35	0.000	0.000	3.640	0.00	
	RESID(-1)^2	0.162	0.093	1.737	0.08	0.050	0.032	1.558	0.12	0.172	0.072	2.401	0.02	0.122	0.046	2.660	0.01	0.000	0.008	-0.016	0.99	0.105	0.018	5.865	0.00	
	GARCH(-1)	-0.522	0.285	-1.835	0.07	0.909	0.059	15.440	0.00	0.782	0.093	8.375	0.00	0.881	0.042	20.953	0.00	1.000	0.013	74.236	0.00	0.883	0.019	46.371	0.00	
	Variable	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
	IPC All-Share	C	-0.001	0.001	-0.602	0.55	0.000	0.002	0.250	0.80	-0.003	0.002	-1.260	0.21	-0.001	0.002	-0.275	0.78	0.000	0.002	0.171	0.86	0.000	0.001	0.463	0.64
		R(-1)	0.314	0.069	4.575	0.00	0.281	0.072	3.910	0.00	0.194	0.071	2.737	0.01	0.322	0.069	4.690	0.00	0.347	0.061	5.721	0.00	0.316	0.029	10.983	0.00
V		0.000	0.000	1.912	0.06	0.000	0.000	0.905	0.37	0.000	0.000	1.906	0.06	0.000	0.000	-0.292	0.77	0.000	0.000	0.466	0.64	0.000	0.000	1.317	0.19	
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
C		0.000	0.000	1.245	0.21	0.000	0.000	2.509	0.01	0.000	0.000	1.490	0.14	0.000	0.000	1.534	0.13	0.000	0.000	1.270	0.20	0.000	0.000	3.511	0.00	
RESID(-1)^2		0.118	0.066	1.803	0.07	0.371	0.147	2.532	0.01	0.163	0.071	2.279	0.02	0.173	0.041	4.256	0.00	0.196	0.072	2.724	0.01	0.162	0.024	6.804	0.00	
GARCH(-1)		0.799	0.105	7.636	0.00	0.504	0.143	3.523	0.00	0.742	0.112	6.620	0.00	0.835	0.039	21.329	0.00	0.767	0.083	9.281	0.00	0.809	0.027	30.006	0.00	
Variable		Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
S&P TSX Index Comp		C	0.001	0.002	0.681	0.50	0.002	0.002	0.974	0.33	0.000	0.002	-0.065	0.95	0.006	0.003	2.029	0.04	0.001	0.002	0.397	0.69	0.002	0.001	2.522	0.01
		R(-1)	0.192	0.078	2.465	0.01	0.231	0.067	3.477	0.00	0.260	0.065	3.967	0.00	0.224	0.074	3.041	0.00	0.341	0.050	6.771	0.00	0.249	0.029	8.568	0.00
	V	0.000	0.000	0.294	0.77	0.000	0.000	-0.788	0.43	0.000	0.000	0.383	0.70	0.000	0.000	-2.156	0.03	0.000	0.000	-0.025	0.98	0.000	0.000	-1.757	0.08	
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
	C	0.000	0.000	2.263	0.02	0.000	0.000	1.845	0.07	0.000	0.000	1.831	0.07	0.000	0.000	0.925	0.35	0.000	0.000	-1.480	0.14	0.000	0.000	4.399	0.00	
	RESID(-1)^2	0.401	0.121	3.312	0.00	0.207	0.106	1.957	0.05	0.215	0.055	3.948	0.00	0.150	0.055	2.732	0.01	0.000	0.012	-0.007	0.99	0.166	0.024	7.040	0.00	
	GARCH(-1)	0.232	0.234	0.993	0.32	0.606	0.178	3.412	0.00	0.769	0.056	13.771	0.00	0.859	0.049	17.413	0.00	1.009	0.020	49.303	0.00	0.813	0.025	32.985	0.00	
	Variable	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
	IBC	C	0.000	0.000	-0.088	0.93	0.001	0.001	0.990	0.32	-0.002	0.001	-2.213	0.03	0.000	0.001	-0.660	0.51	0.001	0.001	2.286	0.02	0.000	0.000	-0.540	0.59
		R(-1)	0.260	0.036	7.203	0.00	0.283	0.053	5.373	0.00	0.321	0.059	5.468	0.00	0.187	0.077	2.437	0.01	0.068	0.076	0.899	0.37	0.220	0.032	6.870	0.00
V		0.000	0.000	-2.398	0.02	0.000	0.000	1.350	0.18	0.000	0.000	2.329	0.02	0.000	0.000	-0.087	0.93	0.000	0.000	-1.548	0.12	0.000	0.000	2.557	0.01	
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
C		0.000	0.000	9.892	0.00	0.000	0.000	3.647	0.00	0.000	0.000	2.418	0.02	0.000	0.000	3.366	0.00	0.000	0.000	5.606	0.00	0.000	0.000	6.765	0.00	
RESID(-1)^2		0.393	0.046	8.551	0.00	0.413	0.068	6.045	0.00	0.099	0.041	2.397	0.02	0.356	0.109	3.259	0.00	0.408	0.119	3.438	0.00	0.374	0.047	8.002	0.00	
GARCH(-1)		0.395	0.037	10.562	0.00	0.576	0.046	12.435	0.00	0.813	0.050	16.272	0.00	0.216	0.166	1.298	0.19	-0.201	0.094	-2.145	0.03	0.397	0.060	6.581	0.00	
Variable		Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
S&P 500		C	0.000	0.002	-0.214	0.83	0.002	0.002	0.749	0.45	0.006	0.002	3.228	0.00	-0.001	0.002	-0.649	0.52	0.005	0.002	1.934	0.05	0.001	0.000	1.322	0.19
		R(-1)	0.288	0.069	4.187	0.00	0.270	0.073	3.695	0.00	0.174	0.068	2.563	0.01	0.160	0.070	2.275	0.02	0.296	0.053	5.562	0.00	0.248	0.029	8.494	0.00
	V	0.000	0.000	0.366	0.71	0.000	0.000	-0.578	0.56	0.000	0.000	-3.302	0.00	0.000	0.000	0.476	0.63	0.000	0.000	-1.619	0.11	0.000	0.000	-0.379	0.70	
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
	C	0.000	0.000	1.917	0.06	0.000	0.000	1.472	0.14	0.000	0.000	1.323	0.19	0.000	0.000	1.080	0.28	0.000	0.000	-0.759	0.45	0.000	0.000	3.913	0.00	
	RESID(-1)^2	0.203	0.090	2.268	0.02	0.062	0.036	1.697	0.09	0.077	0.032	2.383	0.02	0.120	0.046	2.623	0.01	-0.005	0.008	-0.593	0.55	0.111	0.017	6.417	0.00	
	GARCH(-1)	0.226	0.308	0.732	0.46	0.878	0.068	12.980	0.00	0.922	0.031	29.465	0.00	0.888	0.042	20.949	0.00	1.008	0.016	62.889	0.00	0.882	0.018	49.959	0.00	
	Variable	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
	Bovespa	C	-	-	-	-	-	-	-	-	-0.001	0.001	0.818	0.41	-0.008	0.004	-2.128	0.03	0.005	0.003	1.336	0.18	0.001	0.001	1.695	0.09
		R(-1)	-	-	-	-	-	-	-	-	0.175	0.067	2.627	0.01	0.276	0.065	4.247	0.00	0.297	0.063	4.741	0.00	0.253	0.037	6.805	0.00
V		-	-	-	-	-	-	-	-	0.000	0.000	0.863	0.39	0.000	0.000	2.349	0.02	0.000	0.000	-1.121	0.26	0.000	0.000	1.103	0.27	
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
C		-	-	-	-	-	-	-	-	0.000	0.000	1.315	0.19	0.000	0.000	1.333	0.18	0.000	0.000	1.022	0.31	0.000	0.000	2.393	0.02	
RESID(-1)^2		-	-	-	-	-	-	-	-	0.130	0.058	2.227	0.03	0.170	0.057	2.989	0.00	0.074	0.048	1.551	0.12	0.125	0.026	4.738	0.00	
GARCH(-1)		-	-	-	-	-	-	-	-	0.842	0.071	11.933	0.00	0.821	0.052	15.649	0.00	0.866	0.089	9.699	0.00	0.857	0.029	29.647	0.00	

V- Volume

TABLE 12: GARCH (1, 1) IN VOLUME AND VOLATILITY RELATIONSHIP

NAME OF COUNTY INDICES	YEARS	First				Second				Third				Fourth				Fifth				First to Fifth				
		Variable	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.
Dow Jones Composites	C	0.000	0.000	1.403	0.161	0.000	0.000	0.577	0.564	0.000	0.001	-0.219	0.827	-0.001	0.001	-1.168	0.243	0.001	0.001	1.808	0.071	0.000	0.000	2.068	0.039	0.000
	R(-1)	0.214	0.066	3.240	0.001	0.183	0.072	2.536	0.011	0.120	0.053	2.246	0.025	0.170	0.071	2.386	0.017	0.199	0.077	2.591	0.010	0.182	0.029	6.197	0.000	
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
	C	0.000	0.000	-1.948	0.051	0.000	0.000	-1.160	0.246	0.000	0.000	13.492	0.000	0.000	0.000	-7.332	0.000	0.000	0.000	-1.931	0.054	0.000	0.000	-1.889	0.059	0.000
	RESID(-1)^2	0.183	0.099	1.844	0.065	0.137	0.082	1.682	0.093	0.150	0.030	5.049	0.000	0.095	0.044	2.148	0.032	0.150	0.106	1.414	0.157	0.103	0.018	5.669	0.000	0.000
	GARCH(-1)	0.043	0.287	0.151	0.880	-0.075	0.288	-0.259	0.796	0.600	0.088	6.802	0.000	0.842	0.043	19.549	0.000	0.600	0.206	2.918	0.004	0.856	0.023	37.718	0.000	0.000
V	0.000	0.000	3.622	0.000	0.000	0.000	5.800	0.000	0.000	0.000	-112.925	0.000	0.000	0.000	7.163	0.000	0.000	0.000	1.855	0.064	0.000	0.000	3.587	0.000	0.000	
IPC All-Share	Variable	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
	C	0.001	0.000	2.317	0.021	0.001	0.001	0.879	0.380	0.000	0.001	-0.114	0.910	-0.001	0.001	-1.080	0.280	0.001	0.001	1.875	0.061	0.001	0.000	3.726	0.000	0.000
	R(-1)	0.254	0.066	3.822	0.000	0.336	0.089	3.790	0.000	0.204	0.067	3.056	0.002	0.308	0.066	4.683	0.000	0.326	0.063	5.205	0.000	0.304	0.030	10.070	0.000	0.000
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
	C	0.000	0.000	-0.610	0.542	0.000	0.000	4.691	0.000	0.000	-1.315	0.188	0.000	0.000	0.000	-6.868	0.000	0.000	0.000	-2.083	0.037	0.000	0.000	-2.604	0.009	0.000
	RESID(-1)^2	0.099	0.098	1.011	0.312	0.150	0.106	1.409	0.159	0.155	0.108	1.437	0.151	0.116	0.045	2.587	0.010	0.216	0.096	2.248	0.025	0.233	0.039	6.008	0.000	0.000
GARCH(-1)	0.156	0.145	1.074	0.283	0.600	0.200	3.006	0.003	0.308	0.203	1.520	0.129	0.818	0.044	18.444	0.000	0.587	0.128	4.572	0.000	0.638	0.043	14.813	0.000	0.000	
V	0.000	0.000	5.083	0.000	0.000	0.000	#####	0.000	0.000	0.000	2.966	0.003	0.000	0.000	6.590	0.000	0.000	0.000	2.887	0.004	0.000	0.000	6.177	0.000	0.000	
S&P TSX Index Compo	Variable	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
	C	0.001	0.000	3.544	0.000	0.001	0.000	1.494	0.135	0.001	0.000	1.288	0.198	0.000	0.001	0.147	0.883	0.001	0.001	1.767	0.077	0.001	0.000	3.720	0.000	0.000
	R(-1)	0.211	0.078	2.706	0.007	0.249	0.068	3.645	0.000	0.266	0.062	4.298	0.000	0.241	0.072	3.336	0.001	0.297	0.067	4.415	0.000	0.255	0.029	8.705	0.000	0.000
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
	C	0.000	0.000	-1.300	0.194	0.000	0.000	-1.158	0.247	0.000	0.000	-1.732	0.083	0.000	0.000	-0.382	0.702	0.000	0.000	-1.942	0.052	0.000	0.000	-1.635	0.102	0.000
	RESID(-1)^2	0.205	0.074	2.788	0.005	0.274	0.123	2.227	0.026	0.200	0.054	3.704	0.000	0.155	0.056	2.748	0.006	0.150	0.091	1.655	0.098	0.165	0.025	6.674	0.000	0.000
GARCH(-1)	0.307	0.216	1.423	0.155	0.417	0.143	2.925	0.003	0.765	0.046	16.726	0.000	0.847	0.052	16.360	0.000	0.600	0.183	3.285	0.001	0.792	0.027	29.177	0.000	0.000	
V	0.000	0.000	2.692	0.007	0.000	0.000	2.213	0.027	0.000	0.000	2.200	0.028	0.000	0.000	0.469	0.639	0.000	0.000	1.975	0.048	0.000	0.000	3.436	0.001	0.000	
IBC	Variable	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
	C	0.000	0.000	-1.251	0.211	0.001	0.002	0.510	0.610	-0.001	0.001	-0.714	0.475	0.001	0.001	0.557	0.578	0.001	0.000	1.956	0.051	0.000	0.001	0.491	0.624	0.000
	R(-1)	0.255	0.036	7.093	0.000	0.353	0.103	3.418	0.001	0.387	0.100	3.858	0.000	0.241	0.090	2.658	0.008	0.069	0.076	0.903	0.367	0.318	0.055	5.753	0.000	0.000
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
	C	0.000	0.000	8.980	0.000	0.000	0.000	4.785	0.000	0.000	3.199	0.001	0.000	0.000	1.759	0.079	0.000	0.000	0.000	4.343	0.000	0.000	0.000	4.507	0.000	0.000
	RESID(-1)^2	0.391	0.046	8.418	0.000	0.150	0.082	1.829	0.067	0.150	0.110	1.366	0.172	0.150	0.072	2.084	0.037	0.415	0.123	3.372	0.001	0.150	0.042	3.540	0.000	0.000
GARCH(-1)	0.397	0.038	10.365	0.000	0.600	0.142	4.236	0.000	0.600	0.146	4.097	0.000	0.600	0.237	2.536	0.011	-0.182	0.102	-1.780	0.075	0.600	0.095	6.338	0.000	0.000	
V	0.000	0.000	0.778	0.436	0.000	0.000	-12.208	0.000	0.000	0.000	-7.505	0.000	0.000	0.000	-3.784	0.000	0.000	0.000	1.390	0.165	0.000	0.000	-9.938	0.000	0.000	
S&P 500	Variable	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
	C	0.000	0.000	0.993	0.321	0.000	0.000	1.062	0.288	0.001	0.000	1.445	0.149	-0.001	0.001	-0.998	0.318	0.001	0.001	2.060	0.039	0.000	0.000	-0.037	0.971	0.000
	R(-1)	0.287	0.071	4.015	0.000	0.254	0.078	3.265	0.001	0.204	0.066	3.092	0.002	0.170	0.068	2.490	0.013	0.240	0.081	2.983	0.003	0.196	0.029	6.773	0.000	0.000
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
	C	0.000	0.000	-2.186	0.029	0.000	0.000	-4.692	0.000	0.000	-15.223	0.000	0.000	0.000	-19.243	0.000	0.000	0.000	0.000	-2.322	0.020	0.000	0.000	-18.538	0.000	0.000
	RESID(-1)^2	0.150	0.073	2.058	0.040	0.150	0.093	1.618	0.106	0.150	0.074	2.029	0.043	0.094	0.042	2.248	0.025	0.150	0.097	1.545	0.122	0.150	0.024	6.319	0.000	0.000
GARCH(-1)	0.600	0.174	3.451	0.001	0.600	0.156	3.856	0.000	0.600	0.068	8.865	0.000	0.832	0.043	19.494	0.000	0.600	0.186	3.226	0.001	0.600	0.026	22.870	0.000	0.000	
V	0.000	0.000	2.375	0.018	0.000	0.000	7.250	0.000	0.000	0.000	209.344	0.000	0.000	0.000	19.516	0.000	0.000	0.000	2.323	0.020	0.000	0.000	502.742	0.000	0.000	
Bo-vespa	Variable	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	Coefficient	Std. Error	z-Statistic	Prob.	
	C	-	-	-	-	-	-	-	-	0.002	0.001	2.151	0.032	0.000	0.001	-0.353	0.724	0.001	0.001	2.032	0.042	0.001	0.001	2.558	0.011	0.000
	R(-1)	-	-	-	-	-	-	-	-	0.184	0.069	2.673	0.008	0.276	0.070	3.947	0.000	0.278	0.077	3.616	0.000	0.254	0.037	6.840	0.000	0.000
		Variance Equation				Variance Equation				Variance Equation				Variance Equation				Variance Equation								
	C	-	-	-	-	-	-	-	-	0.000	0.000	1.025	0.305	0.000	0.000	-1.058	0.290	0.000	0.000	-2.454	0.014	0.000	0.000	2.133	0.033	0.000
	RESID(-1)^2	-	-	-	-	-	-	-	-	0.159	0.100	1.591	0.112	0.174	0.073	2.392	0.017	0.145	0.107	1.361	0.174	0.125	0.027	4.648	0.000	0.000
GARCH(-1)	-	-	-	-	-	-	-	-	0.717	0.205	3.488	0.000	0.761	0.067	11.371	0.000	0.600	0.120	5.016	0.000	0.853	0.031	27.660	0.000	0.000	
V	-	-	-	-	-	-	-	-	0.000	0.000	-0.911	0.363	0.000	0.000	1.368	0.171	0.000	0.000	3.070	0.002	0.000	0.000	-0.273	0.785	0.000	

V- Volume

TABLE 13: LEAD-LAG RELATIONSHIP BETWEEN VOLUME AND RETURN
VECTOR AUTOREGRESSION ESTIMATES
t-statistics in []

NAME OF COUNTRY INDICES		First		Second		Third		Fourth		Fifth		First to Fifth	
		R	V	R	V	R	V	R	V	R	V	R	V
Dow Jones Composites	R(-1)	0.232506	-3935330	0.20316	645187.4	0.127683	-5441244	0.1612	-8584381	0.23396	2343139	0.170042	-5763011
		-0.06333	-3090506	-0.06485	-3746577	-0.06603	-4606226	-0.0647	-3294170	-0.06386	-5623150	-0.02834	-1746537
		[3.67133]	[-1.27336]	[3.13301]	[0.17221]	[1.93362]	[-1.18128]	[2.49168]	[-2.60593]	[3.66344]	[0.41670]	[5.99947]	[-3.29968]
	R(-2)	-0.14966	1883267	-0.02623	-9093569	-0.08947	228059.7	-0.1599	-1118031	-0.10608	8554560	-0.12886	1031676
		-0.06333	-3090292	-0.06435	-3717858	-0.065	-4533893	-0.06359	-3238111	-0.06049	-5325735	-0.02816	-1735077
		[-2.36333]	[0.60941]	[-0.40758]	[-2.44592]	[-1.37653]	[0.05030]	[-2.51442]	[-0.34527]	[-1.75372]	[1.60627]	[-4.57660]	[0.59460]
	V(-1)	-5.86E-10	0.522124	1.53E-09	0.487649	-1.29E-10	0.492701	1.80E-09	0.574682	-1.58E-09	0.585224	3.70E-10	0.63939
		-1.30E-09	-0.06364	-1.10E-09	-0.06368	-9.20E-10	-0.06396	-1.20E-09	-0.06363	-7.10E-10	-0.06267	-4.40E-10	-0.02736
		[-0.44950]	[8.20423]	[1.38395]	[7.65820]	[-0.14069]	[7.70382]	[1.43844]	[9.03111]	[-2.21881]	[9.33758]	[0.83431]	[23.3700]
	V(-2)	1.42E-09	0.11533	-9.09E-10	0.126389	2.20E-10	0.266491	-1.51E-09	0.248436	8.68E-10	0.184871	-5.65E-10	0.292736
		-1.30E-09	-0.06352	-1.10E-09	-0.06376	-9.10E-10	-0.06335	-1.20E-09	-0.0631	-7.10E-10	-0.06271	-4.40E-10	-0.02725
		[1.09155]	[1.81557]	[-0.82380]	[1.98211]	[0.24261]	[4.20697]	[-1.21788]	[3.93737]	[1.21864]	[2.94823]	[-1.27672]	[10.7441]
	C	-0.00132	758018.3	-0.00124	985026.1	-0.00045	873611.3	-0.00364	973045.3	0.004667	1147597	0.000797	259698.5
		-0.00248	-121017	-0.00263	-151708	-0.00264	-184084	-0.00459	-233657	-0.00277	-243892	-0.00078	-47979.9
		[-0.53248]	[6.26372]	[-0.47024]	[6.49291]	[-0.17217]	[4.74573]	[-0.79219]	[4.16442]	[1.68503]	[4.70535]	[1.02395]	[5.41266]
IPC All-Share	R(-1)	0.350849	-7509.74	0.396197	-395197	0.195802	-389322	0.389162	41875.42	0.415178	142499.4	0.355767	-154925
		-0.06247	-241797	-0.06345	-209472	-0.06444	-211341	-0.06225	-183823	-0.06075	-316566	-0.02763	-100514
		[5.61593]	[-0.03106]	[6.24456]	[-1.88663]	[3.03831]	[-1.84215]	[6.25208]	[0.22780]	[6.83435]	[0.45014]	[12.8761]	[-1.54133]
	R(-2)	-0.14161	-326575	-0.1513	-324018	-0.10523	27171.44	-0.19142	-350474	-0.19257	-342979	-0.15285	-281466
		-0.0625	-241897	-0.06422	-212029	-0.06428	-210798	-0.062	-183107	-0.05943	-309710	-0.02767	-100668
		[-2.26582]	[-1.35006]	[-2.35594]	[-1.52817]	[-1.63711]	[0.12890]	[-3.08724]	[-1.91403]	[-3.24013]	[-1.10742]	[-5.52365]	[-2.79778]
	V(-1)	1.64E-08	0.48206	2.43E-08	0.43199	3.61E-08	0.358796	5.40E-08	0.402558	-2.37E-08	0.378254	1.92E-08	0.495498
		-1.60E-08	-0.06332	-1.90E-08	-0.06406	-2.10E-08	-0.06936	-2.10E-08	-0.06218	-1.20E-08	-0.06219	-7.60E-09	-0.02773
		[1.00221]	[7.61351]	[1.25079]	[6.74322]	[1.70462]	[5.17269]	[2.56250]	[6.47444]	[-1.98257]	[6.08196]	[2.51432]	[17.8709]
	V(-2)	-2.23E-08	0.039319	-2.88E-08	-0.0482	-9.69E-09	0.048789	-4.31E-08	0.212195	8.98E-09	0.051622	-2.26E-08	0.153524
		-1.60E-08	-0.06322	-1.90E-08	-0.06348	-2.10E-08	-0.06964	-2.10E-08	-0.06258	-1.20E-08	-0.06197	-7.60E-09	-0.0277
		[-1.36553]	[0.62193]	[-1.49919]	[-0.75932]	[-0.45609]	[0.70058]	[-2.03325]	[3.39102]	[0.75508]	[0.83296]	[-2.96569]	[5.54147]
	C	0.00191	47329.67	0.001691	77596.25	-0.00329	78949.61	-0.00332	64790.78	0.003872	98591.07	0.001082	49518.31
		-0.00167	-6473.95	-0.00267	-8829.71	-0.00315	-10318.9	-0.00375	-11060.5	-0.00231	-12041.6	-0.00103	-3744.75
		[1.14164]	[7.31079]	[0.63213]	[8.78809]	[-1.04623]	[7.65099]	[-0.88642]	[5.85785]	[1.67551]	[8.18755]	[1.05068]	[13.2234]
S&P TSX Index Compo	R(-1)	0.219225	497028.7	0.243142	-564104	0.222683	-695894	0.170998	-420441	0.370787	160842.2	0.206846	-412573
		-0.06862	-328203	-0.06447	-371559	-0.06496	-334675	-0.06527	-193239	-0.06297	-278176	-0.02882	-117193
		[3.19485]	[1.36997]	[3.77154]	[-1.51821]	[3.42784]	[-2.07931]	[2.61993]	[-2.17575]	[5.88835]	[0.57820]	[7.17804]	[-3.52045]
	R(-2)	-0.04998	-394439	-0.08389	-445776	0.004473	-111605	-0.05435	-55199.6	-0.19316	340700	-0.06854	-18651
		-0.069	-364835	-0.06483	-373676	-0.06533	-336578	-0.06516	-192929	-0.06194	-273606	-0.02887	-117429
		[-0.72432]	[-1.08114]	[-1.29393]	[-1.19295]	[0.06847]	[-0.33159]	[-0.83411]	[-0.28611]	[-3.11878]	[1.24522]	[-2.37372]	[0.15883]
	V(-1)	3.17E-09	0.455157	-3.52E-09	0.383454	1.71E-08	0.355731	3.84E-08	0.519929	-1.40E-08	0.376699	9.65E-09	0.534617
		-1.30E-08	-0.06766	-1.10E-08	-0.06455	-1.30E-08	-0.06477	-2.20E-08	-0.06554	-1.40E-08	-0.06271	-7.00E-09	-0.02844
		[0.24761]	[6.72691]	[-0.31433]	[5.94010]	[1.35640]	[5.49209]	[1.73314]	[7.93268]	[-0.98494]	[6.00668]	[1.38002]	[18.8012]
	V(-2)	-1.99E-08	0.142753	1.25E-08	0.0372	-1.40E-08	0.09903	-2.98E-08	0.030342	1.05E-08	0.200923	-1.68E-08	0.186258
		-1.30E-08	-0.06793	-1.10E-08	-0.06392	-1.20E-08	-0.06437	-2.20E-08	-0.06474	-1.40E-08	-0.06211	-6.90E-09	-0.02822
		[-1.54819]	[2.10144]	[1.13092]	[0.58198]	[-1.12233]	[1.53834]	[-1.36311]	[0.46868]	[0.74894]	[3.23499]	[-2.42136]	[6.60116]
	C	0.003202	56569.92	-0.00144	109003.7	-0.00072	121598.2	-0.00375	113377.8	0.001606	79228.18	0.00159	56075.91
		-0.0018	-9526.42	-0.00232	-13347.7	-0.00311	-16019.5	-0.00537	-15909.4	-0.00277	-12221.4	-0.00119	-4822.73
		[1.77705]	[5.93822]	[-0.62132]	[8.16645]	[-0.23245]	[7.59063]	[-0.69847]	[7.12649]	[0.58041]	[6.48274]	[1.34051]	[11.6274]
IBC	R(-1)	0.359184	38066.17	0.482182	-10827.1	0.389859	24684.51	0.135191	3706.435	0.178451	2598.28	0.357052	-5780.64
		-0.03248	-12500.5	-0.06098	-27280.8	-0.06684	-34568.8	-0.06191	-4619.16	-0.0687	-2379.71	-0.03256	-12510.7
		[1.10575]	[3.04516]	[7.90672]	[-0.39688]	[5.83285]	[0.71407]	[2.18381]	[0.80240]	[2.59768]	[1.09185]	[10.9666]	[-0.46206]
	R(-2)	-0.12746	-421.125	-0.35307	-5592.41	-0.04479	-59486.6	0.222301	6272.136	0.005099	-168.18	-0.12811	-15978.5
		-0.03244	-12485.1	-0.061	-27287.1	-0.06681	-34552.1	-0.06007	-4482.12	-0.06919	-2396.84	-0.03259	-12521.4
		[-3.92861]	[-0.03373]	[-5.78830]	[-0.20495]	[-0.67040]	[-1.72165]	[3.70075]	[1.39937]	[0.07369]	[-0.07017]	[-3.93149]	[-1.27609]
	V(-1)	-2.46E-07	0.372891	3.50E-08	0.191029	1.13E-07	0.349946	-1.71E-06	0.171052	-1.05E-06	-0.02459	-1.32E-07	0.369269
		-8.20E-08	-0.03162	-1.60E-07	-0.06997	-1.20E-07	-0.06336	-8.50E-07	-0.06353	-2.00E-06	-0.06907	-8.30E-08	-0.03178
		[-2.99021]	[11.7940]	[0.22377]	[2.73007]	[0.92431]	[5.52295]	[-2.00568]	[2.69265]	[-0.52878]	[-0.35605]	[1.47773]	[11.6188]
	V(-2)	1.31E-07	0.267254	-3.12E-07	0.05705	3.68E-08	0.317383	8.52E-07	0.171643	-2.87E-06	0.020842	-1.73E-07	0.2618
		-8.30E-08	-0.03176	-1.60E-07	-0.06969	-1.20E-07	-0.06356	-8.50E-07	-0.06334	-2.00E-06	-0.06879	-8.30E-08	-0.03171
		[1.58247]	[8.41360]	[-2.00285]	[0.81861]	[0.29983]	[4.99342]	[1.00338]	[2.71000]	[-1.44511]	[0.30299]	[-2.09628]	[8.25688]
	C	-0.00017	1063.673	0.003357	4832.04	-0.00149	1361.468	0.000618	265.0234	0.001502	117.7327	0.000648	1043.607
		-0.00043	-167.139	-0.00153	-686.082	-0.00083	-428.277	-0.00077	-57.3834	-0.00065	-22.4799	-0.00043	-166.905
		[-0.39513]	[6.36400]	[2.18900]	[7.04295]	[-1.80231]	[3.17894]	[0.80398]	[4.61847]	[2.31423]	[5.23725]	[1.49075]	[6.25269]
S&P 500	R(-1)	0.316018	-4947237	0.293866	114804.4	0.241014	-1.6E+07	0.233996	-1E+07	0.301472	5588909	0.240331	-7884419
		-0.06372	-3881751	-0.06428	-4634956	-0.06628	-5031835	-0.06403	-3209287	-0.06317	-5816559	-0.02815	-1791596
		[4.95934]	[-1.27449]	[4.57163]	[0.02477]	[3.63616]	[-3.25002]	[3.65469]	[-3.14353]	[4.77259]	[0.96086]	[8.53721]	[-4.40078]
	R(-2)	-0.11247	-535164	-0.10893	-1.1E+07	-0.11435	6644836	-0.21055	-399797	-0.15963	8673056	-0.17675	2607807
		-0.06373	-3882415	-0.06383	-4602841	-0.0661	-5017697	-0.06265	-3140272	-0.06048	-5569443	-0.02789	-1774915
		[-1.76465]	[-0.13784]	[-1.70643]	[-2.48943]	[-1.72999]	[1.32428]	[-3.36071]	[-0.12731]	[-2.63925]	[1.55726]	[-6.33752]	[1.46926]
	V(-1)	2.76E-10	0.52811	1.10E-09	0.483437	7.28E-10	0.390615	2.67E-09	0.5208	-1.45E-09	0.579154	9.37E-10	0.603231
		-1.00E-09	-0.06364	-8.80E-10	-0.06345	-8.40E-10	-0.06345	-1.30E-09	-0.06283	-6.80E-10	-0.06246	-4.30E-10	-0.0271
		[0.26											

						-0.06604	-97352.1	-0.06301	-782.917	-0.06462	-1792.88	-0.03679	-24223.9
						[2.91301]	[-0.39983]	[3.89220]	[-0.71474]	[4.72779]	[0.43918]	[6.76759]	[-0.32784]
R(-2)						-0.02455	118319.1	-0.19948	-503.594	-0.12434	2805.54	-0.15227	24059.75
						-0.06608	-97404.3	-0.06267	-778.705	-0.06301	-1748.23	-0.03678	-24221.5
						[-0.37155]	[1.21472]	[-3.18312]	[-0.64671]	[-1.97317]	[1.60479]	[-4.13975]	[0.99332]
V(-1)						-6.33E-08	0.636191	7.32E-06	0.51213	4.39E-08	0.434557	-6.06E-08	0.64674
						-4.20E-08	-0.06247	-5.10E-06	-0.06291	-2.30E-06	-0.06483	-5.30E-08	-0.0349
						[-1.49463]	[0.101836]	[-1.44518]	[8.14120]	[0.01877]	[6.70328]	[-1.14415]	[18.5300]
V(-2)						7.46E-08	0.274198	-3.25E-06	0.207278	7.02E-07	0.024813	7.44E-08	0.28481
						-4.10E-08	-0.06111	-5.10E-06	-0.06303	-2.30E-06	-0.064	-5.20E-08	-0.03414
						[1.79943]	[4.48690]	[-0.64167]	[3.28865]	[0.30423]	[0.38772]	[1.43526]	[8.34350]
C						0.000421	2785.027	-0.00767	416.1008	0.00043	818.0783	0.000297	703.6484
						-0.00129	-1908.41	-0.00649	-80.6131	-0.00378	-104.997	-0.00077	-505.216
						[0.32553]	[1.45935]	[-1.18292]	[5.16170]	[0.11369]	[7.79143]	[0.38649]	[1.39277]

R- Return and V-Volume.

TABLE 14: LEAD –LAG RELATIONSHIP BETWEEN VOLUME AND VOLATILITIES
VECTOR AUTOREGRESSION ESTIMATES (2005-10)
t-statistics in []

NAME OF COUNTRY INDICES	First		Second		Third		Fourth		Fifth		First to Fifth		
	RR	V	RR	V	RR	V	RR	V	RR	V	RR	V	
Dow Jones Composites	RR(-1)	0.159371	-1.78E+08	0.14466	-2.10E+08	0.079908	-8.16E+08	0.167204	-1.21E+08	0.00393	-3.35E+08	0.216271	-1.88E+08
		-0.06537	-3.40E+08	-0.06784	-3.40E+08	-0.06669	-3.30E+08	-0.06307	-8.50E+07	-0.06502	-3.90E+08	-0.02759	-5.40E+07
		[2.43809]	[-0.53018]	[2.13228]	[-0.61936]	[1.19820]	[-2.48282]	[2.65106]	[-1.42969]	[0.06045]	[-0.86272]	[7.83962]	[-3.51060]
	RR(-2)	-0.01352	-3.30E+08	0.02709	37518435	0.041331	3.58E+08	0.269696	40610314	0.039946	4.76E+08	0.286593	56289167
		-0.06549	-3.40E+08	-0.06761	-3.40E+08	-0.06635	-3.30E+08	-0.06284	-8.40E+07	-0.04907	-2.90E+08	-0.02765	-5.40E+07
		[-0.20637]	[-0.98402]	[0.40070]	[0.11105]	[0.62288]	[1.09542]	[4.29207]	[0.48134]	[0.81411]	[1.62673]	[10.3635]	[1.04747]
	V(-1)	2.71E-11	0.526229	1.16E-11	0.499648	4.25E-11	0.565907	1.45E-10	0.637451	2.78E-11	0.606592	7.07E-11	0.668838
		-1.30E-11	-0.06497	-1.30E-11	-0.06732	-1.30E-11	-0.06466	-4.70E-11	-0.06374	-1.10E-11	-0.06361	-1.40E-11	-0.02754
		[2.14124]	[8.09944]	[0.85763]	[7.42253]	[3.23748]	[8.75231]	[3.60315]	[10.0001]	[2.60438]	[9.53649]	[4.98775]	[24.2821]
	V(-2)	-1.49E-11	0.128566	-1.10E-11	0.132621	2.35E-11	0.243377	-2.51E-11	0.210523	-2.42E-12	0.155873	-2.61E-11	0.277958
		-1.30E-11	-0.06526	-1.30E-11	-0.06715	-1.40E-11	-0.06788	-4.90E-11	-0.06545	-1.10E-11	-0.06431	-1.40E-11	-0.02789
		[-1.17055]	[1.97014]	[-0.81503]	[1.97503]	[1.70919]	[3.58527]	[-0.51575]	[3.21678]	[-0.22488]	[2.42366]	[-1.81542]	[9.96641]
	C	7.34E-07	736667.9	3.19E-05	942034.4	-0.00016	733154.2	-0.00045	885288.5	-4.83E-05	1186106	-0.00011	220465
		-2.40E-05	-122800	-3.10E-05	-155695	-4.00E-05	-196839	-0.00019	-250787	-4.20E-05	-247780	-2.60E-05	-49885.4
		[0.03066]	[5.99895]	[1.02519]	[6.05050]	[-4.04614]	[3.72464]	[-2.43333]	[3.53004]	[-1.16359]	[4.78693]	[-4.14021]	[4.41943]
IPC All-Share	RR(-1)	0.151033	2988677	0.263706	-2059058	0.117886	5381947	0.203011	3376830	0.334092	26245281	0.296817	1731917
		-0.06723	-2.00E+07	-0.06773	-2.00E+07	-0.0686	-1.10E+07	-0.06842	-4989152	-0.06316	-1.90E+07	-0.02896	-3460414
		[2.24636]	[0.15283]	[3.89362]	[-0.20178]	[1.71853]	[0.50265]	[2.96695]	[0.67683]	[5.28970]	[1.35180]	[10.2508]	[0.50049]
	RR(-2)	-0.02455	-9129180	0.184954	-58997.5	-0.03979	-1.7E+07	0.120216	11601651	-0.03587	-4E+07	0.180881	3874864
		-0.0671	-2.00E+07	-0.06765	-1.00E+07	-0.06806	-1.10E+07	-0.06712	-4893966	-0.05867	-1.80E+07	-0.02887	-3450429
		[-0.36582]	[-0.46778]	[2.73380]	[-0.00579]	[-0.58460]	[1.63813]	[1.79110]	[2.37060]	[-0.61136]	[2.21047]	[6.26495]	[1.12301]
	V(-1)	5.91E-10	0.481067	-8.91E-11	0.46488	1.48E-09	0.353102	2.85E-09	0.363148	3.11E-10	0.366427	9.72E-10	0.495199
		-2.30E-10	-0.06831	-4.60E-10	-0.06884	-4.70E-10	-0.07332	-9.30E-10	-0.06812	-2.10E-10	-0.06337	-2.40E-10	-0.0292
		[2.51463]	[7.04291]	[-0.19509]	[6.75280]	[3.15519]	[4.81579]	[3.05239]	[5.33098]	[1.50887]	[5.78274]	[3.97880]	[16.9598]
	V(-2)	-5.89E-10	0.042517	6.95E-11	-0.05953	2.71E-11	0.073194	1.92E-09	0.123021	-1.78E-10	0.079057	9.33E-11	0.1035027
		-2.30E-10	-0.06771	-4.60E-10	-0.06894	-4.80E-10	-0.07459	-9.50E-10	-0.06963	-2.10E-10	-0.06336	-2.50E-10	-0.02937
		[-2.53014]	[0.62792]	[0.15180]	[-0.86349]	[0.05672]	[0.98131]	[2.00748]	[1.76689]	[-0.86409]	[1.24768]	[0.37985]	[4.59772]
	C	7.10E-05	47093.93	8.98E-05	74188.19	-3.99E-05	78513.27	-0.00054	81230.75	5.53E-05	97212.4	-5.41E-05	50798.69
		-2.30E-05	-6544.68	-5.90E-05	-8948.95	-6.90E-05	-10760.8	-0.00017	-12688.4	-3.90E-05	-12057.1	-3.30E-05	-3926.2
		[3.15631]	[7.19576]	[1.51166]	[8.29016]	[-0.57883]	[7.29622]	[-3.11505]	[6.40198]	[1.40890]	[8.06267]	[-1.64628]	[12.9384]
S&P TSX Index Compo	RR(-1)	0.052599	28284906	0.125104	-7.2E+07	0.205206	16150899	0.102985	8111171	0.184281	640086.5	0.153647	8276290
		-0.06855	-3.20E+07	-0.06326	-3.20E+07	-0.06589	-1.90E+07	-0.06617	-4747997	-0.06573	-2.00E+07	-0.02873	-3463676
		[0.76727]	[0.87847]	[1.97769]	[2.25504]	[3.11420]	[0.83646]	[1.55647]	[1.70834]	[2.80352]	[1.70834]	[2.80352]	[2.38945]
	RR(-2)	0.061864	29289004	0.296398	22996125	-0.02092	3928002	0.186661	10539324	0.053828	44303964	0.226748	9814858
		-0.06866	-3.20E+07	-0.06375	-3.20E+07	-0.06459	-1.90E+07	-0.06671	-4786712	-0.06239	-1.90E+07	-0.0288	-3472355
		[0.90107]	[0.90830]	[4.64938]	[0.71893]	[0.32385]	[0.20755]	[2.79830]	[2.20179]	[0.86277]	[2.29690]	[7.87234]	[2.82657]
	V(-1)	1.56E-10	0.4449	2.40E-10	0.434891	7.81E-10	0.355406	1.15E-09	0.498521	3.28E-11	0.380049	7.35E-10	0.52178
		-1.40E-10	-0.06795	-1.30E-10	-0.06581	-2.20E-10	-0.06573	-9.40E-10	-0.0671	-2.10E-10	-0.06474	-2.40E-10	-0.02908
		[1.07893]	[6.54704]	[1.83194]	[6.60837]	[3.48202]	[5.40728]	[1.22894]	[7.42902]	[0.15678]	[5.87060]	[3.04718]	[17.9407]
	V(-2)	2.06E-11	0.133624	-1.26E-10	0.028803	6.63E-11	0.073086	1.02E-09	-0.03742	3.48E-10	0.158906	5.10E-10	0.156613
		-1.50E-10	-0.0682	-1.30E-10	-0.06558	-2.30E-10	-0.06733	-9.20E-10	-0.06589	-2.10E-10	-0.06431	-2.40E-10	-0.02889
		[0.14199]	[1.95930]	[-0.96466]	[0.43917]	[0.28852]	[1.08542]	[1.11071]	[-0.56793]	[1.67211]	[2.47097]	[2.12616]	[5.42111]
	C	8.91E-06	57259.64	7.76E-06	103050.7	-0.00012	125750	-0.00027	129541	-1.66E-06	82869.32	-0.00017	62066.61
		-2.00E-05	-9534.26	-2.60E-05	-13226.3	-5.70E-05	-16689.4	-0.00023	-16720.7	-4.00E-05	-12307.2	-4.20E-05	-5093.81
		[0.43875]	[6.00567]	[0.29420]	[7.79135]	[-2.10832]	[5.53474]	[-1.15537]	[7.74733]	[-0.04176]	[6.73338]	[-3.92324]	[12.1847]
IBC	RR(-1)	0.318672	617205.2	0.302971	860969.6	0.327528	4728961	0.366837	-18621	0.435099	34944.78	0.324179	956772.6
		-0.03072	-293980	-0.06058	-460808	-0.06553	-1927293	-0.06069	-240763	-0.06922	-184921	-0.03079	-291179
		[10.3734]	[2.09948]	[5.00158]	[1.86839]	[4.99797]	[2.45368]	[6.04451]	[-0.07734]	[6.28542]	[0.18897]	[10.5294]	[3.28586]
	RR(-2)	0.335728	-72723.8	0.376062	118664.2	0.163954	-782311	-0.05954	161435.1	-0.09707	33096.39	0.338663	-58745.4
		-0.03074	-294163	-0.06119	-465452	-0.0664	-1952877	-0.05393	-213942	-0.06943	-185467	-0.03099	-293063
		[10.9218]	[-0.24722]	[6.14626]	[0.25494]	[2.46911]	[-0.40059]	[-1.10400]	[0.75458]	[-1.39816]	[0.17845]	[10.9291]	[-0.20045]
	V(-1)	3.37E-10	0.368691	-2.43E-09	0.169639	4.67E-10	0.325277	1.61E-08	0.177219	-1.92E-08	-0.03233	-1.12E-09	0.359643
		-3.30E-09	-0.03174	-9.10E-09	-0.06954	-2.20E-09	-0.06341	-1.60E-08	-0.06388	-2.60E-08	-0.06936	-3.40E-09	-0.03171
		[0.10146]	[11.6146]	[-0.26604]	[2.43948]	[0.21650]	[5.56045]	[0.99685]	[2.77432]	[-0.73764]	[-0.46606]	[-0.33392]	[11.3399]
	V(-2)	1.01E-08	0.2524	9.51E-09	0.041215	1.19E-09	0.292189	5.14E-09	0.168521	2.05E-08	0.015679	6.66E-09	0.25008
		-3.30E-09	-0.03182	-9.00E									

		-0.06594	-5.70E+08	-0.06903	-5.20E+08	-0.06834	-3.90E+08	-0.0639	-7.80E+07	-0.06593	-4.40E+08	-0.02763	-5.00E+07
		[2.53193]	[-1.34676]	[2.04945]	[0.37802]	[-1.35456]	[-2.95224]	[1.87463]	[-1.08314]	[1.00226]	[-1.21138]	[6.67182]	[-2.79963]
	RR(-2)	-0.00679	-1.7E+07	0.045556	-1.15E+08	0.048367	3.84E+08	0.256593	-2.4E+07	0.003401	4.84E+08	0.294327	-3850798
		-0.06614	-5.80E+08	-0.06871	-5.20E+08	-0.0675	-3.90E+08	-0.06382	-7.80E+07	-0.05304	-3.60E+08	-0.0277	-5.00E+07
		[-0.10266]	[-0.02925]	[0.66299]	[-0.21946]	[0.71657]	[0.98669]	[4.02072]	[-0.30798]	[0.06412]	[1.36409]	[10.6254]	[-0.07667]
	V(-1)	2.25E-11	0.55441	8.46E-12	0.477671	6.79E-11	0.515534	1.54E-10	0.588741	1.91E-11	0.61746	7.62E-11	0.634856
		-7.60E-12	-0.06594	-9.00E-12	-0.0684	-1.10E-11	-0.06496	-5.20E-11	-0.06381	-9.70E-12	-0.06479	-1.50E-11	-0.02742
		[2.96418]	[8.40831]	[0.94024]	[6.98308]	[6.03072]	[7.93614]	[2.95318]	[9.22644]	[1.97580]	[9.53029]	[5.03589]	[23.1498]
	V(-2)	-1.25E-11	0.104275	-3.40E-12	0.146407	5.74E-12	0.279157	-1.14E-11	0.263777	-7.73E-13	0.151584	-2.53E-11	0.31226
		-7.70E-12	-0.06661	-8.90E-12	-0.06766	-1.20E-11	-0.07082	-5.30E-11	-0.06528	-9.70E-12	-0.06502	-1.50E-11	-0.02772
		[-1.63681]	[1.56545]	[-0.38222]	[2.16401]	[0.46743]	[3.94157]	[-0.21229]	[4.04054]	[-0.07959]	[2.33144]	[-1.65678]	[11.2644]
	C	-3.84E-06	728736.3	9.03E-06	953849.4	-0.00018	809515.5	-0.00053	873250.5	-1.83E-05	1168860	-0.00013	220645.1
		-1.40E-05	-123759	-2.10E-05	-159672	-3.90E-05	-226348	-0.00021	-260739	-3.70E-05	-246818	-2.90E-05	-51728.8
		[-0.27016]	[5.88836]	[0.43005]	[5.97381]	[-4.50700]	[3.57642]	[-2.48512]	[3.34914]	[-0.49622]	[4.73573]	[-4.40423]	[4.26542]
Bovespa	RR(-1)	-	-	-	-	0.186247	-3851773	0.187566	13860.04	-0.01929	-81436.3	0.266374	-181815
		-	-	-	-	-0.06566	-3960860	-0.06405	-14110.8	-0.06934	-98774.4	-0.03524	-483137
		-	-	-	-	[2.83660]	[-0.97246]	[2.92848]	[0.98223]	[-0.27812]	[-0.82447]	[7.55819]	[-0.37632]
	RR(-2)	-	-	-	-	-0.00274	-5727548	0.279726	32767.22	0.000995	43110.77	0.322882	-256897
		-	-	-	-	-0.06589	-3974963	-0.0641	-14122	-0.06058	-86299	-0.03525	-483277
		-	-	-	-	[-0.04161]	[-1.44091]	[4.36394]	[2.32030]	[0.01642]	[0.49955]	[9.15891]	[-0.53157]
	V(-1)	-	-	-	-	1.70E-09	0.62678	6.02E-07	0.479622	1.83E-07	0.461592	2.02E-09	0.646072
		-	-	-	-	-1.00E-09	-0.0624	-2.90E-07	-0.06485	-4.90E-08	-0.06956	-2.50E-09	-0.03492
		-	-	-	-	[1.64421]	[10.0450]	[2.04412]	[7.39625]	[3.74658]	[6.63630]	[0.79262]	[18.5006]
	V(-2)	-	-	-	-	-2.54E-09	0.275139	1.12E-07	0.149987	-5.45E-08	0.013156	-3.01E-09	0.284651
		-	-	-	-	-1.00E-09	-0.06086	-2.90E-07	-0.06463	-4.90E-08	-0.0705	-2.50E-09	-0.03414
		-	-	-	-	[-2.52071]	[4.52118]	[0.38288]	[2.32082]	[-1.10198]	[0.18660]	[-1.20821]	[8.33708]
	C	-	-	-	-	0.000229	5491.71	-0.00066	515.6236	-3.96E-05	807.8509	0.000174	894.6003
		-	-	-	-	-3.90E-05	-2338.99	-0.00039	-86.9477	-7.90E-05	-112.083	-4.00E-05	-552.141
		-	-	-	-	[5.89809]	[2.34789]	[-1.66303]	[5.93028]	[-0.50300]	[7.20764]	[4.31458]	[1.62024]

RR- Volatilities and V-Volume.

A CONCEPTUAL STUDY ON GIG ECONOMY

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ABSTRACT

This Paper focuses on the concept of GIG economy. A different technological revolution – the digital revolution – is partially responsible for the recent return to peer-to-peer exchange. Contingent workers are those who don't have an implicit or explicit contract for long-term employment. Alternative employment arrangements include independent contractors (also called freelancers or independent consultants), on-call workers, and workers provided by temporary help agencies or contract firms. The main objective of our paper is to understand the importance of GIG economy and its impact on the trends in all the sectors. Managing finances is an important part of making gig arrangements viable. Success was once defined as being able to stay at a company for a long time and move up the corporate ladder. Gig Economy will itself become an engine of economic and social transformation. Working nine to five for a single employer bears little resemblance to the way a substantial share of the workforce makes a living today. Millions of people assemble various income streams and work independently, rather than in structured payroll jobs.

KEYWORDS

GIG, technological revolution, employment.

INTRODUCTION

A GIG economy is a situation in which impermanent positions are normal and associations contract with autonomous labourers for transient engagements. Gig specialists are spread among different occupation gathers and are not effortlessly recognized in reviews of business and income. Be that as it may, they are comparable in the way they gain cash. These labourers frequently get singular gigs utilizing a site or portable application that matches them with clients. A few gigs might be exceptionally concise, for example, noting a 5-minute overview. Others are any longer yet of constrained term, for example, a 18-month database administration extend. When one gig is over, specialists who gain a relentless pay along these lines must discover another. What's more, once in a while, that implies juggling different employments without a moment's delay.

BACKGROUND OF THE STUDY

Digitization has additionally contributed straightforwardly to a diminishing in occupations as programming replaces a few sorts of work and implies that others take a great deal less time. Different impacts incorporate monetary weights on organizations prompting to further staff diminishment and the passageway of the Millennial era into the workforce.

The present the truth is that individuals tend to change occupations a few circumstances all through their working lives; the gig economy can be viewed as a development of that pattern. That implies that specialists can choose among impermanent occupations and ventures the world over, while bosses can choose the best people for particular activities from a bigger pool than that accessible in any given territory. Not very far in the past, the main individuals who searched for "gigs" were performers. For whatever is left of us, once we exceeded our school longings for shake fame, we discovered "genuine" occupations that paid us a settled pay each month, permitted us to take paid occasions and shaped the reason for arranging a steady future. Today, more of us pick, rather, to make our living working gigs instead of full time. To the confident people, it guarantees an eventual fate of enabled business visionaries and unlimited advancement. To the naysayers, it forecasts a tragic fate of disappointed specialists chasing for their next wedge of piecework. Working at home or in bistros, beginning organizations with groups of advisors and specialists you've met just on the web, and notwithstanding propelling business wanders that in the end may bomb, all designate "activity," "innovativeness," and "versatility," which are exceptionally attractive characteristics in today's working environment.

OCCUPATIONS FOR GIG BUSINESS

Gigs are more probable in a few occupations than in others. Work that includes a solitary undertaking, for example, composing a strategy for success, loans itself well to this kind of game plan. Any occupation in which specialists might be contracted for on-request occupations has the potential for gig business.

Expressions and outline: Numerous occupations in this gathering, including artists, visual planners, and art and fine craftsmen, offer particular one-time benefits or altered items, which makes them great possibility for gig work.

PC and data innovation: Web designers, programming engineers, and PC developers are among the occupations in this gathering in which specialists may be enlisted to finish a solitary employment, for example, to make a private company site or another sort of programming.

Development and extraction: Craftsmen, painters, and other development laborers as often as possible go up against individual ventures of brief length, a sign of gig occupations.

Media and interchanges: The administrations of specialized journalists, mediators and interpreters, picture takers, and others in this gathering are regularly extend based and simple to convey electronically, powering a business opportunity for gig labourers.

Transportation and material moving: Ridesharing applications have made open doors for labourers who give transportation to travellers as required, and on-request shopping administrations have prompted to gig employments for conveyance drivers.

RESEARCH METHODOLOGY

RESEARCH TYPE

Descriptive

SOURCES OF DATA

Secondary data: The secondary data source is data already existing in the records. The secondary data is obtained the company brochures, newspapers and website.

LIMITATIONS OF THE STUDY

Some of these limitations are as follows:

- Research was constrained by the time limit of one month
- This paper was restricted to secondary sources of Data collection.

OBJECTIVES OF THE STUDY

1. To determine the effectiveness of GIG economy.
2. To understand the Advantages and Disadvantages of GIG economy.
3. To understand the new career avenues of GIG economy

ADVANTAGES AND DISADVANTAGES OF GIG WORK

Gig specialists may do shifted undertakings, however they have comparative things they appreciate—and don't—about their courses of action.

Opportunity to act however they see fit what many individuals like, yet with self-sufficiency comes obligation. For instance, it can be distressing for gig labourers to guarantee that they have reliable salary. "When you're a consultant, you settle on the choices, which is awesome," says Theresa Anderson of Las Vegas, Nevada, who does visual communication, extends low maintenance from her home. "In any case, it can likewise be truly alarming."

PROSPECTS

Gig specialists say that they like being in control. They can pick ventures they appreciate and plan their work around their lives.

Adaptability: Individuals who need to work without having set hours may search for gigs to fit their calendars. "I sign on and work when I need," says Ariana Baseman, a rideshare driver in Detroit, Michigan, who transports travellers in her extra time, notwithstanding working a customary, all day work. "It's that adaptable."

Like different sorts of adaptable business game plans, gigs may offer specialists a possibility for versatility. "The thing that I adore about it is the flexibility," says Scratch Walter, of Salt Lake City, Utah, who makes online classes in PC programming. "In the event that you choose you need to take some time off; you can do that."

Assortment: Gigs may furnish specialists with an opportunity to attempt a few sorts of employments. Thus, they display assortment and profession investigation to both new and experienced specialists. "Accept open doors when they emerge," says Heenan. "You have a great deal of opportunities to do distinctive things." What's more, in case you're an "extrovert," gig work may offer association with a various customer base. "I cherish that I get to always work with various individuals," says Hayes. "I'm quite social, so I appreciate meeting various kinds."

Energy: You might need to choose gigs a similar way you would conventional business: by looking for some kind of employment in which you seek after your interests. Also, contingent upon how you plan your gigs, you may have the capacity to pick among numerous interests.

CONS

There's a great deal of instability connected with gig work. For instance, you'll need a constant flow of gigs to get steady pay. And still, at the end of the day, the sum you procure may not counterbalance a portion of the costs you'll be in charge of outside of a customary work relationship, for example, benefits.

Irregularity: Landing enough work to give a steady salary from gigs alone isn't generally simple, or even conceivable. Accordingly, numerous gig laborers discover gigs sufficient for low maintenance work however not a full-time vocation.

Laborers may battle with searching for employments, not realizing what—on the off chance that anything—will come next. "In some cases you're not profiting in light of the fact that you're not getting any work," says Baseman. "That part's not so much in your control." And even after you finish a gig, you may confront times of no salary if there are deferrals in getting paid.

Booking: Not having set hours or a business who gives guidance for the day is trying for some gig specialists. "Unless you're an exceptionally devoted, self-roused singular, it can be difficult to center," says Walter. "There's nobody letting you know what to do, no due dates."

Furthermore, contingent upon the gig, you may need to work nonstandard days or times to complete an occupation. In the event that you get a gig requiring hours on the end of the week, for instance, you won't not have the capacity to invest energy with companions who have customary 9-to-5 work filled weeks.

Absence of advantages: Gig specialists don't normally get business paid advantages, for example, premiums on medical coverage and commitments to retirement arrangements. You'll have to explore these subjects and pay for the items yourself. "I underestimated things like medical coverage," says Heenan of his previous employment, working at a school. "When you independent, you need to discover those things all alone, and it's costly."

Different advantages that gig specialists regularly pass up a major opportunity for are yearly leave and wiped out leave. Like any representatives who don't get paid time off, no work implies no compensation.

CONCLUSION

The pattern toward a gig economy has started. A review by Intuit anticipated that by 2020, 40 percent of American specialists would be self-employed entities. There are various powers behind the ascent in transient employments. For a certain something, in this computerized age, the workforce is progressively versatile and work should progressively be possible from anyplace, so that employment and area are decoupled.

Slowly but surely, these platforms create a bridge between traditional enterprises and this emerging economy. Perhaps more important, as the global economy continues to be disrupted by technology and other massive change, the Gig Economy will itself become an engine of economic and social transformation.

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SOCIO-ECONOMIC CONDITIONS OF MICRO SMALL MEDIUM ENTREPRENEURS (MSMEs) IN TELANGANA STATE: A STUDY OF KARIMNAGAR DISTRICT

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ABSTRACT

Micro Small and Medium Enterprises play a vital role in economic development of country. It is providing large scale employment the following suggestions are offered for the development of MSMEs. State & Central government have to increase the budget allocation for MSMEs sector & provide assistance to MSMEs for strengthening the share Capital, banks to increase loan amount, government have tax exemption for MSMEs & provide marketing facilities, transport facilities and subsidies, government has to provide raw material, machinery and equipment directly to the MSMEs order to maintain and also providing training in machines, government has to take necessary steps in order to sale the MSMEs products through e – commerce like amazon, snapdeal, and flipkart etc., government has to establish new industrial parks and developing the infrastructural facilities & promotion policies, government should be conduct training and development, awareness programmes, government has to relaxation in labour laws & red tape and governments need to conduct health checkup camps.

KEYWORDS

socio-economic conditions, micro small medium entrepreneurs (MSMEs).

INTRODUCTION

The MSMEs play vital role in the economic-social development of the country, often acting as nursery of entrepreneurship they also play a key role in the development of the economy with their effective, flexible and innovative entrepreneurial spirit. The MSMEs sector contributes significantly to the country's manufacturing output employment and exports and is credited with generality the higher employment growth as well as accounting for major share of industrial production and exports.

OFFICIAL DEFINITION OF MSMEs IN INDIA

Micro, Small & Medium Enterprises Development (MSMED) Act in India in 2006, the Micro, Small and Medium Enterprises (MSMEs) are classified into:

Manufacturing Sector: The enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the Industries (Development and Regulation) Act, 1951. The manufacturing enterprises are defined in terms of investment in plant & machinery (as notified vide S.O. 1642(E), dated 29-Sep-2006), which is presented in the table below:

TABLE 1: SHOWING INVESTMENT CEILINGS FOR MSMEs IN MANUFACTURING SECTOR

Manufacturing Sector	Investment in Plant & Machinery
Micro Enterprises	Does not exceed twenty five lakh rupees, i.e. 2.5 Million Rupees
Small Enterprises	More than twenty five lakh rupees but does not exceed five crore rupees, i.e. 50 Million Rupees
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees, i.e. 100 Million Rupees

Source: Ministry of MSME, Govt. of India.

Service Sector: The enterprises engaged in providing or rendering of services defined in terms of investment in equipment (as notified vide S.O. 1642(E), dated 29-Sep-2006), which is presented in the table below:

TABLE 2: SHOWING INVESTMENT CEILINGS FOR MSMEs IN SERVICE SECTOR

Service Sector	Investment in Equipment
Micro Enterprises	Does not exceed ten lakh rupees, i.e. One Million Rupees
Small Enterprises	More than ten lakh rupees but does not exceed two crore rupees, i.e. 20 Million Rupees
Medium Enterprises	More than two crore rupees but does not exceed five crore rupees, i.e. 50 Million Rupees

Source: Ministry of MSME, Govt. of India

REVIEW OF LITERATURE

Sonia and Kansai Rajeev (2009) studied the effects of globalization on Micro, Small and Medium Enterprises (MSMEs) during pre and post liberalization from 1973-74 to 2008-09. They used four economic parameters namely number of units, production, employment and export and interpreted study results based on Annual Average Growth Rate (AAGR) calculation.

Chakrabarty, K. C. (2010) States that with increasing competition, introduction of new products and stringent regulatory environment, the role of banks needs to change from mere lenders to partners in business. There is a need for greater participation of banks in the affairs of their constituents by convergence of credit services and non-credit services.

Subrahmanya Bala (2011) has probed the impact of globalization on the exports potentials of the small enterprises. The study shows that share of SSI export in total export has increased in protection period but remain more or less stagnated during the liberalization period.

Rajib Lahiri (2011) the study made an attempt to critically analyze the definition aspect of MSMEs and explore the opportunities enjoyed and the constraints faced by them in the era of globalization after analyzing the performance of MSMEs in India during the pre and post liberalization period. The study revealed that except marginal increase in growth rate in employment generation, the growth rate in other parameters is not encouraging during the liberalization period.

Raj Kumar Gautam and Raghbir Singh (2011) in their article, "Marketing Barriers of Small Firms: The Punjab Perspective," presented the findings of a study on marketing barriers of small enterprises based on a sample of 173 small manufacturing enterprises from Punjab.

Shailendra Dasari (2011) in his article, "Marketing Strategies for Maize Seed Industry: A Farmer Centric Approach", analyses the potential of maize seed industry in Andhra Pradesh, and the expectations of the farmers from maize seed industry based on the field study conducted in six districts of Telangana region of Andhra Pradesh covering 100 farmers and 30 dealers.

Uma, H.R. (2012), in her article, "Challenges in India's Foreign Trade" outlines the challenges being faced by India in exports and imports, and underscores the importance of increase in South- South trade in world trade which accounts for 22 per cent of global trade, and almost 50 per cent of total merchandise trade of developing countries at present. Among developing countries, India has emerged as a vibrant economy fueled by robust growth in international trade and investment. The South's impressive growth would provide a new impetus to a sustained growth of the global economy, and contribute to the achievement of the Millennium Development Goals.

Dr. Padmasani, S. Karthika (2013), A study on Problems and Prospects of Micro, Small and Medium Scale Enterprise in Textile Exports with special reference to Tirupur and Coimbatore District. This paper has examined the problems of MSMEs in the era of global economy and also has identified the factors affecting MSMEs.

Dr. NeeruGarg (Sept. 2014), Micro, Small and Medium Enterprises in India: Current Scenario and Challenges. This paper made an attempt to highlight the growth of this sector and analyze various problems and challenges faced by MSME sector in India in general.

K. Suneetha and T. Sankaraiah, Problems of MSMEs and Entrepreneurs in Kadapa District, IOSR Journal of Economics and Finance: The study conducted a survey on 156 enterprises to study they problems. It was found that 103 enterprises were facing financial problems and among them 62.8 per cent are from Micro enterprises. Moreover 23 percent found as meager assistance from government agencies. In the study the divisions of Kadapa, Jammulamadugu and Rajampet were covered.

NEED FOR THE STUDY

The Micro Small and Medium Enterprises (MSMEs) has been accepted as the engine of economic growth and promoting equitable development. In the present scenario, the MSMEs have been facing cut throat competition from the MNCs and big entrepreneurs, whose products are coming out with the sophisticated technology, huge amount of capital, marketing strategies, etc., at this section the proposed research is need of the hour, for which I have selected the Karimnagar district of Telangana state.

OBJECTIVES OF THE STUDY

The study will focus on the following objectives

1. To study the present situation of MSMEs.
2. To examine the Socio-economic conditions of MSMEs.
3. To offer suggestions for the development of the MSMEs.

SCOPE OF THE STUDY

The study broadly examines the Socio-economic conditions of MSMEs in Karimnagar district from 2005-2015. i.e., 10 years' period.

METHODOLOGY

Sources of Data: The required data has been collected using both the primary and secondary data.

Primary Data: The main source of the primary data are the Micro Small Medium Entrepreneurs by serving a structured questionnaire a part from this, personal interviews, group discussions and observations methods were used in collecting the first hand information

Secondary Data: Secondary data for the study has been collected using published annual reports on MSMEs by the government, Handbook of Statistics on the Indian Economy published by Ministry of MSMEs, Reserve Bank of India (RBI), Annual Reports of Karimnagar district, Daily newspapers, published research papers in the reputed journals, books, thesis and dissertation and visiting websites relating to the presented research.

SAMPLE SIZE: Sample of 100 Respondents selected from the Karimnagar District.

TOOLS OF DATA ANALYSIS: The collected data will be classified, tabulated and analysed in a significant manner. For the data analysis simple statistical techniques will be applied such as percentages, averages.

LIMITATION OF THE STUDY

The limitations of present study are as per following:

1. The study is essentially a micro level study.
2. The information through the questionnaires may not have covered correct figures Socio-economic conditions of Micro Small Medium Entrepreneurs.
3. The opinions and expressions of Micro Small Medium Entrepreneurs are based on the personal experience with the industries.
4. Secondary data are taken as MSMEs annual reports however the primary data is added to know the present conditions of Micro Small Medium Entrepreneurs.

DATA ANALYSIS AND INTERPRETATION

An attempt is made in this paper is to examine the Socio-economic conditions of sample respondents focusing on the basis of age wise, area wise, religion wise, caste wise, educational qualification, type of the family, size of the family, occupational background, type of the house, loan taken from the MSMEs, annual income, experience profile, initial of the present business, nature of business, number of persons working in your organization, type of the enterprises mobilized your initial capital and initial capital.

TABLE 1: AGE-WISE DISTRIBUTION OF MSMEs

S.NO	AGE GROUPS (YEARS)	NO. OF RESPONDENTS	PERCENTAGE
1	Below 25	5	5
2	25-35	12	12
3	35-45	50	50
4	Above 45	33	33
Total		100	100

Source: Field survey

The above table-1 shows the age-wise distribution of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 50(50.00%) Respondents are in the age group of 35-45 years, 33(33.00%) Respondents are in the age group of above 45 years, 12(12.00%) Respondents are in the age group of 25-35 years and only 5(5.00%) Respondents are in the age group of below 25 years.

TABLE 2: AREA-WISE DISTRIBUTION OF MSMEs

S.NO	AREA	NO. OF RESPONDENTS	PERCENTAGE
1	Urban	70	70
2	Rral	30	30
Total		100	100

Source: Field survey

The above table-2 clears that area-wise distribution of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 70(70.00%) Respondents are living in the urban area and only 30(30.00%) Respondents are living in the rural area.

TABLE 3: RELIGION- WISE DISTRIBUTION OF MSMEs

S.NO	RELIGION	NO. OF RESPONDENTS	PERCENTAGE
1	Hindu	81	81
2	Muslim	14	14
3	Christian	5	5
4	Others	0	0
Total		100	100

Source: Field survey

The above table-3 clears that religion-wise distribution of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 81(81.00%) Respondents are belongs to Hindu, 14(14.00%) Respondents are belongs to Muslim and only 5(5.00%) Respondents are belongs to Christian.

TABLE 4: CASTE- WISE DISTRIBUTION OF MSMEs

S.NO	CASTE	NO. OF RESPONDENTS	PERCENTAGE
1	BC	40	40
2	SC	20	20
3	ST	10	10
4	FC	30	30
Total		100	100

Source: Field survey

The above table-4 clears that caste-wise distribution of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 40(40.00%) Respondents are belongs to BC, 30(30.00%) Respondents are belongs to FC, 20(20.00%) Respondents are belongs to SC and only 10(10.00%) Respondents are belongs to ST.

TABLE 5: EDUCATIONAL QUALIFICATION OF THE MSMEs

S.NO	EDUCATIONAL QUALIFICATION	NO. OF RESPONDENTS	PERCENTAGE
1	Illiterates	4	4
2	Primary level	9	9
3	Secondary level	24	24
4	Graduation & Above	48	48
5	Technical	15	15
Total		100	100

Source: Field survey

The above table-5 reveals that educational qualification of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 48(48.00%) Respondents are studied graduation & above, 24(24.00%) Respondents are studied secondary level, 15(15.00%) Respondents are studied technical 9(9.00%) Respondents are studied primary level and only 4(4.00%) Respondents are illiterates.

TABLE 6: TYPE OF THE FAMILY OF MSMEs

S.NO	FAMILY	NO. OF RESPONDENTS	PERCENTAGE
1	Joint family	14	14
2	Nuclear family	86	86
Total		100	100

Source: Field survey

The above table-6 clears that type of the family of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 86(86.00%) Respondents are living in the nuclear family and only 14(14.00%) Respondents are living in the joint family.

TABLE 7: SIZE OF THE FAMILY OF MSMEs

S.NO	FAMILY SIZE	NO. OF RESPONDENTS	PERCENTAGE
1	Small (below3)	4	4
2	Medium (4-6)	83	83
3	Large (6 above)	13	13
Total		100	100

Source: Field survey

The above table-7 shows that size of the family of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 83(86.00%) Respondents family size medium, 13(13.00%) Respondents family size large and only 4(4.00%) Respondents family size small.

TABLE 8: OCCUPATIONAL BACKGROUND OF THE FAMILY OF MSMEs

S.NO	OCCUPATION	NO. OF RESPONDENTS	PERCENTAGE
1	Agriculture	44	44
2	Business	34	34
3	Govt Employee	0	0
4	Private Employee	22	22
Total		100	100

Source: Field survey

The above table-8 reveals that occupational background of the family of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 44(44.00%) Respondents are occupational background agriculture, 34(34.00%) Respondents are occupational background business and only 22(22.00%) Respondents are occupational background private employee.

TABLE 9: TYPE OF THE HOUSE OF MSMEs

S.NO	TYPE OF THE HOUSE	NO. OF RESPONDENTS	PERCENTAGE
1	RCC (Building)	51	51
2	Shed	29	29
3	Tiles	20	20
Total		100	100

Source: Field survey

The above table-9 shows that type of the house of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 51(51.00%) respondents are living in the RCC, 29(29.00%) respondents are living in the shed and only 20(20.00%) respondents are living in the tiles.

TABLE 10: LOAN TAKEN OF THE MSMEs

S.NO	TYPE OF THE LOAN	NO. OF RESPONDENTS	PERCENTAGE
1	Bank	56	56
2	Micro finance	23	23
3	Others	21	21
Total		100	100

Source: Field survey

The above table-10 clears that loan taken of the MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 56(56.00%) respondents are taking loan from bank, 23(23.00%) respondents are taking loan from micro finance and only 21(21.00%) respondents are taking loan from others.

TABLE 11: ANNUAL INCOME OF THE MSMEs

S.NO	ANNUAL INCOME	NO. OF RESPONDENTS	PERCENTAGE
1	Below 25,000	6	6
2	25,000-50,000	6	6
3	50,000-1,00,000	23	23
4	1,00,000-2,00,000	38	38
5	Above 2,00,000	27	27
Total		100	100

Source: Field survey

The above table-11 shows that annual income of the MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 38(38.00%) respondents annual income 1,00,000-2,00,000, 27(27.00%) respondents annual income above 2,00,000, 23(23.00%) respondents annual income 50,000-1,00,000, 6(6.00%) respondents annual income 25,000-50,000 and only 6(6.00%) respondents annual income below 25,000

TABLE 12: EXPERIENCE OF MSMEs

S.NO	EXPERIENCE (Years)	NO. OF RESPONDENTS	PERCENTAGE
1	Below 10 years	12	12
2	10 – 20 years	14	14
3	20 – 30 years	50	50
4	Above 30 years	24	24
Total		100	100

Source: Field survey

The above table-12 describes that experience of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 50(50.00%) respondents are experience 20-30 years, 24(24.00%) respondents are experience above 30 years, 14(14.00%) respondents are experience 10-20 years and only 12(12.00%) respondents are experience below 10 years.

TABLE 13: INITIAL IDEA OF THE PRESENT BUSINESS

S.NO	INITIAL IDEA OF THE PRESENT BUSINESS	NO. OF RESPONDENTS	PERCENTAGE
1	Own Idea	12	12
2	Friends & Relatives	37	37
3	Institutional Guidance	8	8
4	Advised by Parents	41	41
5	Advised by Others	2	2
Total		100	100

Source: Field survey

The above table-13 shows that initial idea of the present business. In the Karimnagar District has been selected 100 Respondents. The highest number 41(41.00%) respondents initial idea of the present business is Advised by Parents, 37(37.00%) respondents initial idea of the present business is Friends & Relatives, 12(12.00%) respondents initial idea of the present business is Own Idea, 8(8.00%) respondents initial idea of the present business is Institutional Guidance and only 2(2.00%) respondents initial idea of the present business is Advised by Others.

TABLE 14: NATURE OF THE BUSINESS OF MSMEs

S. NO	NATURE OF THE BUSINESS	NO. OF RESPONDENTS	PERCENTAGE
1	Manufacturing	56	56
2	Servicing	34	34
3	Trading	10	10
Total		100	100

Source: Field Survey

The above table-14 describes that nature of the business of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 56(56.00%) respondents are manufacturing, 34(34.00%) respondents are servicing and only 10(10.00%) respondents are trading.

TABLE 15: TYPE OF THE ENTERPRISE

S.NO	TYPE OF THE ENTERPRISE	NO. OF RESPONDENTS	PERCENTAGE
1	Registered	88	88
2	Unregistered	12	12
Total		100	100

Source: Field Survey

The above table-15 shows that type of the enterprise. In the Karimnagar District has been selected 100 Respondents. The highest number 88(88.00%) enterprises are registered and only 12(12.00%) enterprises are unregistered.

TABLE 16: MOBILISED THE INITIAL CAPITAL OF MSMEs

S.NO	MOBILISED THE INITIAL CAPITAL OF MSMEs	NO. OF RESPONDENTS	PERCENTAGE
1	Owned funds	20	20
2	Borrowed from Friends & Relatives	33	33
3	Borrowed from Bank	32	32
4	Borrowed from Financial Institutions	0	0
5	Borrowed from Others	15	15
Total		100	100

Source: Field survey

The above table-16 shows that mobilised the initial capital of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 33(33.00%) respondents are mobilised the initial capital of MSMEs Borrowed from Friends & Relatives, 32(32.00%) respondents are mobilised the initial capital of MSMEs Borrowed from Bank, 20(20.00%) respondents are mobilised the initial capital of MSMEs from Owned fund and only 15(15.00%) respondents are mobilised the initial capital of MSMEs from Borrowed from Others.

TABLE 17: INITIAL CAPITAL OF THE MSMEs

S.NO	INITIAL CAPITAL	NO. OF RESPONDENTS	PERCENTAGE
1	Below 30,000	12	12
2	30,000-60,000	15	15
3	60,000-1,20,000	26	26
4	1,20,000-2,40,000	24	24
5	Above 2,40,000	23	23
Total		100	100

Source: Field survey

The above table-17 shows that initial capital of MSMEs. In the Karimnagar District has been selected 100 Respondents. The highest number 26(26.00%) respondents are initial capital 60,000-1,20,000, 24(24.00%) respondents are initial capital 1,20,000-2,40,000, 23(23.00%) respondents are initial capital above 2,40,000, 15 (15.00%) respondents are initial capital 30,000-60,000 and only 12(12.00%) respondents are initial capital below 30,000.

SUMMARY OF FINDINGS

The following are the summary of findings presented below

1. It is found that majority of the respondents in the age group of 35-45 years.
2. MSMEs belong to both rural and urban areas.
3. MSMEs are include Hindus, Christians, Muslims the majority of the respondents are belong to Hindu.
4. MSMEs are include BC, SC, ST and FC the majority of the respondents are belong to BC.
5. The majority of respondents are studies graduation and above.
6. MSMEs are include joint family nuclear family it is observed that the majority of respondents are living in the nuclear family, because of urbanization decentralization and globalization.
7. MSMEs are family size include small, medium and large. The majority of respondents are family size medium.
8. It is observed that the majority of respondents occupational background agriculture.
9. It is found that majority of respondents are living in RCC house.
10. Source of loan include bank, micro finance and others. The majority of respondents taking loan from bank.
11. It is observed that majority of respondents annual income Rs. 1,00,000 – Rs. 2,00,000
12. Experience of MSMEs is include below 10 years, 10 – 20 years, 20-30 years and above 30 years. The majority of respondents experience 20-30 years.
13. It is found that majority of respondents initial idea of the present business friends and relatives.
14. Nature of the business of MSMEs includes Manufacturing, Servicing and Trading. The majority of respondents are manufacturing.
15. Enterprises are divide into two i.e., registered and unregistered the majority of enterprises are registered.
16. It is observed that the majority of respondents mobilized the initial capital borrowed from banks.
17. Initial capital of the MSMEs are include below Rs. 30,000 Rs. 30,000-60,000 Rs. 60,000-1,20,000 Rs. 1,20,000-2,40,000 and above Rs. 2,40,000 the majority of respondents are initial capital Rs. 1,20,000 – 2,40,000.

CONCLUSION

Micro Small and Medium Enterprises play a vital role in economic development of country. It is providing large scale employment the following suggestions are offered for the development of MSMEs. State & Central government have to increase the budget allocation for MSMEs sector & provide assistance to MSMEs for strengthening the share Capital, banks to increase loan amount, government have tax exemption for MSMEs & provide marketing facilities, transport facilities and subsidies, government has to provide raw material, machinery and equipment directly to the MSMEs order to maintain and also providing training in machines, government has to take necessary steps in order to sale the MSMEs products through e – commerce like amazon, snapdeal, and flipkart etc., government has to establish new industrial parks and developing the infrastructural facilities & promotion policies, government should be conduct training and development, awareness programmes, government has to relaxation in labour laws & red tape and governments need to conduct health check up camps.

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PATTERNS OF INTERNATIONAL MIGRATION AND REMITTANCES: A MACRO ANALYSIS FROM ETHIOPIA

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ABSTRACT

International migration was highly accelerated in 1990 due to political situation in Ethiopia at that time. However, as it takes a newer form it turned out to be a conscious action by the economic agents apart from political persecution. The Middle East has emerged as an important destination for Ethiopian migrants. Ethiopia has experienced a continuing surge in inward remittances flows both in terms of volume and in terms of share of GDP over the past two and half decades. This study carried out trend analysis to examine the pattern of international migration and evaluates the contribution of the associated remittances for Ethiopian economy. Secondary data required for this study has collected from different reliable sources for 25 years i.e. from 1990-2015/16 (period of post reform). Simple descriptive statistical analysis was used to analyze the data. The outcomes of this study assert the efforts of government and its international partner's in putting in place legislative and bilateral agreements on labor migration with preferred destinations so as to connect the benefits of migration and its contribution to economic development in Ethiopia.

KEYWORDS

Ethiopia, migration, remittances, economic implication.

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INTRODUCTION

According to World Bank Migration and Remittance Fact Book (WB, 2015) International migration flows out of Ethiopia are relatively small. The World Bank mentions an emigration rate of 1.08 percent of the population in 2015, which amounts to a stock of 1,072,949 persons in 2015. This number may seem quite small given the large number of population in Ethiopia. However, there is no reason to deny the importance of studying these migrant populations given the fact that their contribution for the improvement of Ethiopian economy can give an important insight. In this regard it is essential to understand the extent of migration and its pattern in detail where the flows are mainly directed (the major destinations) alongside with the resultant remittance flows. Therefore, the objectives of this study is to carry out analysis of international migration from Ethiopia and analysis of remittances inflow during the last few decades in Ethiopia. The Role of remittance on Ethiopian economy is explored to found out to what extent migration could help social and economic situation in the country.

REVIEW OF LITERATURE

According to the United Nations Department of Economic and Social Affairs, in 2015, the number of international migrants worldwide reached 244 million, an increase of 71 million, or 41 per cent, compared to 2000. Only About 3.3 percent of the world population are international migrants. Between 2000 and 2015, Asia added more international migrants than any other major area. Asia gained some 26 million international migrants during this period or 1.7 million additional migrants per annum. Europe added the second largest number of international migrants between 2000 and 2015 (20 million or 1.3 million per year), followed by Northern America (14 million or 0.9 million per year) and Africa (6 million or 0.4 million per year). Both Latin America and the Caribbean and Oceania added comparatively smaller numbers of migrants during this period (3 million or 0.2 million per year each). The share of Africa on the increase in international migrants during this period of one and half decade is only 8.6 (International Migration Report, 2016) this is not surprising, however, as it is well documented in migration literature that the "poorest of the poor" do not migrate, Africa is the poorest region in the world.

The migration-development nexus has received increasing attention of the international community and policymakers both in the countries of origin and destination of migrants. However, available data and information on international migration in the Ethiopia are often subject to scarcity, weaknesses and inconsistencies. Study by (Teklu, 2014) in Ethiopia using the Ethiopian Urban Household Survey (EUHS) data to examine the impact of remittances on the poverty, found that international remittances reduce the level, depth, and severity of poverty in the urban Ethiopia compared with no remittance scenario. According to the study with the inclusion of remittances the level of poverty was reduced by 4.3 percent, while the depth and severity were reduced by 4.6 and 3.3 percent respectively. There is an exorbitant lack of desirable information in a comprehensive manner about the pattern and extent of international migration and their implications to guide various policies that affect migration, remittances, and the households who participate in migration in the context of Ethiopia. The upcoming study aims to bridge this gap through its contribution in better understanding the phenomena that inform the policy development process. The lack of information is most noticeable in two main dimensions: (1) in terms of information about the size and character of migration flows and major destinations, (2) and in terms of the relationship between migrations, its potential effects on source communities, and policy. Additional studies filling existing data gaps are of utmost importance to identify the contribution of migration to development. Therefore, one of the main objectives of this study is to promote a better understanding of migration and development interaction in the context of Ethiopia. To the best of my knowledge no study come to my notice on the patterns and extent of international migration, remittances and their implication. In this regard, the present study will be unique.

OBJECTIVES OF THE STUDY

The overall objective of this study is to figure out the extent and patterns of international migration and the remittances alongside their implications for Ethiopian economy. Specifically, this study aims:

- i) To examine the patterns of international migration flow over time and its direction.
- ii) To study the extent and patterns of remittance flow and their role in Ethiopian economy.

SIGNIFICANCE OF THE STUDY

Migration for economic motives, is not only about individual or household level decision- making and welfare maximization, there are structural aspects of such labour flows that need scrutiny. Therefore, this study will be of great importance in this regard.

- i) This study gives clear view of the issue of extent and patterns of international migration, and remittances and provides their implication
- ii) The finding of this study assert the efforts of government and its international partner's in putting in place legislative and bilateral agreements on labor migration with preferred destinations so as to connect the benefits of migration and its contribution to economic development of the nation.
- iii) This study will add a brick to literature in the field of economics.
- iv) This study will act as substance for prospective researchers to conduct research in the field of international migration and the remittances.
- v) This study will inform government about the situation of international migration, the remittance flow and its role on the economy of the nation.

RESEARCH METHODOLOGY

For this study the data required has been collected from authentic secondary sources. The data on international migrants is collected from World Bank development indicators, World Bank's Bilateral Estimates of Migrant Stocks. Data on remittance inflow is from World Bank Migration and Remittances Fact Book, National Bank of Ethiopia and World Development Indicators Database.

To examine the extent and patterns of international migration from Ethiopia simple descriptive graphs were used. Analysis of the extent and patterns of international migration from Ethiopia based on historical account is done using available secondary data from various national and international published sources. To explore the role of remittance on Ethiopian economy the remittance flow over period of the study was compared to other financial inflows like the foreign direct investment and the official development assistance.

RESULTS & DISCUSSION

The result of the analysis is organized in sections: In the first section that deals with the characteristics of migration from Ethiopia, the overall economic set up from which migration emanates is explored. Followed by the extent and patterns of international migration over period of time. In the second section the role of remittance on Ethiopian economy is analyzed and the last section tries to link migration and development in the case of Ethiopia.

CHARACTERISTICS OF MIGRATION FROM ETHIOPIA

This section aims to provide brief characteristics of Ethiopian migration trends, before the analysis of Ethiopian out migration trends it is reasonable to look at its overall economic performance of the country as the nation had been in an economic renaissance. Ethiopia also had experienced political and economic revolutions and shift in ideologies which in one way or another influenced the international migration pattern.

ECONOMIC SITUATION IN ETHIOPIA – PUSH FACTORS OF MIGRATION

The rationale of the importance of economic conditions is their direct influence on migration flows. The more the economic situation is unfavorable directly or indirectly implies, the more people intend to leave the country so as to be better off elsewhere abroad. One can use the above mentioned term of *push factors*. According to the human development reports of the United Nations development program (UNDP, 2014) Ethiopia has experienced significant economic and social changes and has recorded some of the highest growth rates in the world-over 10 per cent for more than a decade. However, the country remained one of the poorest countries in the world, ranking 173 out of 186 on the United Nations Development Programme (UNDP) Human Development Index. Ethiopia's Human Development Index (HDI) and its relative ranking have not moved appreciably during the past decade. Ethiopia's Human Development Index value increased from 0.284 to 0.442, indicating an average annual increase of 3.21%. Even though Ethiopia is one of the 10 countries globally that has attained the largest absolute gains in its HDI over the last several years the ranking shows the position is still the lowest one so to speak.

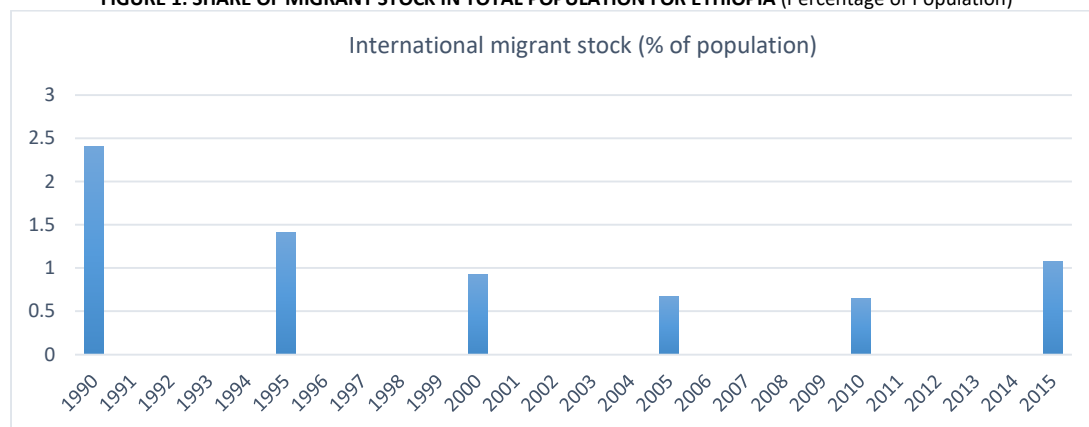
According to the national bank of Ethiopian report, Ethiopia has seen both economic growth and improvements in income inequality and poverty reduction in relative terms and poverty which is estimated to have dropped to 22 percent from 38.7 percent a decade earlier. But, 22 percent of the population still lives below the national poverty line and recurrent drought is still a common phenomenon.

Despite its declining contribution to GDP over the years, agriculture remains the leading sector in terms of contribution to the country's overall economy. The majority of the population is involved in agriculture. It also is a major source of food for domestic consumption, of raw materials for the domestic manufacturing industries and of primary commodities for export. Moreover, the sector contributes 73% of employment, and supplies 70% of the raw-material requirements of local industries. Ethiopia's agriculture depends highly on traditional farming methods and a rain-fed farming system, and is vulnerable to environmental and climate-related shocks. (NBE, 2015)

EXTENT OF INTERNATIONAL MIGRATION FROM ETHIOPIA

People choose or are compelled to migrate in reaction to changes in the structure of opportunities (mainly economic) and constraints around them. Then, as a result of their action, they contribute to changing that structure. They do so by changing the resources, including knowledge and power available to change their life and to live a life of dignity. This takes place in different ways and have attracted the attention of scientific scrutiny long ago. But more so in the past three or four decades, as a consequence of the increasing intensity and significance of the linkages between migrants and their areas or origin. One of these links between the migrants and their origin country is the remittance sent back home. The past few years have witnessed a booming interest by academics, donors, policy makers, and international financial institutions in the potential development impact of these flows. More on these will be dealt latter in the following section. In this section analysis of the extent and patterns of international migration from Ethiopia is done based on historical account using available secondary data from various national and international published sources.

FIGURE 1: SHARE OF MIGRANT STOCK IN TOTAL POPULATION FOR ETHIOPIA (Percentage of Population)



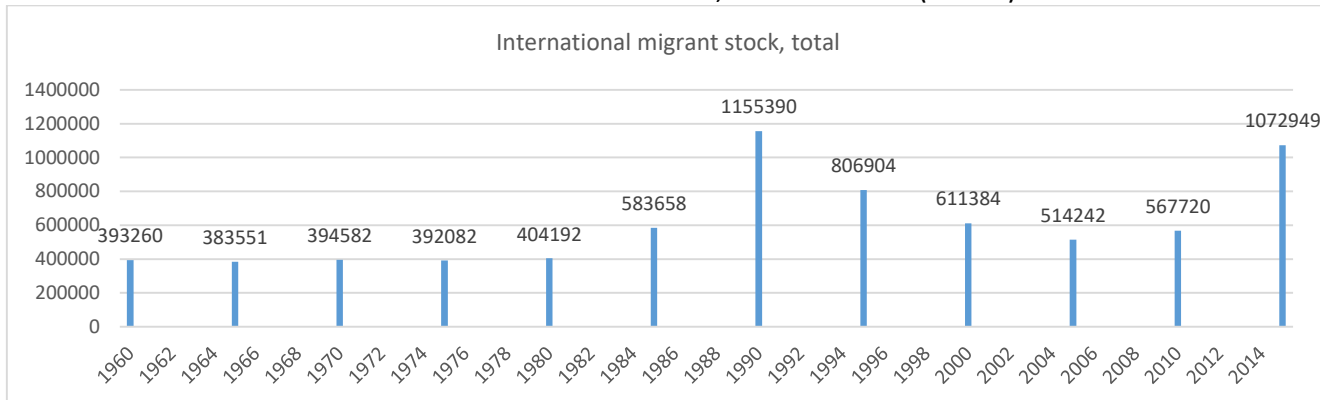
Source: Author's presentation based on World Bank development indicators data (2016)

Figure 1 illustrates the share of migrant stock in total population for the last two and half decades. The migrants share in year 1990 is the highest in history about 2.4 percent and the share has been declining since then until 2010. After 2010 the share is increasing once again. Various Studies had shown that Most of the migrants during 1990 from Ethiopia were refugees, escaping political conflict, famine, and persecution (for instance, Bariagaber, 1997). In most cases the refugees were persecuted by their own government and they were trying to escape the political conflict (De Waal, 1991). Until the early 1990s, Ethiopia was also mentioned as one of the largest producers of migrants in Africa (Bariagaber, 1999). Even if Ethiopia has experienced migratory flows throughout its history, International migration from the country had shown rapid increase starting from the late 1970's, which mainly resulted from the political instability and revolution at that time. The movement of Ethiopian citizens became noticeably high in the late 1960s and 1970s (Berhanu, *et al.*, 2004). Especially after the 1974 revolution, large migration flows started to arise. Most of the migrants from Ethiopia were refugees, escaping political conflict, famine, and persecution (Bariagaber, 1997). The main reasons, however, have changed over time. Migrants primarily fled for political reasons and to escape conflict. Later on, the motives of Ethiopian migrants to flee their country turned out to more economic motives.

Gradually, out migration which was primarily dominated by the urban elite for political reason in the previous periods, started to take more of economic dimension and became the aspiration of most urban people (Alemayehu *et al.*, 2011). In 2005 Dejene states that by the mid-1980s, even the rural people started migrating to the Middle East and the Gulf countries in search of jobs though it was not that much large number so to speak.

Apart from war and political violence, ecological degradation, famine, and poverty are historically among the major causes of migration in Ethiopia (Berhanu & White, 2000; De Waal, 1991; Ezra 2001; Ezra & Kiros, 2001). Migration as a result of low opportunities or poor living conditions is often seen as a form of household income diversification. In these regard some household members migrate to areas with better opportunities while other household members stay at their original location and benefit from, for example, remittances. Historically, this has also been the case for some Ethiopian households in drought prone areas (UNDP, 2009). As per the reviewed literatures Previously Ethiopian international migration flows were mainly generated by political violence, poverty, famine, and limited opportunities. In the same way the present migration patterns in Ethiopia are driven by the same factors that led to historical migration flows.

FIGURE 2: INTERNATIONAL MIGRANT STOCK, TOTAL FOR ETHIOPIA (PERSONS)



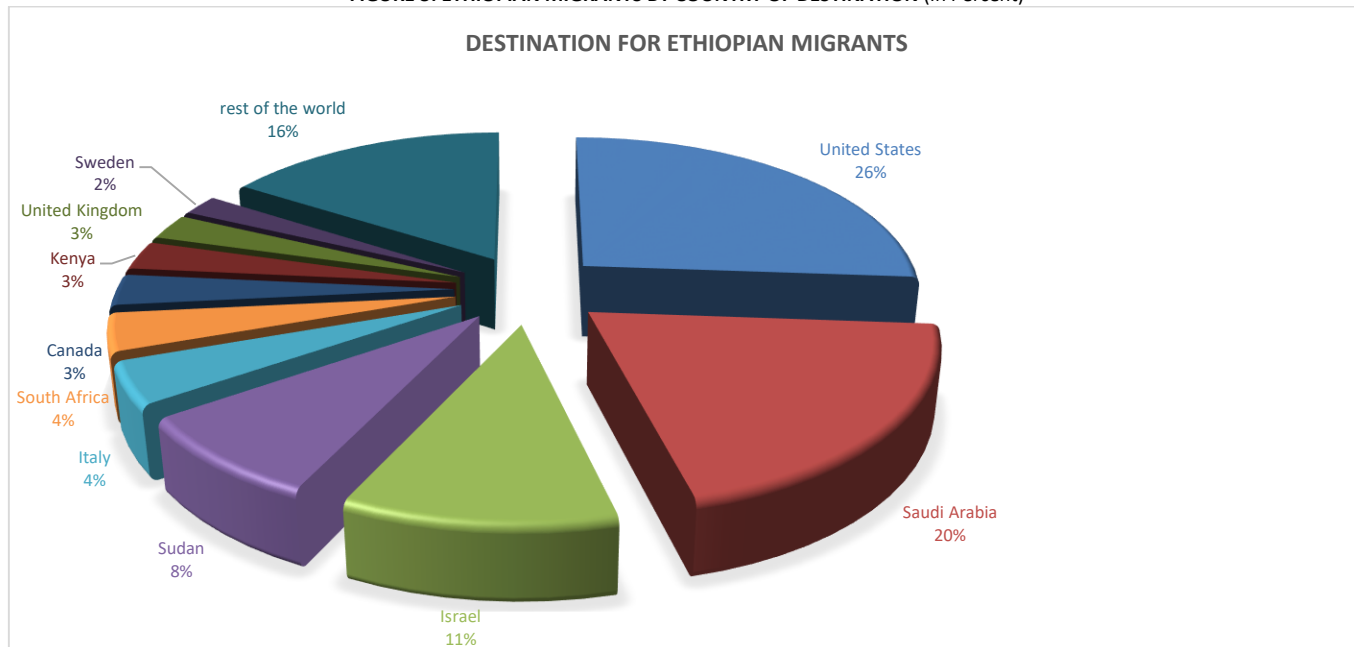
Source: Author's presentation based on World Bank development indicators data (2016)

Ethiopia is one among the countries with a large number of migrants in North America, the Middle East and Europe. In recent years the migrant stock has started increasing once again as more people are migrating to different destinations in search of better life and employment despite the remarkable GDP growth for almost a decade. As matter fact these estimate about the migrant stock given on the world development indicators or any other official documents may miss to include the entire migrants and in effect the actual number of migrants can be a higher than what is indicated. The actual number of migrants in case of Ethiopia is expected to exceed the estimate because the majority of migration from Ethiopia to the Middle East and South Africa mainly remain undocumented. For instance, during the Saudi Arabian crack down and deportation of about 163,000 Ethiopians in year 2013, the country did not have data about such huge number. The reason for this is the migration remains undocumented as the majority of the migrants are using smugglers and crossing the borders without any formal registration.

In terms of country of destination, the World Bank's bilateral migration matrix data indicates, the top ten destinations countries. (See figure 3) United States of America is the leading destination for Ethiopian migrants (26 percent of total migrants), followed by Saudi Arabia (20 percent), Israel (11 percent), Sudan (8 percent), and Italy and South Africa (4 percent each). Canada, Kenya and United Kingdom (3 percent each) Sweden 2 percent. The rest of the world combined 16 percent.

This indicates that the top three migrant receiving countries namely; United States, Saudi Arabia and Israel, host more than half of the total Ethiopian migrants across the world. In continental wise, Asia become the major destination continent for Ethiopians which accounts for about 31 percent. The total migrant stocks in United States of America and Canada accounts 29 per cent of the total migrants of the nation, in contrast to the share of Europe and Africa where the stock of Ethiopian migrants are 9 and 15 percent, respectively. From the above one can observe that for Ethiopians the neighboring countries are not their destination. There also was a similar conclusion earlier than this study by Fransen and Kuschminder, 2009 which indicated that the neighboring countries are not destination for Ethiopians. Rather, they are a transit route to other European, Asian and North American nations. Several years' latter still Ethiopians are heading to other parts of the world not to the neighboring countries for obvious reason that there is limited opportunities out there in neighboring countries as the structure of the economies in the sub Saharan region are similar and opportunities are limited.

FIGURE 3: ETHIOPIAN MIGRANTS BY COUNTRY OF DESTINATION (In Percent)



Source: author's computation based on World Bank's Bilateral Estimates of Migrant Stocks (2015).

The character and root causes of the Ethiopian migration patterns are diverse and had been through different changes in the past decades. Looking for a better education, employment opportunities, and political instability are considered as major causes for migration. Political migration, in particular, was intensified in Ethiopia during 1970-1990 due to political instability at that time. However, in the subsequent years, the reason for migration is having more of economical motive. For instance, the Middle East has become an important destination for Ethiopian migrants, especially from rural areas, to find better employment opportunities. It is widely recognized now a days in economic literature that International migration boosts incomes and widens opportunities by allowing workers to move to where they are more productive. Migration results in an increase in aggregate output and income. According to the World Bank (2016) Remittances generally reduce the level and severity of poverty and lead to: higher human capital accumulation; greater health and education expenditures; better access to information and communication technologies; improved access to formal financial sector services; enhanced small business investment; more entrepreneurship; better preparedness for adverse shocks such as droughts, earthquakes, and cyclones; and reduced child labor (ibid).

Migration from Ethiopia as is from elsewhere is not only the result of political persecution and run away from natural calamity. Rather, as it took a newer form historically should be considered as conscious action by the economic agents. Migration as an action against poverty dates back to early human history, but it has certainly taken on different characteristics, and a whole new quantitative dimension, in the last few centuries.

THE ROLE OF REMITTANCE ON ETHIOPIAN ECONOMY

In economic literature it is widely discussed that one of the economic effects of out migration of people is remittance money that will be sent back to origin countries. In this regard like many migrants from developing countries, Ethiopian migrants also send money back to their home countries. At macro level, remittance flows are an important and stable sources of external finance, and constitute a substantial part of financial inflows for countries with large migrant labor force. At household level, remittances inflows provide an important source of income for families to meet their basic needs.

One of the major insights in relation to international migration in the Ethiopian context is the increasing amount of remittance sent back to country. World Migration Fact book (2015) puts Ethiopia as 8th among the top remittance receiving countries in sub-Saharan Africa. Nevertheless, Ethiopia is not among the highest remittance receivers, even compared to Sub Saharan countries, the volume of remittance inflow to Ethiopia remarkably increased in the past decades. According to the data from World Bank, the amount of remittance inflow recorded in 2015 was around \$0.6 billion.

In relation to this a closer scrutiny at the overall performance of external sector of Ethiopian economy gives some impression on how the private transfers is becoming significant for Ethiopian economy. In the year 2015/16 fiscal year the export sector which in most cases receive better recognition to improve the current account balance witnessed poor performance. According to national bank of Ethiopia report for year 2015/16 Merchandise exports dropped by 5.0 percent compared to the fiscal year 2014/15 due to lower international commodity prices of some export items such as coffee, oilseeds, and gold, chat, leather & leather products. Likewise, receipts from net services dropped by 161 percent year-on-year as outflows for construction services soared. The less expected net private transfers showed 18.6 percent growth in contrast to the others.

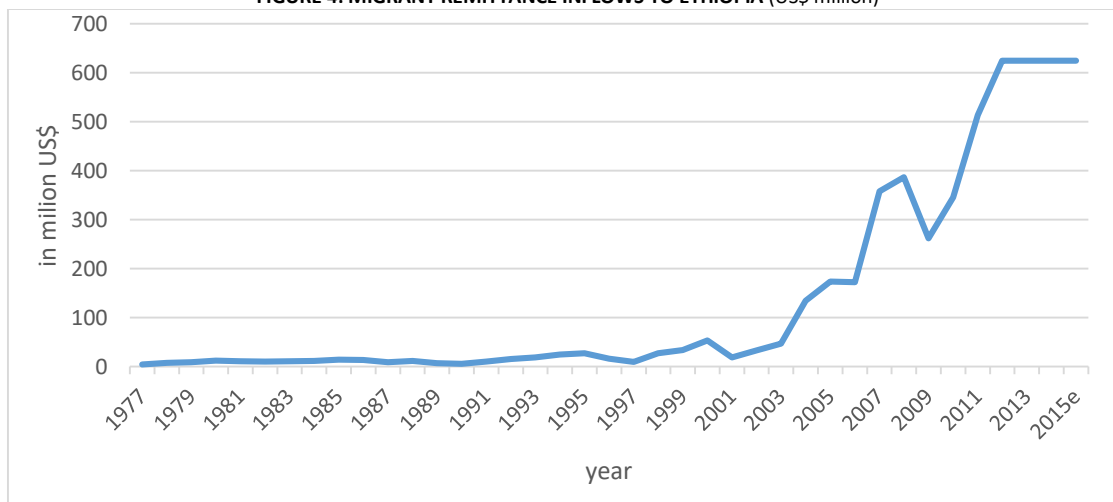
Data from the national bank of Ethiopia shows that the Net transfers improved by 9.9 percent during the fiscal year 2015/16. This improvement is mainly because of the remittances/ the private transfers which amounted to 22.9 percent increase. During the same period a 32.2 percent decline in official transfers was observed. The decline in net official transfers was attributed to lower grants from both international financial institutions and bilateral donors. This is in line with remittances literatures which in recent years has recognized the importance and superior performance of the remittance over other official transfers particularly the official development assistance and the foreign direct investment.

This implies in a country like Ethiopia where the external sector performance show a widening deficit in its trade, current account (including official transfers) capital account and the overall balance of payments, Enhancing Migrants remittance by giving proper recognition could be one solution to cope up with balance of payments deficit. In the following section trend analysis is presented to uncover the, extent and patterns of this financial flow to Ethiopia.

TRENDS OF REMITTANCE FLOW TO ETHIOPIA

As it can be observed from figure 4 below, the total amount of remittance inflow started rising, mainly since 2003. Between 1977 and 2003 remittance flows have steadily grown from 4 million USD to 47 million USD. By 2004, remittance inflow had over passed 100 million USD. A critical examination of the figure reveals that the inflow of remittances leaps strangely in 2007 which possibly be associated with the celebration of the Ethiopian Millennium. After a while this continuous increase, nevertheless, witnessed a slight decline in 2008 after reaching nearly 386 million USD due to the global financial crisis that occurred in the western economies, which is the main source of remittance for Ethiopia and host for significant proportion of the Ethiopian migrants as indicated in the discussion about destination of Ethiopian migrants. This is an indication of how the effect of the crisis is in the destination countries is indirectly manifested in migrant’s origin countries. Any favorable change in the host countries also could increase the earning potential of the migrants thereby increase remittance sent back home which is the life blood for the migrant households at household level and a lot more implication at macro level for instance increasing the supply of foreign exchange. In development financing the government of Ethiopia have been trying to boost the export sector by implementing various policy measures to encourage the export sector hoping to solve the hard currency constraint. That is appreciable and a lot more is needed to be done to tap the potential of remittance in an attempt to relax the hard currency constraint to finance development projects.

FIGURE 4: MIGRANT REMITTANCE INFLOWS TO ETHIOPIA (US\$ million)



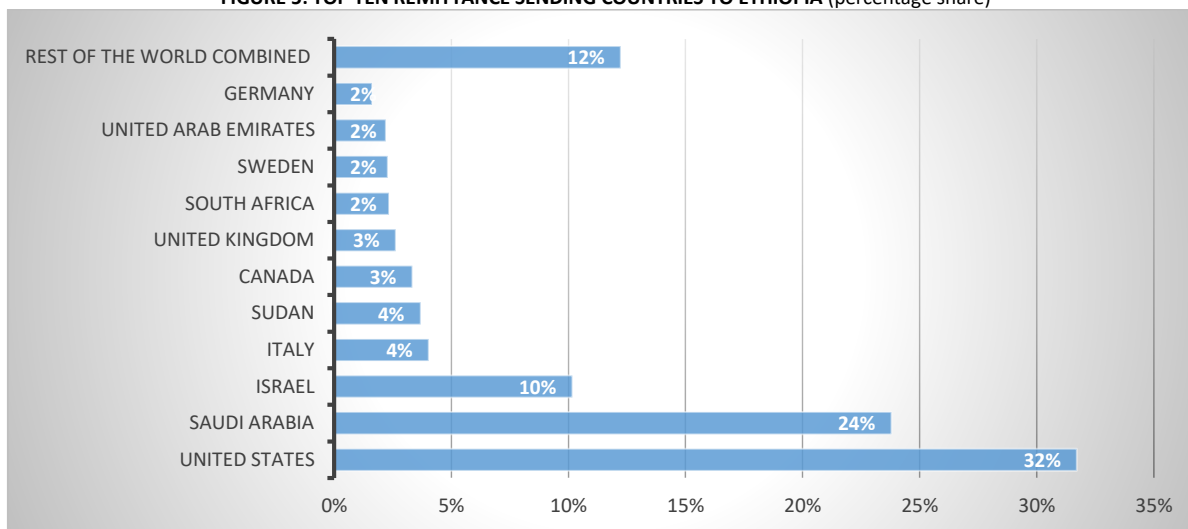
Source: World banks data base (2015)

According to World Bank (2009) report, the global economic crisis had led to 5.5 percent decline in remittance flow to developing countries between 2008 and 2009. In Ethiopia, during this particular period, remittance inflow had declined by about 32 per cent which is by far higher than the average decline for developing countries. Apart from this, however, the year 2010 witnessed an immediate recovery of about 31 per cent and reached nearly 345 million USD. By 2012, the remittance flow had reached about 625 million USD with a growth rate of about 22 percent compared to the previous year’s growth of 49 percent. After that, in

a year 2013 onwards it got stuck from rising as it used to in the previous years. One possible explanation for this could be the massive deportation of undocumented migrants amounting about 163,000 from Saudi Arabia in 2013/14. Although, demand for labor in these destination countries is high, the barriers to employment impacted profoundly on the safety and wellbeing of migrants. For instance, in 2013, Saudi Arabia claimed to be in need of another 0.75 – 1.5 million domestic workers. Despite this demand, at the end of 2013 and early 2014, Saudi Arabia carried out massive deportations of irregular migrants, including some 163,000 Ethiopians.

MAJOR SOURCES OF REMITTANCE INFLOW TO ETHIOPIA

FIGURE 5: TOP TEN REMITTANCE SENDING COUNTRIES TO ETHIOPIA (percentage share)



Source: Author’s Computation Based on Migration and Remittances Fact Book 2016

Looking at the distribution of remittance by country of origin, United States of America takes the lead comprising about 32 percent of remittance income that comes to Ethiopia. This is not surprising given the large number of Ethiopian migrant that the nation accommodates. Saudi Arabia the top remittance sending nation in Asia- is the second most important remittance source with a share of 24 percent. The growing migration of young Ethiopians to gulf countries in general and particularly to Saudi Arabia through Yemen in search of employment opportunities could be good justification for this massive flow. The remittance flow from these two countries accounts about 56 percent of the total remittance income for the Ethiopia. As indicated in figure 6 above, the other major remitting country is Israel with a share of 10 percent followed by Italy and Sudan with 4 percent each, Canada and United Kingdom with 3 percent shares each. The top five remittance sending countries namely USA, Saudi Arabia, Israel, Sudan and Italy account for about three fourth of the total remittance flow to Ethiopia.

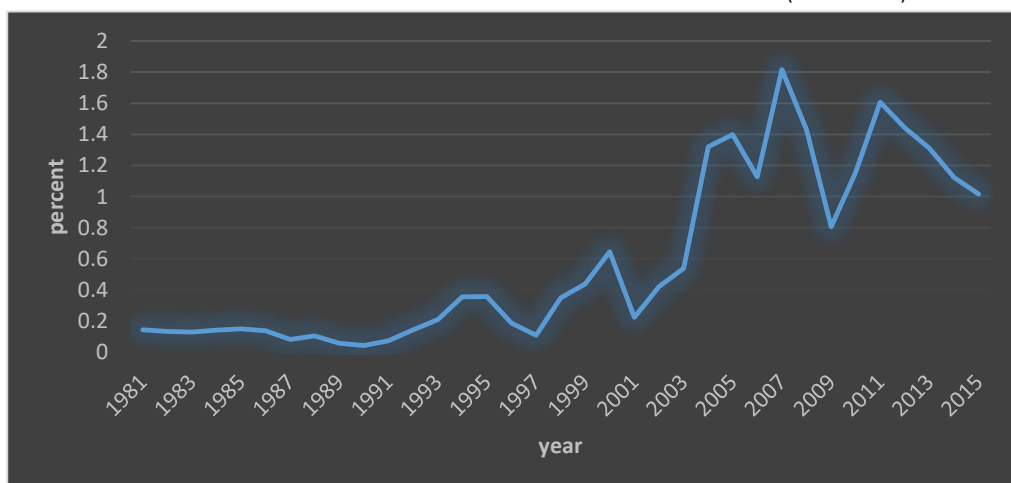
The amount of remittance flowing from African nations is very little compared to other continents. For instance, South Africa and Sudan managed to get in the list of top ten remittance corners but their share is meager. The amount of remittance income flowing from each of these nations constitutes 6 percent share from the total remittance directed to Ethiopia.

There are various reasons behind the increasing remittance inflow, apart from the growing number of migrant stocks. For instance, the improvements made in the recording system of the remittance and increasing remittance flow networks through large number of remittance service providers can be recognized. Moreover, expanded bank branches which led to extensive coverage and reduction in remitting cost compared to preceding years had enabled to divert the amount of remittance income that had previously been flowing using the unofficial channel.

REMITTANCE INCOME RECEIVED AS A PERCENTAGE OF GDP

It is essential to look at the flow of remittance in comparison to GDP in addition to looking at the actual amount of remittance inflow. Hence, over the past three and half decades, the total remittance inflow as a percentage of GDP had grown immensely, even though it was not able to exceed 2 percent. From its lowest share (0.04%) in 1990, it had achieved a share of about 1.5 per cent in 2012. Within this interval the highest remittance to GDP was recorded in 2007 followed by in 2011 with the share of 1.9% and 1.7%, respectively. As the figure 6 below shows the impact of global financial crisis on remittance income is also reflected on the share of remittance to GDP between the years 2007 and 2009. Furthermore, a simple computation reveals that remittance has averaged only 0.59 % of GDP over the last three and half decades which slightly goes up to 0.78% of GDP excluding the remittance flow in the previous regimes.

FIGURE 6: REMITTANCE INCOME RECEIVED AS A PERCENTAGE OF GDP (Current USD)



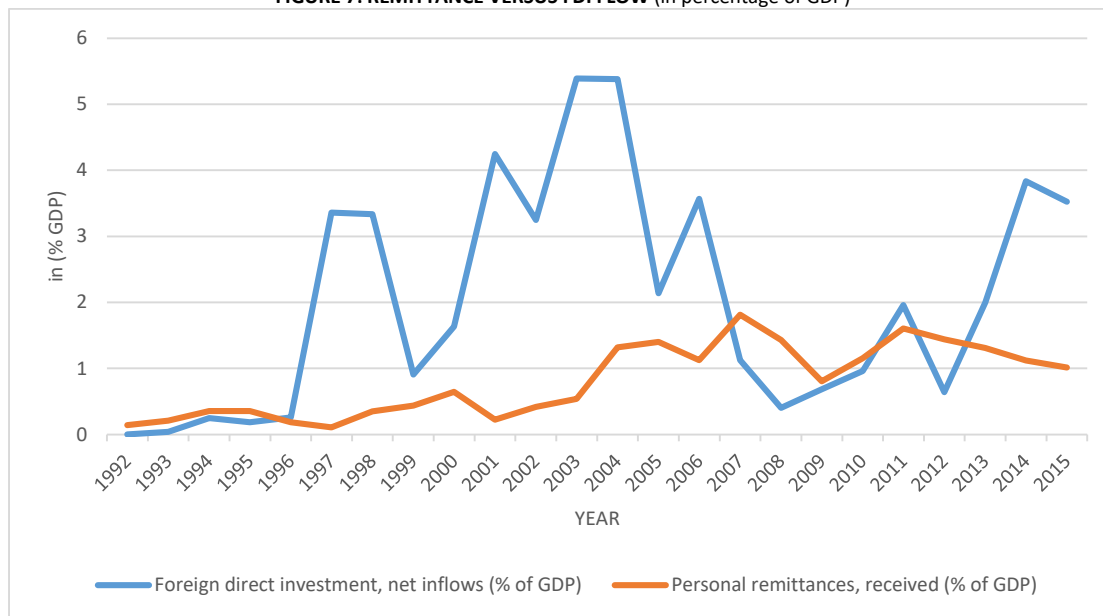
Source: World Development Indicators Database

The growing remittance flow can also be seen via-a-vis government deficit. With the growing government budget deficit, the role of remittance income as an alternative means of financing this gap had become evident. Over the past three decades, remittance income is able to cover government budget deficit by an average of 5.75 percent. This ranges from the lowest share in 1990 which is only 0.47 to 18 percent in 2008. The lowest share of remittance to budget deficit in 1990 is due to the relatively high budget deficit (about 1 billion USD) versus the low level of remittance flow which is only 5 million USD.

REMITTANCE VERSUS OTHER FINANCIAL FLOWS TO ETHIOPIA

The importance of remittance to the Ethiopian economy becomes strong when the remittance figures are compared to other external financial income sources of Ethiopia. This is not surprising, remittance has become the major financial flow from the developed world to the developing countries worldwide and this has been evidenced by the stability/resilience of this financial flows even in times of financial crisis in which the other flows show huge fluctuations. As the previous discussion indicated, Ethiopia has experienced a continuing surge in inward remittances flows both in terms of volume and in terms of share of GDP over the past two and half decades. It is evident that, government has been encouraging the FDI inflows by making investment climates conducive to the foreign investors by giving tax holidays and other infrastructure facilities. However, it has now become evident that the less anticipated remittance has performed well than FDI.

FIGURE 7: REMITTANCE VERSUS FDI FLOW (in percentage of GDP)



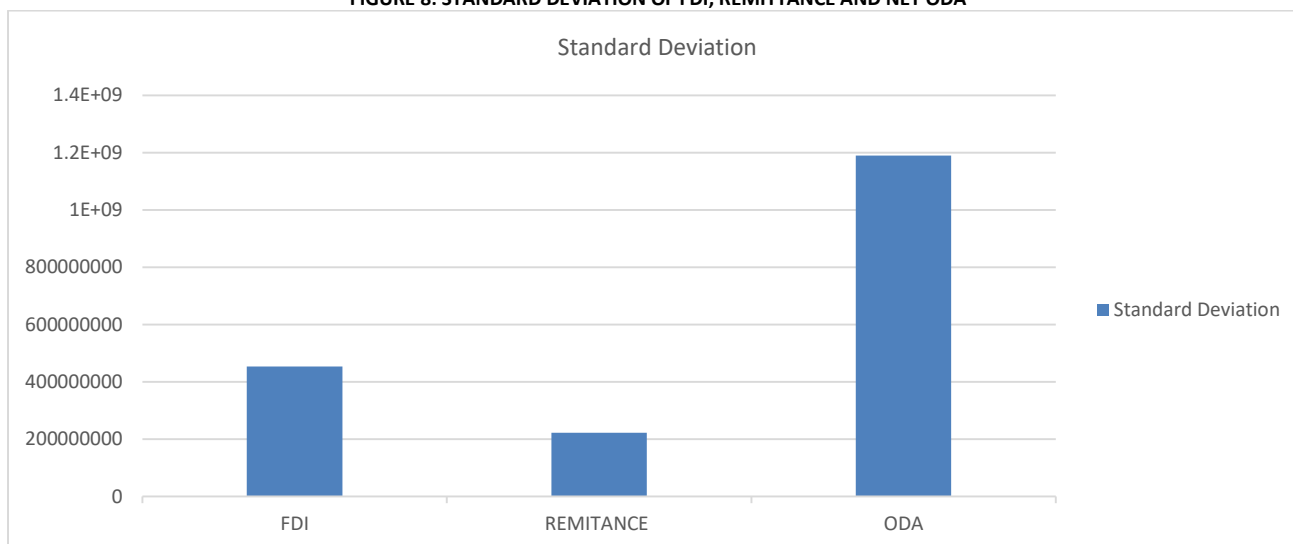
Source: World Development Indicators (2016)

As figure 7 indicates, before 1996 remittance transfer as % of GDP had over passed the FDI, although in subsequent year's % share of FDI flow to the country had by far exceeded the remittance share as % GDP. Between 2007 and 2010 where the share of remittance flow was characterized by significant decline and an immediate recovery, the remittance flow was higher than the FDI flow. Recently after 2011, there is a clear indication that the remittance flow is increasing continuously, unlike the FDI where there is a substantial declining trend.

Certain pattern can be observed when looking at the share of remittance and FDI as a percentage of GDP. As figure shows for instance, FDI contributed only about 1.16 per cent to the GDP while remittance transfer accounted for 1.88 per cent of the GDP in 2007. The share of FDI in GDP was only 0.67 per cent in 2012 whereas remittances accounted for about 1.5 per cent of GDP during the same year. Even though in recent years the FDI take the lead in GDP share over all it is more volatile than remittance flow when one looks at the general trend.

One of the noteworthy features of remittances in economic literature is its resilience. Compared to other flows, remittances are resilient and stable. As we can see from the figure 8 below compared to official development assistance (ODA) and FDI, remittances inflows to Ethiopia are more stable. The volatility of the three variables which can be explained by the standard deviation of each variable had indicated that remittances have the smallest variation across years as compared to other capital flows (see figure 9).

FIGURE 8: STANDARD DEVIATION OF FDI, REMITTANCE AND NET ODA



Source: Author's Computation Based on Data from World Bank Development Indicators

CONCLUSION AND IMPLICATIONS

This study carried out trend analysis of international migration and the remittance inflow to Ethiopia during the last few decades. Even though there is a tendency on the side of the media and the general public propagating migration as if it is at its all-time high rate, this study showed that based on measures like the migrant stock as well as the percentage of population migrated, the current migration is not at all time high rate. The migrants share in year 1990 is the highest in history about 2.4 percent. Political migration, in particular, was intensified in Ethiopia during 1970-1990 due to political instability at that time. However, in the subsequent years, the reason for migration is having more of economical motive. Therefore, Migration from Ethiopia as is from elsewhere is not only the result of political persecution and run away from natural calamity. Rather, as it took a newer form historically should be considered as conscious action by the economic agents. The top three destination for Ethiopian migrants namely; United States, Saudi Arabia and Israel, host more than half of the total Ethiopian migrants across the world.

Ethiopia has experienced a continuing surge in inward remittances flows both in terms of volume and in terms of share of GDP over the past two and half decades. The top five remittance sending countries namely USA, Saudi Arabia, Israel, Sudan and Italy account for about three fourth of the total remittance flow to Ethiopia. The importance of remittance to the Ethiopian economy becomes strong when the remittance figures are compared to other external financial income sources of Ethiopia. Compared to the official development assistance (ODA) and FDI, remittances inflows to Ethiopia are more stable.

It is evident that, Ethiopian government has been encouraging the FDI inflows by making investment climates conducive to the foreign investors by giving tax holidays and other infrastructure facilities hoping to promote the export sector. However, it has now become evident that the less anticipated remittance has performed well than FDI. The implication is that there is untapped potential in this regard for development financing. Although, demand for labor in the destination countries is high, the barriers to employment impacted profoundly on the safety and wellbeing of migrants. For instance, in 2013, Saudi Arabia claimed to be in need of another 0.75 – 1.5 million domestic workers. Ironically it is on the same year that massive deportation of some 163,000 Ethiopians was carried out. Given the fact that Saudi Arabia is a country which is now major destination for Ethiopian migrants as indicated in this study. This calls for rethinking about well-studied diplomatic relationship that could be mutually beneficial.

As long as migration is a conscious action by economic agents instead of viewing it as a problem the findings of this study indicated it as an opportunity to achieve the development goals. Therefore, Development of a national Labor migration strategy and an Action Plan in a way that emigration, and migration policy in particular, is incorporated in the broad development strategy, Establishment of an effective labor migration management system with transparency, accountability and the rule of law as key features, and aimed at strengthening of national and international cooperation and coordination should be given emphasis so as to tap the potential of the migration for development.

SCOPE FOR FURTHER RESEARCH

Before talking about the developmental impact of the migration process it is essential to first make sure that migration has taken place in the first place. From the analysis of the extent and patterns of international migration this study indicated the magnitude of migration and the associated financial flow, the remittance. Ethiopian out migration patterns that were described in the previous section represent a considerable outflow of human resource from the country. The implication is that a lot more has to be dealt than simply looking at the remittance part only. This is because it might also have a negative impact on Ethiopia's development processes. There are also some more positive consequences of emigration as well, that need to be considered apart from remittances, the engagement of diaspora in the development process and the return migration of Ethiopians who received extra schooling and work experience abroad. These are areas for further research for those who are interested and are beyond the scope of this study.

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SOCIO-ECONOMIC CONDITIONS OF MICRO SMALL MEDIUM ENTREPRENEURS (MSMEs): A STUDY OF WARANGAL DISTRICT

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ABSTRACT

The MSMEs play vital role in the economic-social development of the country, often acting as nursery of entrepreneurship they also play a key role in the development of the economy with their effective, flexible and innovative entrepreneurial spirit. The MSMEs sector contributes significantly to the country's manufacturing output employment and exports and is credited with generally the higher employment growth as well as accounting for major share of industrial production and exports. Government provide assistance to MSMEs for strengthening the share capital & increase budget allocations, banks are increase the loan amount, government has been conduct the training & development programmes, to enhance marketing facilities, to increase the transport facilities, government has to provide raw material directly to the MSMEs and there should be relaxation in complex labour laws to avoid the inconvenience in compliance.

KEYWORDS

socio-economic conditions, micro small medium entrepreneurs (MSMEs).

INTRODUCTION

Micro Small and Medium Enterprises play a key role in the industrialization of a developing nation. "This is because: they provide immediate large scale employment and have a comparatively higher labour-capital ratio; they need only a shorter gestation period and relatively smaller markets, to be economic; they need lower investments. They offer a method of ensuring a more equitable distribution of the national income and facilitate an effective mobilization of the resources of capital and skill which might, otherwise, remain unutilized and they stimulate the growth of the industrial entrepreneurship and promote a more differed pattern of ownership and location".

The small scale sector has stimulated economic activity of a far reaching magnitude and has played a significant role in the elimination of the economic backwardness of the rural and the under - developed regions in the country, attained self-reliance and reduction of regional imbalances. It has also led to the reduction of disparities in Income, wealth and consumption. The MSMEs play an important role in assisting the bigger industries and the projects so that the planned activity of the developmental work is timely attended to. The setting up and the growth of all types of industries have the basic objective of profit making. However, it also contributes towards social justice and the development of the particular area, by way of trade and commerce. These industries also develop lots of entrepreneurs who, in future, may play a bigger role in the developmental activities.

The All India Management Association (AIMA), in collaboration with the Federation of the Indian Chamber of Commerce and Industry (FICCI) organized a two day "National Convention on Small and Medium Enterprises in the Emerging Scenario" in 1998 sponsored by the SIDBI and Global Trust Bank to discuss the opportunities and challenges for the SMEs. "The convention was of the unanimous view that in view of the backlog of the manifold problems and the emerging global scenario in the new millennium, the development of the SMEs can certainly tackle issues involved in the economic development of the developing nations and the least developed countries with regard to employment and income generation". Thus the Micro, Small and Medium industries can very well provide an answer to the economic under development and the growing unemployment. The development of these industries would be beneficial to the developing countries and would assist them in improving their economic and social wellbeing.

REVIEW OF LITERATURE

Bhavani T.A. (2010) highlights the issue of quality employment generation by the SSIs and negates the short term attitude of increasing the volume of employment generation compromising with quality. The author argues that employment generation by the SSIs may be high in quantitative term but very low in quality.

Varma.U. K (2011) in his study on MSMEs recognized that while credit, marketing etc. are essential, the critical factor that drives growth is technology. In the present economic scenario of globalised competitiveness, it is the technological edge that will determine the winner.

Mathew, P.M. (2012), in his article, "the Relevance of MSMEs", focuses on recent developments in the industrial sector, contribution of MSMEs, and prospects for growth during the Twelfth Plan period, along with directions in which MSMEs should move in future. The basic objective of the Twelfth Plan (2012-17) is "faster, sustainable and more inclusive growth", as indicated in the Approach Paper of the Twelfth Plan released by the Planning Commission in 2011. Among the thrusts meant for such an inclusive growth, faster creation of jobs, especially in manufacturing, is given a special focus.

Dr. Padmasani, S. Karthika (2013), A study on Problems and Prospects of Micro, Small and Medium Scale Enterprise in Textile Exports with special reference to Tirupur and Coimbatore District. This paper has examined the problems of MSMEs in the era of global economy and also has identified the factors affecting MSMEs.

Dr. A.S. Shiralashetti (2014), prospects & Problems of MSMEs in India. This paper covered growth, performance and contribution of MSMEs to GDP and also mentioned about the problems faced by MSMEs located in Dharwad district of Karnataka State.

Dr. Neeru Garg (Sept. 2014), Micro, Small and Medium Enterprises in India: Current Scenario and Challenges. This paper made an attempt to highlight the growth of this sector and analyze various problems and challenges faced by MSME sector in India in general.

STATEMENT OF THE PROBLEM

The micro, small and medium enterprises are providing self-employment to the rural people and also lead to balanced growth of our nation, these units are struggling with day to day problems. The micro, small medium enterprise facilitates mobilization of resources, capital as well as still aims at raising the standard of living of the people especially in rural India. These are facing many problems from the promotion stage itself.

The micro, small and medium entrepreneurs are very weak in the powers of management of micro, small and medium enterprises. These are severely affected by lack of education and managerial skills. The productivity of micro, small and medium enterprises is affected by poor management on one side, whereas on the other side, these are affected by the high cost of capital especially on private finance. Since majority of micro, small and medium enterprises are managed by women entrepreneurs; they are affected by the social, general and cultural problems, even though the Central and State Governments have introduced a lot of programmes and schemes to rural entrepreneur.

There is a better prospect for micro, small and medium enterprises even after globalization and urbanization. If the problems of micro, small and medium enterprises and entrepreneurs are properly assessed, their problems may be solved through various programmes. Since the Government is highly interested in generating self-employment among the people, they are ready to serve the rural poor. Hence, the present study has made an attempt to identify the problems and also prospects of micro, small and medium enterprises in Warangal district of Telangana state.

NEED FOR THE STUDY

The Micro Small and Medium Enterprises (MSMEs) has been accepted as the engine of economic growth and promoting equitable development. In the present scenario, the MSMEs have been facing cut throat competition from the MNCs and big entrepreneurs, whose products are coming out with the sophisticated technology, huge amount of capital, marketing strategies, etc., At this section the proposed research is need of the hour, for which I have selected the Warangal district of Telangana state.

OBJECTIVES OF THE STUDY

The study will focus on the following objectives:

1. To understand the present situation of MSMEs.
2. To analyze the socio-economic conditions of MSMEs.
3. To offer suggestions for the development of the MSMEs.

SCOPE OF THE STUDY

The study broadly examines the Socio-economic conditions of MSMEs in Warangal district from 2005-2015. i.e., 10 years period.

METHODOLOGY

Sources of Data: The required data has been collected using both the primary and secondary data.

Primary Data: The main source of the primary data are the Micro Small Medium Entrepreneurs by serving a structured questionnaire a part from this, personal interviews, group discussions and observations methods were used in collecting the first hand information

Secondary Data: Secondary data for the study has been collected using published annual reports on MSMEs by the government, Handbook of Statistics on the Indian Economy published by Ministry of MSMEs, Reserve Bank of India (RBI), Annual Reports of Warangal district, Daily newspapers, published research papers in the reputed journals, books, thesis and dissertation and visiting websites relating to the presented research.

SAMPLE SIZE: Sample of 200 Respondents selected from the Warangal District.

TOOLS OF DATA ANALYSIS: The collected data will be classified, tabulated and analysed in a significant manner. For the data analysis simple statistical techniques will be applied such as percentages, averages.

LIMITATION OF THE STUDY

The following are the limitations of present study:

1. The study is essentially a micro level study.
2. The information through the questionnaires may not have covered correct figures Socio-economic conditions of Micro Small Medium Entrepreneurs.
3. The opinions and expressions of Micro Small Medium Entrepreneurs are based on the personal experience with the industries.
4. Secondary data are taken as MSMEs annual reports however the primary data is added to know the present conditions of Micro Small Medium Entrepreneurs.

DATA ANALYSIS AND INTERPRETATION

An attempt is made in this paper is to examine the socio-economic conditions of sample respondents focusing on the basis of age wise, area wise, religion wise, caste wise, educational qualification, type of the family, size of the family, occupational background, type of the house, loan taken from the MSMEs, annual income, experience profile, initial of the present business, nature of business, number of persons working in your organization, type of the enterprises mobilized your initial capital and initial capital.

The below table-1 shows the age wise distribution of MSMEs in the four areas of Warangal district, the age of groups have been categorized in to four such as below 25, 25-35, 35-40 and above 45.

TABLE 1: AGE-WISE DISTRIBUTION OF MSMEs

S.No	Age Groups (Years)	No. of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Below 25	3 (6.00)	2 (1.00)	4 (2.00)	3 (1.50)	12 (6.00)
2	25-35	7 (14.00)	4 (2.00)	5 (2.50)	4 (2.00)	20 (10.00)
3	35-45	28 (56.00)	22 (11.00)	31 (15.50)	19 (9.50)	102 (51.00)
4	Above 45	12 (24.00)	22 (11.00)	10 (5.00)	24 (12.00)	66 (33.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field survey

The above table – 1 reveals that age-wise distribution of MSMEs from the selected areas of Warangal district. It is observed that out of the 50 respondents in the Rampur area the highest number 28 (14.00%) respondents are under age group of 35-45 years, followed by under age group of above 45 years with 12(6.00%) respondents, 7(3.50%) respondents are age under group of 25-35 years, and 3 (1.50%) respondents are under age group below 25 years.

It is observed that out of the 50 respondents in the Madikonda area the highest number 22(11.00%) respondents are under age group of 35-40 years followed by under age group of above 45 years with 22(11.00%) respondents, 4 (2.00%) respondents are under age group of 25-35 years and only 2 (1.00%) respondents under age group of below 25 years.

It is observed that out of the 50 respondents in the Industrial estate area the highest number 31(15.50%) respondents are under age group of 35-40 years followed by under age group of above 45 years, with 10(5.00%) respondents 5(2.50%) respondents under age group of 25-35 years and only 4 (2.00%) respondents are under age group of below 25 years.

It is observed that out of the 50 respondents in the Autonagar area the highest number 24(12.00%) respondents are under age group of above 45 years, followed by under age group of 35-40 years with 19(9.50%) respondents 4(2.00%) respondents are age group of 25-35 years and only 3(1.50%) respondents are under age group of below 25 years.

The overall observation reveals that the majority of 106(51.00%) respondents are in the age group of 35-40 years followed by under the age group above 45 years with 66(33.00%) respondents, 20(10.00%) respondents are under age group of 25-35 years and only 12(6.00%) respondents are under age group below 25 years.

An attempt is made in the table-2 is to understand the area-wise distribution of the selected MSMEs from the selected areas of Warangal district. The area has been categorized into two i.e., rural and urban.

TABLE - 2: AREA -WISE DISTRIBUTION OF MSMEs

S.No	Area	No. of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Rural	50 (100.00)	50 (100.00)			100 (50.00)
2	Urban			50 (100.00)	50 (100.00)	100 (50.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field survey

The above table-2 found that area-wise distribution of MSMEs from the selected areas of Warangal district. In the Rampur area of the 50(100.00%) respondents are belonging to rural area, in the madikonda area of the 50(100.00%) respondents are belonging to rural area, in the industrial estate area of the 50(100.00%) respondents are belonging to urban area in the autonagar area of the 50(100.00%) respondents are belonging to urban area.

The overall observation found that out of 200(100.00%) respondents, 100(50.00%) respondents are belonging to rural area and 100(50.00%) respondents are belonging to urban area.

RELIGION: India known as the land of spirituality and philosophy was the birthplace of some religions, which even exist today in the world. The most dominant religion in India today is Hinduism. About 80% of Indians are Hindus. Hinduism is a colorful religion with a vast gallery of Gods and Goddesses. Hinduism is one of the ancient religions in the world. It is supposed to have developed about 5000 years ago. Later on in ancient period other religions developed in India. Around 500 BC two other religions developed in India, namely, Buddhism and Jainism. Today only about 0.5% of Indians are Jains and about 0.7% are Buddhist. In ancient times Jainism and specially Buddhism were very popular in India. Indians who accepted Buddhist philosophy spread it not only within the Indian sub-continent but also to kingdoms east and south of India. These three ancient religions, Hinduism, Buddhism and Jainism, are seen as the moulders of the India philosophy

The below table-3 shows the religion – wise distribution of MSMEs from the selected areas of Warangal district, religions have been categorized into four i.e, Hindu, Muslim, Christian and Others.

TABLE 3: RELIGION- WISE DISTRIBUTION OF MSMEs

S.No	Religion	No. of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Hindu	42 (84.00)	41 (82.00)	41 (82.00)	40 (80.00)	164 (82.00)
2	Muslim	6 (12.00)	5 (10.00)	6 (12.00)	7 (14.00)	24 (12.00)
3	Christian	2 (4.00)	4 (8.00)	3 (6.00)	3 (6.00)	12 (12.00)
4	Others	0	0	0	0	0
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field survey

The above table-3 reveals that religion–wise distribution of MSMEs from the selected areas Warangal district. In the Rampur area out of the 50 respondents, the highest number 42(84.00%) respondents are belonging to Hindu, religion, followed by the Muslim religion, with 6(12.00%) respondents and only 2(4.00%) respondents are belonging to Christian religion over the period study.

In the Madikonda area out of 50 respondents the highest number 41(82.00%) respondents are belonging to Hindu religion, followed by the Muslim religion with 5(10.00%) respondents and only 4(8.00%) respondents are belonging to Christian religion

In the industrial estate area out of 50 respondents the highest number 41(82%) respondents are belonging to Hindu religion, followed by the Muslim religion with 6 (12%) respondents and only 3(6%) respondents belong to Christian religions over the study period.

In the Auto Nagar area out of 50 respondents, the highest number 40(80%) respondents belong to Hindu religion followed by the Muslim religion with 7(14%) respondents and only 3(6%) respondents are belonging to Christian religions over the study period.

The overall observation reveals that the majority of 164 (82%) respondents are belonging to Hindu religions, followed by the Muslim religions with 24 (12%) respondents and only 12(6%) respondents are belonging to Christian religions.

The below table -4 shows the caste wise distribution of MSMEs in the four areas of Warangal district, caste can be classified into four i.e, BC, SC, ST, OC

TABLE 4: CASTE-WISE DISTRIBUTION OF MSMEs

S.No	Caste	No. of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	BC	22 (44.00)	20 (40.00)	26 (52.00)	16 (32.00)	84 (42.00)
2	SC	8 (16.00)	10 (20.00)	6 (12.00)	12 (24.00)	36 (18.00)
3	ST	4 (8.00)	2 (4.00)	3 (6.00)	3 (6.00)	12 (6.00)
4	OC	16 (32.00)	18 (36.00)	15 (30.00)	19 (38.00)	68 (34.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field survey

The above table-4 clears that caste-wise distribution of MSMEs of Warangal district, in the Rampur area out of 50 (100.00%) respondents, the highest number 22 (44.00%) respondents are belonging to BCs, followed by the OCs with 16(32.00%) respondents 8(16.00%) respondents are belonging to SC and only 4 (8.00%) respondents are belonging to ST.

In the Madikonda area out of 50 respondents, the highest number of 20(40.00%) respondents are belonging to BC, followed by the OC with 18(36.00%) respondents, 10(20.00%) respondents are belonging to SC and only 2 (4.00%) respondents are belonging to to ST.

In the Industrial estate area out of 50 respondents the highest number 26(52.00%) respondents are belonging to BC followed by the OC with 15(30.00%) respondents, 6 (12.00%) respondents are belonging to SC and only 3 (6.00%) respondents are belonging to ST.

In the Autonagar area out of 50 respondents, the highest number 19(38.00%) respondents are belonging to OC, followed by the BC with 16(32.00%) respondents, 12(24.00%) respondents are belonging to SC and only 3 (6.00%) respondents are belonging to ST.

The overall observation reveals that the majority of 84(42.00%) respondents are belonging to BC, followed by the OC with 68(34.00%) respondents, 36(18.00%) respondents are belonging to SC only 12 (6.00%) respondents are belonging to ST.

EDUCATION: Education system plays vital role in the working nature and another of the MSMEs. Generally lower the education, higher the improvement in the MSMEs weaving and vice-versa.

The below table-5 shows the educational qualification of the respondents (MSMEs) from the selected areas of Warangal district, educational qualification can be divide into five i.e, illiterate, primary, secondary, graduation & above, technical and others.

TABLE 5: EDUCATIONAL QUALIFICATION OF THE MSMEs

S.No	Educational Qualification	No. of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Illiterates	01 (2.00)	02 (4.00)	0	01 (2.00)	4 (2.00)
2	Primary level	5 (10.00)	7 (14.00)	6 (12.00)	4 (8.00)	22 (11.00)
3	Secondary level	10 (20.00)	8 (16.00)	13 (26.00)	12 (24.00)	43 (21.50)
4	Graduation & Above	24 (48.00)	24 (48.00)	23 (46.00)	23 (46.00)	93 (46.50)
5	Technical	10 (20.00)	9 (18.00)	8 (16.00)	11 (22.00)	38 (16.00)
	Others	0	0	0	0	0
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field survey

The above table-5 shows that educational qualification of the MSMEs from the selected areas of Warangal district. In the Rampur area out of 50 respondents 24 (48.00%) respondents are studied graduation & above, the followed by the secondary with 10(20.00%) respondents are studied technical, 5(10.00%) are studied primary and only 1(2.00%) respondents are studied illiterate.

In the Madikonda area out of 50 respondents, the highest number 24(48.00%) are studied graduation & above, followed by the technical with 9(18.00%) respondents, 8(16.00%) respondents are studied secondary, 7(14.00%) respondents are studied primary and only 2(14.00%) respondents illiterates.

In the Industrial Estate area out of 50 respondents the highest number 23(46.00%) respondents are studied Graduation & above, followed by the secondary with 13(26.00%) respondents, 8 (16.00%) respondents are studied technical and only 6(12.00%) are studied primary.

In the Autonagar area out of 50 respondents the highest number 23(46.00%) respondents are studied graduation & above, followed by the secondary with 12(24.00%) respondents, 11(22.00%) respondents are studied technical, 4 (8.00%) respondents are studied primary and only 1(2.00%) respondents are illiterate. The overall observation that the majority of 93(46.50%) respondents are studied Graduation & above, followed by the secondary with 43(21.50%) respondents, 38(16.00%) respondents are studied technical, 22(11.00%) respondents are studied primary and only 4(2.00%) respondents are illiterate.

FAMILY: A family is a domestic group of people, or a number of domestic groups, typically affiliated by birth or marriage, or by comparable legal relationships including domestic partnership, adoption, surname and in some cases ownership.

Family system can be divided into two types such as:

1. JOINT FAMILY: Joint Family is recognized as a social institution from time immemorial. It is a large social group in which the father, mother, their mature and immature children, their brother and parents live together. In general, a family is called a joint family where the members in a house, taking food in a common cookery enjoy undivided landed property, participate in a common worship and united in blood relationship.

2. NUCLEAR FAMILY: The nuclear family is a term used to define a family group consisting of a pair of adults and their children. This is in contrast to a single-parent family, to the larger extended family, and to a family with more than two parents.

The following table-6 shows the Type of the family of MSMEs from the selected areas of Warangal district. Family can be divided into two i.e., Joint family and Nuclear family.

TABLE 6: TYPE OF THE FAMILY OF MSMEs

S.No	Type of the family	No. of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Joint Family	6 (12.00)	7 (14.00)	8 (16.00)	5 (10.00)	26 (13.00)
2	Nuclear Family	44 (88.00)	43 (86.00)	42 (84.00)	45 (90.00)	174 (87.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field survey

The above table-6 describes that type of the family of MSMEs from the selected areas of Warangal district. In the Rampur area out of 50 respondents the highest number 44(88.00%) respondents are living the nuclear family and only 6 (12.00%) respondents live in the joint family under the study period.

In the madikonda area out of 50 respondents the highest number 43 (86.00%) respondents are live in the nuclear family and only 7 (14.00%) respondents are live in the joint family under the study period.

In the industrial area out of 50 respondents, the highest number 42 (84.00%) respondents are live in the nuclear family and only 8(16.00%) respondents are live in the joint family under the study period.

In autonagar area out of 50 respondents, the highest number 45 (90.00%) respondents are live in the nuclear family and only 5 (10.00%) respondents are live in the joint family under the study period.

The overall observation reveals that the majority of 174 (87.00%) living in the nuclear family and only 26 (13.00%) respondents are living in the joint family.

The below table-7 shows the size of the family of MSMEs from the selected areas of Warangal district. Family can be size divide into three i.e., small, medium and large.

TABLE 7: SIZE OF THE FAMILY OF MSMEs

S.No	Family Size	No. of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Small (below3)	1 (2.00)	0	1 (2.00)	2 (4.00)	4 (2.00)
2	Medium (4-6)	42 (84.00)	44 (88.00)	41 (82.00)	41 (82.00)	168 (84.00)
3	Large (6 above)	7 (14.00)	6 (12.00)	8 (16.00)	7 (14.00)	28 (14.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field survey

The above table-7 reveals that size of the family of MSMEs from the selected areas Warangal district. In the Rampur area out of 50 respondents the highest number 42(84.00%) respondents family size medium, followed by the family size large with 7 (14.00%) respondents and 1 (2.00%) respondents family size small over the study period.

In the madikonda area out of 50 respondents, the highest number 44(88.00%) respondents family size medium, followed by the family size large with 6 (12.00%) respondents and no respondents family size small over the period of study.

In the industrial area out of 50 respondents, the highest number 41(82.00%) family size medium, followed by the family size large with 8 (16.00%) respondents are 1 (2.00%) respondents family size small over the study of period.

In the autonagar area out of 50 respondents the highest number 41(82.00%) respondents family size medium, followed by the family size large with 7 (14.00%) respondents and only 2 (4.00%) respondents family size small over the period of study.

The overall observation reveals that the majority of 168(84.00%) respondents family size medium, followed by the family size large with 28(14.00%) respondents and only 4(8.00%) respondents small over the period of study.

The following table-8 shows the occupational background of MSMEs from the selected area of Warangal district. Occupation can be divide into four i.e., agriculture, business, govt employee, private employee etc.

TABLE 8: TYPE OF THE OCCUPATIONAL BACKGROUND OF MSMEs

S.No	Occupation	No. of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Agriculture	25 (50.00)	22 (44.00)	24 (48.00)	21 (42.00)	92 (46.00)
2	Business	15 (30.00)	16 (32.00)	18 (36.00)	15 (30.00)	64 (32.00)
3	Govt Employee	0	0	0	0	0
4	Private Employee	10 (20.00)	12 (24.00)	8 (16.00)	14 (28.00)	44 (22.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field survey

The above table-8 clears that occupational background of MSMEs from the selected areas of Warangal district. In the Rampur area out of 50 respondents the highest number 25(50.00%) respondents are occupied by agriculture followed by the business with 15(30.00%) respondents and only 10(20.00%) respondents are occupied by private employees.

In the Madikonda area out of 50 respondents, the highest number 22(44.00%) respondents are occupied by agriculture, followed by the business with 16(32.00%) respondents, and only 12(24.00%) respondents are occupied by private employee.

In the Industrial estate area out of 50 respondents the highest number 24(48.00%) respondents are occupied by agriculture, followed by the business with 18(36.00%) respondents and only 8(16.00%) respondents are occupied by private employee.

In the Autonagar area out of 50 respondents the highest number 21(42.00%) respondents are occupied by agriculture followed by the business with 15(30.00%) respondents and only 14(28.00%) respondents are occupied by private employee.

The overall observation reveals that the majority of 92(46.00%) respondents are occupied by agriculture, followed by the business with 64(32.00%) respondents and only 44(22.00%) respondents are occupied by private employees.

The below table-9 shows the type of the house of MSMEs from the selected areas of Warangal district, Houses are categorized into three i.e., RCC (Building), Shed and Tiles.

TABLE 9: TYPE OF THE HOUSE OF MSMEs

S.No	Type of House	Number of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	RCC	31 (62.00)	31 (62.00)	34 (68.00)	25 (50.00)	121 (60.50)
2	Shed	9 (18.00)	11 (22.00)	9 (18.00)	13 (26.00)	42 (21.00)
3	Tiles	10 (20.00)	8 (16.00)	7 (14.00)	12 (24.00)	37 (18.50)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field Survey

The above-9 reveals that type of the house of MSMEs from the selected areas of Warangal district, In the Rampur area out of 50 respondents, the highest number 31(62.00%) respondents are living in the RCC followed by the living in the tiles with 10(20.00%) respondents and only 9(18.00%) respondents are living shed.

In Madikonda area out of 50 respondents the highest number 31(62.00%) respondents are living the RCC, followed by the living in the shed with 11(22.00%) respondents and only 8(16.00%) respondents are living in the tiles.

In the Industrial Estate area out of 50 respondents the highest number 34(68.00%) respondents are living in the RCC, followed by the living in the shed with 9(18.00%) respondents and only 7(14.00%) respondents are living in the tiles.

In the Autonagar area out of 50 respondents the highest number 25(50.00%) respondents are living in the RCC, followed by the living in the shed with 13(26.00%) respondents and only 12(24.00%) respondents are living in the tiles.

The overall observation reveals that the majority of 121(60.50%) respondents are living in the RCC, followed by the living shed with 42(21.00%) respondents and only 37(18.50%) respondents are living in the tiles.

The following table-10 shows the loan taken of the MSMEs from the selected areas of Warangal district, loan can be categorized into three i.e., bank, micro finance and other.

TABLE 10: LOAN TAKEN OF THE MSMEs

S.No	Type of Loan	Number of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Bank	26 (52.00)	32 (64.00)	27 (54.00)	31 (62.00)	116 (58.00)
2	Micro Finance	16 (32.00)	6 (12.00)	9 (18.00)	13 (26.00)	44 (22.00)
3	Others	8 (16.00)	12 (24.00)	14 (28.00)	6 (12.00)	40 (20.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field Survey

The above table-10 describes that loan taken of the MSMEs from the selected areas Warangal district, In the Rampur area out of 50 respondents, the highest number 26(52.00%) are taking loan from bank, followed by the taking loan from micro finance with 16(32.00%) respondents and only 8(16.00%) respondents are taking loan from Others the study period.

In the Madikonda area out of 50 respondents, the highest number 32(64.00%) respondents are taking loan from bank, followed by the taking loan from others 12(24.00%) respondents and only 6(12.00%) respondents are taking loan from micro finance under the study period.

In the Industrial estate area out of 50 respondents, the highest number 27(54.00%) respondents are taking loan from bank, followed by the taking loan from others, with 14(28.00%) respondents and only 9(18.00%) respondents are taking loan from micro finance under the study period.

In the Autonagar area out of 50 respondents, the highest number 31(62.00%) respondents are taking loan from bank followed by the taking loan from micro finance with 13(26.00%) respondents and only 6(12.00%) respondents are taking loan from others under the study period.

The overall observation found that the majority of 116(58.00%) respondents are taking loan from bank, followed by the taking loan from micro finance with 44(22.00%) respondents and only 40(20.00%) respondents are taking loan from others under the study period.

The below table-11 shows the annual income of the MSMEs from the selected areas of Warangal district, Annual Income has been divide into five i.e., below – 25,000, 25,000-50,000, 50,000-1,00,000, 1,00,000-2,00,000 and above 2,00,000.

TABLE 11: ANNUAL INCOME OF THE MSMEs

S.No	Annual Income	Number of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Below 25,000	1 (2.00)	4 (8.00)	3 (6.00)	3 (6.00)	11 (5.50)
2	25,000-50,000	1 (2.00)	3 (6.00)	2 (4.00)	5 (10.00)	11 (5.50)
3	50,000-1,00,000	8 (16.00)	14 (28.00)	16 (32.00)	6 (12.00)	44 (22.00)
4	1,00,000-2,00,000	22 (44.00)	16 (32.00)	12 (24.00)	28 (56.00)	78 (39.00)
5	Above 2,00,000	18 (36.00)	13 (26.00)	17 (34.00)	8 (16.00)	56 (28.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field Survey

The above table-11 reveals that annual income of the MSMEs from the selected areas of Warangal district, In the Rampur area out of 50 respondents the highest number 22(44.00%) respondents are earnings Above 2,00,000, followed by the earnings 1,00,000-2,00,000 with 18(36.00%) respondents, 8(16.00%) respondents are earnings 50,000-1,00,000, 1(2.00%) respondents are earnings 25,000-50,000 and 1(2.00%) respondents are earnings below 25,000

The Madikonda area out of 50 respondents, the highest number 16(32.00%) respondents are earnings 1,00,000-2,00,000, followed by the earnings 50,000-1,00,000 with 14(28.00%) respondents, 13(26.00%) respondents are earnings above 2,00,000, 4(8.00%) respondents are earnings below 25,000 and only 3(6.00%) respondents are earnings 25,000- 50,000

In the Industrial Estate area out of 50 respondents the highest number 17(34.00%) respondents are earnings above 2,00,000, followed by the earnings 50,000-1,00,000, with 16(32.00%) respondents, 12(24.00%) respondents are earnings 1,00,000-2,00,000, 3(6.00%) respondents are earnings below 25,000 and only 2(4.00%) respondents are earnings 25,000-50,000

In the Autonagar area out of 50 respondents the highest number 28(56.00%) respondents are earnings above 2,00,000 with 8(16.00%) respondents, 6(12.00%) respondents are earnings 50,000-1,00,000, 5(10.00%) respondents are earnings 25,000-50,000 and only 3(6.00%) respondents are earnings below 25,000

The overall observation found that the majority of 78(39.00%) respondents are earnings 1,00,000- 2,00,000, followed by the earnings above 2,00,000 with 56(28.00%) respondents, 44(22.00%) respondents are earnings 50,000-1,00,000, 11(5.50%) respondents are earnings 25,000-50,000 and 11(5.50%) respondents are earnings below 25,000

The below table-12 shows the experience MSMEs from the selected area of Warangal district experience has been categorized into four i.e., below 10 years, 10 – 20 years, 20-30 years and above 30 years.

TABLE 12: EXPERIENCE OF MSMEs

S.No	Experience (Years)	Number of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Below 10 years	4 (8.00)	5 (10.00)	7 (14.00)	4 (8.00)	20 (10.00)
2	10 – 20 years	12 (24.00)	5 (10.00)	8 (16.00)	7 (14.00)	32 (16.00)
3	20 – 30 years	25 (50.00)	26 (52.00)	24 (48.00)	27 (54.00)	102 (51.00)
4	Above 30 years	9 (18.00)	14 (28.00)	11 (22.00)	12 (24.00)	46 (23.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field Survey

The above table-12 describes the experience of MSMEs from the selected areas of Warangal district in the Rampur area out of 50 respondents, the highest 25(50.00%) respondents are experience 20-30 years, followed by the experience 10-20 years with 12(24.00%) respondents 9(18.00%) respondents are experience above 30 years and 4(8.00%) respondents are experience below 10 years.

In the Madikonda area out of 50 respondents, the highest number 26(52.00%) respondents are experience 20-30 years followed by the experience above 30 years with 14(28.00%) respondents, 5(10.00%) respondents are experience 10-20 years and only 5 (10.00%) respondents are experience below 10 years.

In the Industrial area out of 50 respondents, the highest number 24(48.00%) are experience 20-30 years followed by the experience above 30 years with (22.00%) respondents, 8(16.00%) respondents are experience 10-20 years and 7(14.00%) respondents are experience below 10 years.

In the Autonagar area out of 50 respondents the highest number 27(54.00%) respondents are experience 20-30 years, followed by the experience above 30 years with 12(24.00%) respondents, 7(14.00%) respondents are experience 10-20 years and 4(8.00%) respondents are experience below 10 years.

The overall observation found that the majority of 102(51.00%) respondents are experience 20-30 years, followed by the experience above 30 years with 46(23.00%) respondents, 32(16.00%) respondents are experience 10-20 years and 20(10.00%) respondents are experience below 10 years.

The below table-13 shows the initial idea of the present business from the selected areas Warangal district it is can be categorized into five i.e., own idea, friends and relatives, institutional guidance, advised by parents advised by the others.

TABLE 13: INITIAL IDEA OF THE PRESENT BUSINESS

S.No	Initial idea of the Business	Number of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Own Idea	5 (10.00)	6 (12.00)	7 (14.00)	4 (8.00)	22 (11.00)
2	Friends & Relatives	20 (40.00)	18 (36.00)	19 (38.00)	19 (38.00)	76 (38.00)
3	Institutional Guidance	2 (4.00)	4 (8.00)	1 (2.00)	5 (10.00)	12 (6.00)
4	Advised by Parents	21 (42.00)	21 (42.00)	22 (20.00)	20 (40.00)	84 (42.00)
5	Advised by Others	2 (4.00)	1 (2.00)	1 (2.00)	2 (4.00)	6 (3.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field Survey

The above table-13 clears that initial idea of the present business from the selected areas of Warangal district. In the Rampur area out of 50 respondents, the highest number 21(42.00%) respondents idea of the business advised by parents followed by the idea of the business Friends & Relatives with 20(40.00%) respondents, 5(10.00%) respondents are idea of the business own idea, 2(4.00%) respondents are idea of the business advised by others and 2(4.00%) respondents are idea of the business institutional guidance.

In the Madikonda area out of 50 respondents the highest number 21(42.00%) respondents are idea of the business advised by parents, followed by the idea of the business friends & relatives with 18(36.00%) respondents 6(12.00%) respondents are idea of the business own idea, 4(8.00%) respondents idea of the business institutional guidance and 1(2.00%) respondents are idea of the business advised by others.

In the Industrial Area out of 50 respondents the highest number 22(44.00%) respondents are idea of the business advised by parents, followed by the idea of business friends & relatives with 19(38.00%) respondents, 7(14.00%) respondents are idea of business own idea, 1(2.00%) respondents are idea of business institutional guidance and 1(2.00%) respondents are idea of business advised by parents.

In the Autonagar area out of 50 respondents the highest number 20(40.00%) respondents are advised by parents, followed by the idea of business friends & relatives, with 19(38.00%), 5(10.00%) respondents are idea of business institutional guidance, 4(8.00%) respondents are idea of business own idea and 2(4.00%) respondents are idea of business advised by parents.

The overall observation reveals that the majority of 84(42.00%) respondent are idea of business advised parents, followed by the idea of business friends & relatives 76(38.00%) respondents, 22(11.00%) respondents are idea of business own idea, 12(6.00%) respondents are idea of business institutional guidance and 6(3.00%) respondents are idea of business advised by others.

The following table-14 nature of business of MSMEs from the selected areas Warangal district nature of the business can be divide into three i.e., Manufacturing, Servicing, Trading.

TABLE 14: NATURE OF THE BUSINESS OF MSMEs

S.No	Nature of the Business	Number of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Manufacturing	30 (60.00)	26 (52.00)	28 (56.00)	30 (60.00)	114 (57.00)
2	Servicing	15 (30.00)	17 (34.00)	18 (36.00)	14 (28.00)	64 (32.00)
3	Trading	5 (10.00)	7 (14.00)	4 (8.00)	6 (12.00)	22 (11.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field Survey

The above table 3.14 clears that nature of the business of MSMEs from the selected areas of Warangal district. In the Rampur area out of the 50 respondents the highest number 30(60.00%) respondents are manufacturing, followed by the nature of the business servicing with 15(30.00%) respondents and 5(10.00%) respondents are trading.

In the Madikonda area out of 50 respondents the highest number 26(52.00%) respondents are manufacturing, followed by the nature of the business servicing with 17(34.00%) and 7(14.00%) respondents are trading.

In the Autonagar area out of 50 respondents the highest number 30(60.00%) respondents are manufacturing followed by the nature of the business servicing with 14(28.00%) respondents and 6(12.00%) respondents are trading.

The overall observation found that the majority of 114(57.00%) respondents are manufacturing, the followed by the nature of the business servicing with 64(32.00%) respondents and 22(11.00%) respondents are trading.

The below table-15 shows the number of persons working in organization, from the selected areas of Warangal district. Number of persons working in organization can be categorized into five i.e., below 10, 10-20, 20-40, 40-80 and Above 80

TABLE 15: NUMBER OF PERSONS WORKING IN ORGANISATION

S.No	Number of persons in working	Number of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Below 10 persons	7 (14.00)	9 (18.00)	8 (16.00)	8 (16.00)	32 (16.00)
2	10 – 20 persons	12 (24.00)	10 (20.00)	14 (28.00)	8 (16.00)	44 (22.00)
3	20 – 40 persons	13 (26.00)	15 (30.00)	12 (24.00)	16 (32.00)	56 (28.00)
4	40 – 80 persons	13 (26.00)	13 (26.00)	12 (24.00)	14 (28.00)	52 (26.00)
	Above 80 persons	5 (10.00)	3 (6.00)	4 (8.00)	4 (8.00)	16 (8.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field Survey

The above table-15 describes that No. of persons working in organization from the selected areas of Warangal district. In the Rampur area out 50 respondents, the highest number 13(26.00%) respondents are 20-40 persons working in the organization, followed by the 40-80 persons working in organization with 13(26.00%) respondents 12(24.00%) respondents are 10-20 persons working in the organization 7(14.00%) respondents are below 10 persons working in the organization and 5(10.00%) respondents are above 80 persons working in the organization.

In the Madikonda area out of 50 respondents the highest number 15(30.00%) respondents are 20-40 persons working in the organization, followed by the 40-80 persons working in the organization with 13(26.00%) respondents, 10(20.00%) respondents are 10-20 persons working in the organization, 9(18.00%) respondents are below 10 persons working in organization and 3(6.00%) respondents are above 80 persons working in the organization.

In the Industrial estate out of 50 respondents the highest number 14(28.00%) respondents are 10-20 persons working in the organization, followed by the 20-40 persons working in the organization with 12(24.00%) respondents, 12(24.00%) respondents are 40-80 persons working in organization, 8(16.00%) respondents are below 10 persons working in the organization and 4(8.00%) respondents are above 80 persons working in organization.

In the Autonagar area out of 50 respondents the highest number 16(32.00%) respondents are 20-40 persons working in the organization followed by the 40-80 persons working in organization with 14(28.00%) respondents, 8(16.00%) respondents are 10-20 working in organization 8(16.00%) respondents are above 80 persons working in organization.

The overall observation found that the majority of 56(28.00%) respondents 20-40 years working in organization, followed by the 40-80 persons working in organization with 52(26.00%) respondents 44(22.00%) respondents are 10-20 persons working in organization, 32(16.00%) respondents are below 10 persons working in organization and 16(8.00%) respondents are above 80 persons working in organization.

The below table-16 shows the type of the enterprise from the selected areas of Warangal district, enterprise can be divide into two i.e., Registered, Unregistered.

TABLE 16: TYPE OF THE ENTERPRISE

S.No	Type of the Enterprise	Number of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Registered	44 (88.00)	46 (23.00)	41 (82.00)	43 (86.00)	174 (87.00)
2	Unregistered	6 (12.00)	4 (8.00)	9 (18.00)	7 (14.00)	26 (13.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field Survey

The above table-16 clears that type of the enterprise from the selected areas of Warangal district, In the Rampur area out of 50 respondents the highest number 44(88.00%) registered enterprises and only 6(12.00%) unregistered enterprises.

In the Madikonda area out of 50 respondents the highest number 46(23.00%) registered enterprises and only 4(8.00%) unregistered enterprises.

In the Industrial estate area out of 50 respondents the highest number 41(82.00%) registered enterprises and only 9(18.00%) unregistered enterprises.

In the Autonagar area out of 50 respondents the highest number 43(86.00%) registered enterprises and only 7(14.00%) unregistered enterprises.

The overall observation reveals that the majority 174(87.00%) registered enterprises and only 26(13.00%) unregistered enterprises.

The below table-17 shows the mobilized the initial capital of MSMEs from the selected areas of Warangal district, mobilized the initial capital categorized into five i.e., Owned funds, borrowed from Friends & Relatives, borrowed from Bank, borrowed financial Institutions, Borrowed from Others.

TABLE 17: MOBILISED THE INITIAL CAPITAL OF MSMEs

S.No	Initial idea of the Business	Number of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Owned funds	11 (22.00)	12 (24.00)	10 (20.00)	11 (22.00)	44 (22.00)
2	Borrowed from Friends & Relatives	16 (32.00)	15 (30.00)	18 (36.00)	15 (30.00)	64 (32.00)
3	Borrowed from Bank	18 (36.00)	16 (32.00)	16 (32.00)	18 (36.00)	68 (34.00)
4	Borrowed from Financial Institutions	0	0	0	0	0
5	Borrowed from Others	5 (10.00)	7 (14.00)	6 (12.00)	6 (12.00)	24 (12.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field Survey

The above table-17 describes that mobilized the initial capital of MSMEs from the selected areas of Warangal district, In the Rampur area out of 50 respondents the highest number 18(36.00%) respondents are mobilized the initial capital Borrowed from bank, followed by the mobilized initial capital Borrowed from friends & Relatives with 16(32.00%) respondents, 11(22.00%) respondents are mobilized the initial capital Owned funds and only 5(10.00%) respondents are mobilized the initial capital Borrowed from others.

In the Madikonda area out of 50 respondents the highest number 16(32.00%) respondents are mobilized the initial capital Borrowed from Bank, followed by the mobilized the initial capital Borrowed from Friends & Relatives with 15(30.00%) respondents, 12(24.00%) respondents are mobilized initial capital owned funds and only 7(14.00%) respondents are mobilized the initial capital Borrowed from others.

In the Industrial estate area out of the 50 respondents the highest number 18(36.00%) respondents, followed by the mobilized initial capital, Borrowed from bank, with 16(32.00%) respondents, 10(20.00%) respondents are mobilized the initial capital Owned funds and only 6(12.00%) respondents are mobilized the initial capital Borrowed from Others.

In the Autonagar area out of 50 respondents the highest number 18(36.00%) respondents are mobilized the initial capital Borrowed from Bank, followed by the mobilized the initial capital Borrowed from Friends & relatives with 15(30.00%) respondents, 11(22.00%) respondents are mobilized the initial capital Owned fund and only 6(12.00%) respondents are mobilized the initial capital Borrowed from Others.

The overall observation reveals that the majority 68(34.00%) respondents are mobilized the initial capital Borrowed from Banks, followed by the mobilized the initial capital Borrowed from Friends & relatives, with 64(32.00%) respondents 44(22.00%) respondents are mobilized the initial capital Own idea and only 24(12.00%) respondents are mobilized the initial capital Borrowed from Others.

The below table-18 initial capital of MSMEs from the selected areas of Warangal district, initial capital can be divide categorized into five Below – 30,000, 30,000-60,000, 60,000-1,20,000, 1,20,000-2,40,000, Above 2,40,000.

TABLE - 18 INITIAL CAPITAL OF THE MSMEs

S.No	Initial Capital	Number of Respondents				Total (%)
		Rampur	Madikonda	Industrial Estate	Autonagar	
1	Below 30,000	5 (10.00)	6 (12.00)	4 (8.00)	7 (14.00)	22 (11.00)
2	30,000-60,000	9 (18.00)	7 (14.00)	8 (16.00)	8 (16.00)	32 (16.00)
3	60,000-1,20,000	11 (22.00)	12 (24.00)	10 (20.00)	13 (26.00)	46 (23.00)
4	1,20,000-2,40,000	14 (28.00)	12 (24.00)	15 (30.00)	15 (30.00)	56 (26.00)
5	Above 2,40,000	11 (22.00)	13 (26.00)	13 (26.00)	7 (14.00)	44 (22.00)
Total (%)		50 (100.00)	50 (100.00)	50 (100.00)	50 (100.00)	200 (100.00)

Source: Field Survey

The above table-18 clears that initial capital of MSMEs from the selected areas of Warangal district, In the Rampur area out of 50 respondents 14(28.00%) respondents are initial capital 1,20,000-2,40,000, followed by the initial capital Above 2,40,000 with 11(22.00%) respondents 11(22.00%) respondents are initial capital 60,000-1,20,000, 9(18.00%) respondents are initial capital 30,000-60,000 and only 5(10.00%) respondents are initial capital below 30,000

In the Madikonda area out of 50 respondents the highest number 13(26.00%) respondents are initial capital Above 2,40,000, followed by the initial capital 60,000-1,20,000 with 12(24.00%) respondents, 12(24.00%) respondents are initial capital 1,20,000 with 12(24.00%) respondents are initial capital 1,20,000-2,40,000, 7(14.00%) respondents are initial capital 30,000-60,000, and only 6(12.00%) respondents are initial capital Below 30,000

In the Industrial estate out of 50 respondents in the highest number 15(30.00%) respondents are initial capital 1,20,000-2,40,000, followed by the initial capital above 2,40,000 with 13(26.00%), respondents 10(20.00%) respondents are initial capital 30,000 – 60,000 and only 4(8.00%) respondents are initial capital Below 30,000

In the Autonagar area out of 50 respondents the highest number of 15(30.00%) respondents are initial capital 1,20,000-2,40,000, followed by the initial capital 60,000-1,20,000, with 13(26.00%) respondents, 8(16.00%) respondents are initial capital Above 2,40,000 and 7(14.00%) respondents are initial capital below 30,000

The overall observation found that the majority of 56(28.00%) respondents are initial capital 1,20,000-2,40,000, followed by the initial capital 60,000-1,20,000 with 46(23.00%) respondents, 44(22.00%) respondents are initial capital above 2,40,000, 32(16.00%) respondents are initial capital 30,000-60,000, and 22(11.00%) respondents are initial capital Below 30,000.

SUMMARY OF FINDINGS

The following are the summary of findings presented below

1. It is found that majority of the respondents in the age group of 35-45 years.
2. MSMEs belong to both rural and urban areas.
3. MSMEs are include Hindus, Christians, Muslims the majority of the respondents are belong to Hindu.
4. MSMEs are include BC, SC, ST and FC the majority of the respondents are belong to BC.
5. The majority of respondents are studies graduation and above.
6. MSMEs are include joint family nuclear family it is observed that the majority of respondents are living in the nuclear family, because of urbanization decentralization and globalization.
7. MSMEs are family size include small, medium and large. The majority of respondents are family size medium.
8. It is observed that the majority of respondents occupational background agriculture.
9. It is found that majority of respondents are living in RCC house.
10. Source of loan include bank, micro finance and others. The majority of respondents taking loan from bank.
11. It is observed that majority of respondents annual income Rs. 1,00,000 – Rs. 2,00,000
12. Experience of MSMEs is include below 10 years, 10 – 20 years, 20-30 years and above 30 years. The majority of respondents experience 20-30 years.
13. It is found that majority of respondents initial idea of the present business friends and relatives.
14. Nature of the business of MSMEs includes Manufacturing, Servicing and Trading. The majority of respondents are manufacturing.
15. Number of persons working in organization are include below 10 persons, 10-20 persons, 20-40 persons, 40-80 persons and above 80 persons.
16. Enterprises are divide into two i.e., registered and unregistered the majority of enterprises are registered.
17. It is observed that the majority of respondents mobilized the initial capital borrowed from banks.
18. Initial capital of the MSMEs are include below Rs. 30,000 Rs. 30,000-60,000 Rs. 60,000-1,20,000 Rs. 1,20,000-2,40,000 and above Rs. 2,40,000 the majority of respondents are initial capital Rs. 1,20,000 – 2,40,000.

CONCLUSION

The MSMEs play vital role in the economic-social development of the country, often acting as nursery of entrepreneurship they also play a key role in the development of the economy with their effective, flexible and innovative entrepreneurial spirit. The MSMEs sector contributes significantly to the country's manufacturing output employment and exports and is credited with generality the higher employment growth as well as accounting for major share of industrial production and exports. Government provide assistance to MSMEs for strengthening the share capital & increase budget allocations, banks are increase the loan amount, government has been conduct the training & development programmes, to enhance marketing facilities, to increase the transport facilities, government has to provide raw material directly to the MSMEs and there should be relaxation in complex labour laws to avoid the inconvenience in compliance.

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MICRO SMALL MEDIUM ENTREPRENEURS (MSMEs) IN TELANGANA STATE: AN OVERVIEW**LAVURI RAMESH****STUDENT****DEPARTMENT OF TOURISM MANAGEMENT****KAKATIYA UNIVERSITY****WARANGAL****A.YESHODA****PH. D. RESEARCH SCHOLAR****DEPARTMENT OF COMMERCE & BUSINESS MANAGEMENT****KAKATIYA UNIVERSITY****WARANGAL****ABSTRACT**

Micro small and medium enterprises play a vital role in economic development as country. It is providing large scale employment. This paper has covered employment of MSMEs in Telangana State. Investment of MSMEs in Telangana State, and number of MSMEs in Telangana State. The following suggestions are offered for the development of MSMEs. State & Central government have to increase the budget allocation for MSMEs sector & provide assistance to MSMEs for strengthening the share Capital, banks to increase loan amount, government have tax exemption for MSMEs & provide marketing facilities, transport facilities and subsidies, government has to provide raw material, machinery and equipment directly to the MSMEs order to maintain and also providing training in machines, government gas to take necessary steps in order to sale the MSMEs products through the commerce like amazon, snapdeal, and flipkart etc., government has to establish new industrial parks and developing the infrastructural facilities & promotion policies, government should be conduct training and development, awareness programmes, government has to relaxation in labour laws & red tape and governments need to conduct health checkup camps.

KEYWORDS

MSMEs, Telangana state.

INTRODUCTION

The MSMEs play vital role in the economic-social development of the country, often acting as nursery of entrepreneurship they also play a key role in the development of the economy with their effective, flexible and innovative entrepreneurial spirit. The MSMEs sector contributes significantly to the country's manufacturing output employment and exports and is credited with generality the higher employment growth as well as accounting for major share of industrial production and exports.

OFFICIAL DEFINITION OF MSMEs IN INDIA

Micro, Small & Medium Enterprises Development (MSMED) Act2 in India in 2006, the Micro, Small and Medium Enterprises (MSMEs) are classified into:

Manufacturing Sector: The enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the Industries (Development and Regulation) Act, 1951. The manufacturing enterprises are defined in terms of investment in plant & machinery (as notified vide S.O. 1642(E). dated 29-Sep-2006), which is presented in the table below:

TABLE 1: SHOWING INVESTMENT CEILINGS FOR MSMEs IN MANUFACTURING SECTOR

Manufacturing Sector	Investment in Plant & Machinery
Micro Enterprises	Does not exceed twenty five lakh rupees, i.e. 2.5 Million Rupees
Small Enterprises	More than twenty five lakh rupees but does not exceed five crore rupees, i.e. 50 Million Rupees
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees, i.e. 100 Million Rupees

Source: Ministry of MSME, Govt. of India.

Service Sector: The enterprises engaged in providing or rendering of services defined in terms of investment in equipment (as notified vide S.O. 1642 (E), dt. 29.09.06, which is presented in the table below:

TABLE 2: SHOWING INVESTMENT CEILINGS FOR MSMEs IN SERVICE SECTOR

Service Sector	Investment in Equipment
Micro Enterprises	Does not exceed ten lakh rupees, i.e. One Million Rupees
Small Enterprises	More than ten lakh rupees but does not exceed two crore rupees (rupees, i.e. 20 Million Rupees)
Medium Enterprises	More than two crore rupees but does not exceed five core rupees, i.e. 50 Million Rupees

Source: Ministry of MSME, Govt. of India

REVIEW OF LITERATURE

Sonia and Kansai Rajeev (2009) studied the effects of globalization on Micro, Small and Medium Enterprises (MSMEs) during pre and post liberalization from 1973-74 to 2008-09. They used four economic parameters namely number of units, production, employment and export and interpreted study results based on Annual Average Growth Rate (AAGR) calculation.

Chakrabarty. K. C. (2010) States that with increasing competition, introduction of new products and stringent regulatory environment, the role of banks needs to change from mere lenders to partners in business. There is a need for greater participation of banks in the affairs of their constituents by convergence of credit services and non-credit services.

Subrahmanya Bala (2011) has probed the impact of globalization on the exports potentials of the small enterprises. The study shows that share of SSI export in total export has increased in protection period but remain more or less stagnated during the liberalization period.

Rajib Lahiri (2011) the study made an attempt to critically analyze the definition aspect of MSMEs and explore the opportunities enjoyed and the constraints faced by them in the era of globalization after analyzing the performance of MSMEs in India during the pre and post liberalization period. The study revealed that except marginal increase in growth rate in employment generation, the growth rate in other parameters is not encouraging during the liberalization period.

Raj Kumar Gautam and Raghbir Singh (2011) in their article, "Marketing Barriers of Small Firms: The Punjab Perspective," presented the findings of a study on marketing barriers of small enterprises based on a sample of 173 small manufacturing enterprises from Punjab.

Shailendra Dasari (2011) in his article, "Marketing Strategies for Maize Seed Industry: A Farmer Centric Approach", analyses the potential of maize seed industry in Andhra Pradesh, and the expectations of the farmers from maize seed industry based on the field study conducted in six districts of Telangana region of Andhra Pradesh covering 100 farmers and 30 dealers.

Unia, H.R. (2012), in her article, "Challenges in India's Foreign Trade" outlines the challenges being faced by India in exports and imports, and underscores the importance of increase in South- South trade in world trade which accounts for 22 per cent of global trade, and almost 50 per cent of total merchandise trade of developing countries at present. Among developing countries, India has emerged as a vibrant economy fuelled by robust growth in international trade and investment. The South's impressive growth would provide a new impetus to a sustained growth of the global economy, and contribute to the achievement of the Millennium Development Goals.

Dr. Padmasani, S. Karthika (2013), A study on Problems and Prospects of Micro, Small and Medium Scale Enterprise in Textile Exports with special reference to Tirupur and Coimbatore District. This paper has examined the problems of MSMEs in the era of global economy and also has identified the factors affecting MSMEs. Dr. Neeru Garg (Sept. 2014), Micro, Small and Medium Enterprises in India: Current Scenario and Challenges. This paper made an attempt to highlight the growth of this sector and analyze various problems and challenges faced by MSME sector in India in general.

K. Suneetha and T. Sankaraiah, Problems of MSMEs and Entrepreneurs in Kadapa District, IOSR Journal of Economics and Finance: The study conducted a survey on 156 enterprises to study they problems. It was found that 103 enterprises were facing financial problems and among them 62.8 per cent are from Micro enterprises. Moreover 23 percent found as meager assistance from government agencies. In the study the divisions of Kadapa, Jammulamadugu and Rajampet were covered.

NEED FOR THE STUDY

The Micro Small and Medium Enterprises (MSMEs) has been accepted as the engine of economic growth and promoting equitable development. In the present scenario, the MSMEs have been facing cut throat competition from the MNCs and big entrepreneurs, whose products are coming out with the sophisticated technology, huge amount of capital, marketing strategies, etc.

OBJECTIVES OF THE STUDY

The study will focus on the following objectives

1. To study the present situation of MSMEs.
2. To study the MSMEs in Telangana State – An Overview
3. To draw the conclusion

SCOPE OF THE STUDY

The study broadly examines the MSMEs in Telangana State – An Overview from 2005-2015 i.e. 10 years period.

METHODOLOGY

Sources of Data: The required data has been collected using Secondary Data.

Secondary Data: Secondary data for the study has been collected using published annual reports on MSMEs by the government, Handbook of Statistics on the Indian Economy published by Ministry of MSMEs, Reserve Bank of India (RBI), Annual Reports of Karimnagar district, Daily newspapers, published research papers in the reputed journals, books, thesis and dissertation and visiting websites relating to the presented research.

TOOLS OF DATA ANALYSIS: The collected data will be classified, tabulated and analysed in a significant manner. For the data analysis simple statistical techniques will be applied such as percentages, averages.

LIMITATION OF THE STUDY

The limitations of present study are as per following:

1. The study is essentially a micro level study.
2. The information through the questionnaires may not have covered correct figures Socio-economic conditions of Micro Small Medium Entrepreneurs.
3. Secondary data are taken as MSMEs annual reports however the primary data is added to know the present conditions of Micro Small Medium Entrepreneurs.

MSMEs IN TELANGANA STATE

The Micro, Small and Medium Enterprises (MSME) is playing a key role in economic and social development of the State and is providing direct employment opportunities to 64,604 people and with a vast network of around 5,787 units. Its contribution in terms of indirect employment, providing inputs/ raw material for other sectors and export earnings, is immense.

TABLE 1: EMPLOYMENT OF MSMEs IN TELANGANA STATE

Sl. No.	Year	Employment
1	2005-06	7,500
2	2006-07	19,000
3	2007-08	48,100
4	2008-09	53,800
5	2009-10	47,400
6	2010-11	63,500
7	2011-12	77,300
8	2012-13	71,200
9	2013-14	83,200
10	2014-15	94,400

Source: Government of Telangana Planning Development Department

Above table describes that Employment opportunities providing in MSMEs in Telangana State. According to the data in 2005-06 year the MSMEs provided employment to 7500 persons and it was increased 94,400 in 2014-15. It can be observed that the MSMEs are playing very vital role in providing the employment in Telangana state.

TABLE 2: INVESTMENT OF MSMEs IN TELANGANA STATE

Sl. No	Year	Investment (lakhs)
1	2005-06	311
2	2006-07	553
3	2007-08	1,358
4	2008-09	1,559
5	2009-10	4,576
6	2010-11	3,301
7	2011-12	3,033
8	2012-13	2,674
9	2013-14	3,111
10	2014-15	3,588

Source: Government of Planning Development Department

The above table shows that investment of MSMEs in Telangana State. As per above data the investment scenario is increased from 311 Lakhs to 4,576 between 2005-06 to 2009-10, after the 2009-10 it was gradually decreased to 3,588 Lakhs in 2014-15, because of the Telangana agitation. However, it can be observed that the investment tendency is gradually increasing.

TABLE 3: NUMBER OF MSMEs IN TELANGANA STATE

Sl. No	Year	No of MSMEs
1	2005-06	73,100
2	2006-07	1,31,900
3	2007-08	2,64,500
4	2008-09	2,82,800
5	2009-10	2,75,900
6	2010-11	5,37,400
7	2011-12	5,56,100
8	2012-13	5,12,500
9	2013-14	6,84,400

Source: Government of Telangana Development Department

Table 3 gives a clear picture about the number of MSMEs in Telangana State. In 2005-06 there are only 71,100 MSMEs are running in Telangana state and it was raised up to 6,84,400 in 2013-14. The data clearly depicts that the Telangana state is also encouraging to MSMEs.

CONCLUSION

Micro small and medium enterprises play a vital role in economic development as country. It is providing large scale employment. This paper has covered employment of MSMEs in Telangana State. Investment of MSMEs in Telangana State, and number of MSMEs in Telangana State. The following suggestions are offered for the development of MSMEs. State & Central government have to increase the budget allocation for MSMEs sector & provide assistance to MSMEs for strengthening the share Capital, banks to increase loan amount, government have tax exemption for MSMEs & provide marketing facilities, transport facilities and subsidies, government has to provide raw material, machinery and equipment directly to the MSMEs order to maintain and also providing training in machines, government has to take necessary steps in order to sale the MSMEs products through the commerce like amazon, snapdeal, and flipkart etc., government has to establish new industrial parks and developing the infrastructural facilities & promotion policies, government should be conduct training and development, awareness programmes, government has to relaxation in labour laws & red tape and governments need to conduct health check up camps.

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MICRO SMALL MEDIUM ENTERPRISES (MSMEs) IN WARANGAL DISTRICT: AN OVERVIEW

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ABSTRACT

Micro Small Medium Enterprises MSMEs play vital role in Economic Development of Warangal District, it is providing large scale employment, this paper has covered number of MSMEs in Warangal District, employment of MSMEs in Warangal District and investment of MSMEs in Warangal District. The State and Central government have to increase the budget allocation for MSMEs sector & provide assistance to MSMEs for strengthening the share Capital, banks to increase loan amount, government have tax exemption for MSMEs & provide marketing facilities, transport facilities and subsidies, government has to provide raw material, machinery and equipment directly to the MSMEs order to maintain and also providing training in machines, government has to take necessary steps in order to sale the MSMEs products through – commerce like amazon, snapdeal and flipkart etc., government has to establish new industrial parks and developing the infrastructural facilities & promotion policies, government should be conduct training and development, awareness programs.

KEYWORDS

Warangal district, micro small medium enterprises (MSMEs).

INTRODUCTION

The SMEs play vital role in the economic social development of the country, often acting as nursery of entrepreneurship they also play a key role in the development of the economy with their effective, flexible and innovative entrepreneurial spirit. The MSMEs sector contributes significantly to the country's manufacturing output employment and exports and is credited with generally the higher employment growth as well as accounting for major share of industrial production and exports.

OFFICIAL DEFINITION OF MSMEs

Showing investment ceiling for MSMEs in Manufacturing & service sector

TABLE 1

Sector	Investment in Plant, Machinery & Equipment		
	Micro Enterprises	Small Enterprises	Medium Enterprises
Manufacturing	Below 25 Lakhs	25 Lakhs – 5 Crores	5 - 10 Crores
Service	Below 10 Lakhs	10 Lakhs - 2 Crores	2 - 5 Crores

Source: Ministry of MSME, Govt. of India

REVIEW OF LITERATURE

Sonia and Kansai Rajeev (2009) studied the effects of globalization on Micro, Small and Medium Enterprises (MSMEs) during pre and post liberalization from 1973 - 74 to 2008 - 09. They used four economic parameters namely number of units, production, employment and export and interpreted study results based on Annual Average Growth Rate (AAGR) calculation.

Chakrabarty, K.C. (2010) States that with increasing competition, introduction of new products and stringent regulatory environment, the role of banks needs to change from mere lenders to partners in business. There is a need for greater participation of banks in the affairs of their constituents by convergence of credits and non-credits services.

SubrahmanyuaBala (2011) has probed the impact of globalization on the exports potentials of the small enterprises. The study shows that share of SSI export in total export has increases in protection period but remain more or less stagnated during the liberalization period.

RajibLahiri (2011) the study made an attempt in critically analyze the definition aspect of MSMEs and explore the opportunities enjoyed and the constraint faced by them in the era of globalization after analyzing the performance of MSMEs in India during the pre and post liberalization period. The study revealed that except marginal increase in growth rate in employment generation, the growth rate in other parameters is not encouraging during the liberalization period.

Raj Kumar Goutam and Raghbir Singh (2011) in their article. "Marketing Barriers of Small Firms: The Punjab Perspective." presented the findings of a study on marketing barriers of small enterprises based on a sample of 173 small manufacturing enterprises from Punjab.

Shailendra Dasari (2011) in this article, "Marketing Strategies for Maize Seed Industry: A Former Centric Approach", analyses the potential of maize seed industry in Andhra Pradesh, and the expectations of the farmers from maize seed industry based on the field study conducted in six districts of Telangana region of Andhra Pradesh covering 100 farmers and 30 dealers.

Uma, H.R. (2012), in her article, "Challenges in India's Foreign Trade outlines the challenges being faced by India in exports and imports, and underscores the importance of increase in South - South trade in world trade which accounts for 22 per cent of global trade, and almost 50 percent of total merchandise trade of developing countries at present. Among developing countries, India has emerged as vibrant economy fuelled by robust growth in international trade and investment. The South's impressive growth would provide a new impetus to a sustained growth of the global economy, and contribute to the achievement of the Millennium Development Goals.

Dr. Padmasani, S. Karthika (2013), A study on Problems and Prospects of Micro, Small and Medium Scale Enterprise a Textile Exports with special reference to Tirupur and Coimbatore District. This paper has examined the problems of MSMEs in the era of global economy and also has identified the factors affecting MSMEs.

Dr. NeeruGarg (Sept. 2014), Micro, Small and Medium Enterprises in India. Current Scenario and Challenges. This paper made in attempt to highlight the growth of this sector and analyze various problems and challenges faced by MSMEs sector in India in general.

K. Suneetha and T. Sankaraigh (2015) Problems of MSMEs and Entrepreneers in Kadapa District, IOSR Journal of Economics and Finance. The study conducted a survey on 156 enterprises to study they problems. It was found that 103 enterprises were facing financial problems and among them 62.8 per cent are from Micro enterprises. Moreover 23 percent found as meager assistance from government agencies In the study the divisions of Kadapa, Jammulamadugu and Rajampet were covered.

NEED FOR THE STUDY

The Micro, Small and Medium Enterprises (MSMEs) has been accepted as the engine of economic growth and promoting equitable development In the present scenario, the MSMEs have been facing cut throat competition from the MNCs and big entrepreneurs, whose products are coming out with the sophisticated technology, huge amount of capital, marketing strategies etc.

OBJECTIVES OF THE STUDY

The study will focus on the following objectives:

1. To study the present position of MSMEs.
2. To study the MSMEs in Warangal District – An overview
3. To draw the conclusion.

SCOPE OF THE STUDY

The study broadly examines the MSMEs in Warangal District – An overview from 2005 – 2015 i.e. 10 years period.

METHODOLOGY

Source of Data: The required data has been collected using secondary data.

Secondary Data: Secondary data for the study has been collected using published annual reports on MSMEs by the governments, Handbook of Statistics on the Indian Economy published by Ministry of MSMEs, Reserve Bank of India, (RBI), Annual Reports of Warangal district. Daily newspapers published research papers in the reputed journals, books, theses and dissertation and visiting website relating to the presented research.

TOOLS OF DATA ANALYSIS: The collected data will be classified, tabulated and analyzed in a significant manner. For the data analysis simple statistical techniques will be applied such as percentages, averages.

LIMITATION OF THE STUDY

The present study is having the following limitations:

1. The study is essentially a micro level study.
2. The information through the questionnaires may not have covered correct figures Socio-economic conditions of Micro Small Medium Entrepreneurs.
3. Secondary data are taken as MSMEs annual reports however the primary data is added to know the present conditions of Micro Small Medium Entrepreneurs.

MSMEs IN WARANGAL DISTRICT

The Micro, Small and Medium Enterprises (MSME) is playing a key role in economic and social development of the Warangal District and is providing direct employment opportunities to 58,260 people and with a vast network of around 8306 units. In contributions in terms of indirect employment, providing inputs/ raw material for other sector and export earnings, in immense.

TABLE 1: NUMBER OF MSMEs IN WARANGAL DISTRICT

Sl. No.	Year	Number of MSMEs
1	2005 – 06	6224
2	2006 – 07	6256
3	2007 – 08	6339
4	2008 – 09	6423
5	2009 -10	6638
6	2010 – 11	6958
7	2011 – 12	7304
8	2012 – 13	7616
9	2013 -14	7980
10	2014 -15	8326

Source: District Industrial Centre, Warangal

The above table describes that number of MSMEs in Warangal District. In 2005-06 there are only 6224 MSMEs are running in Warangal District and it was raised up to 8326 in 2014 – 15. The data clearly indicates that the Warangal district is also encouraging to MSMEs.

TABLE 2: EMPLOYMENT OF MSMEs IN WARANGAL DISTRICT

Sl. No.	Year	Employment
1	2005 - 06	49809
2	2006 - 07	50158
3	2007 – 08	51150
4	2008 – 09	52226
5	2009 – 10	53105
6	2010 – 11	54218
7	2011 – 12	55112
8	2012 – 13	56220
9	2013 – 14	57330
10	2014 – 15	58260

Source: District Industrial Center, Warangal.

Above table gives a clear picture about the Employment opportunities providing in MSMEs in Warangal District. According to the data in 2005-06 year the MSMEs provided employment to 49809 persons and it was increased 58260 in 2014 – 15. It can be observed that the MSMEs are playing very vital role in providing the employment in Warangal District.

TABLE 3: INVESTMENT OF MSMEs IN WARANGAL DISTRICT

Sl. No.	Year	Investment (Rs. In Lakh)
1	2005 – 06	9841
2	2006 – 07	10339
3	2007 – 08	11105
4	2008 – 09	12875
5	2009 – 10	13970
6	2010 – 11	14650
7	2011 – 12	15872
8	2012 – 13	16780
9	2013 – 14	17970
10	2014 – 15	18523

Source: District Industrial Center Warangal

Table 2.13 shows that investment of MSMEs in Warangal District. As per the data the investment scenario is increased from 9841 Lakhs to 18523 between 2005 - 06 to 2014 – 15. The overall data shows that the investment tendency is gradually increasing.

CONCLUSION

Micro Small Medium Enterprises MSMEs play vital role in Economic Development of Warangal District, it is providing large scale employment, this paper has covered number of MSMEs in Warangal District, employment of MSMEs in Warangal District and investment of MSMEs in Warangal District.

The following suggestions are offered in the development of MSMEs State and Central government have to increase the budget allocation for MSMEs sector & provide assistance to MSMEs for strengthening the share Capital, banks to increase loan amount, government have tax exemption for MSMEs & provide marketing facilities, transport facilities and subsidies, government has to provide raw material, machinery and equipment directly to the MSMEs order to maintain and also providing training in machines, government has to take necessary steps in order to sale the MSMEs products through – commerce like amazon, snapdeal and flipkart etc., government has to establish new industrial parks and developing the infrastructural facilities & promotion policies, government should be conduct training and development, awareness programs.

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PROBLEMS FACED BY MICRO SMALL MEDIUM ENTERPRISES (MSMEs) IN INDIA**NIMMALA SOMARAJU****STUDENT****DEPARTMENT OF HUMAN RESOURCES & MANAGEMENT****KAKATIYA UNIVERSITY****WARANGAL****MOTHE RAJU****STUDENT****DEPARTMENT OF POLITICAL SCIENCE****KAKATIYA UNIVERSITY****WARANGAL****ABSTRACT**

Micro Small Medium Enterprises (MSME's) is play key role in the economic development of the country. It is providing large scale employment is hereby mentioned and covered problems faced by MSME'S in India, which are poor infrastructure, competition from multinational companies, lack of credit banks, unavailability of raw material and other inputs, lack of advanced technology, lack of distribution of marketing channels, lack of Training & Skill development program and complex labour laws and Red Tape the following suggestions are offered for the development of MSME'S. Government has to increase the budget allocation for MSME sector, Banks are increase the loan amount, Government has been conducting Training programmers to increase the Marketing facilities and provide raw material directly to the MSME'S.

KEYWORDS

micro small medium enterprises (MSMEs), economic development.

INTRODUCTION

Micro Small Medium Enterprises (MSMEs) is most dynamic role in the economic development in the country, it is contribute to exports revenue as well as GDP to reasonable extent. MSMEs not only play crucial role in providing large employment opportunities at comparatively lower capital cost than large industries but also help in industrialization of rural and backward areas.

OBJECTIVES OF THE STUDY

The study will focus on the following objectives:

1. To study the introduction of MSMEs
2. To study the problems faced MSMEs in India
3. To draw the conclusion.

SCOPE OF THE STUDY

The study broadly examines the problems faced by Micro Small Medium Enterprises (MSMEs) in India.

METHODOLOGY

The required data has been collected using secondary data.

SECONDARY DATA

Secondary data collecting from annual reports of MSMEs by the Governments, handbook of statistics on the Indian economy, Reserve Bank of India (RBI), Articles, Newspaper, Theses & dissertation.

PROBLEMS FACED BY MICRO SMALL MEDIUM ENTERPRISES (MSMEs) IN INDIA

Micro Small Medium Enterprises (MSMEs) are facing several problems which are:

Lack of Credit from banks: The MSMEs are presently facing the problems of credit from the banks. The banks are not providing the adequate amount of loan to the MSME's. The loan providing process of the banks is very long and formalistic. The owners of the MSME'S has to provding on an average 50 percent total capital employed in fixed assets (TABLE – F). The cost of credit is also high.

Competition from multinational companies: In present era of globalization, the MSME'S are facing the great from the international manufacturing companies who are providing quality goods at cheapest price. Therefore, it is very difficult to compete with the multinational companies.

Poor Infrastructure: Though MSME'S are developing to rapidly but their infrastructure is very poor. With poor infrastructure, their production capacity is very low while production cost is very high.

Lack of advanced Technology: The owners of MSME'S are not aware of advanced technologies of production. Their methodology of production is outdated. The owners are using older method in the field of fabricated metal and textile.

Un-availability of raw material and other inputs: For MSME's required raw material skilled work force and other inputs, which are not available in the market. Due to unavailability of these essentials, it is very difficult to produce the product at affordable prices.

Lack of Training and Skill development program: The training and development programs in respect of MSME'S development concern is very low, so skilled manpower is not being available to MSME'S. The owners are aware of the innovative methods of production. The skill developmental schemes conducted by the government are not sufficient.

Lack of distribution of Marketing Channels: The MSME'S are not adopting the innovative channels of marketing. Their advertisement and sales promotions are comparatively weaker than the multinational companies are. The ineffective advertisement and poor marketing channels leads to a very poor selling.

Complex labor laws and red-tape: All the laws related to the all aspects of manufacturing and service concern are very complex and compliance with these laws are practically difficult. The various decisions of factory are depending upon the factory commissioner and inspector, so there are so many chances of red tape in the operation of MSME'S.

CONCLUSION

Micro Small Medium Enterprises (MSME's) is play key role in the economic development of the country. It is providing large scale employment is hereby mentioned and covered problems faced by MSME'S in India, which are poor infrastructure, competition from multinational companies, lack of credit banks, unavailability of raw material and other inputs, lack of advanced technology, lack of distribution of marketing channels, lack of Training & Skill development program and complex labour laws and Red Tape the following suggestions are offered for the development of MSME'S.

Government has to increase the budget allocation for MSME sector, Banks are increase the loan amount, Government has been conducting Training programmers to increase the Marketing facilities and provide raw material directly to the MSME'S.

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